

NOAA Data Report ERL PMEL-61a

**CHEMICAL AND HYDROGRAPHIC MEASUREMENTS IN THE EASTERN PACIFIC
DURING THE CGC94 EXPEDITION (WOCE SECTION P18)**

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**UNITED STATES
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NOTE: Due to an error in the data tables, this is a revised version of the NOAA Data Report ERL PMEL-61 titled “Chemical and Hydrographic Measurements in the Eastern Pacific During the CGC94 Expedition (WOCE Section P18).”

This new version has been given a different report number: NOAA Data Report ERL PMEL-61a.

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REMOTE ACCESS TO DATA LISTED IN THIS REPORT

The data presented in this report is available on a computerized Remote Bulletin Board System (RBIS), Internet FTP, and the World Wide Web (WWW). For information regarding electronic access to the data sets contact:

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The evaluation of the CGC94 dissolved oxygen, nutrients, and CFC measurements by the WOCE Data Quality Experts and WOCE Hydrographic Office has not been completed. After completion of this process, revised versions of these data will be available from the WOCE Hydrographic Office, or by contacting bullister@pmel.noaa.gov.

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ABSTRACT. NOAA's Climate and Global Change (CGC) Program sponsored a major cooperative effort in the eastern Pacific along WOCE Hydrographic Programme Line P18 from 26 January to 27 April 1994. The first leg (Leg 1) consisted of a transit from Seattle to Punta Arenas, Chile. The second leg (Leg 2) covered hydrographic stations from 67°S, 103°W to 27°S, 103°W. The third leg (Leg 3) included stations between 26.5°S, 103°W and 23°N, 110°W. Full depth CTD/rosette casts were made to the ocean bottom at a nominal spacing of 30 miles on Legs 2 and 3. Water samples were collected on the casts for analyses of concentrations of salinity, DO, CFC, fCO₂, DIC, TA, pH, TOC/TON, ¹³C/¹²C isotopes, and nutrients. Biological parameters were also sampled, and included biogenic Si, chlorophyll-a, phaeopigments, and primary productivity.

1. INTRODUCTION

Human activity is rapidly changing the trace gas composition of the earth's atmosphere, causing the greenhouse warming effect from excess carbon dioxide (CO₂) along with other trace gas species such as chlorofluorocarbons, methane, and nitrous oxide. These gases play a critical role in controlling the earth's climate because they increase the infrared opacity of the atmosphere, causing the planetary surface to warm. Of all the anthropogenic CO₂ that has ever been produced, only about half remains in the atmosphere; the global ocean is considered to be the dominant sink for the "missing" CO₂.

The National Oceanic and Atmospheric Administration's (NOAA) Ocean-Atmosphere Carbon Exchange Study (OACES) Program, and the Ocean Tracers and Hydrography Program, in cooperation with the World Ocean Circulation Experiment (WOCE) and the U.S. Joint Global Ocean Flux Study (U.S. JGOFS), participated in a multifaceted oceanographic research cruise conducted aboard the NOAA ship *Discoverer* from 26 January 1994 to 27 April 1994. This hydrographic section is identified as P18 in the WOCE Implementation Plan. The objective of this effort was to 1) describe water properties and relate them to circulation processes throughout the water column in the eastern Pacific Ocean; 2) determine the sources and sinks of carbon dioxide along a line between 103° and 110°W; 3) study the invasion of the ocean by chlorofluorocarbons;

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and 4) provide a high-quality set of baseline measurements for the continuing evaluation of changes in ocean content of dissolved gasses, water properties, and circulation. Underway Acoustic Doppler Current Profiler (ADCP) measurements were made along the track, and Autonomous Lagrangian Circulation Explorer (ALACE) floats were released at designated positions. In addition, underway measurements of surface pH, $f\text{CO}_2$, nitrate (by wet chemistry), photosynthetically available radiation, and fluorescence were collected on a continuous basis throughout the cruise. This data report summarizes the measurements of chlorofluorocarbons (CFC), dissolved inorganic carbon (DIC), CO_2 fugacity ($f\text{CO}_2$), total alkalinity (TAlk), total organic carbon (TOC), pH, $^{13}\text{C}/^{12}\text{C}$ isotopes ($\delta^{13}\text{C}$), silicate ($\text{Si}(\text{OH})_4$), biogenic silica, phosphate (PO_4^{3-}), nitrate (NO_3^-), nitrite (NO_2^-), total organic nitrogen (TON), dissolved oxygen (DO), chlorophyll-*a*, phaeopigments, primary productivity, temperature, and salinity. The tabulated bottle data, beam attenuation due to particles, and CTD temperature and salinity data from the CTD casts are given in Appendix A; bottle data from Kevlar™ casts (biological parameters) are presented in Appendix B. This report does not address the underway measurements or the data from the ALACE floats.

1.1 Cruise Itinerary

The first leg (Leg 1a, 1b) departed Seattle, Washington, on 26 January 1994 and performed two shallow test casts in Puget Sound to check equipment. The ship then steamed to the East Blanco Depression off the Washington/Oregon coast, where significant volcanic activity had been detected. A total of six water column CTD/rosette stations were occupied at this site. The ship then proceeded to San Francisco for a touch-and-go on 30 January 1994; after disembarking several scientists, *Discoverer* left for Punta Arenas, Chile. No hydrographic data from Leg 1 are included in this report. Underway measurements were conducted for pH, $p\text{CO}_2$, nitrous oxide, methyl bromide, salinity, and temperature from the ship's underway sea water system (Lobert *et al.*, 1996; Wanninkhof *et al.*, in prep.).

The second leg (Leg 2) departed Punta Arenas on 22 February 1994. The ship steamed from the entrance of the Strait of Magellan to the first station at 103°W , 67°S ; two test casts were conducted en route. Seventy-eight stations were occupied along 103°W ; following WOCE Hydrographic Programme (WHP) protocol, station spacing was 30 nautical miles (nm). Between $58^\circ30'\text{S}$ and 48°S , station spacing was increased to 40 nm due to time constraints. The last station occupied on Leg 2 was at 103°W , 26°S , and the ship inported at Isla de Pascua, Chile (Easter Island) on 24 March.

The third leg (Leg 3) departed Isla de Pascua on 29 March 1994 and proceeded to 103°W , $25^\circ30'\text{S}$; 30-nm spacing was resumed along 103°W to 10°S . Stations were occupied at 40-nm intervals along a dogleg from 103°W , 10°S to $110^\circ20'\text{W}$, 5°S , over the East Pacific Rise. Spacing of 30 nm was resumed from 5°S to 3°S along $110^\circ20'\text{W}$. Station spacing was reduced to 20-nm from 3°S to 3°N to obtain better resolution over the equatorial region. From 3°N to $22^\circ30'\text{N}$, stations were occupied at 30-nm intervals, except from 12°N to 16°N , where spacing was again increased to 40 nm. A gradual shift in longitude from $110^\circ20'\text{W}$ to 110°W was made between 8°N and 10°N . North of $22^\circ30'\text{N}$, station spacing was reduced to as little as 3 nm over the rapidly shoaling bathymetry approaching Cabo San Lucas, Mexico. The last station occupied was at 110°W , $22^\circ51'\text{N}$, in less than 200 m of water, and the cruise ended in San Diego on 27 April 1994. Station locations (CTD) and dates are contained in Fig. 1 and Table 1.

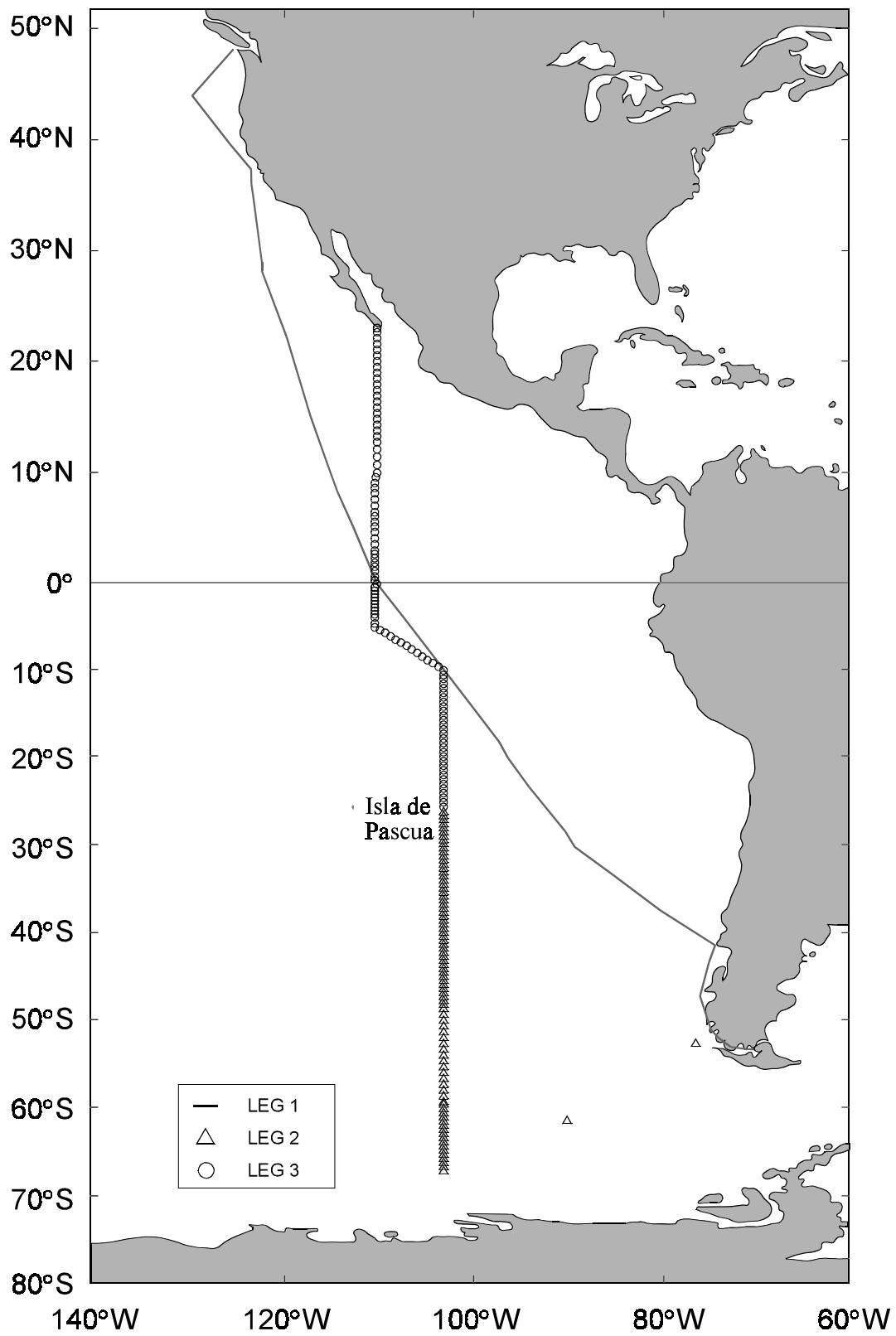


Fig. 1. CTD station locations.

Table 1. CTD station locations and dates during the eastern Pacific 1994 cruise.

Station	Latitude	Longitude	Date	Bottom Depth (m)
<i>Leg 2</i>				
8(test)	52° 22.9' S	76° 22.0' W	23 Feb 94	1888
9(test)	61° 13.2' S	90° 10.9' W	25 Feb 94	4917
10	66° 59.8' S	103° 0.2' W	27 Feb 94	4734
11	66° 29.8' S	102° 59.9' W	28 Feb 94	4807
12	66° 0.0' S	102° 59.8' W	28 Feb 94	4856
13	65° 29.9' S	102° 59.9' W	28 Feb 94	4900
14	64° 59.9' S	103° 0.0' W	28 Feb 94	4949
15	64° 29.9' S	102° 59.9' W	1 Mar 94	4979
16	63° 59.5' S	102° 59.1' W	1 Mar 94	5050
17	63° 30.0' S	102° 59.6' W	2 Mar 94	4987
18	63° 0.1' S	102° 58.4' W	2 Mar 94	5037
19	62° 29.7' S	103° 0.5' W	2 Mar 94	5041
20	61° 59.8' S	102° 59.8' W	2 Mar 94	5079
21	61° 29.2' S	102° 59.3' W	3 Mar 94	5143
22	61° 0.5' S	103° 0.3' W	3 Mar 94	4975
23	60° 30.9' S	102° 57.1' W	3 Mar 94	5240
24	60° 0.2' S	103° 0.0' W	4 Mar 94	5100
25	59° 30.3' S	103° 1.6' W	4 Mar 94	4931
26	59° 0.0' S	103° 0.9' W	4 Mar 94	4700
27	58° 30.3' S	102° 59.7' W	5 Mar 94	4796
28	57° 49.6' S	102° 59.4' W	5 Mar 94	4700
29	57° 10.3' S	103° 0.1' W	6 Mar 94	4100
30	56° 31.5' S	103° 4.9' W	7 Mar 94	4900
31	55° 50.2' S	102° 59.9' W	8 Mar 94	4662
32	55° 9.5' S	102° 59.5' W	8 Mar 94	4523
33	54° 30.0' S	103° 0.0' W	8 Mar 94	4100
34	53° 49.9' S	102° 59.0' W	8 Mar 94	4260
35	53° 10.0' S	103° 0.9' W	9 Mar 94	4100
36	52° 30.4' S	103° 0.4' W	9 Mar 94	4433
37	51° 50.0' S	103° 0.0' W	9 Mar 94	4048
38	51° 10.0' S	103° 0.0' W	10 Mar 94	3758
39	50° 30.0' S	103° 0.5' W	10 Mar 94	5180
40	49° 50.0' S	103° 0.1' W	10 Mar 94	4200
41	49° 9.8' S	103° 0.3' W	11 Mar 94	4272
42	48° 29.8' S	102° 59.7' W	11 Mar 94	4205
43	47° 59.8' S	103° 0.4' W	11 Mar 94	4085
44	47° 30.0' S	103° 0.1' W	11 Mar 94	4300
45	47° 0.0' S	102° 59.8' W	12 Mar 94	4017
46	46° 30.0' S	103° 0.0' W	12 Mar 94	3854
47	46° 0.0' S	103° 0.0' W	12 Mar 94	4437
48	45° 28.9' S	102° 58.4' W	12 Mar 94	4035
49	45° 0.1' S	102° 59.9' W	13 Mar 94	3740
50	44° 29.5' S	102° 59.7' W	13 Mar 94	3900
51	43° 59.2' S	102° 59.8' W	13 Mar 94	4100
52	43° 30.1' S	103° 0.9' W	13 Mar 94	3750

Table 1. (continued)

Station	Latitude	Longitude	Date	Bottom Depth (m)
<i>Leg 2 (continued)</i>				
53	43° 0.2' S	102° 59.9' W	14 Mar 94	3790
54	42° 29.5' S	102° 59.6' W	14 Mar 94	3791
55	41° 59.7' S	103° 0.2' W	14 Mar 94	3672
56	41° 29.6' S	102° 59.5' W	15 Mar 94	3780
57	41° 0.0' S	103° 0.0' W	15 Mar 94	4803
58	40° 30.2' S	102° 59.2' W	15 Mar 94	3930
59	40° 0.2' S	102° 58.8' W	15 Mar 94	4058
60	39° 29.9' S	102° 59.9' W	16 Mar 94	3917
61	39° 0.0' S	103° 0.2' W	16 Mar 94	3834
62	38° 30.6' S	103° 0.9' W	16 Mar 94	3990
63	37° 59.9' S	102° 59.9' W	16 Mar 94	4143
64	37° 29.9' S	102° 59.0' W	17 Mar 94	3498
65	36° 59.7' S	103° 0.3' W	17 Mar 94	4050
66	36° 29.9' S	103° 0.1' W	17 Mar 94	3479
67	35° 59.6' S	102° 59.5' W	17 Mar 94	4483
68	35° 30.0' S	103° 0.0' W	18 Mar 94	3099
69	34° 59.9' S	103° 0.2' W	18 Mar 94	3600
70	34° 30.8' S	103° 0.2' W	18 Mar 94	3434
71	34° 0.4' S	103° 0.0' W	18 Mar 94	3730
72	33° 30.0' S	102° 59.9' W	19 Mar 94	3592
73	32° 59.7' S	102° 59.9' W	19 Mar 94	3682
74	32° 30.0' S	103° 0.0' W	19 Mar 94	3569
75	31° 59.7' S	102° 59.9' W	19 Mar 94	3830
76	31° 29.5' S	103° 0.0' W	20 Mar 94	3532
77	31° 0.1' S	103° 0.4' W	20 Mar 94	3489
78	30° 30.1' S	103° 0.9' W	20 Mar 94	3410
79	30° 0.0' S	103° 0.0' W	21 Mar 94	3586
80	29° 29.5' S	103° 0.3' W	21 Mar 94	3400
81	29° 0.1' S	103° 0.8' W	21 Mar 94	3546
82	28° 29.7' S	102° 59.8' W	22 Mar 94	3287
83	28° 1.0' S	103° 0.9' W	22 Mar 94	3347
84	27° 30.7' S	103° 1.1' W	22 Mar 94	3059
85	26° 55.2' S	103° 0.5' W	22 Mar 94	3139
86	26° 29.7' S	103° 0.0' W	23 Mar 94	3463
87	25° 59.4' S	103° 0.3' W	23 Mar 94	3454
<i>Leg 3</i>				
88	25° 29.9' S	103° 0.0' W	29 Mar 94	3326
89	24° 59.3' S	103° 0.1' W	29 Mar 94	3844
90	24° 30.0' S	103° 0.0' W	29 Mar 94	3584
91	23° 59.9' S	103° 0.1' W	29 Mar 94	3856
92	23° 29.8' S	102° 59.7' W	30 Mar 94	3893
93	23° 0.0' S	102° 59.8' W	30 Mar 94	3900
94	22° 29.9' S	103° 0.0' W	30 Mar 94	4009
95	21° 59.6' S	102° 59.4' W	30 Mar 94	3953

Table 1. (continued)

Station	Latitude	Longitude	Date	Bottom Depth (m)
<i>Leg 3 (continued)</i>				
96	21° 30.0' S	102° 59.9' W	31 Mar 94	3993
97	20° 59.9' S	103° 0.1' W	31 Mar 94	4079
98	20° 30.1' S	103° 0.1' W	31 Mar 94	4067
99	20° 0.0' S	103° 0.0' W	1 Apr 94	4108
100	19° 30.1' S	102° 59.5' W	1 Apr 94	4110
101	18° 59.9' S	103° 0.1' W	1 Apr 94	4094
102	18° 30.0' S	103° 0.0' W	2 Apr 94	4047
103	17° 59.9' S	103° 0.2' W	2 Apr 94	4186
104	17° 29.9' S	103° 0.4' W	2 Apr 94	4043
105	16° 59.9' S	102° 59.7' W	2 Apr 94	3905
106	16° 29.9' S	103° 0.0' W	3 Apr 94	3114
107	16° 0.0' S	103° 0.0' W	3 Apr 94	3785
108	15° 30.1' S	103° 0.1' W	3 Apr 94	3727
109	15° 0.0' S	102° 59.9' W	3 Apr 94	4203
110	14° 30.2' S	102° 59.4' W	4 Apr 94	3992
111	14° 0.0' S	102° 59.6' W	4 Apr 94	4177
112	13° 29.9' S	103° 0.2' W	4 Apr 94	4127
113	13° 0.6' S	103° 0.5' W	5 Apr 94	4320
114	12° 30.1' S	103° 0.1' W	5 Apr 94	4184
115	12° 0.1' S	103° 0.1' W	5 Apr 94	4352
116	11° 30.3' S	103° 0.0' W	5 Apr 94	4096
117	11° 0.0' S	103° 0.8' W	6 Apr 94	4276
118	10° 30.4' S	103° 0.1' W	6 Apr 94	4682
119	10° 0.2' S	103° 0.0' W	6 Apr 94	4560
120	9° 38.9' S	103° 36.6' W	7 Apr 94	4300
121	9° 14.2' S	104° 8.1' W	7 Apr 94	4107
122	8° 51.2' S	104° 41.6' W	7 Apr 94	3713
123	8° 27.8' S	105° 15.6' W	7 Apr 94	3655
124	8° 4.7' S	105° 49.6' W	8 Apr 94	3993
125	7° 42.0' S	106° 23.0' W	8 Apr 94	3245
126	7° 18.7' S	106° 56.6' W	8 Apr 94	3181
127	6° 56.4' S	107° 30.7' W	9 Apr 94	3179
128	6° 33.6' S	108° 4.4' W	9 Apr 94	3286
129	6° 9.3' S	108° 38.5' W	9 Apr 94	3300
130	5° 46.4' S	109° 12.2' W	9 Apr 94	3474
131	5° 23.6' S	109° 46.0' W	10 Apr 94	3800
132	5° 0.1' S	110° 20.1' W	10 Apr 94	3448
133	4° 29.7' S	110° 19.6' W	10 Apr 94	3810
134	4° 0.2' S	110° 19.8' W	10 Apr 94	3873
135	3° 30.0' S	110° 20.0' W	11 Apr 94	3915
136	3° 0.0' S	110° 20.0' W	11 Apr 94	3914
137	2° 40.0' S	110° 20.0' W	11 Apr 94	3900
138	2° 20.0' S	110° 20.0' W	11 Apr 94	4616
139	2° 0.8' S	110° 20.5' W	12 Apr 94	3978
140	1° 40.0' S	110° 19.9' W	12 Apr 94	3907

Table 1. (continued)

Station	Latitude	Longitude	Date	Bottom Depth (m)
<i>Leg 3 (continued)</i>				
141	1° 20.0' S	110° 20.1' W	12 Apr 94	3900
142	1° 0.1' S	110° 19.7' W	13 Apr 94	4049
143	0° 40.3' S	110° 19.8' W	13 Apr 94	3810
144	0° 20.2' S	110° 19.6' W	13 Apr 94	3811
145	0° 0.0' N	110° 0.0' W	13 Apr 94	3784
146	0° 20.1' N	110° 20.0' W	14 Apr 94	3850
147	0° 39.9' N	110° 20.2' W	14 Apr 94	3851
148	1° 0.0' N	110° 20.0' W	14 Apr 94	3700
149	1° 20.0' N	110° 20.0' W	14 Apr 94	3772
150	1° 40.6' N	110° 20.2' W	15 Apr 94	3834
151	2° 0.2' N	110° 20.0' W	15 Apr 94	3835
152	2° 20.0' N	110° 20.0' W	15 Apr 94	3700
153	2° 40.0' N	110° 19.9' W	15 Apr 94	3761
154	3° 0.0' N	110° 20.0' W	15 Apr 94	3770
155	3° 30.0' N	110° 20.0' W	16 Apr 94	3918
156	4° 0.1' N	110° 20.1' W	16 Apr 94	3841
157	4° 30.0' N	110° 20.0' W	16 Apr 94	3984
158	4° 59.7' N	110° 20.0' W	17 Apr 94	4196
159	5° 30.0' N	110° 20.0' W	17 Apr 94	3935
160	6° 0.0' N	110° 20.0' W	17 Apr 94	3850
161	6° 30.0' N	110° 20.0' W	17 Apr 94	3254
162	7° 0.0' N	110° 20.4' W	18 Apr 94	3840
163	7° 30.0' N	110° 20.1' W	18 Apr 94	3952
164	7° 59.9' N	110° 20.2' W	18 Apr 94	3943
165	8° 30.0' N	110° 15.1' W	18 Apr 94	3900
166	9° 0.0' N	110° 9.9' W	19 Apr 94	3672
167	9° 30.7' N	110° 5.1' W	19 Apr 94	3471
168	10° 0.0' N	110° 0.0' W	19 Apr 94	3316
169	10° 40.0' N	110° 0.0' W	20 Apr 94	3853
170	11° 20.0' N	110° 0.0' W	20 Apr 94	3500
171	12° 0.1' N	110° 0.0' W	20 Apr 94	3300
172	12° 40.0' N	110° 0.0' W	20 Apr 94	4157
173	13° 20.0' N	109° 59.9' W	21 Apr 94	4100
174	14° 0.1' N	109° 59.9' W	21 Apr 94	3284
175	14° 29.8' N	109° 59.8' W	21 Apr 94	3724
176	15° 0.0' N	110° 0.0' W	21 Apr 94	3792
177	15° 29.8' N	109° 59.7' W	22 Apr 94	3739
178	16° 0.1' N	110° 0.0' W	22 Apr 94	3307
179	16° 29.9' N	110° 0.1' W	22 Apr 94	3397
180	17° 0.0' N	110° 0.0' W	22 Apr 94	3520
181	17° 30.1' N	109° 59.9' W	23 Apr 94	3485
182	18° 0.0' N	110° 0.0' W	23 Apr 94	3265
183	18° 30.0' N	110° 0.0' W	23 Apr 94	3440
184	19° 0.0' N	110° 0.0' W	23 Apr 94	3372
185	19° 30.0' N	110° 0.0' W	24 Apr 94	3238

Table 1. (continued)

Station	Latitude	Longitude	Date	Bottom Depth (m)
<i>Leg 3 (continued)</i>				
186	20° 0.1' N	110° 0.0' W	24 Apr 94	2627
187	20° 30.0' N	110° 0.0' W	24 Apr 94	3100
188	21° 0.0' N	110° 0.0' W	24 Apr 94	3234
189	21° 29.9' N	110° 0.1' W	24 Apr 94	3203
190	21° 59.9' N	110° 0.0' W	25 Apr 94	3142
191	22° 29.7' N	109° 59.7' W	25 Apr 94	3081
192	22° 44.0' N	110° 0.4' W	25 Apr 94	1997
193	22° 47.8' N	110° 0.3' W	25 Apr 94	967
194	22° 51.1' N	110° 0.0' W	25 Apr 94	190

2. SAMPLING AND ANALYTICAL METHODS

2.1 CTD Cast Operations

CTD/DO measurements were made using one of two Sea Bird 9plus CTDs, each equipped with a fixed pumped temperature–conductivity (TC) sensor pair. A mobile pumped TC pair with dissolved oxygen sensor was mounted on whichever CTD was in use so that dual TC measurements and dissolved oxygen measurements were always collected. The TC pairs were monitored for calibration drift and shifts by examining the differences between the two pairs on each CTD and comparing CTD salinities with bottle salinity measurements.

The primary CTD package utilized PMEL's Sea Bird 9plus CTD (S/N 09P8431-0315) (sampling rate 24 Hz) mounted in a 36-position frame. Water samples were collected using a General Oceanics 36-bottle rosette and 10-liter PVC bottles, and was used for the majority of 194 casts. The secondary package was deployed during foul weather at 29 stations, and used PMEL's Sea Bird 9plus CTD (S/N 329053-0209) (sampling rate 24 Hz) mounted in a 24-position frame, and 4-liter bottles.

The 4- and 10-liter sample bottles mounted on the CTD rosette frames were specially designed Niskin™-type PVC bottles (sometimes referred to as “Bullister” bottles) with internal epoxy-coated stainless steel springs. The O-rings were mounted in a dovetail-shaped groove in the endcaps and sealed against the smooth, flat ends of the bottle. This minimized contact of the seawater sample with the O-rings after closure, and reduced CFC contamination due to O-rings.

All pre- and post-cruise sensor calibrations were performed at Sea-Bird Electronics, Inc. in Bellevue, Washington. Post-cruise data processing was completed at PMEL (McTaggart *et al.*, 1996). Final data are 1-dbar averages in EPIC format (Soreide *et al.*, 1995).

Samples from the CTD casts were collected from the PVC bottles in the following order: chlorofluorocarbons (CFC), helium (He), dissolved oxygen (DO), fugacity of CO₂ (fCO₂), pH, dissolved inorganic carbon (DIC) and total alkalinity (TAlk), tritium, ¹³C/¹²C isotopes (δ¹³C), oxygen isotopes, nutrients, total organic carbon (TOC) and nitrogen (TON), chlorophyll-a, phaeopigments, and salinities. This report does not address He, tritium, or oxygen isotope measurements.

2.1.1 Chlorofluorocarbons (CFC)

CFC samples were collected from the PVC bottles before any other samples and were drawn into 100-mL glass syringes. The syringes were sealed with nickel-plated metal stopcocks and positive pressure was maintained with a rubber band. The syringes were stored in a bath of clean seawater until analysis to reduce contamination from the atmosphere.

The bath and the CFC analytical equipment were set up in a seagoing container modified for use as a laboratory. This removed the system from the interior of the ship, which frequently experiences high levels of CFC contamination from air conditioners, water coolers, etc.

The analytical system used for the CFCs was a purge and trap, gas chromatograph/electron capture detector (gc/ECD) system described in Bullister and Weiss (1988). The CFCs were stripped

from an aliquot of the sample with clean carrier gas (95:5 argon:methane), dried over $\text{Mg}(\text{ClO}_4)_2$, and concentrated on a cold trap of Porasil C™ and Porapak T™. The contents of the trap were injected onto a precolumn of Porasil C™ which vented late unwanted peaks while transferring the gases of interest to a longer Porasil C™ column for final separation. The gases exited the analytical column into an electron capture detector.

About once an hour, a single loop injection of standard was analyzed to monitor changes in sensitivity of the detector. Every few days a number of standard volumes were analyzed to determine changes in sensitivity over a range of responses. The responses of water samples could then be compared to a curve fit through these calibration points. The standard tank used during this cruise (#32386) was calibrated against primary tank #36743 and values assigned on the SIO1986 scale. The concentrations of water samples are reported in picomoles CFC per kilogram (pmol/kg) of seawater.

Sampling blanks may be determined by several methods, including measuring water samples from regions where CFCs have not yet penetrated, and by water bottle incubation tests. Using these methods, the sampling blanks are estimated to have ranged from 0.0048 to 0.0086 pmol/kg for CFC-11, and were 0.0025 pmol/kg or less for CFC-12. During the first 10 stations of Leg 2, the PVC bottles were slightly contaminated with respect to CFC-11. This caused a high variability in the CFC-11/CFC-12 ratio for the deep water samples and, as a result, a larger than normal number of the measurements were flagged as bad or questionable. As the level of contamination in the 10-L bottles declined, the number of flagged samples diminished.

At nearly every station, one or more sets of replicate pairs were drawn and sampled for CFCs. We estimated measurement precision to be about 0.005 pmol/kg or 1% (whichever was greater) for both CFC-11 and CFC-12.

2.1.2 Dissolved Oxygen (DO)

DO samples were drawn from the PVC bottles immediately after CFC and He samples, and were collected in calibrated iodine determination flasks (Corning™ 5400-125) according to the following procedure. The sampling tube was attached to the PVC bottle petcock and the other end inserted into the flask. Seawater was allowed to flow freely into the flask, and the tube was tapped to remove bubbles. The flask was then inverted and the tube pinched slightly to reduce flow while allowing water to drain from the flask. A water sheet formed on the inside of the flask, the sampling tube was pinched off, and the flask was drained and then put right side up. The sampling tube was slowly released to prevent turbulent flow, and the flask was allowed to fill. Fill time was measured to ensure overflow of at least two flask volumes. Typical fill time was 7 seconds.

After a sample was drawn, reagents were introduced quickly using a calibrated Brinkmann™ 1.0-mL Fixed Volume Dispensette repipette with tip lengthened by clear polyolefin shrink tubing. Distilled water or, later, seawater, was added to the collar of the flask to prevent intrusion of air; samples were kept in darkness until analysis. Flasks were reshaken at least 20 minutes after

sampling was finished. All reagents were prepared according to WOCE specifications (WOCE, 1991).

Samples were titrated using Carpenter's whole bottle technique (Carpenter, 1965). An auto-titrator, based on a design by Gernot Friederich (Friederich, 1991) and using a modified version of Friederich's software, was used to titrate the samples. The titrator consists of a Kloehn™ 50100 Syringe Drive with a 5-mL syringe, a custom-built photometer, and a computer. Post-processing software was used to add temperature corrections and to analyze data. The estimated relative accuracy is 0.2%, with an estimated precision of 0.3 $\mu\text{mol/kg}$.

Samples were analyzed no sooner than 20 minutes and no later than 8 hours after remixing. Liquid from the flask collar was aspirated with a transfer pipette and the stopper removed. Approximately 1 mL of 10N sulfuric acid (H_2SO_4) and a rinsed stir bar were added. The flask was wiped dry, placed in the titrator, and titrated with 0.05 N sodium thiosulfate ($\text{Na}_2\text{S}_2\text{O}_4$). After completion of analysis, the sample was poured out and the flask rinsed with hot tap water.

Titratant was standardized with 0.01N potassium iodate (KIO_3) solution mixed before the cruise and stored in an upside-down airtight bottle. Standard was dispensed using a Kloehn™ 50100 with a calibrated 5-mL buret. The measured precision of the dispensed standards was 0.6 μL and 2.3 μL for volumes below and above 5 mL, respectively. Standards were all within 0.1% of their calculated values when intercompared after the cruise. Concentrations were converted to $\mu\text{mol/kg}$ using sigma-theta. Oxygen values from samples with a sampling or analytical problem are flagged as "3" (questionable) in the data table. Several samples were clearly anomalous relative to surrounding samples in the water column, and to the CTD oxygen sensor. This may have been due to errors in logging the oxygen flask number correctly on the sample log at the time of sample collection, or other labeling errors. These samples are also flagged as questionable.

2.1.3 Discrete Fugacity of CO_2 ($f\text{CO}_2$)

Samples were drawn from the PVC bottles into 500-mL Pyrex™ volumetric flasks using Tygon™ tubing. Bottles were rinsed once and filled from the bottom, overflowing half a volume, and care was taken not to entrain any bubbles. Five mL of water was withdrawn with a pipette to create a small expansion volume. 0.2 mL of saturated HgCl_2 solution was added as a preservative. The sample bottles were sealed with a screw cap containing a polyethylene liner and stored upside-down at room temperature for a maximum of a day.

The discrete $f\text{CO}_2$ system is patterned after the setup described in Chipman *et al.* (1993) and is discussed in detail in Wanninkhof and Thoning (1993) and Chen *et al.* (1995). The major difference is that our system uses a LI-COR™ (Model 6262) non-dispersive infrared analyzer, while the system of Chipman *et al.* (1993) utilizes a gas chromatograph with a flame ionization detector and a methanizer which quantitatively converts CO_2 into CH_4 for analysis.

The samples were brought to a temperature of $20.00 \pm 0.02^\circ\text{C}$ by inserting the flasks first upside-down in a pre-bath at $19\text{--}21^\circ\text{C}$ and subsequently in a Neslab™ (Model RT-220) controlled

temperature bath for equilibration and analysis. A 60-mL headspace was created in the sample flask by displacing the water using a compressed standard gas with a CO₂ mixing ratio close to the fCO₂ of the water.

The headspace contents was circulated in a closed loop through the infrared analyzer, which measured CO₂ and water vapor levels in the sample cell. The headspace contents of two flasks were equilibrated simultaneously in two channels. While the headspace contents of the flask in the first channel flowed through the IR analyzer, that of the flask in the second channel was recirculated in a closed loop. After the first sample was analyzed a valve was switched to put the second channel in line with the analyzer. The samples were equilibrated until the running mean of twenty consecutive 1-second readings from the analyzer had a standard deviation of less than 0.1 ppm (parts per million by volume), which on average took about 10 minutes. An expandable volume consisting of a balloon kept the flask contents at room pressure. In order to maintain measurement precision, a set of six gas standards was run through the system after every eight to twelve seawater samples. The standards had mixing ratios of 201.4, 354.1, 517.0, 804.5, 1012.2, and 2020 ppm, which bracketed most of the fCO₂ at 20°C (fCO₂(20)) values observed in the water column.

The determination of fCO₂(20) in the headspace contents involved several steps. The IR detector response for the standards was normalized for temperature, the IR analyzer voltage output for samples was normalized to 1 atm pressure, and the IR detector response was corrected for the influence of water vapor. The sample values were converted to a mixing ratio based on the compressed gas standards. The mixing ratio in the headspace contents was converted to fugacity and corrected to the fugacity of CO₂ in the water sample prior to equilibration by accounting for change in total CO₂ in water during the equilibration process (for details see Wanninkhof and Thoning, 1993). The change in fCO₂(20) caused by the change in DIC is calculated using the constraint that TALK remains constant during exchange of CO₂ gas between the headspace and the water. The calculation is outlined in the appendix of Peng *et al.* (1987).

Relative error of the fCO₂ analysis was determined in two different ways: duplicate samples were taken from PVC bottles tripped at the same depth, and duplicates were taken from the same PVC bottle (Table 2). The difference in relative error between the two types of duplicates was insignificant. The percent relative error is expressed as the absolute difference divided by the mean for two samples.

2.1.4 pH

Seawater samples were drawn from the PVC bottles with a 25-cm length of silicon tubing. One end of the tubing was fit over the petcock of the PVC bottle and the other end was attached over the opening of a 10-cm glass spectrophotometric cell. The spectrophotometric cell was rinsed three to four times with a total volume of approximately 200 mL of seawater; the Teflon™ endcaps were also rinsed and then used to trap a sample of seawater in the glass cell. While drawing the sample, care was taken to make sure that no air bubbles were trapped within the cell.

Table 2. Relative errors for fCO₂ analyses during the eastern Pacific 1994 cruise.

	Samples from different PVC bottles, same depth	Samples from same PVC bottle
Total sets (n)	55	52
Sets used (n)	52	47
Relative error (%)	0.19	0.20

Note: Duplicate samples whose relative error was three times larger than the relative error were omitted from the analyses. The number of sets omitted is the difference between total sets and sets used.

Seawater pH was measured using a double-wavelength spectrophotometric procedure (Byrne, 1987) and the indicator calibration of Clayton and Byrne (1993). The indicator was a 8.0-mM solution of Kodak™ *m*-cresol purple sodium salt (C₂₁H₁₇O₅Na) in a 10% ethanol solution; the absorbance ratio of the concentrated indicator solution (RI = 578A/434A) was 1.00. All absorbance ratio measurements were obtained in the thermostatted (25.0 ± 0.05 °C) cell compartments of Varian™ CARY 1 and CARY 3 UV-visible dual-beam spectrophotometers. Periodically the spectrophotometric cells were cleaned with a 1 N HCl solution to preclude biological growth.

Measurements of pH were taken at 25.0 °C on the total hydrogen ion concentration ([H⁺]_t) scale, in mol/kg soln:

$$\text{pH}_t = -\log[\text{H}^+]_t = -\log([\text{H}^+]_f (1 + [\text{SO}_4^{2-}]/K_s))$$

where [H⁺]_f represents the concentration of free hydrogen ions in the solution; [SO₄²⁻] represents the total concentration of sulfate ions in seawater; and K_s represents the dissociation constant of bisulfate ion in seawater.

2.1.5 Dissolved Inorganic Carbon (DIC)

Samples were drawn from the PVC bottles into cleaned, precombusted 500-mL Pyrex™ bottles using Tygon™ tubing according to procedures outlined in the Handbook of Methods for CO₂ Analysis (DOE, 1994). Bottles were rinsed once and filled from the bottom, overflowing half a volume, and care was taken not to entrain any bubbles. The tube was pinched off and withdrawn, creating a 5-mL headspace, and 0.2 mL of saturated HgCl₂ solution was added as a preservative. The sample bottles were sealed with glass stoppers lightly covered with Apiezon-L™ grease, and were stored at room temperature for a maximum of 12 hours prior to analysis.

The DIC analytical equipment was set up in a seagoing container modified for use as a laboratory. The analysis was done by coulometry; two analytical systems (PMEL-1 and PMEL-2) were used simultaneously on the cruise, each consisting of a coulometer (UIC, Inc.) coupled with a SOMMA (Single Operator Multiparameter Metabolic Analyzer) inlet system developed by Ken

Johnson (Johnson *et al.*, 1985,1987,1993; Johnson, 1992) of Brookhaven National Laboratory (BNL).

In the coulometric analysis of DIC, all carbonate species (CO_3^{2-} and HCO_3^-) were converted to CO_2 (gas) by addition of excess H^+ to seawater. The analysis was conducted as follows. The 500-mL sample bottle was inserted in a water bath at 20°C and allowed to come to thermal equilibrium; water from the bottle was displaced into a calibrated, thermostatted pipette using a headspace gas (511 ppm CO_2 in N_2). Using Ultra-Pure™ N_2 as the carrier gas, the sample was injected into the reaction vessel in the SOMMA which contained 1 mL 10% H_3PO_4 solution (previously stripped of CO_2), and the evolved CO_2 gas from the sample was carried through a condenser and a $\text{Mg}(\text{ClO}_4)_2$ column to dry the gas stream, and then through an ORBO-53™ tube to remove volatile acids other than CO_2 . In the titration cell of the coulometer, CO_2 reacted quantitatively with ethanolamine to form hydroxyethyl carbamic acid which was titrated with OH^- ions electrogenerated by the reduction of H_2O at a platinum cathode. The equivalence point was detected photometrically with thymolphthalein as indicator. The cell solution was blue at the equivalence point of 10.5 pH and colorless at pH 9.3 after the addition of CO_2 in aqueous solution (Johnson *et al.*, 1985). CO_2 lowers pH and raises % transmittance. As the acid was titrated, pH increased (hence, the blue color returned) and % transmittance decreased, thus causing the titration current to decrease as the equivalence point was approached and sensed by the optical detector. CO_2 was thus measured by the quantity of electrons required to reach the equivalence point, calculated by the magnitude of the current and the passage of time.

The coulometers were calibrated by injecting aliquots of pure CO_2 (99.995%) by means of an 8-port valve outfitted with two sample loops that had been calibrated at BNL (Wilke, 1993). All DIC values were corrected for dilution by 0.2 mL of HgCl_2 solution, assuming the solution was saturated with atmospheric CO_2 levels; total water volume was 540 mL. The correction factor used was 1.00037. No correction was made for headspace gas exchange with the sample due to the probable variability of $f\text{CO}_2$ at the location of sampling, and the small magnitude ($<1.0 \mu\text{mol/kg}$) of the correction.

The instruments were calibrated at the beginning, middle, and end of each coulometer cell solution with a set of the gas loop injections. Using the calculation of CO_2 injected (DOE, 1994), the set of gas loops yielded a mean calibration factor (CF) for the instrument defined as

$$\text{CF} = \frac{\text{calculated number of moles } \text{CO}_2 \text{ injected from gas loop}}{\text{observed moles of } \text{CO}_2 \text{ injected}}$$

The concentration of DIC in the samples was determined according to

$$\text{DIC } (\mu\text{mol/kg}) = \frac{\text{CF} \times (\text{Counts} - \text{Blank} \times \text{Run Time}) \times 2.0728 \times 10^{-4} \mu\text{mol/count}}{\text{Pipette Volume} \times \text{Density of Sample}}$$

where “Counts” is the instrument reading at the end of the analysis; “Blank” is the counts/minute determined from blank runs performed at least once for each cell solution; “Run Time” is the length of coulometric titration (in minutes); and 2.0728×10^{-4} is the conversion factor from counts to μmol .

Pipette volume was determined by taking aliquots of distilled water at known temperature dispensed from the pipette before, during, and after the cruise and weighing them ashore. No significant volume change was observed for either instrument. The weights with the appropriate densities were used to determine the volume of the pipette (DOE, 1994).

A Certified Reference Material (CRM) consisting of seawater poisoned with HgCl_2 (Batch 19), prepared by Dr. Andrew Dickson (SIO), was analyzed on both instruments over the duration of the cruise (Fig. 2). The CRM value was determined by the manometric technique of Dr. Charles Keeling of SIO. All DIC data have been corrected to the CRM values on a per instrument/per leg basis; the corrections applied are given in Table 3.

The overall uncertainty of the DIC measurements was determined in several different ways. Figure 2 and Table 3 display measurements of the CRMs analyzed during the cruise; no significant trends were observed over time, and the precision was within $\pm 1.9 \mu\text{mol/kg DIC}$. From Stations T1 and 192, replicate measurements from different PVC bottles tripped at the same depth, along with replicate measurements from the same PVC bottle, are shown in Table 4. The precision for all samples was within $\pm 1.2 \mu\text{mol/kg DIC}$. Duplicate data from the same PVC bottles tripped at 10 m and 1000 m throughout the cruise and analyzed at sea are shown in Table 5. Samples from these pairs were analyzed randomly throughout the life of the coulometer cell solution (25 mg C total throughput), and one remaining sample from one of the pairs was analyzed utilizing a new coulometer cell and solutions. The relative error for these samples was within 0.015%. In addition, sample pairs were collected for shore-based analyses and compared against at-sea analyses. These results are discussed in Section 2.2.5.1.

PMEL has shown a long-term improvement in precision of DIC analyses. Table 6 displays results of CRMs analyzed during cruises in which PMEL has participated from 1990 to 1994. The major improvement in overall precision occurred in 1992 when PMEL scientists began using the SOMMA coulometer system as their primary system for DIC analyses.

2.1.5.1 Shore-based analyses. In addition to the DIC samples analyzed at sea, samples were also collected for post-cruise analyses at SIO’s shore laboratory using a vacuum extraction/manometric analysis method (Guenther, 1994). Pairs of samples for manometric analysis, along with companion samples for at-sea coulometric analysis, were collected at a number of stations throughout the cruise, and were generally drawn from PVC bottles at both 10 and 3000 db (Fig. 3). The data imply a precision of $2.0 \mu\text{mol/kg}$ for individual shipboard measurements. Using Student’s *t* test (DOE, 1994), the average difference between shore-based and at-sea analyses was not significantly different from zero at the 95% confidence level.

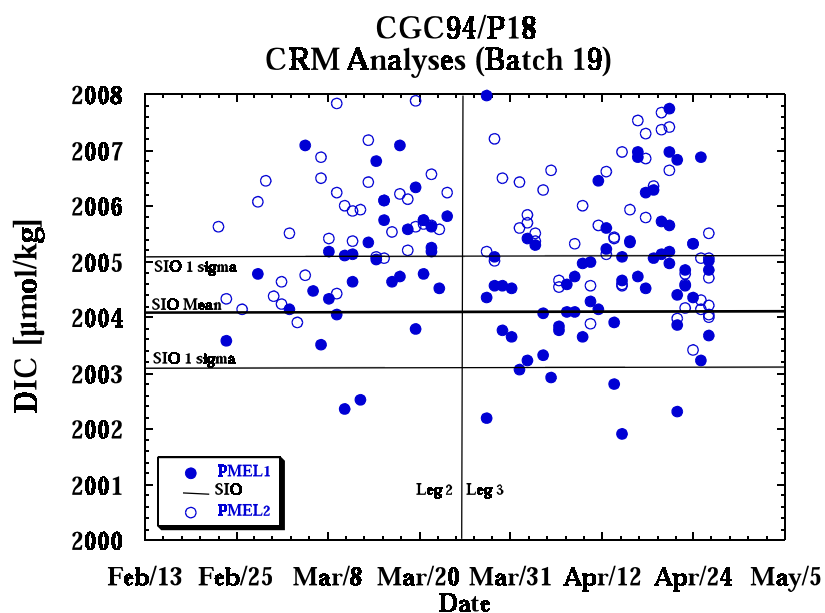


Fig. 2. CRM (Batch 19) analyzed during the eastern Pacific 1994 cruise. The overall uncertainty for both instruments combined was determined to be within $\pm 1.4 \mu\text{mol/kg}$ DIC. Manometrically derived DIC = $2004.1 \pm 1.0 \mu\text{mol/kg}$ ($n=17$).

Table 3. CRM (Batch 19) analyzed during the eastern Pacific 1994 cruise.

	PMEL-1 ($\mu\text{mol/kg}$)	Correction applied	PMEL-2 ($\mu\text{mol/kg}$)	Correction applied
Leg 2	2005.1 ± 1.9 ($n = 35$)	-1.0	2005.7 ± 0.9 ($n = 39$)	-1.6
Leg 3	2004.9 ± 1.5 ($n = 67$)	-0.8	2005.7 ± 1.3 ($n = 54$)	-1.6

Standard deviations are given at the 1σ level. The manometrically derived DIC = $2004.1 \pm 1.0 \mu\text{mol/kg}$.

Table 4. Precision of DIC analyses during the eastern Pacific 1994 cruise.

Station	Depth (m)	Precision ($\mu\text{mol/kg}$)	
		Samples from different PVC bottles, same depth	Samples from same PVC bottle
T1	500	2301.6 ± 1.2 (n = 5)	2302.3 ± 1.0 (n = 5)
192	1000	2362.4 ± 0.4 (n = 10)	2362.1 ± 0.9 (n = 10)

Values shown are for PMEL-1 and PMEL-2 combined. Standard deviations are given at the 1σ level.

Table 5. Relative error of duplicate data from PVC bottles tripped at 10 and 1000 m during the eastern Pacific 1994 cruise.

Depth (m)	<i>n</i>	Relative error (%)
10	101	0.015
1000	100*	0.013

*1 pair was omitted from statistical analysis. Values shown are for PMEL-1 and PMEL-2 combined.

Table 6. Long-term precision based on CRM analyses from 1990 to 1994.

Year	CRM Batch #	n	Precision ($\mu\text{mol/kg}$)
1990	1	26	± 2.5
1991	No CRM available	—	—
1992S	10	68	± 1.3
1992F	12	76	± 1.5
1994	19	195	± 1.3

CGC94/P18
Shore-based (Manometric) versus
at-sea (Coulometric) DIC analyses

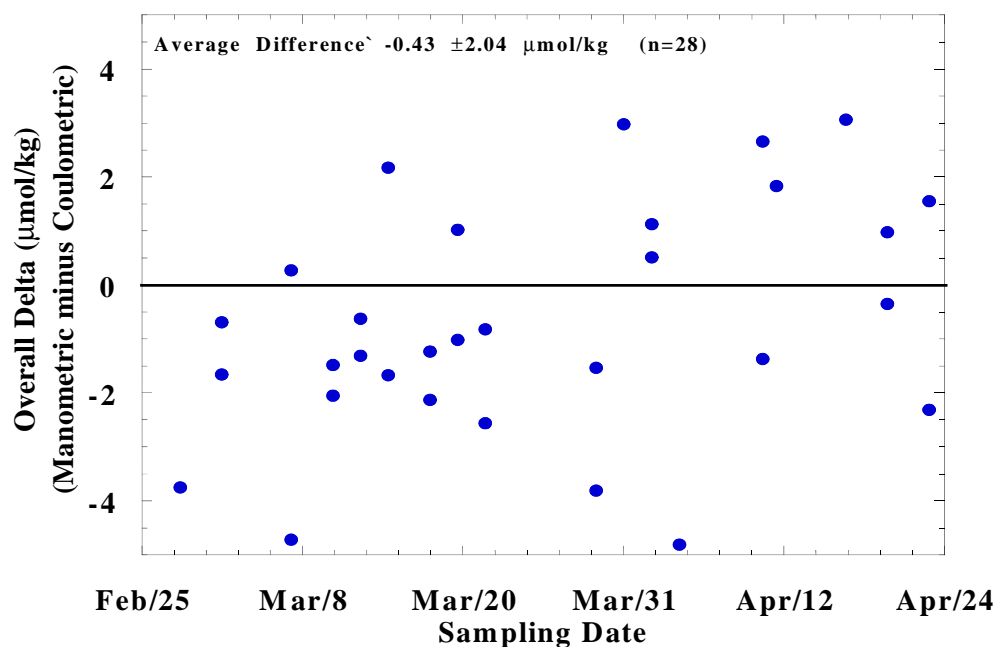


Fig. 3. Shore-based (manometric) versus at-sea (coulometric) DIC analyses during eastern Pacific 1994 cruise.

2.1.6 Total Alkalinity (TALK)

Samples were taken from the same 500-mL Pyrex™ bottles used for DIC analyses, and were analyzed within 12 hours. The titration system used to determine TALK consisted of a Metrohm 665 Dosimat™ titrator and an Orion™ 720A pH meter controlled by a personal computer (Millero *et al.*, 1993). The acid titrant, in a water-jacketed burette, and the seawater sample, in a water-jacketed cell, were kept at $25 \pm 0.1^\circ\text{C}$ with a Neslab™ constant-temperature bath. The plexiglass water-jacketed cells were similar to those used by Bradshaw *et al.* (1988), except that a larger volume (200 mL) was used to increase the precision. The cells had fill and drain valves with zero dead-volume, to increase the reproducibility of the cell volume.

The GWBASIC™ program used to run the titration recorded the volume of the added acid and the electromagnetic force (emf) of the electrodes using an RS232 interface. The titration was made by adding HCl to seawater past the carbonic acid endpoint. A typical titration records the emf reading after the readings stabilize (± 0.09 mv), and adds enough acid to change the voltage to a preassigned increment (± 13 mv). In contrast to the delivery of a fixed-volume increment of acid, this method results in an even distribution of data points throughout the titration curve.

The HCl solutions used throughout the cruise were made, standardized, and stored in 500-mL glass bottles in the laboratory for use at sea. The 0.25 M HCl solutions were made from 1 M Mallinckrodt™ standard solutions in 0.45 M NaCl to yield an ionic strength equivalent to that of

average seawater (0.7 M). The acid was independently standardized using a coulometric technique (Taylor and Smith, 1959; Marinenko and Taylor, 1968) by the University of Miami and by Dr. Dickson; the two standardization techniques agreed to ± 0.0001 N.

The volumes of the cells used at sea were determined in the laboratory by weighing them filled with degassed Milli-Q™ water. The density of water at the temperature of the measurements (25°C) was calculated from the international equation of the state of seawater (Millero and Poisson, 1981). The nominal volumes of the cells were about 200 mL and the values were determined to ± 0.03 mL. The reliability of the volumes was assessed by comparing the values of TAlk obtained for Gulf Stream seawater with open (weighed amounts of seawater) and closed cells using the same acid, electrodes, and Dosimat™. If the volume was correct, the TAlk from the open and closed cells should be the same. If the cells were modified during the cruise, adjustments were made to the volumes using the daily titrations on low-nutrient surface water and CRMs (Batch 19).

The volume of HCl delivered to the cell is traditionally assumed to have a small uncertainty (Dickson, 1981) and is equated with the digital output of the titrator. Calibrations of the Dosimat™ burettes with Milli-Q™ water at 25°C indicated that the systems deliver 3.000 mL (the value for a titration of seawater) to a precision of 0.0004 mL. This uncertainty resulted in an error of 0.4 $\mu\text{mol/kg}$ in TAlk and DIC. The accuracy of the volume of acid delivered by the Dosimats™ was as much as ten times greater (4.0 $\mu\text{mol/kg}$).

Internal consistency of each cell was checked before, during, and after the cruise by titrating CRM Batch 19 prepared by Dr. Dickson; this was the same batch used for calibration of DIC. The TAlk of CRM Batch 19 was determined by open cell (weighed) titration in the laboratory prior to the cruise and was found to be 2251 $\mu\text{mol/kg}$ ($n = 9$). A total of 114 CRM measurements were made at sea ($\bar{x} = 2254 \pm 2$ $\mu\text{mol/kg}$) on three different cells. The deviations from the mean at sea are shown in Fig. 4. All TAlk data have been corrected to laboratory CRM values for each cell and each leg.

2.1.7 $^{13}\text{C}/^{12}\text{C}$ Isotopes ($\delta^{13}\text{C}$)

Samples were collected from the PVC bottles in pre-washed and baked (450°C) 250- or 500-mL ground glass- stoppered bottles using a length of Tygon™ tubing. The tubing was flushed for a few seconds, the end of the tubing was then placed at the bottom of the upright sample bottle, and the bottle was filled, then overflowed by at least half its volume. Flow was stopped as the Tygon™ tubing was removed from the top of the bottle to avoid splashing.

Using a syringe or turkey baster, 10 to 20 mL were withdrawn from the top of the sample to lower the water level to approximately 1 cm below the neck of the bottle, avoiding backwash into the sample. The ground glass joint of the bottle was wiped dry with Kimwipes™, then 100 μL (per 250 mL of seawater) of a saturated HgCl_2 solution was injected into the sample using an Eppendorf™ pipette. The ground-glass stopper, which had been pregreased with Apiezon-M™ grease, was then inserted straight into the bottle without twisting. If any air streaks in the grease seal

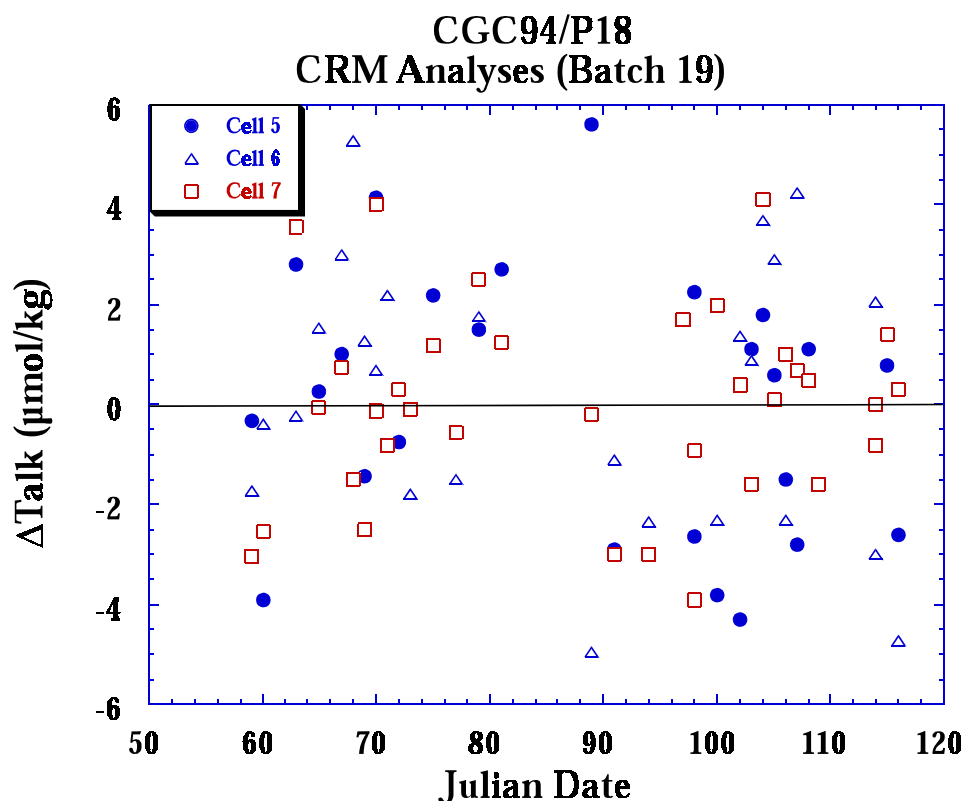


Fig. 4. Deviation from the mean for TALK of CRM (Batch 19) during the eastern Pacific 1994 cruise.

were visible, the stopper was removed, cleaned, and regreased, then the bottle was resealed. Clips (if required for the bottle neck type) were placed on the necks of the bottles, and two heavy rubber bands were placed around the stopper and bottle to prevent leakage. The sample bottle was then overturned a few times to mix the HgCl_2 throughout the sample.

At the onshore laboratory, CO_2 was extracted from the DIC seawater sample using a modification of the He stripping technique of Kroopnick (1974), as described in Quay *et al.* (1992). The stripper comprised a glass tube with a stainless steel fitting and silicone-greased glass stopcock at the bottom (which connects to the He line), a glass frit through which the He passed, and a stainless steel fitting containing a 3-layer silicone rubber septum at the top. Approximately 1 mL H_3PO_4 was injected into the stripper and bubbled with He for 10 min. The gas was then evacuated from the stripper and the stripper weighed. 80 to 125 mL of the sample was then drawn into the stripper and weighed again to allow calculation of the weight of water analyzed. A stainless steel needle pierced the septum, connecting the stripper to the extraction line, which had been evacuated and filled with He. The sample was stripped with 99.997% pure He at a flow rate of about 200 ml/min for 20 min. Water was trapped out in two glass traps submerged in dewars containing a slush mixture of dry ice and isopropanol at -70°C . CO_2 was collected at -196°C in glass loop traps submerged in LN_2 . The $\delta^{13}\text{C}$ was then measured on a FinniganTM MAT 251 mass spectrometer.

The efficiency of the extraction method was $100\% \pm 0.5\%$, based on gravimetrically prepared Na_2CO_3 standards. The precision of the $\delta^{13}\text{C}$ analyses was ± 0.02 per mil, based on replicate analyses of standards and seawater samples.

2.1.8 Nutrients

2.1.8.1 Sampling procedures and equipment; analytical methods. Nutrient samples were collected from the PVC bottles into aged 20-mL high-density polyethylene scintillation vials closed with Teflon™-lined polyethylene caps. All vials and caps were rinsed with 10% HCl and deionized water prior to each station, and rinsed at least three times with sample before filling. Samples were usually analyzed immediately after collection; however, some samples were stored for up to 12 hours at $4\text{--}6^\circ\text{C}$. An AlpKem™ RFA/2 autoanalyzer was used to determine dissolved concentrations of silicate ($\text{Si}(\text{OH})_4$), phosphate (PO_4^{3-}), nitrate (NO_3^-), and nitrite (NO_2^-). Measurements were made in a temperature-controlled laboratory ($21 \pm 1^\circ\text{C}$). The following analytical methods were employed:

- $\text{Si}(\text{OH})_4$ was converted to silicomolybdic acid and reduced with stannous chloride to form silicomolybdous acid or molybdenum blue (Armstrong, 1967).
- PO_4^{3-} was converted to phosphomolybdic acid and reduced with ascorbic acid to form phosphomolybdous acid in a reaction stream heated to 37°C (Bernhardt and Wilhelms, 1967).
- NO_2^- was diazotized with sulfanilamide and coupled with NEDA to form a red azo dye. ($\text{NO}_3^- + \text{NO}_2^-$) was measured by first reducing nitrate to nitrite in a copperized cadmium coil, and then analyzing for nitrite. NO_3^- was determined from the difference of ($\text{NO}_3^- + \text{NO}_2^-$) and NO_2^- (Armstrong, 1967).

2.1.8.2 Calibrations and standards. Standard materials for $\text{Si}(\text{OH})_4$, NO_3^- , NO_2^- , and PO_4^{3-} were sodium fluorosilicate, potassium nitrate, sodium nitrite, and mono-basic potassium phosphate, respectively. Sodium fluorosilicate was referenced against a fused-quartz standard. Primary standards were prepared by dissolving standard material in deionized water, and working standards were prepared in low-nutrient seawater. At each station, seven concentrations of working standard were freshly prepared and analyzed prior to sample analysis, and the highest standard was again analyzed after the last sample. This allowed for regular monitoring of the response, drift, and linearity of the chemistry. All analyses were within the linear range of the instrument. Concentrations were converted to $\mu\text{moles/kg}$ by calculating sample densities using the laboratory temperature of 21°C and the practical salinity scale (UNESCO, 1981).

2.1.8.3 Precision. Analytical precision was determined by replicate measurements (usually 4–5 measurements) on 46 samples from depths greater than 100 m. The average standard deviations of these precision tests in $\mu\text{mol/kg}$ was 1.1 $\text{Si}(\text{OH})_4$, 0.015 PO_4^{3-} , and 0.22 NO_3^- ; the average percent deviations were 0.56% $\text{Si}(\text{OH})_4$, 0.84% PO_4^{3-} , and 0.59% NO_3^- .

2.1.9 Total Organic Carbon (TOC) and Nitrogen (TON)

Water samples taken for organic carbon and nitrogen determinations were not filtered, hence total organic carbon (TOC) and nitrogen (TON) were measured. Samples for TOC and TON analysis were collected using the PVC bottles on the CTD rosette (data in Appendix A), or with 10- or 20-L GoFlo™ bottles deployed on a Kevlar™ line (data in Appendix B). TOC samples were collected in 40-mL EPA vials with Teflon™-lined closures (I-Chem Research). Vials and caps were rinsed three times, filled 3/4 full, immediately acidified with 150 µL of 50% (v/v) H₃PO₄ and stored in the dark. Analyses were completed 6–9 months after collection. TON samples were collected in acid-washed 125-mL polyethylene bottles. Bottles and caps were rinsed three times, filled 3/4 full, and frozen (–20°C) for later onshore analysis. A comparison of TOC concentrations in the frozen TON samples and the acidified, dark-stored samples showed no discernible differences.

2.1.9.1 TOC analyses. All TOC samples were analyzed by high-temperature combustion using a non-commercial system modified from the system of Hansell (1993). A quartz combustion tube (490 mm × 13 mm) was packed with platinum pillows (Ionics, Inc.), Cuprox™ (Leeman Labs), and Sulfix™ (Wako Pure Chemical Industries, Inc.). Four pillows were placed 11 cm from the top of the tube. Below the pillows were 15 g of Cuprox™ and then 15 g of Sulfix™. The pillows, Cuprox™, and Sulfix™ were each separated by a thin layer of quartz wool. The packing material was supported from below by a platinum screen (one of the pillows unfolded), which in turn was supported by a quartz rod (0.6 mm O.D.) extending to the bottom of the column. The combustion column was maintained at 700°C in a Thermolyne™ 21100 tube furnace. The samples were sparged of inorganic carbon with Ultra-Pure™ O₂. Carbon dioxide generated from 100-µL injections was detected using a LICOR™ Model LI-6252 NDIR analyzer operated in the absolute mode. Data were acquired on a Macintosh computer running Dynamax Macintegrator™ 1.3 software (Rainin Instruments, Inc.).

Calibrations were performed daily with a 4-point standard curve using glucose in Milli-Q™ water (0–100 µmol/L C). The system blank (normally 7–8 µmol/L C) was determined using vialled Milli-Q™ water produced at BBSR. The organic carbon content of this water (3 µmol/L C) was determined by intercomparison with the low-carbon water used by Carlson and Ducklow (1995). Vialled seawater, collected from 2600 m at the U.S. JGOFS Bermuda Atlantic Time-Series Study site in the Sargasso Sea, was also analyzed each day to help monitor the system blank and the behavior of the analyzer. The percent relative standard deviation (RSD) for all TOC samples at depths >1000 m, with a mean concentration of 39.9 µmol/L, was 7.8%. In the surface layer, the RSD for TOC was approximately 4%.

2.1.9.2 TON analyses. Concentrations of TON were determined by UV photooxidation according to the method described by Walsh (1989). Frozen samples were thawed by placing sample bottles in a warm water bath. A 10-mL aliquot was removed from each sample bottle and placed in a 20-mL fused quartz tube equipped with a ground stopper (Quartz Scientific, Inc.). Fifty µL of 30% hydrogen peroxide was added to each tube and placed in a homemade irradiation unit overnight

(17–20 hours). Tests for the recovery of known compounds, such as glycine, showed that inconsistent results were obtained with shorter irradiation periods. The irradiation unit contained a 1200W UV lamp (Hanovia) protected by a quartz jacket. A 2-tier aluminum tube holder (40 tubes total) fitted around the lamp and held the samples 8 cm from the lamp. A fan at the bottom of the unit cooled the samples. A hinged aluminum cylinder, open at the top and bottom, was fitted around the samples to keep stray UV light from leaving the system. This entire unit was placed in a fume hood, the front of which was covered with a black curtain while in use (again to collect stray UV light).

After irradiation, aliquots of the samples (which were refrigerated overnight) that had not been oxidized, and the photooxidized aliquots, were analyzed for nitrate plus nitrite using a colorimetric method on a Technicon™ Autoanalyzer II (Knap *et al.*, 1993). Daily calibration was achieved from 4-point calibration curves using both KNO_3 and KNO_2 . Cadmium column efficiency was determined by comparing the slope of the NO_3^- calibration curve with the slope obtained from the NO_2^- calibration curve. Due to the photoreduction of NO_3^- to NO_2^- (Walsh, 1989), it is imperative that the cadmium column be efficient when analyzing samples containing high concentrations of NO_3^- . Therefore, a new column (efficiency >98%) was employed when analyzing NO_3^- samples >10 $\mu\text{mol/L}$. The column efficiency was generally >90% when running the low- NO_3^- samples. Low-nutrient seawater (Sargasso Sea surface water) was always processed with the samples as a daily quality control. TON in the deep ocean is calculated as the difference between two large numbers (total inorganic nitrogen and total dissolved nitrogen, including inorganic and organic fractions), hence high precision in the deep ocean has been an elusive goal. The RSD for all TON samples >1000 m, with a mean concentration 2.5 $\mu\text{mol/L N}$, was 18%. In the surface layer, where inorganic nitrogen was non-detectable, the RSD for TON was approximately 4%.

2.1.10 Salinity

Salinity samples were collected in 125-mL amber glass bottles directly from the PVC bottles; care was taken not to touch the petcock. Analysis was conducted with two Guildline™ model 8400A inductive autosalinometers, standardized with IAPSO Standard Seawater, batch P114, and located in a temperature-controlled van. The autosalinometer in use was standardized before each run, and either at the end of each run or after no more than 48 samples. Drift between standardizations was monitored and individual samples were corrected by linear interpolation. Duplicate samples taken from the deepest bottle on each cast were analyzed on a subsequent day. Bottle salinities were compared with preliminary CTD salinities to aid in identification of leaking bottles as well as to monitor the CTD conductivity cells' performance and drift.

The expected precision of the autosalinometer with an accomplished operator is 0.001, with an accuracy of 0.003. To assess the precision of discrete salinity measurements on this cruise, an examination was made of data from instances in which two bottles were tripped within 1 m of each other at the same station below a depth of 2000 m. For the 138 occasions on which both bottles of

the pair had acceptable salinity measurements, the standard deviation of the differences was 0.0012. This value is very close to the expected precision.

2.1.11 Beam attenuation due to particles (c_p)

A 25-cm-pathlength Sea Tech™ transmissometer was interfaced with the CTD. The 0–5 volt output (V) is proportional to beam transmission (T), i.e., $T = V/5$ (or $T*100$ when expressed as percent transmission). Data were acquired at the same rate as other CTD parameters and were de-spiked and bin-averaged at 1-db intervals. Beam transmission was converted to beam attenuation coefficients using $c = -(\ln T)/z$, where c = the beam attenuation coefficient (m^{-1}), z = beam path length (m), and T = beam transmission. Beam attenuation is linearly related to particle concentration (given a uniform particle-size distribution and index of refraction) whereas beam transmission is not.

When possible, we filtered water through preweighed filters so we could gravimetrically determine the concentration of particulate matter (PM) through the water column for a correlation with beam attenuation (e.g., Gardner *et al.*, 1995). As this was not possible for this transect, we used the following steps for data reduction. The minimum c for each profile was determined and plotted. The depth of the minimum was generally between 2000 and 3000 m. Each profile was examined for anomalous data; only 2 of the profiles had to be eliminated. The transmissometer was not on the CTD for 17 profiles. Successive plots of c were compared, and where the minimum c differed from surrounding plots by more than 0.001 m^{-1} , a linear shift was made in the profile so that c at 2000 m was the same as in adjacent profiles. This procedure corrects for incomplete cleaning of the optical windows and errors in air calibration.

Beam attenuation is the sum of attenuation due to water (c_w), particles (c_p), and dissolved colored organic matter (c_y). In the open ocean the value of c_y is negligible. Sea Tech™ transmissometers were factory-calibrated to have a c of 0.364 m^{-1} in particle-free water, but generally require empirical calibrations by water filtration. Because no filter-calibration data were available, the cruise minimum c was used for c_w ; this constant was subtracted from each profile. The remaining value is c_p , attenuation due to particles in the water.

2.2 Biological Cast Operations

In addition to the CTD casts, samples were collected using 10- or 20-L GoFlo™ bottles deployed on a Kevlar™ line (Table 7) to assess the biological components of the carbon species in the upper 200–300 m of the water column. These included estimates of biomass (chlorophyll- a , phaeopigments, and biogenic silica) and primary productivity. A more comprehensive listing of the biological data is available through MBARI (Michisaki *et al.*, 1996). Samples for TOC and TON were also collected from some of the biology casts.

2.2.1 Methods and Materials

Water for the productivity experiments was collected at six fixed depths representing 100, 50, 30, 15, 5, and 1% of the surface irradiance (S.I.) as determined with a Secchi disk. Dedicated, Teflon-coated Go-Flo™ bottles lowered on a Kevlar™ cable and closed with Teflon™ messengers were employed. The sampling system and cleaning of components, as well as bottle handling and filtration, were modeled after the recommendations of Fitzwater *et al.* (1982). In addition to samples from the Kevlar™ casts, measurements of chlorophyll-*a* and phaeopigments were made on samples collected in the upper 200 m with the rosette sampler on the CTD. (Appendix A).

2.2.2 Chlorophyll-*a* and Phaeopigments

Chlorophyll-*a* and phaeopigments were determined by the fluorometric technique using a Turner™ Designs Model 10-005 R fluorometer calibrated with commercial chlorophyll-*a* (Sigma). Samples for determination of plant pigments were filtered onto 25-mm Whatman™ GF/F glass fiber filters and extracted in 90% acetone in a freezer for between 24 and 30 hours (Venrick and Hayward, 1984). Other than the modification of the extraction procedure, the method used is the conventional fluorometric procedure of Holm-Hansen *et al.* (1965) and Lorenzen (1966). Additional samples were also filtered onto 0.2-, 1.0-, and 5.0- μm -pore Nuclepore™ membrane filters.

2.2.3 Primary Productivity

The stable isotopes ^{13}C and ^{15}N (Hama *et al.*, 1983; Slawyk *et al.*, 1984), rather than the radioactive isotope ^{14}C , were used to measure primary production. Samples were drawn into 1-L polycarbonate bottles which had been washed using the Fitzwater *et al.* (1982) procedure; this method was also used for cleaning the Go-Flo™ bottles. For carbon measurements, Na_2CO_3 (minimum 99.9%; Cambridge, US) was added to reach a concentration of 7.2% of the total inorganic carbon in the ambient seawater (Kanda *et al.*, 1985). An initial sample was inoculated with the tracer and filtered immediately with no incubation to determine abiotic particulate ^{13}C incorporation and initial isotopic ratio. The bottles were encased in nickel screens (Perforated Products) that acted as neutral density filters to reduce light intensity to the level at the depth from which the sample was collected, and were incubated on deck in surface seawater-cooled Plexiglas incubators. All samples were incubated for either 6 (dual-labeled with ^{13}C and ^{15}N) or 24 (^{13}C only) hours under natural light; however, samples were collected and incubations started at various times of the day. For determination of particulate carbon fixation, the water from the bottles was filtered onto Whatman™ GF/F filters at <250 mm mercury. The filters were dried at 60°C and stored in a desiccator for later analysis ashore on a Europa™ mass spectrophotometer. The calculation of production follows the rationale of Dugdale and Wilkerson (1986) for ^{15}N , as described in Chavez *et al.* (1996).

Table 7. Biology cast locations and dates during the eastern Pacific 1994 cruise.

Station	Latitude			Longitude			Date
8	53°	22.9'	S	76°	22.4'	W	23 Feb 94
9	61°	12.7'	S	90°	11.2'	W	25 Feb 94
10	67°	0.0'	S	103°	0.0'	W	27 Feb 94
13	65°	30.0'	S	103°	0.0'	W	28 Feb 94
16	63°	58.0'	S	103°	2.0'	W	1 Mar 94
19	62°	30.0'	S	103°	0.0'	W	2 Mar 94
23	60°	30.0'	S	103°	0.0'	W	3 Mar 94
26	59°	0.0'	S	103°	0.0'	W	4 Mar 94
27	58°	30.0'	S	103°	0.0'	W	5 Mar 94
30	56°	30.0'	S	103°	0.0'	W	7 Mar 94
33	54°	29.7'	S	102°	58.9'	W	8 Mar 94
36	52°	30.0'	S	103°	0.0'	W	9 Mar 94
40	49°	50.0'	S	103°	0.0'	W	10 Mar 94
43	48°	0.0'	S	103°	0.0'	W	11 Mar 94
47	46°	0.0'	S	103°	0.0'	W	12 Mar 94
51	44°	0.0'	S	103°	0.0'	W	13 Mar 94
55	42°	0.0'	S	103°	0.0'	W	14 Mar 94
58	40°	30.0'	S	103°	0.0'	W	15 Mar 94
62	38°	30.0'	S	103°	0.0'	W	16 Mar 94
66	36°	30.0'	S	103°	0.0'	W	17 Mar 94
70	34°	30.0'	S	103°	0.0'	W	18 Mar 94
74	32°	30.0'	S	103°	0.0'	W	19 Mar 94
78	30°	30.0'	S	103°	0.0'	W	20 Mar 94
81	29°	0.0'	S	103°	0.0'	W	21 Mar 94
84	27°	30.0'	S	103°	0.0'	W	22 Mar 94
90	24°	29.3'	S	103°	0.0'	W	29 Mar 94
94	26°	30.0'	S	103°	0.0'	W	30 Mar 94
98	20°	0.0'	S	103°	0.0'	W	31 Mar 94
101	18°	53.7'	S	103°	8.5'	W	1 Apr 94
104	17°	30.0'	S	103°	0.0'	W	2 Apr 94
108	15°	30.0'	S	103°	0.0'	W	3 Apr 94
112	13°	30.0'	S	103°	0.0'	W	4 Apr 94
115	12°	0.0'	S	103°	0.0'	W	5 Apr 94
119	10°	0.0'	S	103°	0.0'	W	6 Apr 94
122	8°	51.3'	S	104°	41.6'	W	7 Apr 94
126	7°	18.4'	S	106°	57.3'	W	8 Apr 94
130	5°	46.5'	S	109°	12.7'	W	10 Apr 94
133	4°	29.8'	S	110°	19.5'	W	10 Apr 94
137	2°	40.0'	S	110°	20.0'	W	11 Apr 94
141	1°	20.0'	S	110°	20.0'	W	12 Apr 94
145	0°	0.0'	S	110°	19.0'	W	13 Apr 94
149	1°	20.0'	N	110°	20.0'	W	14 Apr 94
153	2°	40.0'	N	110°	20.0'	W	15 Apr 94
157	4°	30.0'	N	110°	20.0'	W	16 Apr 94
160	6°	0.0'	N	110°	20.0'	W	17 Apr 94

Table 7. (continued)

Station	Latitude			Longitude			Date
164	8°	0.0'	N	110°	20.0'	W	18 Apr 94
168	10°	9.1'	N	110°	0.4'	W	19 Apr 94
172	12°	40.3'	N	109°	59.9'	W	20 Apr 94
175	14°	29.7'	N	110°	0.1'	W	21 Apr 94
179	16°	30.0'	N	110°	0.0'	W	22 Apr 94
183	18°	30.0'	N	110°	0.0'	W	23 Apr 94
188	21°	0.0'	N	110°	0.0'	W	24 Apr 94
192	22°	43.9'	N	110°	0.0'	W	25 Apr 94

2.2.4 Biogenic Silica

Biogenic silica depth profiles were taken at most biology stations, depending on availability of water. Depths correspond to the depths utilized for uptake rate experiments. One-L samples were filtered onto 47-mm, 0.8- μ m polycarbonate filters. The filters were frozen (-20°C) on board and taken back to the lab for analysis. Dissolution was carried out at 85°C in 0.5% Na_2CO_3 and the sample was acidified before silicate concentration was determined following the spectrophotometric method outlined in Parsons *et al.* (1984). There were no replicate analyses; however, based on similar measurements for the equatorial Pacific, precision was estimated at $\pm 14\%$.

3. DATA TABLES

3.1 CTD Casts

A complete listing of the CTD data is available through NOAA (MCTaggart *et al.*, 1996). Discrete data are reported at all observed depths and are listed in this report as separate tables in Appendix A. Where no data are available, a null value (-9) has been inserted. Sample ID consists of the cast number followed by the 2-digit rosette position. Quality control flags follow the WHP Data Reporting Requirements (WOCE, 1994), and are listed in Tables 8 and 9. In Appendix A, the quality control flags are posted adjacent to the following parameters: Sample ID (flag indicates PVC sample bottle quality (Table 8)), CTD salinity, bottle salinity, nutrients, CFCs, DO, pCO_2 , DIC, pH, and TALK (flags indicate water quality for samples (Table 9)). In the electronic version, quality flags are posted adjacent to all parameters with the exception of pressure, in situ temperature, and potential temperature. Temperatures are reported using the ITS90 scale (Saunders, 1990). Sigma-theta (σ_{θ}) and potential temperature (θ) values in the tables were calculated using standard UNESCO algorithms (Fofonoff and Millard, 1983); input parameters include salinities and in situ temperatures, both from the CTD. To obtain an electronic version of the database by remote access, please see page iii of this report.

3.2 Biological Casts

Discrete bottle data for the biological parameters obtained from the Kevlar™ casts are presented in Appendix B. In both Appendix B and the electronic version of the biology casts quality flags are posted adjacent to the corresponding parameters. To obtain the database by remote access, please see page iii of this report.

Table 8. WOCE quality flag definitions for water bottles.

Flag	Definition
1	Bottle information unavailable
2	No problems noted
3	Leaking
4	Did not trip correctly
5	Not reported
7	Unknown problem
9	Samples not drawn from this bottle

A more detailed listing of water bottle quality flags of 3 or 4, as documented on the deck logs, are contained in a file available by contacting bullister@pmel.noaa.gov.

Table 9. WOCE water quality flag definitions.

Flag	Definition
1	Sample drawn but analysis not received
2	Acceptable measurement
3	Questionable measurement
4	Bad measurement
5	Not reported
6	Mean of replicate measurements
7	Manual chromatographic peak measurements
8	Irregular digital chromatographic peak integration
9	Sample not drawn for measurement

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5. REFERENCES

- Armstrong, F.A.J., C.R. Stearns, and J.D.H. Strickland (1967): The measurement of upwelling and subsequent biological processes by means of the Technicon Auto-Analyzer and associated equipment. *Deep Sea-Res.*, 14, 381–389.
- Bernhardt, H., and A. Wilhelms (1967): The continuous determination of low level iron, phosphate and total phosphate with the AutoAnalyzer. *Technicon Symposia*, Vol I, 385–389.
- Bradshaw, A.L., and P.G. Brewer (1988): High precision measurements of alkalinity and total carbon dioxide in seawater by potentiometric titration-1. Presence of unknown protolyte(s)?. *Mar. Chem.*, 23, 69–86.
- Bullister, J.L., and R.F. Weiss (1988): Determination of CCl_3F and CCl_2F_2 in seawater and air. *Deep-Sea Res.*, 35, 839–853.
- Byrne, R.H. (1987): Standardization of standard buffers by visible spectrometry. *Anal. Chem.*, 59, 1479–1481.
- Carpenter, J.H. (1965): The Chesapeake Bay Institute technique for the Winkler Dissolved Oxygen method. *Limnol. Oceanogr.*, 10, 141–143.
- Carlson, C.A., and H.W. Ducklow (1995): Dissolved organic carbon in the upper ocean of the central equatorial Pacific Ocean, 1992: Daily and finescale vertical variations. *Deep-Sea Res. II*, 42, 639–656.
- Chavez, F.P., K.R. Buck, S.K. Service, J. Newton, and R.T. Barber (1996): Zonal and meridional variability in phytoplankton production, biomass, and composition in the central and eastern tropical Pacific. *Deep-Sea Res.* (in press).
- Chen, H., R. Wanninkhof, R. A. Feely, and D. Greeley (1995): Measurement of fugacity of carbon dioxide in sub-surface water: an evaluation of a method based on infrared analysis. NOAA Tech. Memo. ERL AOML-85.
- Chipman, D.W., J. Marra, and T. Takahashi (1993): Primary production at 47°N and 20°W in the North Atlantic Ocean: A comparison between the ^{14}C incubation method and mixed layer carbon budget observations. *Deep-Sea Res. II*, 40, 151–169.
- Clayton, T.D., and R.H. Byrne (1993): Spectrophotometric seawater pH measurements: total hydrogen ion concentration scale calibration of m-cresol purple and at-sea results. *Deep-Sea Res.*, 40, 2115–2129.
- Dickson, A.G. (1981): An exact definition of total alkalinity and a procedure for the estimation of alkalinity and total CO_2 from titration data. *Deep-Sea Res.*, 28, 609–623.
- DOE (1994): Handbook of methods for the analysis of the various parameters of the carbon dioxide system in sea water, version 2.0 (A. Dickson and C. Goyet, eds.).
- Dugdale, R.C., and F.P. Wilkerson (1986): The use of ^{15}N to measure nitrogen uptake in eutrophic oceans; experimental considerations. *Limnol. Oceanogr.*, 31, 673–689.
- Fitzwater, S.E., G.A. Knauer, and J.H. Martin (1982): Metal contamination and its effects on primary production. *Limnol. Oceanogr.*, 27, 544–551.

- Fofonoff, N.P., and R.C. Millard, Jr., (1983): Algorithms for computation of fundamental properties of seawater. UNESCO Tech. Paper 44.
- Friederich, G.E., L.A. Codispoti, and C.M. Sakamoto (1991): An easy-to-construct automated Winkler titration system. MBARI Tech. Rep. 91-6.
- Gardner, W.D., S.P. Chung, M.J. Richardson, and I.D. Walsh (1995): The oceanic mixed-layer pump. *Deep-Sea Res. II*, 42, 757–775.
- Guenther, P.R., C.D. Keeling, and G. Emanuele III (1994): Oceanic CO₂ measurements for the WOCE Hydrographic Survey in the Pacific Ocean, 1990–1991: Shore based analyses. S.I.O. Ref. Series Data Rep., 129 pp.
- Hama, T., T. Miyazaki, Y. Ogawa, T. Iwakum, M. Takahashi, A. Otuski, and S. Ichimura (1983): Measurement of photosynthetic production of a marine phytoplankton population using a staple ¹³C isotope. *Mar. Biology*, 73, 31–35.
- Hansell, D.A. (1993): Results and observations from the measurement of DOC and DON in seawater using a high-temperature catalytic oxidation technique. *Mar. Chem.*, 41, 195–202.
- Ho, D., R.D. Wanninkhof, R.A. Feely, C. Cosca and J. Masters. (1996): Underway fCO₂ measurements in the eastern and equatorial Pacific in 1994. (In preparation).
- Holm-Hansen, O., C.J. Lorenzen, R.W. Holmes, and J.D. Strickland (1965): Fluorometric determination of chlorophyll. *J. Cons. Int. Explor. Mer*, 30, 3–15.
- Johnson, K.M. (1992): Operator's manual; Single operator multiparameter metabolic analyzer (SOMMA) for total carbon dioxide (C_T) with coulometric detection. Brookhaven, N.Y., 70 pp.
- Johnson, K.M., A.E. King, and J. McN. Sieburth (1985): Coulometric TCO₂ Analyses for Marine Studies; an introduction. *Mar. Chem.*, 16, 61–82.
- Johnson, K.M., P.J. Williams, L. Brandstrom, and J. McN. Sieburth (1987): Coulometric total carbon analysis for marine studies: automation and calibration. *Mar. Chem.*, 21, 117–133.
- Johnson, K.M., K.D. Wills, D.B. Butler, W.K. Johnson, and C.S. Wong (1993): Coulometric total carbon dioxide analysis for marine studies: maximizing the performance of an automated continuous gas extraction system and coulometric detector. *Mar. Chem.*, 44, 167–189.
- Kanda, J., T. Saino, and A. Hattori (1985): Nitrogen uptake by natural populations of phytoplankton and primary production in the Pacific Ocean: Regional variability of uptake capacity. *Limnol. Oceanogr.*, 30, 987–1000.
- Knap, A.H., A.F. Michaels, R.L. Dow, R.J. Johnson, K. Gundersen, J.C. Sorenson, A.R. Close, F.A. Howse, M. Hammer, N. Bates, A. Doyle, and T. Waterhouse (1993): BATS Method Manual, U.S. JGOFS Planning Office, Woods Hole, MA.
- Kroopnick, P. (1974): The dissolved O₂-CO₂-¹³C system in the eastern equatorial Pacific. *Deep-Sea Res.*, 21, 211–227.
- Lobert, J.M., J.H. Butler, L.S. Geller, S.A. Yvon, S.A. Montzka, R.C. Myers, A.D. Clarke, and J.W. Elkins (1996): BLAST94: Bromine latitudinal air/sea transect 1994. Report on oceanic measurements of methyl bromide and other compounds, NOAA Tech. Memo. ERL CMDL-10.

- Lorenzen, C.J. (1966): A method for the continuous measurement of in vivo chlorophyll concentration. *Deep-Sea Res.*, 13, 223–227.
- McTaggart, K., G.C. Johnson, and B. Taft (1996): CTD/O₂ measurements collected on a Climate and Global Change Cruise (WOCE Section P18) along 110°W during January–April, 1994. NOAA Data Rep. ERL PMEL-59, 519 pp.
- Marinenko, G., and J.K. Taylor (1968): Electrochemical equivalents of benzoic and oxalic acid. *Anal. Chem.*, 40, 1645–1651.
- Michisaki, R.P., F.P. Chavez, and K.R. Buck (1996): Primary productivity and chlorophyll in the east Pacific. MBARI Technical Report 9621, 82 pp.
- Millero, F.J., and A. Poisson (1981): International one-atmosphere equation of state of seawater. *Deep-Sea Res.*, 28, 625–629.
- Millero, F.J., J.Z. Zhang, K. Lee, and D.M. Campbell (1993): Titration alkalinity of seawater. *Mar. Chem.*, 44, 153–165.
- Parsons, T.R., Y. Maita, and C.M. Lalli (1984): A manual of chemical and biological methods for seawater analysis. Pergamon Press, New York, 173 pp.
- Press, W.H., B.P. Flannery, S.A. Teukolsky, and W.T. Vetterling (1988): Numerical Recipes in C. Cambridge University Press, Cambridge, pp.
- Peng, T.-H., T. Takahashi, W.S. Broecker, and J. Olafsson (1987): Seasonal variability of carbon dioxide, nutrients and oxygen in the northern North Atlantic surface water: observations and a model. *Tellus*, 39B, 439–458.
- Quay, P.D., B. Tilbrook, and C.S. Wong (1992): Oceanic uptake of fossil fuel CO₂: Carbon-13 evidence. *Science*, 256, 74–79.
- Saunders, P.M. (1990): The international temperature scale of 1990. ITS-90. *WOCE Newsletter*, 10. IOS, Wormley, U.K.
- Slawyk, G., M. Minas, Y. Collos, L. Legendre, and S. Roy (1984): Comparison of radioactive and stable isotope tracer techniques for measuring photosynthesis: ¹³C and ¹⁴C uptake by marine phytoplankton. *J. Plankton Res.*, 6, 249–257.
- Soreide, N.N., M.L. Schall, W.H. Zhu, D.W. Denbo and D.C. McClurg (1995): EPIC: An oceanographic data management, display and analysis system. In Proceedings, 11th International Conference on Interactive Information and Processing Systems for Meteorology, Oceanography, and Hydrology, January 15–20, 1995, Dallas, TX, pp. 316–321.
- Taylor, J.K., and S.W. Smith (1959): Precise coulometric titration of acids and bases. *J. Res. Natl. Bur. Stds.*, 69A, 153–159.
- UNESCO Technical Papers in Marine Science (1981): The practical salinity scale 1978 and the international equation of state of seawater 1980. Tenth Report of the Joint Panel on Oceanographic Tables and Standards, No. 36, 144 pp.
- Venrick, E.L., and T.L. Hayward (1984): Determining chlorophyll on the 1984 CalCOFI surveys. *CalCOFI Rep.* 25, 74–79.

- Walsh, T.W. (1989): Total dissolved nitrogen in seawater: a new high-temperature combustion method and a comparison with photo-oxidation. *Mar. Chem.* 26, 295–311.
- Wanninkhof, R., and K. Thoning (1993): Surface water fCO₂ measurements using continuous and discrete sampling methods. *Mar. Chem.* 44, 189–204.
- Wilke, R.J., D.W.R. Wallace, and K.M. Johnson (1993): Water-based gravimetric method for the determination of gas loop volume. *Anal. Chem.* 65, 2403–2406.
- WOCE (World Ocean Circulation Experiment) (1994): WOCE Operations Manual, Volume 3: The Observational Programme, Section 3.1: WOCE Hydrographic Programme, Part 3.1.2: Requirements for WHP Data Reporting. WHP Office Report WHPO 90-1 (Revision 2), WOCE Rep. No. 67/91 (T. Joyce and C. Corry, eds.), Woods Hole, MA, 144 pp.

APPENDIX A

TABULATED DISCRETE BOTTLE DATA (CTD CASTS)

APPENDIX B

TABULATED DISCRETE BOTTLE DATA (BIOLOGICAL CASTS)

The data presented in this report is available on a computerized Remote Bulletin Board System (RBIS), Internet FTP, and the World Wide Web (WWW). For information regarding electronic access to the data sets contact:

Tsung-Hung Peng
Coordinator for OACES Data Management
NOAA/AOML/OCD
4301 Rickenbacker Causeway
Miami, FL 33149-1026

Telephone: (305) 361-4399
FAX: (305) 361-4392
Internet address: peng@aoml.noaa.gov
WWW address: <http://www.aoml.noaa.gov/ocd/oaces>
Contoured sections of the data are also available at <http://www.pmel.noaa.gov/CO2/>

The evaluation of the CGC94 dissolved oxygen, nutrients, and CFC measurements by the WOCE Data Quality Experts and WOCE Hydrographic Office has not been completed. After completion of this process, revised versions of these data will be available from the WOCE Hydrographic Office, or by contacting bullister@pmel.noaa.gov.

APPENDIX A

**TABULATED DISCRETE BOTTLE DATA
(CTD CASTS)**

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 10 DATE 2/7/94 LATITUDE 66°59.7'S Btm Depth: 4746
CAST 3 LONGITUDE 103°0.4'W

Sample ID	P* db	Pressure	Salinity	F* Bottle	Temp °C	Temp °C	Sigma Theta	Sigma cp	Beam Atten	NO2 µmol/kg	NO3 µmol/kg	PO4 µmol/kg	P* µmol/kg	Si(OH)4 µmol/kg	P* µmol/kg	CFC-11 pmol/kg	P* pmol/kg	CFC-12 pmol/kg	O2 µmol/kg	P* µmol/kg	F* µmol/kg	DIC µmol/kg	pH	P* µmol/kg	TA µmol/kg	P* µmol/kg	Si3C per mil	TOC µmol/L	TON µmol/L	Chi-a µg/L	Phase µg/L									
																																CTD	F* Bottle	Temp °C	Temp °C	Atten	NO2 µmol/kg	NO3 µmol/kg	PO4 µmol/kg	P* µmol/kg
336	2	9.5	33.473	2	33.475	2	2.226	2.226	26.731	0.076	0.2	21.4	2	1.47	2	8.3	2	-9	1	323.07	2	689	2	2108.5	2	-9	9	2261	2	-9	-9	0.055	0.013							
335	2	24.5	33.678	2	33.699	2	2.079	2.077	26.907	0.075	0.2	23.1	2	1.61	2	11.8	2	6.529	2	2.910	2	327.82	2	718	2	2124.9	2	-9	9	2276	2	1.70	-9	0.063	0.020					
334	2	47.9	33.780	2	33.790	2	0.490	0.488	27.095	0.080	0.1	24.1	2	1.77	2	14.5	2	6.984	6	3.071	6	344.92	2	732	2	2132.9	2	-9	9	2281	2	1.60	44.3	-9	0.077	0.021				
333	2	77.6	33.869	2	33.873	2	-0.407	-0.410	27.213	0.052	0.1	25.5	2	1.84	2	20.1	2	7.143	2	3.108	2	344.50	2	784	2	2147.1	2	-9	9	-9	5	1.50	-9	-9	-9					
332	2	99.1	33.895	2	33.896	2	-0.395	-0.398	27.233	0.044	0.1	26.3	2	1.87	2	21.7	2	6.928	2	3.077	2	340.40	2	804	2	2148.7	2	-9	9	2282	2	1.40	43.0	4.0	-9	-9				
331	2	149.5	33.974	2	-9	-9	-0.041	-0.047	27.280	0.015	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9				
330	2	198.5	34.124	2	34.126	2	1.088	1.080	27.336	0.007	0.0	31.0	2	2.12	2	37.5	2	4.181	2	1.903	2	268.94	2	980	2	2199.5	2	-9	9	-9	5	1.00	42.5	-9	-9	-9	-9	-9		
329	2	249.0	34.283	2	34.284	2	2.044	2.030	27.395	0.008	0.0	33.6	2	2.32	2	50.9	2	2.70	2	0.999	2	216.75	2	1110	2	2215.7	2	-9	9	2307	2	0.70	-9	-9	-9	-9	-9			
328	2	290.5	34.344	2	34.346	2	2.117	2.101	27.438	0.011	0.0	34.5	2	2.35	2	57.0	2	1.757	2	0.789	2	202.83	2	1163	2	2227.4	2	-9	9	2312	2	0.60	46.3	2.5	-9	-9	-9	-9	-9	
327	2	400.0	34.456	2	34.456	2	2.135	2.113	27.527	0.009	0.0	34.7	2	2.34	2	67.0	2	1.059	2	0.466	2	184.03	2	1202	2	2245.2	2	-9	9	2332	2	0.50	40.7	-9	-9	-9	-9	-9		
326	2	498.2	34.533	2	34.532	2	2.168	2.139	27.586	0.014	0.0	34.7	2	2.38	2	72.8	2	0.630	2	0.287	2	175.11	2	1217	2	2249.8	2	-9	9	2329	2	0.40	-9	-9	-9	-9	-9			
325	2	599.1	34.588	2	34.588	2	2.174	2.140	27.630	0.009	0.0	33.7	2	2.35	2	75.4	2	0.480	3	0.186	3	172.30	2	1199	2	2253.0	2	-9	9	2335	2	0.40	41.8	1.8	-9	-9	-9	-9	-9	
324	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9			
323	2	708.9	34.636	2	34.636	2	2.142	2.101	27.672	0.010	0.0	33.5	2	2.30	2	78.2	2	0.290	3	0.115	3	172.66	2	1181	2	2253.2	3	-9	9	2341	2	0.40	-9	-9	-9	-9	-9	-9		
322	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9			
321	2	705.5	34.634	2	34.634	2	2.144	2.103	27.670	0.016	0.0	33.0	2	2.31	2	78.6	2	0.270	2	0.121	2	172.98	2	1176	2	2255.1	2	-9	9	2338	2	0.40	41.6	-9	-9	-9	-9	-9	-9	
320	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9			
319	2	893.0	34.684	2	34.685	2	2.047	1.994	27.719	0.010	0.0	32.1	2	2.24	2	81.4	2	0.165	2	0.069	2	177.76	2	1142	2	2254.3	2	-9	9	2350	2	0.40	-9	-9	-9	-9	-9	-9		
318	2	998.4	34.701	2	34.701	2	1.981	1.921	27.738	0.015	0.0	31.7	2	2.21	2	84.1	2	0.139	2	0.056	2	-9	1	1118	2	2253.1	2	-9	9	2343	2	0.40	38.4	3.4	-9	-9	-9	-9	-9	
317	2	1193.5	34.722	2	34.724	2	1.844	1.771	27.767	0.011	0.0	30.9	2	2.15	2	88.5	2	0.040	2	0.018	2	185.30	2	1096	2	2252.8	2	-9	9	2363	2	0.50	-9	-9	-9	-9	-9	-9		
316	2	1398.5	34.730	2	34.730	2	1.665	1.580	27.788	0.011	0.0	30.6	2	2.14	2	94.8	2	-9	-9	-9	-9	1	189.81	2	1071	2	2253.1	2	-9	9	-9	5	0.50	-9	-9	-9	-9	-9	-9	-9
315	2	1599.4	34.730	2	34.730	2	1.498	1.400	27.801	0.010	0.0	30.6	2	2.15	2	99.1	2	0.072	2	0.025	2	192.46	2	1073	2	2255.1	2	-9	9	2357	2	0.50	-9	-9	-9	-9	-9	-9		
314	2	1799.9	34.728	2	34.728	2	1.357	1.245	27.810	0.011	0.0	30.7	2	2.18	2	100.9	2	0.055	2	0.024	2	194.61	2	1064	2	2255.0	2	-9	9	2350	2	0.50	-9	-9	-9	-9	-9	-9	-9	
313	2	1994.4	34.724	2	34.725	2	1.239	1.114	27.816	0.008	0.0	31.3	2	2.22	2	105.4	2	0.050	6	0.021	6	196.48	2	1076	2	2258.3	2	-9	9	2354	2	0.50	-9	-9	-9	-9	-9	-9	-9	
312	2	2248.6	34.719	2	34.719	2	1.084	0.941	27.824	0.007	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	199.19	2	1071	6	2258.7	2	-9	9	-9	5	0.50	-9	-9	-9	-9	-9	-9	-9		
311	4	2497.1	34.715	2	-9	-9	0.970	0.809	27.829	0.008	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	1	-9	1	-9	2258.7	2	-9	9	2366	2	-9	-9	-9	-9	-9	-9	-9	-9		
310	2	2747.9	34.711	2	34.710	2	0.847	0.667	27.834	0.005	0.0	31.6	2	2.24	2	120.9	2	0.072	2	0.017	2	203.57	2	1078	2	2257.9	2	-9	9	2363	2	0.40	-9	-9	-9	-9	-9	-9	-9	
309	2	2997.1	34.708	2	34.707	2	0.758	0.557	27.839	0.005	0.0	31.7	2	2.20	2	125.1	2	0.065	2	0.020	2	205.29	2	1073	2	2259.6	2	-9	9	5	0.40	36.5	2.6	-9	-9	-9	-9	-9	-9	
308	2	3289.3	34.705	2	34.705	2	0.628	0.404	27.845	0.004	0.0	31.5	2	2.24	2	126.9	2	0.071	2	0.031	2	208.00	2	1085	2	2260.1	2	-9	9	2361	2	0.50	-9	-9	-9	-9	-9	-9	-9	
307	2	3597.1	34.704	2	34.702	2	0.500	0.249	27.853	0.005	0.0	31.5	2	2.25	2	127.4	2	0.058	6	0.025	6	210.58	2	1082	2	2260.5	3	-9	9	2367	2	0.40	-9	-9	-9	-9	-9	-9	-9	
306	2	3892.4	34.703	2	34.702	2	0.422	0.145	27.859	0.003	0.0	31.7	2	2.24	2	130.4	2	0.068	4	0.032	4	212.58	2	1087	2	2260.5	3	-9	9	2367	2	0.40	-9	-9	-9	-9	-9	-9	-9	
305	2	4198.9	34.703	2	34.702	2	0.366	0.059	27.863	0.006	0.0	32.0	2	2.26	2	132.1	2	0.073	2	0.034	2	213.96	2	1081	2	2259.8	2	-9	9	-9	5	0.50	36.4	-9	-9	-9	-9	-9	-9	-9
304	3	4497.4	34.703	2	34.701	2	0.349	0.011	27.866	0.003	0.0	32.1	2	2.21	2	137.9	2	0.092	6	0.038	6	215.21	2	1087	2	2261.2	2	-9	9	5	0.40	-9	-9	-9	-9	-9	-9	-9	-9	
303	2	4496.5	34.703	2	34.704	2	0.349	0.010	27.866	0.003	0.0	31.9	2	2.22	2	138.3	2	0.086	2	0.044	2	215.05	2	1067	2	2260.8	2	-9	9	2360	2	0.40	-9	-9	-9	-9	-9	-9	-9	
302	3	4809.5	34.702	2	34.702	2	0.357	-0.017	27.867	0.014	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	1	215.69	2	1074	2	2262.6	2	-9	9	2360	2	0.30	-9	-9	-9	-9	-9	-9	-9	
301	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	0.058	6	215.18	2	1080	2	2263.4	2	-9	5	0.50	-9	-9	-9	-9	-9	-9	-9	-9	

* WOCE water sample quality flag (F) for parameter from previous column

** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 14 DATE 2/28/94 LATITUDE 65°0.0'S Btm Depth: 4949
CAST 1 LONGITUDE 102°59.4'W

Sample ID	Pressure db	Salinity ‰	Salinity ‰ Bottle	Temp °C	Temp °C	Sigma t	Sigma t	Theta sp	Beam		NO2 ‰	NO3 ‰	PO4 ‰	P _{SiO₄} ‰	P _{CFC-11} ‰	P _{CFC-12} ‰	O ₂ ‰	P _{OC2} ‰	DIC ‰	pH	P _{TALK} ‰	P _{TALK} ‰	813C ‰	TOC ‰	TON ‰	Chl-a ‰	Phase ‰			
									SP	CP																				
136	2	10.5	33.819	2	-9	5	2.635	26.974	0.058	0.2	23.4	2	1.71	2	6.018	2	2.725	2	322.40	2	706	2	2125.8	2	-9	-9	-9	-9		
135	2	25.1	33.819	2	2.638	2.637	26.974	0.063	0.2	22.8	2	1.66	2	6.023	2	2.762	2	322.33	2	648	3	2126.6	2	-9	-9	-9	-9	-9		
134	2	49.8	33.824	2	2.640	2.637	26.978	0.059	0.2	22.9	2	1.67	2	6.018	2	2.715	2	322.27	2	706	6	2128.0	2	-9	-9	-9	-9	-9		
133	2	73.1	33.907	2	2.839	0.836	27.177	0.065	0.2	24.3	2	1.80	2	6.578	2	2.894	2	339.26	2	-9	9	2278	2	-9	-9	-9	-9	-9		
132	2	98.2	33.949	2	2.852	0.448	27.234	0.054	0.2	25.8	2	1.89	2	6.463	2	2.919	2	335.91	2	795	6	2149.5	2	-9	-9	-9	-9	-9		
131	2	150.2	33.975	2	2.855	0.150	27.271	0.019	0.1	29.4	2	1.94	2	6.266	2	2.734	2	325.31	2	849	2	2162.9	3	-9	-9	-9	-9	-9		
130	2	197.1	34.021	2	2.820	0.385	27.295	0.011	0.0	29.0	2	1.98	2	5.693	2	2.599	2	311.70	2	876	2	2167.6	3	-9	-9	-9	-9	-9		
129	2	298.6	34.317	2	2.260	2.243	27.405	0.008	0.0	33.5	2	2.33	2	1.908	3	0.808	2	207.68	2	1145	2	2224.6	3	-9	-9	-9	-9	-9		
128	2	399.4	34.431	2	2.335	2.312	27.491	0.008	0.0	34.2	2	2.37	2	1.011	2	0.440	2	185.85	2	1188	2	2242.4	3	-9	-9	-9	-9	-9		
127	2	502.5	34.496	2	2.281	2.252	27.547	0.007	0.0	34.3	2	2.40	2	1.197	4	0.309	2	178.18	2	1208	6	2282.4	3	-9	-9	-9	-9	-9		
126	2	603.0	34.552	2	2.210	2.175	27.599	0.016	0.0	34.1	2	2.38	2	0.566	3	0.236	2	175.35	2	1199	2	2256.9	3	-9	-9	-9	-9	-9		
125	2	698.8	34.601	2	2.209	2.168	27.638	0.011	0.0	33.7	2	2.33	2	0.392	3	0.137	2	172.96	2	-9	9	2328	2	-9	-9	-9	-9	-9		
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
123	2	799.2	34.634	2	2.147	2.099	27.671	0.009	0.0	33.0	2	2.32	2	0.449	4	0.122	2	173.66	2	1179	2	2292.0	3	-9	-9	-9	-9	-9	-9	
122	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
121	2	898.4	34.661	2	2.112	2.058	27.696	0.016	0.0	32.8	2	2.28	2	0.334	4	0.087	2	175.06	2	-9	9	2348	2	-9	-9	-9	-9	-9	-9	
120	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
119	2	998.7	34.685	2	2.064	2.003	27.719	0.013	0.0	32.3	2	2.24	2	0.182	3	0.062	2	177.86	2	1132	6	2255.7	2	-9	-9	-9	-9	-9	-9	
118	2	1197.1	34.712	2	1.942	1.868	27.751	0.009	0.0	31.3	2	2.20	2	0.139	3	0.048	6	182.64	2	1110	2	2251.8	2	-9	-9	-9	-9	-9	-9	
117	2	1398.4	34.727	2	1.792	1.705	27.776	0.010	0.0	31.1	2	2.17	2	0.093	3	0.033	2	187.39	2	1083	2	2253.5	2	-9	-9	-9	-9	-9	-9	
116	2	1601.0	34.731	2	1.632	1.532	27.792	0.010	0.0	30.9	2	2.16	2	0.144	4	0.028	2	190.71	2	1074	6	2254.2	2	-9	-9	-9	-9	-9	-9	
115	2	1801.5	34.730	2	1.483	1.369	27.803	0.007	0.0	31.0	2	2.16	2	0.070	4	0.019	2	193.17	2	-9	9	2365	2	-9	-9	-9	-9	-9	-9	
114	2	1995.5	34.728	2	1.364	1.237	27.811	0.006	0.0	31.3	2	2.16	2	0.136	4	0.018	2	195.19	2	1070	6	2257.6	2	-9	-9	-9	-9	-9	-9	
113	2	2249.4	34.723	2	1.198	1.054	27.819	0.006	0.0	31.2	2	2.20	2	0.049	6	0.016	6	197.87	2	1070	6	2258.2	2	-9	-9	-9	-9	-9	-9	
112	3	2499.6	34.718	2	-9	5	1.042	0.879	27.826	0.006	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
111	2	2752.2	34.713	2	0.927	0.745	27.831	0.006	0.0	31.6	2	2.23	2	0.065	4	0.017	2	203.03	2	-9	9	2350	2	-9	-9	-9	-9	-9	-9	
110	2	2998.4	34.710	2	0.820	0.619	27.836	0.005	0.0	30.6	2	2.20	2	0.132	2	0.021	2	205.02	2	1080	6	2258.9	2	-9	-9	-9	-9	-9	-9	
109	2	3223.0	34.707	2	0.740	0.519	27.841	0.005	0.0	32.2	2	2.21	2	0.190	4	0.021	2	206.57	2	-9	9	2362	2	-9	-9	-9	-9	-9	-9	
108	2	3495.6	34.705	2	0.630	0.386	27.847	0.001	0.0	32.2	2	2.23	2	0.154	4	0.033	2	208.75	2	1083	6	2258.8	2	-9	-9	-9	-9	-9	-9	
107	2	3749.4	34.704	2	0.522	0.256	27.853	0.003	0.0	32.3	2	2.23	2	0.099	3	0.030	2	211.43	2	-9	9	2361	2	-9	-9	-9	-9	-9	-9	
106	2	4000.6	34.703	2	0.444	0.155	27.858	0.003	0.0	32.2	2	2.23	2	0.061	2	0.030	6	213.41	2	1076	6	2259.4	2	-9	-9	-9	-9	-9	-9	
105	2	4237.4	34.703	2	0.399	0.087	27.862	0.002	0.0	31.5	2	2.24	2	0.092	2	0.041	2	214.62	2	1089	2	2260.9	2	-9	-9	-9	-9	-9	-9	
104	2	4499.7	34.703	2	0.375	0.033	27.865	0.001	0.0	31.7	2	2.24	2	0.053	4	0.028	2	215.69	2	1079	6	2260.0	2	-9	-9	-9	-9	-9	-9	
103	3	4751.7	34.703	2	-9	5	0.368	0.001	27.867	0.003	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
102	2	4749.0	34.703	2	0.368	0.001	27.866	0.001	27.866	0.001	31.6	2	2.25	2	0.155	3	0.047	2	216.13	2	1082	2	2261.2	2	-9	-9	-9	-9	-9	-9
101	2	5025.1	34.702	2	-9	9	0.375	-0.024	27.867	0.009	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	

* WOCE water sample quality flag (F) for parameter from previous column

** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94

WOCE P18

NOAA Ship Discoverer

STATION 15 DATE 3/194 LATITUDE 64°29.9'S Btm Depth: 4978
 CAST 1 LONGITUDE 102°59.2'W

Sample ID	Pressure db	Salinity ‰	Temp °C	Potential Temp °C	Sigma T	Theta	Beam Attenuation		NO2 ‰	NO3 ‰	PO4 ‰	Si(OH)4 ‰	CFC-11 ‰	CFC-12 ‰	O2 ‰	fO2 @ 20°C ‰	DIC ‰	pH	TA ‰	813C ‰	TOC ‰	TON ‰	Chl-a ‰	Fluoro ‰	
							cp	µmole/kg																	
136	8.9	33.856	2.655	2.655	27.002	0.053	0.2	2.29	2.22	1.70	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	
135	26.0	33.858	2.652	2.652	27.004	0.055	0.2	2.27	2.22	1.70	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
134	50.3	33.859	2.647	2.647	27.006	0.052	0.2	2.28	2.22	1.70	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
133	74.6	33.985	2.548	2.548	27.193	0.061	0.2	2.43	2.22	1.89	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
132	99.0	34.012	2.263	2.263	27.234	0.056	0.5	2.57	2.22	1.89	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
131	150.6	34.012	2.145	2.145	27.242	0.074	0.0	2.66	2.22	1.89	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
130	200.6	34.010	2.048	2.048	27.254	0.017	0.0	2.69	2.22	1.90	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
129	297.8	34.238	2.299	2.299	27.538	0.014	0.0	3.16	2.22	2.21	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
128	401.5	34.379	2.482	2.482	27.437	0.013	0.0	3.33	2.22	2.32	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
127	483.8	34.437	2.413	2.413	27.489	0.006	0.0	3.37	2.22	2.36	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
126	599.2	34.517	2.324	2.324	27.561	0.013	0.0	3.46	2.22	2.37	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
125	698.2	34.564	2.239	2.239	27.606	0.010	0.0	3.33	2.22	2.35	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
124	9.9	34.608	2.167	2.167	27.648	0.014	0.0	3.28	2.22	2.32	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
123	9.9	34.644	2.164	2.164	27.677	0.010	0.0	3.25	2.22	2.28	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
122	9.9	34.666	2.106	2.106	27.709	0.010	0.0	3.23	2.22	2.27	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
121	9.9	34.702	2.006	2.006	27.739	0.010	0.0	3.11	2.22	2.21	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
120	9.9	34.722	1.863	1.863	27.767	0.009	0.0	3.06	2.22	2.17	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
119	9.9	34.729	1.709	1.709	27.785	0.008	0.0	3.05	2.22	2.17	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
118	9.9	34.730	1.536	1.536	27.799	0.007	0.0	3.04	2.22	2.18	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
117	9.9	34.727	1.406	1.406	27.807	0.007	0.0	3.07	2.22	2.17	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
116	9.9	34.718	1.254	1.254	27.816	0.008	0.0	3.26	2.22	2.18	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
115	9.9	34.715	1.094	1.094	27.825	0.005	0.0	3.06	2.22	2.20	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
114	9.9	34.713	0.966	0.966	27.830	0.005	0.0	3.06	2.22	2.22	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
113	9.9	34.708	0.857	0.857	27.835	0.004	0.0	3.08	2.22	2.22	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
112	9.9	34.710	0.755	0.755	27.840	0.003	0.0	3.12	2.22	2.23	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
111	9.9	34.713	0.633	0.633	27.847	0.003	0.0	3.15	2.22	2.24	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
110	9.9	34.702	0.556	0.556	27.852	0.000	0.0	3.17	2.22	2.25	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
109	9.9	34.704	0.467	0.467	27.858	0.000	0.0	3.15	2.22	2.24	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
108	9.9	34.703	0.375	0.375	27.862	0.003	0.0	3.15	2.22	2.26	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
107	9.9	34.701	0.284	0.284	27.865	0.001	0.0	3.14	2.22	2.26	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
106	9.9	34.702	0.193	0.193	27.865	0.001	0.0	3.15	2.22	2.27	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
105	9.9	34.701	0.102	0.102	27.866	0.003	0.0	3.16	2.22	2.27	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
104	9.9	34.702	0.011	0.011	27.867	0.009	0.0	3.17	2.22	2.23	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
103	9.9	34.703	0.007	0.007	27.867	0.009	0.0	3.17	2.22	2.23	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
102	9.9	34.702	0.002	0.002	27.867	0.009	0.0	3.17	2.22	2.23	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
101	9.9	34.703	0.002	0.002	27.867	0.009	0.0	3.17	2.22	2.23	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 20 DATE 3/2/94 LATITUDE 61°59.9'S Btm Depth: 5058
 CAST 1 LONGITUDE 103°0.1'W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma T	Sigma T	Beam Attenuation		NO2 µmol/kg	NO3 µmol/kg	PO4 µmol/kg	SIORH4 µmol/kg	CFC-11 µmol/kg	CFC-12 µmol/kg	O2 µmol/kg	P* @20°C µatm	DIC µmol/kg	pH	TALK µmol/kg	813C per mil	TOC µmol/L	TON µmol/L	Chl-a µg/L	Phase µg/L								
								cp	cp																								
136	8.7	33.976	2	3.477	3.476	27.023	0.093	0.3	2	21.3	2	1.64	2	2.1	2	5.992	2	2.659	2	314.33	2	-9	9	2121.1	2	7.7616	2	2.285	2	1.80	-9	-9	
135	2	9.2	33.975	2	3.494	27.021	0.093	0.3	2	21.3	2	1.65	2	1.7	2	7.418	4	2.592	2	315.10	2	663	2	2122.1	2	7.7605	2	2.282	2	-9	-9		
134	2	9.1	33.975	2	3.495	27.021	0.093	0.3	2	21.9	2	1.68	2	1.7	2	5.784	2	2.560	2	314.48	2	678	2	2120.3	2	-9	9	2.281	2	-9	-9		
133	2	25.5	33.979	2	3.484	27.025	0.104	0.3	2	21.7	2	1.62	2	1.8	2	5.807	2	2.588	2	314.93	2	-9	9	2121.1	2	7.7606	2	2.281	2	-9	-9		
132	2	48.6	33.980	2	3.472	27.028	0.106	0.3	2	21.5	2	1.64	2	1.7	2	5.795	2	2.583	2	314.45	2	-9	9	2120.4	2	7.7605	2	2.282	2	-9	-9		
131	2	75.7	33.980	2	3.275	27.045	0.097	0.3	2	21.6	2	1.67	2	2.8	2	5.818	2	2.593	2	315.43	2	-9	9	2122.1	2	7.7750	2	2.282	2	-9	-9		
130	2	102.0	34.025	2	1.927	27.197	0.083	0.5	2	25.5	2	1.83	2	12.8	2	6.070	2	2.664	2	319.48	2	776	2	2144.4	2	7.7195	2	2.282	2	-9	-9		
129	2	151.8	34.026	2	1.788	27.208	0.064	0.2	2	26.3	2	1.84	2	15.4	2	6.018	2	2.655	2	317.64	2	-9	9	2146.4	2	7.7144	2	2.276	2	-9	-9		
128	2	201.5	34.026	2	1.659	27.217	0.037	-9	9	9	9	9	9	9	9	6.356	3	2.609	2	317.49	2	800	2	2148.2	2	-9	9	2.281	2	-9	-9		
127	2	299.3	34.036	2	1.466	27.240	0.020	0.0	2	28.2	2	1.95	2	18.9	2	5.621	2	2.476	2	311.64	2	-9	9	2153.8	2	-9	9	2.283	2	-9	-9		
126	2	300.0	34.037	2	1.470	27.241	0.024	0.0	2	27.5	2	1.88	2	18.6	2	-9	1	-9	1	311.19	2	-9	9	2153.8	2	7.7002	2	2.286	2	-9	-9		
125	3	400.4	34.198	2	1.5	27.301	0.018	-9	1	-9	1	-9	1	-9	1	-9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
123	2	599.6	34.401	2	2.565	27.449	0.015	0.0	2	34.3	2	2.35	2	55.7	2	1.029	3	0.426	2	190.69	2	1155	6	2231.7	2	7.5712	2	2.316	2	-9	-9	-9	
122	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
121	2	800.4	34.523	2	2.365	27.564	0.014	0.0	2	34.3	2	2.39	2	68.9	2	1.303	4	0.215	4	175.39	2	-9	9	2249.0	2	7.5597	2	2.327	2	-9	-9	-9	
120	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
119	2	972.0	34.609	2	2.247	27.644	0.014	0.0	2	33.8	2	2.35	2	78.5	2	0.272	2	0.117	2	172.74	2	-9	9	2253.7	2	7.5670	2	2.336	2	-9	-9	-9	
118	2	1199.0	34.665	2	2.143	27.698	0.012	0.0	2	32.5	2	2.24	2	82.3	2	0.177	2	0.074	2	175.89	2	-9	9	-9	9	7.5774	2	-9	9	-9	-9	-9	
117	2	1403.5	34.706	2	2.005	27.743	-9	0.0	2	31.5	2	2.21	2	86.9	2	3.689	4	0.041	2	181.36	2	-9	9	-9	9	7.5914	2	-9	9	-9	-9	-9	
116	2	1600.6	34.725	2	1.833	27.772	0.010	0.0	2	30.5	2	2.20	2	89.5	2	0.102	3	0.030	2	186.97	2	-9	9	-9	9	7.6001	2	-9	9	-9	-9	-9	
115	2	1801.1	34.730	2	1.644	27.792	0.010	0.0	2	31.3	2	2.19	2	94.6	2	0.058	2	0.022	2	191.31	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	
114	2	2001.2	34.728	2	1.438	27.805	0.009	0.0	2	31.5	2	2.20	2	101.9	2	0.048	2	0.019	2	194.87	2	1070	2	-9	9	-9	9	-9	9	-9	-9	-9	
113	2	2251.7	34.725	2	1.269	27.816	0.009	0.0	2	31.5	2	2.19	2	108.0	2	-9	1	-9	1	197.24	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	
112	3	2500.5	34.721	2	1.142	27.822	0.006	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
111	2	2749.4	34.718	2	1.057	27.827	0.007	-9	9	32.1	2	2.22	2	116.4	2	0.027	2	0.009	2	200.12	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9
110	2	3000.5	34.715	2	1.019	27.829	0.006	0.0	2	32.1	2	2.22	2	117.4	2	0.020	2	0.009	2	201.72	2	1075	2	-9	9	-9	9	-9	9	-9	-9	-9	-9
109	2	3250.3	34.712	2	0.957	27.832	0.006	0.0	2	32.1	2	2.24	2	117.7	2	0.052	2	0.011	2	203.20	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9
108	2	3494.6	34.709	2	0.858	27.837	0.003	0.0	2	32.4	2	2.26	2	121.5	2	0.108	4	0.014	2	205.33	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9
107	2	3747.2	34.704	2	0.719	27.844	0.003	0.0	2	32.6	2	2.25	2	125.1	2	0.304	4	0.028	2	208.13	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9
106	2	4001.6	34.704	2	0.585	27.851	0.005	0.0	2	32.2	2	2.25	2	128.0	2	0.095	2	0.039	2	211.04	2	1083	2	-9	9	-9	9	-9	9	-9	-9	-9	-9
105	2	4247.0	34.702	2	0.462	27.858	0.003	0.0	2	32.2	2	2.24	2	130.9	2	0.080	2	0.033	2	213.45	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9
104	2	4504.1	34.703	2	0.424	27.862	0.001	0.0	2	32.4	2	2.25	2	131.4	2	0.087	2	0.033	2	215.50	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9
103	2	4750.8	34.703	2	0.399	27.865	0.006	0.0	2	32.5	2	2.27	2	131.5	2	0.100	2	0.044	2	216.01	2	6	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9
102	2	4999.8	34.702	2	0.395	-0.001	27.865	0.004	0.0	2	32.6	2	2.28	2	133.5	2	0.122	2	0.052	2	216.53	2	6	1081	2	-9	9	-9	9	-9	-9	-9	-9
101	2	5130.8	34.702	2	0.394	-0.019	27.867	0.023	0.0	2	32.7	2	2.29	2	137.5	2	0.133	6	0.059	6	216.96	2	1080	2	-9	9	-9	9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 27 DATE 3/5/94 LATITUDE 58°30.5'S Btm Depth: 4717
 CAST 1 LONGITUDE 102°59.2'W

Sample ID	Pressure db	Salinity	F [*] Salinity	Temp °C	Temp °C	Sigma T	Theta	cp	Beam										fCO2															
									NO2	F [*] NO2	NO3	F [*] NO3	PO4	F [*] PO4	Si	F [*] Si	OB	F [*] OB	CFC-11	F [*] CFC-11	CFC-12	F [*] CFC-12	O2	F [*] O2	pH	F [*] pH	TALK	F [*] TALK	813C	F [*] 813C	TOC	F [*] TOC	TON	F [*] TON
124	2	10.8	34.004	2	34.006	2	5.338	5.338	26.847	-9	0.3	2	19.8	2	1.43	2	2.9	2	4.671	2	2.363	2	299.99	2	-9	9	7.8015	2	2272	2	-9	50.3	-9	-9
125	2	27.5	33.995	2	34.002	2	5.283	5.281	26.846	-9	0.3	2	19.9	2	1.46	2	2.9	2	4.763	2	2.378	2	300.28	2	-9	9	7.8021	2	2276	2	-9	47.4	-9	-9
122	2	50.4	33.995	2	33.997	2	5.289	5.286	26.845	-9	0.3	2	19.8	2	1.41	2	2.8	2	4.902	2	2.386	2	300.36	2	-9	9	7.8013	2	2277	3	-9	-9	-9	-9
121	2	96.5	33.992	2	33.995	2	5.157	5.149	26.859	-9	0.3	2	19.9	2	1.45	2	3.0	2	4.779	2	2.344	2	301.44	2	-9	9	7.8005	2	2274	2	-9	50.9	3.3	-9
120	2	152.5	34.114	2	34.114	2	4.316	4.305	27.049	-9	0.0	2	23.2	2	1.61	2	9.3	2	4.566	2	2.241	2	299.93	2	-9	9	7.7503	2	-9	5	-9	44.4	-9	-9
119	2	206.2	34.106	2	34.094	2	4.080	4.065	27.068	-9	0.0	2	24.1	2	1.67	2	10.5	2	4.693	2	2.312	2	299.45	2	-9	9	7.7414	2	2280	2	-9	47.0	-9	-9
118	2	299.2	34.112	2	34.112	2	3.704	3.683	27.105	-9	0.0	2	23.7	2	1.73	2	12.8	2	4.425	2	2.134	2	289.42	2	-9	9	7.7298	2	2273	2	-9	38.2	3.4	-9
117	2	399.9	34.118	2	34.121	2	3.389	3.363	27.147	-9	0.0	2	26.4	2	1.81	2	17.0	2	4.014	2	1.954	2	278.38	2	-9	9	7.7053	2	2280	2	-9	36.6	-9	-9
116	2	499.5	34.178	2	34.180	2	3.337	3.304	27.201	-9	0.0	2	28.6	2	1.95	2	24.5	2	3.139	2	1.468	2	253.53	2	-9	9	7.6714	2	2287	2	-9	-9	-9	-9
115	2	601.2	34.271	2	34.269	2	3.491	3.449	27.261	-9	0.0	2	30.8	2	2.10	2	33.8	2	1.995	2	0.909	2	222.36	2	-9	9	7.6320	2	2297	2	-9	43.6	3.4	-9
114	2	703.9	34.313	2	34.313	2	3.199	3.152	27.323	-9	0.0	2	33.6	2	2.21	2	41.7	2	1.475	2	0.672	2	208.51	2	-9	9	7.6081	2	2304	3	-9	-9	-9	-9
113	2	809.6	34.356	2	34.354	2	2.916	2.863	27.383	-9	0.0	2	33.3	2	2.29	2	49.4	2	1.210	2	0.548	2	198.46	2	-9	9	7.5918	2	2307	2	-9	44.3	-9	-9
112	2	998.4	34.425	2	34.425	2	2.656	2.590	27.463	-9	0.0	2	34.0	2	2.30	2	59.0	2	1.075	2	0.356	2	186.35	2	-9	9	7.5774	2	2318	2	-9	-9	2.6	-9
111	2	1204.3	34.546	2	34.581	2	2.388	2.310	27.582	-9	0.0	2	33.7	2	2.29	2	81.1	2	0.080	2	0.034	2	177.63	2	-9	9	7.5679	2	2335	2	-9	-9	-9	-9
110	2	1401.8	34.621	2	34.620	2	2.316	2.224	27.650	-9	0.0	2	33.4	2	2.30	2	78.9	2	0.193	2	0.077	2	171.65	2	-9	9	7.5733	2	2353	3	-9	-9	-9	-9
109	2	1805.4	34.698	2	34.697	2	2.072	1.950	27.734	-9	0.0	2	32.3	2	2.21	2	86.2	2	0.079	2	0.030	2	178.05	2	-9	9	7.5911	2	-9	5	-9	40.7	-9	-9
108	2	2204.7	34.723	2	34.722	2	1.744	1.594	27.781	-9	0.0	2	31.8	2	2.18	2	95.6	2	0.182	2	0.014	2	186.35	2	-9	9	7.6040	2	2360	2	-9	-9	-9	-9
107	2	2604.5	34.725	2	34.725	2	1.501	1.320	27.803	-9	0.0	2	31.7	2	2.15	2	104.1	2	0.038	2	0.012	2	192.30	2	-9	9	7.6085	2	2360	2	-9	-9	-9	-9
106	2	3004.4	34.721	2	34.721	2	1.245	1.033	27.819	-9	0.0	2	31.7	2	2.18	2	111.9	2	0.063	2	0.013	2	197.70	2	-9	9	7.6096	2	2361	2	-9	37.8	2.5	-9
105	2	3404.5	34.714	2	34.712	2	1.005	0.761	27.831	-9	0.0	2	32.0	2	2.20	2	117.3	2	0.144	2	0.017	2	202.39	2	-9	9	7.6069	2	2359	2	-9	-9	-9	-9
104	2	3803.1	34.708	2	34.708	2	0.762	0.484	27.843	-9	0.0	2	32.4	2	2.21	2	123.0	2	0.044	2	0.019	2	207.06	2	-9	9	7.6061	2	2356	2	-9	-9	-9	-9
103	2	4209.2	34.705	2	34.705	2	0.553	0.238	27.855	-9	0.0	2	32.6	2	2.22	2	130.0	2	0.066	2	0.028	2	211.49	2	-9	9	7.6047	2	2362	2	-9	41.9	-9	-9
102	2	4596.1	34.703	2	34.703	2	0.489	0.135	27.860	-9	0.0	2	32.4	2	2.21	2	130.6	2	0.081	2	0.026	2	-9	1	-9	9	7.6026	2	-9	5	-9	-9	-9	
101	2	4824.3	34.703	2	34.703	2	0.507	0.126	27.860	-9	0.0	2	32.5	2	2.21	2	136.0	2	0.068	2	0.035	2	-9	1	-9	9	7.6042	2	2362	2	-9	36.9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 28 DATE 3/5/94 LATITUDE 57°49.1'S Btm Depth: 4591
CAST 1 LONGITUDE 103°0.1'W

Sample ID	Pressure db	Salinity ‰	Salinity ‰ CTD	Temp °C	Temp °C	Beam		NO2 ‰	NO3 ‰	PO4 ‰	Si(OH)4 ‰	CFC-11 ‰	CFC-12 ‰	O2 ‰	F ₂ @20°C ‰	DIC ‰	pH	TAIR ‰	F ₂ ‰	813C ‰	TOC ‰	TON ‰	Chl-a ‰	Paseo ‰				
						Sigma T	Attenu																					
136	8.3	33.961	2	5.427	5.426	26.802	0.134	0.2	20.7	1.49	2.3	4.984	2	2.365	2	301.89	2	631	2	2106.6	2	2277	2	1.80	-9	-9		
135	25.7	33.961	2	5.426	5.424	26.802	0.134	0.2	20.0	1.49	2.1	4.903	2	2.199	6	301.56	2	630	2	-9	1	7.7985	2	2272	2	1.80	-9	-9
134	50.4	33.961	2	5.412	5.408	26.804	0.135	0.2	20.5	1.49	2.4	4.661	2	2.517	2	301.42	2	633	2	-9	1	7.7986	2	2274	2	1.80	-9	-9
133	77.3	33.965	2	5.410	5.404	26.808	0.121	0.2	20.4	1.49	2.3	4.993	2	2.399	2	301.21	2	637	2	-9	1	7.7999	2	2274	2	1.90	-9	-9
132	93.8	34.135	2	5.398	5.351	26.948	0.059	0.3	20.6	1.49	2.4	4.294	2	2.135	2	290.71	2	664	2	-9	1	7.7787	2	2272	2	1.60	-9	-9
131	149.1	34.157	2	4.998	4.987	27.008	0.031	0.0	22.5	1.58	2.1	4.576	2	2.180	2	288.98	2	708	2	-9	1	7.7559	2	2276	2	1.50	-9	-9
130	202.8	34.191	2	5.062	5.046	27.029	0.030	0.0	22.3	1.56	2.4	4.391	6	2.135	6	288.17	2	700	2	-9	1	7.7587	2	2275	2	1.50	-9	-9
129	303.1	34.153	2	4.557	4.535	27.056	0.016	0.0	26.0	1.83	2.2	3.671	2	1.771	2	283.56	2	743	2	-9	1	7.7412	2	2276	2	1.40	-9	-9
128	399.8	34.167	2	4.269	4.240	27.099	0.017	0.0	27.9	1.92	2.2	3.616	2	1.463	2	259.84	2	818	2	-9	1	7.7015	2	2279	2	1.30	-9	-9
127	465.5	34.191	2	3.894	3.859	27.157	0.013	0.0	30.3	2.10	2.2	3.22	2	1.382	6	246.75	2	882	2	-9	1	7.6748	2	2280	2	1.10	-9	-9
126	605.0	34.282	2	3.833	3.790	27.237	0.016	0.0	31.5	2.18	2.2	1.481	2	0.670	2	219.49	2	978	2	-9	1	7.6371	2	2286	2	1.00	-9	-9
125	700.2	34.312	2	3.490	3.441	27.294	0.009	0.0	31.6	2.19	2.2	1.418	2	0.644	2	209.29	2	1026	2	2200.3	2	7.6180	2	2291	2	0.90	-9	-9
124	792.5	34.358	2	3.266	3.212	27.353	0.013	0.0	32.4	2.27	2.2	1.215	3	0.426	3	197.60	2	1080	2	2213.0	2	7.5995	2	2307	2	0.70	-9	-9
123	901.5	34.400	2	2.994	2.934	27.412	0.012	0.0	33.0	2.32	2.2	1.580	4	1.601	4	189.05	2	1115	2	2224.7	2	7.5859	2	2316	2	0.70	-9	-9
120	1003.0	34.438	2	2.771	2.705	27.463	0.013	0.0	33.6	2.35	2.2	0.617	2	0.285	2	183.90	2	1147	2	2233.4	2	7.5777	2	2323	2	0.50	-9	-9
118	1199.8	34.577	2	2.522	2.443	27.557	0.011	0.0	33.7	2.39	2.2	0.340	2	0.157	6	173.99	2	-9	9	2236.9	2	7.5670	2	2331	2	0.50	-9	-9
117	1405.5	34.608	2	2.351	2.258	27.637	0.010	0.0	33.1	2.35	2.2	0.214	3	0.080	2	171.46	2	1166	2	2235.8	2	7.5694	2	2339	2	0.40	-9	-9
116	1597.6	34.660	2	2.232	2.125	27.689	0.009	0.0	32.5	2.29	2.2	0.368	3	0.047	2	174.36	2	-9	9	2246.8	2	7.5783	2	2339	2	0.40	-9	-9
115	1797.7	34.686	2	2.161	2.039	27.717	0.014	0.0	32.1	2.25	2.2	0.25	2	-9	1	177.25	2	1129	2	2253.7	2	7.5851	2	2339	2	0.40	-9	-9
114	1999.9	34.710	2	2.043	1.906	27.746	0.011	0.0	31.6	2.22	2.2	0.157	4	0.090	2	181.90	2	1100	2	2253.4	2	7.5938	2	2349	2	0.40	-9	-9
113	2254.1	34.726	2	1.851	1.695	27.776	0.007	0.0	31.1	2.16	2.2	0.069	2	0.099	2	187.73	6	-9	9	2253.6	2	7.6017	2	2356	2	0.40	-9	-9
112	2499.2	34.727	2	1.624	1.451	27.795	0.007	0.0	30.8	2.19	2.2	0.045	2	0.014	2	190.90	2	1076	2	2257.9	2	7.6059	2	2360	2	0.50	-9	-9
111	2748.8	34.726	2	1.461	1.268	27.807	0.006	0.0	31.2	2.20	2.2	0.050	2	0.008	2	193.98	2	-9	9	2256.2	2	7.6084	2	2358	2	0.40	-9	-9
110	2995.6	34.722	2	1.280	1.068	27.817	0.004	0.0	31.4	2.21	2.2	0.041	4	0.011	2	197.12	2	1067	2	2259.2	2	7.6085	2	2361	2	0.40	-9	-9
109	3251.0	34.718	2	1.136	0.903	27.825	0.006	0.0	31.4	2.22	2.2	0.040	2	0.012	2	200.09	2	-9	9	2260.3	2	7.6073	2	2359	2	0.40	-9	-9
108	3499.5	34.713	2	0.979	0.726	27.833	0.005	0.0	31.8	2.24	2.2	0.042	2	0.016	2	205.20	2	1077	2	2258.9	2	7.6050	2	2357	2	0.40	-9	-9
107	3998.2	34.707	2	0.848	0.575	27.839	0.005	0.0	32.2	2.23	2.2	0.059	2	0.019	2	205.58	6	-9	9	2261.3	2	7.6048	2	2357	2	0.40	-9	-9
106	4344.8	34.707	2	0.694	0.398	27.847	0.003	0.0	32.2	2.25	2.2	0.054	6	0.021	6	208.58	2	1073	2	2260.7	2	7.6040	2	2366	2	0.40	-9	-9
105	4744.8	34.706	2	0.584	0.266	27.854	0.005	0.0	32.6	2.26	2.2	0.065	2	0.028	2	210.85	2	1081	2	2263.1	2	7.6050	2	2361	2	0.40	-9	-9
104	4904.4	34.704	2	0.533	0.266	27.854	0.004	0.0	31.9	2.26	2.2	0.061	6	0.025	6	210.51	-9	9	2261.7	2	7.6039	2	2364	2	0.40	-9	-9	
103	4900.4	34.704	2	0.533	0.188	27.857	0.004	0.0	32.4	2.26	2.2	0.067	2	0.029	2	211.69	2	-9	9	2262.1	2	7.6023	2	2363	2	0.40	-9	-9
102	4900.0	34.704	2	0.532	0.187	27.857	0.004	0.0	32.4	2.25	2.2	0.073	2	0.028	2	212.12	2	1072	2	2262.3	2	7.6034	2	2362	2	0.40	-9	-9
101	4784.3	34.704	2	0.523	0.152	27.859	0.011	0.0	32.2	2.25	2.2	0.063	2	0.030	6	212.37	2	1080	2	2259.9	2	7.6041	2	2361	2	0.40	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column

** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 29 1 DATE 3/6/94 LATITUDE 57°10.3'S Btm Depth: 4157
CAST 1 LONGITUDE 103°0.1'W

Sample ID	Pressure db	Salinity ‰	Salinity ‰	Temp °C	Temp °C	Potential		Beam Attenu	NO2 ‰	NO3 ‰	PO4 ‰	Si(OH)4 ‰	CFC-11 ‰	CFC-12 ‰	O2 ‰	fO2 ‰ @20°C	DIC ‰	pH	TA ‰	TA ‰	813C ‰	TOC ‰	TON ‰	Chl-a ‰	Phaeo ‰
						Thetas	Sigma T																		
124	10.5	34.005	34.006	5.793	5.792	26.792	-9	0.2	19.3	2.0	1.44	0.7	-9	-9	1.29870	2.78041	2.21013	2.2272	2.2272	2.2272	-9	-9	-9	-9	-9
125	30.5	34.007	34.008	5.796	5.793	26.794	-9	0.2	20.0	2.0	1.49	1.0	4.770	2.302	2.29904	2.626	-9	-9	-9	-9	-9	-9	-9	-9	-9
122	49.8	34.007	-9	5.797	5.793	26.794	-9	0.2	20.4	2.0	1.57	1.1	-9	-9	2.29861	2.665	2.21045	2.2273	2.2273	2.2273	-9	-9	-9	-9	-9
121	100.3	34.073	34.075	5.444	5.436	26.889	-9	0.2	20.7	2.0	1.55	3.2	4.736	2.285	2.29411	2.665	-9	-9	-9	-9	-9	-9	-9	-9	-9
120	146.9	34.144	34.143	4.800	4.789	27.021	-9	0.0	23.0	2.0	1.61	7.6	-9	-9	2.29182	2.709	2.21270	2.2275	2.2275	2.2275	-9	-9	-9	-9	-9
119	201.3	34.178	34.180	4.885	4.870	27.039	-9	0.0	22.7	2.0	1.62	7.9	4.375	2.105	2.28611	2.709	-9	-9	-9	-9	-9	-9	-9	-9	-9
118	300.6	34.153	34.163	4.480	4.458	27.064	-9	0.0	23.9	2.0	1.69	10.5	-9	-9	2.27977	2.813	2.21348	2.2279	2.2279	2.2279	-9	-9	-9	-9	-9
117	408.4	34.176	34.169	4.282	4.252	27.105	-9	0.0	26.7	2.0	1.84	15.2	4.708	1.630	2.26057	2.813	-9	-9	-9	-9	-9	-9	-9	-9	-9
116	498.6	34.186	34.185	3.951	3.916	27.148	-9	0.0	27.6	2.0	1.93	19.0	-9	-9	2.25282	2.925	2.21614	2.2291	2.2291	2.2291	-9	-9	-9	-9	-9
115	598.8	34.251	-9	3.924	3.881	27.203	-9	0.0	30.2	2.0	1.99	27.2	-9	-9	1.925	2.925	-9	-9	-9	-9	-9	-9	-9	-9	-9
114	695.5	34.284	34.286	3.591	3.542	27.262	-9	0.0	31.8	2.0	1.14	34.9	-9	-9	2.21642	2.925	2.21929	2.2296	2.2296	2.2296	-9	-9	-9	-9	-9
113	802.1	34.324	34.323	3.275	3.221	27.325	-9	0.0	32.5	2.0	1.340	42.8	1.340	0.604	2.20640	2.1051	-9	-9	-9	-9	-9	-9	-9	-9	-9
112	893.4	34.367	34.367	3.037	2.977	27.382	-9	0.0	33.2	2.0	2.29	50.1	-9	-9	2.19574	2.1123	2.22195	2.2304	2.2304	2.2304	-9	-9	-9	-9	-9
111	997.0	34.416	34.418	2.834	2.767	27.440	-9	0.0	34.1	2.0	2.38	58.1	0.776	0.407	2.18661	2.1123	-9	-9	-9	-9	-9	-9	-9	-9	-9
110	1096.3	34.461	34.461	2.696	2.623	27.488	-9	0.0	33.9	2.0	2.37	64.0	-9	-9	2.18029	2.1157	2.22403	2.2326	2.2326	2.2326	-9	-9	-9	-9	-9
109	1200.3	34.510	34.516	2.560	2.481	27.540	-9	0.0	34.2	2.0	2.34	70.0	0.446	0.186	2.17374	2.1157	-9	-9	-9	-9	-9	-9	-9	-9	-9
108	1401.5	34.587	-9	2.388	2.285	27.617	-9	-9	34.2	2.0	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
107	1804.1	34.684	-9	2.159	2.036	27.716	-9	-9	34.2	2.0	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
106	2200.5	34.721	34.727	1.875	1.774	27.770	-9	0.0	31.6	2.0	0.66	93.9	-9	-9	2.18433	2.1046	2.22570	2.2354	2.2354	2.2354	-9	-9	-9	-9	-9
105	2605.8	34.720	34.719	1.558	1.377	27.794	-9	0.0	32.0	2.0	2.21	104.2	0.120	0.010	2.18767	2.1046	-9	-9	-9	-9	-9	-9	-9	-9	-9
104	2996.7	34.723	34.723	1.360	1.146	27.813	-9	0.0	31.5	2.0	2.20	107.1	-9	-9	2.19593	2.1076	2.22604	2.2361	2.2361	2.2361	-9	-9	-9	-9	-9
103	3394.3	34.717	34.716	1.104	0.858	27.827	-9	0.0	32.3	2.0	0.69	116.6	0.032	0.011	2.20101	2.1076	2.22605	2.2368	2.2368	2.2368	-9	-9	-9	-9	-9
102	3794.9	34.710	34.709	0.847	0.567	27.840	-9	0.0	33.6	2.0	0.42	129.0	-9	-9	2.20699	2.1069	2.22591	2.2368	2.2368	2.2368	-9	-9	-9	-9	-9
101	4152.9	34.707	34.705	0.660	0.348	27.850	-9	0.0	32.3	2.0	2.25	133.5	0.055	0.014	2.21011	2.1069	-9	-9	-9	-9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 30 DATE 3/7/94 LATITUDE 56°31.6S Btm Depth: 4527
 CAST 1 LONGITUDE 103°4.0'W

Sample ID	Pressure db	Salinity	F ^a Bottle	Temp °C	Temp °C	Sigma T	Auton	Beam	NO2 P ^a	NO3 P ^a	PO4 P ^a	Si(OH) ₄ P ^a	CFC-11 P ^a	CFC-12 P ^a	O ₂ P ^a	fCO ₂	DIC P ^a	pH	P ^a	TAik	P ^a	813C	TOC	TON	Chi-a	Pbiso		
																											µmol/kg	µmol/kg
124	2	20.7	34.094	2	-9	9	6.426	6.425	26.782	-9	0.2	1.41	2	4.614	2	2.211	2	294.51	2	601	2	2099.4	2	-9	43.8	-9	-9	
123	2	46.3	34.094	2	6.428	6.428	26.782	-9	0.2	18.1	2	1.37	2	4.636	2	2.241	2	294.50	2	601	2	2100.0	2	-9	35.9	-9	-9	
122	2	72.1	34.094	2	-9	9	6.429	6.423	26.782	-9	-9	-9	-9	4.596	2	2.214	2	294.50	2	603	2	2097.8	2	-9	-9	-9	-9	
121	2	103.1	34.102	2	6.078	6.078	26.835	-9	0.2	18.4	2	1.37	2	4.647	2	2.227	2	294.50	2	622	2	2100.5	2	-9	-9	-9	-9	
120	2	151.5	34.152	2	4.703	4.692	27.038	-9	0.0	22.4	2	1.57	2	4.770	2	2.284	2	294.01	2	708	2	2125.0	2	-9	33.0	-9	-9	
119	2	199.1	34.138	2	-9	9	4.536	4.521	27.045	-9	0.0	1.67	2	4.722	2	2.256	2	294.37	2	734	2	2128.0	2	-9	-9	-9	-9	
118	4	300.4	34.141	2	-9	9	4.172	4.150	27.076	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
117	2	400.4	34.141	2	-9	9	3.983	3.955	27.107	-9	0.0	1.88	2	3.866	2	1.798	2	271.25	2	803	2	2147.5	2	-9	-9	-9	-9	
116	2	503.7	34.189	2	3.845	3.809	27.161	-9	0.0	27.8	2	1.98	2	3.174	2	1.454	2	249.86	2	895	2	2164.7	2	-9	-9	-9	-9	
115	2	587.3	34.248	2	3.425	3.721	27.216	-9	0.0	28.1	2	2.08	2	2.317	3	0.984	3	227.71	2	955	2	2181.8	2	-9	-9	-9	-9	
114	3	638.6	34.270	2	3.4275	3.685	3.641	27.242	-9	0.0	30.2	2	2.14	2	-9	1	-9	1	991	2	2187.0	2	-9	32.4	-9	-9		
113	2	801.6	34.341	2	3.4343	3.195	3.141	27.346	-9	0.0	32.1	2	2.39	2	1.200	2	0.563	2	204.35	2	1071	2	2211.9	2	-9	-9	-9	-9
112	3	1003.0	34.431	2	2.792	2.726	27.456	-9	0.0	34.7	2	2.59	2	58.4	2	-9	9	9	1144	2	-9	9	-9	-9	-9	-9	-9	
111	3	1208.5	34.517	2	2.545	2.465	27.547	-9	0.0	33.7	2	2.41	2	68.6	2	-9	1	-9	9	1164	2	2244.3	2	-9	42.7	-9	-9	
110	2	1400.0	34.591	2	2.388	2.295	27.620	-9	0.0	33.2	2	2.39	2	76.7	2	0.097	2	171.54	2	1185	2	2252.6	2	-9	-9	-9	-9	
109	2	1799.6	34.687	2	-9	9	2.147	2.025	27.719	-9	0.0	2.29	2	88.4	2	0.056	2	176.47	2	1126	2	-9	-9	-9	-9	-9	-9	
108	3	2198.7	34.718	2	-9	9	1.872	1.720	27.768	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
107	3	2591.2	34.719	2	1.560	1.379	27.794	-9	0.0	31.5	2	2.26	2	106.9	2	-9	9	-9	9	1072	2	2265.0	2	-9	30.2	-9	-9	
106	2	3005.2	34.722	2	1.384	1.169	27.811	-9	0.0	31.3	2	2.23	2	106.6	2	0.075	4	0.008	2	194.65	2	1064	2	2259.2	2	-9	-9	
105	2	3403.4	34.716	2	-9	9	1.104	0.858	27.827	-9	-9	-9	-9	-9	-9	0.013	2	200.00	2	1065	2	2261.5	2	-9	-9	-9	-9	
104	2	3791.5	34.710	2	-9	9	0.815	0.537	27.841	-9	-9	-9	-9	-9	-9	0.011	2	205.19	2	1062	2	2263.8	2	-9	-9	-9	-9	
103	2	4189.6	34.707	2	-9	9	0.647	0.332	27.851	-9	0.0	2.35	2	131.4	2	0.016	2	208.92	2	1075	2	2264.9	2	-9	39.9	-9	-9	
102	2	-9	-9	-9	-9	-9	-9	-9	-9	0.0	2	31.8	2	130.7	2	0.025	2	210.76	2	1064	2	2262.7	2	-9	44.3	-9	-9	
101	2	-9	-9	-9	-9	-9	-9	-9	-9	1	-9	1	-9	1	0.063	2	0.026	2	210.80	2	1071	2	2261.6	2	-9	-9	-9	

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 34 1 DATE 3/6/94 LATITUDE 53°50.0'S Btm Depth: 4229 LONGITUDE 102°59.9'W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma T	Theta cp	Beam Attenuation										Chl-a Phase													
								NO2 F ^a	NO3 F ^a	PO4 F ^a	Si(OH)4 F ^a	CRC-11 F ^a	CRC-12 F ^a	O2 F ^a	CO2 F ^a	DIC F ^a	pH F ^a		TALK F ^a	813C TOC F ^a	TON F ^a										
136	2	34.254	2	34.256	2	7.824	7.823	26.714	0.088	0.2	2	15.6	2	1.22	2	9	9	9	2093.3	2	7.8346	2	2276	2	1.70	2	-9	-9	-9		
135	2	23.5	34.253	2	34.253	2	7.813	26.715	0.089	0.2	2	15.3	2	0.58	4	2.3	2	2.073	2	2097.0	3	7.8358	2	-9	5	-9	-9	-9			
134	2	50.9	34.253	2	34.253	2	7.792	26.718	0.087	0.2	2	15.3	2	1.21	2	2.2	2	2.073	2	2092.7	2	7.8345	2	2279	2	-9	-9	-9			
133	2	75.0	34.252	2	34.253	2	7.790	26.719	0.084	0.2	2	15.5	2	1.23	2	2.2	2	2.115	2	2106.1	2	7.8091	2	2286	2	-9	-9	-9			
132	2	98.9	34.276	2	34.278	2	7.107	26.835	0.083	0.4	2	16.7	2	1.31	2	4.1	2	4.379	2	2106.1	2	7.8091	2	2286	2	-9	-9	-9			
131	2	125.9	34.300	2	34.300	2	6.362	26.954	0.044	0.6	2	18.2	2	1.42	2	6.7	2	9	284.43	2	662	2	-9	9	-9	-9	-9				
130	2	148.3	34.301	2	34.302	2	6.295	26.964	0.026	0.4	2	19.0	2	1.44	2	6.9	2	9	283.45	2	666	2	-9	9	-9	-9	-9				
129	2	201.7	34.304	2	34.305	2	6.160	26.984	0.016	0.0	2	19.5	2	1.45	2	6.8	2	9	282.16	2	672	2	2119.2	2	2276	2	-9	-9	-9		
128	2	249.0	34.308	2	34.308	2	6.089	26.997	0.014	0.0	2	19.8	2	1.47	2	7.2	2	9	283.03	2	675	2	2119.2	2	2276	2	-9	-9	-9		
127	2	300.1	34.305	2	34.306	2	5.992	27.008	0.014	0.0	2	20.0	2	1.48	2	7.5	2	2.023	2	2122.1	2	7.7724	2	2276	2	-9	-9	-9			
126	2	351.0	34.302	2	34.302	2	5.926	27.014	0.012	0.0	2	20.0	2	1.46	2	7.8	2	9	281.54	2	682	2	-9	9	7.7002	2	-9	-9	-9		
125	2	398.6	34.291	2	34.292	2	5.803	27.021	0.011	0.0	2	20.6	2	1.51	2	8.2	2	9	281.40	2	690	2	2124.5	2	2278	2	-9	-9	-9		
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	9	9	9	9	9	9	9	4	285.46	2	686	2	2123.2	2	2276	2	-9	-9	-9		
123	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	9	9	9	9	9	9	9	4	285.46	2	686	2	2123.2	2	2276	2	-9	-9	-9		
122	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	9	9	9	9	9	9	9	9	282.87	2	706	2	2126.0	2	2273	2	-9	-9	-9		
121	2	599.8	34.244	2	34.243	2	5.254	27.052	0.010	0.0	2	21.6	2	1.59	2	9.1	2	9	282.87	2	706	2	2126.0	2	2273	2	-9	-9	-9		
120	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9		
119	2	699.3	34.217	2	34.218	2	4.925	27.070	0.009	0.0	2	23.3	2	1.70	2	11.6	2	1.853	2	2179.1	2	7.7571	2	2282	2	-9	-9	-9			
118	2	787.6	34.231	2	34.230	2	4.676	27.109	0.012	0.0	2	26.3	2	1.85	2	18.3	2	1.319	2	245.36	2	830	2	2156.7	2	2283	2	-9	-9	-9	
117	2	899.5	34.283	2	34.300	4	4.316	27.190	0.014	0.0	2	29.0	2	2.11	2	27.7	2	9	219.82	2	931	2	2180.3	2	2291	2	-9	-9	-9		
116	2	993.8	34.300	2	34.300	4	3.947	27.242	0.013	0.0	2	30.4	2	2.18	2	33.4	2	0.632	2	213.25	2	973	2	2190.3	2	2292	2	-9	-9	-9	
115	2	1098.8	34.330	2	34.329	2	3.498	27.311	0.012	0.0	2	31.5	2	2.24	2	42.0	2	9	204.12	2	1038	2	-9	9	7.6117	2	-9	-9	-9		
114	2	1200.1	34.360	2	34.360	2	3.194	27.364	0.011	0.0	2	32.4	2	2.31	2	48.9	2	0.226	2	197.35	2	1069	2	-9	9	7.5982	2	-9	-9	-9	
113	2	1399.0	34.453	2	34.453	2	2.761	26.64	27.478	0.011	0.0	2	33.2	2	2.44	2	62.6	2	181.43	2	1152	2	-9	9	7.5774	2	-9	-9	-9		
112	2	1600.5	34.537	2	34.534	2	2.553	24.43	27.564	0.010	0.0	2	33.3	2	2.45	2	71.2	2	9	171.86	2	1173	2	-9	9	7.5669	2	-9	-9	-9	
111	2	1800.2	34.600	2	34.599	2	2.416	22.80	27.628	0.009	0.0	2	33.0	2	2.45	2	79.0	2	0.047	2	169.42	2	1174	2	-9	9	7.5694	2	-9	-9	-9
110	2	1997.8	34.647	2	34.645	2	2.295	21.54	27.677	0.009	0.0	2	32.8	2	2.32	2	83.9	2	9	170.97	2	1157	2	-9	9	7.5764	2	-9	-9	-9	
109	2	2247.2	34.689	2	34.687	2	2.131	19.71	27.725	0.009	0.0	2	31.9	2	2.34	2	91.2	2	9	174.59	6	9	-9	9	7.5861	2	-9	-9	-9		
108	2	2496.3	34.708	2	34.707	2	1.944	17.65	27.756	0.007	0.0	2	31.5	2	2.31	2	95.7	2	0.006	2	177.37	2	1104	2	-9	9	7.5949	2	-9	-9	-9
107	2	2749.4	34.711	2	34.710	2	1.737	15.38	27.776	0.007	0.0	2	32.8	2	2.32	2	102.3	2	9	180.58	6	9	-9	9	7.5997	2	-9	-9	-9		
106	2	3001.8	34.717	2	34.715	2	1.598	13.79	27.792	0.005	0.0	2	31.5	2	2.21	2	105.5	2	0.003	2	185.51	2	1087	2	-9	9	7.6045	2	-9	-9	-9
105	2	3245.9	34.718	2	34.716	2	1.505	12.64	27.802	0.004	0.0	2	31.2	2	2.23	2	108.4	2	0.004	2	194.48	2	1066	2	-9	9	7.6070	2	-9	-9	-9
104	2	3498.9	34.718	2	34.716	2	1.325	10.63	27.814	0.005	0.0	2	31.4	2	2.27	2	112.8	2	0.003	2	194.59	2	1066	2	-9	9	7.6087	2	-9	-9	-9
103	2	3748.3	34.714	2	34.712	2	1.068	0.787	27.829	0.003	0.0	2	31.5	2	2.28	2	118.2	2	0.006	2	196.94	2	1064	2	-9	9	7.6108	2	-9	-9	-9
102	2	3996.7	34.709	2	34.708	2	0.817	0.518	27.842	0.004	0.0	2	31.9	2	1.99	4	126.3	2	0.003	2	204.52	2	1055	2	-9	9	7.6122	2	-9	-9	-9
101	2	4276.0	34.708	2	34.711	2	0.739	0.412	27.847	0.005	0.0	2	32.0	2	2.29	2	130.7	2	0.004	2	206.03	2	1058	2	-9	9	7.6122	2	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 35 DATE 3/9/94 LAITUDE 53°10.0'S Btm Depth: 4175
 CAST 1 LONGITUDE 103°3.0'W

Sample ID	P* db	Pressure	Salinity	P* Bottle	Temp °C	Temp °C	Potential		Sigma t	Theta atm	NO2 µmol/kg	NO3 µmol/kg	P4 µmol/kg	P5(SiO4) µmol/kg	P6(CFC-11) pmol/kg	P7(CFC-12) pmol/kg	P8(O2) µmol/kg	P9(P* @20°C) µm	DIC ⁺ µmol/kg	pH	P* TALK	P* TALK	513C per mil	TOC µmol/L	TON µmol/L	Chi-1 µg/L	Phase µg/L											
							Sigma t	Theta atm																														
136	2	10.2	34.243	2	34.244	2	8.033	8.032	26.675	0.110	0.2	14.9	2	2.2	2	4.399	2	2.034	2	2.8655	2	570	2	1.60	-9	-9	-9	-9										
135	2	24.1	34.243	2	34.243	2	8.032	8.029	26.675	0.111	0.2	14.8	2	2.1	2	4.397	2	2.022	2	2.8591	2	-9	9	7.8385	2	-9	-9	-9	-9									
134	2	50.2	34.243	2	34.244	2	8.028	8.023	26.676	0.108	0.2	14.9	2	2.0	2	4.120	2	2.048	2	2.8602	2	573	2	-9	-9	-9	-9	-9	-9	-9								
133	2	73.8	34.243	2	34.244	2	8.027	8.020	26.676	0.107	0.2	14.9	2	2.0	2	4.388	2	2.068	2	2.8590	2	-9	9	7.8388	2	-9	-9	-9	-9	-9								
132	2	101.3	34.256	2	34.258	2	7.988	7.979	26.751	0.088	0.2	15.4	2	2.9	2	4.395	2	2.065	2	2.8585	2	599	2	-9	-9	-9	-9	-9	-9	-9								
131	2	125.2	34.295	2	34.296	2	6.493	6.482	26.933	0.043	0.3	18.1	2	3.8	2	4.395	2	2.064	2	2.8185	2	-9	9	7.7811	2	-9	-9	-9	-9	-9								
130	2	151.1	34.287	2	34.287	2	6.223	6.210	26.963	0.027	0.0	19.3	2	6.7	2	4.293	2	2.060	2	2.8034	2	673	2	-9	-9	-9	-9	-9	-9	-9								
129	2	203.2	34.289	2	34.291	2	6.094	6.077	26.981	0.015	0.0	19.6	2	7.1	2	4.151	2	1.953	2	2.8004	2	678	2	-9	-9	-9	-9	-9	-9	-9	-9							
128	2	251.9	34.289	2	34.290	2	6.024	6.002	26.991	0.014	0.0	19.7	2	7.5	2	4.107	2	1.934	2	2.7891	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9							
127	2	299.4	34.288	2	34.292	2	5.958	5.932	26.999	0.010	0.0	20.1	2	7.5	2	4.021	2	1.897	2	2.7853	2	686	2	-9	-9	-9	-9	-9	-9	-9	-9	-9						
126	2	348.5	34.290	2	34.290	2	5.916	5.887	27.006	0.007	0.0	20.0	2	7.8	2	4.011	2	1.898	2	2.7863	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9						
125	2	398.4	34.286	2	34.286	2	5.828	5.794	27.014	0.013	0.0	20.8	2	8.2	2	4.012	2	1.753	2	2.7779	2	698	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9					
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9						
123	2	500.1	34.271	2	34.270	2	5.600	5.558	27.031	0.006	0.0	21.9	2	9.8	2	3.674	2	1.720	2	2.7072	2	721	6	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9				
122	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9					
121	2	596.9	34.246	2	34.246	2	5.205	5.156	27.060	0.010	0.0	23.5	2	1.69	2	4.890	4	1.702	2	2.6319	2	755	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9				
120	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9				
119	2	701.0	34.246	2	34.246	2	4.884	4.828	27.097	0.012	0.0	25.6	2	1.83	2	2.717	6	1.227	6	2.4658	2	832	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9			
118	2	801.9	34.268	2	34.268	2	4.563	4.500	27.151	0.009	0.0	27.9	2	1.94	2	2.093	3	0.856	3	2.2887	2	888	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
117	2	901.1	34.287	2	34.286	2	4.113	4.045	27.214	0.012	0.0	29.4	2	2.10	2	1.478	2	0.678	2	2.1756	2	965	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
116	2	993.9	34.304	2	34.304	2	3.744	3.671	27.265	0.012	0.0	30.3	2	2.18	2	1.256	2	0.559	2	2.1138	2	994	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
115	2	1197.3	34.382	2	34.381	2	3.031	2.947	27.397	0.010	0.0	32.7	2	2.30	2	0.740	2	0.325	2	1.9285	6	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9			
114	2	1400.8	34.475	2	34.474	2	2.724	2.628	27.499	0.010	0.0	33.6	2	2.36	2	0.301	2	0.139	2	1.7586	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
113	2	1604.3	34.554	2	34.554	2	2.515	2.405	27.582	0.010	0.0	33.5	2	2.37	2	-0.010	4	-0.002	4	1.6980	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
112	2	1802.5	34.618	2	34.614	3	2.367	2.242	27.646	0.009	0.0	33.0	2	2.33	2	0.078	2	0.031	2	1.6851	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
111	2	2002.3	34.662	2	34.661	2	2.236	2.096	27.693	0.008	0.0	32.7	2	2.25	2	0.040	2	0.019	2	1.7050	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
110	2	2249.4	34.693	2	34.692	2	2.067	1.907	27.753	0.006	0.0	32.2	2	2.25	2	-9	1	-9	1	1.7336	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
109	2	2497.8	34.704	2	34.704	2	1.891	1.712	27.757	0.006	0.0	32.2	2	2.26	2	0.009	2	0.002	2	1.7509	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
108	2	2751.0	34.707	2	34.706	2	1.711	1.513	27.774	0.005	0.0	32.2	2	2.27	2	0.027	4	0.001	2	1.7748	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
107	2	3000.2	34.714	2	34.713	2	1.612	1.393	27.788	0.004	0.0	31.9	2	2.20	2	-0.001	2	-0.001	2	1.8335	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
106	2	3250.7	34.718	2	34.716	2	1.463	1.222	27.804	0.003	0.0	31.8	2	2.21	2	0.005	2	0.003	2	1.8968	6	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
105	2	3500.3	34.716	2	34.715	2	1.291	1.030	27.815	0.003	0.0	31.6	2	2.20	2	0.008	2	0.000	2	1.9408	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
104	2	3750.3	34.712	2	34.710	2	1.014	0.735	27.831	0.003	0.0	31.7	2	2.24	2	0.100	4	0.064	4	1.9985	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
103	2	3999.3	34.709	2	34.707	2	0.790	0.491	27.843	0.004	0.0	31.8	2	2.25	2	0.059	4	0.002	2	2.0418	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
102	2	3998.4	34.709	2	34.707	2	0.791	0.492	27.843	0.004	0.0	31.9	2	2.19	2	0.015	2	0.005	2	2.0424	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
101	2	4165.3	34.707	2	34.706	2	0.727	0.413	27.847	0.005	0.0	31.9	2	2.25	2	-0.009	2	0.006	2	2.0565	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 37 DATE 3/9/94 LATITUDE 51°50.0'S Btm Depth: 4000
CAST 2 LONGITUDE 103°0.1'W

Sample ID	Pressure db	Salinity ‰	Temp °C	Temp °C	Sigma T	Sigma t	Beam		NO2 µM	NO3 µM	PO4 µM	Si(OH)4 µM	F ₁₁ µM	F ₁₂ µM	F ₂₀ µM	O ₂ µM	P ₀ µM	DIC µM	pH	TA µM/kg	P ₀ µM/kg	TA µM/kg	P ₀ µM/kg	813C ‰	TOC µM/L	TON µM/L	Chi-a µM/L	Phase µM/L	
							Trans	cp																					
236	10.8	34.255	8.551	8.550	26.605	0.100	0.2	15.0	2	1.23	2	1.5	2	4.170	2	2.015	2	284.63	2	556	2	2089.1	2	7.8465	2	1.80	-9	-9	-9
235	24.9	34.255	8.520	8.517	26.610	0.100	0.2	14.9	2	1.23	2	1.4	2	4.321	2	2.237	2	284.32	2	556	2	2088.3	2	7.8461	2	1.80	-9	-9	-9
234	49.2	34.255	8.516	8.511	26.611	0.098	0.2	15.0	2	1.21	2	1.4	2	4.178	2	2.032	2	284.10	2	557	2	2089.5	2	7.8461	2	1.80	-9	-9	-9
233	73.6	34.254	8.455	8.448	26.620	0.088	0.2	15.2	2	1.19	2	1.3	2	4.202	2	1.990	2	284.06	2	-9	9	2088.2	2	7.8453	2	1.80	-9	-9	-9
232	98.8	34.296	8.348	8.339	26.819	0.074	0.3	16.0	2	1.31	2	2.4	2	4.385	2	2.125	2	286.95	2	597	2	2100.6	2	7.8212	2	1.70	-9	-9	-9
231	123.1	34.305	8.263	8.253	26.970	0.046	0.3	18.7	2	1.46	2	5.2	2	4.402	2	2.087	2	280.24	2	-9	9	2115.6	2	7.7649	2	1.80	-9	-9	-9
230	148.4	34.305	8.245	8.232	26.946	0.036	0.0	19.4	2	1.47	2	5.6	2	4.288	2	2.048	2	279.55	2	-9	9	2119.1	2	7.7782	2	1.50	-9	-9	-9
229	198.3	34.312	8.249	8.231	26.966	0.021	0.0	19.9	2	1.45	2	6.2	2	4.173	2	1.967	2	278.07	2	673	2	2119.1	2	7.7759	2	1.50	-9	-9	-9
228	248.2	34.317	8.298	8.276	26.977	0.017	0.0	19.8	2	1.49	2	6.7	2	4.094	2	1.953	2	276.92	2	-9	9	2119.5	2	7.7741	2	-9	-9	-9	-9
227	299.1	34.310	8.184	8.158	26.988	0.021	0.0	20.7	2	1.54	2	7.2	2	3.971	2	1.889	2	277.01	2	680	2	2122.4	2	7.7702	2	1.50	-9	-9	-9
226	349.9	34.315	8.142	8.112	26.997	0.013	0.0	20.7	2	1.55	2	7.3	2	3.971	2	1.889	2	277.01	2	-9	9	2121.7	2	7.7701	2	-9	-9	-9	-9
225	400.6	34.309	8.040	8.005	27.006	0.014	0.0	20.8	2	1.57	2	7.6	2	4.111	6	1.877	6	278.15	2	687	2	2126.1	2	7.7673	2	1.50	-9	-9	-9
224	499.3	34.305	8.040	8.005	27.017	0.010	0.0	20.7	2	1.56	2	7.6	2	4.111	6	1.877	6	278.15	2	687	2	2126.1	2	7.7673	2	1.50	-9	-9	-9
223	599.3	34.261	8.040	8.005	27.034	0.010	0.0	20.7	2	1.56	2	7.6	2	4.111	6	1.877	6	278.15	2	687	2	2126.1	2	7.7673	2	1.50	-9	-9	-9
222	699.3	34.261	8.040	8.005	27.034	0.010	0.0	20.7	2	1.56	2	7.6	2	4.111	6	1.877	6	278.15	2	687	2	2126.1	2	7.7673	2	1.50	-9	-9	-9
221	799.3	34.261	8.040	8.005	27.034	0.010	0.0	20.7	2	1.56	2	7.6	2	4.111	6	1.877	6	278.15	2	687	2	2126.1	2	7.7673	2	1.50	-9	-9	-9
220	899.3	34.261	8.040	8.005	27.034	0.010	0.0	20.7	2	1.56	2	7.6	2	4.111	6	1.877	6	278.15	2	687	2	2126.1	2	7.7673	2	1.50	-9	-9	-9
219	999.3	34.261	8.040	8.005	27.034	0.010	0.0	20.7	2	1.56	2	7.6	2	4.111	6	1.877	6	278.15	2	687	2	2126.1	2	7.7673	2	1.50	-9	-9	-9
218	1099.3	34.271	8.040	8.005	27.034	0.010	0.0	20.7	2	1.56	2	7.6	2	4.111	6	1.877	6	278.15	2	687	2	2126.1	2	7.7673	2	1.50	-9	-9	-9
217	1199.3	34.295	8.040	8.005	27.034	0.010	0.0	20.7	2	1.56	2	7.6	2	4.111	6	1.877	6	278.15	2	687	2	2126.1	2	7.7673	2	1.50	-9	-9	-9
216	1299.3	34.309	8.040	8.005	27.034	0.010	0.0	20.7	2	1.56	2	7.6	2	4.111	6	1.877	6	278.15	2	687	2	2126.1	2	7.7673	2	1.50	-9	-9	-9
215	1399.3	34.362	8.040	8.005	27.034	0.010	0.0	20.7	2	1.56	2	7.6	2	4.111	6	1.877	6	278.15	2	687	2	2126.1	2	7.7673	2	1.50	-9	-9	-9
214	1499.3	34.450	8.040	8.005	27.034	0.010	0.0	20.7	2	1.56	2	7.6	2	4.111	6	1.877	6	278.15	2	687	2	2126.1	2	7.7673	2	1.50	-9	-9	-9
213	1599.3	34.534	8.040	8.005	27.034	0.010	0.0	20.7	2	1.56	2	7.6	2	4.111	6	1.877	6	278.15	2	687	2	2126.1	2	7.7673	2	1.50	-9	-9	-9
212	1699.3	34.595	8.040	8.005	27.034	0.010	0.0	20.7	2	1.56	2	7.6	2	4.111	6	1.877	6	278.15	2	687	2	2126.1	2	7.7673	2	1.50	-9	-9	-9
211	1799.3	34.652	8.040	8.005	27.034	0.010	0.0	20.7	2	1.56	2	7.6	2	4.111	6	1.877	6	278.15	2	687	2	2126.1	2	7.7673	2	1.50	-9	-9	-9
210	1899.3	34.685	8.040	8.005	27.034	0.010	0.0	20.7	2	1.56	2	7.6	2	4.111	6	1.877	6	278.15	2	687	2	2126.1	2	7.7673	2	1.50	-9	-9	-9
209	1999.3	34.710	8.040	8.005	27.034	0.010	0.0	20.7	2	1.56	2	7.6	2	4.111	6	1.877	6	278.15	2	687	2	2126.1	2	7.7673	2	1.50	-9	-9	-9
208	2099.3	34.718	8.040	8.005	27.034	0.010	0.0	20.7	2	1.56	2	7.6	2	4.111	6	1.877	6	278.15	2	687	2	2126.1	2	7.7673	2	1.50	-9	-9	-9
207	2199.3	34.712	8.040	8.005	27.034	0.010	0.0	20.7	2	1.56	2	7.6	2	4.111	6	1.877	6	278.15	2	687	2	2126.1	2	7.7673	2	1.50	-9	-9	-9
206	2299.3	34.718	8.040	8.005	27.034	0.010	0.0	20.7	2	1.56	2	7.6	2	4.111	6	1.877	6	278.15	2	687	2	2126.1	2	7.7673	2	1.50	-9	-9	-9
205	2399.3	34.718	8.040	8.005	27.034	0.010	0.0	20.7	2	1.56	2	7.6	2	4.111	6	1.877	6	278.15	2	687	2	2126.1	2	7.7673	2	1.50	-9	-9	-9
204	2499.3	34.712	8.040	8.005	27.034	0.010	0.0	20.7	2	1.56	2	7.6	2	4.111	6	1.877	6	278.15	2	687	2	2126.1	2	7.7673	2	1.50	-9	-9	-9
203	2599.3	34.709	8.040	8.005	27.034	0.010	0.0	20.7	2	1.56	2	7.6	2	4.111	6	1.877	6	278.15	2	687	2	2126.1	2	7.7673	2	1.50	-9	-9	-9
202	2699.3	34.708	8.040	8.005	27.034	0.010	0.0	20.7	2	1.56	2	7.6	2	4.111	6	1.877	6	278.15	2	687	2	2126.1	2	7.7673	2	1.50	-9	-9	-9
201	2799.3	34.707	8.040	8.005	27.034	0.010	0.0	20.7	2	1.56	2	7.6	2	4.111	6	1.877	6	278.15	2	687	2	2126.1	2	7.7673	2	1.50	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 38 DATE 3/10/94 LATITUDE 51°10.0'S Btm Depth: 3796
 CAST 2 LONGITUDE 103°0.0'W

Sample ID	Pressure db	Salinity P _o	Salinity P _o Bottle	Temp °C	Temp °C	Potential		NO2 P _o μmol/kg	NO3 P _o μmol/kg	PO4 P _o μmol/kg	P _o Si(OH) ₄ μmol/kg	CFC-11 P _o μmol/kg	CFC-12 P _o μmol/kg	O2 P _o μmol/kg	P _o @20°C μatm	DIC P _o μmol/kg	pH P _o	TAIR P _o μmol/kg	P _o 813C per mil μmol/L	TOC μmol/L	TON μmol/L	Chl-a μg/L	Phaeo μg/L	
						Thera	Sigma																	
224	8.8	34.209	2 -9	5	9.240	9.239	26.460	-9	0.2	14.9	2 1.10	2 0.0	2 0.0	2 280.54	2 548	2 2082.4	2 -9	9	2275	2 -9	-9	-9	-9	-9
223	26.1	34.209	2 34.211	2 9.224	9.221	26.463	-9	0.2	14.5	2 1.12	2 0.0	2 0.0	2 280.46	2 548	2 2082.8	2 7.8513	2 2274	2 -9	-9	-9	-9	-9	-9	-9
222	49.3	34.209	2 -9	5	9.182	9.177	26.470	-9	0.2	15.3	2 1.15	2 0.0	2 280.39	2 555	2 2082.0	2 -9	9	2277	2 -9	-9	-9	-9	-9	-9
221	98.9	34.258	2 34.259	2 7.259	7.250	26.900	-9	0.2	15.9	2 1.24	2 1.5	2 2 287.36	2 604	2 2098.3	2 7.8156	2 2277	2 -9	-9	-9	-9	-9	-9	-9	-9
220	147.7	34.282	2 34.283	2 6.622	6.609	26.906	-9	0.2	18.4	2 1.28	2 3.7	2 2 280.29	2 657	2 2111.6	2 7.7865	2 2276	2 -9	-9	-9	-9	-9	-9	-9	-9
219	200.7	34.286	2 -9	5	6.447	6.429	26.941	-9	-9	-9	-9	-9	2 278.14	2 670	2 2115.2	2 -9	9	2277	2 -9	-9	-9	-9	-9	-9
218	300.7	34.298	2 34.300	2 6.326	6.300	26.973	-9	0.0	2 21.5	2 1.49	2 6.4	2 2 268.37	2 704	2 2124.7	2 7.7995	2 2278	2 -9	-9	-9	-9	-9	-9	-9	-9
217	401.4	34.296	2 34.297	2 6.029	5.995	26.997	-9	0.0	2 21.1	2 1.50	2 6.3	2 2 274.13	2 698	2 2123.0	2 7.7643	2 2279	2 -9	-9	-9	-9	-9	-9	-9	-9
216	499.5	34.286	2 -9	5	5.821	5.778	27.016	-9	0.0	2 22.3	2 1.58	2 7.2	2 2 273.47	2 708	2 2127.2	2 -9	9	2276	2 -9	-9	-9	-9	-9	-9
215	600.8	34.263	2 34.263	2 5.499	5.448	27.039	-9	0.0	2 23.4	2 1.58	2 9.1	2 2 255.81	2 790	2 2144.3	2 7.7176	2 2283	2 -9	-9	-9	-9	-9	-9	-9	-9
214	701.2	34.246	2 34.247	2 5.096	5.039	27.073	-9	0.0	2 25.1	2 1.73	2 12.8	2 2 233.51	2 872	2 2165.2	2 -9	9	2287	2 -9	-9	-9	-9	-9	-9	-9
213	799.8	34.267	2 -9	5	4.791	4.727	27.125	-9	0.0	2 28.6	2 1.97	2 19.5	2 2 212.05	2 945	2 -9	1	-9	2292	2 -9	-9	-9	-9	-9	-9
212	899.9	34.283	2 -9	5	4.310	4.241	27.191	-9	-9	-9	-9	-9	2 212.05	2 995	2 2192.1	2 7.6286	2 2303	2 -9	-9	-9	-9	-9	-9	-9
211	1000.8	34.301	2 34.302	2 3.853	3.779	27.253	-9	0.0	2 31.2	2 2.19	2 32.5	2 2 193.35	2 1098	2 -9	9	7.5950	2 -9	9	2303	2 -9	-9	-9	-9	-9
210	1199.1	34.369	2 34.370	2 3.210	3.125	27.370	-9	0.0	2 33.1	2 2.28	2 47.3	2 2 177.31	2 1162	2 -9	9	7.5711	2 -9	9	2303	2 -9	-9	-9	-9	-9
209	1401.3	34.459	2 34.458	2 2.806	2.709	27.480	-9	0.0	2 34.1	2 2.38	2 62.3	2 2 170.78	2 1184	2 -9	9	7.5637	2 -9	9	2303	2 -9	-9	-9	-9	-9
208	1600.3	34.541	2 34.541	2 2.545	2.434	27.569	-9	0.0	2 34.3	2 2.41	2 71.3	2 2 169.31	2 1170	2 -9	9	7.5743	2 -9	9	2303	2 -9	-9	-9	-9	-9
207	1900.1	34.636	2 34.635	2 2.316	2.184	27.665	-9	0.0	2 34.2	2 2.36	2 81.7	2 2 172.21	2 1138	2 -9	9	7.5940	2 -9	9	2303	2 -9	-9	-9	-9	-9
206	2198.4	34.683	2 34.682	2 2.137	1.981	27.719	-9	0.0	2 33.1	2 2.33	2 90.6	2 2 175.86	2 1116	2 -9	9	7.5997	2 -9	9	2303	2 -9	-9	-9	-9	-9
205	2599.1	34.705	2 34.705	2 1.846	1.660	27.761	-9	0.0	2 32.9	2 2.25	2 103.6	2 2 180.40	2 1095	2 -9	9	7.6049	2 -9	9	2303	2 -9	-9	-9	-9	-9
204	2898.6	34.709	2 34.708	2 1.662	1.451	27.780	-9	0.0	2 32.9	2 2.30	2 109.4	2 2 193.75	2 1080	2 -9	9	7.6090	2 -9	9	2303	2 -9	-9	-9	-9	-9
203	3193.1	34.716	2 34.715	2 1.535	1.299	27.796	-9	0.0	2 32.5	2 2.26	2 108.0	2 2 206.04	2 1049	2 -9	9	7.6156	2 -9	9	2303	2 -9	-9	-9	-9	-9
202	3499.0	34.714	2 34.714	2 1.273	1.012	27.815	-9	0.0	2 32.7	2 2.29	2 115.3	2 2 206.04	2 1049	2 -9	9	7.6156	2 -9	9	2303	2 -9	-9	-9	-9	-9
201	3824.8	34.709	2 34.708	2 0.827	0.545	27.840	-9	0.0	2 33.8	2 2.24	2 129.4	2 2 206.04	2 1049	2 -9	9	7.6156	2 -9	9	2303	2 -9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 39 DATE 3/10/94 LATITUDE 50°30.0'S Btm Depth: 4268
CAST 1 LONGITUDE 103°0.0'W

Sample ID	P* Pressure db	Salinity P* CTD	Salinity P* Bottle	Temp °C	Temp °C	Potential		Sigma		Theta	Beam	NO2 P*	NO3 P*	PO4 P*	Si(OH)4 P*	CFC-11 P*	CFC-12 P*	O2 P*	P* @20°C P*	DIC P*	pH P*	TAIK P*	P* 813C TOC per ml	TON umol/L	Chi-a Phase um/L											
						Temp	Temp	Temp	Temp																											
124	2	10.9	34.224	2	-9	5	8.942	8.941	26.520	-9	0.2	15.5	2	1.14	2	0.0	2	4.124	2	1.975	2	282.50	2	555	2	2085.4	2	-9	9	2275	2	-9	-9	-9	-9	
123	2	22.9	34.224	2	8.940	8.937	26.521	-9	0.2	14.8	2	14.8	2	0.98	4	0.0	2	4.104	2	2.013	2	282.20	2	554	2	2084.2	2	7.8477	2	2272	2	-9	-9	-9	-9	
122	2	48.7	34.224	2	-9	5	8.889	8.883	26.529	-9	-9	9	-9	-9	9	4.134	2	2.000	2	2.000	2	282.01	2	554	2	-9	9	-9	9	-9	9	-9	-9	-9		
121	2	100.3	34.273	2	-9	5	7.242	7.232	26.814	-9	0.2	16.7	2	1.22	2	1.7	2	4.452	2	2.128	2	288.10	2	609	2	2102.0	2	-9	9	2271	2	-9	-9	-9	-9	
120	2	148.2	34.297	2	6.496	6.483	26.985	-9	0.0	19.3	2	19.3	2	0.45	4	4.7	2	4.271	2	1.968	2	278.72	2	666	2	2112.6	2	7.7797	2	2274	2	-9	-9	-9	-9	
119	2	201.7	34.295	2	-9	5	6.288	6.270	26.961	-9	0.0	20.4	2	1.43	2	4.9	2	4.192	2	1.998	2	278.92	2	677	2	2116.7	2	-9	9	2277	2	-9	-9	-9	-9	
118	2	299.5	34.297	2	34.298	2	6.107	6.081	26.987	-9	0.0	20.9	2	1.51	2	6.1	2	3.851	2	1.803	2	279.17	2	698	2	2123.1	2	7.7640	2	2277	2	-9	-9	-9	-9	
117	2	399.3	34.307	2	34.306	2	6.009	5.975	27.008	-9	0.0	20.7	2	1.42	2	6.0	2	4.050	2	1.914	2	279.38	2	686	2	2123.3	2	7.7688	2	2278	2	-9	-9	-9	-9	
116	2	499.0	34.286	2	-9	5	5.761	5.718	27.023	-9	-9	9	-9	-9	9	3.929	2	1.885	2	2.7757	2	697	2	2124.7	2	-9	9	2276	2	-9	-9	-9	-9			
115	2	598.3	34.257	2	34.258	2	5.409	5.359	27.045	-9	0.0	23.2	2	1.64	2	9.6	2	3.486	2	1.628	2	266.69	2	741	2	2135.9	2	7.7403	2	2283	2	-9	-9	-9	-9	
114	2	698.7	34.248	2	34.249	2	5.052	4.985	27.080	-9	0.0	25.7	2	1.80	2	13.7	2	2.813	2	1.258	2	250.46	2	799	2	2150.2	2	7.7090	2	2284	2	-9	-9	-9	-9	
113	2	798.5	34.266	2	34.267	2	4.690	4.627	27.135	-9	0.0	28.0	2	1.96	2	19.6	2	2.014	2	0.909	2	231.76	2	879	2	2166.3	2	7.6758	2	2288	2	-9	-9	-9	-9	
112	2	1001.4	34.303	2	-9	5	3.751	3.678	27.265	-9	-9	9	-9	-9	9	1.177	2	0.538	2	0.538	2	210.92	2	995	2	-9	9	-9	9	-9	9	-9	-9	-9	-9	
111	2	1200.3	34.379	2	34.380	2	3.097	3.013	27.388	-9	0.0	33.2	2	2.31	2	50.2	2	0.648	2	0.301	2	192.72	2	-9	9	-9	9	7.5921	2	-9	9	-9	-9	-9	-9	
110	2	1400.1	34.460	2	34.460	2	2.743	2.646	27.485	-9	0.0	34.0	2	2.31	2	63.4	2	0.431	2	0.199	2	181.17	2	-9	9	-9	9	7.5740	2	-9	9	-9	-9	-9	-9	
109	2	1600.2	34.550	2	34.548	2	2.523	2.413	27.577	-9	0.0	34.1	2	2.40	2	73.5	2	0.182	2	0.082	2	170.77	2	-9	9	-9	9	7.5662	2	-9	9	-9	-9	-9	-9	
108	4	1881.7	34.635	2	-9	9	2.325	2.194	27.663	-9	-9	9	-9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
107	2	2199.6	34.683	2	34.683	2	2.105	1.949	27.772	-9	0.0	33.3	2	2.33	2	92.5	2	0.017	2	0.015	2	171.13	6	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	
106	2	2599.8	34.702	2	34.700	2	1.794	1.608	27.763	-9	0.0	32.9	2	2.33	2	104.9	2	0.005	2	0.002	2	174.09	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9
105	2	2998.6	34.710	2	34.709	2	1.617	1.398	27.785	-9	0.0	32.2	2	2.28	2	110.7	2	0.012	2	-0.001	2	181.18	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9
104	2	3401.2	34.714	2	34.712	2	1.390	1.137	27.806	-9	0.0	32.1	2	1.98	4	116.0	2	0.005	2	0.007	2	189.50	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9
103	2	3797.7	34.711	2	34.708	2	0.979	0.696	27.833	-9	0.0	32.2	2	2.29	2	123.6	2	0.000	2	0.001	2	199.19	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9
102	2	4200.9	34.708	2	34.707	2	0.780	0.460	27.845	-9	0.0	32.4	2	2.29	2	128.5	2	0.233	4	0.009	2	204.68	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9
101	2	4806.0	34.708	2	34.707	2	0.783	0.451	27.845	-9	0.0	32.7	2	2.24	2	130.0	2	0.005	2	0.003	2	204.90	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 40 DATE 3/10/94 LATITUDE 49°50.0'S Btm Depth: 4186
CAST 3 LONGITUDE 102°50.0'W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma T	Sigma T	Beam										KOC2										TAik P ^m	613C P ^m	TOC P ^m	TON P ^m	Chl-a P ^m	Phaeo P ^m			
								NO2 P ^m	NO3 P ^m	PO4 P ^m	Si(OH)4 P ^m	CFC-11 P ^m	CFC-12 P ^m	O2 P ^m	@20°C P ^m	DIC P ^m	pH P ^m	TAik P ^m	613C P ^m	TOC P ^m	TON P ^m	Chl-a P ^m	Phaeo P ^m													
336	2	9.0	34.158	2	34.158	2	10.089	10.088	0.107	0.2	13.7	1.09	2	0.0	2	1.920	1.920	2	2075.89	2	529	2	2075.3	2	7.8642	2	2268	6	1.90	-9	-9	-9	0.116	0.085		
335	2	9.0	34.159	2	34.171	2	10.088	10.087	0.107	0.2	13.8	1.07	2	0.0	2	1.920	1.920	2	2075.89	2	531	2	2075.4	2	7.8617	2	2264	2	-9	-9	-9	-9	-9	-9		
334	2	24.4	34.168	2	34.227	3	9.923	9.920	0.092	0.2	14.6	1.08	2	0.0	2	1.982	1.982	2	2084.7	2	549	2	2084.7	2	7.8503	2	2276	2	-9	-9	-9	-9	0.120	0.060		
333	2	49.7	34.226	2	34.220	2	9.009	9.004	0.096	0.2	14.7	1.14	2	0.0	2	1.988	1.988	2	2086.1	2	592	2	2086.1	2	7.8503	2	2275	2	-9	-9	-9	-9	0.125	0.059		
332	2	79.5	34.229	2	34.235	2	8.966	8.958	0.085	0.2	15.4	1.22	2	0.8	2	2.190	2.190	2	2085.3	2	592	2	2085.3	2	7.8245	2	2287	2	-9	-9	-9	-9	0.119	0.056		
331	2	100.2	34.235	2	34.236	2	7.603	7.633	0.061	0.2	16.4	1.30	2	2.0	2	2.107	2.107	2	2102.5	2	657	2	2102.5	2	7.8069	2	2278	2	-9	-9	-9	-9	-9	-9		
330	2	117.9	34.235	2	34.236	3	7.017	7.006	0.044	0.1	18.2	1.32	2	2.9	2	2.000	2.000	2	2109.9	2	657	2	2109.9	2	7.7886	2	2274	2	-9	-9	-9	-9	0.177	0.133		
329	2	159.2	34.270	2	34.312	3	6.674	6.660	0.024	0.0	19.3	1.43	2	4.4	2	1.910	1.910	2	2118.7	2	672	2	2118.7	2	7.7745	2	2279	2	-9	-9	-9	-9	0.177	0.083		
328	2	207.0	34.308	2	34.304	2	6.569	6.550	0.017	0.0	20.0	1.46	2	5.0	2	1.869	1.869	2	2120.9	2	672	2	2120.9	2	7.7698	2	2279	2	-9	-9	-9	-9	0.007	0.009		
327	2	257.3	34.299	2	34.304	2	6.370	6.347	0.012	0.0	20.7	1.51	2	5.5	2	1.774	1.774	2	2123.5	2	689	2	2123.5	2	7.7646	2	2280	2	-9	-9	-9	-9	3.5	-9		
326	2	311.0	34.313	2	34.298	2	6.347	6.320	0.010	0.0	21.1	1.51	2	5.9	2	1.712	1.712	2	2126.5	2	697	2	2126.5	2	7.7594	2	2278	2	-9	-9	-9	-9	-9	-9		
325	2	363.1	34.295	2	34.299	2	6.146	6.115	0.011	0.0	21.6	1.53	2	6.9	2	1.608	1.608	2	2127.5	2	703	2	2127.5	2	7.7542	2	2280	2	-9	-9	-9	-9	-9	-9		
324	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	1.526	1.526	2	2130.5	2	722	2	2130.5	2	7.7477	2	2281	2	-9	-9	-9	-9	-9	-9		
323	2	481.8	34.288	2	34.287	2	5.924	5.882	0.013	0.0	22.4	1.64	2	7.9	2	1.508	1.508	2	2136.6	2	742	2	2136.6	2	7.7305	2	2281	2	-9	-9	-9	-9	-9	-9		
322	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	1.508	1.508	2	2136.6	2	742	2	2136.6	2	7.7305	2	2281	2	-9	-9	-9	-9	-9	-9		
321	2	577.1	34.272	2	34.270	2	5.610	5.561	0.010	0.0	24.1	1.73	2	9.8	2	1.308	1.308	2	2147.8	2	806	2	2147.8	2	7.7108	2	2276	2	-9	-9	-9	-9	-9	-9		
320	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	1.147	1.147	2	2147.8	2	806	2	2147.8	2	7.7108	2	2276	2	-9	-9	-9	-9	-9	-9		
319	2	687.6	34.259	2	34.259	2	5.205	5.148	0.010	0.0	25.7	1.83	2	13.0	2	1.147	1.147	2	2163.6	2	879	2	2163.6	2	7.6806	2	2284	2	-9	-9	-9	-9	-9	-9		
318	2	766.5	34.260	2	34.263	2	4.873	4.812	0.010	0.0	27.6	1.95	2	18.7	2	0.889	0.889	2	2178.4	2	941	2	2178.4	2	7.6529	2	2289	2	-9	-9	-9	-9	-9	-9		
317	2	865.2	34.273	2	34.279	3	4.456	4.389	0.011	0.0	29.8	2.11	2	25.5	2	0.613	0.613	2	2194.9	2	999	2	2194.9	2	7.6282	2	2298	2	-9	-9	-9	-9	-9	-9		
316	2	964.5	34.299	2	34.302	3	4.079	4.006	0.010	0.0	31.8	2.21	2	32.5	2	0.519	0.519	2	2194.9	2	999	2	2194.9	2	7.6282	2	2298	2	-9	-9	-9	-9	-9	-9		
315	2	1163.2	34.351	2	34.365	4	3.560	3.577	0.011	0.0	32.7	2.32	2	48.3	2	0.291	0.291	2	178.92	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
314	2	1361.4	34.441	2	34.456	4	2.857	2.762	0.010	0.0	34.0	2.40	2	62.7	2	0.157	0.157	2	178.92	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
313	2	1577.1	34.529	2	34.535	3	2.585	2.475	0.010	0.0	34.2	2.41	2	73.4	2	-9	-9	1	170.87	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
312	2	1771.5	34.595	2	34.602	3	2.432	2.309	0.008	0.0	33.6	2.34	2	83.2	2	0.049	0.049	2	168.96	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
311	2	1975.2	34.644	2	34.647	2	2.302	2.163	0.008	0.0	33.1	2.34	2	88.0	2	0.091	0.091	2	168.96	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
310	2	2215.2	34.682	2	34.684	2	2.146	1.988	0.007	0.0	32.6	2.32	2	92.8	2	0.026	0.026	2	171.81	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
309	2	2469.0	34.700	2	34.701	2	1.965	1.788	0.007	0.0	32.7	2.32	2	100.1	2	0.012	0.012	2	173.90	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
308	2	2777.0	34.709	2	34.706	2	1.775	1.579	0.005	0.0	32.6	2.30	2	108.7	2	0.004	0.004	2	176.85	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
307	2	3177.0	34.712	2	34.712	2	1.544	1.428	0.004	0.0	32.5	2.27	2	112.7	2	0.003	0.003	2	181.19	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
306	2	3468.1	34.713	2	34.713	2	1.331	1.072	0.003	0.0	32.3	2.30	2	113.2	2	-0.003	-0.003	2	181.49	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
305	2	3710.2	34.710	2	34.709	2	1.063	0.787	0.003	0.0	32.2	2.29	2	125.7	2	0.002	0.002	2	191.41	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
304	2	3963.2	34.709	2	34.707	2	0.844	0.547	0.003	0.0	32.3	2.24	2	132.6	2	-0.002	-0.002	2	197.84	2	1049	2	197.84	2	7.6282	2	2299	2	-9	-9	-9	-9	-9	-9	-9	-9
303	2	3979.8	34.709	2	34.707	2	0.858	0.540	0.003	0.0	32.3	2.27	2	133.5	2	-0.002	-0.002	2	202.86	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
302	2	4232.9	34.707	2	34.707	2	0.789	0.465	0.004	0.0	32.5	2.29	2	131.8	2	-0.002	-0.002	2	202.86	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
301	2	4329.9	34.707	2	34.707	2	0.789	0.465	0.004	0.0	32.5	2.29	2	131.8	2	-0.002	-0.002	2	202.86	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column

** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 43 DATE 3/11/94 LATITUDE 47°59.8'S Btm Depth: 4093
 CAST 1 LONGITUDE 103°0.4'W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma T	Sigma T	Theta cp	NO2 μmol/kg	NO3 μmol/kg	PO4 μmol/kg	Pb Si(OH)4 μmol/kg	CRC-11 μmol/kg	CRC-12 μmol/kg	O2 μmol/kg	P ₀₂ @ 20°C μatm	DIC μmol/kg	pH	P _{TALK} μmol/kg	P _{TALK} μmol/kg	513C per ml	TOC μmol/L	TON μmol/L	Chi-a μg/L	Phase μg/L			
																										Potential Temp °C	Beam Attenuation	Beam Attenuation
136	2	11.3	34.124	2	10.565	10.564	26.171	0.128	0.2	2	1.08	2	0.7	2	9	9	2071.6	2	7.8663	2	9	5	1.90	50.2	-9	0.118	0.053	
135	2	24.9	34.124	2	10.565	10.562	26.171	0.132	0.2	2	1.09	2	0.6	2	9	9	271.83	2	525	2	9	9	9	47.1	4.6	0.120	0.045	
134	2	49.8	34.123	2	10.508	10.502	26.181	0.135	0.2	2	1.06	2	0.5	2	9	9	271.41	2	527	6	9	9	9	54.4	4.6	0.145	0.065	
133	2	74.5	34.194	2	8.186	8.178	26.614	0.111	0.1	2	1.46	2	1.6	2	9	9	287.97	2	593	2	9	9	9	51.7	-9	0.223	0.119	
132	2	100.2	34.204	2	7.501	7.491	26.723	0.073	0.2	2	1.21	2	2.3	2	9	9	289.76	2	593	2	9	9	9	40.7	4.6	0.197	0.181	
131	2	124.9	34.218	2	7.004	6.993	26.804	0.053	0.3	2	1.28	2	2.9	2	9	9	286.33	2	593	2	9	9	9	-9	-9	0.183	0.159	
130	2	149.6	34.232	2	6.649	6.635	26.879	0.038	0.1	2	1.30	2	3.3	2	9	9	284.04	2	633	2	9	9	9	44.7	-9	0.120	0.117	
129	2	200.5	34.267	2	6.441	6.423	26.919	0.024	0.0	2	1.26	2	3.6	2	9	9	283.78	2	633	2	9	9	9	-9	-9	0.006	0.180	
128	2	250.7	34.282	2	6.457	6.435	26.990	0.018	0.0	2	1.50	2	3.8	2	9	9	283.42	2	633	2	9	9	9	-9	-9	-9	-9	-9
127	2	300.6	34.292	2	6.469	6.442	26.936	0.016	0.0	2	1.77	2	3.8	2	9	9	284.66	2	664	2	9	9	9	-9	-9	-9	-9	-9
126	2	351.5	34.300	2	6.484	6.453	26.941	0.013	0.0	2	1.32	2	3.8	2	9	9	285.08	2	664	2	9	9	9	-9	-9	-9	-9	-9
125	2	399.4	34.303	2	6.477	6.441	26.945	0.012	0.0	2	1.31	2	4.2	2	9	9	282.96	2	664	2	9	9	9	37.3	-9	-9	-9	-9
124	9	-9	-9	9	-9	-9	-9	-9	-9	9	-9	-9	-9	-9	9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
123	2	499.3	34.299	2	6.329	6.284	26.963	0.014	0.0	2	1.45	2	5.9	2	9	9	276.07	2	752	2	9	9	9	-9	-9	-9	-9	-9
122	9	-9	-9	9	-9	-9	-9	-9	-9	9	-9	-9	-9	-9	9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
121	2	600.8	34.291	2	6.054	6.001	26.992	0.015	0.0	2	1.58	2	7.8	2	9	9	266.08	2	752	2	9	9	9	45.9	2.9	-9	-9	-9
120	9	-9	-9	9	-9	-9	-9	-9	-9	9	-9	-9	-9	-9	9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
119	2	699.4	34.273	2	5.673	5.613	27.026	0.013	0.0	2	1.63	2	9.9	2	9	9	261.25	2	752	2	9	9	9	-9	-9	-9	-9	-9
118	2	795.6	34.261	2	5.205	5.139	27.073	0.013	0.0	2	2.52	2	14.2	2	9	9	248.11	2	886	2	9	9	9	45.7	-9	-9	-9	-9
117	2	898.9	34.268	2	4.704	4.632	27.137	0.014	0.0	2	2.78	2	21.4	2	9	9	230.69	2	886	2	9	9	9	-9	-9	-9	-9	-9
116	2	1000.4	34.284	2	4.270	4.193	27.196	0.012	0.0	2	2.97	2	27.0	2	9	9	218.14	2	936	2	9	9	9	37.2	2.7	-9	-9	-9
115	2	1199.5	34.359	2	3.367	3.281	27.347	0.011	0.0	2	3.29	2	44.7	2	9	9	191.03	2	936	2	9	9	9	-9	-9	-9	-9	-9
114	2	1401.2	34.448	2	2.950	2.851	27.458	0.011	0.0	2	3.45	2	60.8	2	9	9	162.81	2	936	2	9	9	9	-9	-9	-9	-9	-9
113	2	1599.1	34.531	2	2.693	2.580	27.548	0.010	0.0	2	3.51	2	75.5	2	9	9	158.38	2	936	2	9	9	9	-9	-9	-9	-9	-9
112	2	1799.2	34.591	2	2.470	2.344	27.616	0.010	0.0	2	3.46	2	84.6	2	9	9	159.57	2	936	2	9	9	9	-9	-9	-9	-9	-9
111	2	1998.9	34.638	2	2.279	2.138	27.670	0.009	0.0	2	3.42	2	90.6	2	9	9	161.78	2	936	2	9	9	9	34.0	-9	-9	-9	-9
110	2	2250.3	34.672	2	2.116	1.956	27.712	0.007	0.0	2	3.34	2	2.41	2	9	9	165.66	2	936	2	9	9	9	-9	-9	-9	-9	-9
109	2	2499.7	34.692	2	1.935	1.756	27.744	0.007	0.0	2	3.24	2	102.8	2	9	9	173.11	2	936	2	9	9	9	-9	-9	-9	-9	-9
108	2	2749.6	34.701	2	1.780	1.581	27.765	0.006	0.0	2	3.25	2	109.0	2	9	9	175.70	2	936	2	9	9	9	-9	-9	-9	-9	-9
107	2	2999.6	34.705	2	1.680	1.459	27.776	0.005	0.0	2	3.26	2	110.5	2	9	9	181.48	2	936	2	9	9	9	41.3	2.1	-9	-9	-9
106	2	3249.0	34.710	2	1.575	1.333	27.789	0.005	0.0	2	3.28	2	110.5	2	9	9	188.72	2	936	2	9	9	9	-9	-9	-9	-9	-9
105	2	3500.7	34.712	2	1.396	1.132	27.803	0.005	0.0	2	3.32	2	115.3	2	9	9	195.32	2	936	2	9	9	9	-9	-9	-9	-9	-9
104	2	3746.5	34.710	2	1.093	0.812	27.825	0.004	0.0	2	3.27	2	125.1	2	9	9	200.97	2	936	2	9	9	9	-9	-9	-9	-9	-9
103	2	3745.8	34.710	2	1.090	0.809	27.825	0.004	0.0	2	3.25	2	124.4	2	9	9	195.15	2	936	2	9	9	9	-9	-9	-9	-9	-9
102	2	4001.3	34.709	2	0.888	0.586	27.838	0.004	0.0	2	3.23	2	126.2	2	9	9	200.97	2	936	2	9	9	9	-9	-9	-9	-9	-9
101	2	4169.3	34.708	2	0.798	0.461	27.844	0.004	0.0	2	3.25	2	129.2	2	9	9	203.28	2	936	2	9	9	9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 44 DATE 3/1/94 LATITUDE 47°30.0'S Btm Depth: 4247
 CAST 1 LONGITUDE 103°0.1'W

Sample No ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma T	Sigma T	Theta cp	NO2 µmol/kg	NO3 µmol/kg	PO4 µmol/kg	P µmol/kg	SiO4 µmol/kg	CFC-11 µmol/kg	CFC-12 µmol/kg	O2 µmol/kg	P _{OC2} µmol/kg	P _{OC} µmol/kg	DIC ⁺ µmol/kg	pH	TA _{TK} µmol/kg	P _{TA} µmol/kg	813C permil	TOC µmol/L	TON µmol/L	Chl-a µg/L	Phase µg/L				
																												Potential Temp °C	Temp °C	Theta cp	
156	9.8	34.126	34.127	10.705	10.702	26.146	0.119	0.2	13.4	2	1.05	2	0.4	2	3.776	2	1.903	2	273.01	2	525	4	2071.1	2	-9	9	2268	6	-9	-9	
155	24.1	34.128	34.128	10.617	10.614	26.165	0.132	0.2	13.4	2	1.06	2	0.4	2	3.792	2	1.841	2	272.98	2	-9	9	2071.9	2	-9	9	2269	2	-9	-9	
154	48.4	34.129	34.129	10.538	10.532	26.180	0.127	0.2	13.3	2	1.01	2	0.3	2	3.767	2	1.879	2	272.95	2	527	2	2072.2	2	-9	9	2260	2	-9	-9	
153	74.7	34.129	34.131	10.495	10.486	26.189	0.098	0.2	13.4	2	1.06	2	0.4	2	3.763	2	1.873	2	273.98	2	-9	9	2071.6	2	-9	9	2268	2	-9	-9	
152	98.8	34.159	34.162	8.121	8.111	26.597	0.053	0.1	14.7	2	1.16	2	1.7	2	4.345	2	2.115	2	289.81	2	526	4	2087.9	2	-9	9	2273	2	-9	-9	
151	123.6	34.168	34.174	7.221	7.210	26.794	0.041	0.2	15.9	2	1.23	2	2.4	2	4.453	2	2.161	2	288.43	2	-9	9	2085.7	2	-9	9	2271	2	-9	-9	
150	149.5	34.205	34.206	6.649	6.636	26.841	0.027	0.2	17.3	2	1.27	2	3.2	2	4.208	2	1.982	2	283.66	2	525	4	2103.9	2	-9	9	2274	2	-9	-9	
129	200.7	34.257	34.258	6.381	6.363	26.919	0.023	0.0	19.6	2	1.38	2	4.9	2	4.208	2	1.982	2	279.15	2	677	2	2116.7	2	-9	9	2274	2	-9	-9	
128	248.2	34.273	34.274	6.207	6.185	26.954	0.015	0.0	20.5	2	1.45	2	6.0	2	3.993	4	1.910	4	273.33	2	-9	9	2120.1	2	-9	9	2277	2	-9	-9	
127	298.7	34.281	34.283	6.127	6.102	26.972	0.013	0.0	20.9	2	1.49	2	6.5	2	3.804	2	1.811	2	272.07	2	700	2	2123.0	2	-9	9	2279	2	-9	-9	
126	349.7	34.285	34.285	6.072	6.042	26.982	0.011	0.0	21.1	2	1.46	2	6.8	2	3.712	2	1.747	2	270.31	2	673	4	2123.6	2	-9	9	2278	2	-9	-9	
125	398.9	34.290	34.291	6.029	5.994	26.992	0.011	0.0	21.6	2	1.48	2	7.6	2	3.462	2	1.615	2	266.97	2	708	2	2125.7	2	-9	9	2279	2	-9	-9	
124	449.4	34.285	34.286	5.925	5.886	27.002	0.010	0.0	21.8	2	1.54	2	8.0	2	3.411	2	1.586	2	267.89	2	705	2	2127.0	2	-9	9	2278	2	-9	-9	
123	501.6	34.279	34.280	5.796	5.753	27.014	0.009	0.0	22.4	2	1.58	2	8.5	2	3.285	2	1.594	2	266.70	2	717	2	2129.3	2	-9	9	2281	2	-9	-9	
120	596.7	34.252	34.253	5.176	5.119	27.069	0.012	0.0	25.0	2	1.70	2	12.9	2	2.773	2	1.290	2	253.84	2	775	2	2143.5	2	-9	9	2282	2	-9	-9	
118	798.5	34.256	34.258	4.781	4.717	27.118	0.010	0.0	27.1	2	1.83	2	18.3	2	2.068	2	0.941	2	238.37	2	844	2	2159.0	2	-9	9	2284	2	-9	-9	
117	866.5	34.266	34.267	4.517	4.449	27.155	0.010	0.0	28.6	2	1.96	2	22.4	2	1.634	2	0.763	2	227.89	2	893	2	2169.6	2	-9	9	2289	2	-9	-9	
116	1199.2	34.294	34.295	3.949	3.874	27.238	0.010	0.0	30.7	2	2.16	2	33.6	2	1.012	2	0.475	2	211.76	2	979	2	2190.2	2	-9	9	2294	2	-9	-9	
115	1400.0	34.463	34.462	2.859	2.761	27.479	0.008	0.0	34.4	2	2.46	2	64.2	2	0.096	2	0.096	2	171.55	2	-9	9	9	7.5923	2	-9	9	9	9	-9	-9
114	1799.1	34.600	34.540	2.623	2.511	27.561	0.010	0.0	34.7	2	2.48	2	75.7	2	0.063	2	0.041	2	163.70	2	-9	9	9	7.5606	2	-9	9	9	9	-9	-9
112	2001.2	34.639	34.639	2.433	2.308	27.626	0.006	0.0	34.2	2	2.42	2	87.1	2	0.024	2	0.009	2	159.01	2	-9	9	9	7.5624	2	-9	9	9	9	-9	-9
111	2248.4	34.673	34.673	2.086	1.926	27.715	0.005	0.0	33.6	2	2.99	2	100.7	2	0.000	2	0.001	2	164.25	2	-9	9	9	7.5799	2	-9	9	9	9	-9	-9
110	2499.1	34.692	34.691	1.916	1.757	27.745	0.004	0.0	33.4	2	2.58	2	105.4	2	0.000	2	0.003	2	168.31	2	-9	9	9	7.5799	2	-9	9	9	9	-9	-9
109	2749.5	34.701	34.701	1.769	1.570	27.785	0.004	0.0	33.1	2	2.33	2	109.9	2	0.001	2	-0.002	2	179.48	2	-9	9	9	7.5799	2	-9	9	9	9	-9	-9
108	2997.9	34.706	34.706	1.648	1.428	27.780	0.003	0.0	32.8	2	2.32	2	113.3	2	0.001	2	-0.002	2	178.54	2	-9	9	9	7.5799	2	-9	9	9	9	-9	-9
106	3248.3	34.711	34.710	1.539	1.297	27.792	0.003	0.0	32.5	2	2.33	2	114.6	2	-9	9	-9	9	182.61	2	-9	9	9	7.5799	2	-9	9	9	9	-9	-9
105	3499.7	34.711	34.710	1.349	1.087	27.807	0.002	0.0	32.5	2	2.33	2	117.9	2	-0.001	2	0.000	2	185.84	2	-9	9	9	7.5799	2	-9	9	9	9	-9	-9
104	3749.2	34.709	34.709	1.078	0.797	27.825	0.002	0.0	32.5	2	2.32	2	125.1	2	-9	9	-9	9	193.74	2	-9	9	9	7.5799	2	-9	9	9	9	-9	-9
103	4000.2	34.709	34.709	0.875	0.574	27.839	0.003	0.0	32.8	2	2.28	2	131.5	2	-0.001	2	-0.001	2	201.39	2	-9	9	9	7.5799	2	-9	9	9	9	-9	-9
102	3999.8	34.708	34.708	0.876	0.574	27.839	0.003	0.0	32.5	2	2.31	2	131.7	2	-9	9	-9	9	201.39	2	-9	9	9	7.5799	2	-9	9	9	9	-9	-9
101	4318.5	34.708	34.707	0.780	0.447	27.846	0.004	0.0	34.2	2	2.31	2	131.8	2	0.014	2	0.011	2	203.97	2	-9	9	9	7.5799	2	-9	9	9	9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 46 DATE 3/12/94 LATITUDE 46°30.0'S Btm Depth: 3863
CAST 1 LONGITUDE 103°0.0'W

Sample ID	Pressure		Salinity		Temp °C	Temp °C	Sigma T	Sigma T	Atten	Beam	RO2										Chi-4	Pheno																	
	db	CTD	Salinity	Salinity							NO2	NO3	PO4	SiO4	F ⁺	CFC-11	F ⁺	CFC-12	O2	F ⁺			@20°C	DIC	pH	TALK	F ⁺	813C	TOC	TON									
136	2	9.5	34.142	2	34.142	2	10.886	10.885	26.128	0.121	0.2	13.0	2	1.05	2	0.5	2	3.785	2	1.826	2	272.21	2	530	2	2067.3	2	7.8702	2	2268	6	-9	-9	-9	-9				
135	2	23.9	34.145	2	34.145	2	10.717	10.715	26.160	0.120	0.2	12.8	2	1.05	2	0.6	2	3.772	2	1.838	2	272.80	2	522	2	2073.1	3	7.8685	2	-9	5	-9	-9	-9	-9				
134	2	49.5	34.147	2	34.148	2	10.493	10.487	26.202	0.096	0.2	13.1	2	1.07	2	0.6	2	3.758	2	1.808	2	273.35	2	526	2	2072.0	3	7.8684	2	2269	2	-9	-9	-9	-9				
133	2	74.0	34.159	2	34.157	2	8.490	8.482	26.540	0.084	0.2	13.8	2	1.16	2	1.4	2	-9	-9	-9	-9	283.26	2	566	2	2084.5	3	7.8392	2	2268	2	-9	-9	-9	-9				
132	2	92.6	34.166	2	34.168	2	7.917	7.908	26.633	0.049	0.2	14.6	2	1.20	2	1.6	2	4.193	2	1.992	2	284.33	2	586	2	2090.2	3	7.8265	2	2263	2	-9	-9	-9	-9				
131	2	123.5	34.195	2	34.198	2	7.212	7.201	26.757	0.032	0.4	16.6	2	1.26	2	2.4	2	4.317	2	2.044	2	278.89	2	621	2	2101.7	2	7.8034	2	2263	2	-9	-9	-9	-9				
130	2	148.8	34.228	2	34.228	2	6.939	6.926	26.821	0.026	0.0	17.6	2	1.33	2	3.0	2	4.037	2	1.948	2	275.55	2	642	2	2109.6	2	7.7934	2	2264	3	-9	-9	-9	-9				
129	2	204.3	34.294	2	34.293	2	6.758	6.740	26.898	0.016	0.0	19.3	2	1.40	2	4.3	2	-9	1	-9	1	268.65	2	671	2	2117.1	2	7.7751	2	2273	2	-9	-9	-9	-9				
128	2	246.8	34.316	2	34.317	2	6.665	6.643	26.929	0.016	0.0	19.7	2	1.46	2	5.2	2	3.888	2	1.830	2	267.37	2	686	2	2122.2	2	7.7695	2	2276	2	-9	-9	-9	-9				
127	2	296.6	34.309	2	34.310	2	6.483	6.457	26.948	0.015	0.0	20.4	2	1.43	2	6.0	2	3.524	2	1.647	2	267.29	2	692	2	2123.5	2	7.7667	2	2271	2	-9	-9	-9	-9				
126	2	351.8	34.307	2	34.310	2	6.361	6.329	26.962	0.013	0.0	20.3	2	1.46	2	6.0	2	-9	1	-9	1	266.69	2	699	2	2125.3	2	7.7607	2	2272	2	-9	-9	-9	-9				
125	2	397.1	34.304	2	34.307	2	6.257	6.222	26.974	0.011	0.0	20.9	2	1.52	2	6.4	2	3.498	2	1.620	2	266.17	2	707	2	2123.3	2	7.7587	2	2269	2	-9	-9	-9	-9				
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9			
123	2	496.8	34.297	2	34.305	3	6.034	5.991	26.998	0.010	0.0	21.1	2	1.53	2	6.8	2	3.132	6	1.451	6	265.77	2	714	2	2127.3	2	7.7523	2	2276	2	-9	-9	-9	-9	-9	-9		
122	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
121	2	600.5	34.280	2	34.281	2	5.727	5.675	27.024	0.008	0.0	23.0	2	1.60	2	9.0	2	2.909	2	1.339	2	263.15	2	728	2	2134.5	2	7.7439	2	2282	2	-9	-9	-9	-9	-9	-9		
120	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
119	2	698.9	34.285	2	34.286	2	5.372	5.313	27.056	0.010	0.0	24.5	2	1.72	2	12.0	2	2.554	2	1.188	2	235.68	2	768	2	2142.9	2	7.7230	2	2277	2	-9	-9	-9	-9	-9	-9		
118	2	800.7	34.281	2	34.282	2	4.925	4.860	27.105	0.010	0.0	26.9	2	1.89	2	16.5	2	1.991	2	0.917	2	239.25	2	833	2	2157.9	2	7.6946	2	2280	2	-9	-9	-9	-9	-9	-9		
117	2	908.9	34.273	2	34.273	2	4.469	4.398	27.166	0.010	0.0	28.8	2	2.07	2	23.5	2	-9	-9	-9	-9	223.53	2	899	3	2176.2	2	7.6522	2	2286	2	-9	-9	-9	-9	-9	-9		
116	2	999.3	34.297	2	34.298	2	4.115	4.039	27.223	0.009	0.0	30.6	2	2.09	2	29.8	2	0.868	2	0.395	2	210.78	2	970	2	2187.4	2	7.6371	2	2282	6	-9	-9	-9	-9	-9	-9		
115	2	1092.5	34.324	2	34.323	2	3.743	3.662	27.283	0.008	0.0	31.5	2	2.20	2	36.7	2	-9	-9	-9	-9	200.49	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
114	2	1196.2	34.365	2	34.365	2	3.395	3.308	27.350	0.008	0.0	32.9	2	2.31	2	46.0	2	0.420	2	0.212	2	188.58	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
113	2	1401.4	34.458	2	34.458	2	2.960	2.861	27.465	0.008	0.0	34.5	2	2.40	2	64.3	2	-9	-9	-9	-9	166.04	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
112	2	1602.9	34.531	2	34.531	2	2.630	2.518	27.553	0.007	0.0	35.7	2	2.39	2	72.7	2	0.121	2	0.058	2	167.27	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
111	2	1792.1	34.594	2	34.594	2	2.449	2.334	27.620	0.007	0.0	33.5	2	2.37	2	79.7	2	-9	-9	-9	-9	165.57	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
110	2	1993.3	34.642	2	34.642	2	2.287	2.146	27.673	0.006	0.0	33.4	2	2.36	2	87.9	2	0.019	2	0.012	2	163.38	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
109	2	2249.4	34.676	2	34.675	2	2.083	1.923	27.718	0.005	0.0	33.7	2	2.27	2	98.2	2	-9	-9	-9	-9	166.37	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
108	2	2500.4	34.692	2	34.691	2	1.915	1.756	27.746	0.004	0.0	33.1	2	2.31	2	104.9	2	0.004	2	0.001	2	169.24	6	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
107	2	2742.7	34.700	2	34.700	2	1.773	1.574	27.764	0.004	0.0	33.0	2	2.30	2	107.7	2	-9	-9	-9	-9	173.48	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
106	2	2995.1	34.706	2	34.705	2	1.668	1.448	27.778	0.003	0.0	33.3	2	2.26	2	110.1	2	-0.001	2	-0.001	2	177.08	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
105	2	3250.4	34.710	2	34.709	2	1.567	1.324	27.790	0.003	0.0	32.4	2	2.24	2	113.0	2	-9	-9	-9	-9	182.41	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
104	2	3499.9	34.710	2	34.710	2	1.371	1.108	27.806	0.003	0.0	32.3	2	2.26	2	117.1	2	-9	-9	-9	-9	188.23	6	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
103	2	3750.4	34.710	2	34.709	2	1.088	0.807	27.825	0.002	0.0	32.5	2	2.25	2	122.6	2	0.000	6	-0.001	6	195.01	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
102	2	3751.0	34.710	2	34.707	2	1.089	0.808	27.825	0.002	0.0	32.5	2	2.26	2	122.8	2	-9	-9	-9	-9	195.21	6	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
101	2	3912.4	34.709	2	34.707	2	0.872	0.580	27.838	0.003	0.0	31.8	2	2.19	2	129.4	2	-0.001	2	0.001	2	200.90	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION CAST 47 1 DATE 3/12/94 LATITUDE 45°59.6'S LONGITUDE 102°60.0'W Btm Depth: 3907

Sample ID	Pressure db	Salinity	Salinity ‰	Temp °C	Temp °C	Potential	Sigma T	Sigma Anom	Beam	NO2 ‰	NO3 ‰	PO4 ‰	F ^o SKOED4 ‰	F ^o CFC-11 ‰	F ^o CFC-12 ‰	O2 ‰ @20°C	F ^o DIC ‰	pH	F ^o TALK ‰	F ^o 813C TOC per ml	TON ‰	Chl-a ‰	Phase ‰								
																								CTD	Temp	Temp	Theta	cp	umol/kg	umol/kg	umol/kg
136	12.0	34.123	34.124	11.246	11.245	26.048	0.100	0.2	12.2	1.02	4.5	2	3.669	2	1.807	2	270.06	2	509	2	2066.4	2	7.8750	2	2268	2	1.90	51.6	-9	0.096	0.080
135	24.0	34.123	34.124	11.236	11.233	26.051	0.100	0.2	13.2	1.03	4.2	2	3.684	2	1.799	2	270.20	2	515	2	-9	9	7.8725	2	-9	9	1.90	47.6	5.6	0.095	0.084
134	51.4	34.127	34.127	11.114	11.108	26.076	0.098	0.2	12.8	1.09	4.1	2	3.577	2	1.789	2	270.37	2	519	2	-9	9	7.8722	2	-9	9	1.90	47.5	4.5	0.100	0.046
133	76.3	34.152	34.153	8.868	8.860	26.477	0.068	0.2	14.3	1.09	4.8	2	4.211	2	1.996	2	282.68	2	-9	9	-9	9	7.8412	2	-9	9	1.80	51.4	-9	0.137	0.073
132	101.4	34.162	34.163	7.833	7.824	26.642	0.050	0.3	15.3	1.21	5.9	2	4.323	2	2.038	2	282.79	2	-9	9	-9	9	7.8239	2	-9	9	1.70	54.0	4.2	0.140	0.101
131	124.9	34.191	34.190	7.310	7.298	26.740	0.039	0.4	16.1	1.25	6.2	2	4.075	2	1.947	2	279.94	2	615	2	-9	9	7.8074	2	-9	9	1.60	-9	-9	0.101	0.089
129	202.4	34.293	34.295	6.776	6.758	26.895	0.023	0.0	19.5	1.34	8.1	2	4.105	2	1.901	2	270.31	2	-9	9	-9	9	7.7777	2	-9	9	1.40	37.6	-9	0.016	0.011
128	246.2	34.308	34.309	6.636	6.613	26.926	0.018	0.0	19.7	1.42	9.2	2	3.917	2	1.818	2	268.02	2	-9	9	-9	9	7.7692	2	-9	9	1.40	47.8	4.0	-9	-9
127	301.6	34.304	34.304	6.456	6.429	26.947	0.014	0.0	21.2	1.47	9.9	2	3.678	6	1.722	6	267.33	2	696	2	-9	9	7.7641	2	-9	9	1.40	41.3	-9	-9	-9
126	351.2	34.303	34.305	6.336	6.305	26.982	0.014	0.0	20.3	1.51	9.9	2	-9	1	-9	1	266.91	2	-9	9	-9	9	7.7607	2	-9	9	1.40	-9	-9	-9	-9
125	399.2	34.302	34.302	6.231	6.196	26.976	0.014	0.0	20.6	1.49	10.4	2	3.494	2	1.578	2	266.66	2	-9	9	-9	9	7.7579	2	-9	9	1.40	-9	-9	-9	-9
124	469.1	34.295	34.295	6.003	5.959	27.000	0.013	0.0	22.3	1.54	11.5	2	3.193	6	1.469	6	266.54	2	-9	9	-9	9	7.7540	2	-9	9	1.40	-9	-9	-9	-9
122	503.1	34.277	34.278	5.699	5.648	27.026	0.011	0.0	22.2	1.64	12.7	2	3.006	2	1.374	2	260.83	2	732	2	-9	9	7.7420	2	-9	9	1.40	38.8	4.3	-9	-9
120	599.4	34.263	34.266	5.239	5.281	27.058	0.009	0.0	24.9	1.75	15.2	2	2.473	2	1.115	2	253.99	2	-9	9	-9	9	7.7229	2	-9	9	1.30	-9	-9	-9	-9
118	805.8	34.265	34.265	4.901	4.836	27.112	0.010	0.0	26.7	1.91	21.0	2	1.789	2	0.815	2	234.02	2	-9	9	-9	9	7.6891	2	-9	9	1.20	38.7	-9	-9	-9
117	899.6	34.277	34.279	4.521	4.450	27.164	0.010	0.0	29.1	1.99	27.1	2	1.295	2	0.602	2	222.23	2	-9	9	-9	9	7.6614	2	-9	9	1.10	-9	-9	-9	-9
116	1001.9	34.300	34.300	4.052	3.976	27.232	0.010	0.0	30.6	2.11	34.2	2	0.927	6	0.423	6	203.47	2	976	2	-9	9	7.6364	2	-9	9	1.00	38.6	3.2	-9	-9
115	1099.3	34.326	34.326	3.648	3.567	27.293	0.008	0.0	32.1	2.22	40.9	2	-9	9	-9	9	201.38	2	-9	9	-9	9	7.6162	2	-9	9	0.80	-9	-9	-9	-9
114	1198.3	34.364	34.363	3.372	3.286	27.351	0.009	0.0	33.3	2.28	48.2	2	0.424	2	0.203	2	190.15	2	-9	9	-9	9	7.5810	2	-9	9	0.80	-9	-9	-9	-9
113	1598.8	34.534	34.534	2.703	2.597	27.463	0.008	0.0	35.0	2.49	64.9	2	0.044	2	0.019	2	156.06	2	-9	9	-9	9	7.5532	2	-9	9	0.40	-9	-9	-9	-9
112	1800.7	34.593	34.593	2.461	2.335	27.619	0.006	0.0	34.6	2.44	86.6	2	0.031	6	0.010	6	160.11	2	-9	9	-9	9	7.5627	2	-9	9	0.40	-9	-9	-9	-9
110	2248.2	34.678	34.677	2.107	1.947	27.718	0.005	0.0	33.6	2.31	94.8	2	0.007	2	0.001	2	168.22	2	-9	9	-9	9	7.5745	2	-9	9	0.40	41.9	-9	-9	-9
109	2501.0	34.695	34.694	1.913	1.734	27.748	0.004	0.0	33.4	2.36	103.2	2	-9	9	-9	9	170.38	6	-9	9	-9	9	7.5745	2	-9	9	0.30	-9	-9	-9	-9
107	2993.4	34.706	34.706	1.651	1.431	27.779	0.003	0.0	33.2	2.30	110.1	2	-9	9	-9	9	171.68	2	-9	9	-9	9	7.5745	2	-9	9	0.40	-9	-9	-9	-9
106	3251.6	34.709	34.708	1.555	1.312	27.790	0.003	0.0	32.7	2.32	112.5	2	-0.004	2	-0.001	2	177.68	2	-9	9	-9	9	7.5745	2	-9	9	0.40	38.4	3.5	-9	-9
104	3499.2	34.710	34.709	1.341	1.079	27.807	0.003	0.0	32.3	2.30	115.7	2	-9	9	-9	9	182.38	6	-9	9	-9	9	7.5745	2	-9	9	0.40	-9	-9	-9	-9
103	3752.0	34.709	34.707	1.145	0.862	27.821	0.004	0.0	33.0	2.23	121.7	2	-0.004	2	0.001	2	192.84	6	-9	9	-9	9	7.5745	2	-9	9	0.40	-9	-9	-9	-9
102	3751.5	34.709	34.707	1.145	0.862	27.820	0.004	0.0	32.7	2.28	123.6	2	-9	9	-9	9	192.94	2	-9	9	-9	9	7.5745	2	-9	9	0.40	39.7	-9	-9	-9
101	3971.6	34.709	34.707	0.950	0.650	27.834	0.003	0.0	32.6	2.25	128.9	2	-0.003	2	0.002	2	198.96	2	-9	9	-9	9	7.5745	2	-9	9	0.40	38.0	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 49 DATE 3/13/94 LATITUDE 45°0.5'S Btm Depth: 3757
CAST 1 LONGITUDE 102°59.6'W

Sample ID	P* db	Pressure	Salinity	P* Bottle	Temp °C	Temp °C	Sigma t	Sigma t	Beam Attenuation	NO2 µmol/kg	NO3 µmol/kg	P04 µmol/kg	P* Si(OH)4 µmol/kg	P* CFC-11 pmol/kg	P* CFC-12 pmol/kg	O2 µmol/kg	P* @20°C µatm	DICP* µmol/kg	pH P*	P* TALK µmol/kg	P* S13C per mil	TOC µmol/L	TON µmol/L	Chi-a µM	Phase						
																										CTD	Salinity	Temp	Temp	Temp	Temp
124	2	10.3	34.120	2	34.119	2	12.324	12.322	25.844	-9	0.2	12.5	2	1.06	2	1.735	2	-9	1	-9	2064.1	2	7.8814	2	2270	2	-9	-9	-9	-9	
125	4	24.7	34.119	2	-9	12.323	12.320	25.844	-9	-9	9	-9	9	-9	1	-9	1	-9	9	-9	9	2063.1	2	7.8808	2	2265	2	-9	-9	-9	-9
122	2	51.3	34.120	2	34.119	2	12.323	12.316	25.845	-9	0.2	12.4	2	1.00	2	1.743	2	264.40	2	-9	9	2063.1	2	7.8808	2	2265	2	-9	-9	-9	-9
121	2	102.0	34.149	2	34.145	2	8.416	8.405	26.545	-9	0.2	13.9	2	1.11	2	2.005	2	283.00	2	-9	9	2063.1	2	7.8378	2	2262	2	-9	-9	-9	-9
120	2	202.6	34.275	2	34.275	2	6.844	6.825	26.572	-9	0.0	18.8	2	1.37	2	4.212	2	271.18	2	-9	9	2114.5	2	7.7804	2	2270	2	-9	-9	-9	-9
119	2	302.3	34.318	2	34.317	2	6.571	6.544	26.943	-9	0.0	20.6	2	1.48	2	1.746	2	265.97	2	-9	9	2126.1	2	7.7648	2	2276	2	-9	-9	-9	-9
118	2	397.4	34.307	2	34.307	2	6.316	6.281	26.989	-9	0.0	21.4	2	1.51	2	1.619	2	265.87	2	-9	9	2128.6	2	7.7574	2	2277	2	-9	-9	-9	-9
117	2	500.6	34.296	2	34.296	2	6.034	5.990	26.998	-9	0.0	22.0	2	1.51	2	1.619	2	265.80	2	-9	9	2129.3	2	7.7540	2	2275	2	-9	-9	-9	-9
116	2	596.7	34.281	2	34.282	2	5.781	5.729	27.019	-9	0.0	22.8	2	1.61	2	1.402	2	265.20	2	-9	9	2130.8	2	7.7464	2	2280	2	-9	-9	-9	-9
115	2	702.6	34.268	2	34.268	2	5.465	5.406	27.047	-9	0.0	24.8	2	1.71	2	1.175	2	256.76	2	-9	9	2139.8	2	7.7288	2	2281	2	-9	-9	-9	-9
114	2	804.5	34.266	2	34.265	2	5.076	5.010	27.092	-9	0.0	26.7	2	1.84	2	0.987	2	242.12	2	-9	9	2153.5	2	7.7008	2	2285	2	-9	-9	-9	-9
113	2	901.2	34.278	2	34.277	2	4.613	4.542	27.154	-9	0.0	28.9	2	1.96	2	0.654	2	224.10	2	-9	9	2171.8	2	7.6652	2	2291	2	-9	-9	-9	-9
112	2	983.1	34.295	2	34.294	2	4.257	4.181	27.206	-9	0.0	30.9	2	2.12	2	0.348	2	210.10	2	-9	9	2185.0	2	7.6407	2	2300	2	-9	-9	-9	-9
111	2	1104.2	34.326	2	34.326	2	3.703	3.622	27.288	-9	0.0	32.5	2	2.26	2	0.132	2	199.50	2	-9	9	2203.8	2	7.5917	2	2302	2	-9	-9	-9	-9
110	2	1190.7	34.368	2	34.368	2	3.453	3.366	27.347	-9	0.0	34.8	2	2.34	2	0.049	2	162.44	2	-9	9	2248.3	2	7.5563	2	2333	2	-9	-9	-9	-9
109	2	1400.8	34.462	2	34.462	2	2.986	2.887	27.466	-9	0.0	33.1	2	2.43	2	0.088	4	162.44	2	-9	9	2248.3	2	7.5563	2	2333	2	-9	-9	-9	-9
108	4	1699.6	34.564	2	-9	2.573	2.454	27.585	-9	-9	9	-9	9	-9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
107	4	2002.6	34.641	4	34.186	4	2.277	2.136	27.674	-9	0.1	16.4	4	1.21	4	1.641	4	-9	1	-9	9	2088.4	4	-9	5	-9	5	-9	-9	-9	-9
106	2	2301.5	34.683	2	34.682	2	2.047	1.883	27.727	-9	0.0	33.9	2	2.35	2	0.005	2	168.36	2	-9	9	2272.8	2	7.5835	2	2369	2	-9	-9	-9	-9
105	2	2602.1	34.698	2	34.698	2	1.830	1.643	27.757	-9	0.0	33.6	2	2.27	2	0.004	2	172.50	2	-9	9	2278.6	2	7.5923	2	2375	2	-9	-9	-9	-9
104	4	2898.8	34.704	2	-9	1.673	1.462	27.775	-9	-9	9	-9	9	-9	1	-9	1	-9	9	9	9	9	9	9	9	9	9	9	9	9	9
103	2	3197.3	34.708	2	34.705	2	1.557	1.520	27.788	-9	0.0	33.6	2	2.31	2	0.052	4	181.56	2	-9	9	2279.1	2	7.6000	2	2381	2	-9	-9	-9	-9
102	2	3499.9	34.707	2	34.708	2	1.305	1.043	27.807	-9	0.0	33.5	2	2.33	2	0.001	2	187.42	2	-9	9	2277.6	2	7.6105	2	2383	2	-9	-9	-9	-9
101	2	3802.3	34.708	2	-9	1.169	0.880	27.819	-9	0.0	34.1	2	2.40	2	0.001	2	192.26	2	-9	9	2277.0	2	-9	9	2385	2	-9	-9	-9	-9	

* WOCE water sample quality flag (F) for parameter from previous column
** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 51 DATE 3/13/94 LATITUDE 43°59.1'S Btm Depth: 3930
 CAST 3 LONGITUDE 102°59.8'W

Sample ID	P#	Pressure db	Salinity P#	Salinity Bottle	Temp °C	Temp °C	Potential		Sigma		NO2 P#	NO3 P#	PO4 P#	P ^o S(OH)4 P#	CFC-11 P#	CFC-12 P#	O2 P#	O2 P# @20°C P#	DIC P#	pH P#	TAK P#	P#	S13C per mil	TOC µmol/L	TON µmol/L	CH4 Phase µg/L								
							Temp °C	Temp °C	Theta	Theta																								
324	2	9.1	34.049	2	-9	13.187	13.185	25.619	-9	0.2	12.2	2	1.01	2	3.347	2	1.665	2	259.38	2	-9	9	2055.8	2	-9	9	2266	2	-9	9	70.5	-9	-9	-9
325	2	25.1	34.050	2	34.049	13.146	13.146	25.628	-9	0.2	12.0	2	1.00	2	3.357	2	1.680	2	258.90	2	-9	9	7.8887	2	-9	9	7.8887	2	-9	9	71.1	-9	-9	-9
322	2	50.4	34.064	2	34.064	12.983	12.976	25.673	-9	0.2	11.9	2	0.99	2	3.274	2	1.636	2	261.65	2	-9	9	7.8879	2	-9	9	7.8879	2	-9	9	57.9	4.6	-9	-9
321	2	97.6	34.103	2	34.102	9.447	9.487	26.345	-9	0.1	13.0	2	1.04	2	4.161	2	2.022	2	284.72	2	-9	9	7.8534	2	-9	9	7.8534	2	-9	9	4.2	-9	-9	-9
320	2	147.8	34.137	2	34.139	7.905	7.891	26.612	-9	0.3	14.7	2	1.19	2	4.275	2	2.039	2	281.81	2	-9	9	7.8252	2	-9	9	7.8252	2	-9	9	57.3	-9	-9	-9
319	2	199.1	34.221	2	34.223	7.134	7.115	26.789	-9	0.1	17.8	2	1.35	2	4.148	2	1.965	2	271.23	2	-9	9	7.7885	2	-9	9	7.7885	2	-9	9	59.4	3.0	-9	-9
318	2	308.6	34.301	2	34.302	6.517	6.490	26.937	-9	0.0	20.3	2	1.48	2	3.817	2	1.779	2	266.95	2	-9	9	7.7644	2	-9	9	7.7644	2	-9	9	57.4	-9	-9	-9
317	2	404.4	34.304	2	34.304	6.210	6.174	26.981	-9	0.0	21.5	2	1.52	2	3.295	2	1.557	2	265.08	2	-9	9	7.7557	2	-9	9	7.7557	2	-9	9	58.4	3.1	-9	-9
315	2	602.5	34.273	2	34.274	5.685	5.634	27.024	-9	0.0	22.9	2	1.62	2	3.165	2	1.479	2	266.71	2	-9	9	7.7471	2	-9	9	7.7471	2	-9	9	50.1	-9	-9	-9
314	2	702.0	34.262	2	34.262	5.375	5.316	27.093	-9	0.0	24.4	2	1.75	2	2.519	2	1.190	2	257.88	2	-9	9	7.7281	2	-9	9	7.7281	2	-9	9	41.7	2.9	-9	-9
313	2	799.5	34.247	2	34.247	4.938	4.873	27.093	-9	0.0	25.7	2	1.81	2	2.457	2	1.138	2	250.15	2	-9	9	7.7079	2	-9	9	7.7079	2	-9	9	-9	-9	-9	-9
312	2	1002.7	34.294	2	34.294	4.186	4.109	27.213	-9	0.0	30.6	2	2.12	2	0.742	2	0.353	2	209.68	2	-9	9	7.6381	2	-9	9	7.6381	2	-9	9	-9	-9	-9	-9
311	2	1199.6	34.367	2	34.366	3.475	3.388	27.543	-9	0.0	33.2	2	2.39	2	0.207	2	0.102	2	183.95	2	-9	9	7.5891	2	-9	9	7.5891	2	-9	9	-9	-9	-9	-9
310	2	1400.8	34.470	2	34.469	3.046	2.947	27.467	-9	0.0	35.8	2	2.56	2	0.038	2	0.022	2	153.96	2	-9	9	7.5471	2	-9	9	7.5471	2	-9	9	45.6	-9	-9	-9
309	2	1699.7	34.564	2	34.563	2.590	2.471	27.584	-9	0.0	34.7	2	2.49	2	0.022	2	0.013	2	156.06	2	-9	9	7.5557	2	-9	9	7.5557	2	-9	9	-9	-9	-9	-9
308	2	2002.5	34.631	2	34.630	2.307	2.166	27.663	-9	0.0	34.2	2	2.42	2	94.6	2	-9	1	160.90	2	-9	9	7.5693	2	-9	9	7.5693	2	-9	9	-9	-9	-9	-9
307	2	2297.5	34.680	2	34.679	2.079	1.916	27.722	-9	0.0	33.2	2	2.35	2	0.007	2	0.004	2	169.02	2	-9	9	7.5834	2	-9	9	7.5834	2	-9	9	-9	-9	-9	-9
306	2	2598.1	34.695	2	34.695	1.846	1.660	27.754	-9	0.0	33.0	2	2.34	2	0.000	2	0.002	2	171.32	2	-9	9	7.5915	2	-9	9	7.5915	2	-9	9	37.7	2.5	-9	-9
305	2	2897.7	34.702	2	34.701	1.705	1.493	27.772	-9	0.0	32.8	2	2.30	2	0.010	2	-0.002	2	175.16	2	-9	9	7.5959	2	-9	9	7.5959	2	-9	9	-9	-9	-9	-9
304	2	3201.2	34.707	2	34.706	1.597	1.358	27.785	-9	0.0	32.8	2	2.31	2	-0.003	2	-0.001	2	179.99	2	-9	9	7.6011	2	-9	9	7.6011	2	-9	9	-9	-9	-9	-9
303	2	3497.4	34.709	2	34.708	1.386	1.122	27.803	-9	0.0	32.3	2	2.31	2	0.002	2	-0.001	2	186.78	2	-9	9	7.6087	2	-9	9	7.6087	2	-9	9	-9	-9	-9	-9
302	2	3799.5	34.708	2	34.709	1.159	0.871	27.819	-9	0.0	32.3	2	2.29	2	0.000	2	-0.003	2	193.16	2	-9	9	7.6156	2	-9	9	7.6156	2	-9	9	35.7	-9	-9	-9
301	2	3999.7	34.709	2	34.708	1.098	0.790	27.825	-9	0.0	32.4	2	2.33	2	0.002	2	0.002	2	195.98	2	-9	9	7.6156	2	-9	9	7.6156	2	-9	9	35.9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 53 DATE 3/14/94 LATITUDE 43°0.2'S Btm Depth: 3827
 CAST 1 LONGITUDE 102°59.9'W

Sample ID	Pressure db	Salinity P**	Temp °C	Temp °C	Sigma T	Sigma t	Theta sp	Beam										F _{0.4}	F _{0.8}	F _{1.2}	F _{1.6}	F _{2.0}	F _{2.5}	F _{3.0}	F _{3.5}	F _{4.0}	F _{4.5}	F _{5.0}	F _{5.5}	F _{6.0}	F _{6.5}	F _{7.0}	F _{7.5}	F _{8.0}	F _{8.5}	F _{9.0}	F _{9.5}	F _{10.0}	F _{10.5}	F _{11.0}	F _{11.5}	F _{12.0}	F _{12.5}	F _{13.0}	F _{13.5}	F _{14.0}	F _{14.5}	F _{15.0}	F _{15.5}	F _{16.0}	F _{16.5}	F _{17.0}	F _{17.5}	F _{18.0}	F _{18.5}	F _{19.0}	F _{19.5}	F _{20.0}	F _{20.5}	F _{21.0}	F _{21.5}	F _{22.0}	F _{22.5}	F _{23.0}	F _{23.5}	F _{24.0}	F _{24.5}	F _{25.0}	F _{25.5}	F _{26.0}	F _{26.5}	F _{27.0}	F _{27.5}	F _{28.0}	F _{28.5}	F _{29.0}	F _{29.5}	F _{30.0}	F _{30.5}	F _{31.0}	F _{31.5}	F _{32.0}	F _{32.5}	F _{33.0}	F _{33.5}	F _{34.0}	F _{34.5}	F _{35.0}	F _{35.5}	F _{36.0}	F _{36.5}	F _{37.0}	F _{37.5}	F _{38.0}	F _{38.5}	F _{39.0}	F _{39.5}	F _{40.0}	F _{40.5}	F _{41.0}	F _{41.5}	F _{42.0}	F _{42.5}	F _{43.0}	F _{43.5}	F _{44.0}	F _{44.5}	F _{45.0}	F _{45.5}	F _{46.0}	F _{46.5}	F _{47.0}	F _{47.5}	F _{48.0}	F _{48.5}	F _{49.0}	F _{49.5}	F _{50.0}	F _{50.5}	F _{51.0}	F _{51.5}	F _{52.0}	F _{52.5}	F _{53.0}	F _{53.5}	F _{54.0}	F _{54.5}	F _{55.0}	F _{55.5}	F _{56.0}	F _{56.5}	F _{57.0}	F _{57.5}	F _{58.0}	F _{58.5}	F _{59.0}	F _{59.5}	F _{60.0}	F _{60.5}	F _{61.0}	F _{61.5}	F _{62.0}	F _{62.5}	F _{63.0}	F _{63.5}	F _{64.0}	F _{64.5}	F _{65.0}	F _{65.5}	F _{66.0}	F _{66.5}	F _{67.0}	F _{67.5}	F _{68.0}	F _{68.5}	F _{69.0}	F _{69.5}	F _{70.0}	F _{70.5}	F _{71.0}	F _{71.5}	F _{72.0}	F _{72.5}	F _{73.0}	F _{73.5}	F _{74.0}	F _{74.5}	F _{75.0}	F _{75.5}	F _{76.0}	F _{76.5}	F _{77.0}	F _{77.5}	F _{78.0}	F _{78.5}	F _{79.0}	F _{79.5}	F _{80.0}	F _{80.5}	F _{81.0}	F _{81.5}	F _{82.0}	F _{82.5}	F _{83.0}	F _{83.5}	F _{84.0}	F _{84.5}	F _{85.0}	F _{85.5}	F _{86.0}	F _{86.5}	F _{87.0}	F _{87.5}	F _{88.0}	F _{88.5}	F _{89.0}	F _{89.5}	F _{90.0}	F _{90.5}	F _{91.0}	F _{91.5}	F _{92.0}	F _{92.5}	F _{93.0}	F _{93.5}	F _{94.0}	F _{94.5}	F _{95.0}	F _{95.5}	F _{96.0}	F _{96.5}	F _{97.0}	F _{97.5}	F _{98.0}	F _{98.5}	F _{99.0}	F _{99.5}	F _{100.0}	F _{100.5}	F _{101.0}	F _{101.5}	F _{102.0}	F _{102.5}	F _{103.0}	F _{103.5}	F _{104.0}	F _{104.5}	F _{105.0}	F _{105.5}	F _{106.0}	F _{106.5}	F _{107.0}	F _{107.5}	F _{108.0}	F _{108.5}	F _{109.0}	F _{109.5}	F _{110.0}	F _{110.5}	F _{111.0}	F _{111.5}	F _{112.0}	F _{112.5}	F _{113.0}	F _{113.5}	F _{114.0}	F _{114.5}	F _{115.0}	F _{115.5}	F _{116.0}	F _{116.5}	F _{117.0}	F _{117.5}	F _{118.0}	F _{118.5}	F _{119.0}	F _{119.5}	F _{120.0}	F _{120.5}	F _{121.0}	F _{121.5}	F _{122.0}	F _{122.5}	F _{123.0}	F _{123.5}	F _{124.0}	F _{124.5}	F _{125.0}	F _{125.5}	F _{126.0}	F _{126.5}	F _{127.0}	F _{127.5}	F _{128.0}	F _{128.5}	F _{129.0}	F _{129.5}	F _{130.0}	F _{130.5}	F _{131.0}	F _{131.5}	F _{132.0}	F _{132.5}	F _{133.0}	F _{133.5}	F _{134.0}	F _{134.5}	F _{135.0}	F _{135.5}	F _{136.0}	F _{136.5}	F _{137.0}	F _{137.5}	F _{138.0}	F _{138.5}	F _{139.0}	F _{139.5}	F _{140.0}	F _{140.5}	F _{141.0}	F _{141.5}	F _{142.0}	F _{142.5}	F _{143.0}	F _{143.5}	F _{144.0}	F _{144.5}	F _{145.0}	F _{145.5}	F _{146.0}	F _{146.5}	F _{147.0}	F _{147.5}	F _{148.0}	F _{148.5}	F _{149.0}	F _{149.5}	F _{150.0}	F _{150.5}	F _{151.0}	F _{151.5}	F _{152.0}	F _{152.5}	F _{153.0}	F _{153.5}	F _{154.0}	F _{154.5}	F _{155.0}	F _{155.5}	F _{156.0}	F _{156.5}	F _{157.0}	F _{157.5}	F _{158.0}	F _{158.5}	F _{159.0}	F _{159.5}	F _{160.0}	F _{160.5}	F _{161.0}	F _{161.5}	F _{162.0}	F _{162.5}	F _{163.0}	F _{163.5}	F _{164.0}	F _{164.5}	F _{165.0}	F _{165.5}	F _{166.0}	F _{166.5}	F _{167.0}	F _{167.5}	F _{168.0}	F _{168.5}	F _{169.0}	F _{169.5}	F _{170.0}	F _{170.5}	F _{171.0}	F _{171.5}	F _{172.0}	F _{172.5}	F _{173.0}	F _{173.5}	F _{174.0}	F _{174.5}	F _{175.0}	F _{175.5}	F _{176.0}	F _{176.5}	F _{177.0}	F _{177.5}	F _{178.0}	F _{178.5}	F _{179.0}	F _{179.5}	F _{180.0}	F _{180.5}	F _{181.0}	F _{181.5}	F _{182.0}	F _{182.5}	F _{183.0}	F _{183.5}	F _{184.0}	F _{184.5}	F _{185.0}	F _{185.5}	F _{186.0}	F _{186.5}	F _{187.0}	F _{187.5}	F _{188.0}	F _{188.5}	F _{189.0}	F _{189.5}	F _{190.0}	F _{190.5}	F _{191.0}	F _{191.5}	F _{192.0}	F _{192.5}	F _{193.0}	F _{193.5}	F _{194.0}	F _{194.5}	F _{195.0}	F _{195.5}	F _{196.0}	F _{196.5}	F _{197.0}	F _{197.5}	F _{198.0}	F _{198.5}	F _{199.0}	F _{199.5}	F _{200.0}	F _{200.5}	F _{201.0}	F _{201.5}	F _{202.0}	F _{202.5}	F _{203.0}	F _{203.5}	F _{204.0}	F _{204.5}	F _{205.0}	F _{205.5}	F _{206.0}	F _{206.5}	F _{207.0}	F _{207.5}	F _{208.0}	F _{208.5}	F _{209.0}	F _{209.5}	F _{210.0}	F _{210.5}	F _{211.0}	F _{211.5}	F _{212.0}	F _{212.5}	F _{213.0}	F _{213.5}	F _{214.0}	F _{214.5}	F _{215.0}	F _{215.5}	F _{216.0}	F _{216.5}	F _{217.0}	F _{217.5}	F _{218.0}	F _{218.5}	F _{219.0}	F _{219.5}	F _{220.0}	F _{220.5}	F _{221.0}	F _{221.5}	F _{222.0}	F _{222.5}	F _{223.0}	F _{223.5}	F _{224.0}	F _{224.5}	F _{225.0}	F _{225.5}	F _{226.0}	F _{226.5}	F _{227.0}	F _{227.5}	F _{228.0}	F _{228.5}	F _{229.0}	F _{229.5}	F _{230.0}	F _{230.5}	F _{231.0}	F _{231.5}	F _{232.0}	F _{232.5}	F _{233.0}	F _{233.5}	F _{234.0}	F _{234.5}	F _{235.0}	F _{235.5}	F _{236.0}	F _{236.5}	F _{237.0}	F _{237.5}	F _{238.0}	F _{238.5}	F _{239.0}	F _{239.5}	F _{240.0}	F _{240.5}	F _{241.0}	F _{241.5}	F _{242.0}	F _{242.5}	F _{243.0}	F _{243.5}	F _{244.0}	F _{244.5}	F _{245.0}	F _{245.5}	F _{246.0}	F _{246.5}	F _{247.0}	F _{247.5}	F _{248.0}	F _{248.5}	F _{249.0}	F _{249.5}	F _{250.0}	F _{250.5}	F _{251.0}	F _{251.5}	F _{252.0}	F _{252.5}	F _{253.0}	F _{253.5}	F _{254.0}	F _{254.5}	F _{255.0}	F _{255.5}	F _{256.0}	F _{256.5}	F _{257.0}	F _{257.5}	F _{258.0}	F _{258.5}	F _{259.0}	F _{259.5}	F _{260.0}	F _{260.5}	F _{261.0}	F _{261.5}	F _{262.0}	F _{262.5}	F _{263.0}	F _{263.5}	F _{264.0}	F _{264.5}	F _{265.0}	F _{265.5}	F _{266.0}	F _{266.5}	F _{267.0}	F _{267.5}	F _{268.0}	F _{268.5}	F _{269.0}	F _{269.5}	F _{270.0}	F _{270.5}	F _{271.0}	F _{271.5}	F _{272.0}	F _{272.5}	F _{273.0}	F _{273.5}	F _{274.0}	F _{274.5}	F _{275.0}	F _{275.5}	F _{276.0}	F _{276.5}	F _{277.0}	F _{277.5}	F _{278.0}	F _{278.5}	F _{279.0}	F _{279.5}	F _{280.0}	F _{280.5}	F _{281.0}	F _{281.5}	F _{282.0}	F _{282.5}	F _{283.0}	F _{283.5}	F _{284.0}	F _{284.5}	F _{285.0}	F _{285.5}	F _{286.0}	F _{286.5}	F _{287.0}	F _{287.5}	F _{288.0}	F _{288.5}	F _{289.0}	F _{289.5}	F _{290.0}	F _{290.5}	F _{291.0}	F _{291.5}	F _{292.0}	F _{292.5}	F _{293.0}	F _{293.5}	F _{294.0}	F _{294.5}	F _{295.0}	F _{295.5}	F _{296.0}	F _{296.5}	F _{297.0}	F _{297.5}	F _{298.0}	F _{298.5}	F _{299.0}	F _{299.5}	F _{300.0}	F _{300.5}	F _{301.0}	F _{301.5}	F _{302.0}	F _{302.5}	F _{303.0}	F _{303.5}	F _{304.0}	F _{304.5}	F _{305.0}	F _{305.5}	F _{306.0}	F _{306.5}	F _{307.0}
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**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 56 DATE 3/15/94 LATITUDE 41°29.6S Btm Depth: 3803
 CAST 2 LONGITUDE 102°59.5W

Sample ID	Pressure db	Salinity ‰	Temp °C	Sigma T	Theta °C	Beam Attenuation cp	RO2												Chi-a Phase $\mu\text{g/L}$													
							NO2 ‰	NO3 ‰	PO4 $\mu\text{mol/kg}$	Si(OH)4 $\mu\text{mol/kg}$	CFC-11 ‰	CFC-12 ‰	O2 $\mu\text{mol/kg}$	F ²⁰ CP ‰	DIC ‰	pH	F ² TALK $\mu\text{mol/kg}$	F ³ TALK $\mu\text{mol/kg}$		813C TOC per ml $\mu\text{mol/L}$	TON $\mu\text{mol/L}$											
224	2	33.979	2	33.980	2	14.901	14.900	25.207	-9	0.2	2	10.3	2	0.87	2	2.3	2	253.87	2	471	2	2040.4	2	-9	9	2262	2	-9	-9	-9	-9	
225	2	33.982	2	33.981	2	14.734	14.731	25.246	-9	0.2	2	10.5	2	0.83	2	1.8	2	254.81	2	472	2	2042.0	2	-9	9	2253	2	-9	-9	-9	-9	
222	2	48.9	33.968	2	33.993	2	14.346	14.339	25.319	-9	0.2	2	10.7	2	0.84	2	1.6	2	259.86	2	501	2	2044.7	2	-9	9	2232	2	-9	-9	-9	-9
221	2	100.3	34.088	2	34.085	2	9.514	9.502	26.323	-9	0.2	2	12.2	2	0.98	2	2.3	2	271.70	2	533	2	2072.3	2	-9	9	2264	2	-9	-9	-9	-9
220	2	144.3	34.193	2	34.186	2	8.108	8.094	26.626	-9	0.2	2	17.3	2	1.26	2	3.4	2	259.24	2	641	2	2102.3	2	-9	9	2268	2	-9	-9	-9	-9
219	2	195.1	34.277	2	34.275	2	7.304	7.286	26.809	-9	0.0	2	20.2	2	1.41	2	5.2	2	232.88	2	695	2	2119.1	2	-9	9	2272	2	-9	-9	-9	-9
218	2	296.7	34.313	2	34.313	2	6.586	6.559	26.937	-9	0.0	2	21.2	2	1.46	2	7.2	2	238.06	2	711	2	2126.0	2	-9	9	2273	2	-9	-9	-9	-9
217	2	399.6	34.312	2	34.312	2	6.272	6.237	26.979	-9	0.0	2	22.4	2	1.49	2	8.6	2	261.49	2	714	2	2129.3	2	-9	9	2280	2	-9	-9	-9	-9
216	2	500.2	34.298	2	34.299	2	5.994	5.951	27.004	-9	0.0	2	22.0	2	1.57	2	9.3	2	263.12	2	730	2	2130.6	2	-9	9	2278	2	-9	-9	-9	-9
215	2	599.8	34.281	2	34.281	2	5.683	5.632	27.030	-9	0.0	2	23.8	2	1.65	2	10.6	2	259.22	2	745	2	2135.0	2	-9	9	2280	2	-9	-9	-9	-9
214	2	701.4	34.269	2	34.272	2	5.285	5.227	27.069	-9	0.0	2	25.8	2	1.76	2	13.6	2	245.17	2	802	2	2147.0	2	-9	9	-9	5	-9	-9	-9	-9
213	2	800.4	34.269	2	34.270	2	4.892	4.827	27.115	-9	0.0	2	27.8	2	1.90	2	19.2	2	229.03	2	864	2	2161.9	2	-9	9	2284	2	-9	-9	-9	-9
212	2	898.2	34.281	2	34.279	2	4.538	4.468	27.165	-9	0.0	2	28.9	2	1.99	2	23.4	2	219.24	2	925	2	2172.2	2	-9	9	2289	2	-9	-9	-9	-9
211	2	996.9	34.309	2	34.307	2	4.050	3.974	27.239	-9	0.0	2	31.1	2	2.18	2	33.5	2	202.57	2	999	2	2192.8	2	-9	9	2300	2	-9	-9	-9	-9
210	2	1199.6	34.387	2	34.381	3	3.421	3.334	27.365	-9	0.0	2	34.1	2	2.41	2	51.2	2	173.98	2	1149	2	-9	9	-9	9	-9	-9	-9	-9	-9	
209	2	1381.7	34.478	2	-9	9	3.062	2.963	27.472	-9	0.0	2	36.7	2	2.89	2	71.8	2	149.64	2	1254	2	-9	9	-9	9	-9	-9	-9	-9	-9	
208	3	1699.2	34.570	2	-9	9	2.584	2.464	27.589	-9	-9	1	-9	1	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
207	2	2028.3	34.645	2	34.631	4	2.227	2.085	27.680	-9	0.0	2	33.8	2	2.47	2	96.1	2	162.34	2	1176	2	-9	9	-9	9	-9	-9	-9	-9	-9	-9
206	2	2299.8	34.679	2	34.681	2	2.007	1.845	27.727	-9	0.0	2	33.5	2	2.38	2	103.7	2	166.96	2	1141	2	-9	9	-9	9	-9	-9	-9	-9	-9	-9
205	2	2600.1	34.691	2	34.690	2	1.817	1.631	27.752	-9	0.0	2	33.4	2	2.40	2	111.9	2	168.21	2	1131	2	-9	9	-9	9	-9	-9	-9	-9	-9	-9
204	2	2899.8	34.698	2	34.698	2	1.718	1.506	27.768	-9	0.0	2	33.2	2	2.10	2	114.3	2	172.95	2	1116	2	-9	9	-9	9	-9	-9	-9	-9	-9	-9
203	2	3202.2	34.705	2	34.704	2	1.578	1.340	27.785	-9	0.0	2	32.7	2	2.33	2	117.8	2	179.16	2	1094	2	-9	9	-9	9	-9	-9	-9	-9	-9	-9
202	2	3539.4	34.706	2	-9	9	1.272	1.008	27.809	-9	0.0	2	33.7	2	2.38	2	126.4	2	188.15	2	1061	2	-9	9	-9	9	-9	-9	-9	-9	-9	-9
201	2	3844.3	34.708	2	34.718	3	1.128	0.836	27.822	-9	0.0	2	33.2	2	2.35	2	124.9	2	193.99	2	1056	2	-9	9	-9	9	-9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 57 1 DATE 3/1994 LATITUDE 41°1.0'S Btm Depth: 3927
 CAST 1 LONGITUDE 103°0.0'W

Sample ID	P#	Pressure db	Salinity P#	Salinity Bottle	Temp °C	Temp °C	Sigma T	Sigma T	Beam Attenuation	NO2 P#	NO3 P#	PO4 P#	Si(OH)4 P#	CFC-11 P#	CFC-12 P#	O2 P#	P# @20°C	DIC P#	pH P#	TAR P#	813C P#	TOC P#	TON P#	Chl-a P#	Phaeo P#								
																										µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg
124	2	9.8	33.997	2	15.794	15.792	25.023	-9	0.2	2	8.6	2	0.81	2	2.946	2	1.481	2	248.12	2	-9	2088.6	2	7.9204	2	2259	2	2.40	62.7	-9	-9	-9	-9
125	2	24.2	34.002	2	15.615	15.611	25.068	-9	0.2	2	8.5	2	0.85	2	2.969	2	1.493	2	249.59	2	-9	2089.1	2	7.9203	2	2258	2	-9	57.9	-9	-9	-9	-9
122	2	50.4	34.007	2	14.613	14.606	25.392	-9	0.1	2	8.5	2	0.80	2	3.174	2	1.596	2	258.71	2	-9	2041.8	2	7.9144	2	2256	2	-9	58.1	-9	-9	-9	-9
121	2	97.2	34.100	2	9.516	9.505	26.332	-9	0.2	2	11.7	2	1.03	2	3.891	2	1.882	2	273.24	2	-9	2073.2	2	7.8533	2	2255	3	-9	51.2	-9	-9	-9	-9
120	2	147.7	34.196	2	8.376	8.361	26.588	-9	0.1	2	15.7	2	1.25	2	3.802	2	1.798	2	258.41	2	-9	2098.9	2	7.8028	2	2265	2	-9	47.9	-9	-9	-9	-9
119	2	198.8	34.290	2	7.671	7.652	26.767	-9	0.0	2	19.3	2	1.47	2	3.136	2	1.470	2	242.39	2	-9	2121.7	2	7.7595	2	2269	2	-9	41.2	-9	-9	-9	-9
118	2	246.2	34.300	2	7.092	7.069	26.858	-9	0.0	2	19.7	2	1.45	2	3.339	2	1.570	2	253.10	2	-9	2123.8	2	7.7582	2	2269	2	-9	-9	-9	-9	-9	-9
117	2	300.9	34.322	2	6.695	6.668	26.990	-9	0.0	2	20.5	2	1.49	2	3.103	2	1.439	2	253.97	2	-9	2128.4	2	7.7540	2	2275	2	-9	-9	-9	-9	-9	-9
116	2	398.0	34.327	2	6.407	6.372	26.973	-9	0.0	2	21.3	2	1.57	2	2.774	2	1.285	2	257.46	2	-9	2130.5	2	7.7501	2	2270	3	-9	-9	-9	-9	-9	-9
115	2	498.2	34.311	2	6.120	6.076	26.999	-9	0.0	2	22.4	2	1.65	2	2.125	2	0.996	2	254.04	2	-9	2136.0	2	7.7425	2	2275	2	-9	-9	-9	-9	-9	-9
114	2	597.1	34.286	2	5.737	5.686	27.028	-9	0.0	2	23.4	2	1.67	2	1.969	2	0.925	2	254.26	2	-9	2136.5	2	7.7361	2	2275	2	-9	-9	-9	-9	-9	-9
113	2	803.4	34.268	2	4.988	4.922	27.104	-9	0.0	2	26.5	2	1.91	2	1.73	2	0.965	2	232.47	2	-9	2160.0	3	7.6875	2	2284	2	-9	-9	-9	-9	-9	-9
112	2	996.2	34.303	2	4.151	4.075	27.224	-9	0.0	2	30.8	2	2.23	2	3.15	2	0.298	2	201.30	2	-9	2193.6	2	7.6274	2	2298	2	-9	-9	-9	-9	-9	-9
111	2	1198.7	34.385	2	3.482	3.394	27.357	-9	0.0	2	34.4	2	2.44	2	4.98	2	0.062	2	170.56	2	-9	2228.9	2	7.5722	2	2310	2	-9	-9	-9	-9	-9	-9
110	2	1399.0	34.488	2	3.100	3.000	27.476	-9	0.0	2	36.0	2	2.62	2	7.22	2	0.013	2	140.75	2	-9	2268.7	2	7.5304	2	2338	2	-9	-9	-9	-9	-9	-9
109	2	1704.6	34.567	2	2.594	2.474	27.586	-9	0.0	2	34.7	2	2.48	2	8.48	2	0.019	2	133.04	2	-9	2273.1	2	7.5550	2	2350	2	-9	-9	-9	-9	-9	-9
108	2	1996.4	34.637	2	2.271	2.131	27.670	-9	0.0	2	33.5	2	2.44	2	9.23	2	0.013	2	162.54	2	-9	2274.6	2	7.5716	2	2363	2	-9	-9	-9	-9	-9	-9
107	2	2300.9	34.680	2	2.002	1.840	27.728	-9	0.0	2	33.1	2	2.40	2	10.16	2	0.008	2	166.71	2	-9	2281.1	2	7.5835	2	2368	2	-9	-9	-9	-9	-9	-9
106	2	2599.5	34.691	2	1.828	1.641	27.752	-9	0.0	2	33.0	2	2.36	2	10.92	2	0.039	4	168.54	2	-9	2285.3	2	7.5907	2	2376	2	-9	-9	-9	-9	-9	-9
105	2	2803.1	34.699	2	1.727	1.514	27.768	-9	0.0	2	33.0	2	2.34	2	112.7	2	0.004	2	173.24	2	-9	2284.3	2	7.5961	2	2377	2	-9	-9	-9	-9	-9	-9
104	2	3203.4	34.703	2	1.578	1.339	27.784	-9	0.0	2	32.6	2	2.36	2	114.6	2	0.006	2	178.42	2	-9	2282.3	2	7.6023	2	2375	2	-9	-9	-9	-9	-9	-9
103	2	3499.9	34.707	2	1.300	1.039	27.807	-9	0.0	2	32.3	2	2.33	2	118.8	2	0.014	2	187.21	2	-9	2281.2	2	7.6104	2	2384	2	-9	-9	-9	-9	-9	-9
102	2	3798.3	34.708	2	1.164	0.876	27.819	-9	0.0	2	32.4	2	2.32	2	122.8	2	0.011	2	194.03	2	-9	2279.2	2	7.6193	2	2386	2	-9	-9	-9	-9	-9	-9
101	2	4081.2	34.709	2	1.127	0.809	27.824	-9	0.0	2	32.1	2	2.28	2	125.6	2	0.001	2	194.63	2	-9	2278.8	2	7.6160	2	2384	2	-9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 58 DATE 3/15/94 LATITUDE 40°30.2'S Btm Depth: 3901
 CAST 3 LONGITUDE 102°59.2'W

Sample ID	Pressure db	Salinity	P* Salinity	Temp °C	Temp °C	Sigma T	Sigma T	Theta	Beam Attenu	NO2 P*	NO3 P*	PO4 P*	P* S(OH4)	CFC-11 P*	CFC-12 P*	O2 P*	DIC P*	pH	TAIR P*	F*	δ13C TOC	TON	Chi-s	Phase		
																									µmol/kg	µmol/kg
336	2	11.4	34.007	2	15.586	25.077	0.103	0.2	8.4	2	8.4	2	0.81	2	2.6	2	2034.9	2	7.9188	2	2262	2	62.8	5.0	0.088	0.033
335	2	75.9	34.010	2	15.542	25.091	0.102	0.2	8.4	2	8.4	2	0.85	2	2.6	2	2035.7	2	7.9194	2	2256	2	60.3	4.7	0.095	0.034
334	2	48.6	34.013	2	15.127	25.185	0.096	0.2	8.4	2	8.4	2	0.80	2	2.5	2	2039.2	2	7.9171	2	2256	2	60.2	4.8	0.104	0.055
333	2	75.3	34.016	2	11.467	25.926	0.074	0.1	7.8	2	7.8	2	0.72	2	2.5	2	2044.4	2	7.9023	2	2257	2	55.9	4.7	0.190	0.110
332	2	97.8	34.042	2	10.572	26.108	0.053	0.2	9.5	2	9.5	2	0.94	2	2.7	2	2054.8	2	7.8779	2	2261	2	51.2	4.5	0.175	0.119
331	2	126.1	34.096	2	9.662	26.305	0.045	0.2	11.5	2	11.5	2	1.06	2	2.9	2	2068.5	2	7.8550	2	2264	2	56.0	4.3	0.200	0.142
330	2	148.8	34.133	2	9.056	26.456	0.033	0.3	13.2	2	13.2	2	1.14	2	3.4	2	2080.9	2	7.8314	2	2263	2	56.0	4.3	0.165	0.141
329	4	195.5	34.262	2	8.200	26.667	0.028	-9	9	9	9	9	9	9	9	9	2120.4	2	7.7495	2	2272	2	56.0	4.3	0.004	0.008
328	2	250.7	34.300	2	7.235	26.838	0.019	0.0	20.2	2	20.2	2	1.53	2	6.7	2	2127.0	2	7.7501	2	2278	2	46.0	3.8	0.002	0.008
327	2	300.7	34.318	2	6.810	26.911	0.018	0.0	20.6	2	20.6	2	1.56	2	7.6	2	2128.4	2	7.7508	2	2268	3	44.6	3.8	0.002	0.008
326	2	339.8	34.320	2	6.605	26.941	0.015	0.0	21.0	2	21.0	2	1.61	2	8.2	2	2128.7	2	7.7489	2	2271	2	44.6	3.8	0.002	0.008
325	2	399.3	34.319	2	6.393	26.969	0.015	0.0	21.5	2	21.5	2	1.63	2	8.6	2	2130.3	2	7.7463	2	2271	2	44.6	3.8	0.002	0.008
324	9	-9	-9	-9	-9	-9	-9	-9	21.9	2	21.9	2	1.63	2	9.6	2	2131.6	2	7.7430	2	2274	2	44.0	3.3	-9	-9
323	2	448.7	34.317	2	6.260	26.985	0.015	0.0	22.5	2	22.5	2	1.64	2	10.1	2	2141.1	2	7.7200	2	2276	2	43.8	2.8	-9	-9
322	9	-9	-9	-9	-9	-9	-9	-9	24.9	2	24.9	2	1.85	2	12.9	2	2163.2	2	7.6600	2	2288	2	43.8	2.8	-9	-9
321	2	500.4	34.310	2	6.105	27.000	0.012	0.0	29.2	2	29.2	2	2.15	2	24.0	2	2184.9	2	7.6288	2	2291	6	43.8	2.8	-9	-9
319	2	701.8	34.274	2	5.449	27.054	0.012	0.0	31.2	2	31.2	2	2.19	2	31.5	2	2196.2	2	7.5987	2	2291	6	43.8	2.8	-9	-9
318	4	799.4	34.267	2	5.050	27.096	0.011	-9	32.5	2	32.5	2	2.26	2	39.6	2	2205.2	2	7.5801	2	2291	6	43.8	2.8	-9	-9
317	2	899.0	34.281	2	4.637	27.154	0.011	0.0	34.3	2	34.3	2	2.40	2	51.6	2	2217.2	2	7.5524	2	2291	6	43.8	2.8	-9	-9
316	2	998.4	34.307	2	4.184	27.224	0.008	0.0	36.2	2	36.2	2	2.59	2	73.3	2	2230.2	2	7.5298	2	2291	6	43.8	2.8	-9	-9
315	2	1093.0	34.335	2	3.828	27.283	0.009	0.0	36.0	2	36.0	2	2.55	2	85.1	2	2242.2	2	7.5081	2	2291	6	43.8	2.8	-9	-9
314	2	1199.9	34.389	2	3.505	27.358	0.008	0.0	35.3	2	35.3	2	2.48	2	91.4	2	2254.2	2	7.4801	2	2291	6	43.8	2.8	-9	-9
313	2	1393.5	34.489	2	3.123	27.475	0.008	0.0	33.7	2	33.7	2	2.39	2	92.3	2	2266.2	2	7.4511	2	2291	6	43.8	2.8	-9	-9
312	2	1598.6	34.552	2	2.750	27.560	0.007	0.0	33.2	2	33.2	2	2.32	2	101.2	2	2278.2	2	7.4231	2	2291	6	43.8	2.8	-9	-9
311	2	1801.7	34.593	2	2.469	27.618	0.007	0.0	33.0	2	33.0	2	2.26	2	114.2	2	2285.7	2	7.3957	2	2291	6	43.8	2.8	-9	-9
310	2	1995.3	34.633	2	2.288	27.666	0.004	0.0	33.2	2	33.2	2	2.39	2	109.6	2	2297.2	2	7.3681	2	2291	6	43.8	2.8	-9	-9
309	2	2247.9	34.672	2	2.068	27.716	0.005	0.0	33.2	2	33.2	2	2.37	2	116.2	2	2309.2	2	7.3401	2	2291	6	43.8	2.8	-9	-9
308	2	2501.8	34.688	2	1.878	27.765	0.004	0.0	33.0	2	33.0	2	2.33	2	124.2	2	2321.2	2	7.3121	2	2291	6	43.8	2.8	-9	-9
307	2	2749.6	34.693	2	1.798	27.783	0.002	0.0	32.7	2	32.7	2	2.32	2	122.6	2	2333.2	2	7.2841	2	2291	6	43.8	2.8	-9	-9
306	2	3002.1	34.709	2	1.707	27.769	0.003	0.0	32.7	2	32.7	2	2.32	2	122.6	2	2345.2	2	7.2561	2	2291	6	43.8	2.8	-9	-9
305	2	3252.4	34.703	2	1.581	27.783	0.002	0.0	32.5	2	32.5	2	2.33	2	123.0	2	2357.2	2	7.2281	2	2291	6	43.8	2.8	-9	-9
304	2	3500.5	34.706	2	1.519	27.806	0.001	0.0	32.2	2	32.2	2	2.32	2	122.6	2	2369.2	2	7.2001	2	2291	6	43.8	2.8	-9	-9
303	2	3750.2	34.707	2	1.185	27.817	0.003	0.0	32.5	2	32.5	2	2.31	2	123.0	2	2381.2	2	7.1721	2	2291	6	43.8	2.8	-9	-9
302	2	3747.6	34.708	2	1.186	27.817	0.002	0.0	32.7	2	32.7	2	2.33	2	123.3	2	2393.2	2	7.1441	2	2291	6	43.8	2.8	-9	-9
301	2	3969.7	34.708	2	1.127	27.823	0.003	0.0	32.7	2	32.7	2	2.31	2	124.9	2	2405.2	2	7.1161	2	2291	6	43.8	2.8	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 62 DATE 3/16/94 LATITUDE 38°30.3'S Btm Depth: 3990
 CAST 3 LONGITUDE 102°59.8'W

Sample ID	Pressure db	Salinity ‰	Salinity ‰ Bottle	Temp °C	Temp °C	Sigma T	Sigma t	Beam		NO2 ‰	NO3 ‰	PO4 ‰	P S(OB)4 ‰	CFC-11 ‰	CFC-12 ‰	O2 ‰	P ‰ @20°C	DIC ‰	pH	P ‰ TALK	P ‰	δ13C ‰	TOC ‰	TON ‰	Chi-a ‰	Phase ‰
								Thesa	cp																	
306	11.0	33.960	2 33.961	2 18.828	18.826	24.271	0.082	0.0	2 2.7	2 0.40	2 0.0	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9
307	25.5	33.962	2 33.962	2 18.685	18.680	24.309	0.092	0.1	2 2.6	2 0.42	2 0.1	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9
308	47.6	33.959	2 33.960	2 18.638	18.630	24.319	0.096	0.0	2 2.5	2 0.37	2 0.1	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9
309	74.5	33.959	2 33.959	2 14.639	14.628	25.234	0.127	0.1	2 5.8	2 0.61	2 0.2	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9
310	96.7	33.969	2 33.970	2 12.905	12.892	25.616	0.059	0.1	2 5.3	2 0.60	2 0.2	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9
311	125.2	34.074	2 34.074	2 12.149	12.133	25.844	0.037	0.4	2 6.5	2 0.72	2 0.9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9
312	151.0	34.190	2 34.185	2 11.331	11.312	26.088	0.033	0.4	2 9.7	2 0.84	2 1.0	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9
313	204.3	34.319	2 34.315	2 9.839	9.816	26.451	0.019	0.0	2 14.6	2 1.09	2 1.8	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9
314	249.1	34.359	2 34.359	2 8.900	8.873	26.686	0.019	0.0	2 17.2	2 1.26	2 2.8	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9
315	301.5	34.310	2 34.310	2 7.754	7.725	26.773	0.018	0.0	2 19.7	2 1.41	2 3.9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9
316	348.4	34.315	2 34.315	2 7.060	7.027	26.875	0.018	0.0	2 21.7	2 1.46	2 5.2	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9
317	402.8	34.334	2 34.334	2 6.701	6.664	26.940	0.017	0.0	2 21.9	2 1.47	2 6.6	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9
318	499.2	34.319	2 34.318	2 6.237	6.193	26.990	0.016	0.0	2 22.8	2 1.55	2 7.7	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9
319	600.5	34.295	2 34.295	2 5.879	5.827	27.017	0.015	0.0	2 23.3	2 1.58	2 8.6	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9
320	702.4	34.277	2 34.276	2 5.532	5.473	27.046	0.015	0.0	2 24.6	2 1.61	2 10.2	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9
321	799.7	34.266	2 34.265	2 5.111	5.045	27.088	0.013	0.0	2 26.7	2 1.78	2 14.8	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9
322	900.8	34.277	2 34.276	2 4.703	4.631	27.143	0.011	0.0	2 29.2	2 2.00	2 22.4	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9
323	995.0	34.302	2 34.301	2 4.323	4.246	27.205	0.010	0.0	2 31.1	2 2.14	2 30.3	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9
324	1100.8	34.340	2 34.339	2 3.910	3.826	27.279	0.010	0.0	2 33.3	2 2.31	2 40.8	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9
325	1199.1	34.382	2 34.381	2 3.547	3.459	27.348	0.010	0.0	2 34.8	2 2.41	2 51.5	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9
326	1402.6	34.488	2 34.489	2 3.164	3.062	27.471	0.010	0.0	2 36.7	2 2.57	2 75.3	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9
327	1608.8	34.550	2 34.548	2 2.823	2.708	27.552	0.008	0.0	2 35.6	2 2.58	2 87.9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9
328	1804.8	34.589	2 34.587	2 2.514	2.387	27.610	0.007	0.0	2 35.2	2 2.52	2 94.9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9
329	1993.8	34.620	2 34.620	2 2.288	2.148	27.656	0.006	0.0	2 35.2	2 2.47	2 100.0	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9
330	2496.5	34.657	2 34.656	2 2.055	1.896	27.705	0.006	0.0	2 34.0	2 2.36	2 107.5	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9
331	2496.5	34.680	2 34.679	2 1.903	1.724	27.756	0.005	0.0	2 33.9	2 2.35	2 112.1	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9
332	2658.2	34.686	2 34.685	2 1.845	1.653	27.747	0.004	0.0	2 33.7	2 2.32	2 112.7	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9
333	2992.7	34.693	2 34.693	2 1.773	1.550	27.760	0.003	0.0	2 33.4	2 2.30	2 114.7	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9
334	3251.4	34.698	2 34.698	2 1.663	1.418	27.774	0.003	0.0	2 32.9	2 2.27	2 117.9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9
335	3493.0	34.703	2 34.702	2 1.460	1.196	27.794	0.002	0.0	2 32.8	2 2.23	2 120.7	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9
336	3743.1	34.707	2 34.707	2 1.190	0.907	27.816	0.003	0.0	2 31.9	2 2.30	2 124.9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9
337	4043.4	34.707	2 34.706	2 1.189	0.906	27.816	0.003	0.0	2 32.5	2 2.28	2 124.3	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9
338	4343.4	34.708	2 34.707	2 1.139	0.826	27.822	0.004	0.0	2 32.6	2 2.26	2 128.2	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9	2 -9

* WOCE water sample quality flag (F) for parameter from previous column

** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 64 DATE 3/17/94 LATITUDE 37°29.9'S Btm Depth: 3538
CAST 1 LONGITUDE 102°59.0'W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma T	Theta cp	Beam		NO2 F#	NO3 F#	PO4 F#	Si(OH)4 F#	CFC-11 F#	CFC-12 F#	O2 F#	P# @20°C F#	DIC F#	pH F#	TAIK F#	P#	613C TOC per ml	TON umol/L	Chi-a umol/L	Phaeo umol/L	
								Attenuation	Backscatter																	
136	2	9.0	33.905	2	18.684	18.682	24.264	0.092	0.1	2	3.3	2	0.38	2	1.327	2	235.96	2	2002.3	2	7.9698	2	2247	2	-9	-9
135	2	25.0	33.909	2	18.700	18.696	24.264	0.091	0.1	2	3.2	2	0.32	2	-9	9	235.93	2	2002.8	2	7.9698	2	-9	5	-9	-9
134	2	50.4	34.095	2	16.425	16.417	24.956	0.130	0.0	2	0.9	2	0.16	2	1.521	2	272.13	2	2005.3	2	7.9845	2	2244	3	-9	-9
133	2	68.1	34.085	2	14.960	14.949	25.278	0.110	0.0	2	1.5	2	0.26	2	-9	9	272.30	2	2008.7	2	7.9702	2	2256	2	-9	-9
132	2	98.1	33.989	2	12.950	12.937	25.623	0.059	0.2	2	5.0	2	0.51	2	1.676	2	263.16	2	2028.8	2	7.9765	2	2246	2	-9	-9
131	2	126.1	34.045	2	12.108	12.092	25.830	0.046	0.3	2	6.2	2	0.56	2	-9	9	259.03	2	2042.3	2	7.9043	2	2247	3	-9	-9
130	2	148.1	34.171	2	11.275	11.256	26.083	0.032	0.4	2	9.3	2	0.75	2	1.624	2	244.45	2	2067.4	2	7.8608	2	2259	2	-9	-9
129	2	200.9	34.336	2	10.179	10.156	26.407	0.022	0.0	2	14.2	2	1.02	2	-9	9	237.41	2	2096.6	2	7.8100	2	2276	2	-9	-9
128	2	247.3	34.280	2	8.587	8.561	26.623	0.020	0.0	2	17.9	2	1.24	2	1.469	2	235.25	2	2111.3	2	7.7755	2	2274	2	-9	-9
127	2	299.4	34.321	2	7.672	7.643	26.793	0.020	0.0	2	19.8	2	1.38	2	2.502	2	237.54	2	2123.3	2	7.7544	2	2266	2	-9	-9
126	2	354.3	34.321	2	6.917	6.884	26.900	0.017	0.0	2	21.3	2	1.47	2	1.212	2	241.21	2	2128.9	2	7.7422	2	2274	2	-9	-9
125	2	399.1	34.330	2	6.674	6.637	26.940	0.016	0.0	2	21.7	2	1.51	2	1.187	2	248.71	2	2128.6	2	7.7448	2	2279	2	-9	-9
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
123	9	-9	-9	-9	6.216	6.171	26.991	0.012	0.0	2	22.9	2	1.59	2	0.955	2	251.62	2	2133.5	2	7.7416	2	2280	2	-9	-9
122	9	-9	-9	-9	5.838	5.786	27.021	0.010	0.0	2	23.6	2	1.59	2	0.806	2	252.01	2	2136.9	2	7.7347	2	-9	5	-9	-9
121	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
120	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
119	2	701.0	34.275	2	5.505	5.445	27.048	0.013	0.0	2	25.3	2	1.70	2	1.392	2	248.52	2	2142.6	2	7.7239	2	2277	2	-9	-9
118	2	799.7	34.265	2	5.134	5.068	27.085	0.011	0.0	2	26.5	2	1.84	2	0.896	2	237.28	2	2151.7	2	7.6992	2	2281	2	-9	-9
117	2	900.3	34.275	2	4.649	4.577	27.148	0.011	0.0	2	29.5	2	1.99	2	0.421	3	217.57	2	2175.5	2	7.6559	2	2288	2	-9	-9
116	2	998.8	34.304	2	4.187	4.110	27.221	0.010	0.0	2	29.3	2	2.24	2	0.154	2	198.28	2	2193.5	2	7.6231	2	2293	6	-9	-9
115	2	1099.4	34.343	2	3.806	3.724	27.291	0.010	0.0	2	32.7	2	2.33	2	-9	9	180.47	6	-9	-9	7.5915	2	-9	9	-9	-9
114	2	1196.3	34.391	2	3.531	3.443	27.357	0.010	0.0	2	34.8	2	2.49	2	0.014	2	162.36	2	-9	-9	7.5612	2	-9	9	-9	-9
113	2	1297.6	34.446	2	3.329	3.235	27.421	0.010	0.0	2	36.6	2	2.60	2	-9	9	144.30	2	-9	-9	7.5348	2	-9	9	-9	-9
112	2	1396.5	34.498	2	3.142	3.042	27.481	0.009	0.0	2	37.1	2	2.68	2	-0.001	2	132.62	2	-9	-9	7.5205	2	-9	9	-9	-9
111	2	1501.9	34.534	2	2.955	2.847	27.527	0.008	0.0	2	37.4	2	2.66	2	-9	9	130.40	2	-9	-9	7.5216	2	-9	9	-9	-9
110	2	1598.5	34.555	2	2.815	2.701	27.556	0.008	0.0	2	36.9	2	2.62	2	-9	9	131.87	6	-9	-9	7.5261	2	-9	9	-9	-9
109	2	1800.9	34.593	2	2.500	2.373	27.615	0.007	0.0	2	36.4	2	2.61	2	-0.002	2	140.97	2	-9	-9	7.5440	2	-9	9	-9	-9
108	2	1995.8	34.624	2	2.259	2.119	27.661	0.006	0.0	2	35.2	2	2.37	2	-9	9	152.57	2	-9	-9	7.5618	2	-9	9	-9	-9
107	2	2246.7	34.660	2	2.038	1.880	27.709	0.005	0.0	2	34.0	2	2.35	2	-9	9	161.04	2	-9	-9	-9	2	-9	9	-9	-9
106	2	2497.8	34.680	2	1.862	1.684	27.739	0.005	0.0	2	33.8	2	2.37	2	-9	9	164.47	6	-9	-9	-9	2	-9	9	-9	-9
105	2	2747.3	34.685	2	1.805	1.606	27.790	0.004	0.0	2	34.0	2	2.39	2	-9	9	165.57	2	-9	-9	-9	2	-9	9	-9	-9
104	2	2999.9	34.692	2	1.747	1.525	27.761	0.003	0.0	2	34.0	2	2.35	2	-9	9	169.58	2	-9	-9	-9	2	-9	9	-9	-9
103	2	3244.8	34.697	2	1.659	1.415	27.773	0.003	0.0	2	33.5	2	2.32	2	-9	9	173.26	2	-9	-9	-9	2	-9	9	-9	-9
102	2	3246.3	34.697	2	1.656	1.411	27.773	0.003	0.0	2	33.8	2	2.36	2	-9	9	173.55	2	-9	-9	-9	2	-9	9	-9	-9
101	2	3259.1	34.703	2	1.435	1.168	27.795	0.003	0.0	2	33.2	2	2.35	2	-9	9	182.60	2	-9	-9	-9	2	-9	9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION CAST 65 1 DATE 3/17/94 LATITUDE 37°0.0'S LONGITUDE 103°0.0'W BUTM DEPTH: 4027

Sample ID	P#	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma T	Theta	Beam Attenuation	Beam										Chl-a	Phaeo									
										NO2	NO3	PO4	Si(OH)4	CFC-11	CFC-12	O2	F ₂	DOC	DIC			pH	F ₂	TA	F ₂	SiC	TOC	TON		
124	2	12.0	34.062	2	34.062	2	19.551	19.548	24.164	-9	0.0	2	1.6	2	0.30	2	0.0	2	-9	9	2000.4	2	7.9879	2	2256	2	-9	55.4	-9	-9
123	2	24.9	34.063	2	34.064	2	19.545	19.541	24.166	-9	0.0	2	1.5	2	0.29	2	0.0	2	-9	9	1998.4	2	7.9893	2	2256	2	-9	57.0	-9	-9
122	2	45.6	34.066	2	-9	9	19.360	19.352	24.218	-9	0.0	2	1.5	2	0.26	2	0.0	2	-9	9	1998.8	2	-9	9	2256	2	-9	-9	-9	-9
121	3	95.7	34.013	2	34.012	2	13.682	13.669	25.495	-9	0.1	2	3.5	2	0.44	2	0.1	2	-9	9	2020.5	2	-9	9	2249	2	-9	49.3	-9	-9
120	2	146.8	34.232	2	34.258	3	12.670	12.651	25.867	-9	0.5	2	6.2	2	0.65	2	0.4	2	-9	9	2054.0	2	7.8954	2	2264	2	-9	45.7	-9	-9
119	2	194.5	34.206	2	34.282	2	10.895	10.869	26.227	-9	0.0	2	11.9	2	0.93	2	0.9	2	-9	9	2083.3	2	7.8342	2	2270	2	-9	45.4	-9	-9
118	2	296.8	34.306	2	34.306	2	8.057	8.027	26.725	-9	0.0	2	18.7	2	1.31	2	3.0	2	-9	9	2118.4	2	7.7655	2	2268	2	-9	38.7	-9	-9
117	2	396.0	34.335	2	34.334	2	6.909	6.866	26.913	-9	0.0	2	21.5	2	1.52	2	5.8	2	-9	9	2131.2	2	7.7393	2	2279	2	-9	-9	-9	-9
116	2	495.7	34.332	2	34.332	2	6.426	6.382	26.975	-9	0.0	2	22.6	2	1.57	2	7.2	2	-9	9	2132.8	2	7.7408	2	2281	2	-9	-9	-9	-9
115	2	598.3	34.306	2	34.306	2	5.977	5.925	27.013	-9	0.0	2	23.4	2	1.60	2	8.5	2	-9	9	2136.4	2	7.7327	2	2274	2	-9	-9	-9	-9
114	2	698.2	34.281	2	34.283	2	5.550	5.490	27.048	-9	0.0	2	24.7	2	1.69	2	10.9	2	-9	9	2142.5	2	7.7185	2	2274	2	-9	-9	-9	-9
113	2	795.8	34.267	2	34.267	2	5.164	5.098	27.083	-9	0.0	2	26.3	2	1.82	2	14.0	2	-9	9	2151.3	2	7.6992	2	2302	3	-9	-9	-9	-9
112	2	898.2	34.274	2	34.277	2	4.679	4.607	27.144	-9	0.0	2	28.9	2	2.01	2	21.0	2	-9	9	2170.7	2	7.6625	2	2302	3	-9	-9	-9	-9
111	2	998.8	34.301	2	34.302	2	4.223	4.146	27.215	-9	0.0	2	30.9	2	2.13	2	30.0	2	-9	9	2190.6	2	7.6264	2	2297	2	-9	-9	-9	-9
110	2	1206.3	34.407	2	34.408	2	3.471	3.383	27.376	-9	0.0	2	34.9	2	2.46	2	55.9	2	-9	9	2241.5	2	7.5528	2	2315	2	-9	-9	-9	-9
109	4	1390.8	34.498	2	-9	9	3.166	3.066	27.478	-9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
108	2	1605.0	34.558	2	34.557	2	2.758	2.645	27.564	-9	0.0	2	36.3	2	2.58	2	88.8	2	-9	9	2282.7	2	7.5369	2	2353	2	-9	-9	-9	-9
107	2	1877.6	34.605	2	34.605	2	2.376	2.244	27.636	-9	0.0	2	34.9	2	2.47	2	95.1	2	-9	9	2280.7	2	7.5617	2	2368	2	-9	-9	-9	-9
106	2	2207.1	34.659	2	34.659	2	2.038	1.883	27.707	-9	0.0	2	34.2	2	2.36	2	106.1	2	-9	9	2284.9	2	7.5776	2	2371	2	-9	-9	-9	-9
105	2	2601.6	34.684	2	34.687	2	1.831	1.644	27.746	-9	0.0	2	34.1	2	2.36	2	114.7	2	-9	9	2287.8	2	7.5884	2	2387	2	-9	-9	-9	-9
104	2	3002.4	34.692	2	34.693	2	1.759	1.536	27.760	-9	0.0	2	33.6	2	2.37	2	114.8	2	-9	9	2287.8	2	7.5884	2	2382	2	-9	-9	-9	-9
103	2	3389.9	34.699	2	34.698	2	1.552	1.295	27.783	-9	0.0	2	33.5	2	2.32	2	119.0	2	-9	9	2286.1	2	7.6014	2	2385	2	-9	-9	-9	-9
102	2	3802.1	34.707	2	34.707	2	1.210	0.920	27.815	-9	0.0	2	33.2	2	2.30	2	126.0	2	-9	9	2280.8	2	7.6122	2	-9	5	-9	-9	-9	-9
101	2	4094.4	34.707	2	34.707	2	1.219	0.898	27.816	-9	0.0	2	33.1	2	2.26	2	125.9	2	-9	9	2281.6	2	7.6190	2	2390	2	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 66 DATE 3/17/94 LATITUDE 36°30.0'S Btm Depth: 3510
 CAST 2 LONGITUDE 103°0.0'W

Sample ID	P* db	Pressure	Salinity	F* Bottle	Temp °C	Temp °C	Potential		Sigma T	Sigma t	Beam Attn	NO2 µmol/kg	NO3 µmol/kg	PO4 µmol/kg	P* Si(OH)4 µmol/kg	CFC-11 µmol/kg	CFC-12 µmol/kg	O2 µmol/kg	P* @20°C µatm	DCIP* µmol/kg	pH	P* TALK µmol/kg	P* TALE µmol/kg	BIC per ml µmol/L	TOC µmol/L	TON µmol/L	Chl-a µg/L	Phaeo µg/L					
							Temp °C	Temp °C																									
224	2	11.5	34.121	2	34.124	2	19.848	19.846	24.132	-9	0.0	2	1.4	2	0.27	2	1.267	2	230.68	2	371	2	1999.4	2	-9	9	2254	2	-9	9	73.3	-9	-9
223	2	24.5	34.121	2	34.122	2	19.849	19.844	24.132	-9	0.0	2	1.4	2	0.29	2	1.243	2	231.84	2	370	2	2000.4	2	-9	9	2262	2	-9	9	72.2	-9	-9
222	2	49.4	34.052	2	-9	9	17.765	17.757	24.606	-9	0.0	2	1.4	2	0.32	2	1.388	2	251.07	2	378	2	2000.6	2	-9	9	2258	2	-9	9	-9	-9	-9
221	2	100.6	34.010	2	34.012	2	13.510	13.496	25.526	-9	0.1	2	3.5	2	0.46	2	1.644	2	261.12	2	428	2	2021.5	2	-9	9	2251	2	-9	9	61.2	-9	-9
220	2	149.3	34.191	2	34.189	2	12.072	12.053	25.951	-9	0.6	2	8.1	2	0.72	2	1.621	2	241.23	2	515	2	2059.8	2	-9	9	2262	2	-9	9	53.0	-9	-9
219	2	199.4	34.289	2	34.291	2	10.559	10.536	26.304	-9	0.0	2	13.3	2	1.01	2	1.529	2	230.15	2	593	2	2086.4	2	-9	9	2252	2	-9	9	47.0	-9	-9
218	2	299.8	34.312	2	34.311	2	7.922	7.892	26.750	-9	0.0	2	19.9	2	1.42	2	1.169	2	228.95	2	720	2	-9	9	-9	9	2279	2	-9	9	43.5	-9	-9
217	2	400.7	34.329	2	34.330	2	6.657	6.621	26.941	-9	0.0	2	21.9	2	1.54	2	1.190	2	249.18	2	728	2	2130.9	2	-9	9	2279	2	-9	9	43.9	-9	-9
216	2	501.1	34.320	2	-9	9	6.272	6.227	26.986	-9	0.0	2	23.1	2	1.54	2	1.078	2	253.93	2	726	2	2131.3	2	-9	9	2279	2	-9	9	-9	-9	-9
215	2	601.5	34.296	2	34.298	2	5.883	5.831	27.017	-9	0.0	2	23.6	2	1.60	2	0.854	2	253.48	2	743	2	2134.6	2	-9	9	2280	2	-9	9	47.1	-9	-9
214	2	702.1	34.275	2	34.277	2	5.478	5.418	27.051	-9	0.0	2	25.1	2	1.72	2	0.602	2	247.76	2	778	2	2141.7	2	-9	9	2282	2	-9	9	44.9	-9	-9
213	2	804.0	34.265	2	34.266	2	5.043	4.977	27.095	-9	0.0	2	27.2	2	1.88	2	0.395	2	234.30	2	836	2	2155.7	2	-9	9	2282	2	-9	9	-9	-9	-9
212	2	900.0	34.275	2	-9	9	4.614	4.543	27.152	-9	-9	9	-9	9	-9	9	0.417	2	217.00	2	918	2	2172.5	2	-9	9	2289	2	-9	9	47.7	-9	-9
211	2	1004.6	34.310	2	34.310	2	4.095	4.018	27.235	-9	0.0	2	32.1	2	2.17	2	0.078	2	195.37	2	1021	2	2193.3	2	-9	9	2299	2	-9	9	-9	-9	-9
210	2	1199.6	34.402	2	34.403	2	3.473	3.385	27.372	-9	0.0	2	35.7	2	2.45	2	0.007	2	159.00	2	1212	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9
209	2	1402.4	34.504	2	34.504	2	3.007	2.918	27.488	-9	0.0	2	37.7	2	2.62	2	-0.003	2	133.12	2	1331	3	-9	9	-9	9	-9	9	-9	9	41.5	-9	-9
208	2	1700.2	34.577	2	34.577	2	2.593	2.474	27.594	-9	0.0	2	36.4	2	2.55	2	0.003	2	143.25	2	1255	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9
207	2	1993.2	34.630	2	34.628	2	2.223	2.083	27.669	-9	0.0	2	34.7	2	2.36	2	0.002	2	156.07	2	1189	3	-9	9	-9	9	-9	9	-9	9	39.0	-9	-9
206	2	2391.9	34.668	2	34.667	2	1.971	1.809	27.720	-9	0.0	2	34.4	2	2.39	2	0.000	2	162.92	2	1151	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9
205	2	2596.6	34.682	2	34.681	2	1.822	1.636	27.745	-9	0.0	2	34.1	2	2.38	2	0.001	2	165.20	2	1138	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9
204	2	2896.8	34.688	2	34.687	2	1.765	1.552	27.756	-9	0.0	2	34.1	2	2.34	2	-0.002	2	166.67	2	1122	2	-9	9	-9	9	-9	9	-9	9	38.0	-9	-9
203	2	3201.4	34.693	2	34.692	2	1.675	1.435	27.768	-9	0.0	2	33.6	2	2.30	2	0.004	2	172.15	2	1109	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9
202	2	3400.4	34.698	2	34.698	2	1.565	1.307	27.781	-9	0.0	2	33.4	2	2.28	2	0.003	2	177.10	2	1088	2	-9	9	-9	9	-9	9	-9	9	39.4	-9	-9
201	2	3529.4	34.702	2	34.701	2	1.393	1.126	27.798	-9	0.0	2	33.0	2	2.32	2	0.002	2	182.73	2	1077	2	-9	9	-9	9	-9	9	-9	9	38.6	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 67 DATE 3/17/94 LAITUDE 35°59.6'S Burn Depth: 3700
 CAST 1 LONGITUDE 102°49.5'W

Sample ID	Psec	Pressure db	CTD	Salinity Psec	Temp °C	Temp °C	Potential		Sigma T	Sigma t	NO2 Psec	NO3 Psec	PO4 Psec	Si(OH)4 Psec	CFC-11 Psec	CFC-12 Psec	O2 Psec	P@20°C Psec	DIC Psec	pH Psec	TA Psec	P* Psec	Talk Psec	δ13C Psec	TOC Psec	TON Psec	Chl-a Psec					
							Temp °C	Theta cp																								
124	2	13.9	34.117	2	-9	5	20.155	20.152	24.048	-9	1	-9	1	-9	1	-9	9	229.92	2	374	2	-9	9	-9	-9	-9	-9	-9				
123	2	25.4	34.115	2	-9	5	20.156	20.151	24.047	-9	1	-9	1	-9	1	-9	9	230.02	2	373	2	2000.4	2	-9	9	5	-9	-9				
122	2	49.6	34.023	2	-9	5	16.316	16.308	24.926	-9	1	-9	1	-9	1	-9	9	270.62	2	399	2	-9	9	-9	9	2.00	-9	-9				
121	3	77.1	34.083	2	-9	9	14.259	14.248	25.626	-9	1	-9	1	-9	1	-9	9	-9	1	-9	2	-9	9	-9	9	-9	-9	-9				
120	2	98.8	34.037	2	34.049	2	13.151	13.137	25.620	-9	0.1	2	4.1	2	0.53	2	1.1	2	9	264.39	2	450	2	-9	9	7.9344	2	-9	9	1.90	-9	-9
119	2	199.8	34.317	2	34.319	2	10.117	10.094	26.402	-9	0.0	2	14.2	2	1.09	2	2.1	2	9	228.61	2	608	2	-9	9	7.8101	2	-9	9	1.30	-9	-9
118	2	300.4	34.319	2	34.330	2	7.742	7.712	26.782	-9	0.0	2	20.1	2	1.44	2	4.8	2	9	233.04	2	706	2	-9	9	7.7502	2	-9	9	1.40	-9	-9
117	2	402.3	34.332	2	34.333	2	6.231	6.187	26.944	-9	0.0	2	22.6	2	1.54	2	7.1	2	9	245.21	2	731	2	-9	9	7.7397	2	-9	9	1.60	-9	-9
116	2	493.5	34.317	2	34.323	2	5.444	5.396	27.054	-9	0.0	2	25.1	2	1.78	2	11.5	2	9	249.32	2	749	2	-9	9	7.7171	2	-9	9	1.40	-9	-9
115	2	598.8	34.293	2	34.295	2	5.843	5.791	27.020	-9	0.0	2	23.7	2	1.66	2	9.4	2	9	250.41	2	749	2	-9	9	7.7328	2	-9	9	1.40	-9	-9
114	2	697.1	34.273	2	34.274	2	5.444	5.396	27.054	-9	0.0	2	25.1	2	1.78	2	11.5	2	9	249.32	2	749	2	-9	9	7.7171	2	-9	9	1.40	-9	-9
113	2	797.9	34.266	2	34.267	2	5.076	5.010	27.092	-9	0.0	2	27.1	2	1.90	2	15.2	2	9	234.08	2	829	2	-9	9	7.6946	2	-9	9	1.30	-9	-9
112	2	886.5	34.272	2	34.272	2	4.648	4.577	27.145	-9	0.0	2	29.6	2	2.04	2	21.5	2	9	218.52	2	897	2	-9	9	7.6608	2	-9	9	1.10	-9	-9
111	2	990.8	34.300	2	34.301	2	4.203	4.127	27.216	-9	0.0	2	31.0	2	2.19	2	30.8	2	9	199.73	2	994	2	-9	9	7.6254	2	-9	9	1.00	-9	-9
110	2	1099.8	34.406	2	34.405	2	3.484	3.396	27.374	-9	0.0	2	35.5	2	2.49	2	55.2	2	9	156.50	2	-9	9	-9	9	7.5301	2	-9	9	0.60	-9	-9
109	2	1394.6	34.501	2	34.502	2	3.119	3.019	27.485	-9	0.0	2	37.7	2	2.68	2	76.1	2	9	132.47	2	-9	9	-9	9	7.5209	2	-9	9	0.30	-9	-9
108	2	1696.8	34.578	2	34.580	2	2.575	2.456	27.597	-9	0.0	2	35.9	2	2.59	2	89.8	2	9	144.42	2	-9	9	-9	9	7.5470	2	-9	9	0.30	-9	-9
107	2	1999.7	34.631	2	34.631	2	2.220	2.081	27.670	-9	0.0	2	34.8	2	2.45	2	97.8	2	9	157.36	2	-9	9	-9	9	7.5702	2	-9	9	0.30	-9	-9
106	2	2295.0	34.668	2	34.669	2	1.942	1.781	27.723	-9	0.0	2	34.3	2	2.39	2	109.2	2	9	162.59	2	-9	9	-9	9	7.5909	2	-9	9	0.30	-9	-9
105	2	2599.1	34.679	2	34.679	2	1.805	1.619	27.744	-9	0.0	2	34.2	2	2.38	2	114.9	2	9	164.27	2	-9	9	-9	9	7.5875	2	-9	9	0.30	-9	-9
104	2	2896.6	34.685	2	34.685	2	1.744	1.532	27.755	-9	0.0	2	34.1	2	2.43	2	115.3	2	9	167.79	2	-9	9	-9	9	7.5809	2	-9	9	0.30	-9	-9
103	2	3197.1	34.688	2	34.688	2	1.701	1.460	27.763	-9	0.0	2	33.9	2	2.42	2	114.9	2	9	171.08	2	-9	9	-9	9	7.5947	2	-9	9	0.30	-9	-9
102	2	3396.1	34.693	2	34.694	2	1.629	1.370	27.773	-9	0.0	2	33.9	2	2.40	2	115.4	2	9	174.69	2	-9	9	-9	9	7.5947	2	-9	9	0.30	-9	-9
101	2	3648.3	34.698	2	34.698	2	1.541	1.238	27.785	-9	0.0	2	33.8	2	2.33	2	118.2	2	9	177.83	2	-9	9	-9	9	7.6015	2	-9	9	0.30	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 69 DATE 3/18/94 LATITUDE 35°0.0'S BTM Depth: 360
CAST 1 LONGITUDE 103°0.0'W

Sample ID	P* db	Pressure	Salinity P* CTD	Temp °C	Temp °C	Potential			NO2 P*	NO3 P*	PO4 P*	Si(OH)4 P*	F* µmol/kg	CFC-11 P*	CFC-12 P*	O2 P*	F* µmol/kg	DIC P*	pH	F* µmol/kg	TALK P*	F* µmol/kg	S13C P*	TOC per ml µmol/L	TON µmol/L	Chi-a µg/L	Phase								
						Sigma T	Theta	Sigma																											
136	2	11.2	34.077	2	20.336	20.334	23.970	0.089	0.0	2	1.8	2	0.23	2	2.395	2	2.228	2	229.46	2	371	2	1996.7	2	7.9920	2	2252	6	1.90	48.0	4.9	-9	-9		
135	2	24.3	34.075	2	20.341	20.337	23.968	0.090	0.0	2	1.6	2	0.26	2	-9	9	229.57	2	371	2	1994.9	2	7.9914	2	2252	2	-9	-9	48.6	4.9	-9	-9			
134	2	49.6	34.149	2	16.303	16.296	25.025	0.092	0.0	2	0.3	2	0.19	2	3.080	2	1.562	2	273.96	2	370	2	1997.7	2	7.9910	2	2255	2	-9	51.1	5.2	-9	-9		
133	2	77.7	34.139	2	14.462	14.451	25.427	0.068	0.0	2	1.4	2	0.23	2	-9	9	263.27	2	-9	9	2011.0	2	7.9650	2	-9	5	-9	48.6	4.5	-9	-9				
132	2	102.3	34.110	2	13.389	13.374	25.628	0.054	0.1	2	3.2	2	0.39	2	-9	9	247.87	2	452	2	2025.4	2	7.9558	2	2254	2	-9	-9	49.0	4.9	-9	-9			
131	2	120.6	34.166	2	12.970	12.954	25.756	0.044	0.3	2	4.6	2	0.50	2	-9	9	247.87	2	452	2	2025.4	2	7.9558	2	2254	2	-9	-9	46.5	4.2	-9	-9			
130	2	149.7	34.359	2	12.317	12.298	26.094	0.051	0.3	2	7.8	2	0.75	2	3.159	2	1.533	2	231.59	2	511	2	2067.3	2	7.8732	2	2257	3	-9	-9	-9	-9			
129	2	198.1	34.402	2	11.025	11.001	26.310	0.025	0.0	2	11.9	2	0.94	2	-9	9	223.40	2	580	2	2089.4	2	7.8285	2	2275	2	-9	-9	-9	-9	-9	-9			
128	2	249.4	34.377	2	9.328	9.300	26.582	0.022	0.0	2	16.4	2	1.26	2	2.406	2	1.120	2	219.47	2	661	2	2112.1	3	7.7770	2	2268	2	-9	-9	-9	-9	-9		
127	2	298.6	34.326	2	7.995	7.965	26.750	0.021	0.0	2	19.3	2	1.43	2	-9	9	229.18	2	704	2	2125.9	3	7.7529	2	2271	2	-9	-9	-9	-9	-9	-9			
126	2	348.9	34.329	2	7.118	7.085	26.879	0.017	0.0	2	20.9	2	1.52	2	2.330	6	1.077	6	237.39	2	730	3	2131.0	3	7.7591	2	2277	2	-9	-9	-9	-9	-9		
125	3	396.6	34.336	2	6.765	6.729	26.933	0.015	0.0	2	21.5	2	1.55	2	2.220	2	1.024	2	243.16	2	732	2	2132.5	3	7.7401	2	2279	2	-9	-9	-9	-9	-9		
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9			
123	2	496.9	34.323	2	6.281	6.237	26.987	0.017	0.0	2	22.6	2	1.58	2	1.853	2	0.871	2	249.39	2	741	3	2133.8	3	7.7382	2	2277	2	-9	-9	-9	-9	-9		
122	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9			
121	2	596.5	34.298	2	5.879	5.827	27.020	0.015	0.0	2	23.8	2	1.69	2	1.415	2	0.680	2	249.20	2	753	3	2141.0	3	7.7325	2	2285	2	-9	-9	-9	-9	-9		
120	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9			
119	2	699.4	34.278	2	5.491	5.432	27.053	0.012	0.0	2	25.0	2	1.80	2	0.937	2	0.466	2	244.23	2	774	2	2144.9	3	7.7180	2	2284	2	-9	-9	-9	-9	-9		
118	2	798.1	34.267	2	5.068	5.003	27.094	0.014	0.0	2	26.9	2	1.90	2	0.576	2	0.295	2	232.45	2	831	2	2156.5	3	7.6920	2	2273	2	-9	-9	-9	-9	-9		
117	2	899.0	34.277	2	4.600	4.529	27.155	0.014	0.0	2	29.5	2	2.01	2	0.261	6	0.142	6	212.59	2	930	2	2177.1	3	7.6528	2	2284	2	-9	-9	-9	-9	-9		
116	2	995.5	34.309	2	4.153	4.077	27.229	0.013	0.0	2	32.0	2	2.30	2	0.104	2	0.059	2	192.92	2	1020	2	2198.3	2	7.6124	2	2298	6	-9	-9	-9	-9	-9		
115	2	1098.8	34.363	2	3.741	3.659	27.314	0.012	0.0	2	34.1	2	2.48	2	-9	9	169.23	2	1150	2	2225.5	2	7.5736	2	2304	2	-9	-9	-9	-9	-9	-9	-9		
114	2	1204.0	34.423	2	3.495	3.406	27.387	0.011	0.0	2	35.9	2	2.58	2	0.001	2	0.003	2	147.64	2	1246	2	2248.7	2	7.5394	2	-9	-9	-9	-9	-9	-9	-9		
113	2	1298.5	34.478	2	3.162	3.061	27.469	0.010	0.0	2	37.0	2	2.66	2	-9	9	131.80	2	1333	2	2270.7	2	7.5196	2	2321	2	-9	-9	-9	-9	-9	-9	-9		
112	2	1396.9	34.511	2	3.162	3.061	27.469	0.010	0.0	2	37.1	2	2.71	2	81.1	2	-9	9	127.49	2	1341	2	2280.6	2	7.5162	2	2344	2	-9	-9	-9	-9	-9	-9	
111	2	1599.5	34.559	2	2.788	2.674	27.562	0.010	0.0	2	36.9	2	2.65	2	0.000	2	0.000	2	134.20	2	1310	2	2286.5	2	7.5316	2	2353	2	-9	-9	-9	-9	-9	-9	
110	2	1800.9	34.596	2	2.465	2.339	27.620	0.008	0.0	2	35.7	2	2.60	2	0.009	2	0.002	2	144.05	6	1255	2	2287.5	2	7.5480	2	2369	2	-9	-9	-9	-9	-9	-9	
109	2	1996.9	34.630	2	2.213	2.074	27.669	0.007	0.0	2	35.2	2	2.48	2	-9	9	154.43	2	1198	2	2285.2	2	7.5672	2	2367	2	-9	-9	-9	-9	-9	-9	-9	-9	
108	2	2252.4	34.662	2	1.981	1.823	27.715	0.007	0.0	2	33.9	2	2.43	2	110.6	2	-9	9	160.88	2	1162	2	2287.6	2	7.5792	2	2380	2	-9	-9	-9	-9	-9	-9	-9
107	2	2413.7	34.673	2	1.872	1.701	27.753	0.006	0.0	2	33.8	2	2.41	2	114.3	2	-9	9	163.13	2	1150	2	2289.3	2	7.5824	2	2385	2	-9	-9	-9	-9	-9	-9	-9
106	2	2502.1	34.677	2	1.825	1.648	27.740	0.006	0.0	2	33.4	2	2.40	2	115.3	2	0.000	2	163.89	2	1142	2	2291.3	2	7.5907	2	2387	2	-9	-9	-9	-9	-9	-9	-9
105	2	2749.6	34.684	2	1.755	1.556	27.752	0.005	0.0	2	33.3	2	2.38	2	116.8	2	-9	9	166.16	2	1134	2	2292.5	2	7.5967	2	2387	2	-9	-9	-9	-9	-9	-9	-9
104	2	2998.8	34.686	2	1.745	1.522	27.757	0.005	0.0	2	33.8	2	2.42	2	116.7	2	-9	9	167.12	2	1124	2	2293.0	2	7.5910	2	2386	2	-9	-9	-9	-9	-9	-9	-9
103	2	3250.1	34.688	2	1.757	1.510	27.759	0.006	0.0	2	33.5	2	2.42	2	-0.003	2	0.001	2	167.34	2	1129	2	2294.2	2	7.5956	2	2386	2	-9	-9	-9	-9	-9	-9	-9
102	2	3248.1	34.688	2	1.757	1.510	27.759	0.006	0.0	2	33.6	2	2.37	2	117.4	2	-9	9	168.27	2	1129	2	2294.2	2	7.5956	2	2386	2	-9	-9	-9	-9	-9	-9	-9
101	2	3574.2	34.690	2	1.777	1.496	27.761	0.008	0.0	2	33.5	2	2.37	2	118.2	2	-9	9	171.58	2	1123	2	2291.9	2	7.5931	2	2392	2	-9	-9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 71 DATE 3/19/94 LATITUDE 34°0.4'S Btm Depth: 3667
 CAST 1 LONGITUDE 103°0.1'W

Sample ID	Pressure db	Salinity ‰	Salinity ‰ CTD	Temp °C	Temp °C	Potential Temp °C	Sigma T	Sigma T	Auton	Beam	NO2 ‰	NO3 ‰	PO4 ‰	P _{Si} (OR)4 ‰	P _{CFC-11} ‰	P _{CFC-12} ‰	O2 ‰	fO2	DIC ‰	pH ‰	P _{TALK} ‰	P _{813C} ‰	TOC ‰	TON ‰	Chl-a ‰	Phaeo ‰										
																											‰	‰	‰	‰	‰	‰	‰	‰	‰	‰
136	2	34.303	2	34.303	2	20.043	20.941	23.979	0.074	0.0	2	0.5	2	0.23	2	2.323	2	1.202	2	226.37	2	358	2	1999.5	2	8.0039	2	2266	6	1.80	-9	-9	-9	-9		
135	2	34.288	2	34.283	2	20.880	20.876	23.986	0.083	0.0	2	0.4	2	0.24	2	2.313	2	1.202	2	226.56	2	-9	9	8.0025	2	-9	9	1.90	-9	-9	-9	-9				
134	2	34.250	2	34.270	2	18.438	18.430	24.592	0.103	0.0	2	0.4	2	0.19	2	2.799	2	1.421	2	256.37	2	366	2	-9	9	7.9935	2	-9	9	1.90	-9	-9	-9	-9		
133	2	34.172	2	34.178	2	15.149	15.138	25.304	0.091	0.0	2	0.7	2	0.24	2	3.181	2	1.571	2	266.85	2	-9	9	7.9766	2	-9	9	1.90	-9	-9	-9	-9				
132	2	102.5	34.220	2	34.227	2	14.297	14.282	25.525	0.054	0.0	2	1.5	2	0.28	2	3.140	2	1.587	2	253.96	2	410	2	-9	9	7.9556	2	-9	9	1.80	-9	-9	-9	-9	
131	2	125.2	34.175	2	34.182	2	13.687	13.669	25.618	0.043	0.1	2	2.4	2	0.38	2	-9	1	-9	1	251.82	2	-9	9	7.9401	2	-9	9	1.70	-9	-9	-9	-9			
130	2	147.4	34.177	2	34.162	2	12.910	12.890	25.777	0.054	0.3	2	4.6	2	0.54	2	3.303	2	1.576	2	247.32	2	-9	9	7.9121	2	-9	9	1.40	-9	-9	-9	-9			
129	2	198.1	34.514	2	34.511	2	12.379	12.353	26.144	0.024	0.0	2	9.0	2	0.80	2	2.802	2	1.346	2	216.65	2	-9	9	7.8574	2	-9	9	1.40	-9	-9	-9	-9			
128	2	248.3	34.446	2	34.446	2	10.786	10.756	26.388	0.023	0.0	2	12.9	2	1.04	2	2.582	2	1.211	2	216.66	2	579	2	-9	9	7.8171	2	-9	9	1.40	-9	-9	-9	-9	
127	2	298.2	34.363	2	34.364	2	9.059	9.027	26.615	0.021	0.0	2	17.0	2	1.28	2	2.405	2	1.059	2	220.96	2	-9	9	7.7734	2	-9	9	1.40	-9	-9	-9	-9			
126	2	349.4	34.325	2	34.325	2	7.586	7.552	26.809	0.020	0.0	2	20.3	2	1.44	2	2.409	2	1.120	2	233.37	2	-9	9	7.7454	2	-9	9	1.40	-9	-9	-9	-9			
125	2	401.8	34.336	2	34.335	2	6.957	6.919	26.907	0.020	0.0	2	21.6	2	1.49	2	2.182	2	1.006	2	237.38	2	-9	9	7.7365	2	-9	9	1.40	-9	-9	-9	-9			
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
123	2	502.2	34.326	2	34.326	2	6.318	6.273	26.985	0.014	0.0	2	22.4	2	1.55	2	1.814	6	0.829	6	248.49	2	735	2	-9	9	7.7379	2	-9	9	1.40	-9	-9	-9	-9	
122	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
121	2	599.0	34.298	2	34.297	2	5.889	5.837	27.018	0.014	0.0	2	23.3	2	1.62	2	1.512	2	0.703	2	249.85	2	-9	9	7.7336	2	-9	9	1.40	-9	-9	-9	-9	-9		
120	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
119	2	699.4	34.278	2	34.277	2	5.522	5.463	27.048	0.013	0.0	2	24.7	2	1.74	2	1.193	2	0.568	2	247.06	2	-9	9	7.7216	2	-9	9	1.50	-9	-9	-9	-9	-9		
118	2	799.9	34.265	2	34.265	2	5.040	4.974	27.096	0.013	0.0	2	26.9	2	1.90	2	0.698	2	0.352	2	233.00	2	-9	9	7.6926	2	-9	9	1.30	-9	-9	-9	-9	-9		
117	2	897.5	34.272	2	34.272	2	4.584	4.513	27.153	0.011	0.0	2	29.5	2	2.04	2	0.358	2	0.200	2	212.75	2	922	2	-9	9	7.6547	2	-9	9	1.10	-9	-9	-9	-9	-9
116	2	994.7	34.307	2	34.306	2	4.115	4.039	27.231	0.011	0.0	2	31.9	2	2.23	2	0.121	2	0.071	2	192.96	2	1018	2	-9	9	7.6118	2	-9	9	0.90	-9	-9	-9	-9	-9
115	2	1099.5	34.358	2	34.357	2	3.727	3.645	27.311	0.011	0.0	2	34.2	2	2.36	2	0.106	2	0.124	4	172.30	2	-9	9	7.59	2	-9	9	0.80	-9	-9	-9	-9	-9		
114	2	1197.3	34.420	2	34.419	2	3.486	3.398	27.385	0.010	0.0	2	35.8	2	2.54	2	0.003	2	0.001	2	147.52	2	-9	9	7.59	2	-9	9	0.70	-9	-9	-9	-9	-9		
113	2	1400.8	34.513	2	34.511	2	3.124	3.023	27.495	0.009	0.0	2	37.5	2	2.66	2	-0.002	2	0.000	2	128.59	2	-9	9	7.59	2	-9	9	0.30	-9	-9	-9	-9	-9		
112	2	1600.0	34.564	2	34.564	2	2.745	2.630	27.570	0.008	0.0	2	37.1	2	2.58	2	0.003	2	-0.003	2	136.37	2	-9	9	7.59	2	-9	9	0.30	-9	-9	-9	-9	-9		
111	2	1805.8	34.603	2	34.602	2	2.404	2.278	27.631	0.006	0.0	2	36.2	2	2.50	2	0.001	2	-0.001	2	146.48	2	-9	9	7.59	2	-9	9	0.30	-9	-9	-9	-9	-9		
110	2	1997.9	34.635	2	34.634	2	2.172	2.083	27.677	0.005	0.0	2	34.5	2	2.41	2	-0.001	2	0.002	2	155.86	2	-9	9	7.59	2	-9	9	0.30	-9	-9	-9	-9	-9		
109	2	2253.4	34.665	2	34.664	2	1.951	1.794	27.720	0.004	0.0	2	34.4	2	2.40	2	-0.002	2	-0.002	2	160.54	2	-9	9	7.59	2	-9	9	0.30	-9	-9	-9	-9	-9		
108	2	2498.1	34.680	2	34.679	2	1.814	1.637	27.743	0.004	0.0	2	33.9	2	2.39	2	-0.002	2	-0.002	2	164.42	2	-9	9	7.59	2	-9	9	0.30	-9	-9	-9	-9	-9		
107	2	2799.4	34.684	2	34.682	2	1.756	1.559	27.752	0.003	0.0	2	33.9	2	2.37	2	-0.002	2	-0.002	2	167.42	2	-9	9	7.59	2	-9	9	0.30	-9	-9	-9	-9	-9		
106	2	2994.7	34.687	2	34.686	2	1.748	1.521	27.757	0.003	0.0	2	33.8	2	2.37	2	-0.002	2	-0.003	2	167.42	2	-9	9	7.59	2	-9	9	0.30	-9	-9	-9	-9	-9		
105	2	3246.2	34.689	2	34.687	2	1.754	1.507	27.760	0.003	0.0	2	33.7	2	2.35	2	-0.002	2	-0.002	2	168.53	2	-9	9	7.59	2	-9	9	0.30	-9	-9	-9	-9	-9		
104	2	3246.8	34.688	2	34.687	2	1.754	1.507	27.759	0.003	0.0	2	33.7	2	2.34	2	-0.002	2	-0.002	2	168.53	2	-9	9	7.59	2	-9	9	0.30	-9	-9	-9	-9	-9		
103	2	3247.9	34.689	2	34.688	2	1.754	1.507	27.760	0.003	0.0	2	33.5	2	2.33	2	0.313	4	0.004	4	167.79	2	-9	9	7.59	2	-9	9	0.30	-9	-9	-9	-9	-9		
102	2	3494.8	34.690	2	34.688	2	1.774	1.501	27.761	0.004	0.0	2	33.6	2	2.34	2	0.313	4	0.004	4	168.48	2	-9	9	7.59	2	-9	9	0.30	-9	-9	-9	-9	-9		
101	2	3687.9	34.690	2	34.688	2	1.791	1.498	27.761	0.005	0.0	2	33.9	2	2.37	2	0.313	4	0.004	4	168.86	2	-9	9	7.59	2	-9	9	0.30	-9	-9	-9	-9	-9		

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 73 DATE 3/19/94 LATITUDE 33°0.0'S Btm Depth: 3720
 CAST 1 LONGITUDE 103°0.0'W

Sample ID	Pressure db	Salinity P ₀	Salinity Bottle	Temp °C	Temp °C	Sigma T	Sigma T	Theta	NO ₂ P ₀	NO ₃ P ₀	PO ₄ P ₀	Si(OH) ₄ P ₀	CFC-11 P ₀	CFC-12 P ₀	O ₂ P ₀	CO ₂ P ₀	DIC P ₀	DIC P ₀	pH P ₀	TAIK P ₀	813C TOC	TON	Chi-a	
																								µmol/kg
136	2	8.8	35.065	2	22.003	22.001	24.267	0.044	0.0	0.2	0.10	1.2	2.182	2	219.48	2	342	2	2015.8	2	2304	2	1.50	-9
135	2	25.3	35.066	2	22.003	21.998	24.269	0.044	0.0	0.2	0.13	1.1	2.184	2	219.69	2	343	2	2016.0	2	2304	2	-9	-9
134	2	51.5	35.037	2	21.125	21.115	24.491	0.051	0.0	0.0	0.12	1.3	2.366	2	228.88	2	343	2	2014.6	2	2303	2	-9	-9
133	2	76.3	34.933	2	18.430	18.417	25.133	0.053	0.0	0.0	0.11	1.1	2.656	2	245.70	2	349	2	2012.5	2	2297	2	-9	-9
132	2	101.1	34.819	2	17.341	17.324	25.298	0.057	0.0	0.0	0.10	1.0	2.739	2	247.10	2	358	2	2010.8	2	2292	2	-9	-9
131	2	122.7	34.730	2	16.679	16.659	25.388	0.055	0.0	0.0	0.13	1.1	2.521	2	245.79	2	358	2	2014.4	2	2284	2	-9	-9
130	2	152.0	34.737	2	16.269	16.244	25.489	0.048	0.0	0.1	0.15	1.1	2.800	2	240.28	2	380	2	2021.6	2	2284	2	-9	-9
129	2	201.2	34.750	2	14.591	14.561	25.875	0.026	0.0	4.2	0.47	1.5	2.635	2	213.98	2	468	2	2059.4	2	2287	2	-9	-9
128	3	250.8	34.551	2	12.182	12.149	26.212	0.022	0.0	9.4	0.79	2.1	2.594	2	212.61	2	550	2	2082.8	2	2277	2	-9	-9
127	2	298.8	34.438	2	10.386	10.351	26.453	0.019	0.0	14.0	1.04	3.2	2.345	2	212.11	2	633	2	2103.9	2	2272	2	-9	-9
126	2	342.7	34.333	2	8.607	8.571	26.664	0.020	0.0	18.3	1.32	4.7	2.416	2	219.79	2	699	2	2121.1	2	2273	2	-9	-9
125	2	396.5	34.321	2	7.545	7.506	26.813	0.019	0.0	19.8	1.39	5.4	2.494	2	234.08	2	728	2	2125.9	2	2271	2	-9	-9
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
123	2	497.2	34.331	2	6.545	6.500	26.959	0.017	0.0	21.8	1.52	7.7	2.158	2	246.53	2	743	2	2132.0	2	2274	2	-9	-9
122	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
121	4	597.0	34.306	2	6.048	5.996	27.005	0.017	0.0	25.8	1.78	11.0	1.999	6	248.40	2	770	2	2139.3	2	2276	2	-9	-9
120	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
119	2	699.7	34.280	2	5.597	5.537	27.041	0.017	0.0	24.2	1.67	11.0	1.899	6	238.62	2	825	2	2149.5	2	2284	2	-9	-9
118	2	797.2	34.266	2	5.178	5.112	27.080	0.016	0.0	25.8	1.78	14.6	0.785	6	238.62	2	825	2	2149.5	2	2284	2	-9	-9
117	2	899.2	34.267	2	4.681	4.610	27.138	0.015	0.0	28.5	1.86	21.5	0.406	2	218.01	2	916	2	2170.3	2	2277	2	-9	-9
116	2	995.8	34.297	2	4.214	4.137	27.213	0.012	0.0	31.2	2.17	30.5	0.089	2	197.87	2	1024	2	2192.0	2	2277	2	-9	-9
115	2	1098.3	34.359	2	3.836	3.754	27.301	0.010	0.0	34.0	2.37	45.0	0.036	2	168.00	2	1157	2	2221.8	2	2306	2	-9	-9
114	2	1198.5	34.485	2	3.581	3.492	27.387	0.010	0.0	36.4	2.55	61.3	0.004	2	138.34	2	1302	2	2254.9	2	2326	2	-9	-9
113	2	1298.5	34.475	2	3.300	3.206	27.447	0.010	0.0	37.3	2.63	70.1	0.004	2	132.36	2	1338	2	2266.7	2	2338	2	-9	-9
112	2	1398.1	34.517	2	3.134	3.033	27.496	0.010	0.0	37.6	2.67	79.7	-0.003	2	126.33	2	1344	2	2281.6	2	2358	2	-9	-9
111	2	1597.6	34.563	2	2.761	2.648	27.568	0.007	0.0	36.6	2.57	91.2	0.000	2	136.08	2	1284	2	2285.6	2	2358	2	-9	-9
110	2	1800.4	34.600	2	2.407	2.282	27.628	0.006	0.0	35.0	2.46	97.7	0.003	2	149.25	2	1224	2	2285.0	2	2367	2	-9	-9
109	2	1999.2	34.632	2	2.173	2.034	27.674	0.004	0.0	34.9	2.42	104.5	-9	-9	160.31	2	1247	2	2289.4	2	2370	2	-9	-9
108	2	2253.3	34.663	2	1.949	1.792	27.718	0.004	0.0	33.8	2.37	109.3	-9	-9	163.91	2	1142	2	2292.7	2	2378	2	-9	-9
107	2	2492.8	34.678	2	1.821	1.645	27.741	0.003	0.0	34.1	2.37	112.3	-0.001	2	163.91	2	1134	2	2291.7	2	2378	2	-9	-9
106	2	2746.3	34.684	2	1.755	1.557	27.753	0.003	0.0	34.1	2.38	115.2	-9	-9	165.79	2	1124	2	2293.1	2	2389	2	-9	-9
105	2	2993.3	34.687	2	1.751	1.529	27.757	0.002	0.0	34.1	2.34	117.0	-9	-9	166.64	2	1124	2	2293.1	2	2389	2	-9	-9
104	2	3251.4	34.689	2	1.764	1.516	27.759	0.003	0.0	33.6	2.32	118.0	-9	-9	166.93	2	1124	2	2292.8	2	2386	2	-9	-9
103	2	3494.3	34.690	2	1.782	1.509	27.761	0.003	0.0	33.9	2.34	116.8	-0.002	2	166.85	2	1109	2	2295.2	2	2387	2	-9	-9
102	2	3495.0	34.689	2	1.783	1.509	27.760	0.003	0.0	34.1	2.35	115.4	-9	-9	167.53	2	1109	2	2293.5	2	2387	2	-9	-9
101	2	3695.7	34.690	2	1.802	1.508	27.761	0.003	0.0	33.8	2.35	115.6	-0.002	2	167.26	2	1115	2	2293.1	2	2390	2	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 75 1 DATE 3/1994 LATITUDE 31°59.8'S Btm Depth: 3612
 CAST 1 LONGITUDE 102°58.8'W

Sample ID	P _{tot} db	Pressure db	Salinity P _{tot}	Salinity Bottle	Temp °C	Temp °C	Potential		Sigma T _{theta}	Sigma T _{theta}	Atmos	Beam	NO2 P _{tot}	NO3 P _{tot}	PO4 P _{tot}	S(OH) ₄ P _{tot}	CFC-11 P _{tot}	CFC-12 P _{tot}	O2 P _{tot}	P _{tot} @20°C _{P_{tot}}	DIC P _{tot}	pH P _{tot}	TA _{alk} P _{tot}	P _{tot}	813C P _{tot}	TOC P _{tot}	TON P _{tot}	Chl-a P _{tot}	Phaeo P _{tot}							
							Temp	Temp																												
136	2	9.7	35.364	2	35.365	22.669	22.667	24.305	0.040	0.0	0.0	0.0	0.1	2	0.10	2	0.8	2	9	216.41	2	330	2	2022.9	3	8.0445	2	2923	6	1.50	-9	-9	-9	-9		
135	2	27.2	35.361	2	35.363	22.646	22.640	24.311	0.045	0.0	0.0	0.0	0.0	2	0.07	2	0.9	2	9	216.91	2	329	2	-9	9	8.0436	2	-9	9	-9	-9	-9	-9	-9		
134	2	50.7	34.967	2	34.974	19.714	19.714	24.812	0.057	0.0	0.0	0.0	0.0	2	0.08	2	1.0	2	9	242.20	2	333	2	-9	9	8.0186	2	-9	9	-9	-9	-9	-9	-9		
133	2	77.2	34.912	2	34.874	17.954	17.941	25.220	0.053	0.0	0.0	0.0	0.0	2	0.12	2	0.7	2	9	248.33	2	-9	9	-9	9	8.0158	2	-9	9	-9	-9	-9	-9	-9		
132	2	102.2	35.027	2	35.026	17.790	17.775	25.348	0.055	0.0	0.0	0.0	0.1	2	0.12	2	0.8	2	9	239.49	2	352	2	-9	9	8.0200	2	-9	9	-9	-9	-9	-9	-9		
131	2	148.0	34.843	2	34.846	16.631	16.607	25.487	0.046	0.0	0.0	0.0	0.0	2	0.14	2	0.8	2	9	240.11	2	-9	9	-9	9	7.9991	2	-9	9	-9	-9	-9	-9	-9		
130	2	199.8	34.862	2	34.866	15.257	15.226	25.816	0.032	0.1	2	2.7	2	0.35	2	1.0	2	9	215.05	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9		
129	2	197.2	34.864	2	34.873	15.308	15.278	25.806	0.031	0.1	2	2.6	2	0.36	2	0.9	2	9	214.85	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9		
128	2	247.0	34.748	2	34.749	13.330	13.296	26.138	0.025	0.0	0.0	1.1	2	0.72	2	2.1	2	9	206.34	2	518	2	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	
127	2	292.5	34.563	2	34.565	11.479	11.442	26.354	0.022	0.0	0.0	1.1	2	1.01	2	3.1	2	9	204.86	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	
126	2	346.4	34.413	2	34.470	9.333	9.294	26.611	0.020	0.0	0.0	1.5	2	1.24	2	4.0	2	9	207.16	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	
125	2	395.5	34.344	2	34.345	7.857	7.818	26.786	0.021	0.0	0.0	2.1	2	1.56	2	6.8	2	9	210.85	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
123	2	500.0	34.331	2	34.331	6.564	6.518	26.957	0.018	0.0	0.0	2.2	2	1.54	2	7.9	2	9	238.30	2	754	2	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9
122	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
121	2	607.0	34.302	2	34.302	5.940	5.887	27.015	0.018	0.0	0.0	2.3	2	1.65	2	9.6	2	9	243.55	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	
120	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
119	2	708.0	34.276	2	34.277	5.503	5.443	27.050	0.017	0.0	0.0	2.4	2	1.72	2	11.3	2	9	244.58	2	782	2	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9
118	2	802.3	34.267	2	34.267	5.065	4.999	27.094	0.017	0.0	0.0	2.7	2	1.91	2	16.1	2	9	231.50	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9
117	2	905.0	34.279	2	34.280	4.530	4.459	27.164	0.016	0.0	0.0	3.0	2	2.07	2	24.9	2	9	209.30	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9
116	2	1001.9	34.320	2	34.319	4.084	4.008	27.244	0.010	0.0	0.0	3.2	2	2.38	2	36.3	2	9	188.08	6	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9
115	2	1094.2	34.372	2	34.372	3.794	3.712	27.316	0.012	0.0	0.0	3.5	2	2.38	2	48.3	2	9	161.70	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9
114	2	1195.2	34.427	2	34.427	3.448	3.361	27.394	0.011	0.0	0.0	3.6	2	2.51	2	60.4	2	9	146.91	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9
113	2	1299.1	34.485	2	34.484	3.294	3.200	27.455	0.011	0.0	0.0	3.7	2	2.61	2	73.4	2	9	130.19	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9
112	2	1396.5	34.523	2	34.523	3.105	3.004	27.504	0.010	0.0	0.0	3.7	2	2.62	2	83.7	2	9	127.79	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9
111	2	1596.3	34.570	2	34.569	2.697	2.585	27.578	0.008	0.0	0.0	3.6	2	2.54	2	95.2	2	9	131.88	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9
110	2	1795.8	34.605	2	34.605	2.366	2.241	27.636	0.008	0.0	0.0	3.5	2	2.44	2	100.1	2	9	156.56	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9
109	2	1991.6	34.639	2	34.639	2.124	1.986	27.684	0.006	0.0	0.0	3.4	2	2.39	2	105.2	2	9	149.98	6	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9
108	2	2254.9	34.688	2	34.687	1.908	1.751	27.725	0.005	0.0	0.0	3.4	2	2.35	2	111.2	2	9	161.30	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9
107	2	2503.2	34.678	2	34.676	1.803	1.626	27.742	0.004	0.0	0.0	3.4	2	2.38	2	114.3	2	9	164.02	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9
106	2	2747.2	34.682	2	34.681	1.768	1.569	27.750	0.003	0.0	0.0	3.4	2	2.38	2	117.0	2	9	165.22	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9
105	2	2995.5	34.686	2	34.684	1.767	1.544	27.755	0.003	0.0	0.0	3.3	2	2.35	2	119.4	2	9	163.94	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9
104	2	3247.8	34.688	2	34.686	1.778	1.530	27.757	0.003	0.0	0.0	3.3	2	2.34	2	119.7	2	9	166.85	6	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9
103	2	3499.7	34.689	2	34.688	1.793	1.519	27.759	0.003	0.0	0.0	3.3	2	2.32	2	118.1	2	9	166.55	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9
102	3	3499.9	34.689	2	34.688	1.792	1.519	27.759	0.003	0.0	0.0	3.4	2	2.34	2	117.1	2	9	167.28	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9
101	2	3646.6	34.689	2	34.688	1.804	1.515	27.759	0.004	0.0	0.0	3.4	2	2.37	2	116.4	2	9	166.89	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 76 DATE 3/20/94 LATITUDE 31°29.5S Btm Depth: 3529
 CAST 1 LONGITUDE 103°0.0W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma T	Sigma T	Rearm	NO2	NO3	PO4	P* Si(OH)4	P* CFC-11	P* CFC-12	P* O2	P* @20°C	DIC	pH	P* TALK	P* S13C	TOC	TON	Chi-a	Phaeo	
																									µmol/kg
136	2	10.3	35.412	2	22.807	22.805	24.302	0.041	0.0	2	0.1	2	2.097	2	1.110	2	2019.9	2	8.0478	2	2327	6	74.9	-9	-9
135	2	24.1	35.411	2	22.809	22.804	24.302	0.042	0.0	2	0.10	2	2.105	2	1.090	2	2020.0	2	8.0475	2	2322	2	71.5	-9	-9
134	3	48.7	35.327	2	21.490	21.480	24.611	0.048	0.0	2	0.09	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	71.2	-9	-9
133	2	99.0	35.136	2	18.519	18.501	25.251	0.052	0.0	2	0.09	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	81.0	-9	-9
132	2	152.0	34.963	2	17.218	17.193	25.440	0.041	-9	1	-9	1	2.678	2	1.383	2	2017.1	2	8.0300	2	2310	2	68.0	-9	-9
131	2	202.1	34.880	2	16.628	16.230	25.603	0.031	0.1	2	0.3	2	2.512	2	1.206	2	2066.9	2	7.9116	2	2289	2	63.5	-9	-9
130	2	246.4	34.820	2	14.628	14.591	25.950	0.025	0.0	2	0.51	2	2.109	2	0.992	2	2088.1	2	7.8446	2	2279	2	51.8	-9	-9
129	2	297.6	34.569	2	12.179	12.140	26.228	0.020	0.0	2	0.85	2	2.0	-9	-9	-9	2063.6	2	7.7659	2	-9	-9	54.6	-9	-9
128	3	350.8	34.385	2	9.579	9.540	26.549	0.018	0.0	2	1.27	2	4.0	-9	-9	-9	2119.6	2	7.659	2	-9	-9	48.1	-9	-9
127	2	401.3	34.345	2	8.261	8.220	26.726	0.019	0.0	2	1.49	2	6.0	-9	-9	-9	2137.3	2	7.185	2	2267	2	48.2	-9	-9
126	2	496.6	34.326	2	6.660	6.614	26.940	0.018	0.0	2	1.62	2	8.3	-9	-9	-9	2145.2	2	7.7077	2	2269	2	-9	-9	-9
125	2	602.0	34.306	2	6.029	5.976	27.008	0.016	0.0	2	1.72	2	10.3	-9	-9	-9	2148.5	2	7.7021	2	2277	2	-9	-9	-9
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
123	2	703.7	34.282	2	5.525	5.466	27.051	0.017	0.0	2	1.80	2	0.847	2	0.428	2	231.46	2	7.6981	2	2276	2	-9	-9	-9
122	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
121	2	801.7	34.267	2	5.045	4.979	27.097	0.016	0.0	2	1.91	2	-9	-9	-9	-9	225.74	2	7.6795	2	2278	2	-9	-9	-9
120	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
119	2	896.0	34.276	2	4.597	4.526	27.154	0.012	0.0	2	2.04	2	0.274	2	0.147	2	212.13	2	7.6539	2	2289	2	-9	-9	-9
118	2	1002.5	34.329	2	4.137	4.061	27.246	0.014	0.0	2	2.29	2	-9	-9	-9	-9	217.63	2	7.5932	2	2306	2	-9	-9	-9
117	2	1102.1	34.386	2	3.865	3.782	27.320	0.011	0.0	2	2.47	2	0.009	2	0.009	2	152.66	2	7.5502	2	2309	6	-9	-9	-9
116	2	1201.6	34.444	2	3.655	3.565	27.388	0.012	0.0	2	2.61	2	-9	-9	-9	-9	133.45	2	-9	-9	-9	-9	-9	-9	-9
115	2	1201.3	34.444	2	3.655	3.565	27.388	0.011	0.0	2	2.63	2	64.1	2	64.1	2	133.45	2	-9	-9	-9	-9	-9	-9	-9
114	2	1298.7	34.484	2	3.393	3.298	27.445	0.010	0.0	2	2.64	2	-9	-9	-9	-9	133.17	2	-9	-9	-9	-9	-9	-9	-9
113	2	1401.6	34.514	2	3.141	3.040	27.495	0.010	0.0	2	2.57	2	-9	-9	-9	-9	128.88	2	-9	-9	-9	-9	-9	-9	-9
112	2	1500.1	34.539	2	2.906	2.799	27.536	0.008	0.0	2	2.55	2	0.001	2	-0.002	2	138.45	2	-9	-9	-9	-9	-9	-9	-9
111	2	1604.3	34.562	2	2.698	2.585	27.573	0.008	0.0	2	2.32	2	-9	-9	-9	-9	133.46	2	-9	-9	-9	-9	-9	-9	-9
110	2	1697.3	34.582	2	2.529	2.411	27.603	0.007	0.0	2	2.51	2	-9	-9	-9	-9	144.47	2	-9	-9	-9	-9	-9	-9	-9
109	2	1801.4	34.601	2	2.371	2.246	27.633	0.006	0.0	2	2.46	2	-9	-9	-9	-9	148.43	2	-9	-9	-9	-9	-9	-9	-9
108	2	1971.0	34.634	2	2.157	2.020	27.677	0.006	0.0	2	2.38	2	0.000	2	0.000	2	155.99	2	-9	-9	-9	-9	-9	-9	-9
107	2	2201.1	34.662	2	1.940	1.787	27.717	0.004	0.0	2	2.37	2	-9	-9	-9	-9	160.34	2	-9	-9	-9	-9	-9	-9	-9
106	2	2497.6	34.676	2	1.809	1.632	27.740	0.003	0.0	2	2.40	2	-9	-9	-9	-9	163.06	2	-9	-9	-9	-9	-9	-9	-9
105	2	2749.4	34.682	2	1.771	1.572	27.749	0.003	0.0	2	2.40	2	-9	-9	-9	-9	163.06	2	-9	-9	-9	-9	-9	-9	-9
104	2	2999.3	34.686	2	1.767	1.544	27.755	0.003	0.0	2	2.36	2	-9	-9	-9	-9	165.77	2	-9	-9	-9	-9	-9	-9	-9
103	2	3001.6	34.686	2	1.766	1.544	27.755	0.003	0.0	2	2.35	2	-9	-9	-9	-9	165.58	2	-9	-9	-9	-9	-9	-9	-9
102	2	3245.7	34.688	2	1.775	1.528	27.758	0.003	0.0	2	2.35	2	-9	-9	-9	-9	166.79	2	-9	-9	-9	-9	-9	-9	-9
101	2	3564.1	34.689	2	1.794	1.514	27.760	0.003	0.0	2	2.37	2	-9	-9	-9	-9	166.34	2	-9	-9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE water quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 78 DATE 3/20/94 LATITUDE 30°30.3'S Btm Depth: 3487
 CAST 1 LONGITUDE 103°0.0'W

Sample ID	Pressure db	Salinity	Temp °C	Temp °C	Sigma T	Theta	NO2	NO3	PO4	Si(OH)4	CFC-11	CFC-12	O2	P _{OC2}	P _{OC2} @20°C	DIC _F	pH	TALK	P _{TA}	δ13C	TOC	TON	Chl-a	Fluoro																
																									µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg
136	2	35.311	2	23.250	23.248	24.098	0.039	0.0	2	0.1	2	0.9	2	0.11	2	0.9	2	0.9	2	2016.9	2	8.0434	2	2317	6	-9	2	2016.9	2	8.0434	2	2317	6	-9	2	62.9	4.2	0.025	0.009	
135	2	35.310	2	23.248	23.243	24.099	0.039	0.0	2	0.0	2	1.0	2	0.09	2	1.0	2	-9	2	2016.2	2	8.0444	2	2315	2	-9	2	2016.2	2	8.0444	2	2315	2	-9	2	64.0	4.3	0.025	0.011	
134	2	35.017	2	19.705	19.696	24.854	0.052	0.0	2	0.8	2	0.8	2	0.08	2	0.8	2	-9	2	2011.5	2	8.0291	2	2299	2	-9	2	2011.5	2	8.0291	2	2299	2	-9	2	64.6	4.5	0.054	0.014	
133	2	34.970	2	18.560	18.548	25.113	0.050	0.0	2	0.8	2	0.8	2	0.08	2	0.8	2	-9	2	2011.5	2	8.0291	2	2299	2	-9	2	2011.5	2	8.0291	2	2299	2	-9	2	64.7	4.4	0.044	0.016	
132	2	35.007	2	18.066	18.049	25.286	0.046	0.0	2	0.0	2	0.9	2	0.12	2	0.9	2	-9	2	2014.5	2	8.0231	2	2301	2	-9	2	2014.5	2	8.0231	2	2301	2	-9	2	63.6	4.2	0.060	0.023	
131	2	34.989	2	17.674	17.653	25.349	0.046	0.0	2	0.0	2	0.9	2	0.12	2	0.9	2	-9	2	2014.5	2	8.0231	2	2301	2	-9	2	2014.5	2	8.0231	2	2301	2	-9	2	63.8	4.2	0.065	0.036	
130	2	34.868	2	16.864	16.839	25.451	0.037	0.0	2	0.0	2	0.8	2	0.14	2	0.8	2	-9	2	2019.1	2	8.0044	2	2293	2	-9	2	2019.1	2	8.0044	2	2293	2	-9	2	64.0	-9	0.140	0.100	
129	2	34.910	2	15.954	15.922	25.696	0.031	0.2	2	1.5	2	0.28	2	0.28	2	0.9	2	-9	2	2043.8	2	7.9576	2	2290	2	-9	2	2043.8	2	7.9576	2	2290	2	-9	2	50.5	-9	0.120	0.144	
128	2	34.772	2	13.899	13.863	26.039	0.025	0.0	2	6.1	2	0.56	2	0.56	2	1.5	2	-9	2	2075.1	2	7.8932	2	2288	2	-9	2	2075.1	2	7.8932	2	2288	2	-9	2	-9	-9	0.031	0.036	
127	2	34.542	2	11.644	11.606	26.307	0.021	0.0	2	11.4	2	0.89	2	2.3	2	2.3	2	-9	2	2094.6	2	7.8354	2	2280	2	-9	2	2094.6	2	7.8354	2	2280	2	-9	2	46.6	3.2	0.004	0.005	
126	2	34.403	2	9.608	9.568	26.538	0.020	0.0	2	16.8	2	1.25	2	4.1	2	4.1	2	-9	2	2116.9	2	7.7720	2	2274	2	-9	2	2116.9	2	7.7720	2	2274	2	-9	2	-9	-9	-9	-9	
125	2	34.337	2	8.088	8.047	26.746	0.019	0.0	2	22.0	2	1.59	2	6.8	2	6.8	2	-9	2	2141.9	2	7.7074	2	2268	2	-9	2	2141.9	2	7.7074	2	2268	2	-9	2	41.9	-9	-9	-9	
124	9	-9	-9	-9	-9	-9	-9	-9	9	9	9	9	9	9	9	9	9	-9	9	9	9	9	9	9	9	-9	9	9	9	9	9	9	9	9	9	9	9	9	9	
123	2	34.325	2	6.566	6.520	26.952	0.018	0.0	2	25.0	2	1.74	2	9.7	2	9.7	2	-9	2	2150.9	2	7.6938	2	2273	2	-9	2	2150.9	2	7.6938	2	2273	2	-9	2	-9	-9	-9	-9	
122	9	-9	-9	-9	-9	-9	-9	-9	9	9	9	9	9	9	9	9	9	-9	9	9	9	9	9	9	9	-9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
121	2	34.301	2	5.944	5.891	27.014	0.017	0.0	2	25.2	2	1.71	2	10.6	2	10.6	2	-9	2	2146.5	2	7.7075	2	2272	2	-9	2	2146.5	2	7.7075	2	2272	2	-9	2	40.4	3.0	-9	-9	
120	9	-9	-9	-9	-9	-9	-9	-9	9	9	9	9	9	9	9	9	9	-9	9	9	9	9	9	9	9	-9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
119	2	34.271	2	5.442	5.383	27.053	0.016	0.0	2	25.7	2	1.74	2	12.0	2	12.0	2	-9	2	2146.0	2	7.7117	2	2279	2	-9	2	2146.0	2	7.7117	2	2279	2	-9	2	-9	-9	-9	-9	
118	2	34.264	2	4.951	4.887	27.104	0.015	0.0	2	28.0	2	1.92	2	17.4	2	17.4	2	-9	2	2161.6	2	7.6770	2	2282	2	-9	2	2161.6	2	7.6770	2	2282	2	-9	2	39.5	-9	-9	-9	
117	2	34.265	2	4.466	4.396	27.177	0.013	0.0	2	30.8	2	2.13	2	26.8	2	26.8	2	-9	2	2186.1	2	7.6300	2	2292	2	-9	2	2186.1	2	7.6300	2	2292	2	-9	2	-9	-9	-9	-9	
116	2	34.335	2	4.042	3.967	27.261	0.012	0.0	2	33.5	2	2.32	2	39.8	2	39.8	2	-9	2	2213.7	2	7.5832	2	2299	6	-9	2	2213.7	2	7.5832	2	2299	6	-9	2	42.1	2.4	-9	-9	
115	2	34.403	2	3.719	3.638	27.348	0.011	0.0	2	36.3	2	2.51	2	55.0	2	55.0	2	-9	2	2213.7	2	7.5832	2	2299	6	-9	2	2213.7	2	7.5832	2	2299	6	-9	2	-9	-9	-9	-9	
114	2	34.461	2	3.473	3.385	27.419	0.010	0.0	2	37.6	2	2.62	2	67.8	2	67.8	2	-9	2	2150.9	2	7.5188	2	2273	2	-9	2	2150.9	2	7.5188	2	2273	2	-9	2	-9	-9	-9	-9	
113	2	34.505	2	3.293	3.199	27.472	0.008	0.0	2	37.9	2	2.65	2	78.8	2	78.8	2	-9	2	2146.5	2	7.7075	2	2272	2	-9	2	2146.5	2	7.7075	2	2272	2	-9	2	-9	-9	-9	-9	
112	2	34.531	2	3.077	2.977	27.513	0.005	0.0	2	37.5	2	2.61	2	86.2	2	86.2	2	-9	2	2146.5	2	7.7075	2	2272	2	-9	2	2146.5	2	7.7075	2	2272	2	-9	2	40.1	-9	-9	-9	
111	2	34.550	2	2.852	2.746	27.548	0.006	0.0	2	36.7	2	2.55	2	90.4	2	90.4	2	-9	2	2146.5	2	7.7075	2	2272	2	-9	2	2146.5	2	7.7075	2	2272	2	-9	2	-9	-9	-9	-9	
110	2	34.572	2	2.602	2.491	27.588	0.008	0.0	2	35.7	2	2.49	2	93.7	2	93.7	2	-9	2	2146.5	2	7.7075	2	2272	2	-9	2	2146.5	2	7.7075	2	2272	2	-9	2	-9	-9	-9	-9	
109	2	34.608	2	2.318	2.194	27.642	0.004	0.0	2	34.8	2	2.42	2	100.1	2	100.1	2	-9	2	2146.5	2	7.7075	2	2272	2	-9	2	2146.5	2	7.7075	2	2272	2	-9	2	39.6	-9	-9	-9	
108	2	34.639	2	2.089	1.952	27.686	0.005	0.0	2	34.6	2	2.41	2	118.6	2	118.6	2	-9	2	2146.5	2	7.7075	2	2272	2	-9	2	2146.5	2	7.7075	2	2272	2	-9	2	-9	-9	-9	-9	
107	2	34.662	2	1.886	1.730	27.722	0.004	0.0	2	34.6	2	2.42	2	114.9	2	114.9	2	-9	2	2146.5	2	7.7075	2	2272	2	-9	2	2146.5	2	7.7075	2	2272	2	-9	2	-9	-9	-9	-9	
106	2	34.670	2	1.620	1.462	27.743	0.003	0.0	2	34.9	2	2.41	2	120.1	2	120.1	2	-9	2	2146.5	2	7.7075	2	2272	2	-9	2	2146.5	2	7.7075	2	2272	2	-9	2	-9	-9	-9	-9	
105	2	34.677	2	1.401	1.240	27.765	0.002	0.0	2	34.4	2	2.39	2	120.1	2	120.1	2	-9	2	2146.5	2	7.7075	2	2272	2	-9	2	2146.5	2	7.7075	2	2272	2	-9	2	-9	-9	-9	-9	
104	2	34.682	2	1.195	1.038	27.780	0.002	0.0	2	34.2	2	2.38	2	121.1	2	121.1	2	-9	2	2146.5	2	7.7075	2	2272	2	-9	2	2146.5	2	7.7075	2	2272	2	-9	2	37.3	-9	-9	-9	
103	2	34.685	2	1.002	0.845	27.793	0.002	0.0	2	34.1	2	2.35	2	120.8	2	120.8	2	-9	2	2146.5	2	7.7075	2	2272	2	-9	2	2146.5	2	7.7075	2	2272	2	-9	2	-9	-9	-9	-9	
102	2	34.685	2	0.803	0.646	27.753	0.002	0.0	2	34.0	2	2.36	2	119.2	2	119.2	2	-9	2	2146.5	2	7.7075	2	2272	2	-9	2	2146.5	2	7.7075	2	2272	2	-9	2	-9	-9	-9	-9	
101	2	34.686	2	0.689	0.548	27.755	0.002	0.0	2	34.1	2	2.40	2	118.2	2	118.2	2	-9	2	2146.5	2	7.7075	2	2272	2	-9	2	2146.5	2	7.7075	2	2272	2	-9	2	37.3	-9	-9	-9	

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 80 DATE 3/21/94 LAITUDE 29°29.0'S Btm Depth: 3496
CAST 1 LONGITUDE 103°0.0'W

Sample ID	P* db	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma t	Sigma t	Theta	NO2 µmol/kg	NO3 µmol/kg	PO4 µmol/kg	Si(OH)4 µmol/kg	F* µmol/kg	CFC-11 µmol/kg	CFC-12 µmol/kg	P* µmol/kg	O2 µmol/kg	CO2 µatm	DICP* µmol/kg	pH	P* µmol/kg	TALK µmol/kg	F* µmol/kg	513C per mil	TOC µmol/L	TON µmol/L	Chl-a µg/L	Phase µg/L			
																														Potential Temp °C	Theta	NO2 µmol/kg
136	2	10.9	35.238	2	35.239	2	23.221	23.218	24.051	0.058	0.0	0.2	0.04	2	1.1	2	-9	9	214.58	2	330	2	2014.4	2	8.0438	2	2307	2	-9	52.7	-9	-9
135	2	24.8	35.238	2	35.239	2	23.220	23.215	24.052	0.040	0.0	0.1	0.10	2	1.0	2	-9	9	214.92	2	333	2	2012.0	2	8.0424	2	2309	6	-9	64.5	-9	-9
134	2	46.5	34.973	2	35.004	3	20.660	20.651	24.567	0.043	0.0	0.1	0.08	2	0.8	2	-9	9	236.92	2	348	2	2015.3	2	8.0226	2	2293	2	-9	55.7	-9	-9
133	2	72.8	34.849	2	34.848	2	18.560	18.547	25.020	0.050	0.0	0.1	0.08	2	0.9	2	-9	9	248.71	2	350	2	2010.7	2	8.0183	2	2289	2	-9	59.4	-9	-9
132	2	101.3	34.890	2	34.893	2	17.799	17.781	25.241	0.049	0.0	0.1	0.07	2	0.8	2	-9	9	246.94	2	352	2	2013.1	2	8.0193	2	2293	2	-9	51.5	-9	-9
131	2	125.7	34.790	2	34.776	2	16.861	16.841	25.391	0.045	0.0	0.1	0.13	2	0.9	2	-9	9	245.09	6	364	2	2015.9	2	8.0044	2	2292	2	-9	48.5	-9	-9
130	2	146.7	34.748	2	34.758	2	16.218	16.194	25.505	0.044	0.0	0.2	0.17	2	0.7	2	-9	9	236.72	2	385	2	2024.0	2	7.9900	2	2287	2	-9	47.8	-9	-9
129	2	198.4	34.769	2	34.775	2	14.784	14.754	25.847	0.032	0.0	4.0	0.41	2	0.6	2	-9	9	214.27	2	457	2	2088.9	2	7.9210	2	2285	2	-9	38.9	-9	-9
128	2	249.5	34.667	2	34.671	2	13.222	13.187	26.097	0.024	0.0	7.5	0.62	2	1.1	2	-9	9	208.62	2	526	2	2078.9	2	7.8755	2	-9	5	-9	-9	-9	
127	2	304.4	34.474	2	34.481	2	10.774	10.737	26.413	0.020	0.0	12.9	0.94	2	2.4	2	-9	9	212.44	2	606	2	2099.9	2	7.8152	2	2275	2	-9	36.9	-9	-9
126	2	347.8	34.380	2	34.380	2	9.182	9.143	26.610	0.018	0.0	17.6	1.24	2	3.8	2	-9	9	210.51	2	707	2	2119.2	2	7.7606	2	2272	2	-9	-9	-9	-9
125	2	398.6	34.329	2	34.331	2	7.583	7.543	26.814	0.017	0.0	22.9	1.68	2	7.7	2	-9	9	203.75	2	816	2	2146.0	3	7.6970	2	2274	2	-9	32.0	-9	-9
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
123	3	496.8	34.329	2	34.330	2	6.540	6.495	26.959	0.017	0.0	24.7	1.77	2	9.8	2	-9	9	218.28	2	-9	9	2150.2	3	-9	9	2277	2	-9	-9	-9	-9
122	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
121	2	597.3	34.302	2	34.302	2	5.943	5.891	27.015	0.014	0.0	23.7	1.65	2	9.4	2	-9	9	247.26	2	759	3	2136.6	2	7.7324	2	2277	2	-9	40.3	-9	-9
120	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
119	2	703.2	34.271	2	34.271	2	5.374	5.315	27.060	0.013	0.0	25.3	1.75	2	12.4	2	-9	9	243.22	2	794	2	2145.4	2	7.7125	2	2286	2	-9	-9	-9	-9
118	2	799.0	34.265	2	34.265	2	4.879	4.815	27.114	0.012	0.0	27.7	1.92	2	18.2	2	-9	9	226.12	2	873	3	2163.3	2	7.6791	2	2284	2	-9	39.9	-9	-9
117	2	900.5	34.295	2	34.294	2	4.375	4.305	27.194	0.011	0.0	31.1	2.17	2	28.8	2	-9	9	196.76	2	989	2	2190.4	2	7.6288	2	2304	2	-9	-9	-9	-9
116	2	997.3	34.352	2	34.351	2	4.006	3.931	27.278	0.011	0.0	34.3	2.42	2	42.5	2	-9	9	-9	1	1151	3	2222.9	2	7.5690	2	2304	6	-9	36.2	-9	-9
115	2	1098.2	34.418	2	34.416	2	3.773	3.691	27.354	0.010	0.0	36.5	2.56	2	57.7	2	-9	9	138.25	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
114	2	1198.0	34.475	2	34.474	2	3.587	3.499	27.419	0.010	0.0	37.3	2.65	2	70.9	2	-9	9	123.91	2	-9	9	9	7.5120	2	-9	-9	-9	-9	-9	-9	
113	2	1502.1	34.509	2	34.508	2	3.333	3.238	27.471	0.008	0.0	37.3	2.64	2	78.4	2	-9	9	125.83	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
112	2	1404.2	34.531	2	34.530	2	3.078	2.977	27.513	0.008	0.0	36.9	2.62	2	82.9	2	-9	9	132.05	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
111	2	1504.7	34.550	2	34.548	2	2.818	2.712	27.552	0.006	0.0	36.4	2.57	2	86.8	2	-9	9	141.17	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
110	2	1598.0	34.572	2	34.570	2	2.592	2.481	27.589	0.006	0.0	35.6	2.50	2	91.9	2	-9	9	148.42	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
109	2	1797.7	34.614	2	34.612	2	2.265	2.142	27.651	0.005	0.0	34.7	2.43	2	101.7	2	-9	9	155.60	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
108	2	1996.8	34.643	2	34.641	2	2.034	1.898	27.694	0.004	0.0	34.6	2.42	2	110.7	2	-9	9	157.31	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
107	2	2247.5	34.659	2	34.658	2	1.883	1.727	27.720	0.003	0.0	34.5	2.44	2	116.9	2	-9	9	158.63	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
106	2	2505.5	34.666	2	34.664	2	1.837	1.659	27.730	0.003	0.0	34.7	2.44	2	118.3	2	-9	9	159.46	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
105	2	2749.4	34.671	2	34.670	2	1.829	1.629	27.737	0.001	0.0	34.8	2.43	2	119.5	2	-9	9	161.33	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
104	2	2998.0	34.677	2	34.675	2	1.826	1.602	27.744	0.002	0.0	34.2	2.39	2	119.5	2	-9	9	163.05	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
103	2	3248.7	34.682	2	34.681	2	1.830	1.581	27.749	0.001	0.0	34.0	2.37	2	119.6	2	-9	9	163.85	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
102	2	3247.5	34.681	2	34.680	2	1.829	1.581	27.749	0.001	0.0	34.3	2.40	2	118.5	2	-9	9	164.48	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
101	2	3488.9	34.684	2	34.682	2	1.841	1.568	27.751	0.002	0.0	34.3	2.41	2	117.0	2	-9	9	165.18	6	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	

* WOCE water sample quality flag (F) for parameter from previous column

** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 81 DATE 3/21/94 LATITUDE 29°0.1'S Btm Depth: 3561
 CAST 3 LONGITUDE 103°0.8'W

Sample ID	Pressure db	Salinity P ^o	Salinity P ^o Bottle	Temp °C	Temp °C	Sigma t	Sigma t _{atm}	Theta cp	Beam										Chl-a Phaeo µg/L																												
									NO2 P ^o	NO3 P ^o	PO4 P ^o	Si(OH) ₄ P ^o	CFC-11 P ^o	CFC-12 P ^o	O ₂ P ^o	F ^o @20°C P ^o	DIC P ^o	pH P ^o		Talk P ^o	δ13C P ^o	TOC µmol/L	TON µmol/L																								
336	2	35.401	2	35.402	2	23.404	23.401	24.122	0.038	0.0	2	0.1	2	0.11	2	1.1	2	2.028	2	1.108	2	214.67	2	324	2	2019.6	2	8.0475	2	2323	6	2.00	71.0	-9	0.024	0.008											
335	2	24.7	35.414	2	35.420	2	23.412	23.407	24.130	0.050	0.0	2	0.0	2	0.10	2	2.052	2	1.073	2	214.53	2	324	2	2019.4	2	8.0474	2	2325	2	-9	59.6	-9	0.027	0.005												
334	2	52.0	35.412	2	35.509	3	22.819	22.809	24.301	0.065	0.0	2	0.0	2	0.07	2	2.106	2	1.109	2	218.73	2	324	2	2024.3	2	8.0481	2	2329	2	-9	61.2	-9	0.032	0.012												
333	2	75.1	35.088	2	35.090	2	19.426	19.413	24.983	0.055	0.0	2	0.0	2	0.06	2	2.543	2	1.292	2	243.28	2	338	2	2014.1	2	8.0303	2	2301	2	-9	64.3	-9	0.035	0.012												
332	2	99.0	35.123	2	35.129	2	18.726	18.709	25.190	0.058	0.0	2	0.0	2	0.06	2	2.539	2	1.328	2	242.17	2	338	2	2012.6	2	8.0304	2	2307	2	-9	57.4	-9	0.050	0.018												
331	2	121.6	35.022	2	35.023	2	17.822	17.801	25.337	0.053	0.0	2	0.0	2	0.12	2	2.588	2	1.337	2	240.63	2	351	2	2015.0	2	8.0175	2	2303	2	-9	54.8	-9	0.088	0.042												
330	2	150.5	34.888	2	34.889	2	16.959	16.934	25.444	0.047	0.0	2	0.0	2	0.16	2	2.717	2	1.369	2	239.03	2	363	2	2020.0	2	8.0056	2	2298	2	-9	53.9	-9	0.130	0.122												
329	2	173.0	34.884	2	34.882	2	16.621	16.593	25.522	0.041	0.0	2	0.1	2	0.18	2	2.665	2	1.338	2	231.72	2	384	2	2028.6	2	7.9662	2	2300	2	-9	52.8	-9	0.155	0.157												
328	3	200.6	34.913	2	34.892	2	15.877	15.845	25.716	0.037	0.2	2	1.4	2	0.28	2	2.608	2	1.265	2	220.63	2	-9	9	2048.8	2	-9	9	2295	2	-9	47.2	-9	0.110	0.118												
327	2	224.6	34.826	2	34.834	2	14.664	14.631	25.918	0.031	0.0	2	4.8	2	0.46	2	2.403	2	1.197	2	209.30	2	471	2	2035.1	3	7.9109	2	2289	2	-9	42.4	-9	0.061	0.069												
326	2	250.4	34.691	2	34.691	2	13.563	13.529	26.046	0.024	0.0	2	7.1	2	0.63	2	2.437	2	1.200	2	207.09	2	509	2	2074.6	2	-9	9	2284	2	-9	44.0	-9	0.020	0.018												
325	2	297.9	34.509	2	34.509	2	11.383	11.345	26.330	0.025	0.0	2	12.2	2	0.98	2	2.278	2	1.091	2	208.66	2	596	2	2097.4	2	7.8259	2	2276	2	-9	39.5	-9	0.004	0.004												
324	3	345.7	34.398	2	34.402	2	9.469	9.431	26.577	0.023	0.0	2	17.1	2	1.31	2	2.019	2	0.910	2	206.97	2	690	2	2117.4	2	7.7653	2	2273	2	-9	-9	-9	-9	-9	-9	-9										
323	2	402.3	34.346	2	34.345	2	7.821	7.781	26.792	0.024	0.0	2	21.7	2	1.57	2	1.719	2	0.771	2	208.32	2	785	2	2140.3	2	7.7132	2	2272	2	-9	-9	-9	-9	-9	-9	-9	-9									
322	2	500.7	34.336	2	34.336	2	6.676	6.629	26.946	0.020	0.0	2	22.5	2	1.57	2	1.731	2	0.818	2	235.34	2	764	2	2136.9	2	7.7259	2	2272	2	-9	-9	-9	-9	-9	-9	-9	-9									
321	2	601.7	34.305	2	34.308	2	6.017	5.964	27.008	0.018	0.0	2	23.8	2	1.67	2	1.257	2	0.591	2	239.49	2	784	2	2142.3	2	7.7186	2	2281	2	-9	-9	-9	-9	-9	-9	-9	-9									
320	2	698.2	34.274	2	34.274	2	5.457	5.399	27.053	0.017	0.0	2	25.6	2	1.78	2	0.925	2	0.456	2	239.05	2	808	2	2147.8	2	7.7070	2	2278	2	-9	-9	-9	-9	-9	-9	-9	-9									
319	4	798.8	34.265	2	-9	9	4.986	4.921	27.102	0.017	-9	1	-9	1	-9	1	-9	1	-9	1	-9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9									
318	2	899.5	34.302	2	34.303	2	4.489	4.418	27.187	0.017	0.0	2	31.3	2	2.14	2	30.5	2	0.171	2	190.81	2	1039	2	2193.2	2	7.6133	2	2294	2	-9	-9	-9	-9	-9	-9	-9	-9									
317	2	998.0	34.347	2	34.346	2	4.055	3.980	27.269	0.015	0.0	2	33.8	2	2.33	2	42.3	2	0.039	2	167.96	2	1157	2	2219.5	2	7.5720	2	2303	6	-9	-9	-9	-9	-9	-9	-9	-9									
316	2	1101.3	34.425	2	34.425	2	3.767	3.685	27.360	0.014	0.0	2	36.4	2	2.57	2	59.2	2	0.002	2	136.60	2	1309	2	2253.8	2	7.5261	2	2322	2	-9	-9	-9	-9	-9	-9	-9	-9	-9								
315	2	1200.5	34.477	2	34.475	2	3.575	3.487	27.422	0.012	0.0	2	37.4	2	2.65	2	71.8	2	-9	9	124.17	2	1361	2	2271.3	2	7.5107	2	2338	2	-9	-9	-9	-9	-9	-9	-9	-9	-9								
314	2	1303.6	34.510	2	34.510	2	3.328	3.233	27.472	0.011	0.0	2	37.1	2	2.60	2	80.9	2	0.000	2	125.85	2	1339	2	2279.2	2	7.5183	2	2346	2	-9	-9	-9	-9	-9	-9	-9	-9	-9								
313	2	1402.7	34.533	2	34.532	2	3.042	2.942	27.518	0.010	0.0	2	36.3	2	2.54	2	86.6	2	-9	9	134.46	2	1302	2	2279.1	2	7.5325	2	2353	2	-9	-9	-9	-9	-9	-9	-9	-9	-9								
312	2	1502.9	34.533	2	34.533	2	2.779	2.674	27.557	0.009	0.0	2	35.6	2	2.48	2	89.5	2	0.000	2	143.40	2	1246	2	2276.4	2	7.5474	2	2356	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9							
311	2	1602.9	34.575	2	34.574	2	2.548	2.437	27.596	0.008	0.0	2	35.1	2	2.47	2	92.7	2	-9	9	150.95	2	1216	2	2277.3	2	7.5593	2	2359	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9							
310	2	1797.7	34.615	2	34.614	2	2.241	2.118	27.654	0.005	0.0	2	34.7	2	2.44	2	105.2	2	-0.002	2	155.61	2	1179	2	2284.6	2	7.5720	2	2377	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9							
309	2	1999.3	34.638	2	34.638	2	2.055	1.918	27.688	0.005	0.0	2	34.7	2	2.44	2	112.8	2	-9	9	156.35	2	1175	2	2292.4	2	7.5760	2	2385	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9							
308	2	2230.9	34.657	2	34.657	2	1.898	1.742	27.717	0.004	0.0	2	34.1	2	2.38	2	120.8	2	-0.002	2	157.83	2	1156	2	2297.3	2	7.5828	2	2386	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9							
307	2	2502.8	34.665	2	34.665	2	1.844	1.667	27.729	0.004	0.0	2	34.3	2	2.37	2	123.6	2	-9	9	160.68	2	1130	2	2299.8	2	7.5862	2	2390	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9							
306	2	2751.1	34.670	2	34.670	2	1.836	1.636	27.735	0.003	0.0	2	34.2	2	2.40	2	121.1	2	-9	9	159.29	2	1127	2	2298.2	2	7.5890	2	2388	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9						
305	2	2992.9	34.676	2	34.675	2	1.836	1.612	27.742	0.003	0.0	2	34.1	2	2.39	2	120.0	2	-9	1	162.67	2	1135	2	2298.0	2	7.5897	2	2392	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9						
304	2	3249.6	34.679	2	34.678	2	1.844	1.595	27.746	0.002	0.0	2	34.0	2	2.39	2	120.6	2	-9	9	163.74	2	1106	2	2296.2	2	7.5926	2	2391	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9						
303	2	3496.1	34.681	2	34.681	2	1.859	1.584	27.748	0.003	0.0	2	33.8	2	2.34	2	121.8	2	-0.002	2	163.90	2	1106	2	2296.2	2	7.5926	2	2388	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9						
302	2	3497.5	34.681	2	34.681	2	1.859	1.584	27.748	0.003	0.0	2	33.8	2	2.32	2	122.2	2	-9	9	165.30	2	1106	2	2295.4	2	7.5930	2	2391	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
301	2	3566.4	34.682	2	34.682	2	1.859	1.576	27.750	0.003	0.0	2	33.7	2	2.37	2	120.3	2	-0.002	2	164.62	2	1119	2	2296.9	2	7.5924	2	2391	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 82 DATE 3/22/94 LATITUDE 28°29.7'S Btm Depth: 3778
 CAST 1 LONGITUDE 102°59.8'W

Sample No	Pressure db	Salinity P _{CTD}	Salinity P _{Bottle}	Temp °C	Temp °C	Beam			NO2 P _{µmol/kg}	NO3 P _{µmol/kg}	PO4 P _{µmol/kg}	P _{SKOH4} P _{µmol/kg}	CFC-11 P _{pmol/kg}	CFC-12 P _{pmol/kg}	O2 P _{µmol/kg}	pH P _{µmol/kg}	TA _{TK} P _{µmol/kg}	P _{813C} TOC P _{µmol/L}	TON P _{µmol/L}	Chl-a P _{µg/L}	P _{µg/L}	
						Theta	Sigma	Attenu														
136	2	35.592	35.592	23.561	23.559	24.220	0.049	0.0	2	0.1	2	0.09	2	2	1.9	2	2	2	2	2	2	2
135	2	35.591	35.595	23.554	23.552	24.221	0.049	0.0	2	0.0	2	0.10	2	2	2.0	2	2	2	2	2	2	2
134	2	35.599	35.600	23.575	23.573	24.221	0.049	0.0	2	0.1	2	0.11	2	2	2.1	2	2	2	2	2	2	2
133	2	35.597	35.602	23.574	23.572	24.220	0.049	0.0	2	0.0	2	0.08	2	2	1.9	2	2	2	2	2	2	2
132	2	35.700	35.701	23.738	23.733	24.251	0.052	0.0	2	0.0	2	0.06	2	2	2.023	2	2	2	2	2	2	2
131	2	35.565	35.573	22.217	22.208	24.989	0.064	0.0	2	0.1	2	0.05	2	2	2.0	2	2	2	2	2	2	2
130	2	35.414	35.418	19.699	19.681	25.162	0.053	0.0	2	0.0	2	0.11	2	2	2.406	2	2	2	2	2	2	2
129	3	35.395	35.399	19.230	19.207	25.270	0.045	0.0	2	0.0	2	0.09	2	2	1.7	2	2	2	2	2	2	2
127	2	35.259	35.262	18.542	18.516	25.342	0.041	0.0	2	0.2	2	0.16	2	2	1.8	2	2	2	2	2	2	2
126	2	35.057	35.061	17.052	17.019	25.554	0.036	0.1	2	0.2	2	0.43	2	2	2.548	2	2	2	2	2	2	2
125	2	34.661	34.661	13.013	12.972	26.136	0.024	0.0	2	3.4	2	0.63	2	2	2.2	2	2	2	2	2	2	2
124	2	34.455	34.455	10.480	10.438	26.447	0.022	0.0	2	8.4	2	0.76	2	2	2.8	2	2	2	2	2	2	2
123	2	34.372	34.372	8.850	8.807	26.657	0.021	0.0	2	14.1	2	1.12	2	2	4.0	2	2	2	2	2	2	2
122	2	34.335	34.335	6.782	6.735	26.990	0.020	0.0	2	22.6	2	1.60	2	2	6.0	2	2	2	2	2	2	2
121	2	34.310	34.310	6.064	6.011	27.005	0.017	0.0	2	23.1	2	1.63	2	2	10.1	2	2	2	2	2	2	2
120	2	34.275	34.275	4.957	4.892	27.113	0.017	0.0	2	28.5	2	2.00	2	2	20.0	2	2	2	2	2	2	2
118	2	34.372	34.372	4.561	4.490	27.199	0.016	0.0	2	32.7	2	2.32	2	2	33.5	2	2	2	2	2	2	2
117	2	34.390	34.390	4.155	4.078	27.292	0.016	0.0	2	35.1	2	2.52	2	2	49.4	2	2	2	2	2	2	2
116	2	34.432	34.432	3.809	3.726	27.363	0.015	0.0	2	36.5	2	2.60	2	2	61.4	2	2	2	2	2	2	2
115	2	34.479	34.479	3.613	3.524	27.420	0.012	0.0	2	37.2	2	2.66	2	2	72.9	2	2	2	2	2	2	2
114	2	34.512	34.512	3.345	3.251	27.473	0.011	0.0	2	36.8	2	2.65	2	2	80.4	2	2	2	2	2	2	2
113	2	34.535	34.535	3.070	2.969	27.517	0.010	0.0	2	35.4	2	2.55	2	2	89.7	2	2	2	2	2	2	2
111	2	34.575	34.575	2.567	2.456	27.594	0.008	0.0	2	34.6	2	2.48	2	2	94.0	2	2	2	2	2	2	2
110	2	34.602	34.602	2.346	2.226	27.634	0.008	0.0	2	34.4	2	2.43	2	2	101.3	2	2	2	2	2	2	2
109	2	34.635	34.635	2.189	2.063	27.671	0.006	0.0	2	34.6	2	2.44	2	2	100.8	2	2	2	2	2	2	2
108	2	34.663	34.663	1.858	1.727	27.727	0.005	0.0	2	34.2	2	2.44	2	2	117.9	2	2	2	2	2	2	2
107	2	34.674	34.674	1.842	1.649	27.733	0.004	0.0	2	34.1	2	2.44	2	2	119.4	2	2	2	2	2	2	2
106	2	34.681	34.681	1.845	1.595	27.746	0.004	0.0	2	33.9	2	2.38	2	2	120.5	2	2	2	2	2	2	2
105	2	34.679	34.679	1.844	1.595	27.746	0.004	0.0	2	33.5	2	2.38	2	2	120.6	2	2	2	2	2	2	2
104	2	34.682	34.682	1.852	1.593	27.747	0.003	0.0	2	33.9	2	2.41	2	2	118.4	2	2	2	2	2	2	2
103	2	34.680	34.680	1.852	1.593	27.747	0.003	0.0	2	33.9	2	2.41	2	2	118.4	2	2	2	2	2	2	2
102	2	34.682	34.682	1.852	1.593	27.747	0.003	0.0	2	33.9	2	2.41	2	2	118.4	2	2	2	2	2	2	2
101	2	34.682	34.682	1.852	1.593	27.747	0.003	0.0	2	33.9	2	2.41	2	2	118.4	2	2	2	2	2	2	2

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 83 DATE 3/22/94 LATITUDE 28°0.0'S Btm Depth: 3352
CAST 1 LONGITUDE 103°0.0'W

Sample ID	Pressure db	Salinity P ^o	Salinity Bottle	Temp °C	Temp °C	Sigma T	Sigma t	Anom	NO2 P ^o	NO3 P ^o	PO4 P ^o	P ^o Si(OH) ₄	P ^o CFC-11	P ^o CFC-12	P ^o O ₂	P ^o P _{OC2}	DIC P ^o	pH P ^o	TAK P ^o	P ^o	813C TOC	TON	Chl-a	Phaeo					
																									umol/kg	umol/kg	umol/kg	umol/kg	umol/kg
136	2	35.790	35.788	23.713	23.711	24.325	0.041	0.0	2	1.0	0.12	1.4	2	2.031	1.073	2	213.25	2	2040.9	3	8.0574	2	2352	6	1.50	-9	-9		
135	2	35.788	35.788	23.732	23.727	24.319	0.043	0.0	2	0.1	0.11	1.2	2	2.029	1.067	2	213.12	6	-9	9	8.0839	2	-9	9	1.50	-9	-9		
134	2	35.793	35.794	23.253	23.243	24.465	0.051	0.0	2	0.0	0.11	1.2	2	2.141	1.121	2	220.13	2	327	2	-9	9	8.0509	2	-9	9	1.50	-9	-9
133	2	35.520	35.520	20.569	20.555	25.011	0.053	0.0	2	0.0	0.11	1.5	2	2.416	1.245	2	236.37	6	-9	9	8.0483	2	-9	9	1.60	-9	-9		
132	2	35.529	35.529	20.056	20.037	25.155	0.050	0.0	2	0.0	0.10	1.1	2	2.404	1.253	6	234.35	2	335	2	-9	9	8.0413	2	-9	9	1.50	-9	-9
131	2	35.493	35.489	19.588	19.564	25.252	0.059	0.0	2	0.0	0.14	1.2	2	2.715	1.487	2	231.76	2	-9	9	8.0360	2	-9	9	1.50	-9	-9		
130	2	35.446	35.448	19.248	19.221	25.306	0.056	0.0	2	0.0	0.17	1.1	2	2.443	1.273	2	229.74	2	348	2	-9	9	-9	9	1.50	-9	-9		
129	2	35.401	35.399	18.980	18.949	25.341	0.056	0.0	2	0.0	0.16	1.1	2	2.468	1.277	2	226.93	2	-9	9	-9	9	-9	9	1.40	-9	-9		
128	2	35.215	35.221	18.007	17.972	25.444	0.031	0.0	2	0.1	0.17	1.2	2	2.525	1.280	2	224.09	2	366	2	-9	9	-9	9	1.40	-9	-9		
127	2	35.121	35.123	17.357	17.319	25.531	0.029	0.1	2	0.8	0.25	1.2	2	2.598	1.285	6	217.38	2	-9	9	-9	9	-9	9	-9	-9	-9		
126	2	34.682	34.685	15.826	15.786	25.695	0.025	0.0	2	3.1	0.41	1.3	2	2.164	1.250	6	213.18	2	441	2	-9	9	-9	9	1.40	-9	-9		
125	2	34.680	34.680	14.003	13.960	25.948	0.022	0.0	2	6.8	0.66	1.9	2	2.164	1.027	2	205.87	2	501	2	-9	9	-9	9	1.40	-9	-9		
124	2	34.481	34.491	11.350	11.286	26.319	0.021	0.0	2	12.7	1.07	2	3.5	1.950	0.921	2	198.80	2	-9	9	-9	9	-9	9	-9	-9	-9		
123	2	34.381	34.382	9.335	9.280	26.587	0.020	0.0	2	18.4	1.42	3.6	2	1.166	0.557	2	197.55	2	732	2	-9	9	-9	9	1.30	-9	-9		
122	2	34.343	34.342	6.887	6.840	26.923	0.019	0.0	2	26.6	1.91	12.1	2	0.893	0.452	2	186.36	2	-9	9	-9	9	1.00	-9	-9	-9	-9		
121	2	34.314	34.316	6.053	6.000	27.011	0.017	0.0	2	26.8	1.90	13.4	2	0.892	0.459	2	207.61	2	900	2	-9	9	-9	9	1.20	-9	-9		
120	2	34.276	34.278	5.403	5.344	27.061	0.014	0.0	2	26.9	1.88	14.3	2	0.812	0.413	2	226.52	2	-9	9	-9	9	1.30	-9	-9	-9	-9		
119	2	34.294	34.293	5.052	4.986	27.117	0.015	0.0	2	32.9	2.44	21.0	2	0.377	0.205	2	200.58	2	966	2	-9	9	-9	9	1.10	-9	-9		
118	2	34.323	34.322	4.637	4.566	27.187	0.015	0.0	2	32.9	2.44	30.9	2	0.142	0.077	6	174.59	2	-9	9	-9	9	0.90	-9	-9	-9	-9		
117	2	34.433	34.432	3.831	3.748	27.361	0.011	0.0	2	37.2	2.74	60.3	2	0.003	0.002	2	131.91	2	-9	9	-9	9	0.60	-9	-9	-9	-9		
116	2	34.517	34.517	3.354	3.259	27.474	0.010	0.0	2	37.9	2.80	73.8	2	-0.007	-0.002	2	121.81	2	-9	9	-9	9	0.50	-9	-9	-9	-9		
115	2	34.487	34.488	3.549	3.460	27.482	0.011	0.0	2	37.9	2.77	79.9	2	-0.004	-0.002	2	123.16	2	-9	9	-9	9	0.40	-9	-9	-9	-9		
114	2	34.540	34.540	2.995	2.895	27.527	0.008	-9	1	-9	-9	-9	1	-0.005	-0.002	2	-9	1	-9	9	-9	9	-9	-9	-9	-9	-9		
113	2	34.560	34.559	2.744	2.639	27.566	0.008	0.0	2	35.9	2.63	89.3	2	-9	-9	1	143.86	2	-9	9	-9	9	-9	-9	-9	-9	-9		
112	2	34.580	34.579	2.510	2.400	27.603	0.006	0.0	2	35.3	2.60	92.5	2	-0.003	-0.002	2	151.00	2	-9	9	-9	9	0.40	-9	-9	-9	-9		
111	2	34.599	34.599	2.224	2.101	27.632	0.006	0.0	2	35.4	2.61	97.0	2	-9	-9	9	153.95	2	-9	9	-9	9	-9	-9	-9	-9	-9		
110	2	34.616	34.616	2.224	2.101	27.656	0.006	0.0	2	35.4	2.60	103.2	2	-0.007	-0.002	2	154.70	2	-9	9	-9	9	-9	-9	-9	-9	-9		
109	2	34.639	34.639	2.038	1.901	27.690	0.005	0.0	2	35.0	2.59	112.3	2	-9	-9	9	155.55	2	-9	9	-9	9	0.30	-9	-9	-9	-9		
108	2	34.655	34.655	1.912	1.756	27.714	0.004	0.0	2	34.7	2.57	118.9	2	-0.008	-0.002	2	156.91	2	-9	9	-9	9	-9	-9	-9	-9	-9		
107	2	34.663	34.663	1.859	1.682	27.723	0.003	0.0	2	34.8	2.53	120.6	2	-9	-9	9	158.11	2	-9	9	-9	9	0.20	-9	-9	-9	-9		
106	2	34.668	34.673	1.849	1.648	27.733	0.004	0.0	2	34.7	2.51	119.4	2	-0.004	-0.002	2	159.93	2	-9	9	-9	9	-9	-9	-9	-9	-9		
105	2	34.674	34.674	1.847	1.622	27.740	0.003	0.0	2	34.4	2.49	118.0	2	-9	-9	9	161.35	6	-9	9	-9	9	0.30	-9	-9	-9	-9		
104	2	34.680	34.680	1.845	1.596	27.746	0.003	0.0	2	34.3	2.48	116.7	2	-0.008	-0.002	2	162.81	2	-9	9	-9	9	-9	-9	-9	-9	-9		
103	2	34.679	34.679	1.845	1.596	27.746	0.003	0.0	2	34.4	2.52	116.3	2	-9	-9	9	163.25	2	-9	9	-9	9	-9	-9	-9	-9	-9		
102	2	34.681	34.680	1.854	1.591	27.747	0.003	0.0	2	34.4	2.54	115.8	2	-9	-9	9	163.48	2	-9	9	-9	9	-9	-9	-9	-9	-9		
101	2	34.680	34.680	1.854	1.591	27.747	0.003	0.0	2	34.4	2.54	115.8	2	-9	-9	9	163.48	2	-9	9	-9	9	-9	-9	-9	-9	-9	-9	

* WOCE water sample quality flag (F) for parameter from previous column
** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 84 DATE 3/22/94 LATITUDE 27°30.1'S Btm Depth: 3089
CAST 1 LONGITUDE 103°1.1'W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Potential		Sigma		Beam Theta	cp	PO4 µmol/kg	Pb SKORP4 µmol/kg	CFC-11 µmol/kg	CFC-12 µmol/kg	O2 µmol/kg	P _{CO2} µatm	DIC µmol/kg	pH	TAlk µmol/kg	P _{TA} µmol/kg	δ13C per mil	TOC µmol/L	TON µmol/L	Chl-a µg/L	Phaeo µg/L											
						Temp °C	Temp °C	Theta	Theta																												
136	2	11.4	35.797	2	23.797	2	23.797	24.323	0.041	0.0	0.1	2	0.14	2	1.3	2	2.026	2	1.086	2	213.44	2	324	2	2042.5	2	8.0505	2	2533	2	-9	-9	-9	-9	0.024	0.005	
135	2	10.6	35.797	2	23.797	2	23.797	24.322	0.041	0.0	2	0.11	2	1.1	2	1.1	2	2.073	2	1.052	2	213.33	2	327	2	2040.4	2	8.0499	2	2949	2	-9	-9	-9	-9	4.2	-9
134	2	23.8	35.796	2	23.796	2	23.796	24.324	0.042	0.0	2	0.11	2	1.1	2	1.1	2	2.073	2	1.052	2	213.43	2	325	2	2040.5	2	8.0506	2	2356	2	-9	-9	-9	-9	75.5	4.4
133	2	50.6	35.697	2	23.713	2	22.743	24.540	0.033	0.0	2	0.10	2	1.1	2	1.1	2	2.408	2	1.250	2	223.72	2	326	2	2035.0	2	8.0475	2	2944	2	-9	-9	-9	-9	71.4	4.2
132	2	74.9	35.499	2	20.501	2	20.487	25.013	0.052	0.0	2	0.08	2	1.1	2	1.1	2	2.408	2	1.250	2	236.24	2	326	2	2023.8	2	8.0489	2	2932	2	-9	-9	-9	-9	73.4	4.2
131	2	100.3	35.504	2	19.993	2	19.975	25.153	0.048	0.0	2	0.09	2	1.1	2	1.2	2	2.443	2	1.256	2	233.71	2	343	2	2025.8	2	8.0446	2	2930	2	-9	-9	-9	-9	74.9	4.3
130	2	125.2	35.464	2	19.525	2	19.502	25.247	0.044	0.0	2	0.12	2	1.2	2	1.2	2	2.443	2	1.256	2	232.73	2	343	2	2024.2	2	8.0352	2	2931	2	-9	-9	-9	-9	74.5	4.3
129	2	146.5	35.463	2	19.335	2	19.309	25.296	0.039	0.0	2	0.12	2	1.2	2	1.2	2	2.443	2	1.256	2	230.17	2	346	2	2023.7	2	8.0253	2	2929	2	-9	-9	-9	-9	65.5	-9
128	2	174.4	35.433	2	19.145	2	19.114	25.323	0.037	0.0	2	0.18	2	1.1	2	1.1	2	2.478	2	1.256	2	228.63	2	354	2	2042.0	2	8.0208	2	2925	2	-9	-9	-9	-9	62.5	-9
127	2	214.7	35.179	2	17.917	2	17.880	25.439	0.033	0.0	2	0.14	2	1.0	2	1.0	2	2.478	2	1.256	2	226.02	2	363	2	2034.2	2	8.0093	2	2915	2	-9	-9	-9	-9	49.8	3.8
126	2	250.2	35.025	2	16.498	2	16.458	25.661	0.027	0.0	2	0.31	2	1.2	2	1.2	2	2.478	2	1.256	2	211.13	2	426	2	2035.9	2	7.9578	2	2278	2	-9	-9	-9	-9	48.6	-9
125	2	300.8	34.635	2	13.762	2	13.739	25.960	0.021	0.0	2	0.65	2	1.8	2	1.8	2	2.205	2	1.872	2	201.44	2	585	2	2029.1	2	7.8349	2	2277	2	-9	-9	-9	-9	48.6	-9
124	2	349.5	34.577	2	12.092	2	12.046	26.252	0.021	0.0	2	0.89	2	2.8	2	2.8	2	2.205	2	1.872	2	201.44	2	585	2	2029.1	2	7.8349	2	2277	2	-9	-9	-9	-9	48.6	-9
123	2	449.2	34.345	2	9.357	2	9.312	26.535	0.021	0.0	2	1.70	2	8.2	2	8.2	2	2.101	2	0.995	2	192.22	2	750	2	2128.2	2	7.7345	2	2270	2	-9	-9	-9	-9	48.6	-9
122	2	501.9	34.334	2	8.082	2	8.036	26.746	0.021	0.0	2	2.27	2	8.2	2	8.2	2	1.429	2	0.866	2	194.12	2	904	2	2158.2	2	7.6619	2	2280	2	-9	-9	-9	-9	48.6	-9
121	2	549.3	34.324	2	6.388	2	6.338	26.975	0.019	0.0	2	2.62	2	11.7	2	11.7	2	1.108	2	0.540	2	221.99	2	949	2	2160.8	2	7.6700	2	2276	2	-9	-9	-9	-9	48.6	-9
119	2	598.8	34.304	2	5.969	2	5.916	27.013	0.017	0.0	2	2.58	2	12.0	2	12.0	2	1.108	2	0.540	2	221.99	2	949	2	2160.8	2	7.6700	2	2276	2	-9	-9	-9	-9	48.6	-9
118	2	800.5	34.281	2	5.502	2	5.443	27.053	0.015	0.0	2	2.66	2	14.0	2	14.0	2	0.808	2	0.420	2	223.49	2	859	2	2157.7	2	7.6807	2	2281	2	-9	-9	-9	-9	41.7	-9
117	2	899.6	34.311	2	4.310	2	4.241	27.213	0.012	0.0	2	3.29	2	32.9	2	32.9	2	0.114	2	0.063	2	183.87	2	1056	2	2203.7	2	7.6010	2	-9	5	-9	-9	-9	-9	41.5	-9
116	2	1002.2	34.384	2	3.983	2	3.828	27.314	0.011	0.0	2	2.26	2	49.8	2	49.8	2	0.009	2	0.010	2	190.17	2	1225	2	2238.8	2	7.5459	2	2910	6	-9	-9	-9	-9	3.1	-9
115	2	1002.2	34.384	2	3.983	2	3.828	27.314	0.011	0.0	2	2.26	2	49.8	2	49.8	2	0.009	2	0.010	2	190.17	2	1225	2	2238.8	2	7.5459	2	2910	6	-9	-9	-9	-9	3.1	-9
114	2	1301.1	34.574	2	3.233	2	3.139	27.493	0.009	0.0	2	2.63	2	75.0	2	75.0	2	-0.005	2	-0.001	2	124.70	2	-9	9	9	9	7.5175	2	-9	9	-9	-9	-9	-9	-9	-9
113	2	1499.4	34.540	2	2.959	2	2.860	27.531	0.007	0.0	2	2.53	2	81.8	2	81.8	2	-9	-9	-9	-9	130.02	2	-9	9	9	9	7.5425	2	-9	9	-9	-9	-9	-9	-9	-9
112	2	1999.7	34.583	2	2.703	2	2.599	27.570	0.007	0.0	2	2.51	2	89.4	2	89.4	2	-9	-9	-9	-9	145.82	2	-9	9	9	9	7.5425	2	-9	9	-9	-9	-9	-9	-9	-9
111	2	2347.2	34.654	2	2.215	2	2.092	27.608	0.006	0.0	2	2.47	2	94.1	2	94.1	2	-0.006	2	0.000	2	151.87	2	-9	9	9	9	7.5622	2	-9	9	-9	-9	-9	-9	-9	-9
110	2	2498.8	34.673	2	1.865	2	1.749	27.694	0.004	0.0	2	2.47	2	103.7	2	103.7	2	-9	-9	-9	-9	145.82	2	-9	9	9	9	7.5622	2	-9	9	-9	-9	-9	-9	-9	-9
109	2	2698.3	34.671	2	1.865	2	1.749	27.694	0.004	0.0	2	2.47	2	103.7	2	103.7	2	-9	-9	-9	-9	145.82	2	-9	9	9	9	7.5622	2	-9	9	-9	-9	-9	-9	-9	-9
108	2	2998.9	34.671	2	1.865	2	1.749	27.694	0.004	0.0	2	2.47	2	103.7	2	103.7	2	-9	-9	-9	-9	145.82	2	-9	9	9	9	7.5622	2	-9	9	-9	-9	-9	-9	-9	-9
107	2	3471.2	34.673	2	1.863	2	1.738	27.738	0.003	0.0	2	2.40	2	119.2	2	119.2	2	-9	-9	-9	-9	160.74	2	-9	9	9	9	7.5622	2	-9	9	-9	-9	-9	-9	-9	-9
106	2	3471.2	34.673	2	1.863	2	1.738	27.738	0.003	0.0	2	2.40	2	119.2	2	119.2	2	-9	-9	-9	-9	160.74	2	-9	9	9	9	7.5622	2	-9	9	-9	-9	-9	-9	-9	-9
105	2	3471.2	34.673	2	1.863	2	1.738	27.738	0.003	0.0	2	2.40	2	119.2	2	119.2	2	-9	-9	-9	-9	160.74	2	-9	9	9	9	7.5622	2	-9	9	-9	-9	-9	-9	-9	-9
104	2	3471.2	34.673	2	1.863	2	1.738	27.738	0.003	0.0	2	2.40	2	119.2	2	119.2	2	-9	-9	-9	-9	160.74	2	-9	9	9	9	7.5622	2	-9	9	-9	-9	-9	-9	-9	-9
103	2	3471.2	34.673	2	1.863	2	1.738	27.738	0.003	0.0	2	2.40	2	119.2	2	119.2	2	-9	-9	-9	-9	160.74	2	-9	9	9	9	7.5622	2	-9	9	-9	-9	-9	-9	-9	-9
102	2	3471.2	34.673	2	1.863	2	1.738	27.738	0.003	0.0	2	2.40	2	119.2	2	119.2	2	-9	-9	-9	-9	160.74	2	-9	9	9	9	7.5622	2	-9	9	-9	-9	-9	-9	-9	-9
101	2	3471.2	34.673	2	1.863	2	1.738	27.738	0.003	0.0	2	2.40	2	119.2	2	119.2	2	-9	-9	-9	-9	160.74	2	-9	9	9	9	7.5622	2	-9	9	-9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 86 1 DATE 3/29/94 LATITUDE 26°29.7'S Btm Depth: 3462
CAST 1 LONGITUDE 103°0.0'W

Sample ID	P	Pressure db	Salinity ‰	Salinity ‰ Bottle	Temp °C	Temp °C	Sigma T	Sigma A	Beam		NO2 P _o μmol/kg	NO3 P _o μmol/kg	PO4 P _o μmol/kg	Si(OH)4 P _o μmol/kg	CFC-11 P _o μmol/kg	CFC-12 P _o μmol/kg	O2 P _o @20°C μmol/kg	fCO2	DIC P _o μmol/kg	pH P _o	TAK P _o μmol/kg	813C P _o per mil μmol/L	TOC μmol/L	TON μmol/L	Chl-a Fluor. μg/L									
									Theta cp	Trans cp																								
136	2	10.5	36.032	36.028	24.464	24.462	24.285	0.040	0.0	0.1	2	0.12	1.3	2	-9	-9	9	211.12	2	315	2	2045.5	3	8.0609	2	-9	5	-9	71.8	4.4	-9	-9		
135	2	23.0	36.024	36.027	24.311	24.306	24.326	0.045	0.0	0.1	2	0.10	1.2	2	-9	-9	9	210.79	2	314	2	2044.0	2	8.0627	2	-9	5	-9	71.9	4.6	-9	-9		
134	2	49.0	36.028	36.029	24.291	24.280	24.336	0.049	0.0	0.1	2	0.10	1.3	2	-9	-9	9	211.17	2	314	2	2044.6	2	8.0622	2	-9	5	-9	69.0	4.2	-9	-9		
133	2	75.9	35.846	35.886	22.451	22.436	24.737	0.055	0.0	0.1	2	0.11	1.4	2	-9	-9	9	226.29	2	313	2	2056.3	2	8.0634	2	-9	5	-9	71.6	4.0	-9	-9		
132	2	99.5	35.740	35.739	21.161	21.142	25.019	0.052	0.0	0.1	2	0.13	1.3	2	-9	-9	9	231.45	2	318	2	2081.9	2	8.0574	2	-9	5	-9	68.0	4.2	-9	-9		
131	2	124.1	35.678	35.675	20.460	20.437	25.163	0.044	0.0	0.1	2	0.15	1.4	2	-9	-9	9	228.54	2	321	2	2035.8	2	8.0499	2	-9	5	-9	69.8	4.1	-9	-9		
130	2	148.8	35.617	35.625	19.933	19.905	25.258	0.039	0.0	0.1	2	0.13	1.1	2	-9	-9	9	224.52	2	331	2	2035.5	2	8.0404	2	-9	5	-9	63.9	-9	-9	-9		
129	3	174.0	35.470	35.514	19.274	19.242	25.318	0.036	0.0	0.0	2	0.14	1.2	2	-9	-9	9	223.58	2	335	2	2033.6	2	8.0343	2	-9	5	-9	-9	-9	-9	-9		
128	2	199.6	35.357	35.350	18.644	18.609	25.393	0.031	0.0	0.2	2	0.18	1.2	2	-9	-9	1	221.79	2	358	2	2040.5	2	8.0072	2	-9	5	-9	64.3	-9	-9	-9		
127	2	248.7	34.852	34.870	15.539	15.500	25.747	0.025	0.0	3.7	2	0.45	1.5	2	-9	-9	9	210.67	2	429	2	2058.9	2	7.9353	2	-9	5	-9	-9	-9	-9	-9		
126	2	297.0	34.716	34.719	13.808	13.765	26.017	0.022	0.0	7.6	2	0.70	2.2	2	-9	-9	9	202.31	2	503	2	2180.5	3	7.8820	2	-9	5	-9	45.9	3.7	-9	-9		
125	2	347.1	34.489	34.489	11.334	11.290	26.325	0.020	0.0	13.4	2	1.09	3.6	2	-9	-9	9	197.17	2	613	2	2103.3	2	7.8049	2	-9	5	-9	-9	-9	-9	-9		
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9			
123	2	398.9	34.393	34.393	9.107	9.064	26.632	0.018	0.0	22.3	2	1.73	9.0	2	-9	-9	9	163.97	2	878	2	2154.9	3	7.6715	2	-9	5	-9	46.5	-9	-9	-9		
122	2	450.5	34.383	34.381	7.995	7.949	26.797	0.020	0.0	26.5	2	1.96	12.3	2	-9	-9	9	157.44	2	965	2	2174.3	3	-9	9	-9	5	-9	-9	-9	-9	-9		
121	2	501.2	34.364	34.366	7.061	7.013	26.916	0.019	0.0	28.9	2	2.06	14.3	2	-9	-9	9	162.90	2	1028	2	2161.3	2	7.6108	2	-9	5	-9	-9	-9	-9	-9	-9	
120	2	599.0	34.299	34.300	5.894	5.842	27.019	0.017	0.0	26.0	2	1.82	11.3	2	-9	-9	9	231.02	2	824	2	2146.8	2	7.7025	2	-9	5	-9	44.8	2.8	-9	-9		
119	2	696.9	34.291	34.293	5.446	5.387	27.068	0.017	0.0	28.6	2	2.01	16.0	2	-9	-9	9	212.99	2	897	2	-9	9	7.6663	2	-9	5	-9	-9	-9	-9	-9	-9	
118	2	802.0	34.312	34.311	4.958	4.893	27.142	0.015	0.0	32.0	2	2.24	2.55	2	-9	-9	9	185.42	2	1024	2	2190.8	2	7.6130	2	-9	5	-9	39.0	-9	-9	-9	-9	
117	2	896.5	34.334	34.333	4.560	4.489	27.220	0.015	0.0	35.1	2	2.49	37.6	2	-9	-9	9	157.17	2	1157	2	2217.9	2	7.5647	2	-9	5	-9	-9	-9	-9	-9	-9	
116	2	1000.7	34.406	34.405	4.111	4.035	27.310	0.012	0.0	37.2	2	2.63	52.2	2	-9	-9	9	138.54	2	1269	2	2243.2	2	7.5315	2	-9	5	-9	39.1	3.0	-9	-9	-9	
115	2	1099.3	34.455	34.453	3.855	3.772	27.376	0.012	0.0	38.0	2	2.67	64.8	2	-9	-9	9	127.98	6	-9	9	-9	9	-9	-9	-9	9	-9	-9	-9	-9	-9	-9	
114	2	1199.0	34.495	34.493	3.555	3.466	27.438	0.010	0.0	38.0	2	2.71	74.6	2	-9	-9	9	126.10	2	-9	9	-9	9	7.5213	2	-9	9	-9	-9	-9	-9	-9	-9	
113	2	1297.8	34.521	34.523	3.271	3.177	27.486	0.010	0.0	37.5	2	2.68	81.0	2	-9	-9	9	131.01	2	-9	9	-9	9	-9	-9	-9	9	-9	-9	-9	-9	-9	-9	
112	2	1398.8	34.545	34.545	2.945	2.847	27.536	0.008	0.0	36.7	2	2.62	87.0	2	-9	-9	9	139.71	2	-9	9	-9	9	7.5464	2	-9	9	-9	-9	-9	-9	-9	-9	
111	2	1501.8	34.570	34.568	2.675	2.571	27.580	0.008	0.0	36.4	2	2.57	92.7	2	-9	-9	9	145.16	2	-9	9	-9	9	7.5615	2	-9	9	-9	-9	-9	-9	-9	-9	
110	2	1598.1	34.588	34.588	2.476	2.367	27.612	0.006	0.0	36.4	2	2.54	97.0	2	-9	-9	9	152.40	2	-9	9	-9	9	7.5701	2	-9	9	-9	-9	-9	-9	-9	-9	
109	2	1799.1	34.619	34.618	2.205	2.082	27.660	0.005	0.0	36.0	2	2.54	106.0	2	-9	-9	9	152.40	2	-9	9	-9	9	7.5701	2	-9	9	-9	-9	-9	-9	-9	-9	
108	2	1999.1	34.639	34.637	2.039	1.902	27.690	0.004	0.0	35.7	2	2.51	113.2	2	-9	-9	9	154.64	2	-9	9	-9	9	-9	-9	-9	9	-9	-9	-9	-9	-9	-9	
107	2	2216.2	34.652	34.651	1.940	1.786	27.710	0.003	0.0	35.6	2	2.51	117.2	2	-9	-9	9	156.66	6	-9	9	-9	9	-9	-9	-9	9	-9	-9	-9	-9	-9	-9	
106	2	2498.8	34.661	34.659	1.892	1.714	27.722	0.002	0.0	35.4	2	2.49	119.4	2	-9	-9	9	158.88	2	-9	9	-9	9	-9	-9	-9	9	-9	-9	-9	-9	-9	-9	
105	2	2750.1	34.666	34.664	1.879	1.678	27.729	0.002	0.0	35.3	2	2.50	119.5	2	-9	-9	9	157.85	2	-9	9	-9	9	-9	-9	-9	9	-9	-9	-9	-9	-9	-9	-9
104	2	3001.1	34.670	34.664	1.880	1.655	27.734	0.002	0.0	35.7	2	2.51	119.1	2	-9	-9	9	157.62	6	-9	9	-9	9	-9	-9	-9	9	-9	-9	-9	-9	-9	-9	-9
103	2	3249.9	34.672	34.671	1.892	1.642	27.736	0.001	0.0	36.0	2	2.41	120.0	2	-9	-9	9	157.18	2	-9	9	-9	9	-9	-9	-9	9	-9	-9	-9	-9	-9	-9	-9
102	2	3250.3	34.671	34.672	1.892	1.642	27.736	0.001	0.0	35.7	2	2.50	121.7	2	-9	-9	9	157.85	2	-9	9	-9	9	-9	-9	-9	9	-9	-9	-9	-9	-9	-9	-9
101	2	3488.7	34.672	34.673	1.915	1.639	27.737	0.002	0.0	35.6	2	2.50	121.8	2	-9	-9	9	158.09	2	-9	9	-9	9	-9	-9	-9	9	-9	-9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column

** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 87 DATE 3/23/94 LATITUDE 26°0.0'S Btm Depth: 3464
 CAST 1 LONGITUDE 103°0.0'W

Sample ID	Pressure db	Salinity P ^o	Salinity CTD	Temp °C	Temp °C	Sigma T	Atm cp	NO2 P ^o	NO3 P ^o	PO4 P ^o	P ^o S(OH)4 P ^o	CFC-11 P ^o	CFC-12 P ^o	O2 P ^o	P ^o @20°C P ^o	DIC P ^o	pH P ^o	TA P ^o	TA K P ^o	513C TOC per mil	TON P ^o	CH4 Phase P ^o			
																							µmol/kg	µmol/kg	µmol/kg
136	2	35.986	2	35.984	2	24.333	24.289	0.056	0.0	2	0.1	2	1.987	2	211.13	2	2047.3	2	8.0571	2	-9	-9			
135	2	35.978	2	35.975	2	24.203	24.198	0.045	0.0	2	0.0	2	1.989	2	211.15	2	-9	9	2045.3	2	8.0589	2	-9		
134	2	36.069	2	36.068	2	24.195	24.185	0.049	0.0	2	0.0	2	2.019	2	212.95	2	2047.7	2	8.0599	2	-9	-9			
133	2	35.766	2	35.770	2	21.810	21.796	0.054	0.0	2	0.1	2	2.300	2	232.40	2	-9	9	2029.6	2	8.0605	2	-9		
132	2	35.727	2	35.728	2	21.025	21.005	0.047	0.0	2	0.1	2	2.283	2	231.66	2	319	2	2032.0	2	8.0573	2	-9		
131	2	35.766	2	35.766	2	20.737	20.734	0.044	0.0	2	0.0	2	2.316	2	228.05	2	-9	9	2038.9	2	8.0496	2	-9		
130	2	35.665	2	35.665	2	20.159	20.131	0.039	0.0	2	0.0	2	2.362	2	225.19	2	-9	9	2038.6	2	8.0427	2	-9		
129	2	35.478	2	35.479	2	19.230	19.194	0.031	0.0	2	0.0	2	2.410	2	223.63	2	349	2	2041.0	2	8.0219	2	-9		
128	2	35.099	2	35.107	2	16.901	16.860	0.024	0.0	2	1.7	2	2.724	2	210.89	2	-9	9	2054.4	2	7.9632	2	-9		
127	2	301.1	34.822	2	34.824	2	14.653	14.608	0.021	0.0	2	1.6	2	2.367	2	1.164	2	203.42	2	470	2	2070.4	2	-9	
126	2	401.6	34.431	2	34.430	2	9.726	9.680	0.020	0.0	2	1.9	2	1.520	2	0.738	2	167.89	2	807	2	2145.3	2	-9	
125	2	451.5	34.363	2	34.362	2	8.104	8.058	0.019	0.0	2	1.85	2	1.387	2	0.663	2	175.15	2	-9	9	2159.5	2	-9	
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
123	2	499.0	34.346	2	34.344	2	7.089	7.041	0.019	0.0	2	1.95	2	1.164	2	0.567	2	187.27	2	-9	9	2164.4	2	-9	
122	2	550.3	34.330	2	34.330	2	6.525	6.474	0.018	0.0	2	1.91	2	1.081	2	0.531	2	200.70	2	-9	9	2161.6	2	-9	
121	2	599.5	34.313	2	34.314	2	6.088	6.035	0.017	0.0	2	2.67	2	0.995	2	0.489	2	214.87	2	846	2	2158.1	2	-9	
120	2	698.6	34.289	2	34.287	2	5.501	5.442	0.017	0.0	2	2.78	2	0.667	2	0.352	2	219.52	2	-9	9	2160.0	2	-9	
119	2	799.9	34.297	2	34.296	2	4.945	4.890	0.016	0.0	2	3.10	2	0.285	2	0.161	2	197.14	2	6	977	2	2182.9	2	-9
118	2	900.2	34.345	2	34.345	2	4.519	4.448	0.015	0.0	2	3.47	2	0.062	2	0.046	2	162.38	2	-9	9	2213.5	2	-9	
117	2	998.4	34.394	2	34.394	2	4.129	4.052	0.014	0.0	2	3.64	2	0.018	2	0.015	2	143.80	2	1238	2	2240.5	2	-9	
116	2	1102.4	34.449	2	34.448	2	3.871	3.787	0.012	0.0	2	3.77	2	0.000	2	0.003	2	129.39	2	-9	9	2299.9	2	-9	
115	2	1200.2	34.487	2	34.485	2	3.523	3.435	0.010	0.0	2	3.78	2	0.000	2	0.002	2	129.47	2	-9	9	2313.5	2	-9	
114	2	1300.6	34.519	2	34.519	2	3.211	3.117	0.009	0.0	2	3.74	2	0.002	2	-0.001	2	134.44	2	-9	9	2344.4	2	-9	
113	2	1400.9	34.544	2	34.542	2	2.921	2.822	0.008	0.0	2	3.67	2	0.000	2	0.002	2	140.26	2	-9	9	2399.9	2	-9	
112	2	1500.7	34.568	2	34.567	2	2.654	2.550	0.006	0.0	2	3.63	2	-9	-9	-9	9	146.28	2	-9	9	2462.8	2	-9	
111	2	1601.2	34.586	2	34.585	2	2.488	2.378	0.006	0.0	2	3.63	2	0.015	2	0.001	2	149.03	2	-9	9	2499.3	2	-9	
110	2	1698.5	34.606	2	34.605	2	2.314	2.198	0.006	0.0	2	3.59	2	0.000	2	0.000	2	152.29	2	-9	9	2529.2	2	-9	
109	2	1799.3	34.620	2	34.621	2	2.196	2.073	0.004	0.0	2	3.58	2	-0.002	2	0.000	2	152.29	2	-9	9	2529.2	2	-9	
108	2	2001.4	34.639	2	34.639	2	2.043	1.906	0.003	0.0	2	3.56	2	-9	-9	-9	9	154.14	2	1168	2	-9	9	-9	
107	2	2248.3	34.654	2	34.654	2	1.933	1.777	0.003	0.0	2	3.54	2	-0.003	2	-0.003	2	156.01	2	-9	9	2560.1	2	-9	
106	2	2498.8	34.664	2	34.662	2	1.880	1.702	0.002	0.0	2	3.55	2	-9	-9	-9	9	156.68	2	-9	9	2566.8	2	-9	
105	2	2748.7	34.669	2	34.668	2	1.858	1.657	0.002	0.0	2	3.55	2	-0.007	2	-0.004	2	156.46	2	-9	9	2566.6	2	-9	
104	2	2998.8	34.675	2	34.673	2	1.845	1.621	0.001	0.0	2	3.56	2	-9	-9	-9	9	154.76	2	1153	2	-9	9	-9	
103	2	3249.5	34.679	2	34.679	2	1.835	1.586	0.001	0.0	2	3.52	2	-0.004	2	-0.002	2	152.72	2	-9	9	2572.2	2	-9	
102	2	3248.4	34.679	2	34.680	2	1.835	1.586	0.001	0.0	2	3.57	2	-9	-9	-9	9	152.83	2	-9	9	2572.2	2	-9	
101	2	3483.6	34.682	2	34.681	2	1.838	1.565	0.002	0.0	2	3.58	2	-0.001	2	0.000	2	151.53	2	1157	2	-9	9	-9	

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 89 DATE 3/28/94 LAITUDE 24°59.3'S Btm Depth: 3833
CAST 1 LONGITUDE 103°0.0'W

Sample ID	P _{se}	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma T	Sigma Anom	Beam	NO2 P _{se}	NO3 P _{se}	PO4 P _{se}	Si(OH) ₄ P _{se}	CFC-11 P _{se}	CFC-12 P _{se}	O2 P _{se}	F ₂ P _{se}	F ₁₂ P _{se}	DIC P _{se}	pH P _{se}	TAIK P _{se}	P _{se}	TAIK P _{se}	813C TOC per mil	TON μmol/L	Chl-a P _{se} μg/L	
																											Temp °C
136	2	10.2	36.020	2	36.018	2	24.461	24.459	24.276	0.038	0.0	0.2	0.13	2	1.965	2	1.075	2	2051.0	2	8.0579	2	2368	6	1.60	-9	-9
135	2	24.1	36.018	2	36.018	2	24.472	24.467	24.273	0.041	0.0	0.0	0.14	2	1.993	2	1.055	2	2047.6	2	8.0570	2	-9	5	1.60	-9	-9
134	2	49.6	35.992	2	36.006	2	24.319	24.309	24.301	0.046	0.0	0.0	0.12	2	2.001	2	1.081	2	2047.6	2	8.0562	2	2371	2	1.60	-9	-9
133	2	74.6	35.665	2	35.671	2	21.437	21.423	24.884	0.048	0.0	0.0	0.11	2	2.339	2	1.223	2	2056.9	2	8.0476	2	2352	2	1.60	-9	-9
132	2	101.4	35.668	2	35.671	2	20.654	20.634	25.102	0.046	0.0	0.0	0.10	2	2.337	2	1.224	2	2032.1	2	8.0476	2	2348	2	1.50	-9	-9
131	2	125.0	35.676	2	35.675	2	20.323	20.299	25.198	0.039	0.0	0.1	0.13	2	2.325	2	1.202	2	2037.0	2	8.0459	2	2346	2	1.50	-9	-9
130	2	150.0	35.588	2	35.589	2	19.825	19.798	25.264	0.037	0.0	0.0	0.13	2	2.375	2	1.231	2	2038.8	2	8.0296	2	2346	2	1.50	-9	-9
129	2	201.2	35.277	2	35.301	2	18.404	18.399	25.385	0.031	0.0	0.0	0.15	2	2.501	2	1.306	2	2037.1	2	8.0105	2	2323	2	1.50	-9	-9
128	3	250.9	34.942	-9	9	16.046	16.006	25.701	0.024	-9	9	9	9	9	2.308	2	1.207	2	2078.6	3	7.8850	2	2274	2	1.40	-9	-9
127	2	298.6	34.745	2	34.746	2	13.888	13.845	26.023	0.021	0.0	7.1	0.63	2	2.261	2	1.106	2	2108.4	3	7.8850	2	2274	2	1.40	-9	-9
126	2	349.7	34.485	2	34.481	2	11.217	11.173	26.343	0.019	0.0	13.8	1.08	2	2.057	6	1.005	6	2144.2	3	-9	1	2277	2	1.30	-9	-9
125	2	397.9	34.387	2	34.385	2	9.314	9.269	26.595	0.019	0.0	20.2	1.50	2	1.694	2	0.794	2	2170.0	3	7.7013	2	2274	2	1.10	-9	-9
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	-9
123	2	502.1	34.346	2	34.346	2	6.833	6.786	26.933	0.018	0.0	26.9	1.87	2	1.001	2	0.495	2	2157.1	2	7.6369	2	2278	3	1.00	-9	-9
122	2	600.1	34.304	2	34.304	2	5.860	5.808	27.027	0.017	0.0	26.4	1.80	2	0.833	2	0.427	2	2172.5	2	7.6801	2	2286	2	-9	-9	-9
121	2	698.2	34.292	2	34.292	2	5.256	5.199	27.091	0.016	0.0	28.8	1.94	2	0.454	2	0.242	2	2172.8	2	7.6480	2	2283	2	1.10	-9	-9
120	2	795.3	34.335	2	34.337	2	4.847	4.783	27.173	0.016	0.0	33.2	2.24	2	0.126	2	0.074	2	2209.1	2	7.5796	2	2291	2	0.80	-9	-9
119	2	900.5	34.384	2	34.385	2	4.443	4.373	27.257	0.015	0.0	35.9	2.42	2	0.088	6	0.025	6	2235.6	2	7.5362	2	2313	2	0.60	-9	-9
118	2	1000.9	34.438	2	34.438	2	4.068	3.992	27.340	0.012	0.0	36.8	2.58	2	0.027	2	0.008	2	2255.1	2	7.5201	2	2326	6	0.50	-9	-9
117	2	1101.0	34.476	2	34.474	2	3.783	3.700	27.399	0.010	0.0	36.9	2.59	2	0.006	2	0.006	2	2270.7	2	7.5344	2	2346	2	0.30	-9	-9
116	2	1201.8	34.512	2	34.512	2	3.487	3.399	27.458	0.010	0.0	36.1	2.55	2	0.006	2	0.001	2	2270.7	2	7.5344	2	2346	2	0.30	-9	-9
115	2	1297.8	34.531	2	34.532	2	3.246	3.152	27.497	0.009	0.0	35.8	2.53	2	0.010	2	0.000	2	2274.2	2	7.5448	2	2354	2	0.30	-9	-9
114	2	1400.0	34.552	2	34.553	2	2.975	2.876	27.539	0.008	0.0	35.9	2.52	2	0.013	2	0.007	2	2279.5	2	7.5504	2	2364	2	0.40	-9	-9
113	2	1499.8	34.569	2	34.569	2	2.757	2.652	27.572	0.008	0.0	36.2	2.52	2	0.005	2	9	9	2289.1	2	7.5590	2	2374	2	0.30	-9	-9
112	2	1599.7	34.584	2	34.585	2	2.590	2.479	27.599	0.007	0.0	36.2	2.52	2	0.003	2	0.002	2	2289.1	2	7.5590	2	2374	2	0.30	-9	-9
111	2	1799.6	34.615	2	34.616	2	2.265	2.141	27.652	0.004	0.0	35.7	2.45	2	0.002	2	9	9	2292.0	2	7.5627	2	2376	2	0.30	-9	-9
110	2	2001.5	34.636	2	34.636	2	2.082	1.944	27.684	0.003	0.0	35.3	2.42	2	0.017	2	0.001	2	2295.6	2	7.5744	2	2391	2	0.20	-9	-9
109	2	2248.2	34.655	2	34.655	2	1.936	1.779	27.712	0.003	0.0	34.9	2.41	2	0.002	2	9	9	2298.4	2	7.5789	2	2387	2	0.20	-9	-9
108	2	2499.7	34.664	2	34.665	2	1.872	1.694	27.726	0.002	0.0	34.6	2.39	2	-0.008	2	-0.002	2	2301.1	2	7.5845	2	2394	2	0.20	-9	-9
107	2	2746.4	34.671	2	34.671	2	1.838	1.638	27.736	0.001	0.0	34.6	2.40	2	9	9	9	9	2304.1	2	7.5851	2	2403	2	0.20	-9	-9
106	2	2999.4	34.678	2	34.678	2	1.813	1.590	27.745	0.001	0.0	34.8	2.42	2	0.003	2	0.002	2	2311.2	2	7.5874	2	2405	2	0.20	-9	-9
105	2	3251.7	34.682	2	34.682	2	1.808	1.560	27.750	0.001	0.0	34.9	2.46	2	9	9	9	9	2316.5	2	7.5880	2	2414	2	0.20	-9	-9
104	2	3498.4	34.683	2	34.683	2	1.827	1.552	27.752	0.001	0.0	35.1	2.47	2	0.004	2	0.000	2	2320.6	2	7.5862	2	2418	2	0.20	-9	-9
103	2	3749.7	34.683	2	34.683	2	1.848	1.547	27.752	0.001	0.0	35.3	2.44	2	0.002	2	0.001	2	2320.9	2	7.5878	2	2412	2	0.20	-9	-9
102	2	3751.4	34.683	2	34.684	2	1.848	1.547	27.752	0.001	0.0	35.2	2.43	2	0.001	2	0.011	2	2319.9	2	7.5868	2	2409	2	0.10	-9	-9
101	2	3860.3	34.684	2	34.685	2	1.838	1.544	27.753	0.002	0.0	35.5	2.44	2	9	9	9	9	2320.6	2	7.5868	2	2418	2	0.20	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 90 3 DATE 3/29/94 LATITUDE 24°30.1'S Btm Depth: 3644
 CAST 3 LONGITUDE 102°59.8'W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma T	Theta cp	NO2 μmol/kg	PO4 μmol/kg	Si(OH)4 μmol/kg	CRC-11 μmol/kg	CRC-12 μmol/kg	O2 μmol/kg	F ²⁰ μmol/kg	CO2 μmol/kg	DIC μmol/kg	pH	P ³⁰ μmol/kg	TALK μmol/kg	P ³⁰ μmol/kg	TON μmol/L	TOC μmol/L	813C per mil	Chi-s	Phase μg/L	
																										Beam Attenuation
336	9.8	36.025	36.024	24.567	24.565	24.249	0.040	0.0	0.15	1.3	1.986	1.070	210.84	323	2055.6	3	8.0533	2	2371	6	4.3	78.8	-9	0.022	0.006	
335	23.6	36.025	36.023	24.547	24.542	24.255	0.043	0.0	0.14	1.4	-9	-9	214.12	-9	-9	9	8.0546	2	-9	9	4.7	80.6	-9	0.023	0.009	
334	50.2	36.004	36.003	24.401	24.390	24.285	0.049	0.0	0.13	1.4	2.006	1.056	212.54	325	2050.3	2	8.0510	2	2370	2	4.3	75.3	-9	0.024	0.007	
333	75.7	35.724	35.707	22.038	22.023	24.761	0.052	0.0	0.14	1.5	-9	-9	232.54	-9	-9	9	8.0491	2	-9	9	4.5	79.1	-9	0.034	0.016	
332	101.0	35.654	35.674	21.048	21.028	24.984	0.051	0.0	0.14	1.4	2.332	1.226	230.29	326	2032.6	2	8.0523	2	2332	3	4.3	76.8	-9	0.044	0.017	
331	119.0	35.581	35.581	20.369	20.347	25.113	0.046	0.0	0.14	1.3	-9	-9	232.70	-9	-9	9	8.0428	2	-9	9	4.0	76.2	-9	0.057	0.023	
330	150.9	35.520	35.521	19.685	19.657	25.249	0.040	0.0	0.13	1.1	2.424	1.260	221.96	-9	-9	9	8.0333	2	-9	9	-9	-9	-9	0.093	0.043	
329	200.6	35.355	-9	18.603	18.568	25.402	0.034	-9	-9	-9	2.490	1.279	-9	1	-9	9	-9	-9	9	9	-9	-9	-9	-9	-9	-9
328	223.5	35.180	35.193	17.513	17.475	25.538	0.030	0.0	0.27	1.4	-9	-9	121.67	394	2053.5	2	7.9778	2	2316	2	-9	-9	-9	0.084	0.104	
327	249.3	34.973	34.970	16.254	16.214	25.678	0.025	0.0	0.38	1.5	-9	-9	209.25	-9	-9	9	7.9494	2	-9	9	-9	-9	-9	0.051	0.054	
326	301.7	34.586	34.574	13.040	12.998	26.072	0.022	0.0	0.81	2.7	2.360	1.157	197.87	549	2084.1	2	7.8527	2	2282	2	-9	60.3	-9	0.005	0.007	
325	351.6	34.447	34.449	10.693	10.651	26.467	0.020	0.0	1.19	2.9	-9	-9	191.88	-9	-9	9	-9	9	9	9	-9	-9	-9	-9	-9	
324	399.6	34.399	34.398	9.025	8.982	26.650	0.020	0.0	1.64	2.8	1.456	0.708	173.42	852	2148.8	2	7.6886	2	2281	2	-9	-9	-9	-9	-9	
323	449.8	34.378	34.381	7.673	7.628	26.840	0.020	0.0	2.01	2.13	-9	-9	151.05	-9	-9	9	7.6060	2	-9	9	-9	-9	-9	-9	-9	
322	498.7	34.352	34.351	6.795	6.749	26.942	0.019	0.0	1.96	2.1	0.903	0.442	176.72	985	2173.8	2	7.6276	2	2282	2	-9	-9	-9	-9	-9	
321	549.6	34.326	34.325	6.275	6.226	26.991	0.018	0.0	1.86	2.13	-9	-9	201.76	-9	-9	9	7.6648	2	-9	9	-9	-9	-9	-9	-9	
320	599.0	34.310	34.308	5.897	5.845	27.027	0.017	0.0	1.88	2.14	0.791	0.407	207.76	897	2162.4	2	7.6672	2	2277	2	-9	49.9	-9	-9	-9	
319	649.6	34.304	34.302	5.364	5.306	27.088	0.017	0.0	2.03	2.02	-9	-9	196.02	6	870	2	7.6369	2	2282	2	-9	-9	-9	-9	-9	
318	699.4	34.448	34.447	3.968	3.893	27.358	0.012	0.0	2.26	2.35	0.132	0.072	166.69	1130	2209.1	2	7.5812	2	2297	2	-9	-9	-9	-9	-9	
317	800.5	34.337	34.336	4.733	4.669	27.187	0.014	0.0	2.26	2.35	-9	-9	138.45	1265	2238.3	2	7.5340	2	2307	2	-9	-9	-9	-9	-9	
316	900.2	34.394	34.392	4.356	4.286	27.274	0.015	0.0	2.47	2.47	0.026	0.005	126.14	1323	2260.7	2	7.5195	2	2328	6	-9	50.6	-9	-9	-9	
315	999.4	34.448	34.447	3.968	3.893	27.358	0.012	0.0	2.57	2.70	-9	-9	126.04	-9	-9	9	-9	9	9	9	-9	-9	-9	-9	-9	
314	1097.3	34.409	34.406	3.718	3.636	27.416	0.011	0.0	2.50	2.78	0.333	0.199	131.12	-9	-9	9	-9	9	9	9	-9	-9	-9	-9	-9	
313	1198.6	34.518	34.517	3.427	3.340	27.469	0.010	0.0	2.55	2.91	-9	-9	137.38	-9	-9	9	-9	9	9	9	-9	-9	-9	-9	-9	
312	1401.7	34.557	34.555	2.956	2.857	27.545	0.008	0.0	2.49	2.10	-9	-9	138.07	-9	-9	9	-9	9	9	9	-9	-9	-9	-9	-9	
311	1598.3	34.588	34.587	2.593	2.482	27.602	0.006	0.0	2.49	2.10	0.009	0.003	150.49	-9	-9	9	-9	9	9	9	-9	-9	-9	-9	-9	
310	1800.2	34.614	34.612	2.315	2.191	27.647	0.005	0.0	2.42	2.14	-9	-9	152.07	-9	-9	9	-9	9	9	9	-9	-9	-9	-9	-9	
309	1998.4	34.633	34.633	2.099	1.961	27.682	0.004	0.0	2.41	2.10	-9	-9	153.85	-9	-9	9	-9	9	9	9	-9	-9	-9	-9	-9	
308	2250.4	34.653	34.651	1.958	1.801	27.709	0.003	0.0	2.42	2.14	-9	-9	155.11	-9	-9	9	-9	9	9	9	-9	-9	-9	-9	-9	
307	2498.3	34.664	34.662	1.875	1.697	27.726	0.002	0.0	2.41	2.17	-9	-9	157.21	-9	-9	9	-9	9	9	9	-9	-9	-9	-9	-9	
306	2747.8	34.670	34.668	1.845	1.645	27.735	0.002	0.0	2.39	2.12	-9	-9	159.12	-9	-9	9	-9	9	9	9	-9	-9	-9	-9	-9	
305	2997.3	34.676	34.674	1.818	1.595	27.743	0.001	0.0	2.39	2.12	-9	-9	161.22	-9	-9	9	-9	9	9	9	-9	-9	-9	-9	-9	
304	3249.4	34.681	34.679	1.806	1.558	27.750	0.001	0.0	2.43	2.16	-9	-9	163.22	-9	-9	9	-9	9	9	9	-9	-9	-9	-9	-9	
303	3499.3	34.684	34.683	1.814	1.540	27.753	0.001	0.0	2.42	2.17	-9	-9	165.12	-9	-9	9	-9	9	9	9	-9	-9	-9	-9	-9	
302	3497.7	34.684	34.683	1.814	1.540	27.753	0.002	0.0	2.45	2.12	-9	-9	167.12	-9	-9	9	-9	9	9	9	-9	-9	-9	-9	-9	
301	3620.5	34.684	34.683	1.821	1.534	27.755	0.002	0.0	2.47	2.16	-9	-9	169.12	-9	-9	9	-9	9	9	9	-9	-9	-9	-9	-9	

* WOCE water sample quality flag (F) for parameter from previous column

** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 92 DATE 3/20/94 LATITUDE 23°29.7S Btm Depth: 3906
CAST 1 LONGITUDE 102°59.7W

Sample ID	Pressure db	Salinity P _{se}	Temp °C	Temp °C	Sigma-t	Sigma-t	Auton	Beam	NO2 P _{se}	NO3 P _{se}	PO4 P _{se}	P _{se} Si(OH) ₄	CFC-11 P _{se}	CFC-12 P _{se}	O2 P _{se}	P _{se} @20°C	DIC P _{se}	pH	TALK P _{se}	P _{se}	δ13C	TOC	TON	Chi-a	Phaeo										
																										µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg
136	2	36.045	2	24.551	24.549	24.368	0.039	0.0	2	0.1	2	0.17	2	1.962	4	1.089	4	210.18	2	334	2	2056.0	2	8.0476	2	2372	6	-9	64.7	5.6	-9	-9			
135	2	36.046	2	24.429	24.424	24.307	0.044	0.0	2	0.1	2	0.17	2	1.2	2	-9	9	-9	9	8.0475	2	-9	9	70.5	5.5	-9	-9	-9	-9	-9	-9	-9			
134	3	36.091	2	24.308	24.297	24.379	0.048	-9	9	-9	9	-9	9	2.020	2	1.078	2	213.74	2	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
133	2	35.797	2	22.056	22.041	24.812	0.050	0.0	2	0.1	2	0.15	2	-9	9	-9	9	229.93	2	-9	9	-9	9	8.0431	2	-9	9	66.7	4.8	-9	-9	-9			
132	2	35.790	2	21.093	21.015	25.046	0.050	0.0	2	0.0	2	0.13	2	-9	9	-9	9	232.66	2	334	3	2040.3	2	8.0463	2	2333	2	-9	62.1	4.8	-9	-9			
131	2	35.702	2	20.998	20.375	25.198	0.045	0.0	2	0.0	2	0.19	2	-9	9	-9	9	229.19	2	-9	9	-9	9	8.0362	2	-9	9	63.2	4.8	-9	-9	-9			
130	2	35.639	2	19.925	19.898	25.276	0.038	0.0	2	0.0	2	0.20	2	2.365	2	1.232	2	226.63	6	-9	9	-9	9	8.0279	2	-9	9	62.5	4.8	-9	-9	-9			
129	2	198.7	35.333	2	18.446	18.411	25.425	0.033	0.1	2	0.2	0.24	2	1.1	2	-9	9	220.70	2	370	2	2051.6	2	7.9976	2	2328	2	-9	57.1	4.8	-9	-9			
128	2	248.1	34.783	2	15.301	15.263	25.747	0.027	0.0	2	0.3	0.24	2	1.5	2	1.294	2	208.12	2	-9	9	-9	9	7.9178	2	-9	9	-9	-9	-9	-9	-9			
127	2	300.8	34.556	2	12.726	12.686	26.111	0.021	0.0	2	0.6	0.91	2	3.4	2	1.118	2	191.86	2	568	2	2093.9	2	7.8330	2	2278	2	-9	46.6	3.9	-9	-9			
126	2	349.8	34.471	2	10.831	10.788	26.401	0.019	0.0	2	1.6	1.36	2	6.9	2	-9	9	170.10	2	-9	9	-9	9	7.7346	2	-9	9	-9	-9	-9	-9	-9			
125	2	397.3	34.419	2	9.037	8.994	26.564	0.020	0.0	2	2.3	1.83	2	11.5	2	0.380	2	147.64	6	952	2	2169.2	2	-9	9	2276	2	-9	46.1	4.8	-9	-9			
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
123	2	498.0	34.358	2	6.721	6.675	26.957	0.019	0.0	2	2.8	2.05	2	15.4	2	-9	9	167.49	2	1032	2	2180.8	2	7.6083	2	2277	2	-9	-9	-9	-9	-9	-9	-9	
122	2	601.1	34.321	2	5.821	5.769	27.045	0.017	0.0	2	2.9	2.01	2	17.8	2	0.480	6	187.55	2	977	2	2177.0	2	7.6313	2	2281	2	-9	47.2	3.8	-9	-9	-9		
121	2	700.6	34.325	2	5.197	5.139	27.124	0.017	0.0	2	3.2	2.17	2	26.3	2	0.231	2	172.62	2	1072	2	2196.9	2	7.5942	2	2289	2	-9	-9	-9	-9	-9	-9	-9	
120	3	799.4	34.368	2	4.751	4.687	27.210	0.016	0.0	2	3.5	2.41	2	39.2	2	-9	9	-9	9	1214	2	2226.5	2	7.5449	2	2303	2	-9	45.8	-9	-9	-9	-9	-9	
119	2	900.3	34.413	2	4.309	4.240	27.294	0.015	0.0	2	3.6	2.54	2	52.1	2	-9	9	129.95	2	1308	2	2246.9	2	7.5208	2	2315	2	-9	-9	-9	-9	-9	-9	-9	
118	3	998.9	34.463	2	3.989	3.884	27.371	0.013	0.0	2	3.7	2.61	2	64.8	2	0.010	2	123.76	2	1332	2	2263.4	2	7.5174	2	2332	6	-9	41.1	2.6	-9	-9	-9	-9	
117	2	1100.4	34.507	2	3.667	3.586	27.436	0.011	0.0	2	3.7	2.60	2	74.8	2	-9	9	128.32	2	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
116	2	1198.7	34.531	2	3.379	3.293	27.483	0.010	0.0	2	3.6	2.57	2	81.9	2	-9	9	132.08	6	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
115	2	1299.5	34.548	2	3.165	3.072	27.517	0.009	0.0	2	3.7	2.55	2	89.3	2	-9	9	138.84	2	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
114	2	1402.2	34.563	2	2.942	2.843	27.551	0.008	0.0	2	3.7	2.57	2	96.3	2	-9	9	132.49	2	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
113	2	1698.6	34.580	2	2.761	2.656	27.580	0.006	0.0	2	3.7	2.58	2	101.6	2	0.006	2	131.18	2	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
112	2	1600.9	34.592	2	2.597	2.485	27.605	0.006	0.0	2	3.6	2.56	2	104.4	2	-9	9	133.72	2	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
111	2	1800.2	34.616	2	2.285	2.161	27.632	0.004	0.0	2	3.5	2.49	2	109.0	2	-9	9	146.18	2	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
110	2	1999.2	34.638	2	2.078	1.941	27.686	0.003	0.0	2	3.5	2.45	2	113.5	2	-9	9	151.43	2	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
109	2	2249.4	34.653	2	1.998	1.782	27.712	0.002	0.0	2	3.5	2.42	2	116.9	2	0.001	2	155.33	2	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
108	2	2499.4	34.665	2	1.866	1.688	27.728	0.002	0.0	2	3.5	2.38	2	118.4	2	-9	9	157.32	2	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
107	2	2721.2	34.672	2	1.831	1.634	27.737	0.001	0.0	2	3.4	2.39	2	120.3	2	-9	9	157.05	2	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
106	2	3000.5	34.678	2	1.801	1.577	27.746	0.001	0.0	2	3.5	2.42	2	123.8	2	-9	9	155.00	2	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
105	2	3250.9	34.681	2	1.797	1.549	27.751	0.000	0.0	2	3.5	2.45	2	127.1	2	-9	9	157.32	2	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
104	2	3491.4	34.684	2	1.804	1.531	27.755	0.001	0.0	2	3.5	2.43	2	130.7	2	-9	9	150.57	2	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
103	2	3747.2	34.685	2	1.824	1.524	27.756	0.001	0.0	2	3.5	2.43	2	132.1	2	-9	9	150.45	2	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
102	2	3748.6	34.685	2	1.824	1.523	27.756	0.001	0.0	2	3.5	2.43	2	131.6	2	-9	9	150.45	2	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
101	2	3955.5	34.685	2	1.846	1.523	27.756	0.001	0.0	2	3.5	2.44	2	130.8	2	-9	9	149.60	2	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94
WOCE P18
NOAA Ship Discoverer

STATION 93 DATE 3/20/94 LATITUDE 23°0.1'S Btm Depth: 4021 CHL-a Phaeo
CAST 1 LONGITUDE 102°59.8'W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma T	Sigma T	Theta	cp	NO2 µmol/kg	NO3 µmol/kg	PO4 µmol/kg	Si(OH)4 µmol/kg	CFC-11 µmol/kg	CFC-12 µmol/kg	O2 µmol/kg	F ₂ @20°C µatm	DIC µmol/kg	pH	P _{TALK} µmol/kg	P _{TALK} µmol/kg	813C TOC per mil µmol/L	TON µmol/L	µg/L								
																									Potential	Beam						
136	2	10.3	36.289	2	36.288	2	24.640	24.637	24.426	0.037	0.0	0.1	2	1.959	2	1.050	2	205.08	2	345	3	2063.2	2	8.0616	2	2590	2	1.70	-9	-9		
135	2	24.5	36.297	2	36.295	2	24.595	24.589	24.447	0.045	0.0	0.0	2	1.974	6	1.053	6	205.89	2	-9	9	2063.3	2	8.0582	2	2391	6	-9	-9	-9		
134	2	53.8	36.300	2	36.300	2	24.269	24.258	24.549	0.049	0.0	0.0	2	2.094	2	1.058	2	213.75	2	326	2	2068.6	2	8.0573	2	2389	2	-9	-9	-9		
133	2	75.0	35.852	2	35.880	3	21.814	21.799	24.922	0.051	0.0	0.0	2	2.313	2	1.195	2	229.21	2	326	2	2090.6	2	8.0567	2	2359	2	-9	-9	-9		
132	2	99.5	35.938	2	35.962	2	21.505	21.486	25.074	0.047	0.0	0.0	2	2.235	6	1.181	6	225.55	2	327	2	2055.9	2	8.0478	2	-9	5	-9	-9	-9		
131	2	126.4	35.882	2	35.902	2	20.951	20.926	25.186	0.043	0.0	0.0	2	2.270	2	1.168	2	222.60	2	341	2	2059.1	2	8.0560	2	2368	2	-9	-9	-9		
130	2	144.6	35.816	2	35.814	2	20.626	20.599	25.224	0.043	0.0	0.0	2	2.306	2	1.180	2	221.07	6	331	2	2046.6	2	8.0416	2	2354	2	-9	-9	-9		
129	2	201.8	35.492	2	35.483	2	19.033	18.997	25.398	0.034	0.1	0.2	2	2.369	2	1.229	2	214.16	2	346	2	2049.9	2	8.0047	2	2334	2	-9	-9	-9		
128	2	248.8	35.087	2	35.089	2	16.722	16.681	25.656	0.024	0.0	2.2	2	2.433	2	1.241	2	207.07	2	415	2	2057.6	2	7.9543	2	2309	2	-9	-9	-9		
127	2	299.9	34.708	2	34.702	2	13.665	13.622	26.040	0.021	0.0	8.3	2	1.444	4	1.079	2	192.86	2	531	3	2085.8	2	7.8622	2	2288	2	-9	-9	-9		
126	2	353.6	34.504	2	34.502	2	11.042	10.998	26.390	0.019	0.0	16.4	2	1.635	6	0.794	6	164.92	2	734	2	2131.6	2	7.7376	2	2278	2	-9	-9	-9		
125	2	400.8	34.431	2	34.431	2	9.089	9.045	26.665	0.020	0.0	24.8	2	0.997	2	0.501	2	130.65	2	1032	3	2181.8	2	7.6078	2	2276	2	-9	-9	-9		
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
123	2	499.3	34.369	2	34.370	2	6.867	6.820	26.947	0.019	0.0	29.8	2	0.557	2	0.293	2	151.46	2	1098	2	2191.7	2	7.5811	2	2277	2	-9	-9	-9	-9	-9
122	2	599.6	34.319	2	34.319	2	5.801	5.749	27.046	0.017	0.0	29.5	2	0.455	2	0.242	2	187.97	2	978	2	2178.2	2	7.6312	2	2284	2	-9	-9	-9	-9	-9
121	2	699.5	34.328	2	34.329	2	5.240	5.182	27.121	0.017	0.0	32.6	2	0.176	2	0.106	2	169.05	2	1084	2	2199.1	2	7.5925	2	2293	2	-9	-9	-9	-9	-9
120	2	800.0	34.371	2	34.370	2	4.728	4.665	27.214	0.016	0.0	35.8	2	0.041	2	0.074	2	132.78	6	1239	2	2228.3	2	7.5404	2	2302	2	-9	-9	-9	-9	-9
119	2	882.5	34.405	2	34.406	2	4.385	4.316	27.280	0.014	0.0	37.4	2	0.009	6	0.003	6	128.06	2	1306	2	2263.9	2	7.5245	2	2333	2	-9	-9	-9	-9	-9
118	2	997.3	34.472	2	34.474	2	3.974	3.899	27.377	0.012	0.0	37.4	2	-0.002	2	0.003	2	113.25	2	1316	2	2263.3	2	7.5225	2	2332	2	-9	-9	-9	-9	-9
117	2	1098.6	34.512	2	34.513	2	3.751	3.669	27.482	0.011	0.1	37.5	2	-9	1	-9	1	102.04	2	1299	2	2272.2	2	7.5307	2	2344	2	-9	-9	-9	-9	-9
116	2	1183.8	34.529	2	34.529	2	3.536	3.449	27.467	0.009	0.0	37.3	2	0.001	2	0.001	2	126.03	2	1296	2	2277.8	2	7.5288	2	2354	2	-9	-9	-9	-9	-9
115	2	1400.1	34.565	2	34.565	2	3.024	2.924	27.545	0.008	0.0	37.4	2	-0.002	6	0.001	6	122.60	2	1330	2	2295.7	2	7.5242	2	2364	2	-9	-9	-9	-9	-9
114	2	1583.3	34.586	2	34.587	2	2.682	2.571	27.593	0.006	0.0	37.2	2	0.002	2	0.003	2	131.12	2	1285	2	2298.2	2	7.5375	2	2375	2	-9	-9	-9	-9	-9
113	2	1803.2	34.613	2	34.612	2	2.339	2.214	27.644	0.004	0.0	36.0	2	-9	9	-9	9	142.33	2	1202	2	2298.4	2	7.5398	2	2389	2	-9	-9	-9	-9	-9
112	2	2000.3	34.635	2	34.636	2	2.111	1.973	27.681	0.004	0.0	35.2	2	0.001	2	0.001	2	149.41	2	1202	2	2298.4	2	7.5695	2	2389	2	-9	-9	-9	-9	-9
111	2	2200.4	34.651	2	34.650	2	1.979	1.825	27.705	0.003	0.1	35.0	2	-9	9	-9	9	153.50	2	1175	2	2301.8	2	7.5759	2	2386	2	-9	-9	-9	-9	-9
110	2	2400.1	34.661	2	34.661	2	1.893	1.724	27.722	0.002	0.1	35.1	2	-9	9	-9	9	156.30	6	1169	2	2306.8	2	7.5812	2	2393	2	-9	-9	-9	-9	-9
109	2	2601.1	34.668	2	34.670	2	1.845	1.658	27.732	0.001	0.0	34.8	2	0.002	2	0.004	2	156.66	2	1149	2	2301.7	2	7.5851	2	2401	2	-9	-9	-9	-9	-9
108	2	2800.9	34.674	2	34.673	2	1.819	1.614	27.740	0.001	0.0	34.9	2	-9	9	-9	9	155.10	2	1158	2	2305.1	2	7.5863	2	2397	2	-9	-9	-9	-9	-9
107	2	2996.1	34.678	2	34.678	2	1.798	1.575	27.746	0.001	0.0	35.6	2	-9	9	-9	9	149.96	3	1149	2	2309.7	2	7.5860	2	2405	2	-9	-9	-9	-9	-9
106	2	3246.2	34.682	2	34.681	2	1.789	1.541	27.752	0.000	0.0	35.5	2	0.002	2	0.003	2	146.12	3	1155	2	2316.1	2	7.5859	2	2417	2	-9	-9	-9	-9	-9
105	2	3478.9	34.684	2	34.683	2	1.797	1.526	27.755	0.000	0.0	35.9	2	-9	9	-9	9	150.58	2	1153	2	2317.4	2	7.5849	2	-9	5	-9	-9	-9	-9	-9
104	2	3750.0	34.685	2	34.685	2	1.820	1.519	27.756	0.001	0.0	35.2	2	-9	9	-9	9	150.22	2	1152	2	2320.7	2	7.5876	2	2420	2	-9	-9	-9	-9	-9
103	2	4000.3	34.686	2	34.685	2	1.846	1.517	27.757	0.001	0.0	35.5	2	0.001	2	0.004	2	149.20	2	1152	2	2321.5	2	7.5866	2	2430	2	-9	-9	-9	-9	-9
102	2	3999.9	34.686	2	34.685	2	1.846	1.517	27.757	0.001	0.0	35.5	2	-9	9	-9	9	150.06	2	1164	2	2321.3	2	7.5839	2	2416	2	-9	-9	-9	-9	-9
101	2	4052.6	34.685	2	34.686	2	1.853	1.518	27.756	0.001	0.0	35.4	2	-9	9	-9	9	149.88	2	1155	2	2322.6	2	7.5833	2	2419	2	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 94 DATE 3/30/94 LATITUDE 22°29.9'S Btm Depth: 4073
 CAST 3 LONGITUDE 102°59.9'W

Sample ID	Pressure db	Salinity P ^o	Salinity Bottle	Temp °C	Temp °C	Sigma T	Sigma T	Atten	Beam	NO2	NO3	PO4	P ^o Si(OH) ₄	P ^o CFC-11	P ^o CFC-12	O ₂	P ^o @20°C	DIC P ^o	pH	TAIK	P ^o	S13C	TOC	TON	Chi-a	Phaeo						
																											µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg
356	2	36.325	2	36.323	2	24.730	24.728	24.426	0.035	0.0	2	0.18	2	1.954	2	1.055	2	208.80	2	316	2	2066.7	2	8.0610	2	2393	2	73.0	4.1	0.024	0.007	
335	2	20.4	36.320	2	24.665	24.661	24.442	0.041	0.0	2	0.1	2	1.2	2	-9	9	209.00	2	-9	9	8.0612	2	-9	9	8.42	4.5	0.026	0.006				
334	2	41.0	36.314	2	24.612	24.604	24.455	0.048	0.0	2	0.1	2	0.24	2	1.094	2	208.88	2	323	2	2064.6	2	8.0605	2	2395	2	79.5	4.6	0.039	0.014		
333	2	65.6	36.206	2	23.654	23.640	24.661	0.046	0.0	2	0.1	2	0.22	2	-9	9	218.83	2	-9	9	8.0568	2	-9	9	80.2	4.8	0.027	0.008				
332	3	99.6	36.112	2	23.322	23.302	24.977	0.046	0.0	2	0.1	2	0.20	2	-9	9	218.83	2	-9	9	8.0568	2	-9	9	74.5	4.2	0.067	0.029				
331	2	133.6	35.858	2	21.003	20.977	25.153	0.040	0.0	2	0.1	2	0.14	2	2.331	2	224.99	2	334	2	2046.2	2	8.0487	2	2361	2	74.5	4.1	0.104	0.051		
330	3	171.6	35.732	2	20.274	20.242	25.256	0.032	0.0	2	0.2	0.21	2	1.2	2	-9	9	219.92	2	344	2	2046.9	2	8.0356	2	2357	2	-9	-9	0.153	0.167	
329	3	193.9	35.616	2	19.625	19.589	25.339	0.030	0.1	2	0.2	0.21	2	2.351	2	-9	9	219.92	2	-9	9	-9	-9	-9	-9	-9	-9	-9	0.121	0.141		
328	3	220.7	35.405	2	18.521	18.482	25.463	0.027	0.1	2	0.9	0.29	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	0.075	0.096		
327	2	248.2	35.077	2	16.867	16.827	25.682	0.024	0.0	2	3.1	0.40	2	2.0	2	-9	9	205.10	2	-9	9	7.9447	2	-9	9	-9	-9	-9	0.095	0.053		
326	2	301.6	34.628	2	13.426	13.383	26.027	0.021	0.0	2	10.9	1.02	2	2.188	2	1.087	2	169.18	2	620	2	2109.2	2	7.8080	2	2286	2	-9	60.1	4.3	0.007	0.011
325	2	337.1	34.508	2	11.698	11.655	26.272	0.021	0.0	2	15.5	1.25	2	7.1	2	-9	9	155.30	2	-9	9	7.7371	2	-9	9	-9	-9	-9	-9	-9	-9	
324	9	-9	-9	-9	-9	-9	-9	-9	-9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	
323	2	400.9	34.448	2	9.381	9.336	26.632	0.020	0.0	2	25.0	1.92	2	1.46	2	0.446	2	117.25	2	1094	2	2177.7	2	7.5826	2	2279	3	-9	-9	-9	-9	
322	2	500.8	34.384	2	7.062	7.014	26.932	0.019	0.0	2	30.3	2.08	2	18.2	2	0.250	2	136.71	2	1155	2	2201.7	2	7.5620	2	2291	2	-9	-9	-9	-9	
321	2	599.8	34.334	2	5.954	5.902	27.039	0.017	0.0	2	30.4	2.19	2	19.1	2	-9	9	173.88	2	1047	2	2202.3	2	7.6079	2	2285	3	-9	45.8	2.7	-9	-9
320	2	701.4	34.337	2	5.330	5.271	27.118	0.017	0.0	2	33.0	2.36	2	26.7	2	0.090	2	160.63	2	1112	2	2202.5	2	7.5812	2	2291	2	-9	-9	-9	-9	
319	2	806.5	34.375	2	4.749	4.684	27.216	0.015	0.0	2	35.9	2.55	2	40.1	2	0.023	2	139.26	2	1255	2	2229.9	2	7.5395	2	2302	2	-9	-9	-9	-9	
318	2	901.1	34.429	2	4.344	4.274	27.303	0.014	0.0	2	38.2	2.73	2	54.7	2	-9	9	120.57	2	1345	2	2254.2	2	7.5094	2	2321	2	-9	-9	-9	-9	
317	2	998.9	34.478	2	4.007	3.952	27.378	0.011	0.0	2	38.0	2.74	2	67.3	2	-0.002	2	119.55	2	-9	9	-9	-9	-9	-9	-9	-9	47.1	2.6	-9	-9	
316	2	1200.6	34.536	2	3.550	3.461	27.471	0.010	0.0	2	38.2	2.73	2	86.2	2	-0.002	2	117.83	2	1350	2	-9	9	7.5186	2	2353	2	-9	-9	-9	-9	
315	2	1402.3	34.561	2	3.077	2.976	27.537	0.007	0.0	2	38.3	2.74	2	97.5	2	-9	9	123.41	2	-9	9	-9	-9	7.5234	2	-9	9	-9	-9	-9	-9	
314	2	1597.9	34.584	2	2.702	2.590	27.591	0.005	0.0	2	37.8	2.66	2	104.2	2	0.000	2	130.29	2	-9	9	2286.0	3	7.5351	2	-9	9	-9	-9	-9	-9	
313	2	1801.6	34.610	2	2.382	2.257	27.639	0.004	0.0	2	36.8	2.71	2	109.2	2	-9	9	140.15	2	6	-9	9	7.5350	2	-9	9	-9	-9	-9	-9	-9	
312	2	1999.1	34.631	2	2.157	2.018	27.675	0.003	0.0	2	35.9	2.57	2	112.9	2	-9	9	147.91	2	6	-9	9	7.5350	2	-9	9	-9	-9	-9	-9	-9	
311	2	2199.6	34.647	2	2.011	1.857	27.700	0.002	0.0	2	35.6	2.54	2	116.2	2	-9	9	152.31	2	6	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
310	2	2400.9	34.660	2	1.908	1.738	27.719	0.002	0.0	2	35.3	2.51	2	118.4	2	-9	9	155.82	2	-9	9	-9	-9	7.5810	2	-9	9	-9	-9	-9	-9	
309	2	2602.6	34.666	2	1.833	1.666	27.731	0.001	0.0	2	35.3	2.19	4	120.4	2	-9	9	155.82	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
308	2	2793.5	34.673	2	1.822	1.617	27.739	0.001	0.0	2	35.1	2.45	2	122.5	2	-9	9	156.32	2	-9	9	-9	-9	7.5846	2	-9	9	-9	-9	-9	-9	
307	2	3000.9	34.678	2	1.801	1.577	27.746	0.001	0.0	2	36.0	2.52	2	125.4	2	-9	9	154.66	2	-9	9	-9	-9	7.5864	2	-9	9	-9	-9	-9	-9	
306	2	3248.7	34.681	2	1.792	1.544	27.751	0.000	0.0	2	35.8	2.51	2	128.7	2	-9	9	152.52	2	-9	9	-9	-9	7.5864	2	-9	9	-9	-9	-9	-9	
305	2	3469.5	34.684	2	1.800	1.526	27.755	0.000	0.0	2	36.0	2.52	2	130.1	2	-9	9	150.14	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
304	2	3749.7	34.683	2	1.821	1.520	27.756	0.001	0.0	2	36.3	2.55	2	130.6	2	-9	9	149.58	2	-9	9	-9	-9	7.5875	2	-9	9	-9	-9	-9	-9	
303	2	4005.3	34.686	2	1.845	1.515	27.757	0.001	0.0	2	35.9	2.30	4	129.7	2	-9	9	149.11	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
302	2	4002.8	34.686	2	1.845	1.516	27.757	0.001	0.0	2	35.7	2.52	2	129.7	2	-9	9	149.74	2	-9	9	-9	-9	7.5850	2	-9	9	-9	-9	-9	-9	
301	2	4066.0	34.686	2	1.852	1.516	27.757	0.001	0.0	2	36.0	2.57	2	129.6	2	-9	9	149.10	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 96 DATE 3/1/94 LATITUDE 21°30.0'S Btm Depth: 3973
 CAST 1 LONGITUDE 102°59.9'W

Sample ID	Pressure db	Salinity ‰	Salinity ‰	Temp °C	Temp °C	Sigma T	Sigma T	Beam		NO2 ‰	NO3 ‰	PO4 ‰	SiO4 ‰	CFC-11 ‰	CFC-12 ‰	O2 ‰	P* @20°C ‰	DIC ‰	pH	TAIK ‰	813C ‰	TOC ‰	TON ‰	Chl-a ‰	Phase ‰								
								Attenuation	Backscatter																								
136	9.6	36.266	2	24.557	24.555	24.433	0.036	0.0	0.0	0.1	2	0.28	2	1.0	2	9	9	210.26	2	2069.9	2	8.0533	2	2395	6	-9	-9	4.7	-9	-9			
135	2	24.0	36.252	2	24.486	24.481	0.046	0.0	0.0	2	0.0	0.25	2	1.0	2	-9	-9	210.62	6	-9	-9	8.0521	2	-9	9	-9	-9	5.0	-9	-9			
134	2	48.7	36.235	2	24.225	24.215	0.045	0.0	0.0	2	0.1	0.26	2	1.0	2	-9	-9	210.96	2	2069.0	2	8.0505	2	2390	2	-9	-9	4.8	-9	-9			
133	2	74.1	36.054	2	22.756	22.741	0.047	0.0	0.0	2	0.0	0.25	2	0.9	2	-9	-9	225.12	2	-9	-9	8.0494	2	-9	9	-9	-9	5.5	-9	-9			
132	3	97.7	35.986	2	-9	5	22.023	22.003	0.051	0.0	0.0	0.28	2	1.1	2	-9	-9	227.04	2	-9	-9	8.0411	2	-9	9	-9	-9	5.5	-9	-9			
131	2	124.3	35.844	2	35.845	2	20.952	20.928	0.046	0.0	0.0	0.22	2	0.9	2	-9	-9	228.25	2	339	2	-9	9	8.0411	2	-9	9	-9	4.3	-9	-9		
130	2	150.1	35.808	2	35.809	2	20.597	20.568	0.039	0.0	0.1	0.35	2	0.8	2	-9	-9	223.94	2	-9	-9	8.0313	2	-9	9	-9	-9	-9	-9	-9			
129	2	199.7	35.546	2	35.532	2	19.209	19.173	0.031	0.2	0.2	0.34	2	1.0	2	-9	-9	214.55	2	377	2	2065.5	2	7.9946	2	2343	2	-9	-9	-9	-9		
128	2	230.2	34.987	2	34.954	2	16.054	16.014	0.024	0.0	0.2	0.57	2	1.4	2	-9	-9	202.29	2	460	2	-9	9	7.9250	2	-9	9	-9	-9	-9	-9		
127	2	300.8	34.563	2	34.563	2	12.862	12.821	0.020	0.0	12.3	2	1.23	2	4.9	2	-9	-9	167.11	2	650	2	2115.0	2	7.7893	2	2280	2	-9	-9	3.6	-9	-9
126	2	350.4	34.503	2	34.503	2	10.918	10.875	0.021	0.0	21.6	2	2.08	2	13.2	2	-9	-9	98.61	2	-9	-9	7.5890	2	-9	9	-9	-9	-9	-9	-9		
125	2	400.5	34.511	2	34.511	2	9.704	9.658	0.022	0.0	27.7	2	2.48	2	18.7	2	-9	-9	67.42	2	1406	2	2225.1	2	7.4896	2	2283	2	-9	-9	-9	-9	-9
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
123	2	499.6	34.424	2	34.424	2	7.442	7.393	0.020	0.0	32.3	2	2.49	2	20.2	2	-9	-9	105.00	2	1337	2	2219.3	2	7.5097	2	2281	2	-9	-9	-9	-9	-9
122	2	600.9	34.363	2	34.363	2	6.089	6.036	0.017	0.0	32.4	2	2.30	2	21.8	2	-9	-9	147.41	2	1166	2	2203.5	2	7.5669	2	2289	2	-9	-9	3.5	-9	-9
121	2	701.0	34.378	2	34.379	2	5.460	5.401	0.017	0.0	35.6	2	2.55	2	31.7	2	-9	-9	128.62	2	1289	2	2234.0	2	7.5769	2	2293	2	-9	-9	-9	-9	-9
120	2	800.5	34.410	2	34.411	2	4.908	4.843	0.017	0.0	37.9	2	2.68	2	44.3	2	-9	-9	113.94	2	1379	2	2246.6	2	7.5012	2	-9	5	-9	-9	-9	-9	-9
119	2	901.0	34.459	2	34.460	2	4.484	4.413	0.015	0.0	39.7	2	2.77	2	58.5	2	-9	-9	106.66	2	1415	2	2264.2	2	7.4928	2	2329	2	-9	-9	-9	-9	-9
118	2	999.7	34.495	2	34.495	2	4.225	4.147	0.014	0.0	38.7	2	2.80	2	68.4	2	-9	-9	103.10	2	1421	2	2274.7	2	7.4905	2	2336	6	-9	-9	3.2	-9	-9
117	2	1100.6	34.521	2	34.521	2	3.958	3.874	0.010	0.0	39.0	2	2.85	2	83.9	2	-9	-9	100.12	2	-9	-9	-9	9	7.4864	2	-9	9	-9	-9	-9	-9	-9
116	2	1299.7	34.535	2	34.537	2	3.716	3.626	0.010	0.0	39.0	2	2.85	2	83.9	2	-9	-9	100.48	2	-9	-9	-9	9	7.4854	2	-9	9	-9	-9	-9	-9	-9
115	2	1398.3	34.559	2	34.560	2	3.253	3.131	0.008	0.0	38.6	2	2.77	2	95.7	2	-9	-9	110.79	2	-9	-9	-9	9	7.5060	2	-9	9	-9	-9	-9	-9	-9
114	2	1500.1	34.573	2	34.573	2	2.990	2.882	0.007	0.0	38.4	2	2.75	2	96.7	2	-9	-9	115.67	6	-9	-9	-9	9	7.5116	2	-9	9	-9	-9	-9	-9	-9
113	2	1599.1	34.585	2	34.585	2	2.771	2.657	0.006	0.0	37.6	2	2.81	2	102.3	2	-9	-9	104.02	2	-9	-9	-9	9	7.4899	2	-9	9	-9	-9	-9	-9	-9
112	2	1801.0	34.609	2	34.608	2	2.499	2.313	0.005	0.0	37.0	2	2.63	2	108.0	2	-9	-9	133.79	2	-9	-9	-9	9	7.5116	2	-9	9	-9	-9	-9	-9	-9
111	2	2000.1	34.630	2	34.630	2	2.179	2.040	0.003	0.0	35.8	2	2.52	2	111.0	2	-9	-9	146.82	6	-9	-9	-9	9	7.5633	2	-9	9	-9	-9	-9	-9	-9
110	2	2251.3	34.652	2	34.652	2	1.971	1.814	0.002	0.0	35.3	2	2.47	2	115.7	2	-9	-9	155.71	2	-9	-9	-9	9	7.5723	2	-9	9	-9	-9	-9	-9	-9
109	2	2499.2	34.664	2	34.665	2	1.874	1.696	0.002	0.0	34.8	2	2.44	2	118.6	2	-9	-9	155.71	2	-9	-9	-9	9	7.5723	2	-9	9	-9	-9	-9	-9	-9
108	2	2747.9	34.678	2	34.678	2	1.794	1.619	0.001	0.0	34.8	2	2.46	2	121.2	2	-9	-9	153.93	2	-9	-9	-9	9	7.5851	2	-9	9	-9	-9	-9	-9	-9
107	2	3000.5	34.684	2	34.684	2	1.793	1.571	0.000	0.0	34.8	2	2.46	2	124.2	2	-9	-9	153.90	2	-9	-9	-9	9	7.5851	2	-9	9	-9	-9	-9	-9	-9
106	2	3250.1	34.682	2	34.683	2	1.785	1.537	0.000	0.0	35.2	2	2.49	2	127.3	2	-9	-9	151.61	2	-9	-9	-9	9	7.5851	2	-9	9	-9	-9	-9	-9	-9
105	2	3500.6	34.684	2	34.685	2	1.793	1.519	0.000	0.0	35.1	2	2.49	2	129.1	2	-9	-9	152.54	2	-9	-9	-9	9	7.5851	2	-9	9	-9	-9	-9	-9	-9
104	2	3750.0	34.685	2	34.686	2	1.812	1.512	0.000	0.0	35.2	2	2.50	2	129.7	2	-9	-9	149.46	2	-9	-9	-9	9	7.5851	2	-9	9	-9	-9	-9	-9	-9
103	2	3947.8	34.686	2	34.685	2	1.812	1.512	0.000	0.0	35.4	2	2.48	2	129.4	2	-9	-9	150.02	2	-9	-9	-9	9	7.5851	2	-9	9	-9	-9	-9	-9	-9
102	2	4002.7	34.686	2	34.686	2	1.838	1.509	0.001	0.0	35.4	2	2.49	2	129.6	2	-9	-9	149.17	2	-9	-9	-9	9	7.5851	2	-9	9	-9	-9	-9	-9	-9
101	2	4002.7	34.686	2	34.686	2	1.838	1.509	0.001	0.0	35.4	2	2.49	2	129.6	2	-9	-9	149.17	2	-9	-9	-9	9	7.5851	2	-9	9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column

** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94
WOCE P18
NOAA Ship Discoverer

STATION 97 DATE 3/31/94 LATITUDE 20°59.9'S Btm Depth: 4066
CAST 1 LONGITUDE 103°0.1'W

Sample ID	P#	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma t	Theta	Beam Attenuation	CO2											Chi-a Phase											
										NO2 P#	NO3 P#	PO4 P#	Si(OH)4 P#	CFC-11 P#	CFC-12 P#	O2 P#	P# @ 20°C P#	DIC P#	pH P#	TALK P#		513C P#	TOC P#	TON P#								
136	2	9.6	36.258	2	36.257	2	24.376	24.482	0.034	0.0	2	0.2	2	0.24	2	1.952	2	1.048	2	209.96	2	2071.0	2	8.0535	2	2390	6	1.80	-9	-9	-9	
135	2	25.5	36.261	2	36.259	2	24.383	24.483	0.045	0.0	2	0.1	2	0.23	2	1.968	6	1.066	6	209.98	2	-9	9	8.0534	2	-9	9	1.80	-9	-9	-9	
134	2	50.5	36.208	2	36.211	2	24.087	24.076	0.046	0.0	2	0.1	2	0.23	2	2.495	4	1.117	2	212.51	2	325	2	2069.1	2	8.0506	2	2369	2	-9	-9	
133	2	71.2	36.091	2	36.077	2	23.014	22.999	0.046	0.0	2	0.1	2	0.24	2	2.120	2	1.166	2	223.83	2	-9	9	8.0504	2	-9	9	1.80	-9	-9	-9	
132	2	97.6	35.906	2	35.909	2	21.584	21.564	0.046	0.0	2	0.1	2	0.25	2	2.216	6	1.194	6	228.97	2	331	2	2057.7	2	-9	9	2343	2	-9	-9	
131	2	126.5	35.857	2	35.856	2	20.916	20.892	0.043	0.0	2	0.1	2	0.23	2	2.207	2	1.187	2	225.72	2	-9	9	8.0567	2	-9	9	-9	-9	-9	-9	
130	2	149.3	35.817	2	35.818	2	20.588	20.559	0.039	0.0	2	0.0	2	0.22	2	2.273	2	1.290	2	222.50	2	-9	9	8.0516	2	-9	9	1.70	-9	-9	-9	
129	2	200.0	35.530	2	35.544	2	19.158	19.122	0.031	0.1	2	0.4	2	0.28	2	2.310	2	1.277	2	214.51	2	371	2	2065.4	3	7.9588	2	2280	2	1.40	-9	-9
128	2	251.0	34.943	2	34.935	2	15.861	15.822	0.024	0.0	2	4.8	2	0.58	2	2.386	6	1.215	6	199.52	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	
127	2	299.2	34.554	2	34.546	2	12.765	12.725	0.021	0.0	2	13.6	2	1.25	2	1.944	2	0.991	2	155.15	2	694	2	2125.8	2	7.637	2	2288	2	0.90	-9	-9
126	2	349.4	34.505	2	34.505	2	10.811	10.768	0.021	0.0	2	22.4	2	2.09	2	1.089	2	0.544	2	89.42	2	-9	9	7.5671	2	-9	9	-9	-9	-9	-9	
125	2	402.1	34.494	2	34.493	2	9.221	9.177	0.021	0.0	2	29.1	2	2.36	2	0.478	6	0.242	6	72.11	2	1417	6	2226.4	2	7.4867	2	2283	2	0.40	-9	-9
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
123	2	500.5	34.406	2	34.404	2	7.109	7.061	0.019	0.0	2	32.3	2	2.31	2	0.280	2	0.150	2	119.08	6	1265	2	2213.6	2	7.5284	2	2284	2	0.60	-9	-9
122	2	599.6	34.350	2	34.349	2	5.947	5.894	0.017	0.0	2	32.0	2	2.20	2	0.180	2	0.105	2	159.96	6	1081	2	2194.9	2	7.5886	2	2295	3	0.90	-9	-9
121	2	699.2	34.361	2	34.362	2	5.272	5.214	0.016	0.0	2	35.1	2	2.39	2	0.052	2	0.027	2	142.87	6	1202	2	2217.2	3	7.5495	2	2316	2	0.60	-9	-9
120	2	798.7	34.435	2	34.434	2	4.934	4.869	0.016	0.0	2	38.9	2	2.69	2	0.008	6	0.002	6	102.64	2	1438	2	2254.4	2	7.4860	2	2325	3	-9	-9	-9
119	2	900.0	34.470	2	34.470	2	4.458	4.387	0.014	0.0	2	38.8	2	2.67	2	0.004	2	0.000	2	105.65	2	1414	2	2285.4	2	7.4946	2	2341	3	0.40	-9	-9
118	2	999.4	34.503	2	34.505	2	4.217	4.139	0.012	0.0	2	39.4	2	2.71	2	70.8	2	0.001	2	101.07	2	1432	2	2278.9	2	7.4901	2	-9	5	-9	-9	-9
117	2	1101.0	34.524	2	34.524	2	3.916	3.832	0.011	0.0	2	40.1	2	2.82	2	-0.001	2	-0.002	2	98.07	2	-9	9	7.4842	2	-9	9	-9	-9	-9	-9	
116	2	1200.3	34.540	2	34.540	2	3.620	3.531	0.010	0.0	2	39.7	2	2.79	2	0.009	2	0.003	2	101.65	2	-9	9	7.4902	2	-9	9	0.20	-9	-9	-9	
115	2	1399.6	34.566	2	34.566	2	3.187	3.086	0.008	0.0	2	39.7	2	2.78	2	0.000	2	-0.002	2	105.23	2	-9	9	7.4949	2	-9	9	0.20	-9	-9	-9	
114	2	1600.9	34.588	2	34.590	2	2.831	2.716	0.006	0.0	2	39.3	2	2.74	2	0.002	2	0.008	2	113.15	2	-9	9	7.5080	2	-9	9	0.20	-9	-9	-9	
113	2	1799.2	34.608	2	34.607	2	2.501	2.374	0.005	0.0	2	38.0	2	2.62	2	-9	9	9	126.85	2	-9	9	7.5293	2	-9	9	-9	-9	-9	-9		
112	2	2001.8	34.627	2	34.627	2	2.215	2.076	0.003	0.0	2	36.7	2	2.51	2	0.007	2	-0.001	2	144.18	2	-9	9	7.5606	2	-9	9	0.20	-9	-9	-9	
111	2	2201.8	34.647	2	34.646	2	2.017	1.863	0.002	0.1	2	35.8	2	2.48	2	-9	9	-9	151.19	2	-9	9	7.5711	2	-9	9	-9	-9	-9	-9		
110	2	2400.1	34.660	2	34.659	2	1.908	1.739	0.002	0.0	2	35.6	2	2.47	2	0.003	2	-0.002	2	154.45	2	-9	9	7.5827	2	-9	9	0.10	-9	-9	-9	
109	2	2603.7	34.668	2	34.669	2	1.849	1.662	0.001	0.0	2	35.4	2	2.47	2	-0.003	2	-0.002	2	155.36	2	-9	9	7.5820	2	-9	9	0.20	-9	-9	-9	
108	2	2801.6	34.675	2	34.673	2	1.809	1.604	0.001	0.0	2	35.5	2	2.44	2	-9	9	-9	154.64	2	-9	9	7.5827	2	-9	9	-9	-9	-9	-9		
107	2	2998.6	34.679	2	34.679	2	1.786	1.563	0.001	0.0	2	35.7	2	2.45	2	-9	9	-9	152.43	2	-9	9	7.5827	2	-9	9	0.10	-9	-9	-9		
106	2	3247.5	34.683	2	34.683	2	1.776	1.529	0.000	0.0	2	35.9	2	2.47	2	0.005	2	-0.002	2	151.15	2	-9	9	7.5827	2	-9	9	0.10	-9	-9	-9	
105	2	3500.1	34.685	2	34.684	2	1.786	1.513	0.000	0.0	2	36.3	2	2.48	2	-9	9	-9	150.13	2	-9	9	7.5863	2	-9	9	0.10	-9	-9	-9		
104	2	3728.2	34.686	2	34.685	2	1.804	1.506	0.000	0.0	2	36.4	2	2.50	2	-9	9	-9	152.29	2	-9	9	7.5870	2	-9	9	0.10	-9	-9	-9		
103	2	4000.5	34.686	2	34.686	2	1.830	1.502	0.000	0.0	2	36.3	2	2.45	2	0.000	2	-0.002	2	149.03	2	-9	9	7.5870	2	-9	9	0.10	-9	-9	-9	
102	2	4001.9	34.686	2	34.686	2	1.830	1.502	0.000	0.0	2	36.5	2	2.46	2	-9	9	-9	150.14	2	-9	9	7.5870	2	-9	9	0.10	-9	-9	-9		
101	2	4124.3	34.686	2	34.686	2	1.844	1.502	0.000	0.0	2	36.4	2	2.47	2	-0.001	2	0.000	2	149.35	2	-9	9	7.5846	2	-9	9	0.10	-9	-9	-9	

* WOCE water sample quality flag (F) for parameter from previous column
** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 98 DATE 3/3/94 LATITUDE 20°30.1'S Btm Depth: 4037
 CAST 3 LONGITUDE 103°0.0'W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma-t	Sigma-t Atrn	Theta cp	NO2 μmol/kg	NO3 μmol/kg	PO4 μmol/kg	P^{se}(OIB)4 μmol/kg	CFC-11 μmol/kg	CFC-12 μmol/kg	O2 μmol/kg	P^{se} @20°C μatm	DIC^P μmol/kg	pH	P^{se} TA^K μmol/kg	P^{se} TA^K μmol/kg	513C per ml	TOC μmol/L	TON μmol/L	Chi-a μg/L	Phaeo μg/L									
																										Beam								
336	2	36.406	2	36.403	2	24.526	24.524	0.040	0.0	2	0.25	2	1.6	2	9	209.81	2	314	2	2069.8	2	8.0618	2	2399	2	9	69.6	5.3	0.031	0.008				
335	2	23.4	36.400	2	36.398	2	24.426	24.421	0.049	0.0	2	0.28	2	1.1	2	9	209.95	2	9	2071.0	2	8.0619	2	2398	2	9	68.9	5.2	0.032	0.008				
334	2	49.2	36.341	2	36.365	2	24.131	24.621	0.052	0.0	2	0.24	2	1.4	2	9	212.20	2	317	2	2068.8	2	8.0615	2	2395	2	9	68.6	4.6	0.037	0.013			
333	2	74.8	36.223	2	36.226	2	23.313	23.298	0.046	0.0	2	0.23	2	1.4	2	9	218.20	2	319	2	2066.5	2	8.0559	2	2392	2	9	70.2	5.8	0.049	0.015			
332	2	100.3	35.974	2	35.994	2	21.985	21.968	0.046	0.0	2	0.20	2	1.1	2	9	225.81	2	332	2	2061.2	2	8.0443	2	2372	2	9	66.8	5.2	0.063	0.020			
331	2	125.9	35.892	2	35.925	3	21.284	21.259	0.042	0.0	2	0.27	2	1.4	2	9	225.59	2	334	2	2060.5	2	8.0379	2	2364	2	9	65.4	4.6	0.098	0.044			
330	2	149.5	35.837	2	35.830	2	20.651	20.623	0.038	0.0	2	0.24	2	1.3	2	9	223.31	2	346	2	2061.8	2	8.0296	2	2362	2	9	9	9	0.170	0.118			
329	2	200.7	35.555	2	35.523	3	19.183	19.147	0.031	0.3	2	0.35	2	1.2	2	9	209.30	2	386	2	2070.3	2	7.9858	2	2359	2	9	9	9	0.093	0.109			
328	2	251.4	34.883	2	34.898	2	15.407	15.368	0.024	0.0	2	0.58	2	1.8	2	9	197.72	2	479	2	2077.4	2	9	9	2305	2	9	9	9	0.032	0.041			
327	2	297.7	34.520	2	34.521	2	12.360	12.330	0.022	0.0	2	1.40	2	6.2	2	9	89.44	2	1164	2	2200.2	2	7.5619	2	2282	2	9	9	9	9	9	0.005	0.005	
326	2	345.9	34.508	2	34.503	2	10.654	10.612	0.024	0.0	2	1.99	2	15.1	2	9	69.85	2	1457	2	2323.3	2	7.4772	2	2283	2	9	9	9	9	9	9	9	
325	2	403.0	34.492	2	34.492	2	8.962	8.919	0.024	0.0	2	2.36	2	20.4	2	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9		
324	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9		
323	2	499.8	34.400	2	34.401	2	7.043	6.996	0.021	0.0	2	3.22	2	19.5	2	9	123.45	2	1241	2	2210.5	2	7.5377	2	2285	2	9	9	9	9	9	9	9	
322	2	599.8	34.352	2	34.352	2	5.852	5.800	0.018	0.0	2	3.24	2	22.4	2	9	155.88	2	1127	2	2199.8	2	7.5795	2	2280	2	9	44.3	2.8	9	9	9	9	
321	2	701.0	34.404	2	34.403	2	5.409	5.350	0.017	0.0	2	3.73	2	24.8	2	9	113.87	6	1360	2	2237.6	2	7.5043	2	2299	2	9	9	9	9	9	9	9	
320	2	799.9	34.445	2	34.447	2	4.951	4.886	0.017	0.0	2	2.68	2	51.1	2	9	94.96	6	1483	2	2262.5	2	7.4724	2	2318	2	9	9	9	9	9	9	9	
319	2	898.9	34.476	2	34.475	2	4.577	4.506	0.015	0.0	2	3.99	2	2.73	2	9	94.29	2	1484	2	2274.4	2	7.4739	2	2336	2	9	9	9	9	9	9	9	
318	3	999.7	34.506	2	34.505	2	4.220	4.142	0.014	9	1	9	1	9	1	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9		
317	2	1099.2	34.525	2	34.525	2	3.944	3.861	0.012	0.0	2	3.97	2	80.4	2	9	93.90	2	1494	2	2292.2	2	7.4737	2	2350	2	9	9	9	9	9	9	9	9
316	2	1200.1	34.539	2	34.538	2	3.692	3.602	0.010	0.0	2	3.99	2	87.5	2	9	95.73	2	1501	2	2301.6	2	7.4766	2	2359	2	9	9	9	9	9	9	9	9
315	2	1298.6	34.553	2	34.552	2	3.444	3.348	0.010	0.0	2	2.78	2	95.0	2	9	97.74	2	1478	2	2306.7	2	7.4807	2	2366	2	9	9	9	9	9	9	9	9
314	2	1399.7	34.567	2	34.567	2	3.218	3.116	0.008	0.0	2	3.91	2	97.6	2	9	100.26	2	1475	2	2310.2	2	7.4857	2	2376	2	9	9	9	9	9	9	9	9
313	2	1594.5	34.590	2	34.591	2	2.863	2.749	0.007	0.0	2	3.87	2	106.0	2	9	107.49	2	1422	2	2316.6	2	7.4957	2	2382	2	9	9	9	9	9	9	9	9
312	2	1799.2	34.612	2	34.612	2	2.558	2.430	0.006	0.0	2	3.82	2	2.66	2	9	113.23	2	1398	2	2321.2	2	7.5097	2	2389	2	9	9	9	9	9	9	9	9
311	2	1999.9	34.625	2	34.624	2	2.237	2.097	0.005	0.0	2	3.60	2	2.45	2	9	143.58	2	1227	2	2301.1	3	7.5577	2	2401	2	9	9	9	9	9	9	9	9
310	2	2251.5	34.649	2	34.649	2	2.003	1.845	0.003	0.0	2	3.55	2	2.35	2	9	151.63	2	1190	2	2301.5	2	7.5731	2	2391	2	9	9	9	9	9	9	9	9
309	2	2498.8	34.664	2	34.665	2	1.878	1.700	0.002	0.0	2	3.55	2	2.41	2	9	153.85	6	1167	2	2303.6	2	7.5793	2	2395	2	9	9	9	9	9	9	9	9
308	2	2749.1	34.679	2	34.679	2	1.816	1.616	0.001	0.0	2	3.53	2	2.43	2	9	154.31	2	1164	2	2307.3	2	7.5831	2	2408	2	9	9	9	9	9	9	9	9
307	2	3000.7	34.686	2	34.686	2	1.788	1.564	0.001	0.0	2	3.53	2	2.44	2	9	153.15	2	1156	2	2312.1	2	7.5859	2	2417	2	9	9	9	9	9	9	9	9
306	2	3249.2	34.683	2	34.682	2	1.780	1.532	0.000	0.0	2	3.56	2	2.41	2	9	150.66	2	1164	2	2317.3	2	7.5848	2	2417	2	9	9	9	9	9	9	9	9
305	2	3501.4	34.685	2	34.684	2	1.789	1.516	0.000	0.0	2	3.53	2	2.43	2	9	149.88	2	1156	2	2320.2	2	7.5869	2	2417	2	9	9	9	9	9	9	9	9
304	2	3750.5	34.686	2	34.686	2	1.809	1.508	0.001	0.0	2	3.53	2	2.44	2	9	149.44	2	1163	2	2321.1	2	7.5862	2	2421	2	9	9	9	9	9	9	9	9
303	2	4000.4	34.686	2	34.686	2	1.832	1.504	0.001	0.0	2	3.57	2	2.46	2	9	149.05	2	1150	2	2322.0	2	7.5875	2	2427	2	9	9	9	9	9	9	9	9
302	2	4000.1	34.686	2	34.685	2	1.833	1.504	0.001	0.0	2	3.58	2	2.47	2	9	149.47	2	1161	2	2321.9	2	7.5858	2	2422	2	9	9	9	9	9	9	9	9
301	2	4092.5	34.686	2	34.686	2	1.843	1.504	0.000	0.0	2	3.58	2	2.44	2	9	149.50	2	1158	2	2323.0	2	7.5854	2	2420	2	9	9	9	9	9	9	9	9

* WOCE water sample quality flag (F) for parameter from previous column

** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 99 DATE 4/1/94 LATITUDE 20°0.0'S Btm Depth: 4234
 CAST 1 LONGITUDE 103°0.0'W

Sample ID	Pressure db	Salinity ‰	Salinity ‰ CTD	Temp °C	Temp °C	Sigma T	Theta cp	Beam Attenuation		NO2 ‰	NO3 ‰	PO4 ‰	F ²⁺ Si(OH) ₄ ‰	CFC-11 ‰	CFC-12 ‰	O ₂ ‰	f _{CO2}	DIC ‰	pH	TAIK ‰	F ²⁺ per ml	813C TOC ‰	TON ‰	Chl-a ‰	Phaeo ‰
								cp	Thera																
136	10.1	36.310	2 36.309	2 24.486	24.483	24.483	0.040	0.0	0.0	2 0.1	2 0.28	2 1.5	2 2.013	2 1.058	2 210.16	2 322	2 2070.9	2 -9	1 2386	2 2386	2 1.70	-9	-9	-9	-9
135	9.5	36.310	2 36.311	2 24.481	24.479	24.480	0.040	0.0	0.0	2 0.1	2 0.26	2 1.4	2 1.993	2 1.063	2 209.74	2 321	2 -9	9 8.0546	2 2396	2 2396	2 -9	-9	-9	-9	-9
134	24.1	36.303	2 36.302	2 24.279	24.274	24.546	0.047	0.0	0.0	2 0.0	2 0.29	2 1.3	2 1.992	2 1.061	2 210.61	2 -9	9 -9	9 8.0540	2 -9	9 -9	2 -9	-9	-9	-9	-9
133	48.9	36.289	2 36.290	2 24.135	24.125	24.580	0.051	0.0	0.0	2 0.0	2 0.27	2 1.1	2 2.061	2 1.065	2 213.49	2 325	2 -9	9 8.0520	2 -9	9 -9	2 -9	-9	-9	-9	-9
132	75.8	36.044	2 36.062	2 22.560	22.545	24.857	0.050	0.0	0.0	2 0.1	2 0.26	2 1.2	2 2.204	2 1.169	2 220.31	2 -9	9 -9	9 8.0493	2 -9	9 -9	2 -9	-9	-9	-9	-9
131	99.2	35.919	2 35.918	2 21.549	21.530	25.048	0.051	0.0	0.0	2 0.0	2 0.25	2 1.0	2 -9	2 1.186	2 223.18	2 334	2 -9	9 8.0436	2 -9	9 -9	2 -9	-9	-9	-9	-9
130	125.0	35.893	2 35.906	2 20.962	20.938	25.191	0.046	0.0	0.0	2 0.1	2 0.26	2 1.0	2 2.299	2 1.186	2 223.18	2 334	2 -9	9 8.0436	2 -9	9 -9	2 -9	-9	-9	-9	-9
129	150.0	35.804	2 35.824	2 20.487	20.458	25.253	0.040	0.0	0.0	2 0.0	2 0.23	2 1.1	2 2.302	2 1.211	2 221.48	2 -9	9 -9	9 8.0273	2 -9	9 -9	2 -9	-9	-9	-9	-9
128	199.1	35.425	2 35.445	2 18.562	18.527	25.466	0.050	0.2	0.2	2 0.9	2 0.36	2 1.1	2 2.425	2 1.244	2 211.10	2 -9	9 -9	9 7.9834	2 -9	9 -9	2 -9	-9	-9	-9	-9
127	249.1	34.952	2 34.949	2 15.841	15.802	25.756	0.024	0.0	0.0	2 5.1	2 0.61	2 1.6	2 2.451	2 1.229	2 198.72	2 -9	9 -9	9 7.9175	2 -9	9 -9	2 -9	-9	-9	-9	-9
126	300.5	34.507	2 34.504	2 12.204	12.164	26.175	0.022	0.0	0.0	2 15.2	2 1.38	2 7.0	2 1.909	2 0.942	2 149.26	2 -9	9 -9	9 7.7544	2 -9	9 -9	2 -9	-9	-9	-9	-9
125	351.9	34.507	2 34.505	2 10.483	10.440	26.491	0.022	0.0	0.0	2 24.2	2 2.17	2 16.1	2 0.922	2 0.466	2 80.15	2 -9	9 -9	9 -9	9 -9	9 -9	2 -9	-9	-9	-9	-9
124	9	-9	9 -9	9 -9	-9	-9	-9	-9	-9	2 30.1	2 2.40	2 19.7	2 0.452	2 0.235	2 68.44	2 -9	9 -9	9 -9	9 -9	9 -9	2 -9	-9	-9	-9	-9
123	398.7	34.498	2 34.499	2 9.206	9.162	26.699	0.022	0.0	0.0	2 35.3	2 2.50	2 23.3	2 0.202	2 0.120	2 92.66	2 -9	9 -9	9 -9	9 -9	9 -9	2 -9	-9	-9	-9	-9
122	499.6	34.437	2 34.438	2 7.202	7.154	26.954	0.018	0.0	0.0	2 35.0	2 2.40	2 25.8	2 0.113	2 0.069	2 128.61	2 -9	9 -9	9 -9	9 -9	9 -9	2 -9	-9	-9	-9	-9
121	600.3	34.384	2 34.383	2 6.021	5.968	27.070	0.015	0.0	0.0	2 38.0	2 2.60	2 36.6	2 0.031	2 0.025	2 107.57	2 -9	9 -9	9 -9	9 -9	9 -9	2 -9	-9	-9	-9	-9
120	699.3	34.409	2 34.409	2 5.656	5.597	27.160	0.013	0.0	0.0	2 40.5	2 2.78	2 51.1	2 -0.003	2 -0.002	2 89.92	2 -9	9 -9	9 -9	9 -9	9 -9	2 -9	-9	-9	-9	-9
119	798.6	34.452	2 34.452	2 4.978	4.913	27.251	0.013	0.0	0.0	2 41.7	2 2.89	2 63.7	2 0.001	2 -0.002	2 83.07	2 -9	9 -9	9 -9	9 -9	9 -9	2 -9	-9	-9	-9	-9
118	898.7	34.487	2 34.487	2 4.578	4.506	27.324	0.012	0.0	0.0	2 41.1	2 2.89	2 72.0	2 -0.003	2 0.001	2 87.60	2 -9	9 -9	9 -9	9 -9	9 -9	2 -9	-9	-9	-9	-9
117	1000.6	34.509	2 34.508	2 4.283	4.205	27.374	0.011	0.0	0.0	2 41.0	2 2.84	2 79.7	2 0.000	2 0.004	2 92.57	2 -9	9 -9	9 -9	9 -9	9 -9	2 -9	-9	-9	-9	-9
116	1098.6	34.525	2 34.525	2 3.954	3.870	27.422	0.010	0.0	0.0	2 41.0	2 2.87	2 87.3	2 -0.005	2 0.002	2 93.03	2 -9	9 -9	9 -9	9 -9	9 -9	2 -9	-9	-9	-9	-9
115	1199.2	34.541	2 34.542	2 3.663	3.574	27.464	0.010	0.0	0.0	2 40.1	2 2.84	2 98.4	2 0.002	2 -0.002	2 98.32	2 -9	9 -9	9 -9	9 -9	9 -9	2 -9	-9	-9	-9	-9
114	1300.3	34.567	2 34.565	2 2.775	2.661	27.592	0.006	0.0	0.0	2 39.4	2 2.78	2 109.1	2 -0.002	2 -0.002	2 107.94	2 -9	9 -9	9 -9	9 -9	9 -9	2 -9	-9	-9	-9	-9
113	1400.3	34.595	2 34.595	2 2.775	2.661	27.592	0.006	0.0	0.0	2 38.8	2 2.70	2 115.4	2 -9	9 -9	2 117.03	2 -9	9 -9	9 -9	9 -9	9 -9	2 -9	-9	-9	-9	-9
112	1800.1	34.616	2 34.615	2 2.483	2.359	27.634	0.004	0.0	0.0	2 36.8	2 2.52	2 119.9	2 -9	9 -9	2 143.58	2 -9	9 -9	9 -9	9 -9	9 -9	2 -9	-9	-9	-9	-9
111	1991.2	34.627	2 34.626	2 2.206	2.067	27.667	0.003	0.0	0.0	2 36.2	2 2.49	2 117.4	2 0.005	2 -0.002	2 148.97	2 -9	9 -9	9 -9	9 -9	9 -9	2 -9	-9	-9	-9	-9
110	2246.1	34.651	2 34.650	2 1.991	1.854	27.705	0.002	0.0	0.0	2 35.5	2 2.45	2 119.6	2 -9	9 -9	2 153.89	2 -9	9 -9	9 -9	9 -9	9 -9	2 -9	-9	-9	-9	-9
109	2498.4	34.665	2 34.664	2 1.873	1.695	27.727	0.001	0.0	0.0	2 35.7	2 2.46	2 122.6	2 -9	9 -9	2 153.89	2 -9	9 -9	9 -9	9 -9	9 -9	2 -9	-9	-9	-9	-9
108	2743.3	34.673	2 34.673	2 1.813	1.614	27.740	0.001	0.0	0.0	2 36.1	2 2.49	2 126.2	2 -0.003	2 0.003	2 150.56	2 -9	9 -9	9 -9	9 -9	9 -9	2 -9	-9	-9	-9	-9
107	2998.9	34.680	2 34.679	2 1.780	1.557	27.749	0.000	0.0	0.0	2 35.1	2 2.49	2 128.7	2 -9	9 -9	2 149.92	2 -9	9 -9	9 -9	9 -9	9 -9	2 -9	-9	-9	-9	-9
106	3250.0	34.685	2 34.681	2 1.773	1.526	27.754	0.000	0.0	0.0	2 36.0	2 2.49	2 129.8	2 -9	9 -9	2 149.29	2 -9	9 -9	9 -9	9 -9	9 -9	2 -9	-9	-9	-9	-9
105	3499.8	34.683	2 34.683	2 1.783	1.509	27.756	0.000	0.0	0.0	2 36.0	2 2.49	2 130.2	2 -0.005	2 -0.002	2 149.29	2 -9	9 -9	9 -9	9 -9	9 -9	2 -9	-9	-9	-9	-9
104	3748.2	34.686	2 34.686	2 1.800	1.500	27.758	0.000	0.0	0.0	2 36.0	2 2.49	2 130.2	2 -0.005	2 -0.002	2 149.29	2 -9	9 -9	9 -9	9 -9	9 -9	2 -9	-9	-9	-9	-9
103	3998.7	34.686	2 34.686	2 1.823	1.497	27.758	0.000	0.0	0.0	2 36.0	2 2.49	2 130.2	2 -0.001	2 -0.002	2 149.88	2 -9	9 -9	9 -9	9 -9	9 -9	2 -9	-9	-9	-9	-9
102	3999.1	34.686	2 34.686	2 1.825	1.497	27.758	0.000	0.0	0.0	2 36.0	2 2.49	2 130.2	2 -0.001	2 -0.002	2 149.88	2 -9	9 -9	9 -9	9 -9	9 -9	2 -9	-9	-9	-9	-9
101	4222.0	34.686	2 34.687	2 1.849	1.496	27.759	0.000	0.0	0.0	2 36.7	2 2.50	2 130.6	2 -9	9 -9	2 149.84	2 -9	9 -9	9 -9	9 -9	9 -9	2 -9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 101 3 DATE 4/19/94 LATITUDE 19°0.0'S Btm Depth: 4085 19°0.0'S
 CAST 3 LONGITUDE 103°0.1'W 103°0.1'W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma T	Sigma T _{theta}	Beam Attenuation	NO2 μmol/kg	NO3 μmol/kg	PO4 μmol/kg	P^{Si(OH)4} μmol/kg	CFC-11 μmol/kg	CFC-12 μmol/kg	O2 μmol/kg	PO2 μmol/kg	DIC μmol/kg	pH	TA μmol/kg	P^{alk} μmol/kg	813C per mil	TOC μmol/L	TON μmol/L	Chl-a μg/L	Phaeo μg/L	
																										Beam Transp
336	3	10.1	36.313	2	-9	5	24.361	24.559	0.038	-9	1	-9	1	-9	1	-9	1	-9	9	9	9	-9	-9	-9	-9	
335	2	24.0	36.342	2	36.335	2	24.253	24.248	0.048	0.0	2	2.010	2	2.010	2	2.010	2	2.010	2	2.010	2	2.010	2	2.010	2	2.010
334	2	49.6	36.406	2	36.393	2	24.123	24.123	0.054	0.0	2	2.021	2	2.021	2	2.021	2	2.021	2	2.021	2	2.021	2	2.021	2	2.021
333	2	75.3	36.392	2	36.425	3	23.724	23.708	0.050	0.0	2	2.016	2	2.016	2	2.016	2	2.016	2	2.016	2	2.016	2	2.016	2	2.016
332	2	99.7	36.232	2	36.233	2	22.409	22.389	0.049	0.0	2	2.147	2	2.147	2	2.147	2	2.147	2	2.147	2	2.147	2	2.147	2	2.147
331	2	123.7	36.033	2	36.042	2	21.457	21.433	0.048	0.0	2	2.207	2	2.207	2	2.207	2	2.207	2	2.207	2	2.207	2	2.207	2	2.207
330	2	149.5	35.838	2	35.829	2	20.573	20.544	0.044	0.0	2	2.314	2	2.314	2	2.314	2	2.314	2	2.314	2	2.314	2	2.314	2	2.314
329	2	200.5	35.579	2	35.575	2	19.318	19.281	0.035	0.2	2	2.385	2	2.385	2	2.385	2	2.385	2	2.385	2	2.385	2	2.385	2	2.385
328	2	246.3	35.023	2	35.020	2	16.087	16.048	0.024	0.0	2	2.50	2	2.50	2	2.50	2	2.50	2	2.50	2	2.50	2	2.50	2	2.50
327	2	298.9	34.596	2	34.602	2	12.632	12.592	0.022	0.0	2	2.21	2	2.21	2	2.21	2	2.21	2	2.21	2	2.21	2	2.21	2	2.21
326	2	347.3	34.497	2	34.496	2	10.485	10.453	0.023	0.0	2	2.22	2	2.22	2	2.22	2	2.22	2	2.22	2	2.22	2	2.22	2	2.22
325	2	348.4	34.496	2	34.497	2	10.485	10.444	0.023	0.0	2	2.22	2	2.22	2	2.22	2	2.22	2	2.22	2	2.22	2	2.22	2	2.22
324	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
323	2	500.3	34.396	2	34.395	2	6.743	6.696	0.020	0.0	2	2.32	2	2.32	2	2.32	2	2.32	2	2.32	2	2.32	2	2.32	2	2.32
322	2	598.9	34.408	2	34.408	2	5.973	5.921	0.020	0.0	2	2.32	2	2.32	2	2.32	2	2.32	2	2.32	2	2.32	2	2.32	2	2.32
321	2	698.1	34.442	2	34.443	2	5.470	5.410	0.019	0.0	2	2.74	2	2.74	2	2.74	2	2.74	2	2.74	2	2.74	2	2.74	2	2.74
320	2	800.1	34.474	2	34.476	2	4.987	4.922	0.018	0.0	2	40.5	2	40.5	2	40.5	2	40.5	2	40.5	2	40.5	2	40.5	2	40.5
319	2	897.5	34.495	2	34.496	2	4.623	4.551	0.016	0.0	2	40.8	2	40.8	2	40.8	2	40.8	2	40.8	2	40.8	2	40.8	2	40.8
318	2	997.7	34.516	2	34.516	2	4.306	4.228	0.016	0.0	2	41.7	2	41.7	2	41.7	2	41.7	2	41.7	2	41.7	2	41.7	2	41.7
317	2	1098.9	34.532	2	34.533	2	3.995	3.911	0.015	0.0	2	41.6	2	41.6	2	41.6	2	41.6	2	41.6	2	41.6	2	41.6	2	41.6
316	2	1201.1	34.545	2	34.545	2	3.661	3.571	0.013	0.0	2	38.9	2	38.9	2	38.9	2	38.9	2	38.9	2	38.9	2	38.9	2	38.9
315	2	1299.6	34.559	2	34.558	2	3.375	3.280	0.010	0.0	2	39.9	2	39.9	2	39.9	2	39.9	2	39.9	2	39.9	2	39.9	2	39.9
314	2	1399.5	34.572	2	34.559	4	3.137	3.036	0.009	0.0	2	39.5	2	39.5	2	39.5	2	39.5	2	39.5	2	39.5	2	39.5	2	39.5
313	2	1599.6	34.596	2	34.596	2	2.786	2.672	0.009	0.0	2	38.2	2	38.2	2	38.2	2	38.2	2	38.2	2	38.2	2	38.2	2	38.2
312	2	1799.7	34.617	2	34.617	2	2.474	2.348	0.007	0.0	2	37.4	2	37.4	2	37.4	2	37.4	2	37.4	2	37.4	2	37.4	2	37.4
311	2	2000.6	34.634	2	34.635	2	2.231	2.090	0.005	0.0	2	36.1	2	36.1	2	36.1	2	36.1	2	36.1	2	36.1	2	36.1	2	36.1
310	2	2247.9	34.652	2	34.652	2	2.008	1.850	0.004	0.0	2	35.8	2	35.8	2	35.8	2	35.8	2	35.8	2	35.8	2	35.8	2	35.8
309	2	2497.8	34.664	2	34.665	2	1.880	1.702	0.003	0.0	2	35.2	2	35.2	2	35.2	2	35.2	2	35.2	2	35.2	2	35.2	2	35.2
308	2	2742.3	34.673	2	34.674	2	1.818	1.618	0.002	0.0	2	35.5	2	35.5	2	35.5	2	35.5	2	35.5	2	35.5	2	35.5	2	35.5
307	2	2998.5	34.679	2	34.682	2	1.786	1.563	0.002	0.0	2	35.6	2	35.6	2	35.6	2	35.6	2	35.6	2	35.6	2	35.6	2	35.6
306	2	3243.7	34.682	2	34.682	2	1.773	1.526	0.002	0.0	2	35.5	2	35.5	2	35.5	2	35.5	2	35.5	2	35.5	2	35.5	2	35.5
305	2	3499.5	34.685	2	34.684	2	1.774	1.501	0.001	0.0	2	35.5	2	35.5	2	35.5	2	35.5	2	35.5	2	35.5	2	35.5	2	35.5
304	2	3747.1	34.686	2	34.686	2	1.789	1.489	0.001	0.0	2	35.9	2	35.9	2	35.9	2	35.9	2	35.9	2	35.9	2	35.9	2	35.9
303	2	3999.2	34.686	2	34.686	2	1.813	1.485	0.002	0.0	2	35.7	2	35.7	2	35.7	2	35.7	2	35.7	2	35.7	2	35.7	2	35.7
302	2	4000.0	34.686	2	34.687	2	1.813	1.485	0.002	0.0	2	35.4	2	35.4	2	35.4	2	35.4	2	35.4	2	35.4	2	35.4	2	35.4
301	2	4142.4	34.686	2	34.686	2	1.829	1.485	0.002	0.0	2	35.2	2	35.2	2	35.2	2	35.2	2	35.2	2	35.2	2	35.2	2	35.2

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 106 DATE 4/3/94 LATITUDE 16°29.9'S BTM Depth: 3113
CAST 1 LONGITUDE 102°59.9'W

Sample ID	P* db	Pressure	Salinity	P* Bottle	Temp °C	Temp °C	Sigma t	Sigma t	Beam Attenuation	NO2	NO3	PO4	P* SI(OH)4	P* CFC-11	P* CFC-12	P* O2	P* @20°C	DIC	pH	P* TALK	P* 813C	TOC	TON	Chi-a	Phase		
																										µmol/kg	µmol/kg
136	2	9.4	36.262	2	24.576	24.574	24.425	0.048	0.0	2	0.0	2	0.28	2	1.988	2	208.52	2	311	2	2060.2	2	8.0888	2	5	-9	-9
135	2	10.0	36.262	2	24.586	24.584	24.422	0.049	0.0	2	0.0	2	0.29	2	1.988	2	211.87	2	310	2	2062.7	2	8.0885	2	2393	2	-9
134	2	9.3	36.261	2	24.572	24.570	24.426	0.048	0.0	2	0.0	2	0.25	2	1.988	2	207.27	2	310	2	2062.7	2	8.0881	2	-9	9	5.3
133	2	10.0	36.261	2	24.590	24.588	24.420	0.049	0.0	2	0.0	2	0.28	2	1.988	2	208.62	2	309	2	2063.4	2	8.0886	2	-9	9	5.4
132	3	24.7	36.278	2	24.206	24.201	24.549	0.067	0.0	2	0.0	2	0.27	2	2.017	6	210.36	2	308	2	2063.4	2	8.0886	2	-9	9	5.3
131	2	48.3	36.296	2	23.967	23.956	24.636	0.067	0.0	2	0.0	2	0.27	2	1.988	2	211.78	2	309	2	2063.4	2	8.0886	2	-9	9	5.4
130	2	74.6	36.261	2	23.363	23.348	24.789	0.058	0.0	2	0.0	2	0.27	2	2.181	2	216.63	2	310	2	2061.2	2	8.0852	2	2387	2	-9
129	2	100.6	36.190	2	22.186	22.158	24.933	0.050	0.0	2	0.0	2	0.26	2	1.988	2	219.62	2	309	2	2061.2	2	8.0852	2	2387	2	-9
128	2	149.3	35.964	2	20.961	20.933	25.247	0.039	0.6	2	0.8	2	0.40	2	2.302	2	203.72	2	309	2	2074.7	2	7.9566	2	2324	2	-9
127	2	200.1	35.504	2	17.868	17.834	25.546	0.026	0.0	2	2.6	2	0.42	2	1.988	2	203.93	2	412	2	2074.7	2	7.9566	2	2324	2	-9
126	2	248.7	34.759	2	13.913	13.877	26.027	0.020	0.0	2	10.1	2	0.96	2	2.037	2	165.92	2	309	2	2190.0	2	7.6026	2	2281	2	-9
125	2	299.5	34.535	2	10.689	10.653	26.475	0.020	0.0	2	22.0	2	1.91	2	1.988	2	100.70	2	1045	2	2190.0	2	7.6026	2	2281	2	-9
124	9	-9	-9	-9	-9	-9	-9	-9	-9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	-9
123	2	349.6	34.535	2	9.333	9.294	26.707	0.022	0.0	2	31.2	2	2.46	2	1.988	2	50.35	6	9	9	7.4512	2	2289	2	-9	9	-9
122	2	399.2	34.538	2	8.460	8.418	26.848	0.022	0.0	2	35.1	2	2.58	2	1.988	2	45.66	2	1624	3	2255.1	2	7.4282	2	2289	2	-9
121	2	499.5	34.485	2	6.898	6.851	27.034	0.021	0.0	2	37.4	2	2.55	2	1.988	2	74.54	2	1495	2	2248.9	2	7.4617	2	2299	2	-9
120	2	599.9	34.482	2	6.041	5.988	27.145	0.020	0.0	2	39.9	2	2.71	2	1.988	2	70.83	2	1569	2	2262.4	2	7.4475	2	2305	2	-9
119	2	698.1	34.494	2	5.459	5.400	27.227	0.019	0.0	2	42.1	2	2.85	2	1.988	2	64.17	2	1640	2	2279.7	2	7.4285	2	2316	2	-9
118	2	801.2	34.503	2	4.941	4.876	27.296	0.017	0.0	2	42.3	2	2.87	2	1.988	2	63.79	2	1675	2	2293.1	2	7.4235	2	2337	2	-9
117	2	898.9	34.517	2	4.523	4.452	27.354	0.016	0.0	2	43.1	2	2.93	2	1.988	2	64.39	6	1701	2	2303.6	2	7.4213	2	2337	2	-9
116	2	1000.3	34.532	2	4.186	4.109	27.403	0.016	0.0	2	42.7	2	2.94	2	1.988	2	66.58	2	1687	2	2311.0	2	7.4257	2	2352	6	-9
115	2	1097.8	34.544	2	3.876	3.793	27.445	0.015	0.0	2	41.7	2	2.89	2	1.988	2	72.99	6	9	9	7.4866	2	-9	9	-9	-9	-9
114	2	1200.4	34.556	2	3.599	3.510	27.483	0.015	0.0	2	41.4	2	2.86	2	1.988	2	78.61	2	9	9	7.4866	2	-9	9	-9	-9	-9
113	2	1298.2	34.569	2	3.341	3.247	27.518	0.012	0.0	2	41.2	2	2.85	2	1.988	2	84.76	2	9	9	7.4866	2	-9	9	-9	-9	-9
112	2	1385.3	34.581	2	3.121	3.022	27.548	0.010	0.0	2	40.5	2	2.81	2	1.988	2	90.77	2	9	9	7.4866	2	-9	9	-9	-9	-9
111	2	1499.5	34.594	2	2.886	2.779	27.581	0.010	0.0	2	40.3	2	2.78	2	1.988	2	97.02	2	9	9	7.4866	2	-9	9	-9	-9	-9
110	2	1598.2	34.605	2	2.711	2.599	27.606	0.009	0.0	2	39.5	2	2.75	2	1.988	2	102.50	2	9	9	7.4866	2	-9	9	-9	-9	-9
109	2	1801.3	34.626	2	2.394	2.269	27.650	0.008	0.0	2	38.7	2	2.67	2	1.988	2	116.93	2	9	9	7.4866	2	-9	9	-9	-9	-9
108	2	1997.4	34.644	2	2.110	1.972	27.689	0.005	0.0	2	36.7	2	2.52	2	1.988	2	132.22	2	9	9	7.4866	2	-9	9	-9	-9	-9
107	2	2198.8	34.657	2	1.944	1.792	27.713	0.004	0.0	2	35.7	2	2.45	2	1.988	2	144.22	2	9	9	7.4866	2	-9	9	-9	-9	-9
106	2	2395.5	34.666	2	1.863	1.694	27.728	0.003	0.0	2	35.4	2	2.42	2	1.988	2	146.25	2	9	9	7.4866	2	-9	9	-9	-9	-9
105	2	2587.5	34.671	2	1.823	1.638	27.736	0.003	0.0	2	36.5	2	2.46	2	1.988	2	146.25	2	9	9	7.4866	2	-9	9	-9	-9	-9
104	2	2798.5	34.675	2	1.801	1.597	27.742	0.002	0.0	2	36.4	2	2.45	2	1.988	2	145.47	2	9	9	7.4866	2	-9	9	-9	-9	-9
103	2	2997.7	34.676	2	1.805	1.581	27.744	0.002	0.0	2	35.8	2	2.46	2	1.988	2	143.56	2	9	9	7.4866	2	-9	9	-9	-9	-9
102	2	2996.4	34.677	2	1.804	1.580	27.745	0.002	0.0	2	36.4	2	2.45	2	1.988	2	144.93	2	9	9	7.4866	2	-9	9	-9	-9	-9
101	2	3153.2	34.678	2	1.800	1.562	27.747	0.002	0.0	2	37.6	2	2.54	2	1.988	2	142.55	2	9	9	7.4866	2	-9	9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 107 DATE 4/2/94 LATITUDE 16°0.0'S Btm Depth: 3772
 CAST 1 LONGITUDE 103°0.0'W

Sample ID	Pressure db	Salinity ‰	Salinity ‰ CTD	Temp °C	Temp °C	Potential		Sigma		NO2 ‰	NO3 ‰	PO4 ‰	Si(OH)4 ‰	CFC-11 ‰	CFC-12 ‰	O2 ‰	fO2 ‰ @20°C	DIC ‰	pH	TAlk ‰	813C ‰	TOC ‰	TON ‰	Chl-a ‰	Phaeo ‰		
						Temp °C	Temp °C	Theta	Tsigma																		
136	2	10.1	36.331	2	24.343	24.341	24.548	0.046	0.0	2	0.1	2	0.29	2	1.993	2	1.055	2	2064.4	2	8.0708	2	2396	6	1.80	-9	-9
135	2	10.4	36.330	2	24.338	24.336	24.548	0.046	0.0	2	0.0	2	0.27	2	2.003	2	1.063	2	209.15	2	9	8.0716	2	-9	9	-9	-9
134	2	25.2	36.302	2	24.196	24.191	24.571	0.059	0.0	2	0.0	2	0.27	2	2.015	2	1.072	2	209.84	2	9	8.0698	2	-9	9	-9	-9
133	2	49.7	36.286	2	24.070	24.060	24.597	0.060	0.0	2	0.0	2	0.29	2	2.041	2	1.076	2	210.41	2	9	8.0701	2	-9	9	-9	-9
132	2	74.7	36.255	2	23.367	23.351	24.783	0.054	0.0	2	0.0	2	0.28	2	2.088	2	1.128	2	216.00	2	9	8.0654	2	-9	9	-9	-9
131	2	104.0	36.169	2	22.058	22.037	25.096	0.046	0.0	2	0.2	2	0.27	2	2.191	6	1.143	6	212.09	2	9	8.0507	2	-9	9	-9	-9
130	2	125.4	36.105	2	21.616	21.592	25.172	0.049	0.0	2	0.1	2	0.31	2	2.208	2	1.162	2	-9	1	9	8.0378	2	-9	9	-9	-9
129	2	149.4	35.947	2	20.902	20.874	25.250	0.054	0.5	2	1.0	2	0.39	2	2.251	2	1.188	2	203.57	6	9	-9	9	-9	9	-9	-9
128	2	199.8	35.425	2	18.291	18.256	25.534	0.024	0.0	2	5.7	2	0.71	2	2.372	6	1.218	6	183.32	2	9	9	9	-9	9	-9	-9
127	2	249.3	34.832	2	14.402	14.365	25.980	0.019	0.0	2	9.4	2	0.96	2	2.087	2	1.049	2	86.37	2	9	9	9	-9	9	-9	-9
126	2	300.0	34.570	2	11.045	11.008	26.439	0.021	0.0	2	21.9	2	2.00	2	0.826	2	0.421	2	42.69	2	9	9	9	-9	9	-9	-9
125	2	351.4	34.561	2	9.516	9.477	26.697	0.022	0.0	2	31.5	2	2.55	2	0.215	2	0.111	2	41.88	2	9	9	9	-9	9	-9	-9
124	9	-9	-9	-9	-9	-9	-9	-9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
123	2	402.0	34.543	2	8.344	8.302	26.869	0.021	0.0	2	35.6	2	2.61	2	0.072	2	0.041	6	45.97	2	9	9	9	-9	9	-9	-9
122	2	499.5	34.494	2	7.038	6.991	27.021	0.018	0.0	2	37.3	2	2.56	2	0.024	2	0.014	2	75.38	2	9	9	9	-9	9	-9	-9
121	2	606.9	34.504	2	6.229	6.174	27.139	0.017	0.0	2	40.6	2	2.75	2	0.013	6	0.002	6	65.34	2	9	9	9	-9	9	-9	-9
120	2	700.3	34.501	2	5.711	5.650	27.202	0.017	0.0	2	42.7	2	2.97	2	0.005	2	0.001	2	51.77	2	9	9	9	-9	9	-9	-9
119	2	800.8	34.505	2	5.120	5.054	27.277	0.017	0.0	2	44.1	2	2.96	2	0.006	2	0.003	2	53.10	2	9	9	9	-9	9	-9	-9
118	2	900.5	34.516	2	4.667	4.595	27.337	0.016	0.0	2	43.6	2	2.96	2	0.001	2	0.001	2	58.62	6	9	9	9	-9	9	-9	-9
117	2	999.5	34.532	2	4.135	4.058	27.408	0.015	0.0	2	42.3	2	2.96	2	-0.002	2	-0.002	2	68.83	2	9	9	9	-9	9	-9	-9
116	2	1099.9	34.544	2	3.838	3.755	27.449	0.012	0.0	2	41.7	2	2.91	2	8.77	2	9	9	76.32	2	9	9	9	-9	9	-9	-9
115	2	1302.7	34.560	2	3.454	3.373	27.493	0.011	0.0	2	41.1	2	2.88	2	0.010	2	0.003	2	81.10	2	9	9	9	-9	9	-9	-9
114	2	1302.8	34.570	2	3.313	3.218	27.521	0.010	0.0	2	41.0	2	2.86	2	9.74	2	9	9	86.43	2	9	9	9	-9	9	-9	-9
113	2	1403.1	34.583	2	3.102	3.001	27.552	0.010	0.0	2	40.5	2	2.84	2	103.7	2	9	9	89.70	2	9	9	9	-9	9	-9	-9
112	2	1497.8	34.594	2	2.912	2.806	27.579	0.010	0.0	2	40.2	2	2.82	2	109.6	2	9	9	95.39	2	9	9	9	-9	9	-9	-9
111	2	1598.4	34.607	2	2.690	2.578	27.609	0.009	0.0	2	39.4	2	2.77	2	115.5	2	9	9	102.06	2	9	9	9	-9	9	-9	-9
110	2	1800.5	34.624	2	2.414	2.288	27.647	0.008	0.0	2	38.6	2	2.67	2	121.1	2	9	9	114.26	2	9	9	9	-9	9	-9	-9
109	2	2000.2	34.643	2	2.126	1.987	27.687	0.005	0.0	2	37.4	2	2.55	2	122.8	2	9	9	131.84	2	9	9	9	-9	9	-9	-9
108	2	2249.6	34.658	2	1.932	1.776	27.716	0.004	0.0	2	35.9	2	2.47	2	124.8	2	9	9	144.56	2	9	9	9	-9	9	-9	-9
107	2	2499.9	34.670	2	1.832	1.655	27.734	0.003	0.0	2	36.2	2	2.47	2	129.0	2	9	9	145.67	6	1179	2	9	9	9	-9	-9
106	2	2749.6	34.674	2	1.701	1.602	27.741	0.003	0.0	2	37.5	2	2.48	2	132.1	2	9	9	143.22	2	9	9	9	-9	9	-9	-9
105	2	2999.3	34.676	2	1.899	1.575	27.745	0.002	0.0	2	36.3	2	2.48	2	136.1	2	9	9	149.00	2	9	9	9	-9	9	-9	-9
104	2	3248.4	34.677	2	1.808	1.555	27.747	0.002	0.0	2	36.7	2	2.50	2	138.8	2	9	9	140.61	2	9	9	9	-9	9	-9	-9
103	2	3498.3	34.677	2	1.805	1.531	27.748	0.002	0.0	2	37.4	2	2.52	2	143.0	2	0.001	4	137.26	2	9	9	9	-9	9	-9	-9
102	2	3498.7	34.678	2	1.805	1.531	27.748	0.002	0.0	2	37.2	2	2.53	2	143.0	2	0.004	4	137.26	2	9	9	9	-9	9	-9	-9
101	2	3790.5	34.676	2	1.824	1.519	27.749	0.002	0.0	2	36.3	2	2.53	2	145.1	2	9	9	136.68	2	9	9	9	-9	9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 108 1 DATE 4/3/94 LATITUDE 15°30.1'S Btm Depth: 3703
 CAST 1 LONGITUDE 103°0.0'W

Sample ID	Pressure db	Salinity P ^o	Salinity Bottle	Temp °C	Temp °C	Sigma T	Sigma T _{theta}	Beam Attenuation cp	NO2 P ^o umol/kg	NO3 P ^o umol/kg	PO4 P ^o umol/kg	Si(OH)4 P ^o umol/kg	CFC-11 P ^o pmol/kg	CFC-12 P ^o pmol/kg	O2 P ^o umol/kg	fCO2 P ^o @ 20°C ^o usatm	DIC P ^o umol/kg	pH P ^o	TA ^o P ^o umol/kg	F ^o umol/kg	813C TOC per mil umol/L	TON umol/L	Chi-a Phase umol/L											
																								156 2	135 2	134 2	133 2	132 2	131 2	130 2	129 2	128 2	127 2	126 2
156 2	9.4	36.405	2 36.405	2 24.452	24.450	24.571	0.040	0.0	0.1	2 0.26	2 0.7	2 0.7	2 -9	2 -9	2 208.34	2 308	2 2067.6	3 8.0700	2 2405	2 -9	2 64.8	4.9	0.036	0.010										
135 2	25.1	36.379	2 36.377	2 24.305	24.299	24.596	0.049	0.0	0.1	2 0.26	2 0.7	2 0.7	2 -9	2 -9	2 209.04	2 -9	2 -9	9 8.0717	2 -9	2 -9	2 60.2	4.8	0.032	0.011										
134 2	48.4	36.375	2 36.375	2 24.149	24.139	24.641	0.050	0.0	0.1	2 0.28	2 0.5	2 0.5	2 -9	2 -9	2 209.62	2 309	2 2065.2	2 8.0678	2 2397	2 -9	2 69.8	5.3	0.035	0.016										
133 2	74.7	36.237	2 36.241	2 22.774	22.759	24.941	0.046	0.0	0.1	2 0.25	2 0.5	2 0.5	2 -9	2 -9	2 219.89	6 -9	2 -9	9 8.0594	2 -9	2 -9	2 58.4	4.7	0.052	0.022										
132 2	99.4	36.190	2 36.181	2 22.277	22.257	25.050	0.042	0.0	0.0	2 0.24	2 0.4	2 0.4	2 -9	2 -9	2 219.51	2 325	2 2067.1	2 8.0523	2 2386	2 -9	2 75.5	4.8	0.073	0.028										
131 2	125.0	36.067	2 36.052	2 21.536	21.511	25.165	0.046	0.0	0.0	2 0.25	2 0.5	2 0.5	2 -9	2 -9	2 215.97	2 -9	2 -9	9 8.0342	2 -9	2 -9	2 59.1	4.7	0.127	0.134										
130 2	150.5	35.774	2 35.744	3 20.194	20.166	25.308	0.054	0.2	0.6	2 0.29	2 0.4	2 0.4	2 -9	2 -9	2 197.57	2 437	2 2075.7	2 7.9560	2 2318	2 -9	2 57.6	-9	0.154	0.212										
129 2	200.5	35.165	2 35.146	2 16.944	16.911	25.662	0.024	0.0	2 1.2	2 0.50	2 1.2	2 -9	2 -9	2 152.19	2 -9	2 -9	9 7.7830	2 -9	2 -9	2 47.5	-9	0.034	0.039											
128 2	251.8	34.790	2 34.725	2 13.417	13.382	26.106	0.021	0.0	2 1.2	2 1.16	2 1.2	2 -9	2 -9	2 45.77	2 1389	2 2232.1	2 7.4826	2 2286	2 -9	2 -9	2 50.2	3.1	0.001	0.003										
127 2	303.4	34.622	2 34.627	2 11.015	10.978	26.485	0.024	0.0	2 2.4	2 2.35	2 1.9	2 -9	2 -9	2 41.01	2 -9	2 -9	9 7.4357	2 -9	2 -9	2 -9	-9	-9	-9	-9										
126 2	352.4	34.571	2 34.570	2 9.472	9.432	26.712	0.024	0.0	2 3.1	2 2.56	2 2.3	2 -9	2 -9	2 37.67	2 1638	2 2259.0	2 7.4233	2 2292	2 -9	2 -9	2 -9	-9	-9	-9										
125 2	399.3	34.568	2 34.568	2 8.592	8.550	26.851	0.022	0.0	2 3.5	2 2.63	2 2.6	2 -9	2 -9	2 46.95	2 1646	2 2263.8	2 7.4245	2 2298	2 -9	2 -9	2 -9	-9	-9	-9										
124 9	-9	-9	-9	-9	-9	-9	-9	-9	2 3.9	2 2.70	2 3.4	2 -9	2 -9	2 58.74	6 1636	2 2266.8	2 7.4331	2 2303	2 -9	2 -9	2 -9	-9	-9	-9										
123 2	466.4	34.541	2 34.540	2 7.390	7.342	27.009	0.021	0.0	2 3.9	2 2.70	2 3.4	2 -9	2 -9	2 46.86	2 1771	2 2288.1	2 7.3978	2 2317	2 -9	2 -9	2 -9	-9	-9	-9										
122 2	600.5	34.507	2 34.506	2 6.450	6.395	27.112	0.023	0.0	2 4.0	2 2.76	2 3.3	2 -9	2 -9	2 47.47	2 1809	2 2297.8	2 7.3947	2 2327	2 -9	2 -9	2 -9	-9	-9	-9										
121 2	701.4	34.504	2 34.503	2 5.776	5.715	27.196	0.019	0.0	2 4.2	2 2.97	2 5.1	2 -9	2 -9	2 54.54	2 1774	2 2305.0	2 7.4048	2 2338	2 -9	2 -9	2 -9	-9	-9	-9										
120 2	801.6	34.506	2 34.505	2 5.258	5.191	27.261	0.019	0.0	2 4.3	2 3.03	2 6.0	2 -9	2 -9	2 62.81	2 1719	2 2309.4	2 7.4178	2 2345	2 -9	2 -9	2 -9	-9	-9	-9										
119 2	899.8	34.515	2 34.514	2 4.747	4.675	27.328	0.017	0.0	2 4.3	2 2.98	2 7.1	2 -9	2 -9	2 72.62	6 -9	2 -9	9 7.4331	2 -9	2 -9	2 -9	-9	-9	-9											
118 2	999.4	34.527	2 34.528	2 4.343	4.265	27.382	0.015	0.0	2 4.8	2 3.02	2 8.6	2 -9	2 -9	2 78.24	2 -9	2 -9	9 7.4465	2 -9	2 -9	2 -9	-9	-9	-9											
117 2	1088.9	34.541	2 34.541	2 3.929	3.845	27.437	0.015	0.0	2 4.1	2 2.99	2 9.1	2 -9	2 -9	2 84.61	2 -9	2 -9	9 7.4596	2 -9	2 -9	2 -9	-9	-9	-9											
116 2	1196.3	34.554	2 34.552	2 3.648	3.559	27.476	0.014	0.0	2 4.8	2 2.96	2 10.2	2 -9	2 -9	2 91.45	2 -9	2 -9	9 7.4691	2 -9	2 -9	2 -9	-9	-9	-9											
115 2	1300.6	34.571	2 34.570	2 3.306	3.211	27.523	0.012	0.0	2 4.0	2 2.87	2 10.9	2 -9	2 -9	2 101.83	2 -9	2 -9	9 7.4912	2 -9	2 -9	2 -9	-9	-9	-9											
114 2	1399.7	34.586	2 34.584	2 3.044	2.944	27.559	0.010	0.0	2 4.0	2 2.87	2 10.9	2 -9	2 -9	2 116.53	2 -9	2 -9	9 7.5180	2 -9	2 -9	2 -9	-9	-9	-9											
113 2	1598.7	34.608	2 34.607	2 2.685	2.572	27.610	0.010	0.0	2 3.9	2 2.81	2 11.3	2 -9	2 -9	2 131.50	2 -9	2 -9	9 7.5374	2 -9	2 -9	2 -9	-9	-9	-9											
112 2	1801.7	34.627	2 34.627	2 2.365	2.239	27.654	0.007	0.0	2 3.9	2 2.66	2 12.1	2 -9	2 -9	2 145.26	2 -9	2 -9	9 7.5674	2 -9	2 -9	2 -9	-9	-9	-9											
111 2	2003.7	34.645	2 34.644	2 2.107	1.968	27.690	0.005	0.0	2 3.8	2 2.59	2 12.9	2 -9	2 -9	2 145.35	2 -9	2 -9	9 7.5777	2 -9	2 -9	2 -9	-9	-9	-9											
110 2	2202.5	34.660	2 34.660	2 1.915	1.763	27.718	0.004	0.0	2 3.6	2 2.52	2 12.9	2 -9	2 -9	2 142.63	2 -9	2 -9	9 7.5794	2 -9	2 -9	2 -9	-9	-9	-9											
109 2	2397.7	34.668	2 34.667	2 1.844	1.676	27.731	0.004	0.0	2 3.6	2 2.52	2 12.9	2 -9	2 -9	2 141.48	2 -9	2 -9	9 7.5794	2 -9	2 -9	2 -9	-9	-9	-9											
108 2	2600.2	34.673	2 34.671	2 1.809	1.623	27.759	0.003	0.0	2 3.7	2 2.51	2 13.3	2 -9	2 -9	2 138.95	2 -9	2 -9	9 7.5768	2 -9	2 -9	2 -9	-9	-9	-9											
107 2	2800.1	34.675	2 34.675	2 1.799	1.576	27.745	0.003	0.0	2 3.7	2 2.51	2 13.3	2 -9	2 -9	2 137.05	2 -9	2 -9	9 7.5768	2 -9	2 -9	2 -9	-9	-9	-9											
106 2	2999.7	34.676	2 34.675	2 1.799	1.543	27.748	0.002	0.0	2 3.6	2 2.49	2 13.7	2 -9	2 -9	2 137.05	2 -9	2 -9	9 7.5768	2 -9	2 -9	2 -9	-9	-9	-9											
105 2	3201.0	34.677	2 34.675	2 1.805	1.562	27.746	0.003	0.0	2 3.7	2 2.50	2 14.1	2 -9	2 -9	2 137.05	2 -9	2 -9	9 7.5768	2 -9	2 -9	2 -9	-9	-9	-9											
104 2	3397.8	34.677	2 34.675	2 1.806	1.543	27.748	0.002	0.0	2 3.7	2 2.50	2 14.1	2 -9	2 -9	2 137.05	2 -9	2 -9	9 7.5768	2 -9	2 -9	2 -9	-9	-9	-9											
103 2	3595.3	34.676	2 34.677	2 1.811	1.527	27.749	0.002	0.0	2 3.7	2 2.55	2 14.1	2 -9	2 -9	2 138.13	2 -9	2 -9	9 7.5750	2 -9	2 -9	2 -9	-9	-9	-9											
102 2	3597.1	34.676	2 34.675	2 1.811	1.527	27.749	0.002	0.0	2 3.7	2 2.49	2 14.1	2 -9	2 -9	2 135.91	2 -9	2 -9	9 7.5750	2 -9	2 -9	2 -9	-9	-9	-9											
101 2	3774.8	34.676	2 34.675	2 1.818	1.515	27.749	0.002	0.0	2 3.7	2 2.53	2 14.2	2 -9	2 -9	2 135.91	2 -9	2 -9	9 7.5750	2 -9	2 -9	2 -9	-9	-9	-9											

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 110 1 DATE 4/4/94 LATITUDE 14°30.2'S Btm Depth: 4021
CAST 1 LONGITUDE 102°59.3'W

Sample ID	Pressure db	Salinity	F [*] Salinity	Temp °C	Temp °C	Sigma T	Sigma t	Theta cp	Beam										FOC2										TON µmol/L	Chl-a µg/L
									NO2	NO3	PO4	F [*] Si(OH) ₄	F [*] CFC-11	F [*] CFC-12	F [*] O2	F [*] @20°C	DIC	pH	TALK	F [*] 813C	TOC									
136	2	10.7	36.076	2	25.421	25.418	24.026	0.084	0.0	0.6	0.30	3.1	1.900	2	1.018	2	2.0694	2	-9	2035.0	2	2381	2	64.1	6.1	-9				
135	2	10.2	36.067	2	25.421	25.419	24.019	0.084	0.0	0.7	0.30	5.4	1.889	2	1.008	2	207.43	2	291	2	2034.5	2	2373	2	74.5	5.9	-9			
134	2	24.3	36.287	2	24.877	24.872	24.354	0.066	0.0	0.1	0.30	6.9	-9	9	9	208.28	2	-9	9	9	8.0772	2	-9	9	72.4	5.0	-9			
133	2	49.3	36.223	2	23.877	23.867	24.608	0.066	0.0	0.3	0.30	7.6	2.041	2	1.079	2	214.66	6	-9	9	2054.0	2	2385	2	62.5	6.9	-9			
132	2	74.5	36.178	2	22.342	22.327	25.020	0.056	0.0	0.0	0.27	7.4	-9	9	9	221.64	2	-9	9	9	8.0564	2	-9	9	75.5	6.4	-9			
131	2	98.5	36.121	2	21.743	21.724	25.147	0.050	0.0	0.2	0.32	8.2	2.266	2	1.154	2	217.56	2	329	2	2069.4	2	2382	2	56.2	6.0	-9			
130	2	122.1	36.006	2	21.178	21.155	25.218	0.051	0.1	0.3	0.37	9.4	-9	9	9	212.16	2	-9	9	9	8.0278	2	-9	9	4.6	-9	-9			
129	2	149.2	35.745	2	19.909	19.882	25.362	0.034	0.1	2.4	0.51	8.8	2.310	2	1.204	2	1.9926	2	-9	9	9	7.9836	2	-9	9	-9	-9	-9		
128	2	199.1	35.215	2	16.961	16.928	25.696	0.024	0.0	7.3	0.86	9.9	-9	9	9	173.17	2	504	2	2105.5	2	2320	2	-9	9	-9	-9	-9		
127	2	247.9	34.758	2	13.165	13.131	26.179	0.023	0.0	18.5	1.90	18.9	1.318	2	0.668	2	76.73	2	1004	2	2191.9	2	2289	2	63.2	3.5	-9			
126	3	298.8	34.687	2	11.141	11.103	26.513	0.023	0.0	26.6	2.59	29.1	-9	9	9	18.37	2	-9	9	9	7.4547	2	-9	9	-9	-9	-9			
125	2	349.9	34.660	2	9.953	9.952	26.694	0.024	0.0	32.7	2.69	32.4	0.095	2	0.053	2	12.16	2	-9	9	9	7.3994	2	-9	9	3.3	-9	-9		
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
123	2	400.2	34.620	2	8.952	8.908	26.835	0.024	0.0	36.9	2.73	34.2	0.056	2	0.024	2	19.83	2	-9	9	2268.7	2	2298	2	-9	-9	-9			
122	2	499.8	34.572	2	7.743	7.692	26.983	0.023	0.0	40.1	2.79	38.8	-9	9	-9	9	30.37	2	1745	2	2270.5	2	2299	2	44.9	3.0	-9			
121	2	596.7	34.535	2	6.728	6.672	27.097	0.021	0.0	41.9	2.91	46.5	0.003	6	0.001	6	40.11	2	1747	2	2275.5	2	2303	2	-9	-9	-9			
120	2	699.6	34.512	2	5.906	5.844	27.187	0.019	0.0	43.3	3.01	55.3	-9	9	9	40.77	2	1816	2	2287.4	2	2316	2	-9	-9	-9				
119	2	799.9	34.511	2	5.243	5.177	27.267	0.017	0.0	44.4	3.09	65.2	0.000	2	0.000	2	45.10	2	1828	2	2298.8	2	2322	2	-9	-9	-9			
118	2	900.4	34.520	2	4.710	4.637	27.336	0.015	0.0	43.8	3.08	77.0	-9	9	-9	52.59	2	1776	2	2304.8	2	2335	2	-9	-9	-9				
117	2	1000.0	34.533	2	4.289	4.211	27.392	0.015	0.0	43.0	3.02	84.7	-0.008	2	-0.002	2	63.99	2	1700	2	2310.2	2	2350	6	-9	-9	-9			
116	2	1096.4	34.547	2	3.892	3.809	27.446	0.014	0.0	42.8	3.01	92.2	-9	9	-9	79.75	6	-9	9	9	9	-9	-9	-9	-9	-9	-9			
115	2	1199.3	34.560	2	3.589	3.500	27.487	0.013	0.0	42.5	2.95	98.7	-9	9	-9	86.80	2	-9	9	9	9	-9	-9	-9	-9	-9	-9	-9		
114	2	1297.3	34.573	2	3.306	3.211	27.525	0.011	0.0	41.2	2.87	102.5	-9	9	-9	93.22	2	-9	9	9	9	-9	-9	-9	-9	-9	-9	-9		
113	2	1398.6	34.584	2	3.098	2.997	27.554	0.010	0.0	40.5	2.88	110.1	-9	9	-9	104.02	2	-9	9	9	9	-9	-9	-9	-9	-9	-9	-9		
112	2	1600.2	34.607	2	2.713	2.601	27.607	0.008	0.0	39.5	2.78	120.2	-9	9	-9	113.71	2	-9	9	9	9	-9	-9	-9	-9	-9	-9	-9		
111	2	1802.1	34.625	2	2.430	2.304	27.646	0.007	0.0	38.9	2.72	124.0	-9	9	-9	125.43	2	-9	9	9	9	-9	-9	-9	-9	-9	-9	-9		
110	2	1996.1	34.643	2	2.157	2.018	27.685	0.006	0.0	37.7	2.62	127.2	-9	9	-9	139.47	6	-9	9	9	9	-9	-9	-9	-9	-9	-9	-9		
109	2	2347.2	34.660	2	1.933	1.776	27.717	0.006	0.0	36.7	2.52	125.9	-9	9	-9	144.57	2	-9	9	9	9	-9	-9	-9	-9	-9	-9	-9		
108	2	2498.2	34.671	2	1.827	1.650	27.735	0.004	0.0	37.1	2.48	127.5	-9	9	-9	139.47	6	-9	9	9	9	-9	-9	-9	-9	-9	-9	-9		
107	2	2746.5	34.675	2	1.786	1.587	27.743	0.003	0.0	36.5	2.54	136.3	-9	9	-9	140.50	2	-9	9	9	9	-9	-9	-9	-9	-9	-9	-9		
106	2	2999.5	34.677	2	1.779	1.556	27.747	0.002	0.0	36.6	2.53	142.8	0.005	2	0.000	2	140.50	2	-9	9	9	9	-9	-9	-9	-9	-9	-9		
105	2	3301.1	34.676	2	1.777	1.529	27.748	0.002	0.0	37.1	2.54	144.4	-9	9	-9	136.38	2	-9	9	9	9	-9	-9	-9	-9	-9	-9	-9		
104	2	3745.5	34.676	2	1.782	1.508	27.750	0.002	0.0	37.2	2.54	144.1	-9	9	-9	135.86	2	-9	9	9	9	-9	-9	-9	-9	-9	-9	-9		
103	2	3745.5	34.676	2	1.799	1.499	27.750	0.002	0.0	37.5	2.53	141.8	-9	9	-9	136.42	2	-9	9	9	9	-9	-9	-9	-9	-9	-9	-9		
102	2	3744.3	34.676	2	1.799	1.499	27.750	0.002	0.0	37.6	2.53	141.4	-9	9	-9	136.42	2	-9	9	9	9	-9	-9	-9	-9	-9	-9	-9		
101	2	4035.9	34.676	2	1.823	1.491	27.751	0.002	0.0	37.0	2.56	147.5	-9	9	-9	136.47	2	-9	9	9	9	-9	-9	-9	-9	-9	-9	-9		

* WOCE water sample quality flag (F) for parameter from previous column

** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94

WOCE P18

NOAA Ship Discoverer

STATION 112 DATE 4/4/94 LATITUDE 13°30.0'S Btm Depth: 4127
 CAST 1 LONGITUDE 103°0.2'W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma T	Theta	Beam Attenuation cp	NO2 μmol/kg	NO3 μmol/kg	PO4 μmol/kg	Si(OH)4 μmol/kg	F ⁻ μmol/kg	CFC-11 F ⁻ pmol/kg	CFC-12 F ⁻ pmol/kg	O2 μmol/kg	F ⁻ @20°C μatm	DIC μmol/kg	pH	TA μmol/kg	P ⁻ μmol/kg	315C per ml μmol/L	TOC μmol/L	TON μmol/L	Chl-a μg/L	Phaeo μg/L							
																											Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C
136	2	36.061	2	36.062	2	25.545	25.543	23.977	0.079	0.0	0.9	0.34	2.3	1.891	2	1.024	2	206.99	2	289	2	2034.5	2	8.0878	2	2378	2	2	-9	-9	0.091	0.030	
135	2	36.062	2	36.063	2	25.547	25.545	23.976	0.079	0.0	0.9	0.32	3.5	1.890	2	1.014	2	207.33	2	-9	9	2037.7	2	8.0833	2	2378	2	1.70	67.7	5.9	-9	-9	
134	2	36.061	2	36.064	2	25.495	25.489	23.993	0.086	0.0	0.9	0.34	3.6	1.898	2	1.014	2	207.25	2	-9	9	2040.2	2	8.0876	2	-9	9	71.5	5.0	-9	-9	-9	
133	2	36.148	2	36.149	2	25.097	24.179	0.068	0.0	0.1	0.28	3.5	2.119	2	1.950	2	1.098	2	209.84	6	338	3	2040.2	2	8.0853	2	2387	2	-9	68.9	6.9	-9	-9
132	2	36.081	2	36.082	2	23.419	23.403	24.637	0.069	0.0	0.0	0.28	3.4	2.119	2	1.117	2	217.79	2	-9	9	-9	9	8.0798	2	-9	9	6.4	-9	-9	-9	-9	
131	2	36.140	2	36.145	2	22.405	22.385	24.975	0.049	0.0	0.1	0.35	3.5	2.141	6	1.128	6	212.20	2	315	2	2060.1	2	8.0887	2	2386	2	-9	66.7	6.0	-9	-9	
130	2	35.666	2	35.670	2	19.581	19.553	25.388	0.029	0.1	4.3	2.65	3.9	2.316	2	1.206	2	186.54	2	-9	9	-9	9	7.9542	2	-9	9	51.9	4.6	-9	-9	-9	
129	2	35.074	2	35.071	2	15.856	15.825	25.845	0.024	0.0	13.2	1.54	2.77	2.006	2	1.024	2	123.10	2	677	2	2147.2	2	7.7747	2	2310	2	-9	-9	-9	-9	-9	
128	2	34.763	2	34.761	2	12.630	12.596	26.289	0.024	0.0	21.2	2.25	18.9	2.856	2	0.442	2	37.51	2	-9	9	-9	9	7.5243	2	-9	9	-9	-9	-9	-9	-9	
127	2	34.708	2	34.710	2	10.923	10.886	26.568	0.024	0.0	29.6	2.28	26.8	2.180	2	0.098	2	1619	2	2256.9	2	7.4301	2	7.4301	2	2294	2	-9	57.2	3.5	-9	-9	
126	2	34.681	2	34.680	2	9.693	9.653	26.761	0.024	0.0	33.9	2.54	30.3	2.060	6	0.096	6	29.76	2	-9	9	-9	9	7.4496	2	-9	9	-9	-9	-9	-9	-9	
125	2	34.654	2	34.653	2	8.965	8.921	26.860	0.024	0.0	35.6	2.49	32.1	2.029	2	0.016	2	40.74	2	1510	2	2251.7	2	7.4604	2	2303	2	-9	3.3	-9	-9	-9	
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
123	2	34.600	2	34.601	2	7.773	7.722	27.001	0.022	0.0	37.8	2.61	37.9	2.011	6	0.004	6	51.71	2	1515	2	2266.4	3	7.4526	2	2312	2	-9	54.9	-9	-9	-9	
122	2	34.562	2	34.561	2	7.004	6.947	27.081	0.019	0.0	38.9	2.70	43.5	-0.002	2	0.000	2	57.23	2	1547	3	2264.4	3	7.4526	2	2310	2	-9	-9	-9	-9	-9	
121	2	34.530	2	34.529	2	6.266	6.202	27.156	0.019	0.0	41.8	2.86	50.9	-0.004	2	-0.003	2	50.13	2	1679	2	2277.5	3	7.4200	2	2310	2	-9	-9	-9	-9	-9	
120	2	34.517	2	34.517	2	5.563	5.494	27.234	0.017	0.0	43.1	3.03	59.8	-0.003	2	-0.003	2	47.42	2	1757	2	2291.4	3	7.4025	2	2321	2	-9	-9	-9	-9	-9	
119	2	34.518	2	34.517	2	4.985	4.910	27.304	0.017	0.0	43.5	3.05	68.5	2.021	4	-0.003	2	51.98	2	1770	2	2301.5	3	7.4024	2	2331	2	-9	39.1	2.3	-9	-9	
118	2	34.528	2	34.528	2	4.499	4.419	27.367	0.016	0.0	44.2	3.09	78.5	2.099	4	0.130	4	61.23	2	1715	2	2308.6	3	-9	9	2344	6	-9	-9	-9	-9	-9	
117	2	34.554	2	34.552	2	3.764	3.674	27.464	0.012	0.0	41.7	2.98	94.7	-0.004	2	0.000	2	76.80	2	-9	9	-9	9	7.4446	2	-9	9	-9	-9	-9	-9	-9	
116	2	34.582	2	34.582	2	3.165	3.083	27.546	0.010	0.0	40.6	2.86	107.8	-9	9	-9	9	92.79	2	-9	9	-9	9	7.4760	2	-9	9	-9	-9	-9	-9	-9	
115	2	34.603	2	34.602	2	2.790	2.676	27.597	0.009	0.0	39.8	2.79	114.9	-0.001	2	-0.003	2	102.72	2	-9	9	-9	9	7.4946	2	-9	9	-9	-9	-9	-9	-9	
114	2	34.623	2	34.640	4	2.455	2.329	27.643	0.006	0.0	39.0	2.69	121.3	-9	9	-9	114.98	2	-9	9	-9	9	7.5190	2	-9	9	-9	-9	-9	-9	-9		
113	2	34.656	2	34.656	2	1.995	1.841	27.708	0.004	0.0	38.1	2.66	128.9	-9	9	-9	133.57	2	-9	9	-9	9	7.5298	2	-9	9	-9	-9	-9	-9	-9		
112	2	34.666	2	34.666	2	1.873	1.704	27.727	0.003	0.0	36.7	2.53	131.0	-0.002	2	-0.003	2	140.39	6	-9	9	-9	9	7.5298	2	-9	9	-9	-9	-9	-9	-9	
111	2	34.675	2	34.675	2	1.776	1.533	27.746	0.002	0.0	36.6	2.52	132.0	-9	9	-9	141.78	2	-9	9	-9	9	7.5298	2	-9	9	-9	-9	-9	-9	-9		
110	2	34.675	2	34.674	2	1.783	1.580	27.743	0.003	0.0	36.6	2.52	135.9	-0.003	2	-0.003	2	141.10	2	-9	9	-9	9	7.5298	2	-9	9	-9	-9	-9	-9	-9	
109	2	34.676	2	34.675	2	1.774	1.531	27.748	0.002	0.0	36.5	2.52	143.0	-9	9	-9	138.56	2	-9	9	-9	9	7.5298	2	-9	9	-9	-9	-9	-9	-9		
108	2	34.676	2	34.675	2	1.777	1.514	27.749	0.002	0.0	37.7	2.57	145.2	-9	9	-9	135.32	2	-9	9	-9	9	7.5298	2	-9	9	-9	-9	-9	-9	-9		
107	2	34.676	2	34.675	2	1.797	1.492	27.751	0.001	0.0	37.6	2.54	144.3	-0.003	2	-0.003	2	136.09	2	-9	9	-9	9	7.5298	2	-9	9	-9	-9	-9	-9	-9	
106	2	34.676	2	34.675	2	1.813	1.485	27.751	0.002	0.0	37.1	2.58	146.9	-9	9	-9	136.17	2	-9	9	-9	9	7.5298	2	-9	9	-9	-9	-9	-9	-9		
105	2	34.676	2	34.675	2	1.813	1.485	27.751	0.002	0.0	36.8	2.56	150.2	-0.004	2	-0.004	2	136.17	2	-9	9	-9	9	7.5298	2	-9	9	-9	-9	-9	-9	-9	
104	2	34.676	2	34.675	2	1.813	1.485	27.751	0.002	0.0	37.3	2.57	149.8	-9	9	-9	136.61	2	-9	9	-9	9	7.5298	2	-9	9	-9	-9	-9	-9	-9		
103	2	34.676	2	34.675	2	1.832	1.483	27.751	0.002	0.0	37.5	2.55	146.4	0.001	4	0.001	4	136.78	6	-9	9	-9	9	7.5298	2	-9	9	-9	-9	-9	-9	-9	
102	2	34.676	2	34.675	2	1.832	1.483	27.751	0.002	0.0	37.5	2.55	146.4	0.001	4	0.001	4	136.78	6	-9	9	-9	9	7.5298	2	-9	9	-9	-9	-9	-9	-9	
101	2	34.676	2	34.675	2	1.832	1.483	27.751	0.002	0.0	37.5	2.55	146.4	0.001	4	0.001	4	136.78	6	-9	9	-9	9	7.5298	2	-9	9	-9	-9	-9	-9	-9	

* WOCE water sample quality flag (F) for parameter from previous column

** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 113 DATE 4/5/94
CAST 1

LATITUDE 13°0.6'S
LONGITUDE 103°0.5'W

Btm Depth: 4252

Sample ID	Pressure db	Salinity ‰	Salinity ‰ Bottle	Temp °C	Temp °C	Sigma T	Sigma T	Beam Attenuation cp	NO2 ‰	NO3 ‰	PO4 ‰	Si(OH)4 ‰	CFC-11 ‰	CFC-12 ‰	O2 ‰ @20°C	DIC ‰	pH	TAIK ‰	813C ‰	TOC ‰	TON ‰	Chl-a ‰	Phase	
																								‰
136	10.4	35.993	35.991	25.590	25.588	23.911	0.092	0.0	0.2	0.7	0.32	3.4	1.883	1.037	2	293	2	2032.1	2	1.80	6	1.80	-9	-9
135	2	35.993	35.992	25.591	25.589	23.911	0.092	0.0	0.2	0.8	0.30	6.4	1.891	1.007	6	207.02	2	2031.4	2	1.70	2	1.70	-9	-9
134	2	35.989	35.997	25.595	25.589	23.908	0.110	0.0	0.7	0.7	0.32	7.3	1.899	1.021	2	208.63	2	2032.4	2	1.70	2	1.70	-9	-9
133	2	36.182	36.187	24.099	24.088	24.510	0.072	0.0	0.1	0.2	0.28	7.9	2.018	1.077	2	213.31	6	2046.3	2	1.90	2	1.90	-9	-9
132	3	36.288	36.285	22.692	22.676	25.004	0.068	0.0	0.0	0.2	0.29	8.4	2.179	1.121	2	214.76	2	2046.3	2	1.90	2	1.90	-9	-9
131	2	36.188	36.182	22.145	22.125	25.086	0.055	0.1	0.2	0.1	0.34	7.8	2.188	1.213	6	209.46	2	2081.4	2	1.80	2	1.80	-9	-9
130	2	35.958	35.964	20.997	20.973	25.231	0.096	0.9	2.0	4.7	0.46	6.9	2.236	1.185	2	200.18	2	2081.4	2	1.60	2	1.60	-9	-9
129	3	35.623	35.634	19.328	19.301	25.490	0.026	0.0	4.7	2.0	0.66	7.9	2.319	1.205	2	185.00	2	2081.4	2	1.40	2	1.40	-9	-9
128	3	35.039	35.043	15.469	15.438	25.905	0.024	0.0	14.7	12.9	1.44	2.2	1.926	1.079	2	110.78	2	2081.4	2	0.70	2	0.70	-9	-9
127	2	34.782	34.781	12.831	12.799	26.264	0.024	0.0	21.3	21.3	2.28	23.1	2.081	0.447	2	30.10	2	2230.5	2	0.20	2	0.20	-9	-9
126	2	34.705	34.703	10.603	10.567	26.623	0.024	0.0	31.2	30.8	2.58	30.8	2.133	0.074	6	15.81	2	2236.2	2	0.10	2	0.10	-9	-9
125	2	35.09	34.678	9.529	9.489	26.786	0.024	0.0	34.6	34.6	2.55	33.7	2.066	0.024	2	24.68	2	2256.1	2	0.20	2	0.20	-9	-9
124	9	-9	-9	-9	-9	-9	-9	-9	9	9	-9	9	9	9	9	9	9	9	9	9	9	9	-9	-9
123	2	34.602	34.599	7.852	7.802	26.991	0.022	0.0	37.2	37.2	2.56	41.9	2	9	1	53.60	2	2254.6	2	0.30	2	0.30	-9	-9
122	2	34.560	34.557	6.989	6.952	27.081	0.021	0.0	39.6	39.6	2.65	47.3	2	0.002	6	59.21	2	2260.4	2	0.20	2	0.20	-9	-9
121	2	34.528	34.525	6.182	6.119	27.164	0.019	0.0	42.0	42.0	2.84	54.1	2	-0.001	2	53.42	2	2276.5	2	0.20	3	0.20	-9	-9
120	2	34.516	34.514	5.539	5.470	27.236	0.019	0.0	43.3	43.3	2.95	61.9	2	-0.001	2	52.41	2	2288.5	2	0.10	2	0.10	-9	-9
119	2	34.517	34.515	4.928	4.854	27.309	0.017	0.0	44.2	44.2	3.04	70.7	2	0.000	2	52.82	2	2300.0	2	0.10	2	0.10	-9	-9
118	2	34.528	34.528	4.407	4.328	27.376	0.017	9	1	9	1	9	1	-0.002	2	61.63	2	2304.0	2	0.10	2	0.10	-9	-9
117	2	34.541	34.540	4.085	3.970	27.424	0.015	0.0	42.9	42.9	2.98	87.5	2	9	9	73.01	2	2310.2	2	0.00	2	0.00	-9	-9
116	2	34.556	34.554	3.708	3.618	27.471	0.013	0.0	42.5	42.5	2.94	94.1	2	9	9	78.30	2	2315.7	2	0.00	2	0.00	-9	-9
115	2	34.570	34.570	3.404	3.308	27.513	0.012	0.0	42.8	42.8	2.98	102.8	2	9	9	86.01	2	2318.3	2	0.00	2	0.00	-9	-9
114	2	34.583	34.581	3.145	3.044	27.548	0.010	0.0	40.9	40.9	2.85	106.0	2	0.044	4	93.80	2	2321.1	2	0.00	2	0.00	-9	-9
113	2	34.603	34.603	2.766	2.652	27.601	0.008	0.0	39.7	39.7	2.78	117.0	2	9	9	104.15	2	2324.4	2	0.00	2	0.00	-9	-9
112	2	34.624	34.623	2.447	2.320	27.644	0.008	0.0	38.7	38.7	2.71	124.3	2	9	9	114.83	2	2325.7	2	0.10	2	0.10	-9	-9
111	2	34.638	34.636	2.233	2.093	27.674	0.005	0.0	38.4	38.4	2.65	126.6	2	9	9	132.86	2	2325.6	2	0.00	2	0.00	-9	-9
110	2	34.656	34.656	1.991	1.833	27.709	0.004	0.0	36.9	36.9	2.56	129.2	2	9	9	140.40	2	2325.2	2	0.00	2	0.00	-9	-9
109	2	34.669	34.667	1.850	1.673	27.731	0.004	0.0	37.0	37.0	2.53	129.4	2	0.001	2	141.38	2	2323.3	2	0.10	2	0.10	-9	-9
108	2	34.674	34.673	1.792	1.592	27.742	0.003	0.0	37.0	37.0	2.54	134.0	2	9	9	138.27	2	2326.2	2	0.10	2	0.10	-9	-9
107	2	34.675	34.675	1.775	1.552	27.746	0.003	0.0	37.0	37.0	2.54	141.3	2	9	9	137.19	2	2336.2	2	0.10	2	0.10	-9	-9
106	2	34.674	34.673	1.764	1.517	27.748	0.004	0.0	37.5	37.5	2.55	149.8	2	0.000	2	134.76	2	2338.8	2	0.00	2	0.00	-9	-9
105	2	34.676	34.674	1.771	1.498	27.750	0.003	0.0	37.4	37.4	2.55	148.2	2	9	9	135.94	2	2339.0	2	0.00	2	0.00	-9	-9
104	2	34.676	34.674	1.786	1.486	27.751	0.003	0.0	37.4	37.4	2.56	147.2	2	9	9	135.71	2	2339.6	2	0.00	2	0.00	-9	-9
103	2	34.676	34.675	1.786	1.486	27.751	0.003	0.0	37.4	37.4	2.54	145.9	2	-0.001	2	135.76	2	2338.2	2	-0.10	2	-0.10	-9	-9
102	2	34.676	34.675	1.808	1.481	27.752	0.002	0.0	37.3	37.3	2.54	145.7	2	9	9	136.81	2	2338.2	2	-0.10	2	-0.10	-9	-9
101	2	34.676	34.675	1.846	1.478	27.752	0.002	0.0	37.0	37.0	2.56	145.4	2	9	9	136.81	2	2337.7	2	0.00	2	0.00	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 114 1 DATE 4/5/94 LATITUDE 12°30.1'S Btm Depth: 4201
CAST 1 LONGITUDE 103°0.1'W

Sample ID	Pressure db	Salinity ‰	Salmity ‰ Bottle	Temp °C	Temp °C	Sigma T	Sigma A	Theta cp	NO2 ‰	NO3 ‰	PO4 ‰	F ^o SIOB4 ‰	CFC-11 ‰	CFC-12 ‰	O2 ‰	F ^o @ 20°C ‰	CO2 ‰	DIC ‰	pH	TAIK ‰	F ^o ‰	813C ‰	TOC ‰	TON ‰	Chi-a ‰	Phase											
																											‰	‰	‰	‰	‰	‰	‰	‰	‰	‰	‰
136	9.1	35.730	2	35.729	2	26.184	2	23.527	0.104	0.0	2	2.7	2	0.42	2	2.0	2	1.824	2	1.009	2	206.41	2	298	2	2019.4	2	8.0812	2	2357	6	-9	65.9	5.5	-9	-9	
135	25.8	35.729	2	35.729	2	26.172	2	23.532	0.110	0.0	2	3.0	2	0.41	2	1.8	2	1.840	2	0.987	2	206.45	2	-9	9	9	9	8.0640	2	-9	9	9	63.1	5.6	-9	-9	
134	50.3	35.984	2	36.053	3	24.223	2	24.321	0.122	0.0	2	0.2	2	0.29	2	1.5	2	-9	2	-9	2	214.04	2	300	2	2040.1	3	8.0774	2	2380	2	-9	78.2	6.0	-9	-9	
133	73.4	36.160	2	36.159	2	22.145	2	22.130	25.063	0.069	0.0	2	0.0	2	0.30	2	1.3	2	2.166	2	1.151	2	221.34	2	-9	9	9	9	8.0552	2	-9	9	9	68.6	5.5	-9	-9
132	99.5	35.971	2	35.970	2	21.026	2	21.007	25.232	0.043	0.7	2	0.6	2	0.45	2	1.4	2	-9	2	-9	2	204.81	2	359	2	2079.0	2	8.0168	2	2377	2	-9	60.5	4.8	-9	-9
131	124.5	35.640	2	35.632	2	19.382	2	19.359	25.418	0.056	0.0	2	3.2	2	0.59	2	1.6	2	2.334	6	1.210	6	192.90	2	-9	9	9	9	7.9618	2	-9	9	9	5.2	-9	-9	-9
130	150.6	35.441	2	35.446	2	18.378	2	18.352	25.523	0.090	0.0	2	5.3	2	0.73	2	2.3	2	0.924	6	0.481	6	16.82	2	1401	2	2238.1	2	7.4909	2	2298	2	-9	-9	-9	-9	-9
129	199.2	34.841	2	34.839	2	13.233	2	13.205	26.228	0.027	0.0	2	21.5	2	2.38	2	2.0	2	-9	2	-9	2	5.64	2	-9	9	9	9	7.4288	2	-9	9	9	-9	-9	-9	-9
128	248.3	34.763	2	34.764	2	11.612	2	11.580	26.484	0.025	0.0	2	26.3	2	2.59	2	2.40	2	0.098	2	0.054	2	10.57	2	1623	2	2260.4	2	7.4296	2	2304	2	-9	40.6	4.1	-9	-9
127	298.2	34.750	2	34.748	2	10.673	2	10.637	26.646	0.028	0.0	2	31.5	2	2.55	2	2.62	2	-9	2	-9	2	20.40	2	-9	9	9	9	7.4088	2	-9	9	9	-9	-9	-9	-9
126	340.0	34.716	2	34.718	2	9.827	2	9.787	26.767	0.030	0.0	2	34.2	2	2.55	2	2.97	2	0.088	2	0.016	2	26.16	2	1602	2	2261.2	2	7.4388	2	2310	2	-9	-9	-9	-9	-9
125	396.6	34.685	2	34.689	2	9.254	2	9.210	26.837	0.028	0.0	2	35.6	2	2.57	2	31.2	2	0.009	2	-0.002	2	30.74	2	1680	2	2268.2	2	7.4207	2	2303	2	-9	-9	-9	-9	-9
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
123	499.3	34.625	2	34.623	2	8.159	2	8.107	26.963	0.025	0.1	2	39.0	2	2.71	2	37.1	2	0.008	2	-0.002	2	35.44	2	1733	2	2275.5	2	7.4092	2	2304	2	-9	-9	-9	-9	-9
122	600.1	34.572	2	34.571	2	7.158	2	7.099	27.068	0.023	0.1	2	41.1	2	2.83	2	42.7	2	0.008	2	0.000	2	42.27	2	1748	2	2282.9	2	7.4019	2	2312	2	-9	-9	-9	-9	-9
121	700.7	34.534	2	34.534	2	6.258	2	6.194	27.160	0.021	0.0	2	42.7	2	2.92	2	49.2	2	0.008	2	0.000	2	45.08	2	1791	2	2292.9	2	7.3964	2	2325	2	-9	-9	-9	-9	-9
120	801.6	34.520	2	34.518	2	5.588	2	5.519	27.233	0.020	0.0	2	44.1	2	3.01	2	56.7	2	0.003	2	-0.002	2	49.06	2	1716	2	2305.7	2	7.3951	2	2328	2	-9	-9	-9	-9	-9
119	900.5	34.520	2	34.519	2	5.011	2	4.937	27.302	0.018	0.0	2	44.5	2	3.06	2	65.9	2	0.003	2	-0.002	2	60.49	2	1796	2	2305.7	2	7.3951	2	2328	2	-9	-9	-9	-9	-9
118	1002.8	34.529	2	34.529	2	4.470	2	4.391	27.370	0.017	0.0	2	44.2	2	3.10	2	78.7	2	0.003	2	-0.002	2	73.58	2	-9	9	9	9	7.3951	2	2328	2	-9	-9	-9	-9	-9
117	1099.3	34.542	2	34.542	2	4.065	2	3.980	27.424	0.016	0.0	2	41.8	2	2.96	2	86.8	2	0.003	2	-0.002	2	80.58	2	-9	9	9	9	7.3951	2	2328	2	-9	-9	-9	-9	-9
116	1203.2	34.556	2	34.555	2	3.716	2	3.626	27.471	0.015	0.0	2	41.8	2	2.93	2	94.2	2	0.003	2	-0.002	2	85.71	2	-9	9	9	9	7.3951	2	2328	2	-9	-9	-9	-9	-9
115	1299.6	34.569	2	34.567	2	3.441	2	3.345	27.509	0.013	0.0	2	40.8	2	2.89	2	101.3	2	0.003	2	-0.002	2	90.86	2	-9	9	9	9	7.3951	2	2328	2	-9	-9	-9	-9	-9
114	1399.0	34.581	2	34.582	2	3.200	2	3.098	27.542	0.011	0.0	2	40.9	2	2.84	2	105.7	2	0.003	2	-0.002	2	93.06	2	-9	9	9	9	7.3951	2	2328	2	-9	-9	-9	-9	-9
113	1600.6	34.603	2	34.602	2	2.804	2	2.690	27.596	0.010	0.0	2	39.9	2	2.79	2	114.0	2	0.003	2	-0.002	2	103.06	2	-9	9	9	9	7.3951	2	2328	2	-9	-9	-9	-9	-9
112	1801.8	34.620	2	34.618	2	2.520	2	2.392	27.635	0.008	0.0	2	38.8	2	2.72	2	121.6	2	0.003	2	-0.002	2	110.92	2	-9	9	9	9	7.3951	2	2328	2	-9	-9	-9	-9	-9
111	2002.0	34.637	2	34.635	2	2.269	2	2.129	27.670	0.006	0.0	2	38.2	2	2.66	2	128.8	2	0.003	2	-0.002	2	120.37	2	-9	9	9	9	7.3951	2	2328	2	-9	-9	-9	-9	-9
110	2250.5	34.655	2	34.653	2	2.019	2	1.860	27.706	0.006	0.0	2	36.4	2	2.59	2	133.8	2	0.003	2	-0.002	2	128.35	2	-9	9	9	9	7.3951	2	2328	2	-9	-9	-9	-9	-9
109	2501.7	34.668	2	34.666	2	1.857	2	1.679	27.739	0.005	0.0	2	36.9	2	2.53	2	134.6	2	0.003	2	-0.002	2	137.73	2	-9	9	9	9	7.3951	2	2328	2	-9	-9	-9	-9	-9
108	2749.5	34.673	2	34.671	2	1.796	2	1.596	27.741	0.004	0.0	2	36.9	2	2.52	2	137.7	2	0.004	2	-0.002	2	138.43	2	-9	9	9	9	7.3951	2	2328	2	-9	-9	-9	-9	-9
107	3002.5	34.676	2	34.674	2	1.774	2	1.551	27.746	0.003	0.0	2	37.9	2	2.55	2	139.3	2	0.004	2	-0.002	2	137.08	2	-9	9	9	9	7.3951	2	2328	2	-9	-9	-9	-9	-9
106	3249.8	34.675	2	34.673	2	1.771	2	1.523	27.748	0.003	0.0	2	37.5	2	2.56	2	143.0	2	0.004	2	-0.002	2	136.47	2	-9	9	9	9	7.3951	2	2328	2	-9	-9	-9	-9	-9
105	3498.6	34.675	2	34.674	2	1.775	2	1.502	27.749	0.003	0.0	2	36.9	2	2.55	2	146.8	2	0.004	2	-0.002	2	136.47	2	-9	9	9	9	7.3951	2	2328	2	-9	-9	-9	-9	-9
104	3752.3	34.676	2	34.675	2	1.787	2	1.487	27.751	0.002	0.0	2	37.1	2	2.54	2	149.9	2	0.004	2	-0.002	2	136.71	2	-9	9	9	9	7.3951	2	2328	2	-9	-9	-9	-9	-9
103	3999.3	34.676	2	34.676	2	1.808	2	1.480	27.752	0.003	0.0	2	37.5	2	2.54	2	150.9	2	0.001	2	-0.002	2	137.64	2	-9	9	9	9	7.3951	2	2328	2	-9	-9	-9	-9	-9
102	4000.0	34.676	2	34.675	2	1.807	2	1.480	27.752	0.003	0.0	2	36.7	2	2.54	2	149.5	2	0.001	2	-0.002	2	137.64	2	-9	9	9	9	7.3951	2	2328	2	-9	-9	-9	-9	-9
101	4222.3	34.676	2	34.678	2	1.833	2	1.480	27.752	0.003	0.0	2	37.3	2	2.54	2	148.0	2	0.001	2	-0.002	2	137.04	2	-9	9	9	9	7.3951	2	2328	2	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column

** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 115 DATE 4/5/94 LATITUDE 12°0.1'S Btm Depth: 4389
 CAST 1 LONGITUDE 103°0.1'W

Sample ID	Pressure db	Salinity P* CTD	Salinity P* Bottle	Temp °C	Temp °C	Potential		Sigma t	Sigma t ep	NO2 P* umol/kg	NO3 P* umol/kg	PO4 P* umol/kg	Si(OH)4 P* umol/kg	CFC-11 P* pmol/kg	CFC-12 P* pmol/kg	O2 P* umol/kg	fO2 P* @20°C P* uatm	DIC P* umol/kg	pH P*	TAIK P* umol/kg	F* per mil	δ13C TOC per mil	TON umol/L	Chl-a P* μg/L	Pheo μg/L						
						Temp °C	Theta																								
136	2	9.8	35.666	2	26.173	26.171	23.482	0.098	0.0	2	3.4	2	0.42	2	1.820	2	209.85	2	2018.1	2	8.0789	2	23.49	6	1.70	-9	-9	0.138	0.067		
135	2	9.1	35.666	2	26.175	26.173	23.482	0.099	0.0	2	3.4	2	0.44	2	1.828	2	213.12	2	-9	9	8.0765	2	-9	9	-9	-9	-9	-9	-9		
134	2	25.8	35.664	2	26.175	26.169	23.482	0.104	0.0	2	3.5	2	0.43	2	1.839	2	217.81	2	-9	9	8.0796	2	-9	9	-9	-9	-9	-9	-9		
133	2	50.4	35.742	2	26.178	23.680	23.669	24.301	0.129	0.0	2	0.7	2	0.33	2	2.082	2	217.66	2	-9	9	8.0650	2	-9	9	-9	-9	-9	-9	-9	
132	2	73.7	35.767	2	21.872	21.858	24.841	0.084	0.2	2	1.6	2	0.53	2	2.249	2	207.15	2	-9	9	8.0247	2	-9	9	-9	-9	-9	-9	-9		
131	2	100.8	35.631	2	21.872	21.858	24.841	0.084	1.6	2	4.1	2	0.78	2	2.529	6	185.30	2	-9	9	7.9486	2	-9	9	-9	-9	-9	-9	-9		
130	2	126.9	35.489	2	18.757	18.755	25.462	0.035	0.4	2	7.2	2	0.81	2	2.363	2	174.09	2	-9	9	7.9072	2	-9	9	-9	-9	-9	-9	-9		
129	2	150.1	35.142	2	16.312	16.288	25.790	0.031	0.0	2	12.5	2	1.21	2	2.097	2	132.66	6	-9	9	7.7998	2	-9	9	-9	-9	-9	-9	-9		
128	2	199.0	34.795	2	12.797	12.770	26.280	0.026	0.0	2	21.2	2	2.41	2	0.757	2	91.25	2	-9	9	7.4807	2	-9	9	-9	-9	-9	-9	-9		
127	2	250.6	34.782	2	11.478	11.446	26.524	0.025	0.0	2	28.7	2	2.53	2	0.173	2	4.39	2	-9	9	7.4288	2	-9	9	-9	-9	-9	-9	-9		
126	2	297.6	34.750	2	10.480	10.445	26.679	0.028	0.0	2	33.7	2	2.54	2	0.072	2	11.99	2	-9	9	7.4331	2	-9	9	-9	-9	-9	-9	-9		
125	2	351.9	34.720	2	9.769	9.729	26.780	0.031	0.0	2	36.1	2	2.57	2	0.037	2	15.65	2	-9	9	7.4294	2	-9	9	-9	-9	-9	-9	-9		
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
123	2	397.8	34.692	2	9.252	9.207	26.843	0.027	0.0	2	37.1	2	2.62	2	0.008	6	18.05	2	-9	9	7.4213	2	-9	9	-9	-9	-9	-9	-9		
122	2	498.5	34.623	2	8.073	8.021	26.975	0.022	0.0	2	39.9	2	2.76	2	0.007	2	21.51	2	-9	9	7.3994	2	-9	9	-9	-9	-9	-9	-9		
121	2	601.0	34.567	2	7.004	6.946	27.086	0.019	0.0	2	44.5	2	2.85	2	-0.002	2	31.01	2	-9	9	7.3965	2	-9	9	-9	-9	-9	-9	-9		
120	2	699.7	34.534	2	6.207	6.144	27.166	0.018	0.0	2	44.0	2	2.92	2	0.004	2	38.01	2	-9	9	7.3941	2	-9	9	-9	-9	-9	-9	-9		
119	2	800.4	34.530	2	5.540	5.471	27.247	0.017	0.0	2	44.7	2	3.05	2	0.023	2	39.13	2	-9	9	7.3867	2	-9	9	-9	-9	-9	-9	-9		
118	2	899.8	34.532	2	5.015	4.941	27.311	0.016	0.0	2	43.9	2	3.05	2	0.002	2	49.74	6	-9	9	7.4026	2	-9	9	-9	-9	-9	-9	-9		
117	2	1001.9	34.538	2	4.539	4.459	27.370	0.015	0.0	2	42.9	2	2.97	2	0.000	2	63.79	2	1633	2	-9	9	7.4293	2	-9	9	-9	-9	-9	-9	
116	2	1200.6	34.555	2	3.808	3.717	27.461	0.011	0.0	2	41.3	2	2.89	2	-0.001	2	82.12	2	-9	9	7.4582	2	-9	9	-9	-9	-9	-9	-9		
115	2	1400.1	34.579	2	3.243	3.140	27.536	0.009	0.0	2	40.3	2	2.85	2	-9	9	91.25	2	-9	9	7.4726	2	-9	9	-9	-9	-9	-9	-9		
114	2	1600.7	34.603	2	2.810	2.696	27.596	0.009	0.0	2	39.8	2	2.79	2	-9	9	100.75	2	-9	9	7.4928	2	-9	9	-9	-9	-9	-9	-9		
113	2	1908.3	34.638	2	2.261	2.121	27.672	0.006	0.0	2	38.4	2	2.72	2	0.008	2	117.05	2	-9	9	7.5115	2	-9	9	-9	-9	-9	-9	-9		
112	2	2252.0	34.657	2	1.986	1.838	27.709	0.004	0.0	2	38.2	2	2.66	2	-9	9	129.2	2	-9	9	7.5266	2	-9	9	-9	-9	-9	-9	-9		
111	2	2497.5	34.669	2	1.986	1.838	27.709	0.004	0.0	2	37.3	2	2.58	2	-9	9	129.90	2	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	
110	2	2750.5	34.673	2	1.789	1.590	27.741	0.004	0.0	2	36.4	2	2.52	2	-9	9	137.89	2	-9	9	7.5649	2	-9	9	-9	-9	-9	-9	-9		
109	2	2999.7	34.675	2	1.766	1.543	27.747	0.003	0.0	2	36.8	2	2.50	2	0.006	2	137.80	2	1207	2	-9	9	7.5732	2	-9	9	-9	-9	-9	-9	-9
108	2	3245.4	34.675	2	1.766	1.495	27.748	0.003	0.0	2	37.5	2	2.54	2	-9	9	136.16	2	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	
107	2	3501.7	34.676	2	1.769	1.484	27.750	0.002	0.0	2	37.7	2	2.54	2	-9	9	136.16	2	-9	9	7.5721	2	-9	9	-9	-9	-9	-9	-9	-9	
106	2	3749.4	34.676	2	1.784	1.484	27.752	0.002	0.0	2	36.9	2	2.52	2	-9	9	137.20	2	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	
105	2	4001.8	34.676	2	1.808	1.480	27.752	0.002	0.0	2	37.3	2	2.51	2	-9	9	137.09	2	-9	9	7.5741	2	-9	9	-9	-9	-9	-9	-9	-9	
104	2	4249.6	34.676	2	1.836	1.480	27.752	0.002	0.0	2	37.2	2	2.52	2	-0.003	2	136.52	2	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	
103	2	4249.8	34.676	2	1.836	1.479	27.752	0.002	0.0	2	37.3	2	2.51	2	-9	9	137.12	2	-9	9	7.5755	2	-9	9	-9	-9	-9	-9	-9	-9	
102	2	4433.0	34.676	2	1.857	1.479	27.752	0.002	0.0	2	37.0	2	2.52	2	0.110	4	137.00	2	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	
101	2	4433.0	34.676	2	1.857	1.479	27.752	0.002	0.0	2	37.0	2	2.52	2	0.110	4	137.00	2	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 118 DATE 4/6/94 LATITUDE 10°30.4'S Btm Depth: 4684
CAST 1 LONGITUDE 103°0.1'W

Sample ID	P* Pressure db	Salinity P* CTD	Temp °C	Temp °C	Sigma T	Sigma T	Beam Theta	Beam Sigma	Beam Area	NO2 P* µmol/kg	NO3 P* µmol/kg	PO4 P* µmol/kg	Si(OH)4 P* µmol/kg	CFC-11 P* pmol/kg	CFC-12 P* pmol/kg	O2 P* µmol/kg	P* @20°C P* µatm	DIC P* µmol/kg	pH P*	TAIR P* µmol/kg	513C TOC per ml µmol/L	TON µmol/L	Chl-a µg/L	Phase							
																									NO2 P* µmol/kg	NO3 P* µmol/kg	PO4 P* µmol/kg	Si(OH)4 P* µmol/kg	CFC-11 P* pmol/kg	CFC-12 P* pmol/kg	O2 P* µmol/kg
136	2	9.4	35.505	2	35.505	2	26.601	26.599	23.226	0.100	0.1	3.8	2	0.46	2	1.808	2	0.986	2	2018.4	2	8.0705	2	2342	2	-9	-9				
135	2	25.6	35.505	2	35.506	2	26.605	26.600	23.225	0.111	0.1	4.1	2	0.46	2	1.872	2	1.008	2	205.25	2	8.0714	2	-9	9	-9	-9				
134	2	40.5	35.529	2	35.537	2	26.529	26.518	23.270	0.111	0.1	4.0	2	0.46	2	1.841	2	0.994	2	206.17	2	8.0695	2	2344	2	-9	-9				
133	2	74.4	35.941	2	35.952	2	22.976	22.961	24.659	0.082	0.1	0.6	2	0.39	2	2.102	2	1.119	2	206.51	2	8.0596	2	-9	9	-9	-9				
132	2	100.8	35.911	2	35.915	2	21.049	21.029	25.180	0.049	0.9	2	1.4	2	0.53	2	2.265	2	1.188	2	2087.5	2	8.0043	2	2372	2	-9	-9			
131	2	126.0	35.516	2	35.552	3	18.771	18.748	25.480	0.036	0.3	6.5	2	0.79	2	2.303	2	1.197	2	174.15	2	9	7.9171	2	-9	9	-9	-9			
130	2	148.1	34.972	2	34.994	2	14.889	14.867	25.980	0.029	0.0	14.1	2	1.45	2	1.906	2	0.963	2	112.68	2	9	7.7406	2	-9	9	-9	-9			
129	2	200.5	34.810	2	34.809	2	12.014	11.988	26.444	0.030	0.0	25.4	2	2.55	2	0.296	6	0.160	6	4.80	2	2256.4	2	7.4433	2	2296	2	-9	-9		
128	2	249.5	34.779	2	34.778	2	10.850	10.819	26.636	0.024	0.0	31.4	2	2.40	2	0.142	2	0.078	2	25.82	2	9	7.4773	2	-9	9	-9	-9			
127	2	299.2	34.751	2	34.749	2	10.155	10.120	26.737	0.024	0.0	34.6	2	2.44	2	0.068	2	0.041	2	24.45	2	1506	2	2252.4	2	7.4607	2	2301	2	-9	-9
126	2	348.4	34.729	2	34.727	2	9.771	9.731	26.786	0.025	0.0	37.3	2	2.53	2	0.049	2	0.023	2	22.01	2	9	7.4447	2	-9	9	-9	-9			
125	2	400.9	34.698	2	34.697	2	9.292	9.247	26.842	0.025	0.0	37.4	2	2.75	2	0.014	2	0.004	2	4.53	2	1799	2	2278.3	2	7.3881	2	2304	2	-9	-9
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
123	2	500.3	34.631	2	34.629	2	8.104	8.052	26.976	0.025	0.0	40.9	2	2.86	2	0.003	2	0.001	2	12.30	2	1840	2	2281.5	2	7.3804	2	2305	2	-9	-9
122	2	596.5	34.575	2	34.575	2	7.093	7.035	27.079	0.021	0.0	43.4	2	2.96	2	-9	-9	9	20.52	2	1881	2	2287.4	2	7.3743	2	2314	2	-9	-9	
121	2	701.1	34.544	2	34.543	2	6.121	6.069	27.185	0.021	0.0	44.5	2	3.05	2	-9	-9	9	26.81	2	1906	2	2297.0	2	7.3708	2	2316	2	-9	-9	
120	2	800.0	34.533	2	34.532	2	5.423	5.355	27.263	0.019	0.0	44.0	2	3.02	2	-9	-9	9	41.97	2	1826	2	2300.2	2	7.3911	2	2326	2	-9	-9	
119	2	900.8	34.534	2	34.534	2	4.880	4.807	27.328	0.017	0.0	43.4	2	3.01	2	-9	-9	9	52.60	6	1761	2	2303.7	2	7.4065	2	2342	2	-9	-9	
118	2	1001.0	34.539	2	34.539	2	4.500	4.421	27.375	0.015	0.0	43.0	2	2.98	2	-9	-9	9	63.43	2	1672	2	2304.8	2	9	2342	2	-9	-9		
117	2	1148.9	34.554	2	34.554	2	3.882	3.795	27.453	0.015	0.0	41.1	2	2.89	2	-9	-9	9	82.61	2	9	9	9	9	9	9	9	9	9	9	
116	2	1302.2	34.574	2	34.572	2	3.412	3.316	27.516	0.012	0.0	40.5	2	2.88	2	-9	-9	9	87.60	2	9	9	9	9	9	9	9	9	9	9	
115	2	1598.9	34.606	2	34.606	2	2.806	2.692	27.598	0.010	0.0	39.4	2	2.81	2	-9	-9	9	97.52	2	9	9	9	9	9	9	9	9	9	9	
114	2	1794.6	34.624	2	34.625	2	2.490	2.364	27.641	0.008	0.0	38.1	2	2.71	2	-9	-9	9	109.43	2	9	9	9	9	9	9	9	9	9	9	
113	2	1993.9	34.638	2	34.637	2	2.280	2.140	27.671	0.007	0.0	38.6	2	2.68	2	-9	-9	9	115.43	2	9	9	9	9	9	9	9	9	9	9	
112	2	2247.5	34.654	2	34.653	2	2.060	1.901	27.702	0.006	0.0	37.2	2	2.65	2	-9	-9	9	127.06	2	9	9	9	9	9	9	9	9	9	9	
111	2	2500.3	34.665	2	34.664	2	1.899	1.720	27.725	0.005	0.0	37.6	2	2.60	2	-9	-9	9	131.24	2	9	9	9	9	9	9	9	9	9	9	
110	2	2750.8	34.670	2	34.670	2	1.816	1.616	27.737	0.005	0.0	37.2	2	2.58	2	-9	-9	9	133.79	2	9	9	9	9	9	9	9	9	9	9	
109	2	2999.6	34.672	2	34.673	2	1.778	1.555	27.748	0.004	0.0	37.3	2	2.56	2	-9	-9	9	132.22	2	9	9	9	9	9	9	9	9	9	9	
108	2	3200.3	34.674	2	34.674	2	1.768	1.525	27.746	0.004	0.0	37.0	2	2.55	2	-9	-9	9	136.42	2	9	9	9	9	9	9	9	9	9	9	
107	2	3498.1	34.675	2	34.675	2	1.768	1.495	27.750	0.003	0.0	37.0	2	2.55	2	-9	-9	9	137.67	2	9	9	9	9	9	9	9	9	9	9	
106	2	3748.3	34.676	2	34.677	2	1.781	1.482	27.752	0.003	0.0	36.8	2	2.56	2	-9	-9	9	137.67	2	9	9	9	9	9	9	9	9	9	9	
105	2	3997.2	34.676	2	34.678	2	1.801	1.474	27.752	0.003	0.0	37.0	2	2.55	2	-9	-9	9	138.22	2	9	9	9	9	9	9	9	9	9	9	
104	2	4250.6	34.676	2	34.676	2	1.826	1.469	27.753	0.003	0.0	36.8	2	2.54	2	-9	-9	9	137.81	2	9	9	9	9	9	9	9	9	9	9	
103	2	4501.8	34.677	2	34.679	2	1.852	1.465	27.753	0.003	0.0	36.9	2	2.53	2	-9	-9	9	138.69	2	9	9	9	9	9	9	9	9	9	9	
102	2	4500.8	34.677	2	34.677	2	1.851	1.465	27.753	0.003	0.0	37.0	2	2.54	2	-9	-9	9	138.79	2	9	9	9	9	9	9	9	9	9	9	
101	2	4754.3	34.677	2	34.676	2	1.883	1.465	27.753	0.003	0.0	37.1	2	2.54	2	-9	-9	9	138.79	2	9	9	9	9	9	9	9	9	9	9	

* WOCE water sample quality flag (F) for parameter from previous column
** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 120 1 DATE 4/6/94 LATITUDE 9°37.1'S Btm Depth: 4364
CAST 1 LONGITUDE 103°34.0'W

Sample #	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma T	Sigma Anom	Beam Theta	NO2 #	NO3 #	PO4 #	SiO4 #	P #	CFC-11 #	CFC-12 #	O2 #	CO2 #	DIC #	pH	TA #	P #	δ13C	TOC	TON	Chi-a			
																										µmol/kg	µmol/kg	µmol/kg
136	2	35.135	35.146	2	27.174	27.171	22.765	0.069	0.1	2	0.46	2	1.8	2	1.750	2	202.41	2	1993.2	2	8.0768	2	2315	6	-9	-9		
135	2	35.144	35.146	2	27.177	27.172	22.771	0.111	0.1	2	0.45	2	1.8	2	1.754	2	200.84	2	-9	-9	9	9	9	9	-9	-9		
134	2	35.606	35.592	2	26.422	26.410	23.362	0.120	0.1	2	0.45	2	1.9	2	1.856	2	208.44	2	306	2	2016.4	2	2340	2	-9	-9		
133	2	35.891	35.888	2	24.221	24.205	24.255	0.063	0.0	2	0.35	2	1.3	2	2.022	2	1.091	2	215.69	2	-9	9	9	9	-9	-9		
132	3	36.001	36.010	2	21.974	21.955	24.991	0.042	0.5	2	0.51	2	1.4	2	-9	1	1.9508	2	360	2	2077.8	2	2401	2	-9	-9		
131	2	35.717	35.739	2	19.897	19.873	25.343	0.094	0.7	2	0.63	2	1.5	2	2.207	6	1.165	6	185.17	2	-9	9	9	9	-9	-9		
130	2	35.162	35.170	2	16.408	16.383	25.784	0.031	0.0	2	1.12	2	4.3	2	2.177	2	1.092	2	142.12	2	611	2	-9	9	-9	-9		
129	2	34.969	34.973	2	14.746	14.719	26.009	0.028	0.0	2	1.64	2	8.3	2	1.724	2	0.877	2	90.74	2	-9	9	9	9	-9	-9		
128	3	34.794	34.795	2	11.522	11.490	26.525	0.026	0.0	2	2.34	2	16.3	2	2.002	2	0.503	2	22.55	2	1333	2	2293.9	2	-9	-9		
127	2	34.781	34.781	2	10.756	10.700	26.658	0.029	0.0	2	2.45	2	27.5	2	0.100	6	0.056	6	18.65	2	1517	2	2231.5	2	2305	2	-9	-9
126	2	34.735	34.734	2	9.981	9.940	26.756	0.029	0.0	2	2.53	2	30.3	2	0.049	2	0.023	2	18.30	2	-9	9	9	9	-9	-9		
125	2	34.693	34.692	2	9.218	9.173	26.850	0.027	0.0	2	2.64	2	33.9	2	0.015	2	0.009	2	16.66	2	1692	2	2266.5	2	2309	2	-9	-9
124	2	34.693	34.693	2	9.229	9.184	26.849	0.027	0.0	2	2.63	2	33.9	2	-9	9	16.57	2	-9	9	2286.9	2	2309	2	-9	-9		
123	2	34.693	34.694	2	9.219	9.173	26.849	0.027	0.0	2	2.65	2	34.0	2	-9	9	16.60	2	-9	9	2287.6	2	2309	2	-9	-9		
122	2	34.548	34.548	2	6.158	6.095	27.183	0.019	0.0	2	2.98	2	54.0	2	-9	9	33.54	2	1831	2	2291.4	2	2319	2	-9	-9		
121	2	34.536	34.535	2	5.430	5.362	27.264	0.017	0.0	2	2.97	2	73.1	2	-9	9	49.12	2	1746	2	2294.4	2	2335	2	-9	-9		
120	2	34.538	34.538	2	4.586	4.507	27.365	0.014	0.0	2	2.89	2	78.9	2	-9	9	70.87	2	1613	2	2299.0	2	2350	6	-9	-9		
119	2	34.560	34.560	2	3.709	3.619	27.475	0.012	0.0	2	2.81	2	95.5	2	-9	9	91.53	2	-9	9	-9	9	9	9	-9	-9		
118	2	34.585	34.585	2	3.195	3.094	27.545	0.011	0.0	2	2.80	2	108.6	2	-9	9	95.04	2	1477	2	-9	9	9	9	-9	-9		
117	2	34.637	34.638	2	2.766	2.653	27.603	0.010	0.0	2	2.77	2	119.7	2	-9	9	101.47	2	-9	9	-9	9	9	9	-9	-9		
116	2	34.653	34.653	2	2.087	1.928	27.699	0.007	0.0	2	2.72	2	127.9	2	-9	9	112.21	2	1370	2	-9	9	9	9	-9	-9		
115	2	34.670	34.670	2	1.820	1.621	27.722	0.006	0.0	2	2.69	2	134.8	2	-9	9	112.21	2	1370	2	-9	9	9	9	-9	-9		
114	2	34.673	34.673	2	1.781	1.558	27.744	0.005	0.0	2	2.55	2	142.1	2	-9	9	116.43	2	-9	9	-9	9	9	9	-9	-9		
113	2	34.676	34.676	2	1.764	1.491	27.751	0.004	0.0	2	2.53	2	146.5	2	-9	9	130.14	6	-9	9	-9	9	9	9	-9	-9		
112	2	34.676	34.676	2	1.779	1.479	27.752	0.004	0.0	2	2.54	2	149.9	2	-9	9	135.45	2	-9	9	-9	9	9	9	-9	-9		
111	2	34.678	34.678	2	1.821	1.465	27.754	0.004	0.0	2	2.52	2	148.6	2	-9	9	137.75	6	-9	9	-9	9	9	9	-9	-9		
110	2	34.677	34.677	2	1.821	1.465	27.753	0.004	0.0	2	2.53	2	150.4	2	-9	9	137.68	2	-9	9	-9	9	9	9	-9	-9		
109	2	34.678	34.678	2	1.821	1.465	27.753	0.004	0.0	2	2.53	2	150.4	2	-9	9	138.06	2	-9	9	-9	9	9	9	-9	-9		
108	2	34.677	34.677	2	1.847	1.461	27.754	0.004	0.0	2	2.51	2	150.5	2	-9	9	138.32	2	-9	9	-9	9	9	9	-9	-9		

* WOCE water sample quality flag (F) for parameter from previous column
** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 122 DATE 4/7/94 LATITUDE 8°51.2'S Btm Depth: 3690
 CAST 1 LONGITUDE 104°41.7'W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma T	Atten	Beam										pH	TAI _{ik}	Si _{3C}	TOC	TON	Chl-a	Phaeo																		
								NO2	NO3	PO4	SiO ₄	CFC-11	CFC-12	O ₂	F ₂ @20°C	DIC	pH								TAI _{ik}	Si _{3C}	TOC	TON	Chl-a	Phaeo												
136	2	8.3	34.879	2	34.881	2	27.492	27.490	0.090	0.0	6	2.8	6	0.41	6	2.1	6	1.737	2	0.950	2	202.35	2	298	2	1982.6	2	8.0757	2	2307	6	-9	-9	0.167	0.067							
135	2	26.4	34.877	2	34.880	2	27.483	27.477	22.472	0.092	0.0	2	2.9	2	0.40	2	2.1	1.733	2	0.951	2	202.70	2	-9	9	8.0780	2	-9	9	8.0780	2	-9	9	0.168	0.074							
134	2	49.3	35.407	2	35.410	2	26.700	26.689	23.124	0.086	0.1	2	4.3	2	0.48	2	2.3	1.815	2	0.976	2	209.53	2	306	2	2015.7	2	8.0648	2	2335	2	-9	-9	0.228	0.119							
133	2	73.8	35.851	2	35.850	2	23.877	23.861	24.327	0.068	0.1	1.4	1.4	2	0.44	1.8	2.014	2	1.088	2	204.61	2	-9	9	8.0608	2	-9	9	8.0608	2	-9	9	0.291	0.263								
132	2	100.6	35.990	2	35.925	3	21.331	21.331	25.126	0.046	0.8	1.4	1.4	2	0.54	1.7	2.204	6	1.176	6	195.92	2	365	2	2081.9	3	8.0077	2	2369	2	-9	-9	0.191	0.221								
131	2	123.7	35.358	2	35.366	2	17.753	17.732	25.612	0.039	0.4	1.2	1.2	2	0.44	1.4	2.069	2	1.058	2	126.90	2	-9	9	2143.8	2	7.8202	2	2328	2	-9	-9	0.138	0.176								
130	2	151.3	34.987	2	34.996	2	13.962	13.940	26.189	0.032	0.0	2	25.2	2	2.13	14.7	2	0.977	2	0.491	2	23.37	2	-9	9	7.5901	2	-9	9	7.5901	2	-9	9	0.029	0.041							
129	2	176.2	34.925	2	34.927	2	12.828	12.804	26.374	0.024	0.0	2	29.6	2	2.33	22.3	2	0.408	2	0.208	2	9.25	2	-9	9	2241.7	2	7.4956	2	2301	2	-9	-9	0.008	0.014							
128	2	199.8	34.886	2	34.889	2	12.206	12.179	26.466	0.025	0.0	3.1	3.1	2	2.30	24.1	2	0.281	6	0.155	6	14.89	2	1374	2	2240.5	2	7.4942	2	2302	2	-9	-9	0.005	0.013							
127	2	225.4	34.869	2	34.870	2	11.957	11.928	26.501	0.027	0.0	3.2	3.2	2	2.31	24.9	2	0.231	6	0.098	6	9.75	2	-9	1	-9	9	7.4891	2	-9	9	-9	-9	-9	-9	-9	-9					
126	2	249.6	34.854	2	34.854	2	11.742	11.710	26.531	0.029	0.0	3.2	3.2	2	2.39	26.2	2	0.185	2	0.098	2	9.75	2	-9	1	-9	9	7.4891	2	-9	9	-9	-9	-9	-9	-9	-9					
125	2	301.7	34.820	2	34.820	2	11.195	11.157	26.607	0.025	0.0	3.5	3.5	2	2.45	28.0	2	0.127	6	0.068	6	9.33	2	1543	2	2255.8	3	7.4538	2	2300	2	-9	-9	1.4	-9	-9	-9					
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9					
123	2	351.5	34.792	2	34.792	2	10.735	10.692	26.668	0.025	0.0	3.4	3.4	2	2.48	30.3	2	0.083	2	0.043	2	10.41	6	-9	9	7.4438	2	-9	9	-9	-9	-9	-9	-9	-9	-9						
122	2	400.9	34.751	2	34.751	2	10.113	10.066	26.746	0.025	0.0	3.5	3.5	2	2.58	32.7	2	0.040	2	0.017	2	9.31	2	1668	2	2268.5	3	7.4224	2	2310	2	-9	-9	-9	-9	-9	-9					
121	2	500.2	34.659	2	34.658	2	8.620	8.566	26.920	0.022	0.0	4.0	4.0	2	2.77	37.7	2	0.004	2	0.001	2	10.78	2	1819	2	2281.2	3	7.3886	2	2302	2	-9	-9	-9	-9	-9	-9					
120	2	597.7	34.590	2	34.590	2	7.254	7.195	27.069	0.020	0.0	4.3	4.3	2	2.94	45.3	2	0.003	2	-0.002	2	-9	1	1902	2	2292.1	3	7.3708	2	2307	2	-9	-9	-9	-9	-9	-9					
119	2	701.8	34.553	2	34.552	2	6.254	6.190	27.175	0.017	0.0	4.4	4.4	2	2.98	54.1	2	-0.001	2	-0.002	2	30.49	2	1845	2	2294.1	3	7.3835	2	2310	2	-9	-9	-9	-9	-9	-9					
118	2	802.3	34.540	2	34.540	2	5.505	5.436	27.259	0.017	0.0	4.3	4.3	2	2.92	65.1	2	0.000	2	-0.002	2	-0.002	2	51.14	2	1716	2	2293.2	3	7.4157	2	2330	2	-9	-9	-9	-9	-9	-9			
117	2	900.5	34.537	2	34.537	2	4.948	4.874	27.323	0.015	0.0	4.2	4.2	2	2.85	72.6	2	-9	9	-9	9	67.61	2	1611	2	2294.9	3	7.4426	2	2333	2	-9	-9	-9	-9	-9	-9					
116	2	1000.9	34.542	2	34.543	2	4.478	4.399	27.380	0.013	0.0	4.1	4.1	2	2.81	80.1	2	-9	9	-9	9	79.59	2	1548	2	2295.7	3	7.4625	2	2348	6	-9	-9	-9	-9	-9	-9					
115	2	1098.8	34.551	2	34.550	2	4.077	3.992	27.429	0.012	0.0	4.0	4.0	2	2.80	86.9	2	0.000	2	0.000	2	86.91	2	-9	9	7.4738	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9					
114	2	1201.2	34.559	2	34.558	2	3.797	3.706	27.465	0.012	0.0	4.0	4.0	2	2.79	92.1	2	-9	9	-9	9	90.48	6	-9	9	7.4782	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9					
113	2	1390.4	34.571	2	34.570	2	3.484	3.387	27.506	0.010	0.0	4.0	4.0	2	2.78	100.4	2	0.001	2	0.000	2	93.32	2	-9	9	7.4796	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9				
112	2	1396.7	34.585	2	34.586	2	3.178	3.077	27.547	0.010	0.0	4.0	4.0	2	2.78	107.7	2	0.001	2	0.000	2	95.73	2	-9	9	7.4856	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9				
111	2	1599.6	34.609	2	34.610	2	2.742	2.629	27.606	0.008	0.0	3.9	3.9	2	2.74	120.0	2	-9	9	-9	9	103.05	2	-9	9	7.4985	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9				
110	2	1800.9	34.628	2	34.628	2	2.453	2.327	27.647	0.007	0.0	3.9	3.9	2	2.70	129.8	2	-9	9	-9	9	106.46	2	-9	9	7.5058	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9			
109	2	1997.4	34.642	2	34.643	2	2.235	2.096	27.677	0.007	0.0	3.9	3.9	2	2.67	134.3	2	0.004	2	0.002	2	111.28	2	-9	9	7.5128	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9			
108	2	2249.3	34.654	2	34.655	2	2.053	1.894	27.703	0.006	0.0	3.9	3.9	2	2.61	137.8	2	-9	9	-9	9	116.77	2	-9	9	7.5325	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
107	2	2501.2	34.664	2	34.663	2	1.895	1.716	27.724	0.006	0.0	3.8	3.8	2	2.58	141.4	2	-9	9	-9	9	125.29	6	-9	9	7.5554	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9			
106	2	2752.0	34.669	2	34.669	2	1.813	1.613	27.737	0.005	0.0	3.8	3.8	2	2.55	144.9	2	0.001	2	-0.002	2	129.26	2	-9	9	7.5554	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
105	2	2999.6	34.673	2	34.672	2	1.775	1.552	27.744	0.004	0.0	3.7	3.7	2	2.52	148.4	2	-9	9	-9	9	134.88	2	-9	9	7.5701	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
104	2	3249.5	34.675	2	34.678	2	1.753	1.506	27.749	0.004	0.0	3.7	3.7	2	2.52	151.2	2	-9	9	-9	9	135.63	2	-9	9	7.5701	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
103	2	3501.2	34.676	2	34.678	2	1.754	1.481	27.752	0.004	0.0	3.7	3.7	2	2.50	149.5	2	-0.003	2	0.007	2	136.89	2	-9	9	7.5710	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
102	2	3503.0	34.676	2	34.675	2	1.753	1.480	27.752	0.004	0.0	3.8	3.8	2	2.51	147.7	2	-9	9	-9	9	137.43	2	-9	9	7.5710	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
101	2	3753.7	34.677	2	34.678	2	1.760	1.461	27.754	0.005	0.0	3.7	3.7	2	2.48	147.5	2	-0.004	2	0.002	2	138.48	2	-9	9	7.5710	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 123 DATE 4/794 LATITUDE 8°27.8'S Btm Depth: 3664
 CAST 2 LONGITUDE 105°15.6'W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma T	Sigma t	Theta cp	NO2 F*	NO3 F*	PO4 F*	Si(OH)4 F*	CFC-11 F*	CFC-12 F*	O2 F*	OC2 F* @20°C	DIC F*	pH	P* TAik	P* TAik	δ13C per mil	TOC μmol/L	TON μmol/L	Chi-a μg/L	Phaeo μg/L	
																										Beam Attenuation
224	7.2	34.959	2 -9	9	27.687	27.685	22.466	-9	0.0	2.2	0.37	2	1.729	2	0.942	2	203.08	6	-9	9	1980.6	2	-9	-9	-9	-9
225	24.0	34.953	2 34.957	2	27.656	27.650	22.473	-9	0.0	2.0	0.37	2	1.731	2	0.961	2	202.66	2	-9	9	8.0894	2	-9	-9	-9	-9
222	51.2	35.513	2 35.516	2	26.016	26.004	23.419	-9	0.1	4.6	0.55	2	1.872	2	1.041	2	208.10	2	-9	9	8.0497	2	-9	-9	-9	-9
221	100.5	35.542	2 35.583	2	19.221	19.203	25.383	-9	1.8	7.1	0.94	2	2.200	2	1.157	2	152.51	2	-9	9	7.8875	2	-9	-9	-9	-9
220	148.7	34.995	2 35.007	2	14.185	14.163	26.149	-9	0.0	24.6	2.09	2	1.015	2	0.525	2	24.02	2	-9	9	7.5548	2	-9	-9	-9	-9
219	201.5	34.890	2 34.895	2	12.311	12.284	26.449	-9	0.0	29.4	2.28	2	0.313	2	0.168	2	17.05	2	-9	9	7.5001	2	-9	-9	-9	-9
218	300.0	34.822	2 34.823	2	11.204	11.166	26.607	-9	0.0	32.9	2.35	2	0.139	2	0.076	2	15.77	2	-9	9	7.4699	2	-9	-9	-9	-9
217	399.2	34.758	2 34.759	2	10.231	10.183	26.731	-9	0.0	34.6	2.54	2	0.051	2	0.026	2	9.76	2	-9	9	7.4255	2	-9	-9	-9	-9
216	502.4	34.666	2 34.664	2	8.756	8.701	26.904	-9	0.0	38.9	2.74	2	0.005	2	0.003	2	8.92	6	-9	9	7.3862	2	-9	-9	-9	-9
215	598.5	34.602	2 34.603	2	7.590	7.530	27.090	-9	0.0	42.2	2.87	2	0.001	2	-0.002	2	13.72	2	-9	9	7.3703	2	-9	-9	-9	-9
214	701.6	34.560	2 34.559	2	6.528	6.463	27.145	-9	0.0	44.4	2.96	2	-0.001	2	0.000	2	23.47	2	-9	9	7.3727	2	-9	-9	-9	-9
213	799.8	34.538	2 34.538	2	5.668	5.598	27.237	-9	0.0	43.9	2.93	2	0.009	2	0.002	2	43.01	2	-9	9	7.3978	2	-9	-9	-9	-9
212	898.7	34.533	2 34.534	2	5.136	5.061	27.298	-9	0.0	43.6	2.91	2	0.002	2	0.002	2	43.01	2	-9	9	7.3978	2	-9	-9	-9	-9
211	999.4	34.539	2 34.540	2	4.537	4.457	27.371	-9	0.0	42.2	2.84	2	0.001	2	0.002	2	73.13	2	-9	9	7.4497	2	-9	-9	-9	-9
210	1201.7	34.560	2 34.562	2	3.770	3.679	27.469	-9	0.0	40.7	2.78	2	-0.001	2	-0.001	2	89.44	2	-9	9	7.4759	2	-9	-9	-9	-9
209	1397.3	34.589	2 -9	9	3.120	3.019	27.555	-9	0.0	41.1	2.83	2	0.005	2	0.010	2	95.67	6	-9	9	7.5013	2	-9	-9	-9	-9
208	1597.3	34.610	2 34.610	2	2.794	2.622	27.607	-9	0.0	39.4	2.68	2	-0.001	2	-0.001	2	104.10	2	-9	9	7.5184	2	-9	-9	-9	-9
207	1894.2	34.634	2 34.638	3	2.338	2.205	27.662	-9	0.0	39.4	2.64	2	0.000	2	-0.001	2	113.06	2	-9	9	7.5184	2	-9	-9	-9	-9
206	2195.9	34.650	2 34.651	2	2.094	1.939	27.696	-9	0.0	38.6	2.60	2	-0.001	2	-0.001	2	119.80	2	-9	9	7.5346	2	-9	-9	-9	-9
205	2498.2	34.663	2 34.664	2	1.911	1.733	27.722	-9	0.0	38.3	2.56	2	-0.003	2	0.002	2	125.34	2	-9	9	7.5456	2	-9	-9	-9	-9
204	2795.0	34.670	2 34.671	2	1.796	1.592	27.739	-9	0.0	37.7	2.53	2	-0.003	2	0.002	2	131.07	2	-9	9	7.5596	2	-9	-9	-9	-9
203	3096.4	34.674	2 34.675	2	1.751	1.519	27.747	-9	0.0	37.6	2.50	2	-0.001	2	-0.001	2	134.84	2	-9	9	7.5664	2	-9	-9	-9	-9
202	3401.4	34.676	2 34.677	2	1.748	1.485	27.751	-9	0.0	37.6	2.48	2	-0.001	2	-0.001	2	136.47	2	-9	9	7.5717	2	-9	-9	-9	-9
201	3683.4	34.676	2 -9	9	1.762	1.470	27.753	-9	0.0	38.6	2.54	2	-0.003	2	0.003	2	138.68	2	-9	9	7.5717	2	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94
WOCE P18
NOAA Ship Discoverer

STATION 124 DATE 4/8/94 LATITUDE 8°4.75 Btm Depth: 3476
CAST 1 LONGITUDE 105°49.7'W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma T	Theta	Beam Attn	IC02										CHI-a Phaeo											
									NO2	NO3	PO4	Si(OH)4	CFC-11	CFC-12	O2	P	DIC	pH		TALK	F ²⁰⁶	δ13C	TOC	TON						
124	8.4	34.927	34.991	27.616	27.614	22.465	-9	0.1	1.7	2	0.35	2	4.2	2	-9	9	203.10	2	286	2	1977.6	2	-9	9	2302	2	-9	9	-9	-9
123	2	25.2	34.925	27.618	27.612	22.465	-9	0.0	2.1	2	0.34	2	3.9	2	-9	9	203.20	2	285	2	1977.8	2	-9	9	2302	2	-9	9	-9	-9
122	2	49.0	35.530	25.322	25.312	23.647	-9	0.1	4.5	2	0.58	2	5.0	2	-9	9	210.91	2	324	2	2031.5	2	-9	9	5	5	-9	-9	-9	-9
121	2	101.0	35.401	25.423	25.423	18.184	25.533	-9	0.9	2	1.11	2	6.7	2	-9	9	140.64	2	556	2	2134.1	2	-9	9	2331	2	-9	9	-9	-9
120	2	149.5	34.980	25.399	25.399	13.757	26.327	-9	0.0	2	2.31	2	21.0	2	-9	9	7.86	2	1340	2	2236.5	2	-9	9	2286	2	-9	9	-9	-9
119	2	198.0	34.919	25.399	25.399	12.656	26.399	-9	0.0	2	2.30	2	25.5	2	-9	9	16.67	2	1340	2	2236.5	2	-9	9	2286	2	-9	9	-9	-9
118	2	300.6	34.824	25.399	25.399	11.212	26.600	-9	0.0	2	2.40	2	30.4	2	-9	9	15.14	2	1356	3	2250.4	2	-9	9	2289	2	-9	9	-9	-9
117	2	401.3	34.746	25.399	25.399	10.015	26.759	-9	0.0	2	2.66	2	36.3	2	-9	9	5.13	2	1799	3	2279.0	2	-9	9	2297	2	-9	9	-9	-9
116	2	499.8	34.664	25.399	25.399	8.654	26.910	-9	0.0	2	2.82	2	39.7	2	-9	9	9.12	2	1799	3	2279.0	2	-9	9	2306	2	-9	9	-9	-9
115	2	598.2	34.585	25.399	25.399	7.123	27.075	-9	0.0	2	3.02	2	47.1	2	-9	9	16.42	2	1887	3	2290.0	2	-9	9	2316	2	-9	9	-9	-9
114	2	699.0	34.555	25.399	25.399	6.283	27.173	-9	0.0	2	3.02	2	54.8	2	-9	9	29.13	2	1866	2	2295.4	2	-9	9	2336	2	-9	9	-9	-9
113	2	800.7	34.541	25.399	25.399	5.433	27.258	-9	0.0	2	3.00	2	63.3	2	-9	9	47.91	2	1745	2	2294.7	2	-9	9	2336	2	-9	9	-9	-9
112	2	900.9	34.535	25.399	25.399	4.875	27.321	-9	0.0	2	2.88	2	70.0	2	-9	9	68.17	2	1541	2	2292.2	2	-9	9	2333	2	-9	9	-9	-9
111	2	1000.6	34.540	25.399	25.399	4.398	27.378	-9	0.0	2	2.85	2	79.7	2	-9	9	78.53	2	1502	2	2297.0	2	-9	9	2346	2	-9	9	-9	-9
110	2	1200.9	34.562	25.399	25.399	3.727	27.474	-9	0.0	2	2.85	2	96.8	2	-9	9	92.22	2	1457	3	2306.5	2	-9	9	2378	2	-9	9	-9	-9
109	2	1401.0	34.587	25.399	25.399	3.029	27.553	-9	-9	9	9	9	9	9	-9	9	98.43	2	1414	2	2318.1	2	-9	9	2378	2	-9	9	-9	-9
108	2	1602.5	34.607	25.399	25.399	2.647	27.603	-9	0.0	2	2.77	2	121.3	2	-9	9	105.99	2	1382	2	2325.0	2	-9	9	2390	2	-9	9	-9	-9
107	2	1801.2	34.633	25.399	25.399	2.238	27.658	-9	0.0	2	2.72	2	133.7	2	-9	9	110.50	2	1347	2	2335.6	2	-9	9	2406	2	-9	9	-9	-9
106	2	2199.8	34.650	25.399	25.399	1.936	27.698	-9	0.0	2	2.66	2	138.5	2	-9	9	119.62	2	1299	2	2337.7	2	-9	9	2410	2	-9	9	-9	-9
105	2	2501.6	34.663	25.399	25.399	1.726	27.722	-9	0.0	2	2.62	2	141.4	2	-9	9	125.81	6	-9	9	2339.1	2	-9	9	2419	2	-9	9	-9	-9
104	2	2798.9	34.670	25.399	25.399	1.593	27.739	-9	0.0	2	2.60	2	142.5	2	-9	9	132.61	2	1228	2	2335.8	2	-9	9	2420	2	-9	9	-9	-9
103	2	3100.5	34.674	25.399	25.399	1.518	27.747	-9	0.0	2	2.58	2	143.9	2	-9	9	135.48	2	1203	2	2337.6	2	-9	9	2423	2	-9	9	-9	-9
102	2	3400.0	34.675	25.399	25.399	1.498	27.750	-9	0.0	2	2.54	2	148.2	2	-9	9	136.32	2	1194	2	2338.3	2	-9	9	2427	2	-9	9	-9	-9
101	2	3496.4	34.675	25.399	25.399	1.489	27.749	-9	0.0	2	2.58	2	148.2	2	-9	9	136.47	2	1199	2	2338.0	2	-9	9	2425	2	-9	9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 125 1 DATE 4/8/94 LATITUDE 7°42.0'S Btm Depth: 3188
 CAST 1 LONGITUDE 106°23.0'W

Sample ID	Pressure db	Salinity P ^o	Salinity P ^o Bottle	Temp °C	Temp °C	Sigma T	Theta cp	Beam Altzen	FOO2										Chi-a Phase																	
									NO2 P ^o	NO3 P ^o	PO4 P ^o	SiO4 P ^o	CFC-11 P ^o	CFC-12 P ^o	O2 P ^o	P ^o	DIC P ^o	pH P ^o		TALK P ^o	813C P ^o	TOC	TON													
									umol/kg	umol/kg	umol/kg	umol/kg	umol/kg	umol/kg	umol/kg	umol/kg	umol/kg	umol/kg	umol/kg	umol/kg	umol/kg	umol/kg	umol/L	umol/L	umol/L	umol/L										
124	2	9.0	34.943	2	27.456	27.454	22.529	-9	0.1	2	2.0	2	0.40	2	3.3	2	1.753	2	0.938	2	202.44	2	-9	9	1979.7	2	8.0851	2	2305	2	-9	-9	-9	-9		
125	2	24.1	34.943	2	27.463	27.458	22.528	-9	0.1	2	2.8	2	0.40	2	3.1	2	1.743	2	0.948	2	202.52	2	-9	9	1979.7	2	8.0849	2	2311	2	-9	-9	-9	-9		
122	2	50.2	35.431	2	25.914	25.903	23.389	-9	0.1	2	4.9	2	0.58	2	3.8	2	1.904	2	1.014	2	211.11	2	-9	9	2027.2	2	-9	9	2333	2	-9	-9	-9	-9		
121	2	102.3	35.299	2	17.410	17.392	25.649	-9	0.6	2	12.5	2	1.28	2	6.3	2	2.049	2	1.038	2	-9	1	-9	9	2146.0	2	7.7979	2	2322	2	-9	-9	-9	-9		
120	2	151.5	34.958	2	13.512	13.291	26.301	-9	0.0	2	28.7	2	2.31	2	21.8	2	0.530	2	0.276	2	9.00	2	-9	9	2237.5	2	7.5045	2	2305	2	-9	-9	-9	-9		
119	2	196.6	34.891	2	12.289	12.263	26.454	-9	0.0	2	30.4	2	2.35	2	25.3	2	0.162	2	0.162	2	15.33	2	-9	9	2259.1	2	7.4982	2	2307	2	-9	-9	-9	-9		
118	2	297.6	34.809	2	11.036	10.999	26.637	-9	0.0	2	33.9	2	2.50	2	31.4	2	0.104	2	0.055	2	7.19	2	-9	9	2260.8	2	7.4399	2	2303	2	-9	-9	-9	-9		
117	2	401.6	34.731	2	9.782	9.736	26.786	-9	0.0	2	36.4	2	2.70	2	36.7	2	0.024	2	0.013	2	5.01	2	-9	9	2273.5	2	7.4011	2	2303	2	-9	-9	-9	-9		
116	2	500.3	34.654	2	8.473	8.420	26.938	-9	0.0	2	40.5	2	2.86	2	41.1	2	0.005	2	0.002	2	7.67	2	-9	9	2282.1	2	-9	1	2307	2	-9	-9	-9	-9		
115	2	697.1	34.533	2	7.166	7.108	27.078	-9	0.0	2	43.9	2	2.97	2	47.7	2	-0.002	2	-0.002	2	6.17	2	-9	9	2288.9	2	7.3746	2	2308	2	-9	-9	-9	-9		
114	2	801.2	34.541	2	6.253	6.190	27.175	-9	0.0	2	44.9	2	3.03	2	56.1	2	0.000	2	-0.002	2	30.75	2	-9	9	2294.0	2	7.3834	2	2320	2	-9	-9	-9	-9		
113	2	900.1	34.540	2	5.476	5.408	27.263	-9	0.0	2	43.7	2	2.96	2	66.8	2	0.000	2	-0.002	2	53.52	2	-9	9	2293.0	2	7.4199	2	2334	2	-9	-9	-9	-9		
112	2	1002.0	34.545	2	4.462	4.383	27.384	-9	0.0	2	43.1	2	2.89	2	84.3	2	-0.001	2	-0.002	2	66.89	2	-9	9	2293.5	2	-9	9	2344	2	-9	-9	-9	-9		
111	2	1102.6	34.533	2	4.078	3.993	27.432	-9	0.0	2	41.7	2	2.88	2	90.4	2	-9	-9	-9	-9	83.25	2	-9	9	9	9	7.4675	2	-9	9	-9	-9	-9	-9		
110	2	1200.4	34.565	2	3.768	3.677	27.473	-9	0.0	2	42.1	2	2.88	2	98.4	2	-9	-9	-9	-9	85.19	2	-9	9	9	9	7.4704	2	-9	9	-9	-9	-9	-9		
109	2	1403.2	34.587	2	3.220	3.118	27.544	-9	-9	1	-9	1	-9	1	-9	1	-9	1	-9	1	9	9	-9	9	9	9	9	9	9	9	9	9	9	9	9	
108	2	1602.3	34.606	2	2.820	2.706	27.597	-9	0.0	2	33.5	2	2.38	2	68.2	2	0.425	2	0.238	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
107	2	1801.8	34.624	2	2.506	2.379	27.640	-9	0.0	2	39.9	2	2.76	2	132.0	2	-9	-9	-9	-9	106.54	2	-9	9	9	9	9	9	9	9	9	9	9	9	9	9
106	2	2000.3	34.639	2	2.043	1.880	27.672	-9	0.0	2	39.5	2	2.71	2	139.9	2	-0.004	2	0.001	2	112.72	2	-9	9	9	9	9	9	9	9	9	9	9	9	9	9
105	2	2307.7	34.654	2	2.043	1.880	27.704	-9	0.0	2	39.0	2	2.66	2	146.6	2	-9	-9	-9	-9	117.34	2	-9	9	9	9	9	9	9	9	9	9	9	9	9	9
104	2	2608.2	34.666	2	1.857	1.669	27.730	-9	0.0	2	39.1	2	2.60	2	146.8	2	-0.001	2	-0.002	2	127.59	2	-9	9	9	9	9	9	9	9	9	9	9	9	9	9
103	2	2896.0	34.671	2	1.786	1.573	27.741	-9	0.0	2	38.5	2	2.56	2	145.4	2	-9	-9	-9	-9	133.31	2	-9	9	9	9	9	9	9	9	9	9	9	9	9	9
102	2	3141.9	34.674	2	1.764	1.527	27.747	-9	0.0	2	38.6	2	2.57	2	147.1	2	-9	-9	-9	-9	135.24	2	-9	9	9	9	9	9	9	9	9	9	9	9	9	9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 126 2 DATE 4/8/94 LATITUDE 7°18.75 S Btm Depth: 3175
CAST 2 LONGITUDE 106°56.6'W

Sample ID	Pressure db	Salinity P ₀	Salinity P ₁	Salinity P ₂	Temp °C	Temp °C	Potential Temp °C	Beam		NO2 P ₀ μmol/kg	NO3 P ₀ μmol/kg	PO4 P ₀ μmol/kg	P ₀₄ Si(OH) ₄ P ₀ μmol/kg	CFC-11 P ₀ μmol/kg	CFC-12 P ₀ μmol/kg	O2 P ₀ μmol/kg	P ₀ @20°C _P μmol	fCO2	DIC P ₀ μmol/kg	pH P ₀	TA ₀ P ₀ μmol/kg	P ₀ μmol/kg	813C permil	TOC μmol/L	TON μmol/L	Chl-a P ₀ μg/L	Paseo μg/L
								Theta	Sigma																		
236	7.4	34.841	2 36.818	4 27.658	27.656	22.387	0.126	0.0	2.2	2.2	0.36	1.7	1.737	2 0.975	2 202.25	2 290	2 1970.6	3 8.0834	2 2296	2 1.60	77.2	5.7	0.239	0.098			
235	22.6	34.844	2 36.822	4 27.665	27.660	22.388	0.133	0.1	2.3	2.3	0.36	1.7	1.732	2 0.948	2 202.15	2 -9	9 -9	9 8.0842	2 -9	9 -9	1.60	-9	4.5	0.241	0.099		
234	50.4	35.474	2 35.449	3 25.625	25.613	23.511	0.091	0.1	4.1	4.1	0.37	3.1	1.903	2 1.015	2 206.75	2 324	2 2025.4	2 8.0501	2 2324	3 1.50	65.6	4.4	0.264	0.199			
233	74.1	35.422	2 35.405	2 21.002	20.988	24.818	0.064	1.1	7.8	7.8	1.06	5.5	1.994	2 1.023	2 156.89	2 -9	9 -9	9 7.9089	2 -9	9 -9	1.10	59.5	5.7	0.205	0.206		
232	98.5	35.331	2 35.334	2 17.928	17.911	25.547	0.044	1.5	13.6	13.6	1.41	7.4	1.952	6 1.006	6 105.07	2 679	2 2157.7	2 7.7749	2 2340	3 0.80	58.5	5.8	0.124	0.138			
231	124.3	35.041	2 35.051	2 14.555	14.536	26.105	0.029	0.0	25.6	25.6	2.19	16.1	1.071	2 0.553	2 17.69	2 -9	9 -9	9 7.5489	2 -9	9 -9	0.20	51.8	3.9	0.037	0.057		
230	150.1	34.981	2 34.980	2 13.642	13.621	26.251	0.026	0.0	27.3	27.3	2.31	19.5	1.071	2 0.362	2 9.86	2 -9	9 -9	9 7.2362	2 7.5133	2 2300	2 0.10	49.9	-9	0.009	0.015		
229	174.7	34.932	2 34.936	2 12.906	12.882	26.364	0.027	0.0	28.8	28.8	2.35	21.8	0.483	2 0.261	2 9.45	2 -9	9 -9	9 7.1421	2 7.5133	2 2300	2 0.10	49.9	-9	0.009	0.015		
228	202.6	34.899	2 34.900	2 12.356	12.329	26.447	0.029	0.0	30.4	30.4	2.31	24.8	0.318	2 0.177	2 18.90	2 1334	2 2237.7	2 7.5080	2 2294	2 0.10	50.6	2.4	0.005	0.016			
227	214.1	34.889	2 34.889	2 12.185	12.157	26.473	0.028	0.0	30.5	30.5	2.28	25.1	0.301	2 0.169	2 23.16	2 -9	9 -9	9 7.5129	2 -9	9 -9	0.10	50.6	2.4	0.005	0.016		
226	249.8	34.862	2 34.862	2 11.769	11.737	26.532	0.090	0.0	30.5	30.5	2.25	25.5	0.267	6 0.146	6 32.83	3 -9	9 2232.4	2 7.5250	2 2295	2 0.30	48.5	-9	-9	-9			
225	300.4	34.819	2 34.820	2 11.169	11.132	26.610	0.091	0.0	32.7	32.7	2.44	30.7	0.152	2 0.078	2 15.04	2 1491	2 2251.9	2 7.4658	2 2299	2 0.10	48.0	2.0	-9	-9			
224	351.0	34.779	2 34.778	2 10.560	10.518	26.690	0.091	0.0	34.4	34.4	2.61	34.8	0.059	6 0.092	6 4.22	6 -9	9 -9	9 7.4218	2 -9	9 -9	0.00	-9	-9	-9			
223	402.8	34.723	2 34.722	2 9.694	9.648	26.796	0.090	0.0	36.4	36.4	2.70	37.5	0.022	2 0.015	2 5.80	2 1744	2 2273.3	2 -9	1 2301	2 -0.10	-9	-9	-9	-9			
222	500.4	34.630	2 34.628	2 8.076	8.024	26.980	0.026	0.0	41.6	41.6	2.90	43.7	0.006	2 0.001	2 11.48	2 1862	2 2284.9	2 7.5785	2 2300	2 0.00	45.9	-9	-9	-9			
221	599.6	34.571	2 34.570	2 6.784	6.728	27.118	0.023	0.0	44.2	44.2	3.03	52.8	0.004	2 -0.002	2 19.73	2 1907	2 2292.9	2 7.5717	2 2311	2 0.30	45.9	-9	-9	-9			
219	698.4	34.543	2 34.542	2 5.799	5.738	27.225	0.021	0.0	42.0	42.0	2.87	60.5	-0.002	2 -0.001	2 51.55	2 1689	2 2287.1	2 7.4217	2 2319	2 0.20	38.4	-9	-9	-9			
218	803.5	34.538	2 -9	9 5.252	5.184	27.287	0.019	-9	9	9	-9	-9	-9	1 -9	1 -9	1 -9	9 -9	9 -9	9 -9	5 -9	5 -9	5 -9	5 -9	5 -9			
217	899.5	34.539	2 34.538	2 4.905	4.831	27.329	0.018	0.0	40.9	40.9	2.80	74.0	-0.001	2 0.000	2 72.83	2 1573	6 2290.7	2 7.4549	2 2335	2 -9	-9	-9	-9	-9			
216	1000.7	34.543	2 34.543	2 4.462	4.383	27.382	0.016	0.0	40.1	40.1	2.77	81.2	-0.002	2 -0.001	2 82.86	2 1513	2 2294.3	2 7.4709	2 2357	3 0.20	38.4	-9	-9	-9			
215	1098.2	34.551	2 34.550	2 4.170	4.084	27.420	0.017	0.0	40.2	40.2	2.79	87.2	-9	9 -9	9 85.51	2 -9	9 -9	9 7.4744	2 -9	9 -9	0.20	-9	-9	-9	-9		
214	1197.2	34.564	2 34.563	2 3.792	3.702	27.469	0.017	0.0	40.7	40.7	2.83	96.6	-0.002	2 -0.001	2 84.68	2 -9	9 -9	9 7.4684	2 -9	9 -9	0.10	-9	-9	-9	-9		
213	1301.9	34.573	2 34.573	2 3.518	3.421	27.505	0.013	0.0	40.0	40.0	2.80	103.5	-9	9 -9	9 89.31	2 -9	9 -9	9 7.4785	2 -9	9 -9	0.10	-9	-9	-9	-9		
212	1401.7	34.584	2 34.585	2 3.233	3.130	27.541	0.015	0.0	39.5	39.5	2.76	111.0	-9	9 -9	9 95.18	2 -9	9 -9	9 7.4880	2 -9	9 -9	0.10	-9	-9	-9	-9		
211	1500.2	34.598	2 34.598	2 2.970	2.863	27.576	0.014	0.0	39.1	39.1	2.74	117.5	-9	9 -9	9 99.03	2 -9	9 -9	9 7.4949	2 -9	9 -9	0.00	-9	-9	-9	-9		
210	1587.6	34.608	2 34.608	2 2.788	2.676	27.601	0.012	0.0	38.6	38.6	2.72	121.8	0.004	2 0.000	2 102.76	6 -9	9 -9	9 7.5020	2 -9	9 -9	0.00	-9	-9	-9	-9		
209	1800.4	34.626	2 34.626	2 2.465	2.338	27.645	0.011	0.0	38.2	38.2	2.69	130.5	-9	9 -9	9 108.75	2 -9	9 -9	9 7.5140	2 -9	9 -9	0.00	-9	-9	-9	-9		
208	2005.8	34.639	2 34.639	2 2.260	2.119	27.673	0.010	0.0	38.0	38.0	2.66	137.7	-9	9 -9	9 113.04	6 -9	9 -9	9 7.5228	2 -9	9 -9	0.00	37.3	-9	-9	-9		
207	2200.1	34.650	2 -9	9 2.110	1.955	27.695	0.010	-9	9	9	-9	-9	-9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9		
206	2399.5	34.661	2 34.661	2 1.935	1.765	27.718	0.010	0.0	37.3	37.3	2.59	145.4	0.001	2 0.003	2 -9	1 -9	1 -9	9 7.5433	2 -9	9 -9	0.00	-9	-9	-9	-9		
205	2606.3	34.666	2 -9	9 1.863	1.675	27.729	0.009	-9	9	9	-9	-9	-9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9		
204	2800.5	34.672	2 34.672	2 1.798	1.595	27.740	0.010	0.0	36.5	36.5	2.50	148.8	-9	9 -9	9 135.52	2 -9	9 -9	9 7.5684	2 -9	9 -9	0.00	-9	-9	-9	-9		
203	2999.9	34.674	2 34.674	2 1.761	1.538	27.746	0.007	0.0	37.1	37.1	2.52	147.0	-0.001	2 -0.002	2 134.60	2 -9	9 -9	9 7.5708	2 -9	9 -9	0.00	-9	-9	-9	-9		
202	2999.7	34.674	2 34.674	2 1.760	1.538	27.746	0.007	0.0	37.3	37.3	2.52	145.1	-9	9 -9	9 135.45	2 -9	9 -9	9 7.5708	2 -9	9 -9	0.00	44.2	-9	-9	-9		
201	3189.9	34.674	2 34.674	2 1.772	1.531	27.747	0.007	0.0	37.0	37.0	2.52	146.3	6	6 -9	6 -9	6 -9	6 -9	6 -9	6 -9	6 -9	6 -9	6 -9	6 -9	6 -9	6 -9		

* WOCE water sample quality flag (F) for parameter from previous column
** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 127 DATE 4/9/94 LATITUDE 6°56.4'S Btm Depth: 3180
CAST 1 LONGITUDE 107°30.7'W

Sample ID	Pressure db	Salinity	Temp °C	Sigma T	Theta	NO2	NO3	PO4	Si(OH)4	CFC-11	CFC-12	O2	DIC	pH	TAik	813C	TOC	TON	Chi-a	Phase																						
																					µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg		
136	2	11.0	34.878	2	34.880	2	27.643	27.640	22.420	0.249	0.1	2	1.9	2	0.35	2	1.2	2	1.748	2	0.976	2	205.03	2	289	2	1969.1	2	8.0974	2	2301	6	-9	-9	-9	-9	-9	-9				
135	2	10.0	34.878	2	34.880	2	27.641	27.639	22.420	0.243	0.1	2	1.9	2	0.34	2	0.4	2	4.799	4	0.938	4	204.67	2	289	2	1969.8	2	8.0964	2	2299	6	-9	-9	-9	-9	-9	-9				
134	2	10.7	34.877	2	34.880	2	27.641	27.639	22.420	0.249	0.1	2	1.8	2	0.30	2	0.4	2	1.732	2	0.963	2	204.99	2	283	2	1969.8	2	8.0978	2	2305	2	-9	-9	-9	-9	-9	-9				
133	2	24.6	34.921	2	34.923	2	27.593	27.588	22.469	0.232	0.1	2	2.0	2	0.30	2	0.2	2	1.740	6	0.960	6	204.53	2	283	2	1974.5	2	8.0941	2	2303	2	-9	-9	-9	-9	-9	-9				
132	2	48.5	35.438	2	35.442	2	25.073	25.062	23.653	0.130	0.1	2	4.9	2	0.66	2	2.6	2	1.946	2	1.075	2	210.11	2	336	2	2036.4	2	8.0329	2	2332	2	-9	-9	-9	-9	-9	-9				
131	2	75.1	35.264	2	35.288	2	21.199	21.185	24.644	0.060	1.0	2	9.3	2	1.08	2	5.1	2	1.951	2	1.022	2	158.81	2	490	2	2101.6	2	7.8952	2	2329	2	-9	-9	-9	-9	-9	-9				
130	2	101.5	35.258	2	35.279	2	17.236	17.220	25.660	0.044	1.0	2	14.5	2	1.44	2	6.3	2	1.965	2	1.042	2	104.10	2	695	2	2160.7	2	7.7651	2	2318	2	-9	-9	-9	-9	-9	-9				
129	2	123.1	35.019	2	35.019	2	14.225	14.207	26.158	0.032	0.0	2	26.9	2	2.23	2	2.3	2	0.894	2	0.468	2	136.1	2	1249	2	2230.8	2	7.5339	2	2298	2	-9	-9	-9	-9	-9	-9				
128	2	150.6	34.937	2	34.937	2	12.993	12.973	26.350	0.027	0.0	2	30.7	2	2.38	2	2.35	2	0.416	2	0.219	2	7.06	6	1387	2	2242.3	2	7.4957	2	2304	2	-9	-9	-9	-9	-9	-9				
127	2	167.4	34.917	2	34.915	2	12.678	12.655	26.397	0.028	0.0	2	30.6	2	2.38	2	2.47	2	0.364	2	0.237	2	9.75	2	1398	6	2242.5	2	7.4913	2	2296	2	-9	-9	-9	-9	-9	-9				
126	2	200.3	34.893	2	34.891	2	12.326	12.299	26.449	0.029	0.0	2	30.6	2	2.36	2	2.60	2	0.285	2	0.166	2	13.81	2	1409	2	2241.4	2	7.4945	2	2299	2	-9	-9	-9	-9	-9	-9				
125	2	218.5	34.877	2	34.875	2	12.094	12.065	26.481	0.030	0.0	2	31.9	2	2.38	2	2.67	2	0.242	2	0.131	2	13.72	2	1418	2	2242.6	2	7.4879	2	2304	2	-9	-9	-9	-9	-9	-9				
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9				
123	2	297.8	34.820	2	34.818	2	11.192	11.155	26.607	0.031	0.0	2	33.3	2	2.46	2	2.97	2	0.141	6	0.078	6	13.57	2	1508	2	2253.0	2	7.4642	2	2308	2	-9	-9	-9	-9	-9	-9				
122	2	350.0	34.781	2	34.779	2	10.597	10.554	26.684	0.027	0.0	2	35.0	2	2.64	2	3.34	2	0.063	2	0.034	2	4.68	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9			
121	2	404.2	34.719	2	34.717	2	9.617	9.571	26.805	0.028	0.0	2	36.6	2	2.80	2	3.89	2	0.028	2	0.008	2	6.92	2	1918	6	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
120	2	497.5	34.628	2	34.626	2	8.038	7.987	26.983	0.026	0.0	2	42.2	2	2.99	2	4.48	2	0.003	2	0.000	2	0.000	2	24.04	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
119	2	600.0	34.573	2	34.572	2	6.833	6.776	27.113	0.021	0.0	2	44.0	2	3.01	2	5.15	2	0.001	2	0.002	2	0.002	2	47.33	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
118	2	700.0	34.545	2	34.545	2	5.935	5.873	27.209	0.018	0.0	2	43.7	2	2.96	2	5.93	2	-0.001	2	-0.002	2	-0.002	2	47.33	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
117	2	803.4	34.538	2	34.538	2	5.348	5.280	27.277	0.019	0.0	2	41.9	2	2.94	2	6.71	2	-9	1	-9	1	63.34	2	1626	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
116	2	899.7	34.539	2	34.539	2	4.856	4.782	27.335	0.017	0.0	2	42.1	2	2.97	2	7.40	2	-9	9	-9	9	68.51	2	-9	9	2294.8	2	-9	9	2348	6	-9	-9	-9	-9	-9	-9	-9	-9		
115	2	1001.8	34.546	2	34.546	2	4.289	4.211	27.403	0.015	0.0	2	40.8	2	2.81	2	8.29	2	-9	9	-9	9	86.39	6	1499	2	-9	9	74764	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9		
114	2	1103.1	34.554	2	34.553	2	3.982	3.897	27.442	0.012	0.0	2	40.1	2	2.81	2	8.91	2	-9	9	-9	9	90.26	2	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9
113	2	1202.4	34.567	2	34.566	2	3.667	3.577	27.484	0.012	0.0	2	41.1	2	2.82	2	9.71	2	-9	9	-9	9	91.20	2	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9
112	2	1295.2	34.578	2	34.579	2	3.378	3.283	27.522	0.013	0.0	2	40.3	2	2.79	2	105.2	2	-9	9	-9	9	94.54	2	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9
111	2	1397.1	34.590	2	34.591	2	3.119	3.018	27.556	0.011	0.0	2	40.6	2	2.79	2	111.4	2	-9	9	-9	9	99.34	2	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9
110	2	1603.6	34.610	2	34.610	2	2.741	2.627	27.607	0.010	0.0	2	40.4	2	2.74	2	121.3	2	-9	9	-9	9	107.94	2	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9
109	2	1797.3	34.624	2	34.624	2	2.505	2.378	27.640	0.009	0.0	2	39.9	2	2.73	2	128.6	2	-9	9	-9	9	108.29	2	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9
108	2	1996.2	34.640	2	34.640	2	2.281	2.141	27.672	0.009	0.0	2	39.2	2	2.70	2	136.6	2	-9	9	-9	9	108.07	2	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9
107	2	2182.6	34.649	2	34.648	2	2.132	1.978	27.692	0.008	0.0	2	39.0	2	2.68	2	139.4	2	-9	9	-9	9	114.00	2	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9
106	2	2399.2	34.658	2	34.659	2	1.977	1.806	27.713	0.008	0.0	2	38.7	2	2.62	2	141.6	2	-9	9	-9	9	120.04	2	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9
105	2	2502.6	34.664	2	34.664	2	1.888	1.710	27.725	0.006	0.0	2	38.3	2	2.59	2	141.2	2	-9	9	-9	9	126.80	6	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9
104	2	2795.2	34.674	2	34.675	2	1.779	1.576	27.743	0.005	0.0	2	37.4	2	2.54	2	142.1	2	-9	9	-9	9	134.62	2	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9
103	2	3000.4	34.674	2	34.676	2	1.783	1.560	27.744	0.005	0.0	2	37.9	2	2.55	2	144.1	2	-9	9	-9	9	135.01	2	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9
102	2	2999.5	34.674	2	34.674	2	1.783	1.560	27.744	0.005	0.0	2	37.6	2	2.54	2	144.0	2	-9	9	-9	9	134.97	2	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9
101	2	3143.9	34.674	2	34.675	2	1.796	1.558	27.744	0.005	0.0	6	37.6	6	2.54	6	144.7	6	-9	9	-9	9	135.30	2	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9

* WOCE water sample quality flag (F) for parameter from previous column
** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94
WOCE P18
NOAA Ship Discoverer

STATION 128 1 DATE 4994 LATITUDE 6°33.7'S Btm Depth: 3125
CAST 1 LONGITUDE 108°44'W

Sample ID	Pressure db	Salinity P ^o	Salinity P ^o Bottle	Temp °C	Temp °C	Sigma T	Sigma Anom	NO2 P ^o umol/kg	NO3 P ^o umol/kg	PO4 P ^o umol/kg	Si(OH) ₄ P ^o umol/kg	CFC-11 P ^o pmol/kg	CFC-12 P ^o pmol/kg	O ₂ P ^o umol/kg	F ^o @20°C ^o umol/kg	DIC P ^o umol/kg	pH P ^o	TAIK P ^o umol/kg	513C TOC per ml umol/L	TON umol/L	Chl-a Phase ug/L							
																						Potential	Temp	Temp	Theta	CP	Beam	Beam
136	2	34.702	2	34.703	2	27.816	27.814	22.231	0.084	0.1	2	2.4	2	0.955	2	200.88	2	299	2	1975.8	2	2289	6	1.60	76.9	6.0	-9	-9
135	2	34.702	2	34.706	2	27.820	27.818	22.230	0.085	0.1	2	2.1	2	0.950	2	200.75	2	-9	9	8.0735	2	-9	9	-9	72.9	6.0	-9	-9
134	2	34.728	2	34.732	2	27.819	27.814	22.251	0.094	0.0	2	2.2	2	0.953	2	-9	1	297	2	-9	9	8.0707	2	-9	82.4	6.1	-9	-9
133	2	34.992	2	35.004	2	27.116	27.105	22.678	0.109	0.1	2	2.2	2	1.793	2	201.90	2	-9	9	1975.1	2	2284	2	-9	73.9	6.1	-9	-9
132	2	35.317	2	35.335	2	21.280	21.265	24.663	0.076	1.1	2	4.7	2	1.054	2	157.90	2	483	2	-9	9	7.9026	2	-9	7.2	-9	-9	-9
131	2	35.307	2	35.302	2	17.876	17.859	23.542	0.048	1.3	2	1.68	2	1.826	2	81.47	2	760	2	2100.1	3	2324	2	-9	58.5	4.3	-9	-9
130	2	35.036	2	35.036	2	14.597	14.578	26.092	0.038	0.0	2	15.0	2	0.516	2	14.64	2	1326	2	2174.7	3	2318	2	-9	-9	-9	-9	-9
129	2	34.940	2	34.938	2	13.138	13.117	26.323	0.031	0.0	2	19.6	2	0.277	2	10.15	2	1352	2	2228.8	2	2297	2	-9	-9	-9	-9	-9
128	3	179.7	34.912	34.911	2	12.588	12.565	26.411	0.037	0.0	2	30.5	2	0.193	2	12.90	2	1369	2	2239.2	-9	2300	2	-9	-9	-9	-9	-9
127	2	201.8	34.884	34.882	2	12.175	12.149	26.470	0.028	0.0	2	24.1	2	0.158	2	17.70	2	-9	9	2240.4	2	2300	2	-9	-9	-9	-9	-9
126	2	224.3	34.868	34.867	2	11.927	11.898	26.506	0.029	0.0	2	24.5	2	0.265	2	26.20	2	1330	2	-9	9	7.5148	2	-9	-9	-9	-9	-9
125	2	252.2	34.848	34.848	2	11.617	11.585	26.550	0.026	0.0	2	26.1	2	0.142	2	23.20	2	1385	2	2235.7	2	2298	2	-9	52.5	4.4	-9	-9
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
123	2	299.5	34.812	34.813	2	11.084	11.047	26.621	0.029	0.0	2	29.1	2	0.073	2	7.89	2	-9	9	2242.5	2	2300	2	-9	-9	-9	-9	-9
122	2	401.1	34.713	34.712	2	9.549	9.503	26.812	0.028	0.0	2	34.9	2	0.017	2	4.88	2	1788	2	2277.0	2	2302	2	-9	-9	-9	-9	-9
121	2	499.6	34.619	34.618	2	7.876	7.825	27.001	0.024	0.0	2	41.5	2	0.005	2	11.14	2	1886	2	2288.2	2	2302	2	-9	-9	-9	-9	-9
120	2	599.8	34.565	34.564	2	6.600	6.545	27.138	0.023	0.0	2	49.4	2	0.000	2	33.77	2	1716	2	2287.4	2	2313	2	-9	-9	-9	-9	-9
119	2	701.6	34.546	34.547	2	5.758	5.697	27.292	0.020	0.0	2	59.6	2	-9	1	54.79	2	1649	3	2286.7	2	2321	2	-9	-9	-9	-9	-9
118	3	799.0	34.537	34.537	2	5.108	5.042	27.303	0.018	0.0	2	67.6	2	0.006	2	-9	9	84.22	2	1492	2	2340	2	-9	-9	-9	-9	-9
117	2	903.2	34.541	34.540	2	4.611	4.539	27.364	0.017	0.0	2	76.5	2	-9	9	91.42	2	1443	2	2296.0	2	2354	2	-9	44.0	-9	-9	-9
116	2	1001.9	34.551	34.552	2	4.234	4.157	27.413	0.017	0.0	2	84.8	2	-9	9	89.43	2	-9	9	7.4834	2	-9	9	-9	-9	-9	-9	-9
115	2	1102.3	34.562	34.562	2	3.911	3.827	27.456	0.017	0.0	2	92.4	2	-9	9	89.95	2	-9	9	7.4817	2	-9	9	-9	-9	-9	-9	-9
114	2	1201.8	34.573	34.574	2	3.625	3.536	27.493	0.016	0.0	2	100.5	2	-9	9	90.13	2	-9	9	7.4799	2	-9	9	-9	-9	-9	-9	-9
113	2	1272.2	34.579	34.580	2	3.463	3.370	27.515	0.015	0.0	2	108.7	2	-9	9	92.71	2	-9	9	7.4857	2	-9	9	-9	-9	-9	-9	-9
112	2	1402.5	34.590	34.591	2	3.208	3.106	27.548	0.012	0.0	2	119.9	2	-9	9	95.18	2	-9	9	7.4898	2	-9	9	-9	-9	-9	-9	-9
111	2	1597.5	34.611	34.612	2	2.801	2.687	27.603	0.012	0.0	2	132.2	2	-9	9	100.20	2	-9	9	7.4994	2	-9	9	-9	-9	-9	-9	-9
110	2	1801.4	34.625	34.626	2	2.544	2.416	27.638	0.011	0.0	2	147.2	2	-9	9	105.77	2	-9	9	7.5105	2	-9	9	-9	-9	-9	-9	-9
109	2	2002.5	34.640	34.641	2	2.304	2.162	27.670	0.010	0.0	2	161.2	2	-9	9	111.71	2	-9	9	-9	9	7.5203	2	-9	-9	-9	-9	-9
108	2	2200.3	34.651	34.651	2	2.114	1.958	27.695	0.008	0.0	2	182.2	2	-9	9	123.63	2	-9	9	-9	9	7.5410	2	-9	-9	-9	-9	-9
107	2	2398.7	34.659	34.660	2	1.965	1.794	27.715	0.008	0.0	2	204.2	2	-9	9	128.54	2	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9
106	2	2600.1	34.668	34.668	2	1.836	1.649	27.733	0.006	0.0	2	232.2	2	-9	9	135.76	2	-9	9	-9	9	7.5703	2	-9	-9	-9	-9	-9
105	2	2802.7	34.674	34.674	2	1.782	1.577	27.742	0.006	0.0	2	261.2	2	-9	9	137.37	2	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9
104	2	2995.2	34.676	34.676	2	1.742	1.520	27.748	0.007	0.0	2	290.2	2	-9	9	138.47	2	-9	9	-9	9	7.5760	2	-9	-9	-9	-9	-9
103	2	3203.7	34.676	34.678	2	1.741	1.498	27.751	0.006	0.0	2	318.2	2	-9	9	138.78	2	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9
102	2	3204.3	34.676	34.677	2	1.740	1.498	27.751	0.006	0.0	2	345.2	2	-9	9	139.06	2	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9
101	2	3275.0	34.676	34.677	2	1.747	1.498	27.751	0.006	0.0	6	363.2	2	-9	9	139.06	2	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column

** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 130 3 DATE 4/9/94 LATITUDE 5°46.4'S Run Depth: 3491

CAST 3 LONGITUDE 109°12.2'W

Sample ID	Pressure db	Salinity P ^o	Salinity Bottle	Temp °C	Temp °C	Potential		Beam		NO2 P ^o	NO3 P ^o	PO4 P ^o	Si(OH) ₄ P ^o	CFC-11 P ^o	CFC-12 P ^o	O2 P ^o	F ^o @20°C	DIC P ^o	pH P ^o	TAik P ^o	δ13C per mil	TOC μmol/L	TON μmol/L	Chl-a P ^o			
						Temp °C	Temp °C	Theta	Sigma																Attenu	cp	
324	2	34.579	2	34.581	2	27.854	27.853	22.126	-9	0.0	2	3.1	2	0.41	2	3.5	2	1971.2	2	8.0680	2	2276	2	1.60	-9	-9	
323	2	26.0	34.614	2	34.595	2	27.704	27.697	22.202	-9	0.0	2	3.4	2	0.42	2	3.4	2	9	9	8.0676	2	-9	9	-9	-9	
322	2	49.7	35.339	2	-9	25.631	25.620	23.407	-9	0.1	2	5.4	2	0.67	2	3.6	2	9	9	2033.4	2	9	2324	2	-9	-9	
321	2	100.1	35.467	2	35.480	2	18.798	25.429	-9	1.4	2	8.9	2	1.07	2	4.6	2	9	9	2133.3	2	2335	2	-9	5.1	-9	
320	2	150.6	34.966	2	34.977	2	13.712	13.691	26.225	-9	0.0	2	26.3	2	2.24	2	18.5	2	9	9	2234.6	2	2300	2	-9	54.9	-9
319	2	202.0	34.890	2	34.889	2	12.188	12.161	26.472	-9	0.0	2	30.2	2	2.25	2	23.3	2	9	9	2235.5	2	2296	2	-9	59.8	-9
318	2	249.9	34.838	2	34.839	2	11.460	11.428	26.571	-9	0.0	2	32.4	2	2.32	2	26.8	2	9	9	2243.6	2	2303	2	-9	-9	-9
317	2	299.3	34.796	2	34.798	2	10.824	10.788	26.655	-9	0.0	2	33.5	2	2.47	2	30.9	2	9	9	2257.6	2	2301	2	-9	50.8	-9
316	2	400.3	34.700	2	34.703	2	9.277	9.233	26.846	-9	0.0	2	37.1	2	2.71	2	37.7	2	9	9	2276.1	2	2298	2	-9	-9	-9
315	2	502.0	34.616	2	34.619	2	7.659	7.649	27.024	-9	0.0	2	43.1	2	2.92	2	46.3	2	9	9	2286.6	2	2306	2	-9	-9	-9
314	2	599.1	34.574	2	34.574	2	6.694	6.638	27.132	-9	0.0	2	43.0	2	2.92	2	52.5	2	9	9	2286.4	2	2311	2	-9	-9	-9
313	2	701.0	34.552	2	34.552	2	6.023	5.960	27.203	-9	0.0	2	42.2	2	2.87	2	58.9	2	9	9	2285.5	2	2313	2	-9	-9	-9
312	2	800.8	34.542	2	34.543	2	5.449	5.380	27.268	-9	0.0	2	40.8	2	2.83	2	66.9	2	9	9	2285.4	2	2328	2	-9	-9	-9
311	2	898.3	34.541	2	34.541	2	4.819	4.746	27.341	-9	0.0	2	40.0	2	2.79	2	77.1	2	9	9	2289.1	2	2343	2	-9	-9	-9
310	2	1001.5	34.548	2	34.550	2	4.366	4.287	27.396	-9	0.0	2	40.0	2	2.74	2	85.0	2	9	9	2293.4	2	2345	2	-9	44.4	-9
309	2	1202.6	34.566	2	34.566	2	3.818	3.727	27.469	-9	0.0	2	39.3	2	2.79	2	98.5	2	9	9	9	9	9	9	-9	-9	-9
308	2	1399.9	34.617	2	34.586	2	3.319	3.216	27.535	-9	0.0	2	40.1	2	2.79	2	111.7	2	9	9	9	9	9	9	-9	-9	-9
307	2	2299.1	34.657	2	34.617	2	2.644	2.523	27.622	-9	0.0	2	39.0	2	2.72	2	127.4	2	9	9	9	9	9	9	-9	-9	-9
306	2	2002.3	34.639	2	34.640	2	2.266	2.125	27.673	-9	0.0	2	39.0	2	2.69	2	136.0	2	9	9	9	9	9	9	-9	-9	-9
305	2	2600.9	34.670	2	34.671	2	1.789	1.603	27.710	-9	0.0	2	38.2	2	2.63	2	143.0	2	9	9	9	9	9	9	-9	-9	-9
304	2	2901.5	34.674	2	34.677	2	1.743	1.530	27.747	-9	0.0	2	37.0	2	2.54	2	146.0	2	9	9	9	9	9	9	-9	-9	-9
303	2	3200.8	34.679	2	34.681	2	1.660	1.420	27.759	-9	0.0	2	36.3	2	2.48	2	147.8	2	9	9	9	9	9	9	-9	-9	-9
302	2	3504.3	34.682	2	34.681	2	1.623	1.353	27.766	-9	0.0	2	36.7	2	2.48	2	146.8	2	9	9	9	9	9	9	-9	-9	-9
301	2																										

* WOCE water sample quality flag (F) for parameter from previous column
 *** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 132 DATE 4/10/94 LATITUDE 5°0.1'S Btm Depth: 3457
 CAST 1 LONGITUDE 110°20.1'W

Sample ID	P _{tot}	Pressure db	Salinity	P _{sal}	Temp °C	Temp °C	Sigma T	Sigma T	Beam Attenuation	NO ₂	NO ₃	PO ₄	P _{Si(OH)₄}	P _{CFC-11}	P _{CFC-12}	O ₂	P _{OC₂}	DIC _{OC₂}	pH	P _{TALK}	P _{TA}	δ ¹³ C	TOC	TON	Chl-a	Phase		
																											µmol/kg	µmol/kg
124	2	10.2	34.697	2	-9	5	27.890	27.888	22.204	-9	-9	-9	-9	-9	-9	9	201.10	2	327	3	1989.8	2	-9	-9	-9	-9		
123	2	24.0	34.726	2	34.736	2	27.808	27.802	22.253	-9	0.1	2	4.8	2	0.52	2	3.3	2	329	2	1992.4	2	-9	-9	-9	-9		
122	2	48.6	35.072	2	-9	5	21.295	21.285	24.471	-9	0.4	2	12.7	2	1.15	2	6.8	2	525	2	2099.2	2	-9	-9	-9	-9		
121	2	99.0	35.091	2	35.090	2	14.633	14.618	26.125	-9	0.1	2	22.7	2	1.86	2	12.8	2	971	2	2198.5	2	-9	-9	-9	-9		
120	2	149.3	34.913	2	34.915	2	12.826	12.805	26.364	-9	0.0	2	30.7	2	2.15	2	21.9	2	1228	2	2223.4	2	-9	-9	-9	-9		
119	2	198.7	34.880	2	34.881	2	12.353	12.327	26.433	-9	0.0	2	32.3	2	2.30	2	24.8	2	1355	2	2235.7	2	-9	-9	-9	-9		
118	2	299.3	34.825	2	34.824	2	11.348	11.311	26.583	-9	0.0	2	33.6	2	2.45	2	28.3	2	1551	2	2251.7	2	-9	-9	-9	-9		
117	2	396.7	34.727	2	34.727	2	9.743	9.697	26.790	-9	0.0	2	36.7	2	2.66	2	36.0	2	1760	2	2274.4	2	-9	-9	-9	-9		
116	2	499.5	34.632	2	34.675	4	8.448	8.395	26.941	-9	0.0	2	39.1	2	2.75	2	38.5	2	1755	3	2274.5	2	-9	-9	-9	-9		
115	2	600.4	34.599	2	34.600	2	7.340	7.281	27.063	-9	0.0	2	43.2	2	2.92	2	44.4	2	1802	2	2286.4	2	-9	-9	-9	-9		
114	2	649.8	34.575	2	34.576	2	6.813	6.751	27.118	-9	0.0	2	42.5	2	2.89	2	48.2	2	1705	2	2281.5	2	-9	-9	-9	-9		
113	2	800.8	34.540	2	34.541	2	5.622	5.553	27.245	-9	0.0	2	40.1	2	2.73	2	59.7	2	1484	2	2276.2	2	-9	-9	-9	-9		
112	2	898.2	34.538	2	34.539	2	4.956	4.862	27.325	-9	0.0	2	40.5	2	2.66	2	67.6	2	1459	1	2280.8	2	-9	-9	-9	-9		
111	2	1000.1	34.546	2	34.547	2	4.468	4.388	27.394	-9	0.0	2	40.8	2	2.83	2	80.2	2	85.47	2	1471	2	2295.6	2	-9	-9	-9	-9
110	2	1193.3	34.569	2	34.570	2	3.765	3.675	27.476	-9	0.0	2	40.8	2	2.78	2	97.6	2	92.00	2	-9	9	-9	-9	-9	-9		
109	2	1399.1	34.590	2	34.591	2	3.258	3.156	27.543	-9	0.0	2	41.0	2	2.82	2	111.2	2	90.29	2	1422	3	-9	-9	-9	-9	-9	
108	2	1597.9	34.606	2	34.607	2	2.875	2.760	27.592	-9	0.0	2	40.6	2	2.80	2	118.8	2	98.56	2	-9	9	-9	-9	-9	-9	-9	
107	2	1797.3	34.625	2	34.626	2	2.521	2.394	27.639	-9	0.0	2	39.9	2	2.72	2	126.8	2	106.09	2	-9	9	-9	-9	-9	-9	-9	
106	2	2098.7	34.643	2	34.645	2	2.192	2.044	27.682	-9	0.0	2	39.4	2	2.66	2	138.9	2	114.78	2	-9	9	-9	-9	-9	-9	-9	
105	2	2399.6	34.660	2	34.661	2	1.932	1.762	27.718	-9	0.0	2	39.2	2	2.60	2	138.9	2	124.39	2	1276	2	-9	-9	-9	-9	-9	-9
104	2	2701.5	34.671	2	34.671	2	1.775	1.580	27.740	-9	0.0	2	39.2	2	2.55	2	141.0	2	133.70	2	-9	9	-9	-9	-9	-9	-9	
103	2	3000.7	34.678	2	34.678	2	1.642	1.422	27.757	-9	0.0	2	37.8	2	2.48	2	144.2	2	142.68	2	-9	9	-9	-9	-9	-9	-9	
102	2	3301.3	34.683	2	34.685	2	1.553	1.305	27.770	-9	0.0	2	36.9	2	2.40	2	144.2	2	150.09	2	-9	9	-9	-9	-9	-9	-9	
101	2	3474.1	34.684	2	34.685	2	1.553	1.288	27.772	-9	0.0	2	37.2	2	2.48	2	146.1	2	151.42	2	-9	9	-9	-9	-9	-9	-9	

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 133 1 DATE 4/10/94 LATITUDE 4°29.75' N Btm Depth: 3833
 CAST 1 LONGITUDE 110°19.6' W

Sample ID	Pressure db	Salinity ‰	Salinity ‰ Bottle	Temp °C	Temp °C	Sigma T	Sigma T	Beam Attenuation	NO2 ‰	NO3 ‰	PO4 ‰	F ₂ SiO ₄ ‰	CFC-11 ‰	CFC-12 ‰	O ₂ ‰	fCO ₂	DIC ‰	pH	TA ‰	F ₂ TA ‰	813C ‰	TOC ‰	TON ‰	Chl-a ‰	Phase ‰											
																										Potential Temp °C	Temp °C	Theta °C	SP	umol/kg	umol/kg	umol/kg	umol/kg	umol/kg	umol/kg	umol/kg
136	2	34.705	34.708	27.830	27.828	22.229	0.099	0.1	2	4.5	2	0.48	2	1.725	2	0.972	2	201.40	2	325	2	1989.5	2	8.0446	2	2283	6	1.50	-9	-9	0.179	0.076				
135	2	34.776	34.778	27.756	27.750	22.307	0.110	0.1	2	4.8	2	0.52	2	1.716	2	0.941	2	199.50	2	332	2	1990.2	2	8.0998	2	2285	2	-9	-9	-9	0.219	0.102				
134	2	35.154	35.153	19.448	19.489	25.026	0.112	0.6	2	14.8	2	1.28	2	1.474	2	0.771	2	127.82	2	610	2	2129.0	2	7.8155	2	2308	2	-9	-9	-9	5.1	0.271	0.227			
133	2	35.131	35.141	15.553	15.541	25.983	0.061	0.9	2	21.7	2	1.76	2	1.205	2	0.611	2	59.55	2	-9	2	2191.0	2	7.6631	2	2306	3	-9	-9	-9	56.1	3.9	0.253	0.235		
132	2	34.998	35.002	13.856	13.842	26.219	0.037	0.3	2	28.1	2	2.02	2	0.709	2	0.373	2	31.73	2	1134	2	2213.9	2	7.5771	2	2295	2	-9	-9	-9	50.7	3.8	0.161	0.172		
131	2	34.944	34.944	13.926	13.908	26.287	0.033	0.0	2	28.2	2	1.96	2	0.627	2	0.336	2	47.79	2	1058	2	2204.2	2	7.6025	2	2297	2	-9	-9	-9	50.0	3.1	0.073	0.079		
130	2	34.936	34.937	13.178	13.157	26.312	0.032	0.0	2	30.4	2	2.12	2	0.554	2	0.291	2	26.61	2	1207	2	2219.1	2	7.5513	2	2299	2	-9	-9	-9	54.0	3.3	0.039	0.053		
129	2	34.920	34.919	12.996	12.971	26.337	0.028	0.0	2	30.1	2	2.14	2	0.485	2	0.260	2	24.48	2	1239	2	2222.2	2	7.5430	2	2290	2	-9	-9	-9	-9	-9	0.016	0.025		
128	2	34.912	34.910	12.843	12.816	26.361	0.027	0.0	2	31.4	2	2.21	2	0.428	2	0.227	2	18.22	2	1297	2	2230.4	2	7.5229	2	2298	2	-9	-9	-9	53.5	-9	0.010	0.016		
127	2	34.899	34.897	12.650	12.620	26.390	0.027	0.0	2	31.6	2	2.24	2	0.363	2	0.198	2	16.33	2	1335	2	2234.1	2	7.5115	2	2301	2	-9	-9	-9	-9	-9	-9	-9	-9	
126	2	34.883	34.883	12.386	12.352	26.430	0.027	0.0	2	32.5	2	2.32	2	0.281	2	0.157	2	9.49	2	1417	2	2242.0	2	7.4876	2	2294	2	-9	-9	-9	-9	-9	-9	-9	-9	
125	2	34.858	34.856	11.895	11.856	26.506	0.028	0.0	2	32.9	2	2.38	2	0.214	2	0.117	2	10.14	2	-9	2	2248.5	2	-9	2	2297	2	-9	-9	-9	51.3	3.3	-9	-9	-9	
124	9	-9	-9	-9	-9	-9	-9	-9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	
123	2	34.813	34.816	11.152	11.108	26.610	0.030	0.0	2	33.7	2	2.47	2	0.136	2	0.081	2	7.43	2	1578	2	2258.5	2	7.4463	2	2308	2	-9	-9	-9	-9	-9	-9	-9	-9	
122	2	34.733	34.734	9.839	9.793	26.779	0.028	0.0	2	36.4	2	2.67	2	0.050	2	0.029	2	5.43	2	1743	2	2273.9	2	7.4048	2	2293	2	-9	-9	-9	50.7	2.9	-9	-9	-9	
121	2	34.649	34.649	8.366	8.313	26.951	0.029	0.0	2	40.5	2	2.77	2	0.021	2	0.010	2	19.05	2	1754	2	2276.8	2	7.4053	2	2304	2	-9	-9	-9	54.3	2.6	-9	-9	-9	
120	2	34.594	34.594	7.277	7.218	27.069	0.028	0.0	2	41.3	2	2.79	2	0.009	2	0.003	2	39.79	2	1672	2	2273.8	2	7.4276	2	2315	2	-9	-9	-9	53.0	3.4	-9	-9	-9	
119	2	34.557	34.559	6.285	6.221	27.175	0.023	0.0	2	42.6	2	2.87	2	0.006	2	-0.002	2	50.97	2	1667	2	2279.9	2	7.4286	2	2310	2	-9	-9	-9	-9	-9	-9	-9	-9	
118	2	34.544	34.544	5.637	5.567	27.246	0.021	0.0	2	40.0	2	2.76	2	0.004	2	0.002	2	73.06	2	1520	2	2278.1	2	7.4671	2	2322	2	-9	-9	-9	45.3	-9	-9	-9	-9	
117	2	34.537	34.538	5.102	5.026	27.305	0.018	0.0	2	39.8	2	2.79	2	0.005	2	0.002	2	84.72	2	1478	2	2281.5	2	7.4786	2	2330	2	-9	-9	-9	-9	-9	-9	-9	-9	
116	2	34.543	34.542	4.476	4.397	27.381	0.017	0.0	2	38.9	2	2.73	2	0.005	2	-0.002	2	96.05	2	1417	2	2286.6	2	7.4970	2	2344	6	-9	-9	-9	45.2	3.2	-9	-9	-9	
115	2	34.569	34.570	3.745	3.654	27.478	0.016	0.0	2	39.4	2	2.78	2	0.003	2	0.000	2	94.27	2	1451	2	2307.9	2	7.4917	2	2366	2	-9	-9	-9	-9	-9	-9	-9	-9	
114	2	34.589	34.590	3.309	3.206	27.538	0.016	0.0	2	39.7	2	2.84	2	0.001	2	-0.002	2	90.28	2	1496	2	2326.0	2	7.4794	2	2377	2	-9	-9	-9	-9	-9	-9	-9	-9	
113	2	34.606	34.607	2.932	2.817	27.587	0.014	0.0	2	39.8	2	2.81	2	0.001	2	-0.002	2	94.89	2	1471	2	2332.4	2	7.4694	2	2387	2	-9	-9	-9	-9	-9	-9	-9	-9	
112	2	34.625	34.626	2.517	2.390	27.640	0.011	0.0	2	39.3	2	2.74	2	0.005	2	-0.002	2	104.82	2	1413	2	2335.6	2	7.5073	2	-9	5	-9	-9	-9	-9	-9	-9	-9	-9	
111	2	34.641	34.641	2.272	2.132	27.674	0.008	0.0	2	38.5	2	2.74	2	0.002	2	-9	9	108.53	2	1394	2	2342.8	2	7.5169	2	2410	2	-9	-9	-9	39.5	-9	-9	-9	-9	
110	2	34.651	34.653	2.089	1.933	27.697	0.010	0.0	2	38.5	2	2.68	2	0.006	2	0.001	2	115.75	2	1346	2	2339.5	2	7.5293	2	-9	5	-9	-9	-9	-9	-9	-9	-9	-9	
109	2	34.659	34.659	1.925	1.755	27.717	0.010	0.0	2	38.0	2	2.61	2	0.006	2	0.001	2	126.06	2	1293	2	2337.9	2	7.5443	2	2412	2	-9	-9	-9	-9	-9	-9	-9	-9	
108	2	34.667	34.668	1.828	1.641	27.733	0.007	0.0	2	38.0	2	2.59	2	0.002	2	-9	9	130.97	2	1267	2	2339.2	2	7.5561	2	2420	2	-9	-9	-9	-9	-9	-9	-9	-9	
107	2	34.673	34.673	1.737	1.534	27.746	0.004	0.0	2	37.5	2	2.51	2	0.002	2	-9	9	136.93	2	1225	2	2337.0	2	7.5681	2	2420	2	-9	-9	-9	-9	-9	-9	-9	-9	
106	2	34.678	34.678	1.642	1.422	27.757	0.004	0.0	2	36.9	2	2.45	2	0.002	2	-0.002	2	143.39	2	1195	2	2333.4	2	7.5782	2	2423	2	-9	-9	-9	39.5	-9	-9	-9	-9	-9
105	2	34.682	34.682	1.577	1.339	27.767	0.006	0.0	2	37.1	2	2.50	2	0.002	2	-9	9	148.54	2	1158	2	2331.0	2	7.5882	2	2426	2	-9	-9	-9	-9	-9	-9	-9	-9	-9
104	2	34.685	34.685	1.546	1.288	27.772	0.006	0.0	2	36.5	2	2.47	2	0.002	2	-9	9	151.78	2	1146	2	2330.0	2	7.5936	2	2426	2	-9	-9	-9	-9	-9	-9	-9	-9	-9
103	2	34.686	34.688	1.526	1.249	27.776	0.006	0.0	2	36.0	2	2.45	2	0.001	2	-0.002	2	153.81	2	1128	2	2328.3	2	7.5995	2	2426	2	-9	-9	-9	-9	-9	-9	-9	-9	-9
102	2	34.686	34.685	1.526	1.249	27.776	0.006	0.0	2	36.2	2	2.44	2	0.002	2	-9	9	154.55	2	1135	2	2328.7	2	7.5967	2	2422	2	-9	-9	-9	-9	-9	-9	-9	-9	-9
101	2	34.687	34.687	1.544	1.257	27.777	0.006	0.0	2	36.1	2	2.46	2	0.001	2	0.000	2	154.33	2	1131	2	2327.3	2	7.5977	2	2421	2	-9	-9	-9	38.9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 135 DATE 4/1/94 LATITUDE 3°29.9'S Etm Depth: 3915
CAST 1 LONGITUDE 110°20.0'W

Sample ID	Pressure db	Salinity P _{se}	Salinity P _{sw}	Temp °C	Temp °C	Sigma t	Theta cp	FOO2										Chl-a P _{ug/L}																
								NO2 P _{µmol/kg}	NO3 P _{µmol/kg}	PO4 P _{µmol/kg}	Si(OH) ₄ P _{µmol/kg}	CFC-11 P _{pmol/kg}	CFC-12 P _{pmol/kg}	O2 P _{µmol/kg}	P _{µm}	DIC P _{µmol/kg}	pH		TALK P _{µmol/kg}	δ13C P _{per mil}	TOC P _{µmol/L}	TON P _{µmol/L}												
136	3	7.7	34.765	2	-9	5	27.776	27.774	22.291	0.091	-9	1	-9	1	-9	1	-9	1	330	2	-9	9	9	-9	-9	-9	-9							
135	2	8.1	34.787	2	34.771	2	27.732	27.730	22.307	0.091	0.1	2	4.5	2	3.8	2	1.763	2	204.79	2	-9	9	1997.3	2	8.0359	2	2284	2	-9	9	62.6	5.8	-9	-9
134	2	23.7	34.800	2	34.811	2	27.345	27.340	22.458	0.105	0.1	2	5.0	2	3.6	2	1.756	2	202.03	2	-9	9	9	9	8.0246	2	-9	9	58.3	5.5	-9	-9		
133	2	47.3	35.030	2	35.039	2	15.521	15.514	25.881	0.134	0.4	2	20.6	2	14.6	2	0.943	6	89.29	2	-9	9	9	9	7.7192	2	-9	9	45.5	4.6	-9	-9		
132	2	74.6	34.983	2	34.983	2	14.146	14.135	26.145	0.078	0.3	2	24.4	2	17.6	2	0.791	2	0.419	2	66.85	2	-9	9	7.6563	2	-9	9	3.4	-9	-9	-9		
131	2	100.4	34.960	2	34.962	2	13.695	13.681	26.223	0.046	0.3	2	26.0	2	1.86	2	0.698	2	0.384	2	56.09	2	-9	9	7.6278	2	-9	9	41.3	3.5	-9	-9		
130	2	125.3	34.951	2	34.951	2	13.527	13.509	26.251	0.039	0.1	2	26.4	2	1.88	2	0.698	2	0.366	2	56.07	2	-9	9	7.6280	2	-9	9	44.0	-9	-9	-9		
129	2	150.4	34.933	2	34.933	2	13.252	13.231	26.294	0.031	0.0	2	26.9	2	1.97	2	0.648	6	0.346	6	57.29	2	-9	9	7.6219	2	-9	9	-9	-9	-9	-9		
128	3	173.6	34.918	2	34.913	2	13.025	13.001	26.329	0.030	0.0	2	28.3	2	1.99	2	0.560	2	0.306	2	47.42	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
127	2	201.5	34.899	2	34.901	2	12.762	12.735	26.368	0.031	0.0	2	27.1	2	1.95	2	0.580	2	0.305	2	57.79	2	-9	9	7.6097	2	-9	9	-9	-9	-9	-9		
126	2	224.8	34.892	2	34.892	2	12.668	12.638	26.381	0.031	0.0	2	28.0	2	1.96	2	0.580	2	0.285	2	55.30	2	-9	9	7.6009	2	-9	9	-9	-9	-9	-9		
125	2	250.8	34.886	2	34.885	2	12.576	12.542	26.395	0.031	0.0	2	28.3	2	2.01	2	0.493	6	0.262	6	49.65	2	-9	9	7.5866	2	-9	9	37.3	-9	-9	-9		
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	
123	2	350.8	34.843	2	34.845	2	11.666	11.621	26.539	0.028	0.0	2	33.1	2	2.44	2	0.187	2	0.106	2	6.34	2	-9	9	7.4566	2	-9	9	-9	-9	-9	-9		
122	2	395.0	34.772	2	34.770	2	10.516	10.469	26.693	0.028	0.0	2	34.5	2	2.66	2	0.077	2	0.043	2	2.61	2	-9	9	7.4098	2	-9	9	41.7	2.8	-9	-9		
121	3	449.6	34.697	2	34.696	2	9.208	9.158	26.855	0.027	0.0	2	38.3	2	2.81	2	0.028	2	0.016	2	5.38	2	-9	9	7.3990	2	-9	9	-9	-9	-9	-9		
120	2	498.6	34.651	2	34.651	2	8.385	8.335	26.949	0.028	0.0	2	40.9	2	2.82	2	0.018	2	0.004	2	39.07	2	-9	9	7.4264	2	-9	9	-9	-9	-9	-9		
119	2	597.4	34.596	2	34.596	2	7.289	7.231	27.069	0.024	0.0	2	41.2	2	2.74	2	0.016	2	0.004	2	39.07	2	-9	9	7.4264	2	-9	9	-9	-9	-9	-9		
118	2	698.4	34.567	2	34.567	2	6.354	6.290	27.174	0.024	0.0	2	41.9	2	2.80	2	0.016	2	0.000	2	49.27	2	-9	9	7.4285	2	-9	9	-9	-9	-9	-9		
117	2	800.6	34.556	2	34.556	2	5.743	5.673	27.243	0.022	0.0	2	41.9	2	2.89	2	0.016	2	0.000	2	57.63	2	-9	9	7.4393	2	-9	9	-9	-9	-9	-9		
116	2	899.1	34.540	2	34.540	2	5.060	4.985	27.313	0.019	0.0	2	40.7	2	2.77	2	0.007	2	0.000	2	84.52	2	-9	9	7.4815	2	-9	9	35.6	-9	-9	-9		
115	2	997.3	34.543	2	34.545	2	4.553	4.473	27.372	0.016	0.0	2	39.7	2	2.75	2	0.007	2	0.000	2	92.18	2	-9	9	7.4815	2	-9	9	-9	-9	-9	-9		
114	2	1201.7	34.567	2	34.568	2	3.805	3.713	27.471	0.017	0.0	2	40.0	2	2.80	2	0.007	2	0.000	2	91.00	2	-9	9	7.4815	2	-9	9	-9	-9	-9	-9		
113	2	1398.2	34.595	2	34.596	2	3.179	3.078	27.555	0.016	0.0	2	40.6	2	2.84	2	0.007	2	0.000	2	89.32	2	-9	9	7.4815	2	-9	9	-9	-9	-9	-9		
112	2	1594.7	34.615	2	34.616	2	2.766	2.653	27.609	0.015	0.0	2	40.3	2	2.83	2	0.007	2	0.000	2	95.23	2	-9	9	7.4815	2	-9	9	-9	-9	-9	-9		
111	2	1797.8	34.634	2	34.634	2	2.468	2.342	27.650	0.015	0.0	2	40.0	2	2.79	2	0.007	2	0.000	2	103.28	2	-9	9	7.4815	2	-9	9	-9	-9	-9	-9		
110	2	2002.0	34.646	2	34.647	2	2.231	2.091	27.681	0.012	0.0	2	39.7	2	2.74	2	0.007	2	0.000	2	117.66	2	-9	9	7.4815	2	-9	9	-9	-9	-9	-9		
109	2	2248.5	34.654	2	34.655	2	2.012	1.854	27.706	0.010	0.0	2	38.3	2	2.66	2	0.007	2	0.000	2	125.67	2	-9	9	7.4815	2	-9	9	-9	-9	-9	-9		
108	2	2500.9	34.663	2	34.663	2	1.845	1.688	27.728	0.009	0.0	2	37.8	2	2.61	2	0.007	2	0.000	2	134.20	2	-9	9	7.4815	2	-9	9	-9	-9	-9	-9		
107	2	2747.6	34.670	2	34.670	2	1.744	1.546	27.742	0.009	0.0	2	37.5	2	2.57	2	0.007	2	0.000	2	148.16	2	-9	9	7.4815	2	-9	9	-9	-9	-9	-9		
106	2	2999.6	34.675	2	34.675	2	1.638	1.419	27.755	0.007	0.0	2	37.4	2	2.54	2	0.007	2	0.000	2	148.16	2	-9	9	7.4815	2	-9	9	-9	-9	-9	-9		
105	2	3247.8	34.682	2	34.681	2	1.561	1.319	27.768	0.006	0.0	2	37.6	2	2.50	2	0.007	2	0.000	2	154.09	2	-9	9	7.4815	2	-9	9	-9	-9	-9	-9		
104	2	3498.0	34.687	2	34.688	2	1.499	1.233	27.778	0.006	0.0	2	36.9	2	2.45	2	0.007	2	0.000	2	154.09	2	-9	9	7.4815	2	-9	9	-9	-9	-9	-9		
103	2	3747.6	34.689	2	34.691	2	1.478	1.187	27.783	0.007	0.0	2	36.5	2	2.44	2	0.007	2	0.000	2	157.20	2	-9	9	7.4815	2	-9	9	-9	-9	-9	-9		
102	2	3746.7	34.689	2	34.689	2	1.478	1.187	27.783	0.007	0.0	2	36.5	2	2.45	2	0.007	2	0.000	2	157.20	2	-9	9	7.4815	2	-9	9	-9	-9	-9	-9		
101	2	3960.9	34.689	2	34.688	2	1.500	1.185	27.783	0.007	0.0	2	36.7	2	2.43	2	0.007	2	0.000	2	155.87	2	-9	9	7.4815	2	-9	9	-9	-9	-9	-9		

* WOCE water sample quality flag (F) for parameter from previous column
** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94

WOCE P18

NOAA Ship Discoverer

STATION 136 DATE 4/11/94 LATITUDE 3°0.0'S Btm Depth: 3915
 CAST 1 LONGITUDE 110°20.0'W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Sigma T	Sigma Anen	Beam Area	NO2 μmol/kg	NO3 μmol/kg	PO4 μmol/kg	P* SKOR4 μmol/kg	CFC-11 μmol/kg	CFC-12 μmol/kg	O2 μmol/kg	P* @ 20°C μatm	COD μmol/kg	DIC μmol/kg	pH	TA μmol/kg	P* TA μmol/kg	Si3C per mil	TOC μmol/L	TON μmol/L	Chl-a μg/L	Phase μg/L
136	8.8	34.972	2 34.976	2 26.978	26.976	22.705	0.104	0.2	2 6.6	2 0.65	2 4.4	2 -9	9 202.37	6 371	3 -9	2 2080.0	2 7.9962	2 2.298	2 2.298	2 1.30	-9	-9	-9	-9	
135	7.9	34.973	2 34.976	2 26.978	26.971	22.707	0.110	0.2	2 6.5	2 0.64	2 4.5	2 -9	9 201.91	2 366	2 2080.0	2 7.9961	2 2.297	2 2.297	2 -9	-9	-9	-9	-9		
134	24.8	35.023	2 35.033	2 26.938	26.933	22.757	0.123	0.2	2 6.7	2 0.66	2 4.3	2 -9	9 200.33	2 -9	9 2280.4	2 7.4142	2 2.309	2 2.309	2 -9	-9	-9	-9	-9	-9	
133	48.7	35.085	2 35.116	3 19.263	19.254	25.021	0.100	0.5	2 14.6	2 1.21	2 9.5	2 -9	9 156.29	2 582	3 2119.2	2 7.8337	2 2.311	2 2.311	2 -9	-9	-9	-9	-9	-9	
132	73.4	35.003	2 35.008	2 14.191	14.180	26.151	0.052	0.4	2 24.1	2 1.73	2 17.3	2 -9	9 71.35	2 -9	9 2192.5	2 7.6396	2 2.294	2 2.294	2 -9	-9	-9	-9	-9	-9	
131	94.9	34.991	2 34.947	2 13.352	13.339	26.271	0.044	0.1	2 24.8	2 1.75	2 19.1	2 -9	9 75.51	2 907	2 2185.6	2 7.6605	2 2.290	2 2.290	2 -9	-9	-9	-9	-9	-9	
130	124.8	34.923	2 34.922	2 13.209	13.192	26.295	0.036	0.0	2 25.5	2 1.78	2 19.7	2 -9	9 72.18	2 -9	9 2192.5	2 7.6396	2 2.294	2 2.294	2 -9	-9	-9	-9	-9	-9	
129	152.5	34.908	2 34.908	2 12.988	12.987	26.328	0.031	0.0	2 26.1	2 1.82	2 20.5	2 -9	9 69.53	2 -9	9 2192.5	2 7.6396	2 2.294	2 2.294	2 -9	-9	-9	-9	-9	-9	
128	199.4	34.911	2 34.911	2 12.879	12.852	26.354	0.031	0.0	2 30.2	2 2.06	2 22.7	2 -9	9 35.57	2 1169	2 2217.1	2 7.5623	2 2.301	2 2.301	2 -9	-9	-9	-9	-9	-9	
127	249.0	34.900	2 34.900	2 12.628	12.594	26.396	0.027	0.0	2 32.0	2 2.26	2 24.9	2 -9	9 14.57	2 -9	9 2235.0	2 7.5081	2 2.298	2 2.298	2 -9	-9	-9	-9	-9	-9	
126	301.7	34.884	2 34.885	2 12.351	12.311	26.439	0.028	0.0	2 32.7	2 2.29	2 25.8	2 -9	9 13.66	2 1384	2 2239.1	2 7.4895	2 2.297	2 2.297	2 -9	-9	-9	-9	-9	-9	
125	350.8	34.856	2 34.855	2 11.826	11.780	26.519	0.029	0.0	2 32.8	2 2.31	2 26.7	2 -9	9 17.60	2 1416	2 2242.4	2 7.4895	2 2.294	2 2.294	2 -9	-9	-9	-9	-9	-9	
124	9	-9	9 -9	9 -9	-9	-9	-9	-9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	
123	400.2	34.775	2 -9	5 10.583	10.535	26.684	0.026	-9	1 -9	1 -9	1 -9	1 -9	9 15.19	2 1792	2 2280.7	2 7.3954	2 2.306	2 2.306	2 -9	-9	-9	-9	-9	-9	
122	500.1	34.644	2 34.643	2 8.231	8.179	26.967	0.026	0.0	2 41.1	2 2.80	2 45.3	2 -9	9 33.92	6 1711	6 2280.4	2 7.4142	2 2.309	2 2.309	2 -9	-9	-9	-9	-9	-9	
121	599.6	34.596	2 34.597	2 7.204	7.145	27.080	0.023	0.0	2 42.1	2 2.84	2 50.8	2 -9	9 50.33	6 1641	2 2280.2	2 7.4336	2 2.315	2 2.315	2 -9	-9	-9	-9	-9	-9	
120	702.7	34.566	2 34.569	2 6.391	6.326	27.168	0.023	0.0	2 42.3	2 2.83	2 56.6	2 -9	9 61.10	2 1604	2 2285.2	2 7.4434	2 2.323	2 2.323	2 -9	-9	-9	-9	-9	-9	
119	798.3	34.533	2 34.534	2 5.696	5.626	27.247	0.021	0.0	2 42.3	2 2.86	2 65.5	2 -9	9 66.21	2 1589	2 2292.8	2 7.4487	2 2.334	2 2.334	2 -9	-9	-9	-9	-9	-9	
118	889.9	34.532	2 34.532	2 5.224	5.149	27.303	0.021	0.0	2 42.2	2 2.84	2 73.5	2 -9	9 90.31	2 1456	2 2285.8	2 7.4884	2 2.342	2 2.342	2 -9	-9	-9	-9	-9	-9	
117	998.4	34.543	2 34.544	2 4.658	4.577	27.361	0.017	0.0	2 39.4	2 2.73	2 79.3	2 -9	9 93.49	2 -9	9 7.4883	2 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	
116	1099.1	34.555	2 34.556	2 4.246	4.160	27.415	0.017	0.0	2 39.8	2 2.78	2 89.8	2 -9	9 90.20	2 -9	9 7.4802	2 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	
115	1198.7	34.566	2 34.567	2 3.812	3.721	27.469	0.015	0.0	2 39.8	2 2.76	2 98.0	2 -9	9 94.54	2 -9	9 7.4880	2 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	
114	1248.6	34.575	2 34.576	2 3.644	3.551	27.493	0.015	0.0	2 40.1	2 2.80	2 103.4	2 -9	9 102.04	2 -9	9 7.5233	2 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	
113	1398.3	34.593	2 34.594	2 3.221	3.119	27.549	0.015	0.0	2 40.4	2 2.81	2 115.3	2 -9	9 110.19	6 -9	9 7.5233	2 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	
112	1598.7	34.615	2 34.615	2 2.781	2.667	27.607	0.015	0.0	2 40.1	2 2.79	2 128.2	2 -9	9 130.74	2 -9	9 7.5598	2 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	
111	1786.0	34.631	2 34.631	2 2.504	2.378	27.645	0.015	0.0	2 39.4	2 2.73	2 142.3	2 -9	9 139.46	2 -9	9 7.5761	2 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	
110	2001.5	34.644	2 34.644	2 2.290	2.149	27.674	0.011	0.0	2 39.4	2 2.75	2 146.0	2 -9	9 144.59	2 -9	9 7.6047	2 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	
109	2280.0	34.654	2 34.654	2 2.072	1.913	27.702	0.011	0.0	2 38.8	2 2.68	2 163.7	2 -9	9 153.77	2 -9	9 7.6047	2 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	
108	2498.2	34.661	2 34.661	2 1.911	1.793	27.721	0.009	0.0	2 37.6	2 2.55	2 146.0	2 -9	9 157.57	2 -9	9 7.6047	2 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	
107	2749.3	34.670	2 34.670	2 1.755	1.556	27.741	0.008	0.0	2 37.6	2 2.52	2 146.0	2 -9	9 157.57	2 -9	9 7.6047	2 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	
106	2999.9	34.675	2 34.674	2 1.669	1.449	27.753	0.007	0.0	2 37.0	2 2.50	2 146.1	2 -9	9 157.57	2 -9	9 7.6047	2 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	
105	3246.6	34.679	2 34.679	2 1.592	1.349	27.763	0.006	0.0	2 36.7	2 2.49	2 147.6	2 -9	9 157.57	2 -9	9 7.6047	2 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	
104	3499.0	34.687	2 34.686	2 1.492	1.226	27.779	0.006	0.0	2 36.6	2 2.43	2 147.3	2 -9	9 157.57	2 -9	9 7.6047	2 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	
103	3699.0	34.689	2 34.693	2 1.466	1.181	27.784	0.006	0.0	2 36.4	2 2.41	2 145.8	2 -9	9 157.57	2 -9	9 7.6047	2 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	
102	3700.8	34.689	2 34.690	2 1.467	1.181	27.783	0.006	0.0	2 35.9	2 2.41	2 145.4	2 -9	9 157.57	2 -9	9 7.6047	2 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	
101	3952.1	34.690	2 34.690	2 1.486	1.172	27.784	0.006	0.0	2 36.2	2 2.40	2 146.0	2 -9	9 158.99	2 -9	9 7.6029	2 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94
WOCE P18
NOAA Ship Discoverer

STATION 137 DATE 4/1/94 LATITUDE 2°40.0'S Btm Depth: 3901 CHL-a Phano
CAST 1 LONGITUDE 110°19.9'W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Potential		Sigma T	Theta	Beam Attenuation	NO2 μmol/kg	NO3 μmol/kg	FO4 μmol/kg	F ₂ Si(OH) ₄ μmol/kg	F ₃ CFC-11 μmol/kg	F ₄ CFC-12 μmol/kg	O ₂ μmol/kg	F ₅ @ 20°C μmol/kg	DIC μmol/kg	pH	TA μmol/kg	F ₆ TA μmol/kg	δ13C permil	TOC μmol/L	TON μmol/L	Chl-a μg/L	Phano μg/L					
				Temp °C	Temp °C																									
136	8.5	35.097	35.102	26.852	26.850	22.839	0.092	0.2	6.7	2	0.68	4.8	0.991	4	201.79	2	385	2	2039.5	2	7.9881	2	2511	2	-9	-9	0.140	0.061		
135	23.7	35.081	-9	26.739	26.733	22.864	0.129	0.2	6.8	2	0.69	4.9	1.771	2	198.79	2	385	2	2040.8	2	-9	9	2307	6	-9	-9	0.157	0.079		
134	49.2	35.067	35.091	16.954	16.946	25.579	0.108	0.4	18.3	2	1.41	13.6	1.089	2	104.29	2	707	2	2147.8	2	7.7597	2	2309	2	-9	-9	0.229	0.164		
133	74.5	35.001	35.000	14.179	14.169	26.152	0.056	0.5	22.8	2	1.68	17.7	0.802	2	62.47	2	857	2	2176.0	2	7.6821	2	2301	2	-9	-9	3.5	0.251		
132	100.4	34.940	34.939	13.998	13.984	26.269	0.040	0.2	24.0	2	1.71	19.4	0.750	6	77.39	2	892	2	2180.4	2	7.6664	2	2299	2	-9	-9	49.3	3.5		
131	121.8	34.925	34.925	13.246	13.229	26.289	0.039	0.0	23.4	2	1.79	20.3	0.688	2	69.29	2	947	2	2186.9	2	7.6448	2	2289	2	-9	-9	47.0	3.9		
130	148.5	34.921	34.920	13.152	13.131	26.305	0.030	0.0	26.6	2	1.87	20.9	0.656	2	62.47	2	947	2	2186.9	2	7.6448	2	2289	2	-9	-9	0.000	0.106		
129	175.7	34.913	34.912	12.986	12.962	26.333	0.030	0.0	27.0	2	1.90	21.6	0.590	2	55.51	2	1033	2	2200.0	2	7.6097	2	2299	2	-9	-9	0.001	0.019		
128	200.5	34.905	34.902	12.839	12.812	26.355	0.026	0.0	28.3	2	2.00	23.1	0.530	6	43.70	2	1116	2	2209.6	2	7.5802	2	2300	2	-9	-9	0.005	0.040		
127	251.8	34.887	34.888	12.552	12.518	26.401	0.031	0.0	31.0	2	2.18	25.4	0.409	2	23.53	2	1289	2	2227.8	2	7.5257	2	2300	2	-9	-9	-9	-9	-9	-9
126	300.8	34.860	34.859	11.888	11.849	26.509	0.027	0.0	31.9	2	2.30	26.5	0.243	6	17.55	2	1406	2	2240.9	2	7.4898	2	2300	2	-9	-9	-9	-9	-9	-9
125	350.5	34.798	-9	10.916	10.873	26.642	0.029	-9	9	9	-9	-9	1	-9	-9	1	-9	-9	-9	-9	-9	-9	2300	2	-9	-9	-9	-9	-9	-9
124	9	-9	-9	-9	-9	-9	-9	-9	9	9	-9	-9	9	9	-9	9	-9	9	-9	9	-9	-9	2300	2	-9	-9	-9	-9	-9	-9
123	400.7	34.735	34.735	9.860	9.813	26.776	0.026	0.0	36.1	2	2.70	36.7	0.049	2	4.71	2	1767	2	2274.4	2	7.4028	2	2303	2	-9	-9	-9	-9	-9	-9
122	496.8	34.638	34.637	8.090	8.038	26.964	0.028	0.0	40.9	2	2.85	46.0	0.022	2	14.41	2	1807	2	2284.5	2	7.3915	2	2306	2	-9	-9	-9	-9	-9	-9
121	599.0	34.595	34.594	7.112	7.054	27.092	0.024	0.0	42.1	2	2.90	52.6	0.017	2	28.97	2	1766	2	2284.7	2	7.4017	2	2312	2	-9	-9	-9	-9	-9	-9
120	699.8	34.560	34.559	6.189	6.126	27.189	0.024	0.0	41.1	2	2.80	58.7	0.001	2	56.50	2	1611	2	2279.3	2	-9	9	2322	2	-9	-9	-9	-9	-9	-9
119	800.4	34.550	34.549	5.533	5.464	27.263	0.022	0.0	40.0	2	2.83	67.8	-0.001	2	67.49	2	1572	2	2286.1	2	7.4444	2	2329	2	-9	-9	-9	-9	-9	-9
118	898.1	34.552	34.553	5.040	4.966	27.324	0.019	0.0	40.6	2	2.85	77.9	0.000	2	79.44	2	1528	2	2301.3	2	7.4672	2	2348	6	-9	-9	-9	-9	-9	-9
117	999.6	34.555	34.553	4.594	4.445	27.385	0.018	0.0	39.9	2	2.82	85.8	0.001	2	0.000	2	1442	2	2348.7	2	7.5007	2	2348	6	-9	-9	-9	-9	-9	-9
116	1202.3	34.575	34.576	3.677	3.587	27.490	0.015	0.0	39.5	2	2.80	103.4	-0.002	2	87.87	2	1497	2	2316.8	2	7.4800	2	2368	2	-9	-9	-9	-9	-9	-9
115	1399.6	34.597	34.597	3.138	3.037	27.560	0.016	0.0	39.2	2	2.85	117.1	-0.002	2	92.21	2	1479	2	2328.5	2	7.4879	2	2384	2	-9	-9	-9	-9	-9	-9
114	1601.4	34.615	34.617	2.794	2.621	27.612	0.012	0.0	39.2	2	2.77	126.1	-0.002	2	98.58	2	1445	2	2394.2	2	7.4985	2	2401	2	-9	-9	-9	-9	-9	-9
113	1799.9	34.634	34.634	2.443	2.317	27.652	0.012	0.0	38.8	2	2.74	140.6	0.004	2	103.59	2	1406	2	2348.6	2	7.5103	2	2411	2	-9	-9	-9	-9	-9	-9
112	2001.0	34.643	34.644	2.277	2.136	27.675	0.010	0.0	40.0	2	2.71	149.9	-0.002	2	109.02	2	1377	2	2351.2	2	7.5222	2	2417	2	-9	-9	-9	-9	-9	-9
111	2200.8	34.652	34.653	2.099	1.944	27.698	0.010	0.0	38.8	2	2.71	144.9	-0.002	2	109.02	2	1377	2	2351.2	2	7.5222	2	2417	2	-9	-9	-9	-9	-9	-9
110	2402.9	34.659	34.661	1.952	1.762	27.717	0.009	0.0	38.1	2	2.65	146.0	-0.002	2	119.14	2	1320	2	2345.5	2	7.5377	2	2413	2	-9	-9	-9	-9	-9	-9
109	2599.4	34.665	34.666	1.825	1.638	27.731	0.008	0.0	37.0	2	2.60	147.9	-9	9	125.90	2	1278	2	2342.4	2	7.5479	2	2416	2	-9	-9	-9	-9	-9	-9
108	2801.4	34.671	34.671	1.735	1.532	27.744	0.006	0.0	37.0	2	2.56	148.0	-9	9	134.37	2	1242	2	2399.7	2	7.5574	2	2415	2	-9	-9	-9	-9	-9	-9
107	3001.2	34.676	34.676	1.657	1.436	27.754	0.006	0.0	36.4	2	2.52	147.4	-9	9	140.44	2	1209	2	2335.9	2	7.5714	2	2419	2	-9	-9	-9	-9	-9	-9
106	3200.5	34.679	34.679	1.595	1.356	27.763	0.005	0.0	36.3	2	2.51	146.4	-9	9	144.01	2	1191	2	2332.6	2	7.5773	2	2419	2	-9	-9	-9	-9	-9	-9
105	3401.1	34.683	34.683	1.545	1.288	27.771	0.005	0.0	36.3	2	2.49	146.2	-9	9	148.59	2	1163	2	2331.9	2	7.5876	2	2422	2	-9	-9	-9	-9	-9	-9
104	3600.8	34.688	34.688	1.473	1.197	27.782	0.005	0.0	35.4	2	2.44	146.7	-9	9	155.62	2	1124	2	2326.9	2	7.6005	2	2419	2	-9	-9	-9	-9	-9	-9
103	3798.5	34.690	34.691	1.465	1.169	27.785	0.005	0.0	35.0	2	2.42	147.5	0.014	2	157.44	2	1104	2	2327.1	2	7.6070	2	2424	2	-9	-9	-9	-9	-9	-9
102	3800.0	34.690	34.689	1.465	1.168	27.785	0.005	0.0	33.4	2	2.43	147.4	-9	9	158.81	2	1112	2	2326.7	2	7.6047	2	2420	2	-9	-9	-9	-9	-9	-9
101	3937.9	34.690	34.691	1.477	1.165	27.785	0.005	0.0	35.8	2	2.42	146.5	-9	9	157.86	2	1109	2	2327.5	2	-9	9	2423	2	-9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 138 DATE 4/1/94 LATITUDE 2°20.0'S Btm Depth: 3987
 CAST 1 LONGITUDE 110°20.1'W

Sample ID	Pressure db	Salinity	P _o Salinity	Temp °C	Temp °C	Sigma T	Sigma t	Theta cp	Beam Attenuation										Chl-a	Phase												
									NO2	NO3	PO4	Si(OH4)	CFC-11	CFC-12	O2	P _o @20°C	DIC	pH			TALK	813C	TOC	TON								
FCO2																																
µmol/kg																																
136	8.7	35.068	2	35.074	2	26.673	26.671	22.874	0.099	0.2	6.7	2	0.66	2	1.785	2	0.978	2	201.63	2	383	2	2039.1	2	7.9901	2	2311	6	1.20	-9	-9	
135	2	25.2	35.066	2	35.091	2	23.153	23.147	23.941	0.140	0.3	10.5	2	0.92	2	1.649	2	0.877	2	169.30	2	-9	9	-9	9	-9	9	1.10	-9	-9		
134	2	49.8	35.058	2	35.054	2	15.462	15.455	25.916	0.102	0.3	22.1	2	1.61	2	1.59	2	-9	9	79.41	2	833	2	2175.2	2	7.7010	2	2301	2	0.50	-9	-9
133	2	75.3	34.961	2	34.962	2	13.651	13.640	26.237	0.063	0.4	23.6	2	1.69	2	0.781	2	0.408	2	80.58	2	-9	9	-9	9	7.6780	2	-9	9	-9	-9	
132	2	99.9	34.925	2	34.924	2	13.255	13.241	26.286	0.098	0.0	24.6	2	1.74	2	1.98	2	-9	9	76.23	2	915	2	2184.9	2	7.6610	2	2298	2	0.40	-9	-9
131	2	124.7	34.970	2	34.970	2	13.130	13.113	26.308	0.031	0.0	26.1	2	1.80	2	2.08	2	0.348	2	67.40	2	968	2	-9	9	-9	9	-9	9	-9	-9	
130	2	148.7	34.915	2	34.914	2	13.023	13.002	26.327	0.030	0.0	27.5	2	1.91	2	2.21	2	-9	9	53.93	2	1053	2	2201.4	2	7.6092	2	2300	2	0.30	-9	-9
129	2	173.4	34.909	2	34.909	2	12.916	12.892	26.344	0.029	0.0	28.3	2	1.96	2	2.26	2	0.549	6	48.51	2	-9	9	2207.3	2	7.5916	2	2294	2	0.20	-9	-9
128	3	199.7	34.902	2	34.902	2	12.818	12.790	26.359	0.030	0.0	28.8	2	1.98	2	2.29	2	-9	9	46.44	2	-9	9	-9	9	-9	9	-9	9	-9	-9	
127	2	251.7	34.892	2	34.891	2	12.644	12.610	26.387	0.031	0.0	30.5	2	2.09	2	2.47	2	0.247	2	31.50	2	1225	2	2222.6	2	7.5467	2	2295	2	-9	-9	-9
126	2	302.6	34.883	2	34.882	2	12.336	12.316	26.438	0.027	0.0	32.5	2	2.28	2	2.63	2	-9	9	11.47	2	-9	9	2240.4	2	7.4915	2	2296	2	0.00	-9	-9
125	2	352.3	34.836	2	34.837	2	11.540	11.495	26.557	0.030	0.0	33.4	2	2.39	2	2.92	2	0.104	2	9.04	2	1413	3	-9	9	7.4583	2	-9	9	-9	-9	-9
124	9	-9	-9	9	9	-9	-9	-9	-9	-9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
123	2	401.5	34.786	2	34.786	2	10.739	10.690	26.665	0.028	0.0	34.9	2	2.55	2	3.32	2	0.060	2	5.95	2	1668	2	2265.7	2	7.4235	2	2299	2	0.00	-9	-9
122	2	499.2	34.666	2	34.667	2	8.692	8.638	26.914	0.027	0.0	39.6	2	2.73	2	4.20	2	-9	9	13.82	2	1767	2	2277.2	2	7.4002	2	2307	2	0.00	-9	-9
121	2	600.5	34.610	2	34.610	2	7.458	7.398	27.055	0.024	0.0	42.4	2	2.89	2	5.05	2	0.003	2	22.09	2	1802	2	2286.3	2	7.3999	2	2312	2	-9	-9	-9
120	2	699.7	34.569	2	34.569	2	6.439	6.375	27.163	0.022	0.0	41.7	2	2.85	2	5.69	2	-9	9	47.51	2	1669	2	2282.8	2	7.4289	2	2316	2	-9	-9	-9
119	2	798.4	34.535	2	34.538	2	5.760	5.690	27.240	0.021	0.0	41.3	2	2.82	2	6.53	2	0.053	4	59.86	2	1613	2	2287.6	2	7.4437	2	2328	2	0.10	-9	-9
118	2	900.7	34.533	2	34.534	2	4.916	4.842	27.339	0.020	0.0	41.4	2	2.85	2	7.95	2	-9	9	68.84	2	1380	2	2299.2	2	7.4540	2	2345	6	-9	-9	-9
117	2	1001.9	34.559	2	34.560	2	4.498	4.418	27.391	0.018	0.0	40.2	2	2.83	2	8.76	2	-9	9	73.69	2	1557	2	2306.8	2	7.4596	2	2350	2	-9	-9	-9
116	2	1200.7	34.574	2	34.575	2	3.754	3.664	27.482	0.017	0.0	39.9	2	2.81	2	10.5	2	-9	9	90.77	6	-9	9	-9	9	7.4745	2	-9	9	-9	-9	
115	2	1401.3	34.594	2	34.594	2	3.201	3.100	27.552	0.016	0.0	39.6	2	2.78	2	11.57	2	-9	9	96.94	6	-9	9	-9	9	7.4976	2	-9	9	-9	-9	
114	2	1601.5	34.610	2	34.610	2	2.821	2.707	27.600	0.012	0.0	39.6	2	2.74	2	12.34	2	-9	9	98.16	6	-9	9	-9	9	7.5133	2	-9	9	-9	-9	
113	2	1799.3	34.634	2	34.634	2	2.440	2.314	27.653	0.012	0.0	39.8	2	2.75	2	13.72	2	-9	9	98.16	6	-9	9	-9	9	7.5376	2	-9	9	-9	-9	
112	2	1999.7	34.646	2	34.646	2	2.227	2.087	27.681	0.010	0.0	39.2	2	2.71	2	14.90	2	-9	9	104.27	2	-9	9	-9	9	7.5603	2	-9	9	-9	-9	
111	2	2197.9	34.654	2	34.654	2	2.068	1.914	27.701	0.010	0.0	39.0	2	2.66	2	14.68	2	-9	9	110.69	2	-9	9	-9	9	7.5747	2	-9	9	-9	-9	
110	2	2400.1	34.659	2	34.659	2	1.990	1.760	27.717	0.009	0.0	38.2	2	2.62	2	14.61	2	-9	9	119.06	2	-9	9	-9	9	7.5976	2	-9	9	-9	-9	
109	2	2603.3	34.664	2	34.664	2	1.829	1.642	27.780	0.009	0.0	37.8	2	2.59	2	14.44	2	-9	9	125.12	2	-9	9	-9	9	7.6203	2	-9	9	-9	-9	
108	2	2798.5	34.670	2	34.671	2	1.721	1.519	27.744	0.007	0.0	37.0	2	2.52	2	14.49	2	-9	9	133.94	2	-9	9	-9	9	7.6403	2	-9	9	-9	-9	
107	2	2998.9	34.673	2	34.673	2	1.666	1.445	27.732	0.006	0.0	36.8	2	2.51	2	14.53	2	-9	9	137.91	2	-9	9	-9	9	7.6603	2	-9	9	-9	-9	
106	2	3197.4	34.678	2	34.680	2	1.592	1.354	27.763	0.005	0.0	36.4	2	2.49	2	14.59	2	-9	9	143.42	2	-9	9	-9	9	7.6847	2	-9	9	-9	-9	
105	2	3398.7	34.683	2	34.684	2	1.538	1.281	27.772	0.004	0.0	36.7	2	2.45	2	14.49	2	-9	9	149.79	2	-9	9	-9	9	7.7092	2	-9	9	-9	-9	
104	2	3598.6	34.689	2	34.690	2	1.459	1.184	27.783	0.005	0.0	36.1	2	2.42	2	14.42	2	-9	9	156.58	2	-9	9	-9	9	7.7342	2	-9	9	-9	-9	
103	2	3798.2	34.690	2	34.692	2	1.452	1.156	27.786	0.005	0.0	35.9	2	2.41	2	14.54	2	-9	9	163.26	2	-9	9	-9	9	7.7592	2	-9	9	-9	-9	
102	2	3978.2	34.690	2	34.690	2	1.452	1.156	27.786	0.005	0.0	35.9	2	2.41	2	14.63	2	-9	9	171.78	6	-9	9	-9	9	7.7842	2	-9	9	-9	-9	
101	2	4022.5	34.690	2	34.691	2	1.476	1.156	27.786	0.006	0.0	35.8	2	2.42	2	14.58	2	-9	9	175.54	2	-9	9	-9	9	7.8092	2	-9	9	-9	-9	

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94
WOCE P18
NOAA Ship Discoverer

STATION 139
CAST 1

DATE 4/12/94

LATITUDE 2°0.7S
LONGITUDE 110°20.4W

Btm Depth: 3989

Sample ID	P* db	Pressure db	Salinity CIT	F* Bottle	Temp °C	Temp °C	Sigma T	Theta cp	NO2 µmol/kg	NO3 µmol/kg	PO4 µmol/kg	P* µmol/kg	SiO ₄ µmol/kg	P* µmol/kg	CFC-11 µmol/kg	P* µmol/kg	CFC-12 µmol/kg	O2 µmol/kg	P* µmol/kg	O2 µmol/kg	fCO ₂ µatm	DIC µmol/kg	P* µmol/kg	pH	TA µmol/kg	P* µmol/kg	813C permil	TOC µmol/L	TON µmol/L	Chl-a µg/L	Phaeo µg/L		
																																Beam	Beam
136	2	9.7	35.066	2	34.691	4	26.269	23.000	0.111	0.2	6.6	2	0.63	2	2.046	4	0.967	2	201.29	6	377	2	2038.3	2	7.904	2	2302	2	1.30	-9	-9	-9	
135	2	9.1	35.058	2	35.081	2	26.159	23.028	0.108	0.2	6.7	2	0.66	2	2.254	4	0.961	2	190.86	2	378	2	2039.8	2	7.9885	2	2306	2	-9	71.9	4.3	-9	-9
134	2	23.6	35.042	2	35.070	3	22.079	24.229	0.152	0.3	13.4	2	0.88	2	1.420	2	0.743	2	145.61	2	-9	9	-9	9	7.8618	2	-9	9	81.1	5.2	-9	-9	
133	2	49.6	35.009	2	35.106	2	15.768	15.760	0.115	0.4	21.2	2	1.56	2	1.018	2	0.522	2	81.73	2	-9	9	-9	9	7.7121	2	-9	9	56.6	4.1	-9	-9	
132	3	74.7	35.019	2	35.010	2	14.186	14.176	0.083	0.4	22.9	2	1.66	2	0.795	2	0.419	2	76.71	2	-9	9	-9	9	-9	9	-9	9	58.1	3.7	-9	-9	
131	2	100.1	34.933	2	34.931	2	13.334	13.320	0.061	0.1	23.7	2	1.67	2	0.752	6	0.393	6	83.33	2	-9	9	-9	9	-9	1	-9	9	57.8	2.6	-9	-9	
130	2	124.5	34.917	2	34.915	2	13.105	13.088	0.045	0.0	25.9	2	1.80	2	0.654	2	0.340	2	65.72	2	-9	9	-9	9	7.6339	2	-9	9	48.5	3.3	-9	-9	
129	2	147.8	34.909	2	34.908	2	13.008	12.987	0.037	0.0	25.4	2	1.76	2	0.663	2	0.349	2	72.40	2	-9	9	-9	9	7.6467	2	-9	9	-9	-9	-9	-9	
128	3	171.6	34.911	2	34.911	2	12.962	12.938	0.031	0.0	28.0	2	1.91	2	0.572	2	0.308	4	50.94	2	-9	9	-9	9	7.5968	2	-9	9	-9	-9	-9	-9	
127	2	199.1	34.909	2	34.909	2	12.861	12.833	0.029	0.0	29.7	2	2.06	2	0.476	6	0.259	2	32.93	2	-9	9	-9	9	7.5537	2	-9	9	-9	-9	-9	-9	
126	2	248.8	34.896	2	34.895	2	12.648	12.614	0.031	0.0	29.7	2	2.05	2	0.442	2	0.238	2	35.79	2	-9	9	-9	9	7.5539	2	-9	9	-9	-9	-9	-9	
125	2	281.7	34.879	2	34.879	2	12.349	12.312	0.051	0.0	32.1	2	2.24	2	0.258	2	-9	1	14.06	2	1368	2	2241.7	2	7.6957	2	2295	2	-9	-9	-9	-9	
124	9	-9	-9	9	-9	9	-9	-9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	
123	2	349.8	34.804	2	34.803	2	11.010	10.966	0.027	0.0	33.7	2	2.47	2	0.125	6	0.070	6	6.84	2	-9	9	-9	9	7.4328	2	-9	9	-9	-9	-9	-9	
122	2	399.8	34.733	2	34.730	2	9.850	9.804	0.025	0.0	35.6	2	2.68	2	0.043	2	0.022	2	3.49	2	-9	9	-9	9	7.3955	2	-9	9	46.4	-9	-9	-9	
121	2	498.5	34.633	2	34.629	2	8.026	7.975	0.026	0.0	39.9	2	2.72	2	0.021	2	0.010	2	26.06	2	-9	9	-9	9	7.4109	2	-9	9	45.6	2.4	-9	-9	
120	2	600.7	34.576	2	34.577	2	6.919	6.862	0.023	0.0	39.3	2	2.67	2	0.022	2	0.013	2	56.08	2	-9	9	-9	9	7.4533	2	-9	9	-9	-9	-9	-9	
119	2	700.3	34.535	2	34.535	2	6.039	5.977	0.021	0.0	40.1	2	2.75	2	0.006	2	-0.002	2	62.59	6	-9	9	-9	9	7.4523	2	-9	9	-9	-9	-9	-9	
118	2	797.9	34.548	2	34.549	2	5.554	5.485	0.021	0.0	40.2	2	2.75	2	0.003	2	0.003	2	69.47	2	-9	9	-9	9	7.4591	2	-9	9	-9	-9	-9	-9	
117	2	899.6	34.553	2	34.554	2	5.002	4.927	0.019	0.0	40.3	2	2.83	2	0.006	2	0.016	2	69.87	2	-9	9	-9	9	7.4534	2	-9	9	-9	-9	-9	-9	
116	2	1100.2	34.564	2	34.564	2	4.104	4.019	0.017	0.0	39.8	2	2.84	2	0.006	2	-9	9	72.94	2	-9	9	-9	9	7.4556	2	-9	9	47.3	-9	-9	-9	
115	2	1400.2	34.593	2	34.594	2	3.276	3.173	0.017	0.0	39.7	2	2.80	2	-0.001	2	-0.002	2	82.20	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	
114	2	1998.7	34.574	2	34.577	2	3.764	3.674	0.017	0.0	40.5	2	2.81	2	0.014	2	-9	9	86.14	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	
113	2	2400.2	34.593	2	34.594	2	2.910	2.795	0.015	0.0	39.8	2	2.82	2	0.014	2	-9	9	86.59	6	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	
112	2	3400.2	34.607	2	34.608	2	2.910	2.795	0.015	0.0	39.4	2	2.78	2	0.014	2	-9	9	95.51	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9
111	2	3800.2	34.627	2	34.628	2	2.547	2.419	0.012	0.0	39.3	2	2.75	2	0.001	2	-0.002	2	98.97	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9
110	2	4200.2	34.644	2	34.644	2	2.268	2.128	0.010	0.0	38.6	2	2.71	2	-9	9	-9	9	104.03	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9
109	2	4600.2	34.656	2	34.656	2	2.042	1.883	0.010	0.0	38.2	2	2.67	2	-9	9	-9	9	111.72	6	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9
108	2	5000.2	34.661	2	34.661	2	1.882	1.709	0.009	0.0	37.1	2	2.59	2	-9	9	-9	9	124.58	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9
107	2	5400.2	34.669	2	34.670	2	1.740	1.542	0.008	0.0	36.9	2	2.55	2	-0.001	2	-0.002	2	134.11	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9
106	2	5800.2	34.673	2	34.673	2	1.652	1.431	0.006	0.0	36.7	2	2.52	2	0.000	2	-9	9	139.66	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9
105	2	6200.2	34.678	2	34.679	2	1.589	1.346	0.006	0.0	36.7	2	2.48	2	0.000	2	-0.002	2	144.00	6	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9
104	2	6600.2	34.685	2	34.685	2	1.524	1.258	0.004	0.0	36.0	2	2.45	2	-9	9	-9	9	151.32	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9
103	2	7000.2	34.690	2	34.690	2	1.453	1.162	0.003	-9	1	-9	1	-9	-9	9	-9	9	158.62	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9
102	2	7400.2	34.690	2	34.690	2	1.453	1.161	0.006	0.0	35.6	2	2.41	2	0.000	2	0.002	2	158.62	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9
101	2	7800.2	34.691	2	34.691	2	1.473	1.153	0.006	0.0	35.3	2	2.41	2	-9	9	-9	9	158.81	6	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 140 DATE 4/12/94 LATITUDE 1°40.0'S Btm Depth: 3906
CAST 1 LONGITUDE 110°19.9'W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Potential		Sigma t	Theta	CP	NO2	NO3	PO4	SiORP4	CFC-11	CFC-12	O2	F ^{20°C}	DIC ¹⁸	pH	TA ¹⁸	F ¹⁸	513C	TOC	TON	Chl-a	Phase			
						µmol/kg	µmol/kg																							
136	2	9.1	35.076	2	26.799	26.797	22.840	0.108	0.2	2	6.6	2	0.69	2	5.0	2	9	200.55	2	2037.3	2	7.9923	2	2304	2	9	9	-9	-9	
135	2	8.2	35.076	2	26.803	26.801	22.838	0.108	0.2	2	6.6	2	0.68	2	4.4	2	1.790	2	200.99	2	2037.9	2	7.9926	2	2311	2	9	9	-9	-9
134	2	23.5	35.043	2	26.518	26.513	22.905	0.137	0.2	2	6.8	2	0.66	2	4.5	2	1.757	2	190.87	2	9	9	7.9882	2	9	9	-9	-9	-9	
133	2	49.7	35.087	2	26.103	26.103	25.152	0.128	0.4	2	16.6	2	1.28	2	11.0	2	1.258	2	120.92	2	2133.6	2	7.8039	2	2311	2	9	9	-9	-9
132	2	75.9	35.065	2	25.237	25.237	25.973	0.077	0.4	2	21.8	2	1.62	2	15.1	2	0.969	2	62.6	2	9	9	7.7056	2	9	9	-9	-9	-9	
131	2	100.4	35.006	2	24.187	24.187	26.156	0.083	0.4	2	24.0	2	1.75	2	18.0	2	0.810	2	69.60	2	2184.5	2	7.6645	2	2303	2	9	9	-9	-9
130	2	125.3	34.975	2	23.980	23.980	26.222	0.050	0.4	2	24.2	2	1.74	2	20.0	2	0.722	2	69.92	2	2184.2	2	7.6603	2	2300	2	9	9	-9	-9
129	2	149.6	34.938	2	23.315	23.315	26.286	0.043	0.1	2	24.5	2	1.76	2	21.7	2	0.722	2	70.07	2	9	9	7.6454	2	9	9	-9	-9	-9	
128	2	175.3	34.915	2	23.074	23.074	26.317	0.037	0.0	2	25.6	2	1.86	2	21.7	2	0.722	2	70.07	2	9	9	7.6454	2	9	9	-9	-9	-9	
127	2	200.6	34.910	2	22.993	22.993	26.330	0.030	0.0	2	26.4	2	1.90	2	21.9	2	0.646	2	49.83	2	2194.8	2	7.6286	2	2305	2	9	9	-9	-9
126	2	249.6	34.904	2	22.838	22.838	26.358	0.029	0.0	2	28.2	2	2.04	2	23.6	2	0.407	2	49.83	2	2207.7	2	7.5943	2	2305	2	9	9	-9	-9
125	2	299.6	34.887	2	22.562	22.562	26.401	0.028	0.0	2	31.1	2	2.20	2	26.3	2	0.407	2	23.82	2	2230.2	2	7.5272	2	2305	2	9	9	-9	-9
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
123	2	351.6	34.858	2	21.994	21.994	26.489	0.025	0.0	2	32.9	2	2.35	2	28.6	2	0.407	2	10.16	2	2260.6	2	7.4782	2	2301	2	9	9	-9	-9
122	2	399.9	34.792	2	21.834	21.834	26.652	0.026	0.0	2	34.3	2	2.51	2	33.0	2	0.123	2	9.72	2	2271.2	2	7.4206	2	2305	2	9	9	-9	-9
121	2	501.1	34.652	2	21.458	21.458	26.939	0.025	0.0	2	39.3	2	2.72	2	42.1	2	0.012	2	23.69	2	2271.2	2	7.4206	2	2305	2	9	9	-9	-9
120	2	601.7	34.578	2	21.193	21.193	27.103	0.019	0.0	2	39.6	2	2.75	2	50.2	2	0.012	2	56.21	2	2267.7	2	7.4567	2	2314	2	9	9	-9	-9
119	2	700.1	34.577	2	20.993	20.993	27.186	0.018	0.0	2	40.6	2	2.80	2	59.0	2	0.004	2	59.67	2	2278.1	2	7.4527	2	2333	2	9	9	-9	-9
118	2	802.3	34.550	2	20.833	20.833	27.256	0.018	0.0	2	40.6	2	2.94	2	70.4	2	0.004	2	64.45	2	2286.5	2	7.4527	2	2333	2	9	9	-9	-9
117	2	898.2	34.552	2	20.677	20.677	27.328	0.017	0.0	2	40.8	2	2.97	2	81.7	2	0.002	2	68.61	2	2299.0	2	7.4530	2	2339	2	9	9	-9	-9
116	2	998.1	34.560	2	20.519	20.519	27.398	0.016	0.0	2	40.6	2	3.00	2	91.3	2	0.002	2	70.36	2	2307.5	2	7.4554	2	2339	2	9	9	-9	-9
115	2	1098.7	34.563	2	20.364	20.364	27.437	0.015	0.0	2	40.0	2	2.94	2	97.8	2	0.002	2	83.43	2	9	9	9	9	9	9	9	9	9	9
114	2	1199.4	34.574	2	20.209	20.209	27.482	0.014	0.0	2	40.4	2	2.93	2	105.9	2	0.002	2	85.00	2	9	9	9	9	9	9	9	9	9	9
113	2	1402.0	34.595	2	20.054	20.054	27.554	0.013	0.0	2	40.1	2	2.88	2	119.3	2	0.002	2	99.18	2	9	9	9	9	9	9	9	9	9	9
112	2	1502.4	34.603	2	19.900	19.900	27.585	0.011	0.0	2	39.6	2	2.86	2	125.6	2	0.002	2	93.33	2	9	9	9	9	9	9	9	9	9	9
111	2	1801.3	34.633	2	19.746	19.746	27.646	0.010	0.0	2	40.3	2	2.80	2	142.1	2	0.002	2	92.35	2	9	9	9	9	9	9	9	9	9	9
110	2	1998.3	34.647	2	19.591	19.591	27.681	0.010	0.0	2	39.6	2	2.84	2	148.5	2	0.002	2	97.85	2	9	9	9	9	9	9	9	9	9	9
109	2	2247.2	34.656	2	19.436	19.436	27.708	0.010	0.0	2	38.8	2	2.76	2	148.4	2	0.002	2	115.10	2	9	9	9	9	9	9	9	9	9	9
108	2	2491.7	34.662	2	19.281	19.281	27.727	0.008	0.0	2	38.1	2	2.73	2	148.7	2	0.002	2	125.04	2	9	9	9	9	9	9	9	9	9	9
107	2	2752.8	34.669	2	19.126	19.126	27.743	0.006	0.0	2	37.4	2	2.67	2	150.9	2	0.002	2	97.85	2	9	9	9	9	9	9	9	9	9	9
106	2	3000.5	34.672	2	18.971	18.971	27.752	0.006	0.0	2	37.1	2	2.66	2	151.3	2	0.002	2	93.33	2	9	9	9	9	9	9	9	9	9	9
105	2	3248.5	34.678	2	18.816	18.816	27.763	0.005	0.0	2	37.0	2	2.62	2	151.9	2	0.002	2	92.35	2	9	9	9	9	9	9	9	9	9	9
104	2	3491.3	34.685	2	18.661	18.661	27.775	0.005	0.0	2	36.7	2	2.57	2	152.4	2	0.002	2	91.35	2	9	9	9	9	9	9	9	9	9	9
103	2	3748.0	34.690	2	18.506	18.506	27.786	0.005	0.0	2	36.1	2	2.50	2	149.5	2	0.003	2	89.18	2	9	9	9	9	9	9	9	9	9	9
102	2	3747.3	34.690	2	18.351	18.351	27.786	0.005	0.0	2	36.2	2	2.50	2	150.6	2	0.002	2	88.19	2	9	9	9	9	9	9	9	9	9	9
101	2	3951.4	34.690	2	18.196	18.196	27.786	0.005	0.0	2	33.8	2	2.51	2	151.2	2	0.002	2	87.20	2	9	9	9	9	9	9	9	9	9	9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 141 DATE 4/12/94 LATITUDE 1°20.0'S Btm Depth: 3820
 CAST 1 LONGITUDE 110°20.1'W

Sample ID	Pressure db	Salinity ‰	Salinity ‰ CTD	Temp °C	Temp °C	Sigma T	Sigma T	Theta	Theta	NO2 ‰	NO3 ‰	PO4 ‰	Si(OH)4 ‰	CFC-11 ‰	CFC-12 ‰	O2 ‰	F ₂ @20°C ‰	DIC ‰	pH	TAIK ‰	F ₂ ‰	613C ‰	TOC ‰	TON ‰	Chi-a ‰	Phase
136	9.3	35.028	35.033	26.631	26.629	22.857	0.099	0.1	2	6.5	2	0.67	2	1.765	2	0.970	2	2004.3	2	2299	2	-9	-9	-9	0.125	0.061
135	8.9	35.028	35.032	26.642	26.640	22.854	0.099	0.1	2	6.5	2	0.69	2	1.776	2	0.958	2	2084.3	2	2300	2	-9	-9	-9	-9	-9
134	24.6	35.011	35.032	26.567	26.561	22.866	0.113	0.1	2	6.6	2	0.67	2	1.783	2	0.950	2	2033.9	2	2303	2	-9	-9	-9	0.161	0.069
133	50.2	35.083	35.090	16.348	16.340	25.733	0.126	0.7	2	20.9	2	1.68	2	1.050	2	0.554	2	784	2	2305	2	-9	-9	-9	-9	-9
132	71.3	35.008	35.008	14.289	14.289	26.132	0.065	0.4	2	25.1	2	1.91	2	0.804	2	0.420	2	2190.6	2	2299	2	-9	-9	-9	2.3	0.238
131	87.8	34.966	34.975	13.481	13.469	26.271	0.050	0.1	2	26.3	2	1.97	2	0.697	2	0.361	2	2196.0	2	2303	2	-9	-9	-9	44.5	2.2
130	107.4	34.943	34.945	13.229	13.214	26.306	0.042	0.0	2	26.4	2	1.96	2	0.652	2	0.337	2	2194.8	2	2304	2	-9	-9	-9	45.8	2.2
129	148.6	34.916	34.914	12.957	12.956	26.340	0.039	0.0	2	27.0	2	1.97	2	0.632	2	0.335	2	2198.6	2	2300	2	-9	-9	-9	-9	-9
128	199.7	34.912	34.911	12.895	12.868	26.351	0.032	0.0	2	29.7	2	2.12	2	0.499	2	0.273	2	2217.7	2	2297	2	-9	-9	-9	-9	-9
127	251.2	34.899	34.897	12.690	12.656	26.383	0.029	0.0	2	31.5	2	2.29	2	0.398	2	0.218	2	2200.0	2	2296	2	-9	-9	-9	-9	-9
126	300.8	34.880	34.881	12.371	12.331	26.432	0.029	0.0	2	32.1	2	2.36	2	0.322	2	0.172	2	2238.2	2	2286	2	-9	-9	-9	-9	-9
125	349.6	34.831	34.826	11.482	11.437	26.564	0.028	0.0	2	33.5	2	2.53	2	0.173	2	0.093	2	2254.8	2	2295	2	-9	-9	-9	-9	-9
124	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
123	399.7	34.771	34.767	10.495	10.447	26.696	0.030	0.0	2	34.6	2	2.60	2	0.121	2	0.060	2	2258.7	2	2299	2	-9	-9	-9	-9	-9
122	499.7	34.649	34.644	8.495	8.441	26.931	0.024	0.0	2	38.0	2	2.68	2	0.038	2	0.016	2	2262.1	2	2308	2	-9	-9	-9	-9	-9
121	599.5	34.580	34.578	7.080	7.022	27.085	0.020	0.0	2	38.7	2	2.76	2	0.025	2	0.043	2	2265.7	2	2317	2	-9	-9	-9	42.8	1.7
120	695.8	34.553	34.552	6.223	6.160	27.179	0.019	0.0	2	39.4	2	2.76	2	0.009	2	0.003	2	2271.4	2	2322	2	-9	-9	-9	-9	-9
119	800.8	34.544	34.544	5.635	5.566	27.247	0.019	0.0	2	39.4	2	2.80	2	0.006	2	0.002	2	2277.0	2	2327	2	-9	-9	-9	-9	-9
118	899.0	34.550	34.550	5.036	4.961	27.323	0.019	0.0	2	40.9	2	2.89	2	0.001	2	-0.002	2	2291.7	2	2338	2	-9	-9	-9	-9	-9
117	1000.8	34.551	34.547	4.567	4.487	27.377	0.017	0.0	2	39.9	2	2.79	2	0.002	2	0.000	2	2297.5	2	2351	2	-9	-9	-9	39.4	1.6
116	1097.2	34.559	34.558	4.188	4.103	27.425	0.016	0.0	2	39.7	2	2.82	2	0.011	2	0.000	2	2301.7	2	2345	2	-9	-9	-9	-9	-9
115	1197.7	34.569	34.568	3.872	3.781	27.466	0.016	0.0	2	39.9	2	2.85	2	0.003	2	-9	2	2310.5	2	2366	2	-9	-9	-9	-9	-9
114	1400.6	34.595	34.596	3.282	3.179	27.546	0.015	0.0	2	40.8	2	2.89	2	-9	2	-9	2	2332.6	2	2386	2	-9	-9	-9	-9	-9
113	1600.4	34.608	34.609	2.884	2.769	27.593	0.013	0.0	2	40.0	2	2.82	2	-9	2	-9	2	2348.2	2	2403	2	-9	-9	-9	-9	-9
112	1800.8	34.631	34.631	2.513	2.386	27.645	0.012	0.0	2	40.1	2	2.81	2	0.000	2	-0.002	2	2348.2	2	2416	2	-9	-9	-9	-9	-9
111	2005.7	34.644	34.644	2.292	2.152	27.675	0.011	0.0	2	39.5	2	2.73	2	-9	2	-9	2	2352.3	2	2435	2	-9	-9	-9	35.3	-9
110	2403.8	34.654	34.654	2.016	1.861	27.705	0.010	0.0	2	38.9	2	2.71	2	-0.002	2	-0.002	2	2347.7	2	2457	2	-9	-9	-9	-9	-9
109	2403.8	34.657	34.657	1.932	1.762	27.716	0.009	0.0	2	38.4	2	2.66	2	-9	2	-9	2	2343.7	2	2477	2	-9	-9	-9	-9	-9
108	2995.3	34.665	34.665	1.795	1.609	27.733	0.009	0.0	2	37.9	2	2.62	2	-9	2	-9	2	2342.7	2	2482	2	-9	-9	-9	-9	-9
107	2799.1	34.670	34.670	1.724	1.531	27.743	0.007	0.0	2	37.5	2	2.61	2	-9	2	-9	2	2344.4	2	2425	2	-9	-9	-9	-9	-9
106	2998.6	34.672	34.672	1.711	1.490	27.747	0.007	0.0	2	37.8	2	2.61	2	-9	2	-9	2	2342.2	2	2427	2	-9	-9	-9	43.1	-9
105	3196.6	34.680	34.672	1.619	1.381	27.759	0.007	0.0	2	37.4	2	2.57	2	0.001	2	-0.002	2	2336.9	2	2428	2	-9	-9	-9	-9	-9
104	3399.1	34.680	34.679	1.577	1.319	27.767	0.006	0.0	2	36.8	2	2.53	2	-9	2	-9	2	2336.2	2	2427	2	-9	-9	-9	-9	-9
103	3596.5	34.685	34.687	1.512	1.236	27.777	0.006	0.0	2	36.7	2	2.51	2	0.000	2	-0.002	2	2334.3	2	2434	2	-9	-9	-9	-9	-9
102	3597.2	34.686	34.684	1.500	1.223	27.778	0.006	0.0	2	36.7	2	2.49	2	-9	2	-9	2	2334.5	2	2431	2	-9	-9	-9	-9	-9
101	3865.3	34.690	34.691	1.458	1.155	27.786	0.006	0.0	2	36.1	2	2.48	2	0.001	2	0.001	2	2329.7	2	2435	2	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 143 DATE 4/14/94 LATITUDE 0°41.0'S Btm Depth: 3807
 CAST 1 LONGITUDE 110°20.0'W

Sample ID	P**	Pressure db	Salinity ‰	Salinity ‰ Bottle	Temp °C	Temp °C	Sigma T	Theta cp	Beam Attenuation										NO2 ‰	NO3 ‰	PO4 ‰	Si(OH)4 ‰	CFC-11 ‰	CFC-12 ‰	O2 ‰	F ^{20C} ‰	DIC ‰	pH	TA ‰	TA ‰	813C ‰	TOC ‰	TON ‰	Chl-a ‰	Phase ‰
									Attenuation	Attenuation	Attenuation	Attenuation	Attenuation	Attenuation	Attenuation	Attenuation	Attenuation	Attenuation																	
136	2	10.2	35.171	2	35.174	2	25.095	23.442	0.118	0.2	2	6.2	2	0.67	2	4.3	2	1.808	2	0.997	2	194.56	6	386	2	2044.9	2	7.9824	2	2308	6	-9	-9	-9	-9
135	2	24.5	35.263	2	35.253	2	23.472	23.998	0.111	0.4	2	7.3	2	0.79	2	4.7	2	1.762	6	0.921	6	174.56	6	-9	9	-9	9	7.9499	2	-9	9	-9	-9		
134	2	48.3	35.403	2	35.409	2	18.005	17.997	0.122	0.4	2	14.4	2	1.24	2	8.3	2	1.380	2	0.709	2	109.43	2	611	2	2142.0	2	7.8168	2	2321	2	-9	-9	-9	-9
133	2	74.0	35.121	2	35.131	2	15.056	15.044	0.062	0.0	2	17.9	2	1.35	2	12.8	2	1.024	2	0.531	2	109.18	2	-9	9	-9	9	7.7677	2	-9	9	-9	-9		
132	2	100.5	35.033	2	35.037	2	14.141	14.126	0.044	0.0	2	20.5	2	1.51	2	15.4	2	0.889	2	0.432	4	97.44	2	768	2	2164.2	2	7.7264	2	2307	2	-9	-9	-9	-9
131	2	124.1	34.933	2	34.932	2	13.366	13.349	0.031	0.0	2	20.8	2	1.53	2	17.8	2	0.832	6	0.431	6	104.41	2	-9	9	-9	9	7.7204	2	-9	9	-9	-9		
130	2	149.4	34.892	2	34.893	2	13.084	13.063	0.027	0.0	2	21.9	2	1.58	2	19.0	2	0.800	2	0.399	2	100.50	2	-9	9	2168.0	2	7.7060	2	2300	2	-9	-9	-9	-9
129	2	169.1	34.894	2	34.893	2	13.000	12.977	0.025	0.0	2	22.9	2	1.66	2	20.5	2	0.762	2	0.385	2	91.32	2	-9	9	9	7.6848	2	-9	9	-9	-9			
128	2	196.2	34.893	2	34.893	2	12.978	12.900	0.026	0.0	2	23.8	2	1.71	2	20.3	2	0.693	2	0.363	2	83.36	2	900	2	2182.4	2	7.6653	2	2306	2	-9	-9	-9	-9
127	2	248.3	34.892	2	34.890	2	12.775	12.739	0.029	0.0	2	26.3	2	1.83	2	21.4	2	0.605	6	0.320	6	66.82	2	-9	9	2196.2	2	7.6293	2	2298	2	-9	-9	-9	-9
126	2	297.1	34.872	2	34.870	2	12.538	12.518	0.029	0.0	2	31.2	2	2.15	2	24.9	2	0.421	2	0.202	2	28.74	2	1265	2	2228.2	2	7.5318	2	2293	2	-9	-9	-9	-9
125	2	348.1	34.823	2	34.822	2	11.463	11.419	0.031	0.0	2	33.5	2	2.32	2	28.1	2	0.214	2	0.114	2	18.08	2	-9	9	-9	9	7.4801	2	-9	9	-9	-9		
124	9	402.5	34.736	2	34.739	2	10.041	9.994	0.032	0.0	2	33.7	2	2.28	2	29.6	2	0.169	2	0.073	2	47.00	2	1337	2	2238.0	2	7.5125	2	2294	2	-9	-9	-9	-9
123	2	500.5	34.642	2	34.641	2	8.397	8.344	0.050	0.0	2	39.6	2	2.65	2	41.0	2	0.032	2	0.013	2	29.38	2	1636	2	2267.3	2	7.4323	2	2303	2	-9	-9	-9	-9
121	2	591.5	34.590	2	34.589	2	7.282	7.223	0.024	0.0	2	40.4	2	2.69	2	46.9	2	0.021	2	0.006	2	50.08	2	1538	2	2287.9	2	7.4519	2	2306	2	-9	-9	-9	-9
120	2	700.0	34.561	2	34.561	2	6.402	6.338	0.023	0.0	2	40.7	2	2.73	2	54.9	2	0.007	2	-0.002	2	61.96	2	1544	2	2273.0	2	7.4599	2	2316	2	-9	-9	-9	-9
119	2	798.7	34.547	2	34.548	2	5.450	5.381	0.022	0.0	2	40.6	2	2.76	2	68.5	2	0.001	2	-0.002	2	72.26	2	1521	6	2294.4	2	7.4655	2	2332	2	-9	-9	-9	-9
118	2	898.4	34.546	2	34.545	2	5.107	5.032	0.021	0.0	2	40.7	2	2.73	2	74.1	2	0.004	2	-0.002	2	79.08	2	1489	2	2287.2	2	7.4763	2	2342	2	-9	-9	-9	-9
117	2	999.6	34.554	2	34.553	2	4.604	4.524	0.019	0.0	2	40.7	2	2.86	2	84.3	2	0.006	2	-0.002	2	78.59	2	1526	2	2297.7	2	7.4701	2	2350	2	-9	-9	-9	-9
116	2	1099.8	34.563	2	34.562	2	4.166	4.081	0.019	0.0	2	41.1	2	2.87	2	92.6	2	-9	9	-9	9	81.86	2	-9	9	-9	9	7.4739	2	-9	9	-9	-9		
115	2	1199.1	34.569	2	34.568	2	3.961	3.868	0.017	0.0	2	40.9	2	2.88	2	97.0	2	-0.003	2	-0.002	2	83.45	2	-9	9	-9	9	7.4757	2	-9	9	-9	-9		
114	2	1500.7	34.598	2	34.599	2	3.107	2.998	0.015	0.0	2	40.9	2	2.87	2	116.3	2	-9	9	-9	9	91.65	2	-9	9	-9	9	7.4872	2	-9	9	-9	-9		
113	2	1598.9	34.606	2	34.606	2	2.929	2.813	0.015	0.0	2	40.3	2	2.85	2	121.1	2	0.003	2	-0.002	2	95.10	2	-9	9	-9	9	7.4927	2	-9	9	-9	-9		
112	2	1783.4	34.629	2	34.629	2	2.512	2.386	0.013	0.0	2	40.3	2	2.81	2	136.0	2	-9	9	-9	9	97.21	2	-9	9	-9	9	7.4989	2	-9	9	-9	-9		
111	2	2001.2	34.643	2	34.643	2	2.257	2.116	0.011	0.0	2	39.8	2	2.79	2	143.4	2	-9	9	-9	9	103.31	2	-9	9	-9	9	7.4989	2	-9	9	-9	-9		
110	3	2243.1	34.652	2	34.652	2	2.051	1.893	0.010	-9	1	-9	1	-9	1	-9	1	-0.001	2	-0.002	2	-9	1	-9	9	-9	9	7.4989	2	-9	9	-9	-9		
109	2	2492.4	34.658	2	34.658	2	1.938	1.760	0.011	0.0	2	39.1	2	2.70	2	146.8	2	-9	9	-9	9	117.43	2	-9	9	-9	9	7.5329	2	-9	9	-9	-9		
108	2	2745.8	34.668	2	34.669	2	1.766	1.567	0.008	0.0	2	38.4	2	2.58	2	146.4	2	-9	9	-9	9	127.82	2	-9	9	-9	9	7.5725	2	-9	9	-9	-9		
107	2	3000.2	34.673	2	34.674	2	1.721	1.500	0.010	0.0	2	38.3	2	2.60	2	147.1	2	-0.003	2	-0.002	2	132.33	2	-9	9	-9	9	7.5725	2	-9	9	-9	-9		
106	2	3247.8	34.678	2	34.678	2	1.618	1.375	0.007	0.0	2	38.0	2	2.56	2	146.0	2	-9	9	-9	9	139.39	2	-9	9	-9	9	7.5725	2	-9	9	-9	-9		
105	2	3499.0	34.683	2	34.683	2	1.550	1.283	0.008	0.0	2	38.2	2	2.53	2	146.4	2	-0.001	2	-0.002	2	145.13	6	-9	9	-9	9	7.5725	2	-9	9	-9	-9		
104	2	3629.6	34.688	2	34.688	2	1.483	1.204	0.007	0.0	2	37.6	2	2.52	2	146.8	2	-9	9	-9	9	151.68	2	-9	9	-9	9	7.5958	2	-9	9	-9	-9		
103	2	3630.4	34.688	2	34.689	2	1.482	1.203	0.007	0.0	2	37.1	2	2.51	2	149.2	2	-0.002	2	-0.002	2	151.39	2	-9	9	-9	9	7.6020	2	-9	9	-9	-9		
102	2	3747.3	34.689	2	34.689	2	1.464	1.173	0.007	0.0	2	36.7	2	2.49	2	150.5	2	-9	9	-9	9	154.56	2	-9	9	-9	9	7.6020	2	-9	9	-9	-9		
101	2	3860.7	34.690	2	34.690	2	1.464	1.161	0.010	0.0	2	36.8	2	2.43	2	149.0	2	-9	9	-9	9	156.68	2	-9	9	-9	9	7.6020	2	-9	9	-9	-9		

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94

WOCE P18

NOAA Ship Discoverer

STATION 144 DATE 4/14/94 LATITUDE 0°20.1'S Btm Depth: 3810
CAST 1 LONGITUDE 110°19.6'W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential			NO2 µmol/kg	NO3 µmol/kg	PO4 µmol/kg	Si(OH)4 µmol/kg	CFC-11 µmol/kg	CFC-12 µmol/kg	O2 µmol/kg	F ₂ @20°C ¹ µmol/kg	DIC µmol/kg	pH	TA µmol/kg	F ₂ TA µmol/kg	813C TOC per mil µmol/L	TON µmol/L	Chi-a µg/L	Phaeo µg/L																	
					Temp °C	Sigma T	Theta																																	
136	2	8.3	35.169	2	35.173	2	24.417	23.645	0.108	0.3	2	5.2	2	0.67	2	4.1	2	1.792	2	0.971	2	188.09	6	396	2	2049.8	2	7.9743	2	2310	6	-9	-9	-9	-9					
135	2	26.7	35.234	2	35.231	2	22.460	22.455	0.123	0.5	2	7.5	2	0.79	2	5.0	2	1.721	2	0.919	2	163.18	6	-9	2	0.971	2	188.09	6	396	2	2049.8	2	7.9743	2	2310	6	-9	-9	
134	2	48.8	35.292	2	35.292	2	18.341	18.332	0.117	0.3	2	11.9	2	0.96	2	7.6	2	1.416	2	0.744	2	127.86	2	530	2	2108.9	2	7.9671	2	2314	2	-9	-9	-9	-9					
133	2	75.5	35.249	2	35.232	2	16.570	16.558	0.078	0.1	2	15.3	2	1.19	2	9.6	2	1.192	2	0.616	2	117.60	2	-9	2	0.971	2	188.09	6	396	2	2049.8	2	7.9743	2	2310	6	-9	-9	
132	2	101.9	35.000	2	34.998	2	14.340	14.325	0.039	0.0	2	17.2	2	1.29	2	14.1	2	1.052	2	0.532	2	124.81	2	669	2	2141.8	2	7.7812	2	2304	2	-9	-9	-9	-9					
131	2	121.8	34.989	2	34.989	2	14.069	14.051	0.044	0.0	2	16.8	2	1.35	2	14.7	2	0.959	2	0.508	2	118.67	2	-9	2	0.971	2	188.09	6	396	2	2049.8	2	7.9743	2	2310	6	-9	-9	
130	2	149.5	34.938	2	34.937	2	13.540	13.519	0.029	0.0	2	20.0	2	1.47	2	16.5	2	-9	2	0.438	2	110.32	2	-9	2	0.971	2	188.09	6	396	2	2049.8	2	7.9743	2	2310	6	-9	-9	
129	2	173.8	34.894	2	34.894	2	13.198	13.174	0.029	0.0	2	21.2	2	1.55	2	18.0	2	0.853	2	0.438	2	104.84	2	-9	2	0.971	2	188.09	6	396	2	2049.8	2	7.9743	2	2310	6	-9	-9	
128	2	201.2	34.884	2	34.883	2	13.040	13.012	0.024	0.0	2	22.7	2	1.64	2	19.4	2	0.668	2	0.347	2	90.03	2	858	2	2175.6	2	7.6824	2	2297	2	-9	-9	-9	-9					
127	2	225.6	34.889	2	34.889	2	12.901	12.870	0.030	0.0	2	24.0	2	1.74	2	20.5	2	0.668	2	0.347	2	77.29	2	-9	2	0.971	2	188.09	6	396	2	2049.8	2	7.9743	2	2310	6	-9	-9	
126	2	250.4	34.889	2	34.891	2	12.809	12.775	0.033	0.0	2	25.4	2	1.81	2	21.1	2	0.668	2	0.347	2	67.96	2	-9	2	0.971	2	188.09	6	396	2	2049.8	2	7.9743	2	2310	6	-9	-9	
125	2	299.6	34.865	2	34.863	2	12.269	12.230	0.031	0.0	2	31.2	2	2.22	2	25.5	2	0.394	2	0.191	2	21.02	2	1329	2	2234.4	2	7.5121	2	2293	2	-9	-9	-9	-9					
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
123	2	349.7	34.792	2	34.789	2	10.951	10.908	0.032	0.0	2	32.1	2	2.31	2	28.5	2	0.190	2	0.105	2	21.70	2	-9	2	0.971	2	188.09	6	396	2	2049.8	2	7.9743	2	2310	6	-9	-9	
122	2	398.2	34.700	2	34.697	2	9.468	9.423	0.030	0.0	2	35.2	2	2.43	2	33.3	2	0.099	2	0.051	2	35.59	2	1478	2	2233.0	2	7.4719	2	2286	2	-9	-9	-9	-9	-9	-9	-9	-9	-9
121	2	497.7	34.629	2	34.630	2	8.143	8.092	0.027	0.0	2	38.3	2	2.64	2	41.7	2	-9	2	-9	2	34.09	2	1608	2	2268.1	2	7.4373	2	2306	2	-9	-9	-9	-9	-9	-9	-9	-9	-9
120	2	601.2	34.588	2	34.586	2	7.257	7.199	0.025	0.0	2	38.5	2	2.68	2	48.0	2	-0.004	2	-0.002	2	51.21	2	1545	2	2271.1	2	7.4538	2	2313	2	-9	-9	-9	-9	-9	-9	-9	-9	-9
119	2	799.0	34.547	2	34.549	2	5.577	5.508	0.019	0.0	2	38.9	2	2.73	2	67.5	2	-9	2	-9	2	69.59	2	1537	2	2285.1	2	7.4653	2	2333	2	-9	-9	-9	-9	-9	-9	-9	-9	-9
118	2	1000.1	34.553	2	34.551	2	4.684	4.603	0.018	0.0	2	39.1	2	2.75	2	57.7	2	-9	2	-9	2	52.35	2	1593	2	2282.2	2	7.4396	2	2321	2	-9	-9	-9	-9	-9	-9	-9	-9	-9
117	2	1599.2	34.529	2	34.532	2	3.444	3.340	0.019	0.0	2	40.4	2	3.03	2	74.4	2	-9	2	-9	2	77.95	2	1522	2	2299.2	2	7.4665	2	2346	6	-9	-9	-9	-9	-9	-9	-9	-9	-9
116	2	1994.3	34.569	2	34.568	2	4.005	3.912	0.017	0.0	2	40.4	2	2.84	2	97.6	2	-9	2	-9	2	79.96	2	-9	2	0.971	2	188.09	6	396	2	2049.8	2	7.9743	2	2310	6	-9	-9	
115	2	1398.4	34.590	2	34.589	2	3.444	3.340	0.016	0.0	2	40.0	2	2.83	2	111.3	2	-9	2	-9	2	82.14	2	-9	2	0.971	2	188.09	6	396	2	2049.8	2	7.9743	2	2310	6	-9	-9	
114	2	1599.2	34.607	2	34.606	2	2.928	2.813	0.014	0.0	2	39.7	2	2.78	2	121.3	2	-9	2	-9	2	93.88	2	-9	2	0.971	2	188.09	6	396	2	2049.8	2	7.9743	2	2310	6	-9	-9	
113	2	1794.1	34.627	2	34.629	2	2.545	2.418	0.013	0.0	2	40.5	2	2.87	2	133.4	2	-9	2	-9	2	96.79	2	-9	2	0.971	2	188.09	6	396	2	2049.8	2	7.9743	2	2310	6	-9	-9	
112	2	1997.3	34.639	2	34.638	2	2.315	2.174	0.011	0.0	2	38.5	2	3.04	2	141.1	2	-9	2	-9	2	102.75	2	-9	2	0.971	2	188.09	6	396	2	2049.8	2	7.9743	2	2310	6	-9	-9	
111	2	2200.2	34.650	2	34.649	2	2.099	1.943	0.010	0.0	2	37.7	2	2.74	2	148.5	2	-9	2	-9	2	109.88	2	-9	2	0.971	2	188.09	6	396	2	2049.8	2	7.9743	2	2310	6	-9	-9	
110	2	2402.7	34.657	2	34.657	2	1.944	1.774	0.010	0.0	2	37.2	2	2.56	2	148.5	2	-9	2	-9	2	117.05	2	-9	2	0.971	2	188.09	6	396	2	2049.8	2	7.9743	2	2310	6	-9	-9	
109	2	2799.6	34.663	2	34.663	2	1.854	1.667	0.008	0.0	2	37.1	2	2.59	2	148.4	2	-9	2	-9	2	122.03	2	-9	2	0.971	2	188.09	6	396	2	2049.8	2	7.9743	2	2310	6	-9	-9	
108	2	2962.6	34.673	2	34.672	2	1.706	1.466	0.009	0.0	2	36.7	2	2.52	2	147.8	2	-9	2	-9	2	135.64	2	-9	2	0.971	2	188.09	6	396	2	2049.8	2	7.9743	2	2310	6	-9	-9	
107	2	3249.1	34.677	2	34.675	2	1.629	1.385	0.006	0.0	2	36.0	2	2.48	2	147.0	2	-9	2	-9	2	139.27	2	-9	2	0.971	2	188.09	6	396	2	2049.8	2	7.9743	2	2310	6	-9	-9	
106	2	3501.3	34.683	2	34.682	2	1.553	1.285	0.006	0.0	2	36.1	2	2.46	2	147.8	2	-9	2	-9	2	145.18	2	-9	2	0.971	2	188.09	6	396	2	2049.8	2	7.9743	2	2310	6	-9	-9	
105	2	3751.0	34.689	2	34.690	2	1.465	1.174	0.007	0.0	2	35.8	2	2.44	2	145.2	2	-9	2	-9	2	154.84	6	-9	2	0.971	2	188.09	6	396	2	2049.8	2	7.9743	2	2310	6	-9	-9	
104	2	3751.0	34.689	2	34.689	2	1.465	1.174	0.007	0.0	2	35.8	2	2.44	2	145.2	2	-9	2	-9	2	154.84	6	-9	2	0.971	2	188.09	6	396	2	2049.8	2	7.9743	2	2310	6	-9	-9	
103	2	3840.2	34.690	2	34.690	2	1.465	1.164	0.008	0.0	2	35.2	2	2.40	2	149.2	2	-9	2	-9	2	155.93	2	-9	2	0.971	2	188.09	6	396	2	2049.8	2	7.9743	2	2310	6	-9	-9	
102	2	3840.2	34.690	2	34.690	2	1.465	1.164	0.008	0.0	2	35.2	2	2.40	2	149.2	2	-9	2	-9	2	155.93	2	-9	2	0.971	2	188.09	6	396	2	2049.8	2	7.9743	2	2310	6	-9	-9	
101	2	3840.2	34.690	2	34.690	2	1.465	1.164	0.008	0.0	2	35.2	2	2.40	2	149.2	2	-9	2	-9	2	155.93	2	-9	2	0.971	2	188.09	6	396	2	2049.8	2	7.9743	2	2310	6	-9	-9	

* WOCE water sample quality flag (F) for parameter from previous column

** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 145 DATE 4/19/94 LATITUDE 0°0.0'S Btm Depth: 3785 CHL4 Phase
 CAST 3 LONGITUDE 110°20.0'W

Sample ID	P	S	CTD	Pressure db	Salinity	P	Temp °C	Temp °C	Sigma-t	Sigma-t	Theta	cp	RO2										TAIK	P	813C	TOC	TON	CHL4	Phase						
													F	F	F	F	F	F	F	F	F	F								F	F	F	F	F	F
336	2	9.0	35.132	2	35.134	2	24.723	24.721	23.525	0.120	0.3	2	6.2	2	0.66	2	1.788	2	0.960	2	190.99	2	395	2	2047.8	2	7.9763	2	2305	2	1.10	-9	-9	0.171	0.057
335	2	26.1	35.120	2	35.128	2	23.985	23.980	23.739	0.133	0.3	2	6.7	2	0.68	2	1.758	2	0.948	2	183.21	2	398	2	2048.8	2	7.9676	2	2303	2	1.10	-9	-9	0.243	0.121
334	2	52.2	34.869	2	34.859	2	17.479	17.470	25.301	0.141	0.3	2	13.4	2	1.07	2	1.433	2	0.733	2	128.67	2	578	2	2103.5	2	7.8364	2	2290	2	0.70	-9	-9	0.514	0.383
333	2	76.1	34.920	2	34.911	2	15.856	15.844	25.721	0.073	0.1	2	14.7	2	1.23	2	1.350	2	0.691	2	126.04	2	611	2	2119.3	2	7.8144	2	2287	2	-9	58.2	6.6	0.335	0.286
332	2	101.6	34.946	2	34.952	2	14.707	14.692	25.997	0.054	0.0	2	16.1	2	1.23	2	1.188	2	0.616	2	128.31	2	630	2	2132.2	2	7.7944	2	2289	2	0.70	57.7	5.6	0.127	0.095
331	2	124.1	34.925	2	34.924	2	14.004	13.986	26.132	0.056	0.0	2	17.8	2	1.35	2	1.055	2	0.546	2	123.00	2	693	2	2142.0	2	7.7684	2	2313	2	-9	57.0	3.9	0.060	0.052
330	2	148.8	34.959	2	34.938	2	13.726	13.705	26.202	0.031	0.0	2	18.3	2	1.42	2	0.956	2	0.496	2	113.75	2	728	2	2151.0	2	7.7496	2	2289	2	0.50	-9	-9	0.028	0.036
329	2	171.7	34.903	2	34.903	2	13.402	13.378	26.241	0.032	0.0	2	19.9	2	1.51	2	0.883	2	0.458	2	107.15	2	772	2	2160.6	2	7.7257	2	2299	2	-9	-9	-9	0.020	0.031
328	3	195.2	34.884	2	34.883	2	13.135	13.108	26.281	0.031	0.0	2	22.4	2	1.63	2	0.784	2	0.401	2	92.08	2	855	2	2174.0	2	7.6871	2	2299	2	0.40	54.2	-9	0.014	0.028
327	2	224.6	34.888	2	34.888	2	12.843	12.813	26.344	0.031	0.0	2	25.0	2	1.79	2	0.642	2	0.331	2	72.37	2	963	2	2191.5	2	7.6414	2	2296	2	-9	-9	-9	-9	-9
326	3	248.8	34.888	2	34.887	2	12.728	12.695	26.367	0.031	0.0	2	26.9	2	1.95	2	0.556	2	0.281	2	52.66	2	1083	2	2205.8	2	7.5961	2	2298	2	-9	-9	-9	-9	-9
325	2	299.8	34.859	2	34.853	2	12.158	12.118	26.457	0.034	0.0	2	31.8	2	2.27	2	0.320	2	0.164	2	18.03	2	1389	2	2239.7	2	7.4965	2	2297	2	0.00	50.4	-9	-9	-9
324	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
323	2	348.6	34.780	2	34.777	2	10.774	10.732	26.652	0.033	0.0	2	33.6	2	2.38	2	0.184	2	0.094	2	24.45	2	1466	2	2249.1	2	7.4755	2	2297	2	-9	46.0	-9	-9	-9
322	2	398.5	34.699	2	34.699	2	9.475	9.430	26.812	0.035	0.0	2	36.1	2	2.51	2	0.085	2	0.045	2	27.39	2	1558	2	2257.6	2	7.4330	2	2289	2	0.10	-9	-9	-9	-9
321	2	498.9	34.626	2	34.626	2	8.057	8.006	26.979	0.029	0.0	2	38.4	2	2.67	2	0.024	2	0.012	2	34.09	2	1630	2	2269.9	2	7.4328	2	2305	2	0.10	-9	-9	-9	-9
320	2	598.6	34.593	2	34.592	2	7.272	7.214	27.068	0.028	0.0	2	39.2	2	2.72	2	0.014	2	0.007	2	45.77	2	1606	2	2271.6	2	7.4431	2	2310	2	-9	-9	-9	-9	-9
319	2	700.4	34.568	2	34.568	2	6.503	6.438	27.154	0.025	0.0	2	40.3	2	2.82	2	0.006	2	0.003	2	52.07	2	1607	2	2279.9	2	7.4405	2	2322	2	-9	-9	-9	-9	-9
318	2	800.0	34.550	2	34.538	2	5.669	5.600	27.247	0.025	0.0	2	39.8	2	2.80	2	0.001	2	0.002	2	66.52	2	1550	2	2283.3	2	7.4575	2	2329	2	0.20	-9	-9	-9	-9
317	2	898.5	34.547	2	34.547	2	5.078	5.004	27.315	0.022	0.0	2	40.0	2	2.79	2	0.006	2	0.004	2	75.38	2	1521	2	2290.8	2	7.4674	2	2350	2	-9	-9	-9	-9	-9
316	2	998.2	34.551	2	34.551	2	4.786	4.705	27.353	0.023	0.0	2	41.2	2	2.86	2	0.002	2	0.002	2	77.28	2	1517	2	2297.8	2	7.4679	2	2354	2	-9	43.1	-9	-9	-9
314	2	1400.8	34.593	2	34.594	2	3.314	3.211	27.541	0.017	0.0	2	40.3	2	2.86	2	-9	-9	-9	-9	84.45	2	1513	2	2335.0	2	7.4746	2	2387	2	-9	-9	-9	-9	-9
313	2	1599.5	34.610	2	34.609	2	2.881	2.766	27.595	0.015	0.0	2	39.8	2	2.81	2	0.003	2	-0.002	2	92.42	2	1471	2	2342.6	2	7.4869	2	2400	2	-9	-9	-9	-9	-9
312	2	1801.9	34.628	2	34.627	2	2.537	2.410	27.640	0.014	0.0	2	39.4	2	2.78	2	0.003	2	-9	-9	96.56	2	1441	2	2351.8	2	7.4961	2	2411	2	-9	-9	-9	-9	-9
311	2	1999.6	34.642	2	34.641	2	2.251	2.111	27.676	0.012	0.0	2	39.6	2	2.75	2	0.017	2	-0.002	2	104.92	2	1403	2	2353.6	2	7.5105	2	2416	2	-9	39.5	-9	-9	-9
310	2	2300.5	34.649	2	34.649	2	2.117	1.962	27.693	0.011	0.0	2	38.9	2	2.72	2	0.002	2	-0.002	2	115.74	2	1372	2	2352.5	2	7.5193	2	2418	2	-9	-9	-9	-9	-9
309	2	2400.4	34.655	2	34.655	2	1.975	1.804	27.711	0.010	0.0	2	38.1	2	2.66	2	-0.002	2	-0.002	2	121.32	2	1300	2	2350.5	2	7.5305	2	2422	2	-9	-9	-9	-9	-9
308	2	2600.0	34.663	2	34.663	2	1.864	1.677	27.727	0.010	0.0	2	37.5	2	2.65	2	-9	-9	-9	-9	127.81	2	1264	2	2347.7	2	7.5521	2	2433	2	-9	-9	-9	-9	-9
307	2	2798.7	34.667	2	34.667	2	1.778	1.575	27.739	0.010	0.0	2	37.9	2	2.62	2	0.000	2	-0.002	2	127.81	2	1264	2	2347.7	2	7.5521	2	2433	2	-9	-9	-9	-9	-9
306	2	2999.8	34.674	2	34.673	2	1.698	1.477	27.750	0.008	0.0	2	37.6	2	2.59	2	-9	-9	-9	-9	133.34	2	1238	2	2344.5	2	7.5625	2	2432	2	-9	38.6	-9	-9	-9
305	2	3198.1	34.677	2	34.676	2	1.619	1.380	27.760	0.007	0.0	2	37.0	2	2.54	2	0.000	2	-0.002	2	139.18	2	1217	2	2340.9	2	7.5695	2	2419	3	-9	-9	-9	-9	-9
304	2	3398.7	34.682	2	34.682	2	1.550	1.293	27.770	0.009	0.0	2	36.8	2	2.50	2	-9	-9	-9	-9	144.57	2	1172	2	2339.2	2	7.5821	2	2432	2	-9	-9	-9	-9	-9
303	2	3600.0	34.687	2	34.688	2	1.505	1.229	27.778	0.009	0.0	2	37.0	2	2.50	2	0.011	2	-0.002	2	147.41	2	1143	2	2339.6	2	7.5925	2	2432	2	-9	-9	-9	-9	-9
302	2	3598.7	34.687	2	34.686	2	1.504	1.228	27.778	0.009	0.0	2	37.1	2	2.50	2	-9	-9	-9	-9	148.49	2	1151	2	2339.6	2	7.5905	2	2431	2	-9	-9	-9	-9	-9
301	2	3836.1	34.690	2	34.690	2	1.464	1.163	27.785	0.010	0.0	2	36.1	2	2.44	2	0.001	2	-0.002	2	156.01	2	1116	2	2332.3	2	7.6012	2	2391	2	-9	39.8	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94
WOCE P18
NOAA Ship Discoverer

STATION 146 1
CAST 1
DATE 4/14/94
LATITUDE 0°20.1'N
LONGITUDE 110°20.0'W
Btm Depth: 3650

Table with columns: Sample ID, Pressure db, Salinity CTD, Salinity Bottle, Temp, Sigma T, Sigma S, Theta, NO2, NO3, PO4, SiO4, CFC-11, CFC-12, O2, SO2, DIC, TA, pH, TAik, TOC, 813C, Chl-a Phase. Rows 136-101.

* WOCE water sample quality flag (F) for parameter from previous column
** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94

WOCE P18

NOAA Ship Discoverer

STATION 147 DATE 4/14/94 LATITUDE 0°39.9'N Btm Depth: 3850
CAST 1 LONGITUDE 110°20.2'W

Table with columns: Sample ID, Pressure, Salinity, Salinity Bottle, Temp, Sigma T, Sigma T Theta, NO2, NO3, PO4, Si(OH)4, CFC-11, CFC-12, O2, FOC, DIC, pH, TALK, TOC, TOC, Chl-a. Rows 136-101.

* WOCE water sample quality flag (F) for parameter from previous column
** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94

WOCE P18

NOAA Ship Discoverer

STATION 148 1 LATITUDE 1°0.0'N LONGITUDE 110°20.0'W DATE 4/14/94 Btm Depth: 3675

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma T	Sigma Anom	Theta cp	NO2 µmol/kg	NO3 µmol/kg	PO4 µmol/kg	Si(OH)4 µmol/kg	CFC-11 µmol/kg	CFC-12 µmol/kg	O2 µmol/kg	F ₂ @20°C ^{FC} µatm	DIC ^{FC} µmol/kg	pH	TA ^{FC} µmol/kg	δ13C TOC per mil	TON µmol/L	Chl-a µg/L	Phase								
																								Beam							
136	2	34.902	2	25.256	25.255	23.190	0.092	0.2	2	5.8	2	0.62	2	1.839	2	0.984	2	194.12	6	385	2	2033.1	2	7.9817	2	2286	2	1.20	-9	-9	-9
135	2	34.982	2	24.486	24.481	23.469	0.100	0.2	2	6.4	2	0.66	2	1.757	2	0.934	2	187.27	6	-9	9	9	7.9714	2	-9	9	1.00	-9	-9	-9	
134	2	34.855	2	17.735	17.727	25.228	0.128	0.5	2	17.3	2	1.37	2	1.216	2	0.643	2	103.40	6	688	2	2130.3	2	7.7718	2	2292	2	0.50	-9	-9	-9
133	2	34.949	2	15.301	15.290	25.869	0.068	0.5	2	21.6	2	1.62	2	0.977	2	0.504	2	74.14	2	-9	9	9	7.6900	2	-9	9	0.40	-9	-9	-9	
132	2	34.928	2	9	14.041	14.026	0.051	-9	9	-9	-9	-9	-9	0.863	6	0.446	6	64.65	6	907	2	2181.9	2	-9	9	2286	2	-9	-9	-9	-9
131	2	34.916	2	13.770	13.752	26.174	0.056	0.0	2	24.0	2	1.72	2	0.799	2	0.420	2	62.78	6	-9	9	9	7.6381	2	-9	9	-9	-9	-9	-9	
130	2	34.913	2	13.445	13.424	26.239	0.034	0.0	2	25.3	2	1.80	2	0.712	2	0.365	2	62.78	6	-9	9	9	7.6366	2	-9	9	0.30	-9	-9	-9	
129	2	34.895	2	12.977	12.953	26.321	0.032	0.0	2	25.8	2	1.85	2	0.622	2	0.331	2	62.25	2	-9	9	9	7.6044	2	-9	9	-9	-9	-9	-9	
128	2	34.888	2	12.743	12.716	26.363	0.030	0.0	2	26.9	2	1.93	2	0.552	2	0.295	2	53.43	6	1054	2	2206.7	2	7.5999	2	2286	2	0.20	-9	-9	-9
127	2	34.877	2	12.546	12.513	26.394	0.033	0.0	2	28.6	2	2.04	2	0.469	2	0.253	2	39.98	2	-9	9	9	7.5638	2	-9	9	-9	-9	-9	-9	
126	2	34.815	2	11.604	11.565	26.528	0.033	0.0	2	33.5	4	2.50	4	0.129	6	0.069	6	26.72	6	1529	2	2260.9	2	-9	9	2302	2	0.00	-9	-9	-9
125	2	34.809	2	11.325	11.280	26.576	0.031	0.0	2	33.0	2	2.36	2	0.242	2	0.138	2	13.65	2	-9	9	9	7.4673	2	-9	9	-9	-9	-9	-9	
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
123	2	34.714	2	9.854	9.807	26.762	0.034	0.0	2	35.5	2	2.47	2	0.107	2	0.056	2	20.36	2	1568	2	2260.7	2	7.4471	2	2300	2	0.00	-9	-9	-9
122	2	34.637	2	8.356	8.304	26.943	0.030	0.0	2	37.9	2	2.61	2	0.030	2	0.016	2	32.11	2	1619	2	2268.2	2	7.4371	2	2302	2	-0.20	-9	-9	-9
121	2	34.590	2	7.342	7.283	27.056	0.026	0.0	2	38.5	2	2.70	2	0.021	6	0.003	6	46.13	2	1586	2	2272.0	2	7.4462	2	2306	2	-9	-9	-9	-9
120	2	34.582	2	6.095	6.032	27.203	0.025	0.0	2	40.6	2	2.86	2	0.005	2	0.000	2	47.96	2	1677	2	2291.1	2	-9	9	2325	2	-9	-9	-9	-9
119	2	34.551	2	5.514	5.445	27.266	0.023	0.0	2	39.9	2	2.79	2	0.001	2	-0.001	2	65.85	2	1573	2	2289.0	2	7.4538	2	2329	2	0.10	-9	-9	-9
118	2	34.548	2	5.032	4.957	27.322	0.022	0.0	2	39.6	2	2.78	2	0.029	2	0.010	2	73.54	2	1531	2	2293.5	2	7.4666	2	2337	2	-9	-9	-9	-9
117	2	34.534	2	4.597	4.517	27.376	0.018	0.0	2	39.8	2	2.80	2	0.003	2	0.000	2	78.10	2	1513	2	2301.7	2	7.4694	2	2350	2	-9	-9	-9	-9
116	2	34.564	2	4.226	4.140	27.425	0.020	0.0	2	40.2	2	2.83	2	0.000	2	0.000	2	77.29	2	-9	9	9	7.4650	2	-9	9	-9	-9	-9	-9	
115	2	34.570	2	3.982	3.889	27.455	0.019	0.0	2	40.2	2	2.83	2	0.002	2	-0.001	2	79.63	2	-9	9	9	7.4683	2	-9	9	-9	-9	-9	-9	
114	2	34.589	2	3.464	3.359	27.524	0.017	0.0	2	40.5	2	2.85	2	0.001	2	0.000	2	80.55	2	-9	9	9	7.4690	2	-9	9	-9	-9	-9	-9	
113	2	34.606	2	2.959	2.843	27.585	0.014	0.0	2	39.6	2	2.77	2	0.001	2	0.000	2	91.21	2	-9	9	9	7.4690	2	-9	9	-9	-9	-9	-9	
112	2	34.624	2	2.580	2.452	27.653	0.013	0.0	2	39.3	2	2.75	2	-9	-9	9	96.52	2	-9	9	9	7.4846	2	-9	9	-9	-9	-9	-9		
111	2	34.641	2	2.249	2.109	27.675	0.011	0.0	2	38.7	2	2.70	2	0.002	2	-0.001	2	104.86	2	-9	9	9	7.5209	2	-9	9	-9	-9	-9	-9	
110	2	34.649	2	2.099	1.943	27.695	0.010	0.0	2	38.5	2	2.67	2	-9	-9	9	109.70	2	-9	9	9	7.5209	2	-9	9	-9	-9	-9	-9		
109	2	34.658	2	1.956	1.766	27.716	0.010	0.0	2	38.2	2	2.63	2	-9	-9	9	117.19	2	-9	9	9	7.5209	2	-9	9	-9	-9	-9	-9		
108	2	34.666	2	1.820	1.634	27.732	0.012	0.0	2	37.7	2	2.59	2	-9	-9	9	123.86	2	-9	9	9	7.5454	2	-9	9	-9	-9	-9	-9		
107	2	34.669	2	1.762	1.559	27.741	0.008	0.0	2	37.3	2	2.57	2	-9	-9	9	126.88	2	-9	9	9	7.5454	2	-9	9	-9	-9	-9	-9		
106	2	34.672	2	1.702	1.480	27.748	0.007	0.0	2	37.0	2	2.54	2	-9	-9	9	131.43	2	-9	9	9	7.5575	2	-9	9	-9	-9	-9	-9		
105	2	34.677	2	1.629	1.390	27.759	0.006	0.0	2	36.6	2	2.51	2	-9	-9	9	137.26	2	-9	9	9	7.5575	2	-9	9	-9	-9	-9	-9		
104	2	34.683	2	1.546	1.289	27.771	0.008	0.0	2	36.3	2	2.47	2	-9	-9	9	143.16	2	-9	9	9	7.5807	2	-9	9	-9	-9	-9	-9		
103	2	34.688	2	1.480	1.204	27.781	0.009	0.0	2	36.2	2	2.44	2	-9	-9	9	147.47	2	-9	9	9	7.5807	2	-9	9	-9	-9	-9	-9		
102	2	34.687	2	1.480	1.204	27.780	0.010	0.0	2	36.2	2	2.43	2	-9	-9	9	147.47	2	-9	9	9	7.5925	2	-9	9	-9	-9	-9	-9		
101	2	34.688	2	1.481	1.194	27.781	0.010	0.0	2	36.1	2	2.43	2	-9	-9	9	149.11	2	-9	9	9	7.5925	2	-9	9	-9	-9	-9	-9		

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 149 DATE 4/14/94 LATITUDE 1°20.0'N Btm Depth: 3775
 CAST 2 LONGITUDE 110°20.0'W

Sample ID	P ⁰	Pressure db	Salinity ‰	Salinity ‰	Temp °C	Temp °C	Sigma T	Theta cp	NO2 P ⁰ μmol/kg	NO3 P ⁰ μmol/kg	PO4 P ⁰ μmol/kg	P ⁰ Si(OH) ₄ P ⁰ μmol/kg	CFC-11 P ⁰ pmol/kg	CFC-12 P ⁰ pmol/kg	O2 P ⁰ @ 20°C P ⁰ μmol/kg	DIC P ⁰ μmol/kg	pH P ⁰	TA _{TK} P ⁰ μmol/kg	δ13C per mil ‰	TOC μmol/L	TON μmol/L	Chl-a P ⁰ μg/L	Fluoro P ⁰ μg/L													
																								CTD	Salinity ‰	Temp °C	Temp °C	Beam Attenu	Beam Attenu	NO2 P ⁰ μmol/kg	NO3 P ⁰ μmol/kg	PO4 P ⁰ μmol/kg	P ⁰ Si(OH) ₄ P ⁰ μmol/kg	CFC-11 P ⁰ pmol/kg	CFC-12 P ⁰ pmol/kg	O2 P ⁰ @ 20°C P ⁰ μmol/kg
236	2	9.7	34.790	2	25.943	25.941	22.893	0.094	0.2	5.1	2	4.3	2	1.769	2	200.25	6	373	2	2021.8	2	-9	1	2288	2	-9	-9	0.096	0.039							
235	2	24.6	34.597	2	25.077	25.071	23.318	0.099	0.2	6.0	2	4.6	2	1.766	2	195.97	2	-9	9	9	7.9780	2	-9	9	9	-9	-9	-9	0.117	0.062						
234	2	49.7	34.828	2	18.776	18.717	24.961	0.104	0.4	15.8	2	1.25	2	1.278	2	118.35	2	626	2	2115.5	2	-9	9	2287	2	-9	66.1	4.4	0.172	0.137						
233	2	74.8	34.935	2	15.762	15.750	25.754	0.066	0.5	20.7	2	1.55	2	1.045	2	84.69	2	-9	9	9	7.7146	2	-9	9	9	-9	54.0	3.7	0.173	0.167						
232	2	101.4	34.952	2	14.950	14.985	26.029	0.048	0.4	23.7	2	1.72	2	0.893	2	64.02	2	903	2	2180.2	2	-9	9	2297	2	-9	53.3	4.0	0.153	0.177						
231	2	127.4	34.920	2	13.867	13.849	26.157	0.038	0.1	23.9	2	1.73	2	-9	9	70.01	2	-9	9	9	7.6617	2	-9	9	9	-9	50.3	3.0	0.078	0.120						
230	2	148.8	34.907	2	13.444	13.423	26.235	0.032	0.0	25.4	2	2.02	2	0.798	2	67.62	2	-9	9	2187.1	2	-9	9	2303	2	-9	-9	-9	0.039	0.054						
229	2	167.0	34.899	2	13.027	13.004	26.314	0.031	0.0	26.7	2	2.12	2	-9	9	62.02	2	-9	9	9	7.6462	2	-9	9	9	-9	-9	-9	0.011	0.030						
228	2	199.6	34.891	2	12.789	12.762	26.356	0.031	0.1	28.7	2	2.30	2	0.528	2	46.52	2	1100	2	2309.6	2	-9	9	2300	2	-9	-9	-9	0.004	0.020						
227	2	251.0	34.858	2	12.348	12.315	26.418	0.033	0.0	31.6	2	2.16	2	-9	9	27.31	2	-9	9	2229.9	2	-9	9	2302	2	-9	-9	-9	-9	-9	-9					
226	2	302.0	34.808	2	11.551	11.512	26.532	0.034	0.0	33.9	2	2.29	2	0.261	2	18.75	2	1409	2	2243.5	2	-9	9	2301	2	-9	52.1	2.3	-9	-9	-9					
225	2	349.4	34.766	2	10.949	10.906	26.610	0.036	0.0	34.7	2	2.36	2	-9	9	23.86	2	-9	9	9	7.4818	2	-9	9	9	-9	-9	-9	-9	-9	-9					
224	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9					
223	2	399.3	34.688	2	9.537	9.491	26.794	0.034	0.0	37.4	2	3.57	2	0.091	2	28.01	2	1536	2	2258.1	2	-9	9	2303	2	-9	-9	-9	-9	-9	-9					
222	2	499.6	34.629	2	8.235	8.182	26.955	0.030	0.0	39.7	2	2.64	2	-9	9	35.44	2	1590	2	2266.6	2	-9	9	2304	2	-9	55.9	-9	-9	-9	-9	-9				
221	2	600.2	34.586	2	7.239	7.181	27.067	0.024	0.0	40.9	2	2.72	2	0.000	2	47.99	2	1575	2	2270.5	2	-9	9	2321	2	-9	-9	-9	-9	-9	-9	-9				
220	2	699.9	34.563	2	6.176	6.112	27.193	0.024	0.0	42.9	2	2.88	2	-9	9	50.30	2	1642	2	2288.1	2	-9	9	2319	2	-9	-9	-9	-9	-9	-9	-9	-9			
219	2	798.0	34.554	2	5.504	5.435	27.270	0.023	0.0	43.2	2	2.91	2	0.006	2	54.31	2	1650	2	2298.2	2	-9	9	2335	2	-9	-9	-9	-9	-9	-9	-9	-9			
218	3	899.9	34.550	2	-9	5	4.993	4.919	27.328	0.022	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9				
217	2	1000.0	34.559	2	4.428	4.349	27.398	0.019	0.0	40.8	2	2.85	2	0.001	2	72.10	2	1558	2	2308.9	2	-9	9	2353	6	-9	44.7	1.5	-9	-9	-9	-9	-9			
216	2	1100.8	34.567	2	3.456	3.408	27.440	0.019	0.1	40.9	2	2.82	2	-9	9	78.58	2	-9	9	9	7.4739	2	-9	9	9	-9	-9	-9	-9	-9	-9	-9	-9			
215	2	1199.8	34.570	2	3.912	3.821	27.463	0.019	0.0	40.5	2	2.78	2	-9	9	88.46	2	-9	9	9	7.4717	2	-9	9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
214	2	1400.0	34.593	2	3.349	3.245	27.537	0.015	0.0	41.1	2	2.84	2	-9	9	81.31	2	-9	9	9	7.4717	2	-9	9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
213	2	1597.4	34.613	2	2.857	2.743	27.599	0.015	0.0	40.6	2	2.81	2	-9	9	92.20	2	-9	9	9	7.4999	2	-9	9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
212	2	1801.0	34.630	2	2.466	2.339	27.647	0.013	0.0	40.2	2	2.73	2	-9	9	98.60	2	-9	9	9	7.4999	2	-9	9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
211	2	2000.7	34.642	2	2.221	2.081	27.679	0.011	0.0	39.2	2	2.68	2	-9	9	107.76	2	-9	9	9	7.5219	2	-9	9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
210	2	2300.8	34.651	2	2.069	1.915	27.699	0.010	0.0	39.4	2	2.66	2	-9	9	110.39	2	-9	9	9	7.5219	2	-9	9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
209	2	2599.4	34.657	2	1.957	1.786	27.713	0.010	0.0	39.2	2	2.65	2	-9	9	116.29	2	-9	9	9	7.5219	2	-9	9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
208	2	2599.3	34.666	2	1.813	1.627	27.733	0.009	0.0	38.5	2	2.59	2	-9	9	123.40	2	-9	9	9	7.5460	2	-9	9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
207	2	2798.8	34.669	2	1.776	1.572	27.739	0.008	0.0	38.2	2	2.55	2	-9	9	127.08	2	-9	9	9	7.5460	2	-9	9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
206	2	3001.1	34.671	2	1.733	1.510	27.746	0.008	0.0	38.2	2	2.56	2	-9	9	130.46	2	-9	9	9	7.5460	2	-9	9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
205	2	3198.4	34.675	2	1.658	1.418	27.755	0.007	0.0	37.9	2	2.54	2	-9	9	135.86	2	-9	9	9	7.5460	2	-9	9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
204	2	3402.3	34.682	2	1.568	1.310	27.768	0.007	0.0	37.9	2	2.50	2	-9	9	141.65	2	-9	9	9	7.5770	2	-9	9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
203	2	3600.0	34.687	2	1.502	1.225	27.778	0.008	0.0	37.4	2	2.45	2	-9	9	146.09	2	-9	9	9	7.5770	2	-9	9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
202	2	3598.9	34.686	2	1.500	1.224	27.778	0.007	0.0	37.4	2	2.45	2	-9	9	146.19	2	-9	9	9	7.5894	2	-9	9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
201	2	3806.5	34.688	2	1.487	1.190	27.782	0.011	0.0	37.9	2	2.45	2	-9	9	148.02	2	-9	9	9	7.5894	2	-9	9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 150 DATE 4/15/94 LATITUDE 1°40.6'N Btm Depth: 3796
 CAST 1 LONGITUDE 110°20.2'W

Sample ID	P* Pressure db	Salinity	Temp °C	Temp °C	Sigma t	Theta	Beam Attenu	IO2										TON µM/L	Chl-a µg/L								
								NO2 µM/kg	NO3 µM/kg	PO4 µM/kg	Si(OH)4 µM/kg	CFC-11 µM/kg	CFC-12 µM/kg	O2 µM/kg	F ²⁰ µM/kg	DICP µM/kg	pH			TALK µM/kg	δ13C per mil						
136	2	8.4	34.723	2	34.731	2	26.133	0.1	5.0	0.57	3.8	2	9	9	202.01	6	361	2	2016.0	2	8.0001	2	2282	6	-9	-9	-9
135	2	22.7	34.889	2	34.904	2	24.501	0.158	6.8	0.70	4.9	2	-9	9	189.38	2	-9	9	2061.6	2	7.9124	2	2285	2	-9	-9	-9
134	2	50.7	34.758	2	34.744	2	21.327	0.117	9.3	0.86	6.3	2	-9	9	169.13	2	470	2	2061.6	2	7.9124	2	2285	2	-9	-9	-9
133	2	73.5	34.950	2	34.952	2	16.006	0.070	21.9	1.50	14.4	2	-9	9	86.84	2	830	2	2170.2	2	7.6915	2	2296	2	-9	-9	-9
132	2	97.0	34.936	2	34.948	2	14.848	0.046	25.0	1.62	16.6	2	-9	9	75.99	2	906	2	2182.7	2	7.6385	2	2295	2	-9	-9	-9
131	2	125.4	34.956	2	34.956	2	14.320	0.039	25.0	1.79	18.0	2	-9	9	58.10	2	906	2	2182.7	2	7.6385	2	2295	2	-9	-9	-9
130	2	149.4	34.924	2	34.924	2	13.647	0.031	24.4	1.74	18.8	2	-9	9	71.01	2	906	2	2182.7	2	7.6385	2	2295	2	-9	-9	-9
129	2	173.0	34.909	2	34.910	2	13.232	0.030	25.6	1.81	20.1	2	-9	9	63.84	2	906	2	2182.7	2	7.6385	2	2295	2	-9	-9	-9
128	2	197.4	34.899	2	34.898	2	12.978	0.030	26.8	1.88	21.6	2	-9	9	56.36	2	1028	2	2201.1	2	7.6113	2	2297	2	-9	-9	-9
127	2	199.1	34.898	2	34.898	2	12.964	0.030	26.4	1.89	21.3	2	-9	9	57.35	2	906	2	2227.9	2	7.5290	2	2305	2	-9	-9	-9
126	2	250.7	34.858	2	34.855	2	12.367	0.033	30.8	2.15	24.8	2	-9	9	28.72	2	1260	2	2227.9	2	7.5290	2	2305	2	-9	-9	-9
125	2	299.9	34.808	2	34.808	2	11.576	0.034	33.0	2.28	28.0	2	-9	9	20.22	2	-9	9	9	9	7.4930	2	-9	9	-9	-9	-9
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
123	2	397.9	34.684	2	34.681	2	9.582	0.033	35.5	2.49	35.9	2	-9	9	24.22	2	1572	2	2261.6	2	7.4432	2	2304	2	-9	-9	-9
122	2	497.8	34.627	2	34.628	2	8.178	0.028	38.4	2.62	41.9	2	-9	9	36.25	2	1584	2	2266.0	2	7.4408	2	2303	2	-9	-9	-9
121	2	599.8	34.588	2	34.587	2	7.289	0.025	38.7	2.66	47.4	2	-9	9	50.11	2	1557	2	2269.0	2	7.4509	2	2316	2	-9	-9	-9
120	2	698.4	34.573	2	34.573	2	6.578	0.024	41.5	2.83	56.7	2	-9	9	44.13	2	1655	2	2284.0	2	7.4278	2	2317	2	-9	-9	-9
119	2	797.7	34.558	2	34.558	2	5.777	0.021	42.6	2.92	67.8	2	-9	9	46.98	2	1704	2	2299.1	2	7.4196	2	2330	2	-9	-9	-9
118	2	898.5	34.552	2	34.556	2	5.027	0.021	42.4	2.91	80.4	2	-9	9	55.40	2	1669	2	2307.3	2	7.4296	2	2351	2	-9	-9	-9
117	2	1000.1	34.561	2	34.561	2	4.440	0.020	41.7	2.90	90.5	2	-9	9	69.52	2	1589	2	2312.1	2	7.4331	2	2357	6	-9	-9	-9
116	2	1101.3	34.566	2	34.565	2	4.104	0.018	40.6	2.84	96.4	2	-9	9	79.71	2	-9	9	9	9	7.4675	2	-9	9	-9	-9	-9
115	2	1198.1	34.571	2	34.572	2	3.896	0.018	40.5	2.82	101.2	2	-9	9	82.10	2	-9	9	9	9	7.4614	2	-9	9	-9	-9	-9
114	2	1299.7	34.587	2	34.588	2	3.565	0.018	40.4	2.89	101.0	2	-9	9	76.34	2	-9	9	9	9	7.4614	2	-9	9	-9	-9	-9
113	2	1499.9	34.602	2	34.602	2	3.171	0.017	41.3	2.89	111.4	2	-9	9	80.08	2	-9	9	9	9	7.4691	2	-9	9	-9	-9	-9
112	2	1600.9	34.611	2	34.610	2	2.944	0.014	40.5	2.85	120.4	2	-9	9	81.29	2	-9	9	9	9	7.4691	2	-9	9	-9	-9	-9
111	2	1799.6	34.630	2	34.630	2	2.564	0.012	40.5	2.82	126.6	2	-9	9	86.91	2	-9	9	9	9	7.4691	2	-9	9	-9	-9	-9
110	2	2001.0	34.640	2	34.640	2	2.265	0.011	39.7	2.78	137.9	2	-9	9	94.22	2	-9	9	9	9	7.4691	2	-9	9	-9	-9	-9
109	2	2250.6	34.652	2	34.652	2	2.034	0.010	38.9	2.71	140.9	2	-9	9	107.12	2	-9	9	9	9	7.4691	2	-9	9	-9	-9	-9
108	2	2501.6	34.661	2	34.661	2	1.874	0.009	38.6	2.66	145.1	2	-9	9	113.00	2	-9	9	9	9	7.4691	2	-9	9	-9	-9	-9
107	2	2749.6	34.669	2	34.673	2	1.772	0.008	38.2	2.59	147.8	2	-9	9	126.79	2	-9	9	9	9	7.4691	2	-9	9	-9	-9	-9
106	2	2997.7	34.671	2	34.672	2	1.737	0.008	38.3	2.58	148.0	2	-9	9	129.91	2	-9	9	9	9	7.4691	2	-9	9	-9	-9	-9
105	2	3201.5	34.683	2	34.683	2	1.633	0.007	37.7	2.51	148.1	2	-9	9	136.45	2	-9	9	9	9	7.4691	2	-9	9	-9	-9	-9
104	2	3501.6	34.683	2	34.683	2	1.552	0.006	37.0	2.48	152.6	2	-9	9	142.79	2	-9	9	9	9	7.4691	2	-9	9	-9	-9	-9
103	2	3501.6	34.683	2	34.683	2	1.552	0.006	37.4	2.48	152.6	2	-9	9	142.79	2	-9	9	9	9	7.4691	2	-9	9	-9	-9	-9
102	2	3796.4	34.688	2	34.688	2	1.485	0.010	37.1	2.46	152.9	2	-9	9	147.88	6	-9	9	9	9	7.4691	2	-9	9	-9	-9	-9
101	2	3796.4	34.688	2	34.688	2	1.485	0.010	37.1	2.46	152.9	2	-9	9	147.88	6	-9	9	9	9	7.4691	2	-9	9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column

** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 151 DATE 4/19/94 LATITUDE 2°00'N Btm Depth: 3772
 CAST 1 LONGITUDE 110°20.1'W

Sample ID	Pressure db	Salinity P ₀	Temp °C	Sigma T	Atten	NO2 P ₀	NO3 P ₀	PO4 P ₀	Si(OH) ₄ P ₀	CFC-11 P ₀	CFC-12 P ₀	O2 P ₀	P ₀ @20°C P ₀	DIC P ₀	pH P ₀	TAIK P ₀	813C P ₀	TOC P ₀	TON P ₀	Chl-a P ₀																	
																					CTD	Salinity P ₀	Temp °C	Temp °C	Thera	cp	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg
136	2	10.0	34.609	2	26.585	26.583	22.555	0.161	0.1	2	4.6	2	0.52	2	4.7	2	1.727	2	0.946	2	203.53	6	354	2	2003.9	2	8.0101	2	2281	2	1.40	70.9	5.7	-9	-9		
135	2	24.4	34.684	2	26.018	26.012	22.791	0.182	0.1	2	5.4	2	0.57	2	5.0	2	1.699	2	0.924	2	199.71	2	378	2	2015.7	2	7.9949	2	2280	2	-9	74.4	5.9	-9	-9		
134	2	48.4	34.856	2	34.847	2	17.701	17.693	25.237	0.146	0.3	2	1.30	2	13.7	2	1.236	2	0.636	2	117.16	2	639	2	2117.9	2	7.7973	2	2291	2	-9	58.5	5.7	-9	-9		
133	2	74.1	34.927	2	34.931	2	15.311	15.300	25.850	0.069	0.7	2	22.9	2	18.0	2	0.979	2	0.507	2	64.17	2	916	2	2167.5	2	7.6839	2	2293	2	-9	4.8	4.8	-9	-9		
132	2	98.8	34.951	2	34.950	2	14.400	14.385	26.067	0.044	0.0	2	25.2	2	19.4	2	0.847	2	0.438	2	64.17	2	916	2	2179.5	2	7.6594	2	2294	2	-9	51.6	3.7	-9	-9		
131	2	123.9	34.959	2	34.958	2	13.973	13.955	26.149	0.034	0.0	2	25.8	2	20.6	2	0.761	2	0.399	2	60.01	2	959	2	2186.7	2	7.6431	2	2295	2	-9	51.3	-9	-9	-9		
130	2	149.3	34.929	2	34.930	2	13.679	13.658	26.204	0.031	0.0	2	27.2	2	22.0	2	0.692	2	0.356	2	53.60	2	1008	2	2193.4	2	7.6226	2	2296	2	-9	-9	-9	-9	-9		
129	2	173.7	34.902	2	34.902	2	13.163	13.139	26.289	0.031	0.0	2	29.3	2	24.0	2	0.539	2	0.279	2	39.02	2	1126	2	2208.7	2	7.5795	2	2292	2	-9	-9	-9	-9	-9		
128	2	199.0	34.880	2	34.879	2	12.772	12.745	26.351	0.032	0.0	2	30.6	2	25.7	2	0.484	2	0.233	2	33.05	2	1199	2	2217.1	2	7.5526	2	2295	2	-9	47.2	-9	-9	-9		
127	2	199.7	34.879	2	34.878	2	12.772	12.745	26.350	0.031	0.0	2	30.3	2	25.8	2	0.444	2	0.236	2	33.24	2	1201	2	2216.9	2	7.5541	2	2292	2	-9	-9	-9	-9	-9		
126	2	250.7	34.844	2	34.844	2	12.185	12.152	26.439	0.031	0.0	2	32.5	2	28.3	2	0.364	2	0.186	2	23.26	2	1320	2	2230.5	2	7.5157	2	2295	2	-9	52.0	3.1	-9	-9		
125	2	296.6	34.812	2	34.812	2	11.709	11.671	26.506	0.034	0.0	2	33.1	2	29.9	2	0.287	2	0.153	2	20.94	2	1389	2	2237.3	2	7.4974	2	2294	2	-9	-9	-9	-9	-9		
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
123	2	395.3	34.693	2	34.693	2	9.799	9.754	26.754	0.032	0.0	2	35.0	2	37.2	2	0.112	2	0.062	2	23.01	2	1537	2	2254.6	2	7.4555	2	2313	2	-9	-9	-9	-9	-9		
122	2	498.9	34.621	2	34.619	2	8.165	8.113	26.959	0.030	0.0	2	39.5	2	45.5	2	0.024	2	0.012	2	30.85	2	1642	2	2271.9	2	7.4322	2	2305	2	-9	-9	-9	-9	-9		
121	3	599.9	34.588	2	34.587	2	7.317	7.259	27.058	0.025	0.0	2	39.3	2	49.6	2	0.026	2	0.007	2	50.25	2	-9	9	2269.7	2	-9	9	2309	2	-9	44.9	-9	-9	-9	-9	-9
120	2	700.3	34.566	2	34.566	2	6.553	6.488	27.147	0.023	0.0	2	41.0	2	58.0	2	0.004	2	0.002	2	49.47	2	1624	2	2281.3	2	7.4395	2	2317	2	-9	-9	-9	-9	-9		
119	2	800.0	34.558	2	34.558	2	5.721	5.651	27.247	0.023	0.0	2	42.2	2	70.6	2	0.008	2	0.001	2	48.72	2	1699	2	2300.9	2	7.4207	2	2333	2	-9	-9	-9	-9	-9		
118	2	900.9	34.557	2	34.558	2	5.082	5.007	27.324	0.021	0.0	2	42.7	2	82.0	2	0.000	2	-0.002	2	52.30	2	1699	2	2311.5	2	7.4249	2	2345	2	-9	-9	-9	-9	-9		
117	2	1001.4	34.563	2	34.563	2	4.462	4.383	27.400	0.020	0.0	2	42.0	2	93.4	2	0.003	2	0.000	2	62.53	2	1650	2	-9	1	7.4375	2	-9	5	-9	41.9	-9	-9	-9	-9	
116	2	1099.8	34.570	2	34.570	2	4.138	4.052	27.458	0.019	0.0	2	41.8	2	99.5	2	-9	-9	-9	-9	69.84	2	1603	2	2322.1	2	7.4487	2	2368	2	-9	-9	-9	-9	-9		
115	2	1199.5	34.578	2	34.578	2	3.870	3.778	27.473	0.017	0.0	2	41.7	2	105.8	2	0.000	2	-0.002	2	71.72	2	1600	2	2327.5	2	7.4516	2	2368	2	-9	-9	-9	-9	-9		
114	2	1300.7	34.587	2	34.588	2	3.549	3.452	27.513	0.017	0.0	2	41.4	2	114.9	2	-9	-9	-9	-9	77.01	2	1567	2	2330.8	2	7.4623	2	2381	2	-9	-9	-9	-9	-9		
113	2	1399.7	34.594	2	34.595	2	3.316	3.213	27.541	0.017	0.0	2	41.4	2	120.0	2	-0.002	2	-0.002	2	81.17	2	1543	2	2334.3	2	7.4668	2	2382	2	-9	-9	-9	-9	-9		
112	2	1600.3	34.609	2	34.610	2	2.960	2.844	27.587	0.017	0.0	2	41.1	2	128.9	2	-9	-9	-9	-9	86.51	2	1507	2	2342.3	2	7.4789	2	2396	2	-9	-9	-9	-9	-9		
111	2	1800.4	34.627	2	34.627	2	2.612	2.483	27.633	0.012	0.0	2	40.6	2	137.4	2	-9	-9	-9	-9	93.20	2	1472	2	2348.5	2	7.4900	2	2406	2	-9	-9	-9	-9	-9		
110	2	2001.8	34.638	2	34.638	2	2.337	2.195	27.666	0.010	0.0	2	40.2	2	141.7	2	-0.001	2	-0.002	2	101.46	2	1416	2	2350.8	2	7.5061	2	2415	2	-9	-9	-9	-9	-9		
109	2	2247.7	34.651	2	34.652	2	2.069	1.910	27.699	0.010	0.0	2	39.5	2	148.3	2	-9	-9	-9	-9	109.87	2	1371	2	2349.6	2	7.5204	2	2416	2	-9	-9	-9	-9	-9		
108	2	2500.5	34.664	2	34.663	2	1.840	1.663	27.729	0.010	0.0	2	38.9	2	152.2	2	-9	-9	-9	-9	119.38	2	1311	2	2349.6	2	7.5390	2	2425	2	-9	-9	-9	-9	-9		
107	2	2743.1	34.668	2	34.668	2	1.774	1.575	27.758	0.008	0.0	2	38.5	2	154.2	2	0.001	2	-0.001	2	123.98	2	1289	2	2346.9	2	7.5387	2	2427	2	-9	-9	-9	-9	-9		
106	2	2997.6	34.672	2	34.672	2	1.710	1.489	27.747	0.006	0.0	2	38.1	2	152.1	2	-9	-9	-9	-9	130.29	2	1263	2	2342.1	2	7.5532	2	2427	2	-9	-9	-9	-9	-9		
105	2	3247.6	34.678	2	34.678	2	1.602	1.359	27.762	0.006	0.0	2	37.9	2	152.6	2	-9	-9	-9	-9	139.07	2	1222	2	2337.1	2	7.5685	2	2429	2	-9	-9	-9	-9	-9		
104	2	3499.2	34.685	2	34.685	2	1.507	1.240	27.776	0.006	0.0	2	37.8	2	154.6	2	-9	-9	-9	-9	145.34	2	1170	2	2336.9	2	7.5832	2	2429	2	-9	-9	-9	-9	-9		
103	2	3748.1	34.688	2	34.689	2	1.477	1.186	27.782	0.009	0.0	2	37.3	2	155.3	2	0.002	2	0.000	2	148.12	2	1149	2	2336.8	2	7.5938	2	2432	2	-9	-9	-9	-9	-9		
102	2	3747.7	34.688	2	34.688	2	1.477	1.186	27.782	0.009	0.0	2	37.4	2	155.2	2	-9	-9	-9	-9	148.24	2	1146	2	2337.1	2	7.5990	2	2437	2	-9	-9	-9	-9	-9		
101	2	3838.6	34.688	2	34.688	2	1.487	1.186	27.782	0.009	0.0	2	37.4	2	155.1	2	-9	-9	-9	-9	147.91	2	1143	2	2336.2	2	7.5896	2	2440	2	-9	-9	-9	-9	-9		

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 152 1
CAST 1

DATE 4/15/94

LAITUDE 2°20.0'N
LONGITUDE 110°20.0'W

Btm Depth: 3701

Sample ID	Pressure db	Salinity P _{se}	Temp °C	Potential Temp °C	Sigma T	Theta CP	NO2 P _{se} µmol/kg	NO3 P _{se} µmol/kg	PO4 P _{se} µmol/kg	Si(OR)4 P _{se} µmol/kg	CFC-11 P _{se} pmol/kg	CFC-12 P _{se} pmol/kg	O2 P _{se} µmol/kg	FOO2 P _{se} @ 20°C µm	DIC P _{se} µmol/kg	pH P _{se}	TALK P _{se} µmol/kg	Si3C per ml µmol/L	TOC µmol/L	TON µmol/L	CHI-a µmol/L	Phase						
																							Salinity P _{se} Bottle	Temp °C	Temp °C	Theta CP	NO2 P _{se} µmol/kg	NO3 P _{se} µmol/kg
136	2	34.387	2	27.037	27.035	22.245	0.132	0.1	2	4.3	2	0.946	6	201.90	2	354	2	1996.3	2	8.0129	2	2261	3	1.40	-9	-9		
135	2	34.502	2	27.057	27.052	22.226	0.133	0.1	2	4.5	2	0.946	2	201.73	2	-9	9	-9	9	2109.2	2	7.8732	2	2294	2	0.80	-9	-9
134	2	49.9	34.814	2	18.835	18.826	24.923	0.151	0.3	14.4	2	0.666	2	126.31	2	588	2	2109.2	2	7.8732	2	2294	2	0.80	-9	-9		
133	2	74.9	34.942	2	15.569	15.557	25.804	0.086	0.9	24.7	2	0.479	2	45.13	2	-9	9	-9	9	7.6329	2	-9	9	-9	-9	-9		
132	2	101.0	34.957	2	14.955	14.940	25.952	0.052	0.2	22.4	2	-9	9	74.20	2	825	2	2169.7	2	7.6900	2	2292	2	0.40	-9	-9		
131	2	126.4	34.948	2	14.178	14.159	26.114	0.034	0.0	24.7	2	0.426	2	64.00	2	-9	9	-9	9	7.6540	2	-9	9	-9	-9	-9		
130	2	153.3	34.932	2	13.634	13.612	26.215	0.033	0.0	26.5	2	-9	9	53.25	2	-9	9	2197.5	2	7.6220	2	2295	2	0.30	-9	-9		
129	2	175.0	34.912	2	13.305	13.281	26.268	0.033	0.0	27.2	2	0.513	2	47.72	2	-9	9	9	7.6024	2	-9	9	-9	-9	-9			
128	2	200.3	34.887	2	12.905	12.877	26.330	0.033	0.0	29.3	2	-9	9	35.36	2	1154	2	2217.8	2	7.5638	2	2296	2	0.20	-9	-9		
127	2	227.3	34.860	2	12.547	12.516	26.381	0.034	0.0	30.4	2	0.571	4	30.89	2	-9	9	-9	9	7.5436	2	-9	9	-9	-9	-9		
126	2	248.4	34.833	2	12.165	12.132	26.434	0.035	0.0	30.9	2	-9	9	30.52	2	-9	9	2228.8	2	-9	9	2293	2	-9	-9	-9		
125	2	902.0	34.774	2	11.266	11.228	26.558	0.036	0.0	32.1	2	0.278	2	13.47	2	1347	2	2328.8	2	7.5054	2	2293	2	0.10	-9	-9		
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
123	2	348.6	34.719	2	10.308	10.267	26.687	0.035	0.0	34.3	2	-9	9	23.94	2	-9	9	-9	9	7.4670	2	-9	9	-9	-9	-9		
122	2	401.5	34.672	2	9.276	9.231	26.824	0.032	0.0	36.7	2	0.090	2	21.11	2	1608	2	2267.5	2	7.4351	2	2301	2	0.10	-9	-9		
121	2	500.5	34.617	2	8.079	8.027	26.969	0.029	0.0	38.3	2	0.013	2	36.15	2	1597	2	2269.3	2	7.4399	2	2303	2	0.10	-9	-9		
120	2	602.1	34.580	2	6.432	6.368	27.159	0.024	0.0	40.3	2	0.004	2	49.26	2	1574	2	2273.7	2	7.4491	2	2311	2	-9	-9	-9		
119	2	700.5	34.562	2	6.432	6.368	27.159	0.024	0.0	40.3	2	-9	9	52.44	2	1600	2	2281.2	2	7.4423	2	2316	2	-9	-9	-9		
118	2	800.4	34.561	2	5.747	5.677	27.246	0.024	0.0	42.4	2	0.005	2	41.87	2	1745	2	2302.9	2	7.4124	2	2329	2	0.10	-9	-9		
117	2	901.6	34.559	2	5.063	4.988	27.327	0.022	0.0	42.3	2	-9	9	52.88	2	1681	2	2310.4	2	7.4248	2	2344	6	-9	-9	-9		
116	2	1001.3	34.564	2	4.469	4.420	27.395	0.021	0.0	41.7	2	-9	9	61.13	2	1655	2	2318.0	2	7.4355	2	2354	6	-9	-9	-9		
115	2	1201.2	34.582	2	3.773	3.682	27.486	0.018	0.0	41.6	2	-9	9	69.71	2	-9	9	-9	9	7.4508	2	-9	9	-9	-9	-9		
114	2	1399.4	34.594	2	3.327	3.224	27.541	0.017	0.0	40.9	2	-9	9	80.64	2	-9	9	-9	9	7.4678	2	-9	9	-9	-9	-9		
113	2	1599.6	34.611	2	2.929	2.813	27.592	0.015	0.0	40.9	2	-9	9	92.91	2	-9	9	-9	9	7.4781	2	-9	9	-9	-9	-9		
112	2	1800.1	34.628	2	2.592	2.464	27.635	0.014	0.0	40.5	2	-9	9	93.42	2	-9	9	-9	9	7.4920	2	-9	9	-9	-9	-9		
111	2	2003.4	34.637	2	2.373	2.231	27.662	0.012	0.0	39.6	2	-9	9	99.73	2	-9	9	-9	9	7.5154	2	-9	9	-9	-9	-9		
110	2	2201.5	34.647	2	2.183	2.026	27.687	0.010	0.0	39.2	2	-9	9	115.12	2	-9	9	-9	9	7.5154	2	-9	9	-9	-9	-9		
109	2	2394.0	34.661	2	1.914	1.745	27.720	0.010	0.0	38.6	2	-9	9	115.10	2	-9	9	-9	9	-9	2	-9	9	-9	-9	-9		
108	2	2599.5	34.666	2	1.822	1.635	27.753	0.009	0.0	38.3	2	-9	9	119.82	2	-9	9	-9	9	7.5424	2	-9	9	-9	-9	-9		
107	2	2799.1	34.669	2	1.770	1.567	27.740	0.008	0.0	37.9	2	-9	9	124.45	2	-9	9	-9	9	-9	2	-9	9	-9	-9	-9		
106	2	2994.7	34.673	2	1.699	1.478	27.749	0.008	0.0	38.0	2	-9	9	131.39	2	-9	9	-9	9	7.5565	2	-9	9	-9	-9	-9		
105	2	3201.2	34.678	2	1.612	1.373	27.761	0.006	0.0	37.4	2	-9	9	140.71	2	-9	9	-9	9	-9	2	-9	9	-9	-9	-9		
104	2	3401.2	34.682	2	1.549	1.292	27.770	0.006	0.0	37.2	2	-9	9	140.71	2	-9	9	-9	9	-9	2	-9	9	-9	-9	-9		
103	2	3524.4	34.686	2	1.497	1.229	27.777	0.006	0.0	36.6	2	-9	9	145.19	2	-9	9	-9	9	-9	2	-9	9	-9	-9	-9		
102	2	3600.5	34.688	2	1.470	1.195	27.781	0.008	0.0	36.9	2	-9	9	147.80	2	-9	9	-9	9	-9	2	-9	9	-9	-9	-9		
101	2	3731.2	34.688	2	1.472	1.183	27.782	0.009	0.0	36.9	2	-9	9	147.71	2	-9	9	-9	9	-9	2	-9	9	-9	-9	-9		

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 153 DATE 4/15/94 LATITUDE 2°40.0'N Btm Depth: 3710
 CAST 3 LONGITUDE 110°20.0'W

Sample ID	Pressure db	Salinity ‰	Subsity ‰	Temp °C	Temp °C	Sigma-t	Theta	Beam Attenuation	NO2 ‰	NO3 ‰	FO4 ‰	F ² S(OH)4 ‰	CFC-11 ‰	CFC-12 ‰	O2 ‰	O2 ‰ @ 20°C	DIC:P ‰	pH	TALK ‰	P ^o ‰	δ13C per mil ‰	TOC ‰	TON ‰	Chl-a ‰	Phaeo ‰	
																										db
336	2	9.1	34.622	2	27.412	27.410	22.151	0.111	0.1	2	4.3	2	0.57	2	3.3	2	1995.7	2	8.0149	2	2290	3	-9	-9	0.141	0.064
335	2	25.2	34.444	2	27.370	27.364	22.183	0.115	0.1	2	4.3	2	0.58	2	3.2	2	-9	-9	8.0150	2	-9	-9	-9	-9	0.156	0.074
334	2	50.2	34.854	2	18.362	18.353	25.073	0.103	0.2	2	14.6	2	1.27	2	10.7	2	-9	-9	7.8209	2	-9	-9	-9	-9	0.172	0.127
333	2	73.3	34.942	2	15.618	15.606	25.792	0.086	0.4	2	20.6	2	1.64	2	15.3	2	-9	-9	7.7070	2	-9	-9	-9	-9	52.3	4.4
332	2	99.5	34.950	2	14.749	14.734	25.999	0.047	0.2	2	23.3	2	1.72	2	18.1	2	-9	-9	-9	1	-9	-9	-9	-9	42.2	4.7
331	2	122.8	34.946	2	14.107	14.089	26.127	0.039	0.0	2	23.6	2	1.75	2	18.1	2	-9	-9	7.6598	2	-9	-9	-9	-9	3.9	0.031
330	2	148.7	34.942	2	13.791	13.770	26.190	0.033	0.0	2	26.3	2	1.93	2	21.0	2	-9	-9	7.6182	2	-9	-9	-9	-9	-9	0.010
329	2	175.9	34.921	2	13.444	13.419	26.246	0.034	0.0	2	26.9	2	1.98	2	21.8	2	-9	-9	7.6074	2	-9	-9	-9	-9	-9	0.005
328	2	199.6	34.903	2	13.077	13.050	26.308	0.034	0.0	2	27.8	2	2.03	2	22.9	2	-9	-9	7.5866	2	-9	-9	-9	-9	49.3	-9
327	2	220.7	34.876	2	12.742	12.712	26.354	0.035	0.0	2	29.8	2	2.14	2	24.6	2	-9	-9	7.5327	2	-9	-9	-9	-9	-9	-9
326	2	248.9	34.841	2	12.300	12.267	26.414	0.035	0.0	2	30.4	2	2.22	2	26.7	2	-9	-9	7.5345	2	-9	-9	-9	-9	-9	-9
325	2	301.5	34.776	2	11.428	11.390	26.530	0.037	0.0	2	30.8	2	2.25	2	29.7	2	-9	-9	7.5208	2	-9	-9	-9	-9	42.7	-9
324	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	39.8	-9
323	2	349.5	34.734	2	10.662	10.620	26.640	0.037	0.0	2	33.0	2	2.43	2	33.0	2	-9	-9	7.4759	2	-9	-9	-9	-9	-9	-9
322	2	399.6	34.682	2	9.486	9.441	26.798	0.032	0.0	2	35.6	2	2.67	2	41.8	2	-9	-9	7.4245	2	-9	-9	-9	-9	39.6	2.7
321	2	498.3	34.620	2	8.117	8.065	26.966	0.029	0.0	2	38.6	2	2.73	2	46.1	2	-9	-9	7.4365	2	-9	-9	-9	-9	-9	-9
320	2	601.7	34.583	2	7.041	6.983	27.093	0.026	0.0	2	39.9	2	2.85	2	54.2	2	-9	-9	7.4338	2	-9	-9	-9	-9	-9	-9
319	2	700.5	34.574	2	6.497	6.433	27.160	0.025	0.0	2	41.5	2	2.96	2	61.0	2	-9	-9	7.4119	2	-9	-9	-9	-9	-9	-9
318	2	797.0	34.563	2	5.821	5.751	27.238	0.026	0.0	2	42.4	2	3.01	2	70.3	2	-9	-9	7.4091	2	-9	-9	-9	-9	-9	-9
317	2	902.8	34.558	2	5.188	5.112	27.312	0.023	0.0	2	43.5	2	3.02	2	78.7	2	-9	-9	7.4197	2	-9	-9	-9	-9	-9	-9
316	2	1001.6	34.561	2	4.521	4.441	27.390	0.022	0.0	2	42.4	2	3.03	2	91.1	2	-9	-9	7.4376	2	-9	-9	-9	-9	37.7	-9
315	2	1098.0	34.572	2	4.120	4.035	27.442	0.021	0.0	2	41.7	2	3.01	2	103.0	2	-9	-9	7.4376	2	-9	-9	-9	-9	-9	-9
314	2	1197.7	34.581	2	3.784	3.693	27.484	0.019	0.0	2	42.1	2	2.99	2	109.6	2	-9	-9	7.4376	2	-9	-9	-9	-9	-9	-9
313	2	1300.2	34.590	2	3.486	3.389	27.521	0.017	0.0	2	41.7	2	2.96	2	113.4	2	-9	-9	7.4376	2	-9	-9	-9	-9	-9	-9
312	2	1401.3	34.596	2	3.275	3.172	27.547	0.017	0.0	2	41.5	2	2.91	2	116.7	2	-9	-9	7.4376	2	-9	-9	-9	-9	-9	-9
311	2	1602.2	34.613	2	2.928	2.812	27.593	0.017	0.0	2	41.1	2	2.92	2	126.6	2	-9	-9	7.4376	2	-9	-9	-9	-9	-9	-9
310	2	1799.4	34.625	2	2.630	2.502	27.630	0.015	0.0	2	40.9	2	2.87	2	134.0	2	-9	-9	7.4376	2	-9	-9	-9	-9	-9	-9
309	2	1999.8	34.635	2	2.408	2.266	27.638	0.012	0.0	2	39.8	2	2.84	2	140.3	2	-9	-9	7.4376	2	-9	-9	-9	-9	41.3	-9
308	2	2347.5	34.650	2	2.108	1.948	27.696	0.010	0.0	2	39.1	2	2.76	2	150.9	2	-9	-9	7.4376	2	-9	-9	-9	-9	-9	-9
307	2	2499.7	34.664	2	1.873	1.695	27.728	0.010	0.0	2	38.9	2	2.70	2	154.2	2	-9	-9	7.4376	2	-9	-9	-9	-9	-9	-9
306	2	2749.3	34.669	2	1.792	1.593	27.738	0.010	0.0	2	38.7	2	2.69	2	153.4	2	-9	-9	7.4376	2	-9	-9	-9	-9	-9	-9
305	2	2998.7	34.673	2	1.729	1.507	27.747	0.007	0.0	2	38.6	2	2.67	2	155.0	2	-9	-9	7.4376	2	-9	-9	-9	-9	37.3	-9
304	2	3249.5	34.678	2	1.610	1.367	27.761	0.006	0.0	2	37.7	2	2.60	2	149.3	2	-9	-9	7.4376	2	-9	-9	-9	-9	-9	-9
303	2	3502.0	34.685	2	1.501	1.234	27.776	0.006	0.0	2	37.1	2	2.55	2	151.0	2	-9	-9	7.4376	2	-9	-9	-9	-9	-9	-9
302	2	3500.8	34.686	2	1.500	1.234	27.777	0.006	0.0	2	37.2	2	2.55	2	154.5	2	-9	-9	7.4376	2	-9	-9	-9	-9	-9	-9
301	2	3741.6	34.688	2	1.466	1.176	27.783	0.009	0.0	2	37.4	2	2.52	2	155.7	2	-9	-9	7.4376	2	-9	-9	-9	-9	41.0	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 154 DATE 4/15/94 LATITUDE 3°0.0'N Btm Depth: 3770
CAST 1 LONGITUDE 110°20.0'W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma T	Sigma T	Beam		NO2 µmol/kg	NO3 µmol/kg	PO4 µmol/kg	SiOH4 µmol/kg	CFC-11 µmol/kg	CFC-12 µmol/kg	O2 µmol/kg	P _{CO2} µatm	DIC µmol/kg	pH	TA µmol/kg	P _{TALK} µmol/kg	813C per mil	TOC µmol/L	TON µmol/L	Chl-a µg/L	Phaeo µg/L
								cp	Theta																	
136	9.2	34.634	2 34.639	2 27.702	27.702	22.217	0.105	0.1	2 4.5	2 0.976	2 203.26	6 343	2 2002.0	2 8.0181	2 2279	6 1.40	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
135	24.3	34.669	2 34.685	2 27.472	27.467	22.319	0.116	0.1	2 4.6	2 0.953	2 202.22	2 -9	9 -9	9 8.0149	2 -9	9 -9	2 2142.0	2 7.544	2 2286	2 -9	9 -9	-9	-9	-9	-9	-9
134	48.5	34.913	2 34.922	2 16.660	16.652	25.530	0.134	0.3	2 19.0	2 0.578	2 98.86	2 778	2 2142.0	2 7.544	2 2286	2 -9	9 -9	2 2176.4	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9
133	73.6	34.943	2 34.948	2 15.207	15.196	25.885	0.100	0.4	2 21.9	2 0.519	2 69.32	2 877	2 2176.4	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9	-9	-9
132	99.1	34.948	2 34.949	2 14.352	14.338	26.076	0.047	0.0	2 23.9	2 0.468	2 61.18	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9	-9
131	126.0	34.940	2 34.941	2 13.889	13.870	26.168	0.033	0.0	2 25.4	2 0.394	2 54.94	2 987	2 2194.3	2 7.6249	2 2286	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9
130	149.4	34.933	2 34.932	2 13.636	13.615	26.216	0.031	0.0	2 26.4	2 0.355	2 44.86	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9	-9
129	174.2	34.911	2 34.909	2 13.270	13.245	26.274	0.032	0.0	2 28.0	2 0.301	2 36.87	2 1138	2 2212.7	2 7.5695	2 2286	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9
128	198.5	34.895	2 34.891	2 13.088	13.061	26.306	0.035	0.0	2 29.1	2 0.269	2 27.30	2 1267	2 2225.9	2 7.5279	2 2286	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9
127	248.4	34.840	2 34.838	2 12.264	12.231	26.430	0.037	0.0	2 31.4	2 0.231	2 36.85	2 1282	2 -9	1 7.5243	2 2292	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9
126	300.6	34.776	2 34.774	2 11.378	11.340	26.539	0.037	0.0	2 33.4	2 0.195	2 30.96	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9	-9
125	350.2	34.722	2 34.721	2 10.442	10.400	26.666	0.036	0.0	2 35.7	2 0.166	2 28.27	2 1750	2 2289.1	2 7.4018	2 2316	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9
124	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	9 -9	2 38.1	2 0.135	2 28.27	2 1750	2 2289.1	2 7.4018	2 2316	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9
123	398.3	34.688	2 34.687	2 9.614	9.569	26.781	0.032	0.0	2 40.7	2 0.107	2 28.27	2 1750	2 2289.1	2 7.4018	2 2316	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9
122	498.6	34.619	2 34.617	2 7.811	7.761	27.010	0.029	0.0	2 42.3	2 0.085	2 28.27	2 1750	2 2289.1	2 7.4018	2 2316	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9
121	601.9	34.590	2 34.590	2 6.999	6.941	27.104	0.026	0.0	2 43.3	2 0.085	2 28.27	2 1750	2 2289.1	2 7.4018	2 2316	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9
120	697.6	34.566	2 34.565	2 6.378	6.314	27.169	0.024	0.0	2 43.3	2 0.085	2 28.27	2 1750	2 2289.1	2 7.4018	2 2316	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9
119	797.4	34.538	2 34.537	2 5.668	5.599	27.253	0.023	0.0	2 41.9	2 0.085	2 28.27	2 1750	2 2289.1	2 7.4018	2 2316	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9
118	898.4	34.539	2 34.538	2 5.122	5.047	27.320	0.023	0.0	2 41.9	2 0.085	2 28.27	2 1750	2 2289.1	2 7.4018	2 2316	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9
117	999.0	34.538	2 34.538	2 4.576	4.496	27.382	0.019	0.0	2 41.7	2 0.085	2 28.27	2 1750	2 2289.1	2 7.4018	2 2316	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9
116	1099.2	34.566	2 34.566	2 4.242	4.156	27.424	0.018	0.0	2 41.8	2 0.085	2 28.27	2 1750	2 2289.1	2 7.4018	2 2316	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9
115	1199.9	34.590	2 34.581	2 3.837	3.746	27.478	0.017	0.0	2 41.8	2 0.085	2 28.27	2 1750	2 2289.1	2 7.4018	2 2316	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9
114	1299.6	34.590	2 34.590	2 3.485	3.389	27.521	0.018	0.0	2 41.2	2 0.085	2 28.27	2 1750	2 2289.1	2 7.4018	2 2316	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9
113	1399.4	34.596	2 34.596	2 3.289	3.196	27.564	0.017	0.0	2 40.9	2 0.085	2 28.27	2 1750	2 2289.1	2 7.4018	2 2316	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9
112	1499.6	34.601	2 34.601	2 3.141	3.032	27.564	0.015	0.0	2 40.1	2 0.085	2 28.27	2 1750	2 2289.1	2 7.4018	2 2316	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9
111	1600.8	34.611	2 34.610	2 2.950	2.834	27.590	0.015	0.0	2 39.6	2 0.085	2 28.27	2 1750	2 2289.1	2 7.4018	2 2316	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9
110	1799.1	34.624	2 34.623	2 2.646	2.517	27.628	0.014	0.0	2 40.0	2 0.085	2 28.27	2 1750	2 2289.1	2 7.4018	2 2316	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9
109	2000.3	34.636	2 34.635	2 2.395	2.252	27.660	0.014	0.0	2 39.6	2 0.085	2 28.27	2 1750	2 2289.1	2 7.4018	2 2316	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9
108	2234.7	34.649	2 34.649	2 2.136	1.977	27.693	0.011	0.0	2 39.0	2 0.085	2 28.27	2 1750	2 2289.1	2 7.4018	2 2316	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9
107	2500.1	34.663	2 34.662	2 1.887	1.709	27.724	0.009	0.0	2 38.4	2 0.085	2 28.27	2 1750	2 2289.1	2 7.4018	2 2316	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9
106	2750.7	34.668	2 34.668	2 1.815	1.615	27.735	0.008	0.0	2 38.3	2 0.085	2 28.27	2 1750	2 2289.1	2 7.4018	2 2316	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9
105	3000.1	34.673	2 34.673	2 1.715	1.493	27.748	0.007	0.0	2 38.0	2 0.085	2 28.27	2 1750	2 2289.1	2 7.4018	2 2316	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9
104	3252.5	34.680	2 34.680	2 1.599	1.355	27.763	0.007	0.0	2 37.9	2 0.085	2 28.27	2 1750	2 2289.1	2 7.4018	2 2316	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9
103	3498.8	34.685	2 34.686	2 1.498	1.232	27.777	0.006	0.0	2 36.8	2 0.085	2 28.27	2 1750	2 2289.1	2 7.4018	2 2316	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9
102	3499.9	34.685	2 34.686	2 1.498	1.232	27.777	0.006	0.0	2 37.2	2 0.085	2 28.27	2 1750	2 2289.1	2 7.4018	2 2316	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9
101	3816.7	34.688	2 34.689	2 1.467	1.169	27.784	0.009	0.0	2 36.2	2 0.085	2 28.27	2 1750	2 2289.1	2 7.4018	2 2316	2 -9	9 -9	2 2295	2 -9	9 -9	2 2295	2 -9	9 -9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94
WOCE P18
NOAA Ship Discoverer

STATION 155 DATE 4/16/94 LATITUDE 3°30.0N Btm Depth: 3930
CAST 1 LONGITUDE 110°20.0W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma T	Theta cp	Beam Attenuation		NO2 µmol/kg	NO3 µmol/kg	PO4 µmol/kg	F ² S(OH) ₄ µmol/kg	CFC-11 P ₀ pmol/kg	CFC-12 P ₀ pmol/kg	O ₂ P ₀ @20°C µmol/kg	CO ₂ P ₀ @20°C µatm	DIC µmol/kg	pH	P _{TALK} µmol/kg	P _{TA} µmol/kg	δ13C per mil	TOC µmol/L	TON µmol/L	Chi-a µg/L	Phaeo µg/L					
								Attenuation	Attenuation																						
136	9.2	34.843	34.845	27.690	27.688	22.378	0.105	0.1	2	4.4	2	0.53	2	1.743	2	202.17	6	347	2	2012.3	2	8.0161	2	2294	6	-9	-9	-9	-9	-9	-9
135	24.0	34.864	34.868	27.663	27.657	22.404	0.121	0.1	2	4.5	2	0.56	2	1.746	2	202.10	6	356	2	2014.6	2	8.0138	2	2291	2	-9	-9	-9	-9	-9	-9
134	49.0	34.818	34.818	18.956	18.948	24.877	0.144	0.4	2	14.2	2	1.24	2	1.313	2	121.51	6	608	2	2112.3	2	7.8119	2	2293	2	-9	-9	-9	-9	-9	-9
133	73.3	34.939	34.937	15.283	15.271	25.865	0.068	0.6	2	21.0	2	1.64	2	1.008	2	74.64	6	896	2	2167.2	2	7.6914	2	2300	2	-9	-9	-9	-9	-9	-9
132	99.1	34.952	34.950	14.576	14.562	26.090	0.033	0.1	2	22.8	2	1.69	2	0.883	2	70.17	6	878	2	2176.1	2	7.6744	2	2297	2	-9	-9	-9	-9	-9	-9
131	124.5	34.951	34.948	14.280	14.262	26.093	0.033	0.0	2	23.0	2	1.72	2	0.916	2	69.92	6	895	2	2179.5	2	7.6677	2	2298	2	-9	-9	-9	-9	-9	-9
130	149.2	34.934	34.933	13.884	13.863	26.165	0.031	0.0	2	24.7	2	1.81	2	0.758	2	60.26	6	960	2	2189.3	2	7.6404	2	2301	2	-9	-9	-9	-9	-9	-9
129	174.2	34.930	34.927	13.588	13.563	26.224	0.031	0.0	2	25.9	2	1.88	2	0.668	2	55.03	6	1006	2	2196.4	2	7.6226	2	2296	2	-9	-9	-9	-9	-9	-9
128	198.6	34.916	34.913	13.300	13.272	26.272	0.032	0.0	2	26.8	2	1.92	2	0.600	2	51.77	6	1036	2	2200.9	2	7.6078	2	2291	2	-9	-9	-9	-9	-9	-9
127	249.3	34.872	34.868	12.663	12.629	26.368	0.035	0.0	2	29.6	2	2.14	2	0.420	2	30.24	6	1223	2	2223.5	2	7.5448	2	2293	2	-9	-9	-9	-9	-9	-9
126	299.8	34.795	34.785	11.638	11.600	26.506	0.036	0.0	2	30.0	2	2.18	2	0.329	2	35.06	6	1284	2	2232.0	2	7.5243	2	2294	2	-9	-9	-9	-9	-9	-9
125	350.7	34.731	34.730	10.721	10.679	26.624	0.036	0.0	2	30.1	2	2.19	2	0.286	2	48.35	6	1264	2	2231.3	2	7.5316	2	2305	2	-9	-9	-9	-9	-9	-9
124	9	-9	-9	-9	-9	-9	-9	-9	-9	9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
123	400.3	34.699	34.697	9.959	9.913	26.731	0.035	0.0	2	33.7	2	2.44	2	0.138	2	29.02	6	1493	2	2255.1	2	7.4643	2	2303	2	-9	-9	-9	-9	-9	-9
122	500.3	34.625	34.623	8.041	7.989	26.981	0.029	0.0	2	39.1	2	2.85	2	0.020	2	15.52	6	1786	2	2287.2	2	7.3941	2	2313	2	-9	-9	-9	-9	-9	-9
121	600.9	34.605	34.603	7.341	7.282	27.088	0.025	0.0	2	40.7	2	2.90	2	0.009	2	11.31	6	1803	2	2291.8	2	7.3933	2	2313	2	-9	-9	-9	-9	-9	-9
120	700.4	34.568	34.566	6.410	6.346	27.167	0.025	0.0	2	40.7	2	2.87	2	0.013	2	11.31	6	1690	2	2289.1	2	7.4199	2	-9	5	-9	-9	-9	-9	-9	-9
119	800.6	34.561	34.561	5.833	5.763	27.236	0.025	0.0	2	41.8	2	2.97	2	0.002	2	40.74	6	1752	2	2302.1	2	7.4088	2	2328	2	-9	-9	-9	-9	-9	-9
118	901.5	34.553	34.551	5.207	5.131	27.305	0.023	0.0	2	41.0	2	2.95	2	0.002	2	54.67	6	1660	2	2304.1	2	7.4291	2	2336	2	-9	-9	-9	-9	-9	-9
117	1001.0	34.558	34.558	4.710	4.629	27.367	0.020	0.0	2	41.7	2	2.96	2	-9	-9	61.64	6	1635	2	2311.0	2	7.4384	2	2349	6	-9	-9	-9	-9	-9	-9
116	1099.2	34.566	34.568	4.300	4.214	27.419	0.019	0.0	2	41.6	2	2.95	2	-9	-9	65.53	6	1622	2	2320.2	2	7.4423	2	2358	2	-9	-9	-9	-9	-9	-9
115	1203.1	34.578	34.577	3.843	3.751	27.476	0.019	0.0	2	41.4	2	2.96	2	-9	-9	70.35	6	1608	2	2329.4	2	7.4522	2	2372	2	-9	-9	-9	-9	-9	-9
114	1299.9	34.589	34.587	3.564	3.467	27.513	0.017	0.0	2	41.7	2	2.80	2	-9	-9	71.65	6	1598	2	2334.3	2	7.4572	2	2383	2	-9	-9	-9	-9	-9	-9
113	1398.6	34.598	34.598	3.328	3.225	27.548	0.017	0.0	2	41.6	2	2.84	2	-9	-9	74.41	6	1582	2	2342.0	2	7.4620	2	2385	2	-9	-9	-9	-9	-9	-9
112	1599.6	34.616	34.615	2.867	2.753	27.601	0.015	0.0	2	40.0	2	2.91	2	-9	-9	82.27	6	1534	2	2348.7	2	7.4690	2	2395	2	-9	-9	-9	-9	-9	-9
111	1801.5	34.629	34.629	2.544	2.417	27.641	0.013	0.0	2	39.6	2	2.83	2	-9	-9	92.69	6	1475	2	2351.2	2	7.4895	2	2403	2	-9	-9	-9	-9	-9	-9
110	1999.3	34.638	34.637	2.342	2.200	27.666	0.012	0.0	2	39.3	2	2.76	2	-9	-9	100.46	6	1421	2	2349.8	2	7.5037	2	2412	2	-9	-9	-9	-9	-9	-9
109	2246.3	34.650	34.649	2.117	1.958	27.695	0.010	0.0	2	38.6	2	2.72	2	-9	-9	108.89	6	1377	2	2350.9	2	7.5183	2	2424	2	-9	-9	-9	-9	-9	-9
108	2498.0	34.663	34.663	1.878	1.700	27.725	0.010	0.0	2	38.2	2	2.67	2	-9	-9	116.26	6	1326	2	2352.7	2	7.5344	2	2422	2	-9	-9	-9	-9	-9	-9
107	2749.4	34.668	34.668	1.821	1.621	27.735	0.008	0.0	2	38.4	2	2.66	2	-9	-9	117.60	6	1321	2	2354.7	2	7.5376	2	2431	2	-9	-9	-9	-9	-9	-9
106	2998.3	34.672	34.672	1.752	1.530	27.745	0.007	0.0	2	38.4	2	2.62	2	-9	-9	128.7	6	1287	2	2353.0	2	7.5469	2	2431	2	-9	-9	-9	-9	-9	-9
105	3247.5	34.680	34.678	1.601	1.358	27.763	0.006	0.0	2	37.7	2	2.58	2	-9	-9	144.99	6	1169	2	2345.6	2	7.5652	2	2429	2	-9	-9	-9	-9	-9	-9
104	3498.2	34.686	34.686	1.477	1.211	27.779	0.006	0.0	2	36.9	2	2.52	2	-9	-9	148.36	6	1145	2	2337.3	2	7.5852	2	2433	2	-9	-9	-9	-9	-9	-9
103	3748.5	34.689	34.690	1.463	1.172	27.784	0.008	0.0	2	36.0	2	2.50	2	-9	-9	148.77	6	1144	2	2337.5	2	7.5902	2	2434	2	-9	-9	-9	-9	-9	-9
102	3748.2	34.689	34.688	1.463	1.172	27.784	0.008	0.0	2	36.2	2	2.48	2	-9	-9	148.77	6	1144	2	2337.5	2	7.5902	2	2434	2	-9	-9	-9	-9	-9	-9
101	3973.0	34.688	34.689	1.487	1.171	27.783	0.009	0.0	2	36.5	2	2.50	2	-9	-9	144.94	6	1138	2	2337.6	2	7.5902	2	2436	2	-9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 156 1 DATE 4/16/94 LATITUDE 4°0.1'N Brm Depth: 3668 Chl-a Phaeo
 CAST 1 LONGITUDE 110°20.1'W

Sample ID	Prestore db	Salinity	Salinity P* Bottle	Temp °C	Temp °C	Sigma T	Sigma T	Theta cp	Beam												Chl-a	Phaeo														
									NO2 P*	NO3 P*	PO4 P*	Si(OH)4 P*	CFC-11 P*	CFC-12 P*	O2 P*	CO2 P* @20°C P*	DIC P*	pH P*	TALK P*	813C TOC P*			813C TOC													
														µmol/kg		µmol/kg		µmol/kg		µmol/kg		µmol/kg		µmol/kg		µmol/L										
136	2	9.2	34.450	2	27.964	27.961	21.994	0.117	0.0	2	1.5	2	0.35	2	1.7	2	1.855	2	0.948	2	205.51	6	306	2	1966.7	2	8.0625	2	2264	2	1.60	-9	-9	0.206	0.087	
135	2	24.7	34.405	2	25.979	25.974	22.593	0.140	0.0	2	1.0	2	0.37	2	2.5	2	1.760	2	0.933	2	199.49	2	-9	9	-9	9	1	-9	9	1.50	-9	-9	0.298	0.167		
134	2	50.7	34.717	2	34.723	19.717	19.707	24.622	0.087	0.7	2	13.5	2	1.19	2	10.4	2	1.481	2	0.777	2	115.85	2	594	2	2102.5	2	-9	1	2279	2	0.60	-9	-9	0.197	0.104
133	2	76.4	34.906	2	34.924	15.960	15.948	25.687	0.065	0.8	2	21.7	2	1.66	2	15.9	2	1.019	2	0.518	2	72.60	2	-9	9	-9	9	7.6896	2	-9	9	0.40	-9	-9	0.220	0.261
132	2	99.7	34.947	2	34.947	14.494	14.480	26.044	0.040	0.0	2	24.6	2	1.78	2	17.5	2	0.886	6	0.446	6	61.92	2	905	2	2183.7	2	7.6557	2	2293	2	0.30	-9	-9	0.123	0.183
131	2	124.5	34.937	2	34.937	13.960	13.942	26.150	0.034	0.0	2	25.9	2	1.85	2	18.9	2	0.747	2	0.384	2	55.55	2	-9	9	-9	9	7.6324	2	-9	9	0.20	-9	-9	0.056	0.096
130	2	140.5	34.931	2	34.930	13.687	13.666	26.203	0.032	0.0	2	26.6	2	1.91	2	19.8	2	0.682	2	0.348	2	52.16	2	-9	9	2197.5	2	7.6207	2	2294	2	0.30	-9	-9	0.021	0.046
129	2	168.5	34.920	2	34.919	13.462	13.439	26.242	0.031	0.0	2	26.9	2	1.98	2	21.3	2	0.613	2	0.319	2	46.94	2	-9	9	-9	9	7.6037	2	-9	9	0.20	-9	-9	0.012	0.033
128	2	197.6	34.902	2	34.901	13.133	13.105	26.296	0.033	0.0	2	28.1	2	2.04	2	22.8	2	0.549	2	0.300	2	41.82	2	1105	2	2209.9	2	7.5809	2	2296	2	0.20	-9	-9	0.005	0.024
127	2	249.6	34.854	2	34.853	12.449	12.416	26.395	0.037	0.0	2	30.9	2	2.18	2	25.7	2	0.384	2	0.206	2	25.52	2	-9	9	2229.5	2	7.5286	2	2293	2	0.10	-9	-9	-9	-9
126	2	302.6	34.810	2	34.808	11.792	11.753	26.488	0.036	0.0	2	32.0	2	2.28	2	27.9	2	0.311	6	0.161	6	22.75	2	1349	2	2237.5	2	7.5046	2	2298	2	0.00	-9	-9	-9	-9
125	2	350.4	34.749	2	34.750	10.952	10.909	26.596	0.036	0.0	2	30.2	2	2.15	2	28.7	2	0.337	2	0.179	2	54.19	2	-9	9	-9	9	7.5540	3	-9	9	0.30	-9	-9	-9	-9
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
123	2	399.8	34.712	2	34.713	10.253	10.206	26.692	0.033	0.0	2	33.2	2	2.37	2	32.5	2	0.184	2	0.096	2	34.88	2	1407	2	2244.1	2	7.4904	2	2299	2	0.10	-9	-9	-9	-9
122	2	498.8	34.642	2	34.643	8.428	8.375	26.936	0.031	0.0	2	38.8	2	2.88	2	46.1	2	0.021	6	0.007	6	8.02	2	1810	2	2287.8	2	7.3883	3	2306	2	-0.10	-9	-9	-9	-9
121	2	601.6	34.592	2	34.590	7.322	7.263	27.060	0.027	0.0	2	39.9	2	2.80	2	49.1	2	0.019	2	0.011	2	39.95	2	1637	2	2275.0	2	7.4344	2	2309	2	0.10	-9	-9	-9	-9
120	2	698.3	34.564	2	34.563	6.566	6.501	27.143	0.025	0.0	2	40.6	2	2.85	2	55.1	2	0.019	2	0.003	2	49.78	2	1615	2	2278.9	2	7.4404	2	2319	2	0.20	-9	-9	-9	-9
119	2	801.7	34.556	2	34.557	6.010	5.938	27.210	0.026	0.0	2	42.1	2	2.91	2	62.9	2	0.002	2	-0.001	2	49.20	2	1660	2	2280.5	2	7.4294	2	2325	2	-0.40	-9	-9	-9	-9
118	2	901.7	34.552	2	34.552	5.372	5.294	27.285	0.023	0.0	2	42.8	2	2.97	2	73.4	2	0.000	2	-0.002	2	50.79	2	1680	2	2301.6	2	7.4248	2	2334	2	0.00	-9	-9	-9	-9
117	2	1001.9	34.555	2	34.555	4.847	4.764	27.350	0.022	0.0	2	43.1	2	3.07	2	85.4	2	0.003	2	0.001	2	53.18	2	1696	2	2313.7	2	7.4236	2	2348	2	0.00	-9	-9	-9	-9
116	2	1100.7	34.564	2	34.563	4.473	4.385	27.398	0.022	0.0	2	43.1	2	3.08	2	97.1	2	-9	-9	-9	-9	53.84	2	-9	9	-9	9	7.4219	2	-9	9	0.00	-9	-9	-9	-9
115	2	1199.7	34.575	2	34.575	4.015	3.922	27.456	0.019	0.0	2	42.8	2	3.08	2	107.6	2	0.014	2	0.001	2	59.02	2	-9	9	-9	9	7.4452	2	-9	9	-0.10	-9	-9	-9	-9
114	2	1301.3	34.583	2	34.583	3.692	3.593	27.496	0.019	0.0	2	42.2	2	3.02	2	112.9	2	-9	-9	-9	-9	67.25	2	-9	9	-9	9	7.4502	2	-9	9	-0.10	-9	-9	-9	-9
113	2	1400.4	34.593	2	34.593	3.406	3.322	27.530	0.017	0.0	2	42.0	2	2.96	2	117.5	2	0.002	2	0.000	2	71.20	2	-9	9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9
112	2	1600.9	34.614	2	34.614	2.941	2.826	27.593	0.018	0.0	2	41.4	2	2.96	2	129.8	2	-9	-9	-9	-9	90.56	6	-9	9	-9	9	7.4669	2	-9	9	-0.10	-9	-9	-9	-9
111	2	1802.0	34.629	2	34.630	2.561	2.433	27.639	0.015	0.0	2	40.9	2	2.89	2	135.6	2	0.004	2	-0.002	2	98.45	2	-9	9	-9	9	7.5002	2	-9	9	-0.10	-9	-9	-9	-9
110	2	1999.5	34.640	2	34.640	2.320	2.179	27.669	0.013	0.0	2	40.2	2	2.84	2	141.9	2	0.004	2	0.007	2	108.75	2	-9	9	-9	9	7.5339	2	-9	9	-0.10	-9	-9	-9	-9
109	2	2239.9	34.653	2	34.653	2.076	1.917	27.700	0.011	0.0	2	39.5	2	2.77	2	150.4	2	0.004	2	0.007	2	115.23	2	-9	9	-9	9	7.5682	2	-9	9	-0.10	-9	-9	-9	-9
108	2	2301.0	34.664	2	34.664	1.876	1.698	27.725	0.010	0.0	2	38.8	2	2.69	2	156.2	2	-9	-9	-9	-9	115.23	2	-9	9	-9	9	7.5992	2	-9	9	-0.10	-9	-9	-9	-9
107	2	2751.3	34.668	2	34.668	1.818	1.617	27.735	0.009	0.0	2	38.8	2	2.68	2	157.2	2	-9	-9	-9	-9	115.23	2	-9	9	-9	9	7.6339	2	-9	9	-0.10	-9	-9	-9	-9
106	2	2998.7	34.672	2	34.672	1.763	1.540	27.744	0.008	0.0	2	37.0	2	2.54	2	155.3	2	0.008	2	-0.002	2	120.74	2	-9	9	-9	9	7.5469	2	-9	9	0.00	-9	-9	-9	-9
105	2	3251.7	34.679	2	34.678	1.617	1.373	27.762	0.007	0.0	2	37.6	2	2.59	2	154.7	2	-9	-9	-9	-9	133.20	2	-9	9	-9	9	7.5822	2	-9	9	0.10	-9	-9	-9	-9
104	2	3499.9	34.686	2	34.686	1.494	1.228	27.777	0.007	0.0	2	36.7	2	2.53	2	153.4	2	-9	-9	-9	-9	143.23	2	-9	9	-9	9	7.5912	2	-9	9	-9	-9	-9	-9	-9
103	2	3750.4	34.688	2	34.690	1.465	1.174	27.783	0.008	0.0	2	36.5	2	2.52	2	151.8	2	0.002	2	0.003	2	148.21	6	-9	9	-9	9	7.5912	2	-9	9	-9	-9	-9	-9	-9
102	2	3750.8	34.688	2	34.688	1.465	1.174	27.783	0.008	0.0	2	36.2	2	2.49	2	151.0	2	-9	-9	-9	-9	148.35	2	-9	9	-9	9	7.5912	2	-9	9	0.10	-9	-9	-9	-9
101	2	3902.1	34.689	2	34.689	1.477	1.169	27.784	0.009	0.0	2	36.0	2	2.51	2	151.0	2	0.003	2	0.012	2	149.27	2	-9	9	-9	9	7.5912	2	-9	9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column

** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 157 DATE 4/16/94 LATITUDE 4°30.0'N BTM Depth: 3973
 CAST 3 LONGITUDE 110°20.0'W

Sample ID	Pressure db	Salinity F**	Salinity F** Bottle	Temp °C	Temp °C	Sigma T	Sigma T	Theta cp	NO2 F*	NO3 F*	PO4 F*	Si(OH)4 F*	CFC-11 F*	CFC-12 F*	O2 F*	F ²⁺ @20°C F*	DIC F*	pH F*	TAIK F*	F ²⁺	F ²⁺	813C TOC per mil	TON µmol/L	Chl-a µg/L	Phaeo µg/L									
																										GTD	Temp °C	Temp °C	cp	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg
336	2	9.8	33.891	2	33.892	2	28.666	28.663	21.544	0.075	0.0	0.0	2	1.719	2	0.945	2	201.27	2	267	2	1908.8	2	8.1102	2	2225	6	-9	-9	-9	-9	0.149	0.055	
335	2	25.5	33.964	2	33.963	2	28.415	28.409	21.497	0.095	0.0	0.0	2	1.744	2	0.960	2	204.22	2	-9	-9	-9	-9	9	8.1124	2	-9	-9	-9	-9	0.208	0.083		
334	2	49.5	34.689	2	34.694	2	21.749	21.740	24.054	0.100	0.7	2	9.4	2	0.96	2	0.96	2	145.34	2	-9	-9	-9	-9	9	7.8927	2	-9	-9	-9	-9	0.451	0.340	
333	2	75.4	34.916	2	34.911	2	15.353	15.341	25.831	0.061	0.6	2	22.2	2	1.003	6	0.903	6	67.52	2	-9	-9	-9	-9	9	7.6866	2	-9	-9	-9	-9	0.233	0.304	
332	2	99.9	34.950	2	34.949	2	14.446	14.431	26.057	0.045	0.0	2	24.1	2	1.71	2	1.71	2	67.84	2	-9	-9	-9	-9	9	7.6688	2	-9	-9	-9	-9	0.152	0.210	
331	2	125.6	34.940	2	34.938	2	13.820	13.802	26.182	0.038	0.0	2	25.3	2	0.796	2	0.381	2	60.76	6	-9	-9	-9	-9	9	7.6390	2	-9	-9	-9	-9	0.032	0.051	
330	2	149.8	34.921	2	34.922	2	13.417	13.396	26.251	0.035	0.0	2	26.7	2	0.540	2	0.280	2	43.42	2	-9	-9	-9	-9	9	7.6162	2	-9	-9	-9	-9	0.011	0.046	
329	2	175.5	34.904	2	34.902	2	13.102	13.077	26.303	0.033	0.0	2	28.3	2	0.280	2	0.280	2	43.42	2	-9	-9	-9	-9	9	7.5852	2	-9	-9	-9	-9	0.008	0.028	
328	2	201.6	34.880	2	34.878	2	12.744	12.716	26.357	0.034	0.0	2	28.7	2	0.340	2	0.175	2	40.20	2	-9	-9	-9	-9	9	7.5677	2	-9	-9	-9	-9	0.006	0.027	
327	2	230.6	34.825	2	34.820	2	11.966	11.933	26.466	0.034	0.0	2	30.6	2	0.340	2	0.175	2	32.89	2	-9	-9	-9	-9	9	7.5312	2	-9	-9	-9	-9	0.008	0.028	
326	2	300.4	34.731	2	34.731	2	10.990	10.953	26.575	0.034	0.0	2	27.9	2	0.205	2	0.113	2	74.16	2	-9	-9	-9	-9	9	7.5960	3	-9	-9	-9	-9	0.008	0.028	
325	2	330.8	34.719	2	34.719	2	10.407	10.366	26.669	0.036	0.0	2	32.2	2	0.231	2	0.113	2	43.32	2	-9	-9	-9	-9	9	7.5128	2	-9	-9	-9	-9	0.008	0.027	
324	9	-9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
323	2	400.3	34.687	2	34.686	2	9.715	9.669	26.764	0.035	0.0	2	34.3	2	0.125	2	0.066	2	31.23	2	-9	-9	-9	-9	9	7.4684	2	-9	-9	-9	-9	0.008	0.028	
322	2	500.5	34.636	2	34.636	2	8.414	8.361	26.934	0.033	0.0	2	38.6	2	0.007	2	0.003	2	18.38	2	-9	-9	-9	-9	9	7.3629	2	-9	-9	-9	-9	0.008	0.028	
321	2	601.1	34.592	2	34.591	2	7.272	7.213	27.068	0.030	0.0	2	40.9	2	0.007	2	0.003	2	18.38	2	-9	-9	-9	-9	9	7.3629	2	-9	-9	-9	-9	0.008	0.028	
320	2	698.4	34.565	2	34.565	2	6.397	6.333	27.166	0.026	0.0	2	42.0	2	0.007	2	0.003	2	18.38	2	-9	-9	-9	-9	9	7.3629	2	-9	-9	-9	-9	0.008	0.028	
319	2	800.7	34.533	2	34.532	2	5.768	5.698	27.237	0.025	0.0	2	41.5	2	0.007	2	0.003	2	18.38	2	-9	-9	-9	-9	9	7.4191	2	-9	-9	-9	-9	0.008	0.028	
318	2	899.4	34.552	2	34.552	2	5.299	5.223	27.294	0.024	0.0	2	42.3	2	0.007	2	0.003	2	18.38	2	-9	-9	-9	-9	9	7.4191	2	-9	-9	-9	-9	0.008	0.028	
317	2	1001.1	34.561	2	34.561	2	4.873	4.791	27.351	0.024	0.0	2	43.5	2	0.003	2	0.002	2	39.05	2	-9	-9	-9	-9	9	7.3963	2	-9	-9	-9	-9	0.008	0.028	
316	2	1100.0	34.567	2	34.567	2	4.397	4.310	27.409	0.021	0.0	2	43.1	2	0.003	2	0.002	2	39.05	2	-9	-9	-9	-9	9	7.3963	2	-9	-9	-9	-9	0.008	0.028	
315	2	1199.7	34.578	2	34.577	2	3.903	3.811	27.470	0.021	0.0	2	42.9	2	0.003	2	0.002	2	39.05	2	-9	-9	-9	-9	9	7.3963	2	-9	-9	-9	-9	0.008	0.028	
314	2	1298.3	34.587	2	34.587	2	3.603	3.506	27.507	0.020	0.0	2	41.8	2	0.003	2	0.002	2	39.05	2	-9	-9	-9	-9	9	7.3963	2	-9	-9	-9	-9	0.008	0.028	
313	2	1400.5	34.595	2	34.596	2	3.360	3.256	27.538	0.020	0.0	2	41.4	2	0.003	2	0.002	2	39.05	2	-9	-9	-9	-9	9	7.3963	2	-9	-9	-9	-9	0.008	0.028	
312	2	1597.6	34.613	2	34.614	2	2.907	2.792	27.595	0.017	0.0	2	41.1	2	0.003	2	0.002	2	39.05	2	-9	-9	-9	-9	9	7.3963	2	-9	-9	-9	-9	0.008	0.028	
311	2	1801.3	34.628	2	34.628	2	2.572	2.444	27.637	0.015	0.0	2	40.1	2	0.003	2	0.002	2	39.05	2	-9	-9	-9	-9	9	7.3963	2	-9	-9	-9	-9	0.008	0.028	
310	2	2000.6	34.639	2	34.639	2	2.346	2.204	27.666	0.013	0.0	2	39.6	2	0.003	2	0.002	2	39.05	2	-9	-9	-9	-9	9	7.3963	2	-9	-9	-9	-9	0.008	0.028	
309	2	2251.3	34.656	2	34.656	2	2.010	1.851	27.708	0.010	0.0	2	39.2	2	0.003	2	0.002	2	39.05	2	-9	-9	-9	-9	9	7.3963	2	-9	-9	-9	-9	0.008	0.028	
308	2	2500.0	34.663	2	34.664	2	1.877	1.699	27.735	0.012	0.0	2	38.5	2	0.003	2	0.002	2	39.05	2	-9	-9	-9	-9	9	7.3963	2	-9	-9	-9	-9	0.008	0.028	
307	2	2748.2	34.668	2	34.667	2	1.824	1.624	27.735	0.009	0.0	2	38.4	2	0.003	2	0.002	2	39.05	2	-9	-9	-9	-9	9	7.3963	2	-9	-9	-9	-9	0.008	0.028	
306	2	2998.7	34.673	2	34.672	2	1.742	1.520	27.746	0.008	0.0	2	37.8	2	0.003	2	0.002	2	39.05	2	-9	-9	-9	-9	9	7.3963	2	-9	-9	-9	-9	0.008	0.028	
305	2	3248.4	34.681	2	34.681	2	1.593	1.350	27.765	0.007	0.0	2	37.5	2	0.003	2	0.002	2	39.05	2	-9	-9	-9	-9	9	7.3963	2	-9	-9	-9	-9	0.008	0.028	
304	2	3499.9	34.686	2	34.686	2	1.504	1.238	27.777	0.008	0.0	2	36.9	2	0.003	2	0.002	2	39.05	2	-9	-9	-9	-9	9	7.3963	2	-9	-9	-9	-9	0.008	0.028	
303	2	3750.4	34.689	2	34.690	2	1.460	1.169	27.784	0.008	0.0	2	36.3	2	0.003	2	0.002	2	39.05	2	-9	-9	-9	-9	9	7.3963	2	-9	-9	-9	-9	0.008	0.028	
302	2	3949.5	34.689	2	34.689	2	1.460	1.169	27.784	0.008	0.0	2	36.6	2	0.003	2	0.002	2	39.05	2	-9	-9	-9	-9	9	7.3963	2	-9	-9	-9	-9	0.008	0.028	
301	2	3990.0	34.689	2	34.689	2	1.483	1.166	27.784	0.008	0.0	2	36.6	2	0.003	2	0.002	2	39.05	2	-9	-9	-9	-9	9	7.3963	2	-9	-9	-9	-9	0.008	0.028	

* WOCE water sample quality flag (F) for parameter from previous column

** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 159 1 DATE 4/17/94 LATITUDE 5°30.0'N Btm Depth: 3952 CHL-a Fluoro
CAST 1 LONGITUDE 110°20.1'W

Sample ID	Pressure db	Salinity	F ^o Salinity	Temp °C	Temp °C	Sigma T	Sigma T	Theta	Beam	CO2										TA	F ^o TA	pH	F ^o pH	DIC	F ^o DIC	813C	TOC	TON	CHL-a	Fluoro				
										NO2	F ^o NO2	NO3	F ^o NO3	PO4	F ^o PO4	Si(OH)4	F ^o Si(OH)4	CFC-11	F ^o CFC-11												CFC-12	F ^o CFC-12	O2	F ^o O2
136	2	23.2	33.761	2	33.769	2	28.965	28.960	21.147	0.078	0.0	0.1	2	0.17	2	1.709	2	0.951	2	199.68	2	265	2	1904.0	2	8.1094	2	2277	2	-9	85.1	-9	-9	
135	2	48.5	34.104	2	34.117	2	28.419	28.407	21.588	0.077	0.0	0.0	2	0.16	2	1.744	2	0.947	2	202.08	2	266	2	1909.4	2	8.1214	2	2240	2	-9	72.2	-9	-9	
134	2	75.4	34.671	2	34.673	2	17.774	17.761	25.079	0.077	0.6	2	24.4	2	2.03	2	0.614	4	0.317	4	38.78	2	986	2	2177.3	3	7.6251	2	2280	2	-9	58.8	4.6	-9
133	2	97.5	34.774	2	34.777	2	14.337	14.323	25.944	0.053	0.0	2	30.7	2	2.39	2	0.451	2	0.241	2	11.15	2	1310	2	2223.3	2	7.5142	2	2293	2	-9	47.8	4.0	-9
132	2	125.4	34.771	2	34.773	2	12.636	12.619	26.291	0.056	0.0	2	31.4	2	2.29	2	0.454	2	0.242	2	20.70	2	1326	2	2227.1	2	7.5142	2	2291	2	-9	47.8	3.4	-9
131	2	150.1	34.771	2	34.772	2	12.077	12.057	26.400	0.031	0.0	2	31.7	2	2.33	2	0.374	2	0.204	2	22.78	2	1340	2	2231.7	2	7.5077	2	2296	2	-9	-9	-9	-9
130	2	174.2	34.751	2	34.751	2	11.589	11.567	26.477	0.034	0.0	2	31.7	2	2.33	2	0.376	6	0.170	6	27.88	2	1338	2	2234.5	2	7.5087	2	2297	2	-9	46.6	-9	-9
129	2	199.8	34.748	2	34.748	2	11.122	11.097	26.558	0.034	0.0	2	31.9	2	2.31	2	0.278	2	0.153	2	33.54	2	1335	2	2234.6	2	7.5102	2	2299	2	-9	-9	-9	-9
128	2	249.1	34.722	2	34.722	2	10.543	10.513	26.646	0.038	0.0	2	32.7	2	2.34	2	0.199	2	0.107	2	34.29	2	1382	2	2241.1	2	7.4954	2	2306	2	-9	45.6	2.6	-9
127	2	300.4	34.702	2	34.701	2	10.082	10.047	26.711	0.039	0.0	2	33.5	2	2.38	2	0.159	2	0.083	2	34.83	6	1416	2	2244.9	2	7.4855	2	2305	2	-9	-9	-9	-9
126	3	349.3	34.682	2	34.681	2	9.624	9.584	26.774	0.038	0.0	2	35.5	2	2.54	2	0.098	6	0.050	6	25.65	2	1540	2	2257.1	2	7.4544	2	2303	2	-9	-9	-9	-9
125	2	399.7	34.667	2	34.666	2	9.232	9.187	26.827	0.036	0.0	2	36.5	2	2.71	2	0.046	2	0.026	2	11.88	2	1703	6	2273.1	2	-9	9	2307	2	-9	-9	-9	-9
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	
123	3	501.8	34.616	2	34.614	2	8.044	7.992	26.973	0.032	0.0	2	38.3	2	3.05	2	0.008	2	0.004	2	2.89	6	-9	9	2298.0	2	-9	9	2321	2	-9	47.6	-9	-9
122	2	598.9	34.581	2	34.579	2	6.904	6.847	27.110	0.029	0.0	2	42.1	2	3.09	2	0.005	2	0.002	2	16.24	2	1880	2	2301.6	2	7.3772	2	2322	2	-9	40.2	-9	-9
121	2	699.9	34.562	2	34.562	2	6.149	6.086	27.195	0.027	0.0	2	43.1	2	3.14	2	0.010	2	0.002	2	19.53	2	1909	2	2313.7	3	7.3716	2	2343	3	-9	-9	-9	-9
120	2	800.5	34.538	2	34.539	2	5.483	5.415	27.276	0.028	0.0	2	44.1	2	3.14	2	0.005	2	-0.002	2	28.71	2	1880	2	2321.4	3	7.3798	2	2333	2	-9	-9	-9	-9
119	2	900.4	34.537	2	34.538	2	5.054	4.979	27.327	0.025	0.0	2	44.7	2	3.12	2	0.010	2	0.004	2	35.29	2	1832	2	2325.4	3	7.3897	2	2344	2	-9	-9	-9	-9
118	2	1001.9	34.564	2	34.565	2	4.496	4.416	27.395	0.024	0.0	2	44.3	2	3.15	2	0.004	2	0.002	2	44.75	2	1773	2	2355.1	3	7.4042	2	-9	5	-9	-9	-9	
117	2	1098.9	34.573	2	34.574	2	4.184	4.099	27.486	0.023	0.0	2	43.6	2	3.08	2	0.003	2	0.002	2	52.57	2	1722	2	2335.6	3	7.4176	2	2364	2	-9	39.3	-9	-9
116	2	1200.0	34.583	2	34.583	2	3.872	3.780	27.477	0.022	0.0	2	43.5	2	3.04	2	0.010	2	0.002	2	57.28	2	1695	2	2340.9	3	7.4262	2	2374	2	-9	-9	-9	-9
115	2	1301.2	34.588	2	34.588	2	3.585	3.487	27.510	0.020	0.0	2	42.8	2	3.02	2	0.006	2	0.002	2	63.75	6	1657	2	2343.2	3	7.4380	2	2374	2	-9	-9	-9	-9
114	2	1400.2	34.597	2	34.597	2	3.331	3.228	27.542	0.020	0.0	2	42.4	2	3.02	2	-9	9	-9	9	68.54	2	1633	2	2347.6	3	7.4467	2	2380	2	-9	-9	-9	-9
113	2	1800.6	34.613	2	34.615	2	2.892	2.777	27.597	0.017	0.0	2	41.6	2	2.89	2	0.001	2	-0.001	2	84.84	2	1529	2	2355.7	3	7.4753	2	2402	2	-9	-9	-9	-9
112	2	1999.8	34.641	2	34.641	2	2.303	2.162	27.671	0.014	0.0	2	40.7	2	2.85	2	0.001	2	0.001	2	95.12	2	1468	2	2358.1	3	7.4949	2	2417	2	-9	-9	-9	-9
111	2	2249.2	34.656	2	34.656	2	2.022	1.864	27.706	0.011	0.0	2	39.5	2	2.78	2	0.001	2	0.001	2	106.27	2	1389	2	2356.7	3	7.5165	2	2421	2	-9	-9	-9	-9
110	2	2498.9	34.665	2	34.666	2	1.864	1.686	27.728	0.010	0.0	2	39.5	2	2.75	2	0.005	2	0.005	2	111.25	2	1360	2	2359.2	3	7.5264	2	2432	2	-9	-9	-9	-9
109	2	2750.2	34.669	2	34.668	2	1.821	1.621	27.735	0.009	0.0	2	39.1	2	2.71	2	0.005	2	0.005	2	113.38	2	1295	2	2361.8	3	7.5312	2	2447	2	-9	-9	-9	-9
108	2	2999.2	34.673	2	34.672	2	1.744	1.522	27.746	0.008	0.0	2	39.0	2	2.70	2	0.001	2	0.001	2	119.30	2	1315	2	2358.1	3	7.5419	2	2434	2	-9	-9	-9	-9
107	2	3252.2	34.681	2	34.681	2	1.589	1.346	27.765	0.009	0.0	2	38.4	2	2.61	2	0.001	2	0.001	2	132.09	2	1258	2	2348.6	3	7.5654	2	2458	2	-9	-9	-9	-9
106	2	3501.1	34.684	2	34.684	2	1.551	1.283	27.772	0.007	0.0	2	38.2	2	2.56	2	0.002	2	0.002	2	138.26	2	1206	2	2344.9	2	7.5743	2	2434	2	-9	-9	-9	-9
105	2	3746.6	34.687	2	34.687	2	1.506	1.214	27.779	0.007	0.0	2	37.8	2	2.52	2	0.011	2	0.011	2	144.05	2	1174	2	2341.4	2	7.5839	2	2435	2	-9	-9	-9	-9
104	2	3747.8	34.687	2	34.690	2	1.504	1.212	27.779	0.007	0.0	2	37.7	2	2.53	2	0.011	2	-0.002	2	144.10	2	1164	2	2340.5	2	7.5866	2	2433	2	-9	-9	-9	-9
103	2	3966.0	34.688	2	34.687	2	1.507	1.191	27.782	0.008	0.0	2	37.8	2	2.51	2	0.011	2	-0.002	2	147.22	2	1154	2	2339.3	2	7.5882	2	2433	2	-9	-9	-9	-9
102	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	0.0	2	37.5	2	2.52	2	0.011	2	-9	9	146.33	2	1158	2	2342.9	2	7.5879	2	2436	2	-9	-9	-9	-9
101	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	0.0	2	37.5	2	2.52	2	0.011	2	-9	9	146.33	2	1158	2	2342.9	2	7.5879	2	2436	2	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94
 WOCE P18
 NOAA Ship Discoverer

STATION	160	DATE	4/17/94	LATITUDE	6°0.0'N	Bottom Depth:	3850
CAST	1			LONGITUDE	110°20.0'W		

Sample ID	Pressure	Salinity	P* Salinity	P* Temp	°C	Potential Temp	°C	Sigma T	Theta	Sp	Beam	NO2	P* NO3	P* PO4	P* Si(OH)4	P* CFC-11	P* CFC-12	P* O2	P* @20°C	CO2	DIC	P* DIC	P* pH	P* TA	P* TA	P* TA	TON	TON	TON	Chl-a	Phaeo
	db	CTD	‰	‰	°C	°C	°C	kg/dm ³	°C	g/cm ³	µm	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µg/L	µg/L

STATION ABORTED

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 161 DATE 4/17/94 LATITUDE 6°29.9'N Btm Depth: 3255
 CAST 1 LONGITUDE 110°20.0'W

Sample ID	P* Pressure db	Salinity CTD	P* Salinity Bottle	Temp °C	Temp °C	Sigma T	Sigma T	Theta cp	NO2 P* μmol/kg	NO3 P* μmol/kg	PO4 P* μmol/kg	SiO4 P* μmol/kg	CFC-11 P* μmol/kg	CFC-12 P* μmol/kg	O2 P* μmol/kg	P* @20°C μmol/kg	DIC P* μmol/kg	pH P*	TA K P* μmol/kg	P* 813C per mil	TOC μmol/L	TON μmol/L	Chl-a Phaeo μg/L
136	8.7	33.810	33.814	29.099	29.097	21.138	0.061	0.0	2.0	0.0	0.17	0.5	2.0	1.9708	2.272	1898.8	2.81206	2.2221	2.160	95.7	4.5	-9	
135	24.0	33.814	33.822	29.096	29.090	21.164	0.072	0.0	2.0	0.0	0.15	0.6	2.0	1.690	2.0955	1975.6	2.81207	2.2221	2.160	95.7	4.5	-9	
134	49.7	34.184	34.166	27.590	27.578	21.918	0.107	0.0	2.0	0.0	0.17	0.9	2.0	1.710	2.0930	2021.0	2.81140	2.2256	2.160	95.7	4.5	-9	
133	74.5	34.638	34.644	19.743	19.730	24.556	0.096	0.3	2.0	16.0	1.43	10.1	2.0	1.298	2.0643	92.94	2.7696	2.2256	2.160	95.7	4.5	-9	
132	99.1	34.722	34.726	13.916	13.902	25.993	0.047	0.1	2.0	28.4	2.11	21.1	2.0	0.723	2.0373	34.73	2.28077	2.2290	2.160	95.7	4.5	-9	
131	124.3	34.712	34.708	12.625	12.609	26.247	0.056	0.0	2.0	27.9	2.08	23.7	2.0	0.627	2.0324	47.41	2.75712	2.2290	2.160	95.7	4.5	-9	
130	149.0	34.770	34.770	12.274	12.255	26.361	0.035	0.0	2.0	29.9	2.16	24.5	2.0	0.480	2.0256	37.99	2.2223	2.2290	2.160	95.7	4.5	-9	
129	174.1	34.751	34.754	11.769	11.746	26.444	0.034	0.0	2.0	30.7	2.19	25.7	2.0	0.401	2.0211	6.3728	2.75345	2.2305	2.160	95.7	4.5	-9	
128	198.6	34.750	34.755	11.393	11.368	26.514	0.034	0.0	2.0	31.6	2.24	26.7	2.0	0.336	2.0182	37.03	2.2323.9	2.2305	2.160	95.7	4.5	-9	
127	223.2	34.736	34.738	11.038	11.011	26.568	0.036	0.0	2.0	30.9	2.23	27.6	2.0	0.310	2.0177	42.95	2.75274	2.2305	2.160	95.7	4.5	-9	
126	248.8	34.737	34.736	10.755	10.725	26.620	0.036	0.0	2.0	33.1	2.40	29.5	2.0	0.190	2.0107	24.25	2.2251.6	2.2302	2.160	95.7	4.5	-9	
125	299.3	34.711	34.711	10.259	10.224	26.688	0.038	0.0	2.0	35.0	2.48	31.7	2.0	0.132	2.0072	18.44	2.2258.9	2.2302	2.160	95.7	4.5	-9	
124	9	34.692	34.691	9.816	9.776	26.749	0.037	0.0	2.0	34.4	2.48	31.5	2.0	0.059	2.0035	10.88	2.2270.5	2.2316	2.160	95.7	4.5	-9	
123	397.2	34.663	34.661	9.216	9.172	26.827	0.038	0.0	2.0	36.5	2.75	39.0	2.0	-9	1.687	1761	2.2279.5	2.2312	2.160	95.7	4.5	-9	
122	497.2	34.623	34.623	8.273	8.231	26.945	0.031	0.0	2.0	37.0	2.99	48.3	2.0	0.008	2.0004	1.45	2.2298.3	2.2319	2.160	95.7	4.5	-9	
120	599.6	34.583	34.581	7.046	6.988	27.092	0.030	0.0	2.0	41.0	3.19	59.6	2.0	-0.002	2.0003	2.39	2.2314.5	2.2333	2.160	95.7	4.5	-9	
119	700.2	34.566	34.565	6.070	6.008	27.209	0.031	0.0	2.0	44.3	3.23	68.3	2.0	0.004	2.0003	10.51	2.2322.0	2.2337	2.160	95.7	4.5	-9	
118	801.5	34.562	34.561	5.394	5.325	27.289	0.028	0.0	2.0	44.1	3.18	80.2	2.0	0.001	2.0001	20.65	2.2328.8	2.2340	2.160	95.7	4.5	-9	
117	898.3	34.561	34.560	5.037	4.962	27.331	0.026	0.0	2.0	44.7	3.14	85.0	2.0	0.002	2.0003	31.03	2.2328.6	2.2345	2.160	95.7	4.5	-9	
116	999.3	34.567	34.568	4.550	4.470	27.391	0.024	0.0	2.0	44.2	3.14	94.0	2.0	0.001	2.0003	35.26	2.2337.2	2.2354	2.160	95.7	4.5	-9	
115	1099.6	34.571	34.571	4.107	4.022	27.443	0.022	0.0	2.0	42.2	3.04	101.2	2.0	-9	9.5482	2.9	2.2337.2	2.2354	2.160	95.7	4.5	-9	
114	1201.4	34.579	34.579	3.827	3.736	27.478	0.020	0.0	2.0	42.2	3.01	107.0	2.0	-9	9.5980	2.9	2.2337.2	2.2354	2.160	95.7	4.5	-9	
113	1297.9	34.586	34.586	3.560	3.463	27.511	0.018	0.0	2.0	41.9	3.00	112.7	2.0	-0.001	2.0003	65.62	2.2337.2	2.2354	2.160	95.7	4.5	-9	
112	1400.6	34.594	34.594	3.364	3.260	27.537	0.017	0.0	2.0	41.8	3.00	118.1	2.0	-9	9.7339	2.9	2.2337.2	2.2354	2.160	95.7	4.5	-9	
111	1598.1	34.613	34.613	2.887	2.772	27.597	0.016	0.0	2.0	41.3	2.99	130.4	2.0	-9	9.7339	2.9	2.2337.2	2.2354	2.160	95.7	4.5	-9	
110	1797.9	34.627	34.627	2.576	2.448	27.636	0.015	0.0	2.0	40.1	2.89	137.4	2.0	0.005	2.0001	84.55	2.2337.2	2.2354	2.160	95.7	4.5	-9	
109	1999.0	34.640	34.640	2.301	2.160	27.670	0.012	0.0	2.0	39.9	2.83	142.4	2.0	-9	9.9333	2.9	2.2337.2	2.2354	2.160	95.7	4.5	-9	
108	2199.4	34.650	34.652	2.116	1.961	27.695	0.011	0.0	2.0	39.7	2.79	146.7	2.0	-9	9.9833	2.9	2.2337.2	2.2354	2.160	95.7	4.5	-9	
107	2391.5	34.660	34.658	1.956	1.786	27.716	0.011	0.0	2.0	38.7	2.69	156.4	2.0	-9	9.10292	2.9	2.2337.2	2.2354	2.160	95.7	4.5	-9	
106	2601.4	34.665	34.665	1.860	1.673	27.729	0.009	0.0	2.0	37.9	2.66	158.6	2.0	0.001	2.0001	108.79	2.2337.2	2.2354	2.160	95.7	4.5	-9	
105	2800.8	34.669	34.670	1.810	1.605	27.737	0.008	0.0	2.0	37.2	2.60	161.5	2.0	-0.001	2.0001	113.06	2.2337.2	2.2354	2.160	95.7	4.5	-9	
104	2999.7	34.675	34.674	1.698	1.477	27.751	0.008	0.0	2.0	37.4	2.65	158.9	2.0	-9	9.12219	2.9	2.2337.2	2.2354	2.160	95.7	4.5	-9	
103	3200.0	34.681	34.683	1.569	1.331	27.767	0.007	0.0	2.0	36.9	2.58	155.9	2.0	0.001	2.0001	122.19	2.2337.2	2.2354	2.160	95.7	4.5	-9	
102	3198.8	34.682	34.680	1.567	1.329	27.767	0.008	0.0	2.0	36.8	2.55	156.0	2.0	-9	9.13424	2.9	2.2337.2	2.2354	2.160	95.7	4.5	-9	
101	3265.5	34.683	34.682	1.538	1.294	27.771	0.007	0.0	2.0	37.6	2.57	153.8	2.0	-0.002	2.0012	137.12	2.2337.2	2.2354	2.160	95.7	4.5	-9	

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94

WOCE P18

NOAA Ship Discoverer

STATION 162 DATE 4/18/94 LATITUDE 7°00'N Btm Depth: 3823
 CAST 1 LONGITUDE 110°20.4'W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Potential			NO2 µmol/kg	NO3 µmol/kg	PO4 µmol/kg	Si(OH)4 µmol/kg	F ²⁺ µmol/kg	CFC-11 µmol/kg	CFC-12 µmol/kg	O2 µmol/kg	P ²⁺ µmol/kg	P ³⁺ µmol/kg	DIC µmol/kg	pH	P ²⁺ µmol/kg	P ³⁺ µmol/kg	Talk µmol/kg	P ²⁺ µmol/kg	P ³⁺ µmol/kg	813C per mil	TOC µmol/L	TON µmol/L	Chi-4 µg/L	Phase				
						Sigma T	Theta	Theta cp																										
136	2	33.987	2	33.994	2	29.034	29.032	21.293	0.067	0.0	2	0.1	2	0.19	2	2.0	2	0.9	9	197.28	2	254	2	1901.8	2	8.1200	2	2228	6	1.60	-9	-9	-9	
135	2	24.5	33.985	2	33.991	2	29.040	29.034	21.291	0.074	0.0	2	0.1	2	1.6	2	0.9	9	196.74	2	-9	9	9	9	8.1218	2	-9	9	-9	-9	-9			
134	2	51.1	34.427	2	34.420	2	25.073	25.062	22.889	0.211	0.0	2	0.3	2	0.7	2	0.9	9	206.38	2	315	2	1973.7	2	8.0490	2	2264	2	-9	-9	-9	-9		
133	2	75.3	34.672	2	34.664	2	18.114	18.101	24.996	0.063	1.0	2	23.1	2	1.88	2	14.4	2	9	50.05	2	-9	9	9	7.6549	2	-9	9	-9	-9	-9			
132	3	97.3	34.813	2	34.813	2	14.326	14.312	25.977	0.047	-9	1	-9	1	-9	1	-9	9	13.83	2	-9	9	9	9	7.5157	2	-9	9	-9	-9	-9			
131	2	125.2	34.821	2	34.822	2	12.846	12.829	26.289	0.036	0.0	2	31.7	2	2.34	2	25.3	2	9	17.09	2	-9	9	2230.2	2	7.5094	2	2292	2	-9	-9	-9	-9	
130	2	152.3	34.802	2	34.805	2	11.323	11.303	26.377	0.035	0.0	2	32.8	2	2.40	2	26.8	2	9	10.82	6	1378	2	2288.8	2	7.4879	2	2280	2	-9	-9	-9	-9	
129	2	174.9	34.776	2	34.775	2	11.844	11.821	26.449	0.033	0.0	2	32.0	2	2.30	2	27.4	2	9	9	27.87	2	-9	9	7.5157	2	-9	9	-9	-9	-9			
128	2	198.9	34.764	2	34.765	2	11.442	11.416	26.515	0.034	0.0	2	32.6	2	2.29	2	28.4	2	9	28.94	2	1351	2	2235.1	2	7.5057	2	2289	2	-9	-9	-9	-9	
127	2	224.3	34.749	2	34.750	2	11.112	11.084	26.565	0.038	0.0	2	32.3	2	2.30	2	29.5	2	9	9	34.55	2	-9	9	7.5108	2	-9	9	-9	-9	-9			
126	2	249.5	34.742	2	34.741	2	10.908	10.877	26.597	0.037	0.0	2	33.0	2	2.35	2	30.7	2	9	9	31.16	2	-9	9	2240.2	2	7.4980	2	2298	2	-9	-9	-9	-9
125	2	299.8	34.721	2	34.721	2	10.409	10.373	26.670	0.037	0.0	2	34.4	2	2.49	2	33.5	2	9	9	19.05	2	1530	2	2255.5	2	7.4580	2	2300	2	-9	-9	-9	-9
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	
123	2	348.1	34.691	2	34.690	2	9.764	9.724	26.757	0.034	0.0	2	35.3	2	2.72	2	39.6	2	9	5.07	2	1735	2	2278.5	2	7.4056	2	2301	2	-9	-9	-9	-9	
122	2	398.1	34.664	2	34.664	2	9.195	9.150	26.830	0.031	0.0	2	36.3	2	2.83	2	43.6	2	9	3.00	2	1806	2	2288.0	2	7.3889	2	2309	2	-9	-9	-9	-9	
121	2	499.3	34.606	2	34.605	2	7.965	7.913	26.978	0.031	0.0	2	37.6	2	3.06	2	54.3	2	9	1.44	2	1917	2	2304.3	2	7.3626	2	2321	2	-9	-9	-9	-9	
120	2	599.3	34.580	2	34.579	2	6.898	6.841	27.110	0.030	0.0	2	42.0	2	3.25	2	63.9	2	9	3.34	2	2005	2	2316.7	2	7.3504	2	2327	2	-9	-9	-9	-9	
119	2	698.9	34.568	2	34.566	2	6.096	6.034	27.207	0.028	0.0	2	45.1	2	3.29	2	72.1	2	9	8.17	6	2016	2	2325.4	2	7.3470	2	2335	2	-9	-9	-9	-9	
118	2	797.2	34.560	2	34.560	2	5.541	5.472	27.271	0.025	0.0	2	45.2	2	3.20	2	77.2	2	9	25.23	2	1890	2	2322.3	3	7.3748	2	2341	2	-9	-9	-9	-9	
117	2	899.0	34.561	2	34.560	2	5.079	5.004	27.327	0.024	0.0	2	44.8	2	3.21	2	84.8	2	9	32.61	2	1854	2	2326.9	2	7.3848	2	2346	2	-9	-9	-9	-9	
116	2	1001.6	34.565	2	34.565	2	4.682	4.601	27.376	0.023	0.0	2	45.1	2	3.24	2	93.3	2	9	34.98	2	1868	2	2335.7	2	7.3857	2	2356	6	-9	-9	-9	-9	
115	2	1099.3	34.568	2	34.568	2	4.277	4.191	27.423	0.021	0.0	2	43.9	2	3.17	2	100.6	2	9	46.29	2	-9	9	9	9	7.4252	2	-9	9	-9	-9	-9	-9	
114	2	1204.3	34.575	2	34.575	2	3.932	3.840	27.465	0.019	0.0	2	43.4	2	3.10	2	106.5	2	9	57.09	2	-9	9	9	9	7.4252	2	-9	9	-9	-9	-9	-9	
113	2	1397.2	34.591	2	34.592	2	3.426	3.322	27.529	0.017	0.0	2	42.6	2	3.08	2	119.9	2	9	65.74	2	-9	9	9	9	7.4590	2	-9	9	-9	-9	-9	-9	
112	2	1601.0	34.612	2	34.612	2	2.906	2.791	27.594	0.017	0.0	2	42.1	2	3.03	2	133.8	2	9	73.70	2	-9	9	9	9	7.4590	2	-9	9	-9	-9	-9	-9	
111	2	1744.3	34.620	2	34.619	2	2.696	2.571	27.620	0.016	0.0	2	42.1	2	3.02	2	137.7	2	9	80.87	2	-9	9	9	9	7.4590	2	-9	9	-9	-9	-9	-9	
110	2	1996.7	34.637	2	34.637	2	2.328	2.187	27.666	0.013	0.0	2	40.6	2	2.89	2	143.8	2	9	92.10	2	-9	9	9	9	7.4879	2	-9	9	-9	-9	-9	-9	
109	2	2252.2	34.654	2	34.653	2	2.033	1.874	27.705	0.011	0.0	2	40.2	2	2.84	2	152.3	2	9	107.72	2	-9	9	9	9	7.5187	2	-9	9	-9	-9	-9	-9	
108	2	2499.6	34.665	2	34.664	2	1.867	1.689	27.727	0.010	0.0	2	39.7	2	2.78	2	157.7	2	9	110.84	2	-9	9	9	9	7.5187	2	-9	9	-9	-9	-9	-9	
107	2	2747.7	34.668	2	34.668	2	1.858	1.638	27.733	0.009	0.0	2	39.2	2	2.78	2	160.1	2	9	117.46	2	-9	9	9	9	7.5187	2	-9	9	-9	-9	-9	-9	
106	2	2998.1	34.673	2	34.673	2	1.742	1.520	27.747	0.009	0.0	2	39.5	2	2.73	2	158.1	2	9	117.46	2	-9	9	9	9	7.5187	2	-9	9	-9	-9	-9	-9	
105	2	3247.2	34.679	2	34.679	2	1.629	1.386	27.761	0.007	0.0	2	39.0	2	2.67	2	158.5	2	9	130.14	6	-9	9	9	9	7.5187	2	-9	9	-9	-9	-9	-9	
104	2	3498.3	34.683	2	34.683	2	1.573	1.305	27.770	0.007	0.0	2	38.3	2	2.63	2	154.8	2	9	136.33	2	-9	9	9	9	7.5187	2	-9	9	-9	-9	-9	-9	
103	2	3747.1	34.685	2	34.687	2	1.529	1.236	27.777	0.009	0.0	2	37.9	2	2.59	2	153.4	2	9	142.20	2	-9	9	9	9	7.5187	2	-9	9	-9	-9	-9	-9	
102	3	3747.0	34.686	2	34.683	2	1.529	1.236	27.777	0.009	0.0	2	38.0	2	2.60	2	152.5	2	9	142.20	2	-9	9	9	9	7.5187	2	-9	9	-9	-9	-9	-9	
101	2	3877.6	34.686	2	34.685	2	1.542	1.235	27.777	0.009	0.0	2	37.6	2	2.60	2	153.0	2	9	142.20	2	-9	9	9	9	7.5187	2	-9	9	-9	-9	-9	-9	

* WOCE water sample quality flag (F) for parameter from previous column

** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 163 DATE 4/18/94 LATITUDE 7°29.9'N Btm Depth: 3939
 CAST 1 LONGITUDE 110°20.1'W

Sample ID	Pressure db	Salinity ‰	Salinity ‰ Bottle	Temp °C	Temp °C	Potential			NO2 ‰	NO3 ‰	PO4 ‰	F ^o Si(OH) ₄ ‰	CFC-11 ‰	CFC-12 ‰	O ₂ ‰	F ^o @ 20°C ‰	CO ₂ ‰	DIC ‰	pH	P ^o Talk ‰	F ^o ‰	813C TOC ‰	TON ‰	Chi-a ‰	Phase ‰
						Temp °C	Sigma T	Theta																	
136	8.5	33.931	33.936	28.928	28.926	21.287	0.060	0.0	0.1	0.15	1.2	1.678	6	0.929	197.06	2.255	1902.4	8.1180	2.2229	2	1.50	88.4	5.9	-9	
135	25.0	33.934	33.937	28.935	28.929	21.287	0.066	0.0	0.1	0.14	1.2	1.649	2	0.898	196.97	2.264	1899.5	8.1198	2.2243	3	1.50	91.0	5.7	-9	
134	49.6	34.012	34.022	27.231	27.220	21.904	0.174	0.0	0.1	0.25	1.3	1.665	2	0.912	197.48	2.286	1928.8	8.0876	2.2246	2	1.50	-9	4.2	-9	
133	74.7	34.739	34.736	24.944	24.933	25.786	0.080	0.1	27.7	2.04	1.97	0.827	2	0.420	32.57	2.1126	2198.4	7.5776	2.2283	2	0.00	62.5	4.4	-9	
132	100.2	34.784	34.818	23.163	23.149	26.196	0.044	0.0	29.3	2.08	2.25	0.582	6	0.304	35.79	2.1173	2212.1	7.5635	2.2297	2	0.10	-9	3.9	-9	
131	125.3	34.843	34.842	22.850	22.833	26.304	0.037	0.0	30.1	2.17	2.23	0.471	2	0.247	28.83	2.1237	2221.1	7.5405	2.2301	2	-9	-9	-9	-9	
130	150.7	34.786	34.784	21.977	21.957	26.431	0.033	0.0	31.4	2.22	2.60	0.375	2	0.201	29.15	2.1298	2228.7	7.5210	2.2300	2	0.00	59.1	-9	-9	
129	175.5	34.751	34.765	21.612	21.589	26.486	0.032	0.0	31.7	2.24	2.70	0.329	2	0.171	30.66	2.1312	2231.9	7.5160	2.2291	2	-9	-9	-9	-9	
128	200.0	34.752	34.750	21.286	21.261	26.534	0.035	0.0	31.1	2.24	2.78	0.319	2	0.171	30.66	2.1312	2231.9	7.5232	2.2295	2	0.10	54.3	2.9	-9	
127	249.4	34.739	34.738	20.870	20.839	26.602	0.036	0.0	32.7	2.33	2.98	0.236	2	0.131	31.49	2.1379	2240.1	7.4989	2.2294	2	-9	-9	-9	-9	
126	301.0	34.720	34.719	20.406	20.390	26.666	0.037	0.0	33.7	2.37	3.13	0.188	6	0.098	31.79	2.1421	2244.4	7.4871	2.2300	2	0.10	55.4	-9	-9	
125	351.2	34.705	34.704	20.106	20.065	26.710	0.039	0.0	34.1	2.42	3.29	0.148	2	0.082	5.42	2.1451	2249.1	7.4792	2.2299	2	-9	-9	-9	-9	
124	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
123	400.8	34.675	34.671	19.589	19.544	26.775	0.038	0.0	35.5	2.72	3.89	0.038	6	0.021	4.85	2.1751	2277.2	7.4007	2.2299	2	-0.10	53.6	-9	-9	
122	499.3	34.620	34.619	18.224	18.172	26.949	0.034	0.0	37.1	3.02	5.14	0.009	2	0.003	1.31	2.1920	2301.6	7.3668	2.2316	2	-0.20	-9	-9	-9	
121	600.0	34.587	34.586	17.183	17.124	27.076	0.032	0.0	41.1	3.13	6.00	0.003	2	0.000	2.75	2.1989	2313.8	7.3522	2.2319	2	-0.20	-9	-9	-9	
120	701.3	34.572	34.570	16.384	16.319	27.173	0.031	0.0	42.8	3.19	6.93	0.010	2	0.000	5.72	2.2014	2322.2	7.3477	2.2325	2	-0.20	-9	-9	-9	
119	800.9	34.563	34.562	15.733	15.663	27.249	0.037	0.0	43.9	3.22	7.85	0.004	2	0.002	14.74	2.1999	2327.6	7.3546	2.2337	2	-0.20	-9	-9	-9	
118	898.8	34.561	34.560	15.184	15.108	27.314	0.028	0.0	44.7	3.20	8.70	0.004	2	0.001	24.07	2.1990	2333.5	7.3673	2.2345	2	-0.20	-9	-9	-9	
117	1000.7	34.563	34.562	14.741	14.660	27.367	0.025	0.0	44.0	3.15	9.22	-0.001	2	0.000	38.08	2.1839	2336.0	7.3922	2.2350	3	-0.10	-9	-9	-9	
116	1199.9	34.573	34.574	14.028	13.935	27.454	0.021	0.0	42.6	3.09	10.60	-9	-9	-9	52.84	2.1740	2338.5	7.4173	2.2372	2	-0.20	-9	-9	-9	
115	1398.1	34.594	34.593	13.430	13.326	27.530	0.021	0.0	42.1	3.07	12.16	-0.002	2	0.001	58.11	2.1720	2354.7	7.4264	2.2383	2	-0.20	-9	-9	-9	
114	1599.5	34.609	34.610	13.004	12.888	27.583	0.019	0.0	41.9	3.00	13.04	-9	-9	-9	70.39	2.1625	2355.4	7.4475	2.2399	2	-0.20	-9	-9	-9	
113	1798.2	34.621	34.623	12.637	12.508	27.636	0.017	0.0	41.0	2.92	13.75	-9	-9	-9	81.49	2.1506	2357.0	7.4807	2.2403	2	-0.10	-9	-9	-9	
112	1999.8	34.635	34.635	12.339	12.198	27.664	0.015	0.0	40.1	2.87	14.44	0.002	2	0.001	89.39	2.1506	2357.0	7.4807	2.2413	2	-0.10	-9	-9	-9	
111	2198.3	34.652	34.651	12.078	11.923	27.699	0.013	0.0	39.5	2.81	15.19	-9	-9	-9	96.56	2.1462	2362.6	7.4972	2.2425	2	-0.10	-9	-9	-9	
110	2400.9	34.662	34.663	11.904	11.734	27.722	0.011	0.0	38.8	2.75	15.58	-9	-9	-9	105.16	2.1393	2361.5	7.5157	2.2426	2	-0.10	-9	-9	-9	
109	2601.7	34.666	34.667	11.852	11.665	27.730	0.010	0.0	38.5	2.72	16.06	-0.001	2	0.000	108.46	2.1368	2360.9	7.5220	2.2427	2	-0.10	-9	-9	-9	
108	2800.0	34.670	34.670	11.790	11.586	27.739	0.010	0.0	39.1	2.70	16.05	-9	-9	-9	113.25	2.1334	2358.9	7.5317	2.2432	2	-0.10	-9	-9	-9	
107	2999.5	34.676	34.675	11.690	11.469	27.752	0.008	0.0	37.8	2.66	16.04	-9	-9	-9	125.00	2.1286	2353.9	7.5471	2.2433	2	-0.10	-9	-9	-9	
106	3201.0	34.679	34.678	11.631	11.392	27.760	0.009	0.0	38.1	2.63	15.86	0.000	2	0.001	128.76	2.1259	2350.4	7.5568	2.2433	2	-0.10	-9	-9	-9	
105	3400.9	34.682	34.682	11.567	11.309	27.769	0.009	0.0	37.6	2.58	15.70	-9	-9	-9	135.69	2.1219	2345.8	7.5681	2.2438	2	0.00	-9	-9	-9	
104	3598.8	34.684	34.683	11.549	11.271	27.773	0.009	0.0	37.8	2.58	15.56	-9	-9	-9	138.83	2.1201	2343.4	7.5745	2.2438	2	-9	-9	-9	-9	
103	3795.8	34.685	34.686	11.548	11.250	27.775	0.009	0.0	37.4	2.56	15.50	0.004	2	-0.002	140.70	2.1192	2341.7	7.5781	2.2436	2	-9	-9	-9	-9	
102	3972.2	34.685	34.685	11.548	11.249	27.775	0.009	0.0	37.3	2.57	15.46	-9	-9	-9	141.09	2.1182	2341.5	7.5777	2.2430	2	-9	-9	-9	-9	
101	3984.0	34.686	34.686	11.547	11.228	27.778	0.009	0.0	37.2	2.55	15.42	-9	-9	-9	142.76	2.1173	2340.9	7.5812	2.2435	2	0.00	-9	-9	-9	

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 164 DATE 4/18/94 LATITUDE 7°59.9'N Btm Depth: 3969
CAST 1 LONGITUDE 110°20.2'W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma T	Theta cp	NO2 P ^o	NO3 P ^o	PO4 P ^o	Si(OH) ₄ P ^o	CFC-11 P ^o	CFC-12 P ^o	O ₂ P ^o	F ^o @20°C ^o	DOC μmM	DIC P ^o	pH P ^o	TAK μmol/kg	F ^o	δ13C per mil	TOC μmol/L	TON μmol/L	Chi-a Phase μg/L
136	8.4	33.892	33.897	28.907	28.905	21.264	-9	0.0	2.0	0.17	0.4	1.680	0.935	2.19724	2.261	1901.5	2.81188	2.2219	3	1.60	-9	-9	-9	-9
135	23.9	33.890	33.900	28.863	28.857	21.278	-9	0.0	2.0	0.16	0.5	1.693	0.939	2.19679	-9	9	8.1185	2	-9	9	-9	-9	-9	-9
134	49.5	34.359	34.348	22.312	22.302	23.646	-9	0.2	9.8	1.04	1.3	1.349	0.713	2.13045	4.87	2055.1	2.78909	2.2258	2	-9	-9	-9	-9	-9
133	74.8	34.725	34.725	14.786	14.775	25.809	-9	0.2	27.3	2.11	2.19	-9	-9	9.3311	-9	9	7.5749	2	-9	9	-9	-9	-9	-9
132	99.2	34.770	34.768	13.610	13.596	26.094	-9	0.0	28.5	2.13	2.25	0.661	0.346	6.3231	11.63	2210.8	-9	9	2282	2	-9	-9	-9	-9
131	124.2	34.800	34.802	13.119	13.101	26.218	-9	0.0	29.7	2.17	2.29	-9	-9	9.3037	-9	9	7.5497	2	-9	9	-9	-9	-9	-9
130	150.4	34.803	34.802	12.520	12.500	26.339	-9	0.0	30.1	2.22	2.47	0.473	0.249	2.3294	12.21	2221.5	2.75407	2.2292	2	-9	-9	-9	-9	-9
129	174.4	34.780	34.778	11.971	11.948	26.428	-9	0.0	30.8	2.24	2.60	-9	-9	9.3371	13.00	2231.1	2.75179	2.2287	3	-9	-9	-9	-9	-9
128	198.4	34.769	34.767	11.643	11.618	26.482	-9	0.0	31.4	2.29	2.67	0.344	0.181	2.3170	13.00	2231.1	2.75179	2.2287	3	-9	-9	-9	-9	-9
127	250.3	34.748	34.747	11.049	11.019	26.576	-9	0.0	32.9	2.37	2.86	-9	-9	9.2749	6	-9	9.74892	2	-9	9	-9	-9	-9	-9
126	301.2	34.735	34.734	10.754	10.717	26.620	-9	0.0	33.5	2.42	2.99	0.204	0.109	2.2542	14.32	2246.6	2.74807	2.2294	2	-9	-9	-9	-9	-9
125	340.9	34.711	34.710	10.218	10.177	26.696	-9	0.0	34.2	2.56	3.36	-9	-9	9.1613	-9	9	9.74452	2	-9	9	-9	-9	-9	-9
124	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
123	400.2	34.682	34.683	9.645	9.599	26.771	-9	0.0	34.7	2.75	3.93	0.052	0.029	2.607	17.20	2277.2	2.74047	2.2297	2	-9	-9	-9	-9	-9
122	500.0	34.624	34.624	8.284	8.231	26.944	-9	0.0	36.9	3.03	5.11	-9	-9	9.103	18.92	2298.9	2.73687	2.2309	2	-9	-9	-9	-9	-9
121	600.2	34.593	34.591	7.377	7.318	27.053	-9	0.0	39.5	3.11	6.13	0.006	0.001	2.17	1970	2311.5	2.73557	2.2322	2	-9	-9	-9	-9	-9
120	700.8	34.567	34.566	6.153	6.090	27.199	-9	0.0	44.1	3.19	7.23	-9	-9	9.737	2017	2323.5	2.73481	2.2329	2	-9	-9	-9	-9	-9
119	801.9	34.561	34.561	5.557	5.488	27.269	-9	0.0	44.9	3.17	7.85	0.008	0.002	18.77	1967	2326.6	2.73608	2.2330	3	-9	-9	-9	-9	-9
118	902.5	34.560	34.560	5.187	5.111	27.314	-9	0.0	44.9	3.17	8.39	-9	-9	9.2533	1922	2328.0	2.73716	2.2346	6	-9	-9	-9	-9	-9
117	1000.6	34.561	34.560	4.774	4.692	27.362	-9	0.0	44.5	3.14	9.06	0.002	0.003	2.3435	1875	2332.3	2.73949	2.2353	2	-9	-9	-9	-9	-9
116	1299.3	34.567	34.566	4.344	4.257	27.415	-9	0.0	44.2	3.12	9.89	-9	-9	9.4267	-9	9	9.73988	2	-9	9	-9	-9	-9	-9
115	1202.2	34.576	34.576	3.993	3.900	27.459	-9	0.0	43.7	3.16	11.14	0.003	0.002	2.4055	-9	9	9.73924	2	-9	9	-9	-9	-9	-9
114	1401.6	34.593	34.593	3.437	3.333	27.529	-9	0.0	43.3	3.06	12.32	-9	-9	9.5549	6	-9	9.74066	2	-9	9	-9	-9	-9	-9
113	1600.3	34.610	34.610	2.988	2.842	27.588	-9	0.0	42.4	2.96	13.20	-9	-9	9.6943	2	-9	9.74464	2	-9	9	-9	-9	-9	-9
111	1800.0	34.623	34.623	2.628	2.499	27.629	-9	0.0	41.3	2.88	13.76	-9	-9	9.8139	3	-9	9.74671	2	-9	9	-9	-9	-9	-9
110	2000.0	34.637	34.637	2.341	2.200	27.665	-9	0.0	40.8	2.86	14.79	-9	-9	9.8571	2	-9	9.75069	2	-9	9	-9	-9	-9	-9
109	2240.9	34.659	34.659	1.968	1.811	27.713	-9	0.0	39.9	2.76	15.60	-9	-9	9.10036	2	-9	9.75069	2	-9	9	-9	-9	-9	-9
108	2468.1	34.666	34.667	1.849	1.671	27.730	-9	0.0	39.2	2.71	15.64	-9	-9	9.10879	2	-9	9.75283	2	-9	9	-9	-9	-9	-9
107	2750.5	34.659	34.659	1.809	1.609	27.737	-9	0.0	39.1	2.68	15.64	-9	-9	9.11169	2	-9	9.75283	2	-9	9	-9	-9	-9	-9
106	2899.7	34.675	34.674	1.703	1.482	27.751	-9	0.0	38.9	2.63	15.43	-9	-9	9.12101	2	-9	9.75283	2	-9	9	-9	-9	-9	-9
105	3248.8	34.680	34.679	1.606	1.362	27.763	-9	0.0	37.6	2.60	15.73	-9	-9	9.13053	6	-9	9.75610	2	-9	9	-9	-9	-9	-9
104	3300.8	34.681	34.682	1.589	1.320	27.767	-9	0.0	36.9	2.59	16.19	-9	-9	9.13385	2	-9	9.75610	2	-9	9	-9	-9	-9	-9
103	3749.2	34.683	34.684	1.593	1.298	27.770	-9	0.0	37.5	2.54	15.92	0.006	0.001	2.13574	-9	9	9.75693	2	-9	9	-9	-9	-9	-9
102	3749.6	34.683	34.683	1.592	1.298	27.770	-9	0.0	37.4	2.56	15.75	-9	-9	9.13598	2	-9	9.75693	2	-9	9	-9	-9	-9	-9
101	3989.8	34.683	34.684	1.600	1.280	27.772	-9	0.0	37.2	2.55	15.90	-9	-9	9.13731	2	-9	9.75732	2	-9	9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 165 DATE 4/18/94 LATITUDE 8°30.1'N Btm Depth: 3877
 CAST 1 LONGITUDE 110°15.1'W

Sample ID	P* ^o	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma T	Atm	Beam	NO2 P*	NO3 P*	PO4 P*	SiO4 P*	CFC-11 P*	CFC-12 P*	O2 P*	F ^o @20°C P*	CO2 P*	DIC P*	pH	TAIK P*	P*	S13C per mil	TOC µmol/L	TON µmol/L	Chl-a µg/L	Phase		
																												µmol/kg	µmol/kg
136	2	9.9	34.040	2	34.045	2	28.963	28.961	21.557	0.073	0.0	2	0.0	2	1.717	2	0.942	2	1913.7	2	8.1160	2	2245	6	-9	80.1	4.2	-9	-9
135	2	24.8	34.039	2	34.045	2	28.885	28.879	21.383	0.084	0.0	2	0.0	2	1.688	2	0.944	2	1914.4	2	8.1205	2	-9	9	-9	-9	4.4	-9	-9
134	2	50.3	34.147	2	34.134	2	24.918	24.907	22.725	0.163	1.0	2	0.5	2	1.585	2	0.918	2	152.79	2	9	9	9	9	9	69.2	4.5	-9	-9
133	2	73.9	34.620	2	34.624	2	18.635	18.622	24.826	0.108	0.7	2	1.92	2	1.009	6	0.534	6	41.69	6	9	9	9	9	9	49.5	4.1	-9	-9
132	2	97.3	34.720	2	34.726	2	14.507	14.493	25.866	0.051	0.0	2	2.73	2	0.803	2	0.413	2	39.76	2	9	9	9	9	9	37.7	3.5	-9	-9
131	2	123.2	34.747	2	34.746	2	13.112	13.095	26.177	0.039	0.0	2	2.09	2	0.688	2	0.336	2	44.48	2	9	9	9	9	9	39.9	3.0	-9	-9
130	2	152.3	34.782	2	34.782	2	12.495	12.473	26.329	0.035	0.0	2	3.13	2	0.466	2	0.240	2	24.35	2	9	9	9	9	9	40.5	-9	-9	-9
129	2	174.9	34.775	2	34.775	2	12.067	12.044	26.406	0.033	0.0	2	3.12	2	0.398	6	0.216	6	30.04	2	9	9	9	9	9	-9	-9	-9	-9
128	2	200.1	34.756	2	34.755	2	11.600	11.575	26.480	0.035	0.0	2	2.29	2	0.336	2	0.178	2	31.75	2	9	9	9	9	9	35.0	-9	-9	-9
127	2	224.9	34.736	2	34.735	2	11.390	11.362	26.519	0.036	0.0	2	3.22	2	0.280	2	0.155	2	29.00	2	9	9	9	9	9	-9	-9	-9	-9
126	2	249.9	34.750	2	34.751	2	11.179	11.147	26.554	0.038	0.0	2	3.23	2	0.266	2	0.143	2	30.59	2	9	9	9	9	9	-9	-9	-9	-9
125	2	297.9	34.733	2	34.732	2	10.727	10.691	26.623	0.039	0.0	2	3.34	2	0.215	6	0.118	6	31.07	2	9	9	9	9	9	-9	-9	-9	-9
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
123	2	400.1	34.688	2	34.689	2	9.746	9.700	26.759	0.037	0.0	2	3.56	2	0.059	2	0.031	2	6.83	2	9	9	9	9	9	40.3	-9	-9	-9
122	2	499.4	34.644	2	34.643	2	8.742	8.688	26.889	0.034	0.0	2	3.70	2	0.011	2	0.007	2	1.73	2	9	9	9	9	9	38.6	2.5	-9	-9
121	2	600.4	34.581	2	34.581	2	7.340	7.281	27.049	0.033	0.0	2	4.03	2	0.002	2	0.000	2	1.65	2	9	9	9	9	9	-9	-9	-9	-9
120	2	700.3	34.566	2	34.566	2	6.355	6.291	27.172	0.034	0.0	2	4.47	2	0.002	2	0.001	2	3.01	2	9	9	9	9	9	-9	-9	-9	-9
119	2	798.6	34.555	2	34.555	2	5.599	5.530	27.260	0.032	0.0	2	4.45	2	0.001	2	0.000	2	1.89	2	9	9	9	9	9	42.5	-9	-9	-9
118	2	900.1	34.561	2	34.561	2	5.160	5.084	27.318	0.029	0.0	2	4.66	2	0.001	2	0.000	2	20.51	2	9	9	9	9	9	-9	-9	-9	-9
117	2	998.5	34.563	2	34.563	2	4.687	4.606	27.373	0.026	0.0	2	4.47	2	-0.001	2	0.000	2	31.96	2	9	9	9	9	9	-9	-9	-9	-9
116	2	1200.8	34.576	2	34.576	2	3.973	3.881	27.461	0.025	0.0	2	4.44	2	0.000	2	0.000	2	42.01	2	9	9	9	9	9	-9	-9	-9	-9
115	2	1399.0	34.597	2	34.596	2	3.360	3.256	27.539	0.022	0.0	2	4.32	2	0.000	2	0.000	2	58.61	2	9	9	9	9	9	-9	-9	-9	-9
114	2	1599.0	34.610	2	34.610	2	2.975	2.859	27.587	0.019	0.0	2	4.24	2	0.000	2	0.000	2	69.82	2	9	9	9	9	9	-9	-9	-9	-9
113	2	1764.9	34.622	2	34.622	2	2.656	2.530	27.625	0.017	0.0	2	2.95	2	0.000	2	0.000	2	80.08	2	9	9	9	9	9	-9	-9	-9	-9
112	2	1997.8	34.639	2	34.638	2	2.299	2.158	27.670	0.014	0.0	2	2.88	2	0.000	2	0.000	2	87.68	2	9	9	9	9	9	36.5	-9	-9	-9
111	2	2199.2	34.654	2	34.654	2	2.045	1.890	27.703	0.014	0.0	2	2.80	2	0.000	2	0.000	2	97.59	6	9	9	9	9	9	-9	-9	-9	-9
110	2	2397.8	34.662	2	34.662	2	1.916	1.746	27.720	0.013	0.0	2	2.76	2	0.000	2	0.000	2	104.01	2	9	9	9	9	9	-9	-9	-9	-9
109	2	2598.8	34.667	2	34.666	2	1.848	1.661	27.731	0.012	0.0	2	2.74	2	0.000	2	0.000	2	108.25	2	9	9	9	9	9	-9	-9	-9	-9
108	2	2801.7	34.669	2	34.669	2	1.826	1.621	27.736	0.011	0.0	2	2.72	2	0.000	2	0.000	2	110.92	2	9	9	9	9	9	-9	-9	-9	-9
107	2	2999.4	34.672	2	34.671	2	1.767	1.544	27.744	0.010	0.0	2	2.69	2	0.000	2	0.000	2	117.18	6	9	9	9	9	9	41.5	-9	-9	-9
106	2	3199.3	34.676	2	34.676	2	1.684	1.443	27.755	0.010	0.0	2	2.65	2	0.000	2	0.000	2	123.92	2	9	9	9	9	9	-9	-9	-9	-9
105	2	3399.8	34.680	2	34.680	2	1.631	1.371	27.762	0.011	0.0	2	2.62	2	0.000	2	0.000	2	130.19	2	9	9	9	9	9	-9	-9	-9	-9
104	2	3600.4	34.682	2	34.682	2	1.602	1.322	27.767	0.010	0.0	2	2.60	2	0.000	2	0.000	2	134.40	2	9	9	9	9	9	-9	-9	-9	-9
103	2	3599.2	34.682	2	34.682	2	1.600	1.321	27.768	0.011	0.0	2	2.60	2	0.000	2	0.000	2	134.08	2	9	9	9	9	9	-9	-9	-9	-9
102	2	3800.8	34.683	2	34.683	2	1.595	1.295	27.770	0.010	0.0	2	2.63	2	0.000	2	0.000	2	136.39	2	9	9	9	9	9	-9	-9	-9	-9
101	2	3917.8	34.683	2	34.684	2	1.601	1.289	27.771	0.010	0.0	2	2.60	2	0.000	2	0.000	2	138.94	2	9	9	9	9	9	39.8	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94

WOCE P18

NOAA Ship Discoverer

STATION 166
CAST 1

DATE 4/19/94

LAITUDE 9°0.1'N
LONGITUDE 110°10.0'W

Btm Depth: 3691

Sample ID	Pressure db	Salinity	F ⁺ Salinity	Temp °C	Temp °C	Sigma T	Sigma Anom	Theta	NO2 F ⁺ umol/kg	NO3 F ⁺ umol/kg	PO4 F ⁺ umol/kg	Si(OH)4 F ⁺ umol/kg	CFC-11 F ⁺ pmol/kg	CFC-12 F ⁺ pmol/kg	O2 F ⁺ umol/kg	FO2 F ⁺ @20°C μatm	DIC F ⁺ umol/kg	pH F ⁺	TAIK F ⁺ umol/kg	F ⁺	813C TOC per mil umol/L	TON umol/L	Chl-a μg/L	Phaeo μg/L						
																									Beaman	Beaman	Beaman	Beaman	Beaman	Beaman
136	2	10.3	34.010	2	28.730	28.728	21.412	0.068	0.0	2	0.1	2	0.13	2	0.0	2	1913.0	2	8.1143	2	2232	6	1.60	-9	5.6	-9				
135	2	23.7	34.001	2	28.707	28.701	21.413	0.076	0.0	2	0.0	2	0.13	2	0.0	2	1978.1	2	9	8.1149	2	-9	9	86.0	5.8	-9				
134	2	49.5	33.985	2	28.633	28.621	21.428	0.134	0.0	2	0.0	2	0.15	2	0.0	2	1972.7	2	260	1909.0	4	2253	2	-9	80.6	6.0	-9			
133	2	74.0	34.309	2	34.591	22.737	22.722	23.489	0.070	2.2	9.4	2	1.15	2	5.3	2	110.01	2	-9	9	7.8619	2	-9	9	3.5	-9	-9			
132	2	99.6	34.762	2	34.764	14.768	14.753	25.842	0.038	0.1	2	28.6	2	2.38	2	20.9	2	15.06	2	2216.5	2	2283	2	-9	-9	-9	-9			
131	2	124.4	34.777	2	34.777	13.320	13.303	26.159	0.033	0.0	2	28.3	2	2.48	2	23.4	2	30.94	2	-9	9	7.5488	2	-9	-9	-9	-9			
130	2	150.8	34.781	2	34.780	12.406	12.386	26.345	0.033	0.0	2	29.4	2	3.77	4	25.5	2	30.58	2	2225.0	2	2297	2	-9	47.2	3.5	-9	-9		
129	2	175.8	34.781	2	34.780	12.010	11.988	26.422	0.033	0.0	2	30.1	2	2.95	4	26.7	2	25.39	2	-9	9	7.5126	2	-9	4.0	-9	-9			
128	2	200.5	34.764	2	34.764	11.637	11.611	26.479	0.034	0.0	2	30.4	2	2.29	2	27.7	2	32.08	2	1903	2	2233.2	2	2299	2	-9	62.4	-9	-9	
127	2	252.6	34.749	2	34.749	11.153	11.122	26.558	0.037	0.0	2	30.5	2	2.32	2	29.5	2	31.65	2	-9	9	2236.3	2	2307	2	-9	-9	-9	-9	
126	2	300.3	34.732	2	34.732	10.696	10.659	26.628	0.038	0.0	2	32.3	2	2.42	2	31.6	2	25.85	2	1437	2	2246.9	2	-9	5	-9	62.5	-9	-9	
125	2	348.5	34.712	2	34.711	10.260	10.219	26.690	0.038	0.0	2	33.4	2	2.54	2	34.6	2	17.66	2	-9	9	7.4450	2	-9	-9	-9	-9	-9	-9	
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
123	2	399.1	34.685	2	34.684	9.717	9.671	26.762	0.036	0.0	2	33.6	2	2.91	2	40.2	2	5.62	2	1749	2	2276.2	2	2307	2	-9	63.7	-9	-9	-9
122	2	501.1	34.610	2	34.609	8.443	8.390	26.909	0.034	0.0	2	34.6	2	3.43	4	52.3	2	1.79	2	1902	2	2287.2	2	2321	2	-9	-9	-9	-9	-9
121	2	600.8	34.573	2	34.573	7.348	7.288	27.042	0.032	0.0	2	37.8	2	3.14	2	62.3	2	2.07	2	1984	2	2311.2	2	2331	2	-9	-9	-9	-9	-9
120	2	700.0	34.556	2	34.555	6.338	6.274	27.166	0.032	0.0	2	42.9	2	3.18	2	72.0	2	8.36	2	-9	9	2322.2	2	2341	2	-9	-9	-9	-9	-9
119	2	798.7	34.553	2	34.554	5.681	5.611	27.248	0.029	0.0	2	44.8	2	3.21	2	79.3	2	11.76	2	2027	2	2329.1	2	2345	2	-9	-9	-9	-9	-9
118	2	890.9	34.554	2	34.554	5.143	5.067	27.314	0.030	0.0	2	45.6	2	3.23	2	88.5	2	17.77	2	-9	9	2336.6	2	2343	2	-9	-9	-9	-9	-9
117	2	999.7	34.557	2	34.557	4.786	4.704	27.338	0.028	0.0	2	44.5	2	3.21	2	96.9	2	24.00	2	1966	2	2340.7	2	2354	2	-9	-9	-9	-9	-9
116	2	1097.2	34.565	2	34.565	4.362	4.275	27.411	0.025	0.0	2	44.8	2	3.19	2	104.2	2	32.82	2	-9	9	-9	2	-9	-9	-9	-9	-9	-9	-9
115	2	1197.5	34.573	2	34.573	4.017	3.924	27.454	0.025	0.0	2	44.2	2	3.17	2	110.9	2	39.96	2	-9	9	-9	2	-9	-9	-9	-9	-9	-9	-9
114	2	1297.6	34.584	2	34.585	3.634	3.537	27.502	0.024	0.0	2	43.7	2	3.11	2	117.8	2	48.69	2	-9	9	-9	2	-9	-9	-9	-9	-9	-9	-9
113	2	1497.9	34.600	2	34.599	3.168	3.059	27.560	0.020	0.0	2	42.6	2	3.01	2	128.1	2	55.20	2	-9	9	-9	2	-9	-9	-9	-9	-9	-9	-9
112	2	1600.3	34.608	2	34.608	2.967	2.851	27.586	0.018	0.0	2	42.6	2	2.98	2	132.3	2	62.65	2	-9	9	-9	2	-9	-9	-9	-9	-9	-9	-9
111	2	1799.1	34.623	2	34.623	2.616	2.488	27.629	0.017	0.0	2	41.7	2	2.90	2	139.3	2	79.43	2	-9	9	-9	2	-9	-9	-9	-9	-9	-9	-9
110	2	2000.5	34.639	2	34.640	2.290	2.149	27.671	0.016	0.0	2	41.3	2	2.85	2	147.7	2	87.97	2	-9	9	-9	2	-9	-9	-9	-9	-9	-9	-9
109	2	2246.4	34.655	2	34.656	2.012	1.854	27.707	0.013	0.0	2	39.9	2	2.78	2	154.7	2	99.69	2	-9	9	-9	2	-9	-9	-9	-9	-9	-9	-9
108	2	2497.4	34.665	2	34.665	1.868	1.691	27.727	0.013	0.0	2	40.4	2	2.73	2	157.4	2	108.03	2	-9	9	-9	2	-9	-9	-9	-9	-9	-9	-9
107	2	2729.8	34.667	2	34.666	1.834	1.636	27.733	0.011	0.0	2	39.3	2	2.70	2	157.8	2	110.74	2	-9	9	-9	2	-9	-9	-9	-9	-9	-9	-9
106	2	2997.5	34.673	2	34.673	1.740	1.519	27.746	0.010	0.0	2	39.0	2	2.66	2	157.3	2	118.72	2	-9	9	-9	2	-9	-9	-9	-9	-9	-9	-9
105	2	3250.0	34.677	2	34.678	1.672	1.427	27.756	0.010	0.0	2	38.9	2	2.63	2	156.1	2	125.57	2	-9	9	-9	2	-9	-9	-9	-9	-9	-9	-9
104	2	3498.5	34.680	2	34.682	1.620	1.351	27.764	0.010	0.0	2	38.4	2	2.59	2	155.1	2	131.20	2	-9	9	-9	2	-9	-9	-9	-9	-9	-9	-9
103	2	3499.6	34.680	2	34.681	1.620	1.351	27.764	0.010	0.0	2	37.3	2	2.62	2	158.5	2	131.20	2	-9	9	-9	2	-9	-9	-9	-9	-9	-9	-9
102	2	3714.1	34.681	2	34.681	1.627	1.335	27.766	0.011	0.0	2	37.2	2	2.58	2	161.9	2	132.45	2	-9	9	-9	2	-9	-9	-9	-9	-9	-9	-9
101	2	3714.1	34.681	2	34.681	1.627	1.335	27.766	0.011	0.0	2	37.2	2	2.58	2	161.9	2	132.45	2	-9	9	-9	2	-9	-9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column

** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 167 DATE 4/19/94 LATITUDE 9°30.1'N Btm Depth: 3489
 CAST 1 LONGITUDE 110°5.2'W

Sample ID	P	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma T	Theta	Beam Attenuation	Potential		NO2 P [*] μmol/kg	NO3 P [*] μmol/kg	PO4 P [*] μmol/kg	P [*] SiO4 P [*] μmol/kg	CFC-11 P [*] pmol/kg	CFC-12 P [*] pmol/kg	O2 P [*] @ 20°C μmol/kg	fCO2 P [*] μatm	DIC P [*] μmol/kg	pH P [*]	TA [*] μmol/kg	P [*] μmol/kg	δ13C TOC per mil ‰	TON μmol/L	Chl-a μg/L	Phase					
										Temp °C	Temp °C																					
136	2	8.3	33.964	2	33.976	2	28.756	28.754	21.368	0.060	0.0	2	0.1	2	0.15	2	0.945	2	1.667	2	0.945	2	1908.3	2	8.1131	2	2228	2	-9	-9	-9	
135	2	8.1	33.964	2	33.966	2	28.748	28.746	21.371	0.060	0.0	2	0.0	2	0.14	2	0.944	2	1.694	2	0.944	2	1904.5	2	8.1181	2	2230	2	-9	-9	-9	
134	2	24.0	33.963	2	33.971	2	28.762	28.756	21.367	0.068	0.0	2	0.0	2	0.17	2	0.941	2	1.690	2	0.941	2	1911.4	2	8.1175	2	-9	9	-9	-9	-9	
133	2	40.8	33.971	2	33.981	2	28.611	28.599	21.425	0.087	0.0	2	0.0	2	0.16	2	0.944	2	1.687	2	0.944	2	1911.4	2	8.1104	2	2225	3	-9	-9	-9	
132	2	75.1	34.305	2	34.295	2	22.886	22.871	23.444	0.091	1.5	2	12.0	2	1.21	2	0.801	2	1.398	2	0.801	2	2210.9	2	7.8409	2	-9	9	-9	-9	-9	
131	2	101.0	34.748	2	34.742	2	15.880	15.864	25.585	0.046	0.0	2	28.8	2	2.20	2	0.761	2	0.420	2	0.761	2	2210.9	2	7.5409	2	2275	2	-9	-9	-9	
130	2	124.2	34.795	2	34.796	2	13.596	13.578	26.117	0.038	0.0	2	31.0	2	2.30	2	0.536	2	0.284	2	0.536	2	2235.3	2	7.4997	2	-9	9	-9	-9	-9	
129	2	145.5	34.802	2	34.805	2	12.891	12.871	26.265	0.032	0.0	2	31.5	2	2.33	2	0.418	2	0.236	2	0.418	2	2235.3	2	7.4948	2	2286	2	-9	-9	-9	
128	2	175.1	34.791	2	34.790	2	12.260	12.237	26.381	0.033	0.0	2	31.6	2	2.38	2	0.328	2	0.204	2	0.328	2	2240.3	2	7.4818	2	2295	2	-9	-9	-9	
127	3	195.2	34.780	2	-9	5	11.951	11.925	26.432	0.035	-9	1	-9	1	-9	1	0.306	2	0.174	2	-9	1	-9	9	-9	9	-9	-9	-9	-9	-9	
126	2	252.6	34.746	2	34.745	2	11.182	11.151	26.550	0.038	0.0	2	32.1	2	2.41	2	0.117	2	0.214	2	0.117	2	2246.1	2	7.4766	2	-9	5	-9	-9	-9	
125	2	295.3	34.721	2	34.721	2	10.604	10.569	26.635	0.039	0.0	2	33.3	2	2.42	2	0.160	2	0.094	2	0.160	2	2251.3	2	7.4655	2	2297	2	-9	-9	-9	
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
123	2	348.2	34.705	2	34.704	2	10.228	10.187	26.689	0.039	0.0	2	34.4	2	2.53	2	0.105	2	0.055	2	0.105	2	2250.2	2	7.4425	2	-9	9	-9	-9	-9	
122	2	374.0	34.696	2	34.695	2	10.019	9.975	26.719	0.039	0.0	2	34.5	2	2.56	2	0.084	2	0.051	2	0.084	2	2273.1	2	7.4287	2	-9	9	-9	-9	-9	
121	2	400.1	34.681	2	34.680	2	9.690	9.644	26.763	0.037	0.0	2	35.2	2	2.66	2	0.050	2	0.027	2	0.050	2	2273.1	2	7.4075	2	2296	2	-9	-9	-9	
120	2	505.5	34.614	2	34.613	2	8.558	8.504	26.894	0.035	0.0	2	35.7	2	2.90	2	0.009	2	0.003	2	0.009	2	2282.7	2	7.3759	2	2309	2	-9	-9	-9	
119	2	596.7	34.560	2	34.561	2	7.301	7.242	27.038	0.033	0.0	2	38.2	2	3.12	2	0.002	2	0.002	2	0.002	2	2311.4	2	7.3535	2	2323	2	-9	-9	-9	
118	2	695.0	34.552	2	34.554	2	6.324	6.261	27.165	0.031	0.0	2	42.6	2	3.19	2	-9	-9	-9	-9	9	4.11	2	2044	2	7.3432	2	2326	2	-9	-9	-9
117	2	801.1	34.551	2	34.552	2	5.726	5.656	27.241	0.031	0.0	6	44.0	6	3.24	6	-0.001	2	0.000	2	0.000	2	2333.2	2	7.3418	2	2351	2	-9	-9	-9	
116	2	896.9	34.551	2	34.549	2	5.167	5.092	27.308	0.029	0.0	2	45.4	2	3.23	2	86.3	2	-9	9	16.20	2	2021	2	7.3521	2	2346	2	-9	-9	-9	
115	2	997.9	34.556	2	34.556	2	4.710	4.629	27.365	0.027	0.0	2	44.4	2	3.22	2	96.8	2	0.002	2	0.001	2	2340.3	2	7.3516	2	2355	6	-9	-9	-9	
114	2	1203.2	34.574	2	34.575	2	4.016	3.923	27.435	0.024	0.0	2	43.4	2	3.17	2	114.1	2	-9	9	40.23	2	-9	9	-9	9	-9	-9	-9	-9	-9	
113	2	1400.4	34.594	2	34.593	2	3.425	3.321	27.531	0.021	0.0	2	42.6	2	3.05	2	127.6	2	-9	9	57.38	2	-9	9	7.4206	2	-9	9	-9	-9	-9	
112	2	1600.4	34.607	2	34.607	2	2.979	2.863	27.584	0.019	0.0	2	41.7	2	2.98	2	136.0	2	-9	9	69.47	2	-9	9	-9	9	-9	-9	-9	-9	-9	
111	2	1804.9	34.624	2	34.624	2	2.607	2.478	27.631	0.019	0.0	2	41.5	2	2.94	2	144.2	2	-9	9	75.74	2	-9	9	7.4657	2	-9	9	-9	-9	-9	
110	2	1996.9	34.641	2	34.640	2	2.282	2.141	27.673	0.017	0.0	2	40.5	2	2.86	2	150.5	2	-9	9	86.52	2	-9	9	-9	9	-9	-9	-9	-9	-9	
109	2	2199.2	34.656	2	34.657	2	1.995	1.842	27.709	0.014	0.0	2	39.6	2	2.79	2	155.2	2	-9	9	99.19	2	-9	9	7.4996	2	-9	9	-9	-9	-9	
108	2	2398.9	34.662	2	34.660	2	1.899	1.729	27.722	0.012	0.0	6	40.2	6	2.75	6	156.9	6	-9	9	105.14	2	-9	9	-9	9	-9	-9	-9	-9	-9	
107	2	2599.9	34.667	2	34.667	2	1.842	1.656	27.732	0.011	0.0	2	40.2	2	2.71	2	157.3	2	-9	9	106.99	2	-9	9	7.5210	2	-9	9	-9	-9	-9	
106	3	2799.2	34.670	2	34.668	2	1.809	1.604	27.737	0.011	0.0	2	40.4	2	2.71	2	155.6	2	-9	9	112.30	2	-9	9	-9	9	-9	-9	-9	-9	-9	
105	2	2998.9	34.673	2	34.672	2	1.752	1.530	27.745	0.010	0.0	6	39.4	6	2.69	6	155.7	6	-9	9	117.86	2	-9	9	7.5382	2	-9	9	-9	-9	-9	
104	2	3199.2	34.676	2	34.676	2	1.698	1.457	27.753	0.010	0.0	2	39.1	2	2.66	2	162.5	2	-9	9	123.00	2	-9	9	-9	9	-9	-9	-9	-9	-9	
103	2	3398.6	34.680	2	34.679	2	1.622	1.363	27.763	0.010	0.0	2	38.8	2	2.62	2	160.9	2	-9	9	130.15	6	-9	9	7.5583	2	-9	9	-9	-9	-9	
102	2	3598.1	34.680	2	34.679	2	1.621	1.363	27.763	0.010	0.0	2	38.9	2	2.62	2	159.8	2	-9	9	130.26	2	-9	9	-9	9	-9	-9	-9	-9	-9	
101	2	3510.7	34.681	2	34.680	2	1.607	1.337	27.765	0.010	0.0	6	38.6	6	2.61	6	158.6	6	-9	9	132.11	2	-9	9	-9	9	-9	-9	-9	-9	-9	

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 168 DATE 4/1994 LATITUDE 10°0.0N Btm Depth: 3310
 CAST 3 LONGITUDE 110°0.0W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma t	Sigma t _{theta}	Beam Attenuation	Beam Attenuation										Chl-a µg/L	Phase µg/L								
									NO2 µmol/kg	NO3 µmol/kg	PO4 µmol/kg	Si(OH) ₄ µmol/kg	CR-11 µmol/kg	CR-12 µmol/kg	O2 µmol/kg	PO2 µmol/kg	DIC µmol/kg	pH			TALK µmol/kg	F ₂₀₀	813C per mil	TOC µmol/L	TON µmol/L			
336	2	33.992	2	33.995	2	28.821	28.819	21.368	0.061	0.0	0.1	0.17	0.4	1.688	0.953	197.79	2.264	1908.5	2	8.1159	2	2235	2	1.50	-9	6.5	0.128	0.052
335	2	24.2	34.000	2	28.744	28.739	21.400	0.068	0.0	0.0	0.0	0.17	0.4	1.688	1.011	198.06	2.261	1908.8	2	8.1168	2	2232	2	1.70	85.7	6.5	0.130	0.060
334	2	49.6	34.089	2	28.236	28.224	21.837	0.068	0.0	0.0	0.17	0.7	1.735	0.948	201.99	2.269	1914.2	2	8.1121	2	2238	2	1.60	83.0	6.6	0.293	0.144	
333	2	73.7	34.194	2	23.671	23.656	23.135	0.122	1.6	10.3	1.14	5.3	1.447	0.785	104.45	2.545	2059.9	2	7.8550	2	2252	2	0.70	68.7	3.7	0.435	0.405	
332	2	100.7	34.704	2	16.747	16.731	25.351	0.055	0.0	27.9	2.19	2.19	2.15	0.803	0.428	13.24	1.195	2204.6	2	7.5520	2	2277	2	-9	63.5	-9	0.114	0.199
331	2	124.9	34.782	2	14.265	14.247	25.967	0.036	0.0	30.8	2.33	2.33	2.16	0.581	0.310	6.535	1.968	2229.2	2	7.5006	2	2286	2	-0.10	59.1	3.0	0.056	0.107
330	2	149.8	34.795	2	12.738	12.737	26.286	0.031	0.0	31.2	2.31	2.31	2.44	0.432	0.226	13.84	2.173	2233.0	2	7.5019	2	-9	5	-0.10	53.0	-9	0.015	0.048
329	2	174.2	34.786	2	12.181	12.158	26.392	0.031	0.0	32.5	2.38	2.38	2.61	0.304	0.166	8.37	1.464	2243.7	2	-9	9	2292	2	-0.10	-9	-9	0.003	0.026
328	2	193.9	34.775	2	11.884	11.859	26.441	0.034	0.0	32.8	2.36	2.36	2.67	0.284	0.150	10.71	1.461	2245.2	2	7.4713	2	2294	2	-0.10	49.4	-9	0.003	0.029
327	2	249.4	34.749	2	11.284	11.253	26.534	0.037	0.0	33.1	2.43	2.43	2.86	0.204	0.114	13.01	1.495	2249.1	2	7.4662	2	2299	2	-0.10	-9	-9	0.002	0.033
326	2	299.8	34.728	2	10.767	10.731	26.612	0.039	0.0	32.3	2.39	2.39	3.01	0.202	0.107	25.77	1.444	2246.7	2	7.4821	2	2302	2	0.00	-9	-9	0.001	0.030
325	2	348.8	34.702	2	10.308	10.267	26.673	0.039	0.0	33.4	2.52	2.52	3.38	0.093	0.051	10.67	1.630	2262.4	2	7.4337	2	2297	2	-0.10	-9	-9	-9	-9
324	9	-9	-9	9	-9	-9	-9	-9	-9	34.6	2.68	2.68	37.5	0.033	0.020	2.87	1.767	2277.7	2	7.3978	2	2309	2	-0.10	46.6	2.1	-9	-9
323	2	399.1	34.676	2	9.815	9.769	26.738	0.037	0.0	34.6	2.80	2.80	47.9	0.007	0.003	2.19	1.884	2296.9	2	7.3759	2	2322	2	-0.20	49.6	2.3	-9	-9
322	2	500.2	34.605	2	8.544	8.490	26.889	0.038	0.0	35.3	3.14	3.14	61.5	0.002	0.002	1.01	2.003	2316.6	2	7.3501	2	2326	2	-0.20	-9	-9	-9	-9
321	2	599.6	34.569	2	7.228	7.169	27.056	0.035	0.0	37.4	3.42	3.42	70.4	0.002	0.001	1.73	2.065	2327.7	2	7.3410	2	2336	2	-0.20	-9	-9	-9	-9
320	2	698.7	34.558	2	6.402	6.338	27.160	0.034	0.0	41.1	3.23	3.23	78.5	0.001	0.001	1.73	2.065	2327.7	2	7.3410	2	2345	2	-0.20	47.7	-9	-9	-9
319	2	798.9	34.550	2	5.710	5.640	27.242	0.033	0.0	43.0	3.27	3.27	85.7	0.001	0.001	1.457	2.026	2335.1	2	7.3496	2	2346	2	-0.30	-9	-9	-9	-9
318	2	898.2	34.552	2	5.234	5.158	27.301	0.031	0.0	44.0	3.24	3.24	92.5	-0.001	0.001	1.457	2.026	2335.1	2	7.3496	2	2346	2	-0.30	46.3	-9	-9	-9
317	3	999.2	34.537	2	4.779	4.698	27.359	0.030	0.0	44.6	3.28	3.28	99.5	-9	-9	1	-9	2335.1	2	7.3496	2	2346	2	-0.30	-9	-9	-9	-9
316	2	1099.5	34.563	2	4.341	4.254	27.413	0.028	0.0	43.9	3.23	3.23	99.3	-9	-9	29.44	1.930	2347.7	2	7.3719	2	2372	2	-0.30	-9	-9	-9	-9
315	2	1199.0	34.573	2	3.998	3.905	27.457	0.026	0.0	43.7	3.18	3.18	105.3	0.001	0.002	36.08	1.876	2350.7	2	7.3823	2	2381	2	-0.20	-9	-9	-9	-9
314	2	1299.2	34.583	2	3.671	3.573	27.498	0.025	0.0	44.0	3.13	3.13	110.9	-9	-9	44.03	1.824	2354.8	2	7.3975	2	2389	2	-0.30	-9	-9	-9	-9
313	2	1398.0	34.589	2	3.378	3.278	27.532	0.024	-9	44.0	3.09	3.09	115.7	-9	-9	49.59	1.790	2356.0	2	-9	9	2389	2	-0.20	-9	-9	-9	-9
312	2	1498.3	34.599	2	3.239	3.128	27.553	0.024	0.0	42.7	3.10	3.10	123.3	-9	-9	54.61	1.758	2361.3	2	7.4156	2	2403	2	-0.20	-9	-9	-9	-9
311	2	1598.7	34.607	2	2.996	2.880	27.583	0.021	0.0	41.5	3.03	3.03	132.7	-0.009	-0.002	62.58	1.704	2361.6	2	7.4310	2	2399	2	-0.20	-9	-9	-9	-9
310	2	1798.4	34.624	2	2.637	2.508	27.628	0.020	0.0	41.2	2.95	2.95	140.9	-9	-9	73.73	1.613	2362.4	2	7.4535	2	2411	2	-0.30	-9	-9	-9	-9
309	2	1997.1	34.641	2	2.298	2.157	27.671	0.017	0.0	40.2	2.82	2.82	147.5	-9	-9	85.57	1.536	2365.0	2	7.4748	2	2432	3	-0.20	39.3	-9	-9	-9
308	2	2193.3	34.654	2	2.043	1.889	27.703	0.016	0.0	39.2	2.79	2.79	151.7	-9	-9	96.80	1.457	2364.2	2	7.4973	2	2437	2	-0.20	-9	-9	-9	-9
307	2	2399.0	34.661	2	1.923	1.753	27.720	0.014	0.0	38.7	2.75	2.75	153.4	-9	-9	103.74	1.411	2364.2	2	7.5110	2	2435	2	-0.10	-9	-9	-9	-9
306	2	2600.6	34.667	2	1.837	1.650	27.732	0.013	0.0	38.3	2.71	2.71	152.3	-9	-9	109.59	1.364	2361.3	2	7.5280	2	2437	2	-0.10	-9	-9	-9	-9
305	2	2801.3	34.671	2	1.766	1.562	27.742	0.010	0.0	38.1	2.68	2.68	151.8	-9	-9	115.46	1.336	2360.9	2	7.5336	2	2439	2	0.00	-9	-9	-9	-9
304	2	2999.4	34.674	2	1.718	1.496	27.749	0.011	0.0	38.1	2.63	2.63	150.8	-9	-9	120.23	1.305	2356.5	2	7.5416	2	2435	2	-0.10	-9	-9	-9	-9
303	2	3198.7	34.676	2	1.683	1.443	27.755	0.011	0.0	38.2	2.59	2.59	149.9	-9	-9	123.84	1.284	2354.2	2	7.5489	2	2428	2	-9	-9	-9	-9	-9
302	2	3196.4	34.676	2	1.683	1.443	27.755	0.011	0.0	37.1	2.63	2.63	153.2	-9	-9	123.85	1.269	2354.7	2	7.5483	2	2425	3	0.00	-9	-9	-9	-9
301	2	3342.1	34.678	2	1.651	1.397	27.759	0.012	0.0	36.9	2.62	2.62	157.1	-9	-9	127.53	1.258	2355.4	2	7.5545	2	2433	2	0.00	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 170 DATE 4/20/94 LATITUDE 11°20.0'N Btm Depth: 3521
CAST 1 LONGITUDE 110°0.0'W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma T	Theta cp	Beam										IC02										Chl-a µg/L	Phaeo µg/L					
								NO2 µg/kg	NO3 µg/kg	PO4 µg/kg	Si(OH)4 µg/kg	CFC-11 µg/kg	CFC-12 µg/kg	O2 µmol/kg	P* @20°C µatm	DIC P* µmol/kg	pH P*	TALK µmol/kg	P* µmol/kg	813C per mil	TOC µmol/L	TON µmol/L												
136	2	9.9	33.799	2	28.841	28.838	21.216	0.065	0.0	2	0.0	2	0.14	2	2.3	2	1.671	2	0.934	2	197.77	2	255	2	1898.5	2	8.1260	2	2224	2	1.70	-9	-9	-9
135	2	9.9	33.798	2	28.840	28.838	21.216	0.065	0.0	2	0.0	2	0.13	2	2.4	2	1.673	2	0.932	2	197.79	6	254	2	1901.9	2	8.1252	2	2221	3	-9	86.0	7.7	-9
134	2	24.3	33.800	2	28.850	28.844	21.215	0.069	0.0	2	0.0	2	0.11	2	2.5	2	1.678	2	0.954	2	198.29	2	-9	9	-9	9	8.1241	2	-9	9	-9	6.6	-9	-9
133	2	49.9	33.801	2	28.853	28.841	21.217	0.071	0.0	2	0.0	2	0.12	2	3.0	2	1.678	6	0.941	6	197.48	2	264	2	1899.8	2	8.1252	2	2225	2	-9	99.5	6.7	-9
132	2	74.5	33.813	2	27.236	27.219	21.755	0.069	0.2	2	0.9	2	0.28	2	3.2	2	1.694	2	0.957	2	182.55	2	-9	9	-9	9	8.0600	2	-9	9	-9	91.0	7.2	-9
131	2	99.4	34.277	2	22.433	22.413	23.553	0.086	0.0	2	16.4	2	1.31	2	8.9	2	1.558	2	0.797	2	88.78	2	636	2	2089.4	3	7.7943	2	2246	2	-9	83.8	5.9	-9
130	2	124.9	34.705	2	16.769	16.749	25.947	0.047	0.0	2	28.6	2	2.21	2	19.8	2	0.813	2	0.431	2	9.16	2	-9	9	-9	9	7.5370	2	-9	9	-9	65.5	5.0	-9
129	2	149.4	34.783	2	14.219	14.197	25.978	0.042	0.0	2	31.4	2	2.35	2	24.2	2	0.514	2	0.278	2	3.60	2	1400	2	2234.1	2	7.4916	2	2283	2	-9	-9	-9	-9
128	3	173.7	34.807	2	13.168	13.144	26.214	0.036	0.0	2	31.9	2	2.36	2	25.8	2	0.422	2	0.231	2	4.36	2	-9	9	-9	9	-9	2	2283	2	-9	-9	-9	-9
127	2	200.1	34.806	2	12.633	12.606	26.321	0.034	0.0	2	32.4	2	2.38	2	27.1	2	0.298	6	0.162	6	3.55	2	1465	2	2242.5	2	7.4742	2	2288	2	-9	54.0	3.8	-9
126	2	250.2	34.776	2	11.898	11.866	26.441	0.035	0.0	2	33.0	2	2.40	2	29.0	2	-9	1	-9	1	5.79	2	1504	2	2248.3	2	7.4616	2	2289	2	-9	-9	-9	-9
125	2	300.1	34.745	2	11.205	11.167	26.546	0.038	0.0	2	33.2	2	2.50	2	31.9	2	0.154	2	0.088	2	5.18	2	1592	2	2258.1	2	7.4397	2	2295	2	-9	53.3	-9	-9
124	9	-9	-9	-9	-9	-9	-9	-9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
123	2	347.3	34.722	2	10.745	10.702	26.612	0.036	0.0	2	32.8	2	2.55	2	34.1	2	0.100	2	0.055	2	4.55	2	-9	9	-9	9	7.4220	2	-9	9	-9	-9	-9	-9
122	2	400.0	34.680	2	9.679	9.950	26.711	0.036	0.0	2	31.3	2	2.70	2	39.6	2	0.041	2	0.023	2	0.60	2	1795	2	2282.2	2	7.3952	2	2294	3	-9	47.7	-9	-9
121	2	497.8	34.612	2	8.604	8.551	26.885	0.046	0.0	2	31.7	2	2.95	2	51.4	2	-9	9	-9	9	1.01	2	1915	2	2301.7	2	7.3696	2	2316	2	-9	-9	-9	-9
120	2	590.0	34.571	2	7.289	7.230	27.049	0.039	0.0	2	36.6	2	3.13	2	63.6	2	0.046	2	0.019	2	1.47	2	2003	2	2317.8	2	7.3524	2	2327	2	-9	-9	-9	-9
119	2	699.3	34.554	2	6.288	6.225	27.171	0.035	0.0	2	41.5	2	3.23	2	74.6	2	-9	9	-9	9	1.59	2	2083	2	2331.7	2	7.3373	2	2339	2	-9	-9	-9	-9
118	2	798.2	34.551	2	5.710	5.641	27.243	0.037	0.0	2	43.7	2	3.27	2	81.4	2	-9	9	-9	9	3.19	2	2106	2	2339.6	2	-9	1	2340	2	-9	-9	-9	-9
117	2	901.7	34.554	2	4.987	4.913	27.331	0.034	0.0	2	44.2	2	3.48	4	89.3	2	0.003	2	0.003	2	14.36	2	2053	2	2345.4	2	7.3453	2	2350	2	-9	-9	-9	-9
116	2	997.6	34.538	2	4.569	4.489	27.382	0.031	0.0	2	43.8	2	3.20	2	95.7	2	0.007	2	-0.001	2	33.24	2	-9	9	-9	9	7.3792	2	-9	9	-9	48.8	-9	-9
115	2	1098.9	34.563	2	4.281	4.194	27.418	0.030	0.0	2	43.4	2	3.18	2	100.8	2	-9	9	-9	9	39.78	2	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	
114	2	1198.1	34.575	2	3.973	3.831	27.465	0.028	0.0	2	43.3	2	3.14	2	108.0	2	0.002	2	-0.001	2	43.92	2	-9	9	-9	9	7.3949	2	-9	9	-9	-9	-9	-9
113	2	1296.8	34.584	2	3.643	3.545	27.501	0.028	0.0	2	43.0	2	3.12	2	113.9	2	-9	9	-9	9	50.51	2	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	
112	2	1399.7	34.592	2	3.402	3.298	27.532	0.025	0.0	2	42.7	2	3.07	2	119.2	2	-9	9	-9	9	57.51	2	-9	9	-9	9	7.4207	2	-9	9	-9	-9	-9	-9
111	2	1499.0	34.600	2	3.174	3.064	27.560	0.025	0.0	2	42.2	2	3.03	2	126.2	2	-9	9	-9	9	63.44	2	-9	9	-9	9	7.4514	2	-9	9	-9	-9	-9	-9
110	2	1590.0	34.608	2	2.978	2.863	27.583	0.024	0.0	2	41.9	2	2.98	2	130.6	2	-9	9	-9	9	69.85	2	-9	9	-9	9	7.4814	2	-9	9	-9	-9	-9	-9
109	2	1799.3	34.624	2	2.608	2.479	27.631	0.022	0.0	2	40.5	2	2.91	2	138.9	2	-9	9	-9	9	74.26	2	-9	9	-9	9	7.5142	2	-9	9	-9	-9	-9	-9
108	2	2002.2	34.640	2	2.276	2.135	27.672	0.020	0.0	2	40.3	2	2.83	2	146.1	2	-9	9	-9	9	83.39	2	-9	9	-9	9	7.5497	2	-9	9	-9	-9	-9	-9
107	2	2247.6	34.654	2	2.015	1.857	27.706	0.017	0.0	2	39.3	2	2.76	2	151.7	2	-9	9	-9	9	98.35	2	-9	9	-9	9	7.5987	2	-9	9	-9	-9	-9	-9
106	2	2497.9	34.662	2	1.890	1.712	27.723	0.015	0.0	2	38.6	2	2.67	2	153.0	2	-9	9	-9	9	105.91	2	-9	9	-9	9	7.6487	2	-9	9	-9	-9	-9	-9
105	2	2747.4	34.668	2	1.772	1.574	27.738	0.013	0.0	2	38.5	2	2.67	2	156.1	2	-9	9	-9	9	114.24	6	-9	9	-9	9	7.7029	2	-9	9	-9	-9	-9	-9
104	2	3001.4	34.673	2	1.700	1.479	27.749	0.011	0.0	2	37.5	2	2.62	2	156.9	2	-9	9	-9	9	120.02	2	-9	9	-9	9	7.7586	2	-9	9	-9	-9	-9	-9
103	2	3249.0	34.676	2	1.634	1.390	27.758	0.011	0.0	2	37.2	2	2.58	2	157.2	2	-9	9	-9	9	126.94	2	-9	9	-9	9	7.8086	2	-9	9	-9	-9	-9	-9
102	2	3247.5	34.677	2	1.634	1.390	27.759	0.011	0.0	2	37.2	2	2.58	2	155.4	2	-9	9	-9	9	127.84	2	-9	9	-9	9	7.8586	2	-9	9	-9	-9	-9	-9
101	2	3542.3	34.683	2	1.523	1.252	27.773	0.010	0.0	2	36.6	2	2.52	2	153.9	2	-9	9	-9	9	140.65	2	-9	9	-9	9	7.9663	2	-9	9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column

** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94

WOCE P18

NOAA Ship Discoverer

STATION 172 DATE 4/20/94 LATITUDE 12°40.0'N Btm Depth: 4186
 CAST 3 LONGITUDE 110°40.0'W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma t	Theta	Beam Attenuation		FOO2										TAIK	P _h	DIC	pH	TOC	TON	Chl-a											
								NO2	NO3	PO4	SiO4	F ₀₄	F ₁₁	F ₁₂	O2	F _{20C}	DIC	F _h	F _h								F _h	F _h	F _h	F _h	F _h						
336	2	8.8	33.768	2	33.770	2	28.975	28.973	21.148	0.064	0.0	0.0	0.0	0.13	2	0.0	2	1.676	2	0.943	2	198.20	2	-9	9	1894.4	2	8.1259	2	2225	6	-9	72.9	6.6	0.086	0.028	
335	2	9.9	33.767	2	33.770	2	28.949	28.947	21.156	0.067	0.0	0.0	0.10	2	0.0	2	1.688	2	0.946	2	198.28	6	250	2	-9	9	8.1265	2	-9	9	-9	5.3	0.085	0.028			
334	2	23.8	33.762	2	33.765	2	28.854	28.848	21.186	0.076	0.0	0.0	0.12	2	0.0	2	1.677	2	0.934	2	198.65	2	-9	9	8.1267	2	-9	9	9	9	72.7	6.1	0.097	0.035			
333	2	49.9	33.743	2	33.745	2	28.662	28.650	21.237	0.075	0.0	0.0	0.14	2	0.0	2	1.690	2	0.933	2	198.61	2	264	2	1893.3	2	8.1223	2	2228	2	-9	5.8	0.226	0.098			
332	3	75.0	33.858	2	33.861	2	28.542	28.525	21.364	0.078	0.0	0.0	0.15	2	0.0	2	1.699	2	0.961	2	199.30	2	-9	9	-9	9	-9	9	-9	9	60.9	-9	6.0	0.332	0.195		
331	2	97.8	33.955	2	33.976	2	27.295	27.273	21.844	0.087	0.3	0.8	0.34	2	0.1	2	1.715	6	0.950	6	183.89	2	309	2	1942.4	2	8.0594	2	2246	2	-9	-9	-9	0.019	0.065		
330	2	149.2	34.718	2	34.718	2	16.461	16.437	25.430	0.099	0.0	2	2.22	2	17.3	2	0.820	2	0.438	2	0.31	2	1285	2	2212.5	3	7.5779	2	2296	2	-9	44.1	4.2	0.015	0.249		
329	2	197.6	34.820	2	34.822	2	13.335	13.307	26.191	0.055	1.0	2	2.83	2	24.0	2	0.595	2	0.222	2	0.31	2	1468	2	2243.2	3	7.4756	2	2300	2	-9	41.1	-9	0.003	0.093		
328	2	248.8	34.793	2	34.791	2	12.223	12.190	26.391	0.051	0.2	2	2.41	2	26.5	2	0.237	2	0.133	2	0.19	2	1547	2	2251.6	2	7.4494	2	2300	2	-9	44.1	-9	0.003	0.093		
327	2	302.3	34.735	2	34.738	2	11.367	11.329	26.509	0.044	0.2	2	3.04	2	32.2	2	0.124	2	0.072	2	0.18	2	1643	2	2263.6	2	7.4285	2	2304	2	-9	44.1	-9	0.002	0.080		
326	2	330.2	34.728	2	34.739	2	11.115	11.074	26.551	0.043	0.5	2	3.2	2	34.2	2	0.106	2	0.061	2	0.184	2	-9	9	2265.3	2	7.4229	2	2302	2	-9	-9	-9	-9	-9		
325	2	398.9	34.683	2	34.684	2	10.196	10.148	26.679	0.043	0.8	2	2.69	2	38.1	2	0.039	2	0.022	2	1.48	2	1785	2	2283.7	2	7.3949	2	2307	2	-9	57.5	-9	-9	-9		
324	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	0.9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
323	2	499.3	34.616	2	34.616	2	8.765	8.711	26.864	0.042	0.4	2	2.92	2	49.8	2	0.007	2	0.006	2	1.62	2	1904	2	2302.5	2	7.3680	2	2327	2	-9	-9	-9	-9	-9		
322	2	599.1	34.574	2	34.573	2	7.489	7.429	27.023	0.039	0.4	2	3.08	2	61.9	2	-9	-9	-9	-9	0.24	2	1995	2	2318.0	2	7.3519	2	2336	2	-9	-9	-9	-9	-9		
321	2	700.7	34.552	2	34.551	2	6.571	6.506	27.133	0.035	0.0	2	3.15	2	70.5	2	0.002	2	0.000	2	0.93	2	2060	2	2326.5	2	7.3400	2	2330	2	-9	-9	-9	-9	-9		
320	2	799.0	34.548	2	34.548	2	5.849	5.778	27.224	0.037	0.0	2	3.22	2	78.2	2	-9	-9	-9	-9	1.69	2	2110	2	2337.6	2	7.3306	2	2335	2	-9	-9	-9	-9	-9		
319	2	902.2	34.545	2	34.545	2	5.212	5.136	27.299	0.036	0.0	2	3.30	2	89.4	2	-0.002	2	-0.002	2	5.00	2	2115	2	2347.0	2	-9	9	2346	2	-9	-9	-9	-9	-9		
318	2	1001.2	34.550	2	34.550	2	4.776	4.694	27.354	0.032	0.0	2	3.30	2	96.6	2	-9	-9	-9	-9	8.75	2	2120	2	2354.5	2	7.3317	2	2361	6	-9	34.8	2.4	-9	-9		
317	2	1197.9	34.571	2	34.569	2	3.940	3.848	27.461	0.030	0.0	2	3.25	2	110.7	2	-9	-9	-9	-9	26.27	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
316	2	1399.8	34.590	2	34.592	2	3.327	3.234	27.537	0.027	0.0	2	3.13	2	123.3	2	0.000	2	0.003	2	42.54	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
315	2	1599.6	34.608	2	34.607	2	2.944	2.828	27.587	0.024	0.0	2	3.02	2	129.9	2	-9	-9	-9	-9	57.83	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
314	2	1801.6	34.625	2	34.624	2	2.559	2.432	27.636	0.021	0.0	2	2.92	2	136.5	2	-9	-9	-9	-9	72.67	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
313	2	1997.8	34.640	2	34.640	2	2.263	2.123	27.674	0.019	0.0	2	2.84	2	142.4	2	0.001	2	0.001	2	85.96	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
312	2	2199.3	34.651	2	34.650	2	2.074	1.920	27.698	0.017	0.0	2	2.73	2	148.7	2	-9	-9	-9	-9	94.93	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
311	2	2399.9	34.658	2	34.657	2	1.958	1.788	27.715	0.016	0.0	2	2.64	2	153.7	2	0.001	2	0.000	2	102.15	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
310	2	2600.4	34.664	2	34.663	2	1.866	1.679	27.727	0.014	0.0	2	2.72	2	153.7	2	0.001	2	0.000	2	108.11	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
309	2	2800.5	34.668	2	34.668	2	1.790	1.586	27.737	0.012	0.0	2	2.68	2	156.8	2	-9	-9	-9	-9	113.58	6	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
308	2	3000.5	34.671	2	34.672	2	1.737	1.515	27.745	0.011	0.0	2	2.64	2	155.4	2	-0.001	2	0.006	2	124.72	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
307	2	3198.8	34.675	2	34.675	2	1.669	1.429	27.755	0.010	0.0	2	2.61	2	155.4	2	-9	-9	-9	-9	118.11	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
306	2	3400.8	34.679	2	34.679	2	1.592	1.334	27.765	0.010	0.0	2	2.57	2	152.1	2	-9	-9	-9	-9	93.85	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
305	2	3597.7	34.681	2	34.681	2	1.566	1.288	27.770	0.010	0.0	2	2.54	2	150.7	2	-9	-9	-9	-9	135.86	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
304	2	3796.8	34.682	2	34.681	2	1.569	1.270	27.771	0.010	0.0	2	2.53	2	150.0	2	-9	-9	-9	-9	131.85	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
303	2	4002.9	34.682	2	34.683	2	1.586	1.265	27.772	0.010	0.0	2	2.52	2	149.3	2	0.002	2	0.001	2	137.35	6	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
302	2	4001.0	34.683	2	34.682	2	1.586	1.264	27.772	0.010	0.0	2	2.54	2	148.6	2	-9	-9	-9	-9	137.67	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
301	2	4277.2	34.682	2	34.681	2	1.609	1.262	27.772	0.010	0.0	2	2.55	2	151.5	2	-9	-9	-9	-9	137.53	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 173 1 DATE 4/21/94 LATITUDE 13°20.0'N Btm Depth: 4090 CHL-a Phaeo
CAST 1 LONGITUDE 109°59.7'W

Sample ID	Pressure db	Salinity P ₀	Salinity B _{ottle}	Temp °C	Potential Temp °C	Sigma-t ₀	Sigma-t	Theta	Beam Attenuation cp	NO2 P ₀ μmol/kg	NO3 P ₀ μmol/kg	PO4 P ₀ μmol/kg	Si(OH) ₄ P ₀ μmol/kg	CFC-11 P ₀ pmol/kg	CFC-12 P ₀ pmol/kg	O ₂ P ₀ μmol/kg	fO ₂ P ₀ μatm	DIC P ₀ μmol/kg	pH P ₀	TA ₀ P ₀ μmol/kg	F ₀ P ₀	813C P ₀ per mil	TOC μmol/L	TON μmol/L	Chi-a μg/L	Phaeo μg/L
136	2	33.790	33.791	28.877	28.875	21.197	0.066	0.0	0.0	0.0	0.0	0.0	0.0	1.677	0.938	2.205	2.257	1.899	2.812	2.229	3	1.60	-9	-9	-9	-9
135	2	33.792	33.795	28.757	28.750	21.240	0.078	0.0	0.0	0.0	0.0	0.0	0.0	1.685	0.941	2.198	2.260	1.901	2.812	2.229	3	1.60	-9	-9	-9	-9
134	2	33.827	33.837	28.668	28.656	21.298	0.082	0.0	0.0	0.0	0.0	0.0	0.0	1.686	0.929	2.199	2.260	1.901	2.812	2.229	3	1.60	-9	-9	-9	-9
133	2	34.077	34.080	28.389	28.371	21.579	0.076	0.0	0.0	0.1	0.1	0.1	0.1	1.717	0.951	2.200	2.337	1.977	2.812	2.229	3	1.60	-9	-9	-9	-9
132	3	34.107	34.112	25.598	25.576	22.491	0.084	0.6	2.9	0.6	1.5	2.2	1.667	0.918	2.167	2.337	1.977	2.812	2.229	3	1.60	-9	-9	-9	-9	
131	2	34.670	34.714	17.335	17.314	25.186	0.045	0.0	2.8	2.2	1.7	2.0	1.822	0.442	0.663	2.337	1.977	2.812	2.229	3	1.60	-9	-9	-9	-9	
130	2	34.775	34.777	14.450	14.428	25.923	0.036	0.0	30.5	2.3	2.1	2.4	0.544	0.294	1.27	2.338	2.233	2.812	2.229	3	1.60	-9	-9	-9	-9	
129	2	34.761	34.763	13.385	13.360	26.135	0.058	0.1	29.2	2.4	2.3	2.4	0.416	0.230	0.66	2.338	2.233	2.812	2.229	3	1.60	-9	-9	-9	-9	
128	2	34.774	34.773	12.603	12.576	26.302	0.054	0.0	31.8	2.4	2.5	2.4	0.299	0.163	0.65	2.338	2.233	2.812	2.229	3	1.60	-9	-9	-9	-9	
127	2	34.767	34.767	11.810	11.778	26.450	0.035	0.0	33.4	2.4	2.7	2.2	0.211	0.119	2.78	2.338	2.233	2.812	2.229	3	1.60	-9	-9	-9	-9	
126	2	34.748	34.748	11.292	11.254	26.533	0.034	0.0	33.2	2.4	2.6	2.9	0.090	0.049	2.57	2.338	2.233	2.812	2.229	3	1.60	-9	-9	-9	-9	
125	2	34.718	34.717	10.763	10.721	26.606	0.032	0.0	33.2	2.5	2.1	3.1	0.090	0.049	1.57	2.338	2.233	2.812	2.229	3	1.60	-9	-9	-9	-9	
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
123	2	34.686	34.687	10.106	10.059	26.697	0.042	0.3	30.9	2.6	2.6	3.5	0.018	0.004	0.43	2.338	2.233	2.812	2.229	3	1.60	-9	-9	-9	-9	-9
122	2	34.595	34.595	8.758	8.704	26.848	0.041	0.0	35.3	2.7	2.9	4.3	0.018	0.004	4.69	2.338	2.233	2.812	2.229	3	1.60	-9	-9	-9	-9	-9
121	2	34.551	34.555	7.716	7.656	26.972	0.039	0.0	36.8	2.9	2.6	5.3	0.000	-0.002	4.74	2.338	2.233	2.812	2.229	3	1.60	-9	-9	-9	-9	-9
120	2	34.551	34.551	6.812	6.745	27.100	0.035	0.0	39.1	3.0	3.0	6.4	0.000	-0.002	2.72	2.338	2.233	2.812	2.229	3	1.60	-9	-9	-9	-9	-9
119	2	34.540	34.540	6.006	5.934	27.197	0.035	0.0	42.5	3.0	3.2	7.4	0.000	-0.002	1.88	2.338	2.233	2.812	2.229	3	1.60	-9	-9	-9	-9	-9
118	2	34.539	34.539	5.432	5.355	27.268	0.034	0.0	43.7	3.2	3.2	8.5	0.000	-0.002	1.41	2.338	2.233	2.812	2.229	3	1.60	-9	-9	-9	-9	-9
117	2	34.541	34.541	4.990	4.947	27.329	0.031	0.0	44.6	3.2	3.2	9.2	0.002	0.003	1.14	2.338	2.233	2.812	2.229	3	1.60	-9	-9	-9	-9	-9
116	2	34.551	34.550	4.489	4.401	27.386	0.031	0.0	44.6	3.2	3.2	10.4	0.002	0.003	1.14	2.338	2.233	2.812	2.229	3	1.60	-9	-9	-9	-9	-9
115	2	34.562	34.563	4.116	4.022	27.436	0.030	0.0	44.5	3.2	3.2	10.8	0.002	0.003	1.14	2.338	2.233	2.812	2.229	3	1.60	-9	-9	-9	-9	-9
114	2	34.574	34.573	3.781	3.681	27.480	0.029	0.0	44.4	3.1	3.1	11.6	0.002	0.003	1.14	2.338	2.233	2.812	2.229	3	1.60	-9	-9	-9	-9	-9
113	2	34.587	34.587	3.406	3.302	27.528	0.027	0.0	43.6	3.0	3.0	12.3	0.002	0.003	1.14	2.338	2.233	2.812	2.229	3	1.60	-9	-9	-9	-9	-9
112	2	34.607	34.607	2.944	2.828	27.587	0.024	0.0	42.4	3.0	3.0	13.1	0.002	0.003	1.14	2.338	2.233	2.812	2.229	3	1.60	-9	-9	-9	-9	-9
111	2	34.623	34.623	2.575	2.448	27.634	0.021	0.0	41.4	2.8	2.8	14.0	0.002	0.003	1.14	2.338	2.233	2.812	2.229	3	1.60	-9	-9	-9	-9	-9
110	2	34.638	34.637	2.285	2.144	27.670	0.017	0.0	40.7	2.8	2.8	15.0	0.002	0.003	1.14	2.338	2.233	2.812	2.229	3	1.60	-9	-9	-9	-9	-9
109	2	34.650	34.650	2.063	1.904	27.699	0.017	0.0	39.8	2.7	2.7	15.9	0.002	0.003	1.14	2.338	2.233	2.812	2.229	3	1.60	-9	-9	-9	-9	-9
108	2	34.661	34.660	1.884	1.706	27.722	0.014	0.0	38.4	2.6	2.6	16.7	0.002	0.003	1.14	2.338	2.233	2.812	2.229	3	1.60	-9	-9	-9	-9	-9
107	2	34.667	34.667	1.787	1.588	27.737	0.013	0.0	38.4	2.6	2.6	17.7	0.002	0.003	1.14	2.338	2.233	2.812	2.229	3	1.60	-9	-9	-9	-9	-9
106	2	34.672	34.670	1.731	1.509	27.746	0.011	0.0	37.9	2.6	2.6	18.6	0.002	0.003	1.14	2.338	2.233	2.812	2.229	3	1.60	-9	-9	-9	-9	-9
105	2	34.676	34.676	1.667	1.422	27.756	0.010	0.0	37.6	2.6	2.7	19.2	0.002	0.003	1.14	2.338	2.233	2.812	2.229	3	1.60	-9	-9	-9	-9	-9
104	2	34.678	34.677	1.631	1.361	27.762	0.010	0.0	37.7	2.5	2.5	20.1	0.002	0.003	1.14	2.338	2.233	2.812	2.229	3	1.60	-9	-9	-9	-9	-9
103	2	34.680	34.681	1.617	1.322	27.766	0.010	0.0	37.4	2.5	2.4	20.9	0.002	0.003	1.14	2.338	2.233	2.812	2.229	3	1.60	-9	-9	-9	-9	-9
102	2	34.680	34.680	1.617	1.322	27.766	0.010	0.0	37.3	2.5	2.3	21.5	0.002	0.003	1.14	2.338	2.233	2.812	2.229	3	1.60	-9	-9	-9	-9	-9
101	2	34.680	34.680	1.646	1.307	27.767	0.010	0.0	37.1	2.5	2.3	22.2	0.002	0.003	1.14	2.338	2.233	2.812	2.229	3	1.60	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 174 1 DATE 4/21/94 LATITUDE 14°0.1'N Btm Depth: 3275
 CAST 1 LONGITUDE 109°59.9'W

Sample #	Pressure db	Salinity	F ^o Salinity	Temp °C	Temp °C	Potential Temp °C	Sigma T		Beam Theta ep	NO2 F ^o	NO3 F ^o	PO4 F ^o	Si(OH) ₄ F ^o	CFC-11 F ^o	CFC-12 F ^o	O ₂ F ^o	P ^o @20°C μm	DIC F ^o	pH	P ^o	Talk F ^o	F ^o	δ13C per mil	TOC μmol/L	TON μmol/L	Chi-a μg/L	Phaeo μg/L													
							Thera	cp																																
136	9.1	33.891	2	33.893	2	28.503	2	28.501	21.397	0.065	0.0	2	0.1	2	0.12	2	0.2	2	1.693	2	0.970	2	198.60	2	263	2	1898.8	2	8.1200	2	2229	2	1.60	-9	-9	-9	-9			
135	9.4	33.891	2	33.894	2	28.502	2	28.500	21.398	0.065	0.0	2	0.0	2	0.14	2	0.1	2	1.701	2	0.951	2	198.87	2	266	2	1899.3	2	8.1173	2	2229	2	-9	81.8	5.6	-9	-9			
134	2	25.2	33.903	2	33.905	2	28.409	28.403	21.438	0.079	0.0	2	0.0	2	0.13	2	0.2	2	1.711	2	0.992	2	199.02	2	258	2	1899.3	2	8.1192	2	2231	2	1.60	84.2	6.7	-9	-9			
133	2	40.3	33.881	2	33.886	2	28.158	28.147	21.506	0.075	0.0	2	0.0	2	0.15	2	0.1	2	1.727	2	0.964	2	200.45	2	259	2	1897.4	2	8.1224	2	2231	2	1.60	80.2	5.7	-9	-9			
132	2	79.8	33.950	2	33.959	2	27.191	27.174	21.872	0.084	0.0	2	0.0	2	0.11	2	0.6	2	1.785	2	1.004	2	205.34	2	259	2	1905.6	2	8.1147	2	2237	2	1.60	84.2	5.2	-9	-9			
131	2	98.7	34.405	2	34.388	2	22.052	22.032	23.757	0.071	0.9	2	9.7	2	1.04	2	4.9	2	1.566	6	0.843	6	112.26	2	535	2	2074.0	2	7.8527	2	2276	2	0.80	-9	6.0	-9	-9			
130	2	124.3	34.740	2	34.731	2	16.096	16.076	25.531	0.043	0.0	2	29.2	2	2.22	2	17.5	2	0.785	2	0.419	2	4.45	2	1275	2	2212.2	2	7.5240	2	2286	2	-9	64.3	-9	-9	-9			
129	2	148.4	34.786	2	34.776	2	14.038	14.017	26.018	0.039	0.0	2	30.3	2	2.37	2	23.0	2	0.467	2	0.254	2	1.02	2	1402	2	2233.7	2	7.4794	2	2291	2	-0.20	52.5	-9	-9	-9			
128	2	173.3	34.765	2	34.769	2	12.845	12.822	26.247	0.053	0.7	2	29.3	2	2.45	2	25.8	2	0.333	2	0.184	2	0.61	2	1508	2	2243.0	2	7.4579	2	2292	2	-9	-9	-9	-9	-9			
127	2	200.2	34.759	2	34.759	2	12.319	12.292	26.346	0.045	0.5	2	30.9	2	2.44	2	27.0	2	0.257	2	0.155	2	0.84	2	1525	2	2246.1	2	7.4521	2	2296	2	-0.10	53.9	-9	-9	-9			
126	2	250.5	34.722	2	34.716	2	11.531	11.499	26.467	0.036	0.0	2	31.7	2	2.48	2	29.2	2	0.157	2	0.090	2	2.34	2	1609	2	2253.1	2	7.4369	2	-9	5	-9	-9	-9	-9				
125	2	301.0	34.687	2	34.688	2	10.687	10.651	26.595	0.036	0.0	2	31.8	2	2.55	2	32.6	2	0.094	6	0.060	6	2.97	2	1680	2	2262.9	2	7.4186	2	-9	5	-0.20	52.8	-9	-9	-9			
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9			
123	2	348.3	34.663	2	34.660	2	10.197	10.156	26.662	0.036	0.0	2	31.1	2	2.64	2	35.9	2	0.041	2	0.024	2	1.30	6	1790	2	2274.2	2	7.3929	2	2302	2	-9	-9	-9	-9	-9			
122	2	399.7	34.633	2	34.630	2	9.597	9.551	26.741	0.039	0.0	2	32.3	2	2.74	2	39.8	2	0.021	6	0.012	6	0.87	2	1842	2	2280.4	2	7.3817	2	2306	2	-0.20	-9	-9	-9	-9			
121	2	500.3	34.577	2	34.576	2	8.435	8.382	26.884	0.041	0.0	2	35.5	2	2.83	2	47.4	2	0.009	2	0.005	2	5.16	6	1875	2	2287.7	2	-9	9	2308	2	-0.20	44.9	-9	-9	-9			
120	2	600.7	34.546	2	34.545	2	7.463	7.403	27.004	0.037	0.0	2	37.2	2	2.97	2	57.2	2	0.001	2	0.002	2	5.78	2	1933	2	2308.9	2	7.3624	2	2319	2	-0.20	-9	-9	-9	-9			
119	2	700.7	34.528	2	34.528	2	6.654	6.588	27.103	0.035	0.0	2	39.6	2	3.06	2	66.0	2	0.002	2	-0.001	2	6.26	2	2003	2	2318.5	2	7.3513	2	2326	2	-0.20	-9	-9	-9	-9			
118	2	800.3	34.539	2	-9	5	5.942	5.870	27.205	0.032	0.0	2	43.2	2	3.31	2	79.4	2	0.000	2	0.000	2	1.95	2	2105	2	2333.3	2	-9	9	2346	2	-0.30	-9	-9	-9	-9			
117	2	898.3	34.540	2	34.541	2	5.381	5.304	27.275	0.034	0.0	2	43.6	2	3.24	2	86.0	2	-0.004	2	0.000	2	3.45	2	2137	2	2346.0	2	7.3281	2	2340	2	-0.30	-9	-9	-9	-9			
116	2	1000.6	34.544	2	34.545	2	4.818	4.736	27.344	0.032	0.0	2	44.5	2	3.27	2	95.8	2	-9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9		
115	2	1100.7	34.533	2	34.534	2	4.430	4.342	27.395	0.031	0.0	2	44.7	2	3.27	2	103.2	2	-0.003	2	-0.002	2	14.94	2	2092	2	2360.1	2	7.3410	2	2358	2	-0.30	-9	-9	-9	-9			
114	2	1300.6	34.573	2	34.572	2	3.800	3.701	27.477	0.027	0.1	2	44.2	2	3.18	2	115.4	2	-9	9	-9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9		
113	2	1399.7	34.584	2	34.584	2	3.517	3.412	27.514	0.026	0.0	2	43.6	2	3.12	2	123.8	2	0.007	2	0.004	2	29.35	2	1982	2	2363.1	2	7.3651	2	2371	2	-0.30	-9	-9	-9	-9			
112	2	1599.2	34.609	2	34.608	2	2.925	2.810	27.590	0.023	0.0	2	42.0	2	2.99	2	136.8	2	-0.005	2	-0.002	2	58.02	2	1748	2	2367.3	2	7.4201	2	2398	2	-0.20	-9	-9	-9	-9			
111	2	1802.2	34.624	2	34.624	2	2.543	2.415	27.637	0.020	0.0	2	41.2	2	2.89	2	145.7	2	-9	9	-9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9		
110	2	1999.4	34.639	2	34.640	2	2.256	2.116	27.673	0.017	0.0	2	40.5	2	2.81	2	149.3	2	-0.003	2	0.001	2	84.84	2	1560	2	2367.0	2	7.4707	2	2417	2	-0.20	-9	-9	-9	-9			
109	2	2197.2	34.650	2	34.649	2	2.079	1.924	27.697	0.017	0.0	2	39.6	2	2.75	2	152.2	2	-9	9	-9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9		
108	2	2399.3	34.658	2	34.658	2	1.959	1.789	27.714	0.017	0.0	2	38.5	2	2.70	2	154.3	2	-0.004	2	0.000	2	101.89	2	1436	2	2361.7	2	7.5056	2	2426	2	-0.20	-9	-9	-9	-9			
107	2	2600.1	34.664	2	34.665	2	1.848	1.661	27.729	0.013	0.0	2	38.1	2	2.64	2	157.3	2	-9	9	-9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9		
106	2	2799.4	34.668	2	34.669	2	1.789	1.593	27.738	0.012	0.0	2	36.5	2	2.63	2	156.4	2	-0.003	2	0.000	2	113.82	2	1365	2	2358.4	2	-9	1	2429	2	-0.30	-9	-9	-9	-9	-9	-9	-9
105	2	3001.8	34.671	2	34.672	2	1.727	1.505	27.746	0.011	0.0	6	38.0	6	2.60	6	156.4	6	-9	9	-9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9		
104	2	3199.8	34.675	2	34.676	2	1.671	1.431	27.754	0.010	0.0	2	37.8	2	2.56	2	155.6	2	-0.002	2	0.003	2	118.31	2	1340	2	2357.5	2	7.5335	2	2428	2	-0.10	-9	-9	-9	-9	-9	-9	-9
103	2	3200.3	34.675	2	34.676	2	1.671	1.431	27.754	0.010	0.0	2	38.2	2	2.57	2	155.5	2	-0.002	2	0.000	2	123.57	2	1302	2	2352.4	2	7.5416	2	2432	2	-9	-9	-9	-9	-9	-9	-9	
102	2	3316.3	34.675	2	34.675	2	1.671	1.420	27.755	0.010	0.0	2	38.3	2	2.57	2	154.9	2	-0.002	2	0.002	2	124.29	2	1303	2	2350.8	2	7.5439	2	2426	2	-0.10	-9	-9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 176 DATE 4/21/94 LATITUDE 15°0.0'N BATHYDEPTH: 3777
CAST 1 LONGITUDE 110°0.0'W

Sample ID	Pressure db	Salinity ‰	Salinity ‰ CTD	Temp °C	Temp °C	Sigma-t	Sigma-t	Anom	NO2 ‰	NO3 ‰	PO4 ‰	Si(OH)4 ‰	P ‰	CFC-11 ‰	CFC-12 ‰	O2 ‰	P ‰ @20°C	DIC ‰	pH	TA ‰	TA ‰	P ‰	813C ‰	TOC ‰	TON ‰	Chi-a ‰	Phaeo ‰							
																												Temp °C	Temp °C	cp	cp	cp	cp	cp
136	2	8.7	33.883	2	28.018	28.016	21.550	0.068	0.0	2	0.12	2	0.0	2	1.754	2	0.974	2	201.41	2	256	2	1901.0	2	8.1230	2	2298	2	1.60	-9	5.6	-9	-9	
135	2	24.5	33.921	2	27.578	27.573	21.722	0.082	0.0	2	0.12	2	0.0	2	1.765	6	0.975	6	203.14	6	-9	9	8.1215	2	-9	9	5.3	-9	-9	-9	-9	-9		
134	2	49.5	34.087	2	26.947	26.936	22.051	0.082	0.0	2	0.09	2	0.0	2	1.825	2	1.008	2	210.32	2	-9	9	8.1218	2	-9	9	87.9	-9	-9	-9	-9	-9		
133	2	73.1	34.251	2	24.256	24.256	22.600	0.077	0.0	2	0.12	2	0.0	2	1.909	2	1.041	2	208.90	2	-9	9	8.0956	2	-9	9	5.4	-9	-9	-9	-9	-9		
132	3	98.9	34.279	2	24.284	24.284	22.607	0.079	0.4	2	0.12	2	3.1	2	2.033	2	1.060	2	151.83	2	-9	9	7.9	-9	-9	4.7	-9	-9	-9	-9	-9			
131	2	124.7	34.419	2	24.389	24.389	22.607	0.047	0.0	2	1.79	2	13.4	2	1.644	2	0.839	2	60.91	2	-9	9	7.6168	2	-9	9	89.6	-9	-9	-9	-9	-9		
130	2	148.5	34.687	2	24.688	24.688	22.607	0.059	0.0	2	2.42	2	22.7	2	0.666	2	0.416	2	1.73	2	-9	9	7.4716	2	-9	9	46.3	3.9	-9	-9	-9	-9		
129	2	172.9	34.768	2	24.769	24.769	22.607	0.050	2.4	2	2.47	2	25.5	2	0.321	6	0.187	6	1.65	2	-9	9	7.4596	2	-9	9	-9	-9	-9	-9	-9	-9		
128	2	198.2	34.781	2	24.780	24.780	22.607	0.053	2.7	2	2.45	2	26.0	2	0.247	2	0.140	2	0.64	2	-9	9	7.4549	2	-9	9	-9	-9	-9	-9	-9	-9		
127	2	198.8	34.781	2	24.780	24.780	22.607	0.053	2.7	2	2.46	2	25.7	2	0.244	2	0.143	2	0.244	2	-9	9	7.4545	2	-9	9	-9	-9	-9	-9	-9	-9		
126	2	250.2	34.798	2	24.798	24.798	22.607	0.052	1.7	2	2.53	2	28.8	2	0.127	2	0.074	2	0.20	2	-9	9	7.4545	2	-9	9	-9	-9	-9	-9	-9	-9		
125	2	299.0	34.714	2	24.714	24.714	22.607	0.049	2.5	2	2.57	2	31.3	2	0.072	2	0.042	2	1.25	2	-9	9	7.4132	2	-9	9	-9	-9	-9	-9	-9	-9		
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
123	2	398.8	34.633	2	24.633	24.633	22.607	0.042	0.5	2	2.77	2	40.1	2	0.017	6	0.017	6	0.98	2	-9	9	7.3786	2	-9	9	38.6	-9	-9	-9	-9	-9	-9	
122	2	498.7	34.569	2	24.569	24.569	22.607	0.039	0.0	2	2.95	2	53.0	2	0.003	2	0.012	2	1.48	2	-9	9	7.3614	2	-9	9	-9	-9	-9	-9	-9	-9	-9	
121	2	599.1	34.549	2	24.549	24.549	22.607	0.034	0.0	2	3.06	2	63.3	2	0.001	2	0.006	2	1.36	2	-9	9	7.3513	2	-9	9	-9	-9	-9	-9	-9	-9	-9	
120	2	699.9	34.533	2	24.533	24.533	22.607	0.033	0.0	2	3.17	2	73.8	2	0.001	2	0.006	2	1.44	2	-9	9	7.3386	2	-9	9	-9	-9	-9	-9	-9	-9	-9	
119	2	799.5	34.533	2	24.532	24.532	22.607	0.035	0.0	2	3.22	2	81.3	2	0.000	2	0.000	2	1.90	2	-9	9	7.3300	2	-9	9	40.0	-9	-9	-9	-9	-9	-9	
118	2	900.8	34.537	2	24.537	24.537	22.607	0.036	0.0	2	3.25	2	88.0	2	0.002	2	0.002	2	4.67	2	-9	9	7.3274	2	-9	9	-9	-9	-9	-9	-9	-9	-9	
117	2	1000.1	34.543	2	24.543	24.543	22.607	0.035	0.0	2	3.26	2	95.1	2	0.000	2	0.000	2	9.11	2	-9	9	7.3319	2	-9	9	41.9	2.6	-9	-9	-9	-9	-9	-9
116	2	1100.7	34.555	2	24.555	24.555	22.607	0.031	0.0	2	3.25	2	103.4	2	-9	9	17.88	2	9.11	2	-9	9	7.3319	2	-9	9	-9	-9	-9	-9	-9	-9	-9	
115	2	1198.5	34.566	2	24.566	24.566	22.607	0.030	0.0	2	3.23	2	112.5	2	0.002	2	0.004	2	25.07	2	-9	9	7.3319	2	-9	9	-9	-9	-9	-9	-9	-9	-9	
114	2	1397.0	34.587	2	24.587	24.587	22.607	0.026	0.0	2	3.12	2	125.5	2	-9	9	40.34	2	25.07	2	-9	9	7.3319	2	-9	9	-9	-9	-9	-9	-9	-9	-9	
113	2	1597.6	34.605	2	24.604	24.604	22.607	0.024	0.0	2	3.09	2	120.6	4	-9	9	53.57	2	25.07	2	-9	9	7.3319	2	-9	9	-9	-9	-9	-9	-9	-9	-9	
112	2	1799.5	34.622	2	24.621	24.621	22.607	0.020	0.0	2	2.90	2	135.8	2	-0.002	2	-0.001	2	68.84	2	-9	9	7.3319	2	-9	9	-9	-9	-9	-9	-9	-9	-9	
111	2	1998.4	34.637	2	24.636	24.636	22.607	0.018	0.0	2	2.82	2	140.7	2	-9	9	82.87	2	68.84	2	-9	9	7.3319	2	-9	9	-9	-9	-9	-9	-9	-9	-9	
110	2	2195.3	34.647	2	24.649	24.649	22.607	0.017	0.0	2	2.74	2	143.2	2	-9	9	91.78	2	68.84	2	-9	9	7.3319	2	-9	9	-9	-9	-9	-9	-9	-9	-9	
109	2	2399.2	34.656	2	24.656	24.656	22.607	0.015	0.0	2	2.72	2	148.8	2	0.001	2	0.008	2	100.47	2	-9	9	7.3319	2	-9	9	-9	-9	-9	-9	-9	-9	-9	
108	2	2600.0	34.664	2	24.664	24.664	22.607	0.014	0.0	2	2.66	2	153.6	2	-9	9	108.80	2	100.47	2	-9	9	7.3319	2	-9	9	-9	-9	-9	-9	-9	-9	-9	
107	2	2997.2	34.674	2	24.675	24.675	22.607	0.011	0.0	2	2.61	2	154.8	2	-9	9	116.36	2	100.47	2	-9	9	7.3319	2	-9	9	-9	-9	-9	-9	-9	-9	-9	
106	2	3299.1	34.677	2	24.677	24.677	22.607	0.010	0.0	2	2.54	2	149.9	2	0.005	2	0.000	2	121.35	2	-9	9	7.3319	2	-9	9	-9	-9	-9	-9	-9	-9	-9	
105	2	3399.5	34.678	2	24.678	24.678	22.607	0.010	0.0	2	2.56	2	153.1	2	-9	9	125.69	2	121.35	2	-9	9	7.3319	2	-9	9	-9	-9	-9	-9	-9	-9	-9	
104	2	3599.5	34.678	2	24.678	24.678	22.607	0.010	-9	1	-9	1	-9	1	-9	1	-9	1	125.69	2	-9	9	7.3319	2	-9	9	-9	-9	-9	-9	-9	-9	-9	
103	3	3599.5	34.678	2	24.678	24.678	22.607	0.010	-9	1	-9	1	-9	1	-9	1	-9	1	125.69	2	-9	9	7.3319	2	-9	9	-9	-9	-9	-9	-9	-9	-9	
102	2	3599.3	34.678	2	24.679	24.679	22.607	0.010	0.0	2	2.55	2	156.6	2	0.008	2	0.011	2	129.25	2	-9	9	7.3319	2	-9	9	-9	-9	-9	-9	-9	-9	-9	
101	2	3811.2	34.680	2	24.680	24.680	22.607	0.010	0.0	2	2.52	2	155.0	2	-0.001	2	0.009	2	132.74	2	-9	9	7.3319	2	-9	9	-9	-9	-9	-9	-9	-9	-9	

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 171 DATE 4/22/94 LATITUDE 15°29.9'N Btm Depth: 3789
 CAST 1 LONGITUDE 109°59.7'W

Sample ID	P#	Pressure db	Salinity ‰	Salinity ‰ Bottle	Temp °C	Temp °C	Potential		Sigma T		NO2 P#	NO3 P#	PO4 P#	Si(OH)4 P#	CFC-11 P#	CFC-12 P#	O2 P#	fO2 P#	DIC P#	pH P#	TA Lk P#	813C P#	TOC P#	TON P#	Chl-a P#									
							Temp °C	Temp °C	Theta cp	Theta cp																								
136	2	8.9	33.949	2	33.953	2	27.600	27.597	21.735	0.076	0.0	2	0.0	2	0.0	2	202.67	2	259	2	1904.3	2	8.1184	2	2243	6	-9	79.8	6.1	-9				
135	2	25.2	33.918	2	33.921	2	27.416	27.410	21.772	0.080	0.0	2	0.0	2	0.0	2	203.08	2	-9	9	1904.3	2	8.1200	2	-9	9	5.1	-9	-9					
134	2	49.5	34.031	2	34.043	2	26.619	26.608	22.112	0.081	0.0	2	0.0	2	0.0	2	206.18	2	262	2	1915.6	3	8.1160	2	2243	2	-9	5.2	-9	-9				
133	2	74.1	34.287	2	34.311	2	24.034	24.019	23.096	0.115	0.1	2	0.7	2	0.8	2	189.81	2	-9	9	8.0209	2	-9	9	-9	9	78.8	5.0	-9	-9				
132	3	100.3	34.325	2	34.324	2	17.623	17.606	24.851	0.067	0.2	2	1.4	2	1.5	2	96.24	2	-9	9	8.0209	2	-9	9	-9	9	2.6	-9	-9	-9				
131	2	125.7	34.445	2	34.443	2	15.474	15.455	25.444	0.046	0.0	2	2.1	2	1.6	2	49.43	2	-9	9	2.1877	2	7.5839	2	2270	2	-9	-9	-9	-9				
130	2	148.5	34.663	2	34.667	2	13.741	13.720	25.985	0.038	0.0	2	2.6	2	2.4	2	7.48	2	1446	2	2238.1	2	7.4727	2	2298	2	-9	43.5	-9	-9	-9			
129	2	174.5	34.762	2	34.765	2	12.905	12.882	26.233	0.054	2.8	6	2.5	6	2.6	6	1.39	2	-9	9	7.4557	2	-9	9	-9	9	-9	-9	-9	-9				
128	2	200.2	34.753	2	34.754	2	12.064	12.038	26.390	0.054	2.4	2	2.7	2	2.8	2	0.71	2	1544	2	2255.2	2	7.4438	2	2298	2	-9	-9	-9	-9	-9			
127	2	249.5	34.726	2	34.726	2	11.289	11.258	26.516	0.051	2.1	2	2.6	2	2.8	2	0.77	2	1688	2	2266.2	2	7.4212	2	2297	2	-9	-9	-9	-9	-9			
126	2	295.4	34.696	2	34.696	2	10.708	10.672	26.598	0.047	2.5	2	2.4	2	2.6	2	0.83	2	1752	2	2276.2	2	7.4029	2	2311	2	-9	41.8	-9	-9	-9	-9		
125	2	349.3	34.659	2	34.658	2	10.096	10.055	26.677	0.044	1.2	2	2.6	2	2.7	2	0.83	2	-9	9	7.3888	2	-9	9	-9	9	-9	-9	-9	-9				
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9				
123	2	395.7	34.629	2	34.628	2	9.555	9.509	26.745	0.041	0.5	2	2.8	2	4.2	2	1.38	2	1826	2	2288.7	2	7.3759	2	2309	2	-9	46.3	-9	-9	-9	-9		
122	2	498.5	34.570	2	34.570	2	8.145	8.093	26.922	0.038	0.0	2	3.3	2	5.2	2	0.47	2	1952	2	2304.3	2	7.3601	2	2323	2	-9	-9	-9	-9	-9	-9		
121	2	599.3	34.542	2	34.542	2	7.112	7.054	27.051	0.033	0.0	2	3.7	2	6.2	2	1.10	2	2015	2	2318.7	2	7.3482	2	2338	2	-9	-9	-9	-9	-9	-9		
120	2	700.3	34.537	2	34.537	2	6.344	6.280	27.151	0.032	0.0	2	4.0	2	7.5	2	0.99	2	2085	2	2332.3	2	7.3375	2	2338	2	-9	-9	-9	-9	-9	-9		
119	2	799.9	34.534	2	34.535	2	5.586	5.516	27.244	0.034	0.0	2	4.2	2	8.9	2	2.01	2	2130	2	2342.3	2	7.3294	2	2353	2	-9	-9	-9	-9	-9	-9		
118	2	896.2	34.539	2	34.540	2	4.964	4.890	27.323	0.036	0.0	2	4.4	2	9.0	2	5.63	2	2147	2	2352.2	2	7.3289	2	2361	6	-9	39.3	-9	-9	-9	-9		
117	3	1000.3	34.549	2	34.548	2	4.540	4.461	27.379	0.035	0.0	6	4.4	6	10.1	6	11.28	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9			
116	2	1100.0	34.559	2	34.558	2	4.210	4.134	27.422	0.031	0.0	2	4.4	2	10.8	2	16.46	2	-9	9	2364.6	2	-9	9	2370	2	-9	-9	-9	-9	-9	-9		
115	2	1198.2	34.569	2	34.570	2	3.863	3.771	27.467	0.030	0.0	2	4.4	2	11.0	2	23.51	6	-9	9	7.3546	2	-9	9	-9	9	-9	-9	-9	-9	-9	-9		
114	2	1290.4	34.579	2	34.579	2	3.530	3.433	27.508	0.027	0.0	2	4.4	2	11.6	2	34.69	2	-9	9	-9	-9	-9	9	-9	9	-9	-9	-9	-9	-9	-9		
113	2	1397.5	34.589	2	34.589	2	3.311	3.208	27.537	0.026	0.0	2	4.3	2	12.0	2	40.80	2	-9	9	-9	-9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	
112	2	1498.1	34.597	2	34.597	2	3.137	3.028	27.561	0.024	0.0	2	4.3	2	13.8	2	46.66	2	-9	9	-9	-9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	
111	2	1597.8	34.609	2	34.609	2	2.888	2.773	27.593	0.023	0.0	2	4.2	2	13.8	2	55.84	2	-9	9	-9	-9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9
110	2	1799.2	34.624	2	34.624	2	2.546	2.419	27.636	0.021	0.0	2	4.1	2	13.2	2	70.18	2	-9	9	-9	-9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9
109	2	1999.4	34.640	2	34.641	2	2.235	2.095	27.676	0.017	0.0	2	4.0	2	14.5	2	84.89	2	-9	9	-9	-9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9
108	2	2248.5	34.653	2	34.653	2	2.002	1.844	27.706	0.015	0.0	2	3.9	2	15.0	2	96.16	2	-9	9	-9	-9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9
107	2	2499.1	34.661	2	34.661	2	1.866	1.688	27.724	0.013	0.0	2	3.8	2	15.4	2	106.07	2	-9	9	-9	-9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9
106	2	2751.3	34.669	2	34.668	2	1.751	1.552	27.740	0.012	0.0	2	3.8	2	15.0	2	121.02	6	-9	9	-9	-9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9
105	2	2998.6	34.673	2	34.673	2	1.692	1.471	27.750	0.010	0.0	6	3.8	6	15.1	6	124.37	2	-9	9	-9	-9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9
104	2	3238.8	34.676	2	34.675	2	1.667	1.423	27.755	0.010	0.0	2	3.8	2	15.6	2	127.9	2	-9	9	-9	-9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9
103	2	3500.5	34.677	2	34.679	2	1.647	1.377	27.760	0.010	0.0	2	3.8	2	15.2	2	127.93	6	-9	9	-9	-9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9
102	2	3499.6	34.678	2	34.677	2	1.646	1.376	27.760	0.010	0.0	2	3.8	2	15.0	2	128.26	2	-9	9	-9	-9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9
101	2	3789.4	34.678	2	34.678	2	1.669	1.368	27.761	0.010	0.0	2	3.7	2	15.6	2	130.80	2	-9	9	-9	-9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 179 DATE 47294 LATITUDE 16°30.0N Btm Depth: 3397
CAST 1 LONGITUDE 110°0.1'W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma-t	Sigma-t	Beam		NO2 P*	NO3 P*	PO4 P*	P* Si(OH)4 P*	CFC-11 P*	CFC-12 P*	O2 P*	P* @20°C P*	DIC P*	pH P*	TAIK P*	P* 813C TOC per ml μmol/L	TON μmol/L	Chl-a μg/L	Phase						
								Thera	Atten																					
136	2	8.3	34.214	2	27.004	27.004	22.125	0.065	0.0	2	0.1	2	0.11	2	0.3	2	268	2	1990.9	2	8.1049	2	2252	6	-9	-9	0.106	0.035		
135	2	24.3	34.527	2	34.474	3	25.361	22.875	0.077	0.0	2	0.18	2	0.4	2	-9	9	213.92	2	-9	9	8.0817	2	-9	9	-9	-9	0.121	0.049	
134	2	46.3	34.427	2	34.417	2	23.225	23.434	0.085	0.0	2	0.32	2	0.7	2	-9	9	214.21	2	330	2	2001.3	2	2284	2	-9	-9	0.288	0.203	
133	2	76.1	34.392	2	34.378	2	19.191	19.177	0.102	0.3	2	10.6	2	6.3	2	-9	9	118.91	2	-9	9	7.8123	2	-9	9	-9	-9	0.413	0.450	
132	2	100.4	34.278	2	34.295	2	16.436	16.420	0.049	0.1	2	16.9	2	12.3	2	-9	9	82.03	2	892	2	2152.3	2	2273	2	-9	-9	0.133	0.189	
131	2	124.4	34.607	2	34.608	2	14.541	14.523	0.036	0.0	2	25.7	2	22.1	2	-9	9	15.08	2	-9	9	7.4944	2	-9	9	-9	-9	0.045	0.069	
130	2	150.4	34.730	2	34.732	2	13.365	13.344	0.040	0.0	2	26.7	2	26.1	2	-9	9	0.46	2	-9	9	7.4648	2	-9	9	-9	-9	0.004	0.051	
129	2	173.8	34.763	2	34.763	2	12.610	12.587	0.051	1.8	2	24.9	2	27.8	2	-9	9	0.93	2	-9	9	7.4484	2	-9	9	-9	-9	0.007	0.127	
128	2	199.2	34.763	2	34.763	2	12.161	12.135	0.053	2.7	2	24.2	2	29.8	2	-9	9	0.66	2	1577	2	2258.7	2	2305	2	-9	-9	0.004	0.129	
127	2	248.2	34.729	2	34.728	2	11.362	11.331	0.051	2.5	2	24.1	2	26.2	2	-9	9	0.57	2	-9	9	7.4197	2	-9	9	-9	-9	0.002	0.105	
126	2	299.1	34.680	2	34.680	2	10.568	10.532	0.048	1.8	2	23.7	2	37.7	2	-9	9	0.50	6	1762	2	2279.0	2	2312	2	-9	-9	0.002	0.083	
125	2	340.7	34.637	2	34.635	2	9.800	9.760	0.045	0.5	2	26.5	2	42.5	2	-9	9	0.63	2	-9	9	7.3813	2	-9	9	-9	-9	-9	-9	
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
123	2	400.1	34.596	2	34.596	2	9.069	9.025	0.040	0.0	2	29.3	2	28.6	2	-9	9	0.48	2	1908	2	2294.4	2	2305	2	-9	-9	-9	-9	
122	2	451.1	34.584	2	34.583	2	8.531	8.483	0.039	0.1	2	30.3	2	29.5	2	-9	9	0.21	2	-9	9	7.3644	2	-9	9	-9	-9	-9	-9	
121	3	501.1	34.557	2	34.557	2	7.919	7.868	0.037	0.0	2	32.7	2	3.01	2	-9	9	0.35	2	-9	9	2307.7	2	-9	9	2320	2	-9	-9	
120	2	599.3	34.532	2	34.533	2	6.885	6.829	0.032	0.0	2	36.6	2	3.14	2	-9	9	0.52	2	2042	2	2323.8	2	2330	2	-9	-9	-9	-9	
119	2	702.0	34.525	2	34.525	2	5.936	5.874	0.032	0.0	2	40.1	2	3.22	2	-9	9	1.02	2	2111	2	2336.6	2	2339	2	-9	-9	-9	-9	
118	2	800.5	34.531	2	34.532	2	5.228	5.161	0.036	0.0	2	42.8	2	3.22	2	-9	9	2.71	2	2155	2	2347.8	2	2347	2	-9	-9	-9	-9	
117	2	900.9	34.538	2	34.537	2	4.803	4.730	0.036	0.0	2	43.8	2	3.24	2	-9	9	6.96	2	2137	2	2355.6	2	2360	2	-9	-9	-9	-9	
116	2	1000.6	34.546	2	34.546	2	4.353	4.274	0.032	0.0	2	43.7	2	3.17	2	-9	9	12.49	2	2135	2	2360.4	2	2374	2	-9	-9	-9	-9	
115	2	1101.1	34.538	2	34.537	2	3.989	3.905	0.028	0.0	2	43.6	2	3.14	2	-9	9	21.12	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	
114	2	1201.8	34.568	2	34.568	2	3.719	3.629	0.028	0.0	2	43.6	2	3.08	2	-9	9	28.73	2	-9	9	9	7.3649	2	-9	-9	-9	-9	-9	-9
113	2	1399.5	34.589	2	34.589	2	3.233	3.131	0.024	0.0	2	42.8	2	2.99	2	-9	9	43.10	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	
112	2	1599.5	34.610	2	34.609	2	2.797	2.683	0.022	0.0	2	41.7	2	2.80	2	-9	9	38.47	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	
111	2	1800.2	34.627	2	34.627	2	2.488	2.361	0.020	0.0	2	42.0	2	2.80	2	-9	9	71.59	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9
110	2	1999.5	34.641	2	34.641	2	2.202	2.063	0.017	0.0	2	39.5	2	2.71	2	-9	9	86.89	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9
109	2	2199.4	34.653	2	34.653	2	1.973	1.820	0.016	0.0	2	38.6	2	2.61	2	-9	9	97.15	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9
108	2	2398.6	34.661	2	34.661	2	1.844	1.676	0.014	0.0	2	37.9	2	2.56	2	-9	9	105.43	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9
107	2	2601.7	34.667	2	34.666	2	1.764	1.579	0.012	0.0	2	37.8	2	2.52	2	-9	9	111.53	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9
106	2	2799.3	34.669	2	34.669	2	1.717	1.515	0.011	0.0	2	37.6	2	2.53	2	-9	9	97.15	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9
105	2	3000.4	34.671	2	34.671	2	1.703	1.481	0.011	0.0	6	37.5	6	2.57	6	-9	9	114.83	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9
104	2	3197.1	34.673	2	34.673	2	1.699	1.458	0.010	0.0	2	37.4	2	2.58	2	-9	9	117.74	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9
103	2	3399.4	34.674	2	34.674	2	1.708	1.447	0.010	0.0	2	37.2	2	2.56	2	-9	9	120.30	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9
102	2	3599.4	34.674	2	34.674	2	1.708	1.447	0.010	0.0	2	37.2	2	2.56	2	-9	9	121.34	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9
101	2	3480.8	34.674	2	34.675	2	1.715	1.445	0.010	0.0	2	37.0	2	2.56	2	-9	9	121.45	6	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 180 180 DATE 4/22/94 LATITUDE 17°0.0'N Btm Depth: 3521
 CAST 1 LONGITUDE 110°0.0'W

Sample ID	Pressure db	Salinity P ^o	Salinity P ^o Bottle	Temp °C	Temp °C	Sigma T	Theta cp	Beam Attenu	NO2 P ^o µmol/kg	NO3 P ^o µmol/kg	PO4 P ^o µmol/kg	SiOR4 P ^o µmol/kg	CFC-11 P ^o pmol/kg	CFC-12 P ^o pmol/kg	O2 P ^o @ 20°C µmol/kg	FO2 µmol/kg	DIC P ^o µmol/kg	pH P ^o	TA µmol/kg	TA LK P ^o µmol/kg	δ13C TOC per mil µmol/L	TON µmol/L	Chl-a Phase µg/L								
																								27319	27317	21923	0.071	0.0	0.1	0.13	2.0
136	2	34.079	2	34.082	2	27.319	27.317	21.923	0.071	0.0	0.1	0.13	2.0	1.800	2	2.20388	2	2.271	3	1919.0	2	8.1135	2	2244	6	1.60	88.9	6.5	-9	-9	
135	2	34.060	2	34.067	2	26.898	26.892	22.044	0.083	0.0	0.0	0.13	2.0	1.807	2	2.20529	2	-9	-9	-9	9	8.1145	2	-9	9	-9	-9	-9	-9	-9	
134	2	34.512	2	34.517	2	24.959	24.949	22.968	0.081	0.0	0.2	0.18	2.0	1.985	2	2.21331	2	-9	-9	-9	9	8.0831	2	-9	9	-9	-9	-9	-9	-9	
133	2	34.487	2	34.492	2	23.863	23.847	23.298	0.117	0.0	0.1	0.23	2.0	2.047	6	2.21380	2	-9	-9	-9	9	8.0615	2	-9	9	-9	-9	-9	-9	-9	
132	2	34.457	2	34.468	2	18.386	18.368	24.750	0.060	0.3	18.0	1.59	2	1.507	2	2.6923	2	-9	-9	-9	9	7.6893	2	-9	9	-9	-9	-9	-9	-9	
131	2	34.483	2	34.483	2	15.399	15.380	25.490	0.099	0.0	22.4	1.99	2	1.451	2	2.4270	6	-9	-9	-9	9	7.5642	2	-9	9	-9	-9	-9	-9	-9	
130	2	34.758	2	34.745	2	13.489	13.468	26.095	0.045	0.8	26.0	2.47	2	0.490	2	2.060	2	-9	-9	-9	9	7.4597	2	-9	9	-9	-9	-9	-9	-9	
129	2	34.759	2	34.759	2	12.794	12.771	26.252	0.048	2.1	25.0	2.50	2	0.359	2	2.068	2	-9	-9	-9	9	7.4525	2	-9	9	-9	-9	-9	-9	-9	
128	2	34.756	2	34.757	2	12.196	12.170	26.367	0.051	2.7	24.7	2.55	2	0.130	2	2.073	2	-9	-9	-9	9	7.4398	2	-9	9	-9	-9	-9	-9	-9	
127	2	34.739	2	34.738	2	11.521	11.489	26.483	0.052	2.6	23.8	2.61	2	0.120	2	2.062	2	-9	-9	-9	9	7.4227	2	-9	9	-9	-9	-9	-9	-9	
126	2	34.695	2	34.696	2	10.775	10.738	26.585	0.050	2.1	23.5	2.67	2	0.076	2	2.056	2	-9	-9	-9	9	7.4018	2	-9	9	-9	-9	-9	-9	-9	
125	2	34.635	2	34.638	2	9.833	9.792	26.702	0.045	0.3	26.9	2.76	2	0.051	6	0.030	6	0.40	2	-9	-9	7.3817	2	-9	9	-9	-9	-9	-9	-9	
124	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
123	2	34.601	2	34.601	2	9.127	9.083	26.792	0.042	0.0	29.2	2.86	2	0.031	2	0.016	2	0.84	2	-9	-9	7.3682	2	-9	9	-9	-9	-9	-9	-9	
122	2	34.540	2	34.541	2	7.600	7.550	26.979	0.038	0.0	34.3	3.04	2	0.033	2	0.004	2	0.60	2	-9	-9	7.3498	2	-9	9	-9	-9	-9	-9	-9	
121	2	34.530	2	34.530	2	6.652	6.596	27.103	0.036	0.0	38.6	3.14	2	0.002	6	-0.001	6	0.74	6	-9	-9	7.3394	2	-9	9	-9	-9	-9	-9	-9	
120	2	34.530	2	34.530	2	5.945	5.883	27.197	0.033	0.0	41.5	3.23	2	0.002	2	0.010	2	1.04	2	-9	-9	7.3317	2	-9	9	-9	-9	-9	-9	-9	
119	2	34.531	2	34.531	2	5.252	5.185	27.281	0.037	0.0	43.9	3.27	2	0.000	2	-0.002	2	2.54	2	-9	-9	7.3273	2	-9	9	-9	-9	-9	-9	-9	
118	2	34.535	2	34.536	2	4.832	4.758	27.335	0.036	0.0	44.1	3.30	2	0.007	2	0.001	2	5.79	2	-9	-9	7.3262	2	-9	9	-9	-9	-9	-9	-9	
117	2	34.546	2	34.546	2	4.405	4.326	27.390	0.033	0.0	44.3	3.31	2	0.000	2	-0.002	2	11.49	2	-9	-9	7.3254	2	-9	9	-9	-9	-9	-9	-9	
116	2	34.538	2	34.537	2	4.004	3.920	27.449	0.030	0.0	44.4	3.24	2	-9	9	-9	20.59	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
115	2	34.569	2	34.569	2	3.683	3.593	27.485	0.028	0.0	44.2	3.19	2	-9	9	-9	28.96	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
114	2	34.584	2	34.585	2	3.440	3.344	27.521	0.029	0.0	45.1	3.16	2	-0.002	2	-0.001	2	34.82	2	-9	-9	7.3498	2	-9	9	-9	-9	-9	-9	-9	-9
113	2	34.594	2	34.595	2	3.215	3.113	27.551	0.027	0.0	43.6	3.15	2	-9	9	-9	42.95	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
112	2	34.612	2	34.611	2	2.804	2.691	27.603	0.023	0.0	42.3	3.00	2	-9	9	-9	57.83	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
111	2	34.628	2	34.627	2	2.473	2.346	27.646	0.022	0.0	41.2	2.91	2	-0.001	2	0.001	2	72.04	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
110	2	34.642	2	34.642	2	2.193	2.053	27.681	0.019	0.0	40.6	2.79	2	-0.001	2	0.001	2	85.69	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
109	2	34.652	2	34.653	2	2.007	1.853	27.705	0.016	0.0	39.8	2.76	2	0.000	2	-0.002	2	95.86	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
108	3	34.661	2	34.661	2	1.861	1.692	27.723	0.016	0.0	39.2	2.74	2	-9	9	-9	104.58	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
107	2	34.665	2	34.665	2	1.773	1.588	27.735	0.014	0.0	38.7	2.68	2	-9	9	-9	110.50	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
106	2	34.669	2	34.669	2	1.718	1.516	27.744	0.012	0.0	38.4	2.64	2	-9	9	-9	115.10	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
105	2	34.672	2	34.672	2	1.699	1.478	27.749	0.012	0.0	38.5	2.63	2	-0.001	2	-0.002	2	117.96	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
104	2	34.674	2	34.674	2	1.692	1.451	27.752	0.011	0.0	38.2	2.60	2	-9	9	-9	120.53	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
103	2	34.676	2	34.676	2	1.701	1.440	27.753	0.011	0.0	38.4	2.63	2	0.000	2	-0.002	2	121.97	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
102	2	34.675	2	34.675	2	1.701	1.440	27.754	0.012	0.0	38.1	2.60	2	-9	9	-9	121.97	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
101	2	34.675	2	34.675	2	1.711	1.434	27.754	0.012	0.0	38.5	2.59	2	-9	9	-9	122.62	6	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 183 1 DATE 4/23/94 LATITUDE 18°30.0'N LONGITUDE 110°00.0'W
 CAST 1 Btm Depth: 3453

Sample ID	Pressure db	Salinity ‰	Salinity ‰ Bottle	Temp °C	Temp °C	Potential		NO2 ‰	NO3 ‰	PO4 ‰	Si(OH)4 ‰	CFC-11 ‰	CFC-12 ‰	O2 ‰	F ₂ @ 20°C ‰	CO2 ‰	DIC ‰	pH	F ₂ ‰	TAK ‰	F ₂ ‰	813C ‰	TOC ‰	TON ‰	Chi-a ‰	Phase ‰	
						Sigma T	Theta																				
136	8.8	34.364	34.368	25.395	25.393	22.741	0.056	0.0	0.1	0.14	0.0	1.933	1.063	2.0939	2.281	2.19477	3.80968	2.2716	2	-9	-9	-9	-9	0.095	0.022		
135	24.9	34.548	34.551	25.200	25.194	22.940	0.063	0.0	0.0	0.20	0.0	-9	-9	9.21173	2	-9	9.80833	2	-9	9	-9	-9	-9	0.089	0.029		
134	50.5	34.501	34.502	24.023	24.013	23.260	0.062	0.0	0.0	0.23	0.0	2.083	1.108	2.21599	2	306	2.19788	2.80720	2.2884	2	-9	-9	-9	-9	0.133	0.059	
133	75.1	34.372	34.397	22.023	22.189	23.688	0.077	0.0	0.0	0.29	0.1	2.171	1.164	2.21711	2	-9	9.80233	2	-9	9	-9	-9	-9	0.289	0.231		
132	101.5	34.107	34.126	17.119	17.102	24.805	0.054	0.1	9.3	1.09	6.3	2.247	1.140	6.13789	2	689	2.20863	2.77905	2	-9	5	-9	-9	-9	0.213	0.226	
131	123.4	34.415	34.448	14.333	14.315	25.669	0.040	0.0	2	23.5	2.10	1.385	0.698	2.4111	2	-9	9.75324	2	-9	9	-9	-9	-9	0.053	0.090		
130	150.6	34.675	34.676	13.218	13.197	26.102	0.031	0.0	27.3	2.47	25.2	0.634	0.339	2.461	2	1546	2.22460	2.74568	2.2792	2	-9	-9	-9	-9	0.001	0.033	
129	170.0	34.697	34.697	12.851	12.828	26.192	0.030	0.0	27.6	2.53	27.1	0.508	0.292	2.331	2	-9	9.74484	2	-9	9	-9	-9	-9	0.001	0.033		
128	194.7	34.710	34.711	12.260	12.235	26.319	0.031	0.2	27.6	2.67	29.5	0.348	0.193	2.128	2	-9	9.74363	2	-9	9	-9	-9	-9	0.002	0.030		
127	249.1	34.697	34.695	11.231	11.200	26.503	0.037	0.2	26.5	2.63	33.7	-9	-9	9.020	2	1719	2.22696	2.74131	2.2304	2	-9	-9	-9	-9	-9	-9	-9
126	299.4	34.671	34.670	10.611	10.575	26.595	0.040	0.4	25.5	2.70	36.8	0.106	0.058	2.045	2	1798	2.23988	2.73941	2.2305	2	-9	-9	-9	-9	-9	-9	-9
125	349.0	34.625	34.625	9.749	9.709	26.708	0.040	0.1	27.2	2.76	41.2	-9	-9	9.043	2	-9	9.73795	2	-9	9	-9	-9	-9	-9	-9	-9	-9
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
123	400.8	34.595	34.595	9.021	8.977	26.803	0.035	0.0	29.3	2.87	46.7	0.026	0.035	1.34	6	1920	2.23965	2.73811	2.2311	2	-9	-9	-9	-9	-9	-9	-9
122	498.3	34.537	34.537	7.700	7.650	26.962	0.033	0.0	34.1	3.02	59.4	-9	-9	9.159	2	2006	2.23110	2.73522	2.2316	2	-9	-9	-9	-9	-9	-9	-9
121	599.2	34.528	34.527	6.789	6.733	27.063	0.032	0.0	37.1	3.16	70.9	0.007	0.004	0.62	2	2062	2.23250	2.73414	2.2334	2	-9	-9	-9	-9	-9	-9	-9
120	701.6	34.530	34.530	6.072	6.009	27.180	0.031	0.0	39.9	3.21	80.0	-9	-9	9.134	2	2102	2.23364	2.73330	2.2335	2	-9	-9	-9	-9	-9	-9	-9
119	799.8	34.529	34.530	5.300	5.232	27.275	0.031	0.0	42.9	3.28	90.3	-0.002	-0.002	2.46	2	2159	2.23487	2.73267	2.2353	2	-9	-9	-9	-9	-9	-9	-9
118	900.8	34.532	34.534	4.739	4.666	27.342	0.030	0.0	43.7	3.27	99.9	-9	-9	9.650	2	2154	2.23576	2.73284	2.2362	2	-9	-9	-9	-9	-9	-9	-9
117	999.7	34.545	34.545	4.254	4.176	27.406	0.026	0.0	43.7	3.28	108.6	0.010	0.016	-9	1	2109	3	-9	9	-9	-9	-9	-9	-9	-9	-9	
116	1099.6	34.536	34.536	3.977	3.893	27.444	0.025	0.0	44.1	3.25	116.7	-9	-9	9.1771	2	-9	9.73460	2	-9	9	-9	-9	-9	-9	-9	-9	
115	1198.4	34.565	34.564	3.762	3.672	27.474	0.024	0.0	43.6	3.26	123.8	-9	-9	9.2201	2	-9	9.73517	2	-9	9	-9	-9	-9	-9	-9	-9	
114	1300.4	34.571	34.571	3.623	3.525	27.493	0.024	0.0	43.4	3.22	127.0	-9	-9	9.2566	2	-9	9.73584	2	-9	9	-9	-9	-9	-9	-9	-9	
113	1399.7	34.579	34.579	3.463	3.358	27.515	0.022	0.0	43.0	3.19	125.9	-9	-9	9.3046	2	-9	9.73666	2	-9	9	-9	-9	-9	-9	-9	-9	
112	1600.1	34.603	34.603	2.925	2.810	27.586	0.020	0.0	42.7	3.04	133.4	-9	-9	9.5172	2	-9	9.74075	2	-9	9	-9	-9	-9	-9	-9	-9	
111	1799.7	34.621	34.620	2.561	2.433	27.633	0.018	0.0	41.7	3.00	144.6	-9	-9	9.6649	2	-9	9.74075	2	-9	9	-9	-9	-9	-9	-9	-9	
110	1997.0	34.640	34.640	2.204	2.065	27.678	0.016	0.0	40.4	2.87	153.6	-9	-9	9.8430	2	-9	9.74707	2	-9	9	-9	-9	-9	-9	-9	-9	
109	2198.8	34.651	34.651	2.011	1.857	27.704	0.014	0.0	39.5	2.77	155.7	-9	-9	9.9504	2	-9	9.74707	2	-9	9	-9	-9	-9	-9	-9	-9	
108	2398.3	34.659	34.659	1.871	1.702	27.722	0.012	0.0	38.9	2.72	155.0	-9	-9	9.10551	2	-9	9.75069	2	-9	9	-9	-9	-9	-9	-9	-9	
107	2598.1	34.663	34.663	1.797	1.612	27.732	0.018	0.0	38.8	2.68	155.7	-9	-9	9.10897	6	-9	9.75069	2	-9	9	-9	-9	-9	-9	-9	-9	
106	2799.0	34.667	34.666	1.751	1.548	27.739	0.018	0.0	38.5	2.67	159.1	-9	-9	9.11241	2	-9	9.75069	2	-9	9	-9	-9	-9	-9	-9	-9	
105	3001.5	34.670	34.670	1.720	1.498	27.745	0.010	0.0	38.2	2.66	166.6	-9	-9	9.11618	2	-9	9.75069	2	-9	9	-9	-9	-9	-9	-9	-9	
104	3199.5	34.673	34.673	1.706	1.465	27.750	0.010	0.0	38.2	2.62	157.1	-9	-9	9.11772	2	-9	9.75069	2	-9	9	-9	-9	-9	-9	-9	-9	
103	3398.4	34.674	34.675	1.711	1.450	27.752	0.010	0.0	38.1	2.64	159.4	-9	-9	9.12040	2	-9	9.75069	2	-9	9	-9	-9	-9	-9	-9	-9	
102	3599.1	34.674	34.675	1.711	1.449	27.752	0.010	0.0	38.2	2.64	162.4	-9	-9	9.12064	2	-9	9.75069	2	-9	9	-9	-9	-9	-9	-9	-9	
101	3471.4	34.675	34.675	1.718	1.449	27.753	0.010	0.0	37.8	2.62	161.3	-9	-9	9.12053	2	-9	9.75069	2	-9	9	-9	-9	-9	-9	-9	-9	

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94

WOCE P18

NOAA Ship Discoverer

STATION 184
CAST 1

DATE 4/23/94

LATITUDE 19°0.0'N
LONGITUDE 110°0.0'W

Btm Depth: 3404

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp Sigma T	Sigma T	Theta	Anen	Beam	NO2 P ^o	NO3 P ^o	PO4 P ^o	Si(OH) ₄ P ^o	CFC-11 P ^o	CFC-12 P ^o	O2 P ^o	fCO2 P ^o	DIC P ^o	pH P ^o	TAIK P ^o	P ^o	δ13C per mil	TOC μmol/L	TON	Ca-a μg/L	Phaeo μg/L		
																											μmol/kg	μmol/kg
136	2	9.7	34.609	2	24.167	24.165	23.296	0.079	0.0	2	0.1	2	0.21	2	2.115	2	215.02	2	1988.8	2	2301	6	1.80	87.7	5.0	-9		
135	2	23.4	34.603	2	23.594	23.589	23.462	0.087	0.0	2	0.1	2	0.25	2	2.166	2	218.50	2	-9	-9	9	8.0635	2	-9	9	87.2	4.8	-9
134	2	48.8	34.388	2	22.115	22.105	23.724	0.075	0.0	2	0.1	2	0.23	2	2.260	2	222.53	2	-9	-9	9	8.0446	2	-9	9	5.3	-9	-9
133	2	75.3	34.097	2	34.127	34.127	24.288	0.101	0.1	2	2.7	2	0.54	2	2.354	2	194.70	2	-9	-9	9	7.9359	2	-9	9	92.0	4.5	-9
132	2	100.4	34.413	2	34.417	34.417	25.456	0.045	0.0	2	2.15	2	1.93	2	1.589	2	52.90	2	-9	-9	9	7.5818	2	-9	9	-9	-9	-9
131	2	124.0	34.543	2	34.556	34.556	25.861	0.035	0.0	2	24.1	2	2.24	2	1.071	6	21.94	2	-9	-9	9	-9	2	-9	9	-9	-9	-9
130	2	149.5	34.649	2	34.650	34.650	26.118	0.035	0.0	2	26.0	2	2.42	2	-9	1	12.69	2	-9	-9	9	-9	2	-9	9	-9	-9	-9
129	2	175.2	34.724	2	34.727	34.727	26.243	0.037	0.0	2	25.3	2	2.49	2	0.431	2	2.44	2	-9	-9	9	-9	2	-9	9	-9	-9	-9
128	2	199.9	34.730	2	34.730	34.730	26.351	0.050	0.0	2	26.4	2	2.53	2	0.906	2	2.60	2	-9	-9	9	-9	2	-9	9	-9	-9	-9
127	2	226.4	34.743	2	34.744	34.744	26.406	0.054	1.2	2	25.3	2	2.58	2	0.237	2	0.131	2	-9	-9	9	-9	2	-9	9	-9	-9	-9
126	2	250.1	34.725	2	34.723	34.723	26.461	0.052	1.3	2	24.6	2	2.62	2	0.187	2	0.102	2	-9	-9	9	-9	2	-9	9	-9	-9	-9
125	2	296.5	34.668	2	34.667	34.667	26.573	0.054	0.2	2	25.6	2	2.69	2	0.131	6	0.068	6	0.51	2	-9	-9	2	-9	9	-9	-9	-9
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
123	2	351.4	34.635	2	34.635	34.635	26.690	0.041	0.1	2	26.7	2	2.79	2	0.074	2	2.44	2	-9	-9	9	-9	2	-9	9	-9	-9	-9
122	2	401.2	34.595	2	34.592	34.592	26.764	0.037	0.0	2	28.8	2	2.85	2	0.048	6	0.86	6	0.04	2	-9	-9	2	-9	9	-9	-9	-9
121	2	500.2	34.549	2	34.549	34.549	26.954	0.033	0.0	2	32.3	2	3.02	2	0.020	2	0.08	2	-9	-9	9	-9	2	-9	9	-9	-9	-9
120	2	599.3	34.515	2	34.515	34.515	27.080	0.031	0.0	2	36.8	2	3.12	2	0.009	2	0.06	2	-9	-9	9	-9	2	-9	9	-9	-9	-9
119	2	699.5	34.512	2	34.512	34.512	27.188	0.032	0.0	2	40.0	2	3.19	2	0.002	2	0.002	2	-9	-9	9	-9	2	-9	9	-9	-9	-9
118	2	801.0	34.520	2	34.521	34.521	27.268	0.033	0.0	2	42.3	2	3.25	2	-9	1	3.19	2	-9	-9	9	-9	2	-9	9	-9	-9	-9
117	2	899.0	34.528	2	34.528	34.528	27.331	0.031	0.0	2	43.3	2	3.26	2	-0.001	2	0.000	2	-9	-9	9	-9	2	-9	9	-9	-9	-9
116	2	1001.3	34.537	2	34.538	34.538	27.386	0.028	0.0	2	43.9	2	3.29	2	-0.003	2	0.000	2	-9	-9	9	-9	2	-9	9	-9	-9	-9
115	2	1299.3	34.578	2	34.578	34.578	27.436	0.028	0.0	2	43.8	2	3.27	2	-9	9	17.96	2	-9	-9	9	-9	2	-9	9	-9	-9	-9
114	2	1599.6	34.566	2	34.567	34.567	27.478	0.028	0.0	2	43.5	2	3.20	2	-0.004	2	-0.002	2	-9	-9	9	-9	2	-9	9	-9	-9	-9
113	2	1899.7	34.587	2	34.587	34.587	27.545	0.026	0.0	2	42.5	2	3.08	2	-9	9	40.36	2	-9	-9	9	-9	2	-9	9	-9	-9	-9
112	2	1400.1	34.587	2	34.587	34.587	27.545	0.026	0.0	2	42.5	2	3.08	2	-9	9	40.36	2	-9	-9	9	-9	2	-9	9	-9	-9	-9
111	2	1599.7	34.607	2	34.607	34.607	27.599	0.020	0.0	2	41.9	2	2.97	2	0.002	2	54.36	2	-9	-9	9	-9	2	-9	9	-9	-9	-9
110	2	1800.1	34.623	2	34.624	34.624	27.644	0.018	0.0	2	41.1	2	2.93	2	-9	9	69.61	2	-9	-9	9	-9	2	-9	9	-9	-9	-9
109	2	1998.9	34.642	2	34.642	34.642	27.688	0.015	0.0	2	40.1	2	2.82	2	-9	9	87.33	2	-9	-9	9	-9	2	-9	9	-9	-9	-9
108	2	2198.0	34.653	2	34.653	34.653	27.711	0.013	0.0	2	39.1	2	2.74	2	-9	9	98.36	2	-9	-9	9	-9	2	-9	9	-9	-9	-9
107	2	2395.0	34.661	2	34.662	34.662	27.726	0.015	0.0	2	38.5	2	2.66	2	-0.006	2	105.96	2	-9	-9	9	-9	2	-9	9	-9	-9	-9
106	2	2600.3	34.665	2	34.664	34.664	27.736	0.017	0.0	2	38.0	2	2.64	2	-9	9	111.53	2	-9	-9	9	-9	2	-9	9	-9	-9	-9
105	2	2799.2	34.668	2	34.669	34.669	27.748	0.019	0.0	2	38.2	2	2.61	2	-9	9	114.40	2	-9	-9	9	-9	2	-9	9	-9	-9	-9
104	2	2999.7	34.671	2	34.671	34.671	27.748	0.011	0.0	2	38.0	2	2.61	2	-9	9	116.93	2	-9	-9	9	-9	2	-9	9	-9	-9	-9
103	2	3199.8	34.673	2	34.673	34.673	27.751	0.010	0.0	2	38.5	2	2.57	2	-0.005	2	118.82	2	-9	-9	9	-9	2	-9	9	-9	-9	-9
102	2	3199.2	34.673	2	34.673	34.673	27.751	0.011	0.0	2	38.0	2	2.57	2	-9	9	119.24	2	-9	-9	9	-9	2	-9	9	-9	-9	-9
101	2	3412.8	34.674	2	34.674	34.674	27.752	0.011	0.0	2	37.9	2	2.59	2	-0.005	2	119.91	2	-9	-9	9	-9	2	-9	9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column

** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 185 DATE 4/24/04 LATITUDE 19°30.07N Btm Depth: 3271
CAST 1 LONGITUDE 109°59.97W

Sample ID	Pressure db	Salinity P ^o	Temp °C	Potential Temp °C	Sigma T	Sigma A	Sigma S	Theta	Beam Attenuation	fCO ₂										TON	Chl-a										
										NO2 P ^o	NO3 P ^o	PO4 P ^o	Si(OH) ₄ P ^o	CFC-11 P ^o	CFC-12 P ^o	O ₂ P ^o	F ^o	μm	DIC P ^o			pH P ^o	TALK P ^o	δ13C	TOC	μg/L					
136	2	34.596	2	23.933	23.931	23.356	0.085	0.0	2	0.0	2	0.22	2	0.0	2	9	9	215.31	2	305	2	1988.3	2	8.0640	2	2287	2	-9	-9	-9	-9
135	2	34.606	2	24.075	24.073	23.522	0.085	0.0	2	0.0	2	0.24	2	0.0	2	9	9	214.99	6	305	2	1987.9	2	8.0656	2	2285	2	-9	-9	6.4	-9
134	2	34.551	2	23.403	23.398	23.478	0.093	0.0	2	0.0	2	0.23	2	0.0	2	9	9	219.12	2	-9	9	1987.9	2	8.0652	2	-9	9	82.3	6.5	-9	-9
133	2	34.659	2	22.077	22.067	23.788	0.095	0.0	2	0.0	2	0.29	2	0.0	2	9	9	222.01	2	324	2	1996.5	2	8.0405	2	2284	2	-9	-9	6.2	-9
132	2	34.059	2	17.262	17.250	24.718	0.153	0.4	2	7.4	2	0.98	2	4.9	2	9	9	155.41	2	-9	9	2188.1	2	7.8178	2	-9	9	84.9	5.0	-9	-9
131	2	34.408	2	14.862	14.847	25.549	0.050	0.0	2	21.8	2	1.64	2	16.4	2	9	9	58.47	2	1097	2	2188.1	2	7.5803	2	2270	2	-9	-9	53.0	-9
130	2	34.618	2	13.589	13.572	25.981	0.058	0.0	2	26.2	2	2.37	2	24.0	2	9	9	211.11	2	-9	9	2188.1	2	7.4882	2	-9	9	-9	-9	-9	-9
129	2	34.739	2	13.095	13.075	26.175	0.037	0.0	2	27.1	2	2.53	2	27.4	2	9	9	4.71	2	1515	2	2250.3	2	7.4569	2	2291	2	-9	-9	52.3	-9
128	2	34.764	2	12.500	12.477	26.313	0.048	0.1	2	26.8	2	2.56	2	29.3	2	9	9	0.61	2	-9	9	2250.3	2	7.4437	2	-9	9	-9	-9	-9	-9
127	2	34.750	2	12.087	12.061	26.383	0.042	0.0	2	27.3	2	2.58	2	30.7	2	9	9	0.85	2	1608	2	2262.0	2	7.4333	2	2296	2	-9	-9	-9	-9
126	2	34.709	2	11.225	11.193	26.514	0.046	1.0	2	25.5	2	2.62	2	32.9	2	9	9	1.07	2	1714	2	2271.4	2	7.4110	2	2305	2	-9	-9	-9	-9
125	2	34.650	2	10.342	10.307	26.626	0.040	0.0	2	26.9	2	2.75	2	39.0	2	9	9	0.62	2	1813	2	2281.5	2	7.3902	2	2301	2	-9	-9	56.8	-9
124	9	-9	-9	-9	-9	-9	-9	-9	9	9	9	-9	-9	-9	9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
123	2	34.611	2	9.527	9.488	26.734	0.039	0.0	2	28.4	2	2.86	2	45.8	2	9	9	1.43	2	-9	9	2297.7	2	7.3743	2	2311	2	-9	-9	50.8	-9
122	2	34.554	2	8.595	8.552	26.839	0.035	0.0	2	31.1	2	2.91	2	51.6	2	9	9	1.53	2	1950	2	2297.7	2	7.3601	2	2311	2	-9	-9	-9	-9
121	2	34.527	2	7.539	7.490	26.977	0.032	0.0	2	34.2	2	3.07	2	61.4	2	9	9	2.19	2	2005	2	2312.8	2	7.3490	2	2321	2	-9	-9	-9	-9
120	2	34.516	2	6.630	6.574	27.096	0.041	0.0	2	37.3	2	3.13	2	71.0	2	9	9	1.56	2	2101	2	2326.3	2	7.3340	2	2329	2	-9	-9	-9	-9
119	2	34.513	2	5.884	5.823	27.190	0.037	0.0	2	40.4	2	3.21	2	80.4	2	9	9	1.57	2	2117	2	2337.2	2	7.3287	2	2346	2	-9	-9	-9	-9
118	2	34.521	2	5.207	5.140	27.279	0.035	0.0	2	42.5	2	3.26	2	94.2	2	9	9	3.47	2	2160	2	2349.1	2	7.3257	2	2351	2	-9	-9	-9	-9
117	2	34.531	2	4.702	4.629	27.345	0.031	0.0	2	43.4	2	3.28	2	102.2	2	9	9	7.66	2	2133	2	2355.9	2	7.3293	2	2365	2	-9	-9	-9	-9
116	2	34.541	2	4.314	4.236	27.396	0.029	0.0	2	43.8	2	3.29	2	107.9	2	9	9	12.49	2	2129	2	2362.6	2	7.3361	2	2373	6	-9	-9	-9	-9
115	2	34.553	2	4.020	3.936	27.437	0.029	0.0	2	44.3	2	3.25	2	113.0	2	9	9	17.86	6	-9	9	2362.6	2	7.3443	2	-9	9	-9	-9	-9	-9
114	2	34.565	2	3.723	3.633	27.478	0.027	0.0	2	43.8	2	3.25	2	121.9	2	9	9	24.29	2	-9	9	2362.6	2	7.3443	2	-9	9	-9	-9	-9	-9
113	2	34.575	2	3.470	3.374	27.511	0.026	0.0	2	43.3	2	3.19	2	130.0	2	9	9	30.23	2	-9	9	2362.6	2	7.3668	2	-9	9	-9	-9	-9	-9
112	2	34.589	2	3.190	3.088	27.549	0.024	0.0	2	42.7	2	3.12	2	133.6	2	9	9	39.67	2	-9	9	2362.6	2	7.3668	2	-9	9	-9	-9	-9	-9
111	2	34.608	2	2.778	2.664	27.602	0.020	0.0	2	42.0	2	3.01	2	140.1	2	9	9	55.96	2	-9	9	2362.6	2	7.4141	2	-9	9	-9	-9	-9	-9
110	2	34.625	2	2.425	2.299	27.647	0.018	0.0	2	40.9	2	2.90	2	146.1	2	9	9	71.22	2	-9	9	2362.6	2	7.4677	2	-9	9	-9	-9	-9	-9
109	2	34.640	2	2.148	2.010	27.682	0.016	0.0	2	40.2	2	2.82	2	151.3	2	9	9	83.98	2	-9	9	2362.6	2	7.4677	2	-9	9	-9	-9	-9	-9
108	2	34.653	2	1.928	1.776	27.711	0.012	0.0	2	39.3	2	2.77	2	156.9	2	9	9	97.72	2	-9	9	2362.6	2	7.5095	2	-9	9	-9	-9	-9	-9
107	2	34.660	2	1.816	1.648	27.727	0.011	0.0	2	38.7	2	2.71	2	160.6	2	9	9	105.74	2	-9	9	2362.6	2	7.5095	2	-9	9	-9	-9	-9	-9
106	2	34.664	2	1.765	1.580	27.735	0.011	0.0	2	38.2	2	2.66	2	159.2	2	9	9	109.58	2	-9	9	2362.6	2	7.5095	2	-9	9	-9	-9	-9	-9
105	2	34.670	2	1.699	1.497	27.746	0.011	0.0	2	38.0	2	2.64	2	157.3	2	9	9	115.62	6	-9	9	2362.6	2	7.5294	2	-9	9	-9	-9	-9	-9
104	2	34.671	2	1.668	1.448	27.750	0.010	0.0	6	38.1	6	2.64	6	158.4	6	9	9	117.04	2	-9	9	2362.6	2	7.5294	2	-9	9	-9	-9	-9	-9
103	3	34.671	-9	1.676	1.435	27.751	0.010	-9	1	-9	1	-9	1	-9	1	9	9	117.04	2	-9	9	2362.6	2	7.5294	2	-9	9	-9	-9	-9	-9
102	2	34.671	2	1.675	1.435	27.751	0.010	0.0	2	37.8	2	2.62	2	162.2	2	9	9	117.73	2	-9	9	2362.6	2	7.5322	2	-9	9	-9	-9	-9	-9
101	2	34.671	2	1.682	1.434	27.751	0.011	0.0	2	38.0	2	2.63	2	161.1	2	9	9	117.82	2	-9	9	2362.6	2	7.5322	2	-9	9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 187 1 DATE 4/24/94 LATITUDE 20°29.9'N Btm Depth: 3138
 CAST 1 LONGITUDE 110°0.0'W

Sample ID	P ₀₀₀	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma T	Sigma T	Theta	Theta	NO2 P ₀₀₀	NO3 P ₀₀₀	PO4 P ₀₀₀	SiO ₄ P ₀₀₀	P ₀₀₀	CFC-11 P ₀₀₀	CFC-12 P ₀₀₀	O2 P ₀₀₀	F ₀₀₀	DICP ₀₀₀	pH P ₀₀₀	TA ₀₀₀	P ₀₀₀	Si3C	TOC	TON	Chi-a	Phase			
																													µmol/kg	µmol/kg	µmol/kg
136	2	7.8	34.791	2	34.793	2	24.070	24.068	23.463	0.082	0.0	2	0.0	2	0.29	2	0.0	2	0.0	2	2001.7	2	2310	2	-9	-9	-9	-9	-9		
135	2	25.0	34.785	2	34.784	2	24.062	24.056	23.462	0.088	0.0	2	0.0	2	0.31	2	0.0	2	0.0	2	9	9	8.0577	2	-9	-9	-9	-9	-9		
134	2	48.4	34.611	2	34.621	2	21.359	21.349	24.102	0.202	0.0	2	0.1	2	0.53	2	0.6	2	0.6	2	2109.4	2	2311	2	-9	-9	-9	-9	-9		
133	2	74.6	34.584	2	34.592	2	18.291	18.278	24.885	0.054	0.5	2	16.0	2	1.61	2	10.7	2	10.7	2	9	9	7.7111	2	-9	-9	-9	-9	-9		
132	2	100.3	34.577	2	34.581	2	14.460	14.445	25.766	0.039	0.0	2	24.6	2	2.24	2	22.2	2	22.2	2	2221.5	2	2286	2	-9	-9	-9	-9	-9		
131	2	125.7	34.659	2	34.658	2	13.809	13.792	25.967	0.029	0.0	2	25.6	2	2.35	2	25.8	2	25.8	2	9	9	7.4763	2	-9	-9	-9	-9	-9		
130	2	148.5	34.731	2	34.725	2	13.089	13.069	26.171	0.029	0.0	2	26.5	2	2.46	2	26.7	2	26.7	2	2253.5	2	2293	2	-9	-9	-9	-9	-9		
129	2	175.5	34.729	2	34.728	2	12.576	12.553	26.272	0.030	0.0	2	27.1	2	2.49	2	28.0	2	28.0	2	9	9	7.4431	2	-9	-9	-9	-9	-9		
128	2	197.9	34.740	2	34.741	2	12.247	12.220	26.345	0.034	0.0	2	27.1	2	2.52	2	28.3	2	28.3	2	1621	2	2256.9	2	2295	2	-9	-9	-9		
127	2	248.2	34.715	2	34.717	2	11.442	11.411	26.479	0.038	0.1	2	26.4	2	2.60	2	27.2	2	27.2	2	1690	2	2265.7	2	2314	3	-9	-9	-9		
126	2	299.8	34.668	2	34.667	2	10.526	10.490	26.608	0.037	0.1	2	25.9	2	2.67	2	27.4	2	27.4	2	1801	2	2278.4	2	2318	3	-9	-9	-9		
125	2	351.4	34.610	2	34.607	2	9.621	9.581	26.718	0.035	0.0	2	27.7	2	2.78	2	43.5	2	43.5	2	9	9	7.3753	2	-9	-9	-9	-9	-9		
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
123	2	401.3	34.569	2	34.568	2	8.846	8.803	26.812	0.034	0.0	2	29.8	2	2.87	2	49.2	2	49.2	2	1943	2	2286.1	2	2318	2	-9	-9	-9		
122	2	448.4	34.535	2	34.533	2	8.140	8.094	26.894	0.034	0.0	2	32.1	2	2.93	2	58.2	2	58.2	2	9	9	7.3549	2	-9	-9	-9	-9	-9		
121	2	501.2	34.526	2	34.524	2	7.576	7.526	26.971	0.033	0.0	2	33.5	2	3.02	2	64.4	2	64.4	2	2022	2	2311.9	2	2314	2	-9	-9	-9		
120	2	599.7	34.500	2	34.499	2	6.488	6.433	27.102	0.031	0.0	2	37.7	2	3.10	2	77.7	2	77.7	2	2095	2	2325.9	2	2328	2	-9	-9	-9		
119	2	699.1	34.502	2	34.501	2	5.768	5.707	27.196	0.030	0.0	2	40.2	2	3.16	2	86.1	2	86.1	2	2149	2	2337.4	2	2339	2	-9	-9	-9		
118	2	801.1	34.512	2	34.513	2	5.171	5.104	27.277	0.031	0.0	2	42.2	2	3.20	2	92.8	2	92.8	2	2144	2	2345.6	2	2348	2	-9	-9	-9		
117	2	902.2	34.529	2	34.527	2	4.695	4.623	27.344	0.029	0.0	2	44.3	2	3.23	2	101.9	2	101.9	2	772	2	2358.7	2	-9	-9	-9	-9	-9		
116	2	1001.3	34.545	2	34.544	2	4.288	4.210	27.402	0.028	0.0	2	43.5	2	3.24	2	111.7	2	111.7	2	1212	2	2362.4	2	2372	6	-9	-9	-9		
115	2	1100.2	34.556	2	34.555	2	3.992	3.908	27.443	0.026	0.0	2	43.6	2	3.21	2	118.6	2	118.6	2	9	9	7.3440	2	-9	-9	-9	-9	-9		
114	2	1198.9	34.566	2	34.565	2	3.743	3.652	27.476	0.024	0.0	2	43.4	2	3.19	2	122.6	2	122.6	2	9	9	7.3546	2	-9	-9	-9	-9	-9		
113	2	1300.3	34.580	2	34.579	2	3.439	3.343	27.517	0.023	0.0	2	43.0	2	3.09	2	127.8	2	127.8	2	9	9	7.3703	2	-9	-9	-9	-9	-9		
112	2	1401.4	34.590	2	34.589	2	3.186	3.084	27.550	0.021	0.0	2	42.6	2	3.02	2	130.3	2	130.3	2	9	9	7.3878	2	-9	-9	-9	-9	-9		
111	2	1502.1	34.598	2	34.597	2	3.012	2.904	27.573	0.022	0.0	2	42.3	2	3.03	2	134.6	2	134.6	2	9	9	7.4085	2	-9	-9	-9	-9	-9		
110	2	1799.7	34.624	2	34.623	2	2.480	2.353	27.641	0.018	0.0	2	40.8	2	2.91	2	149.4	2	149.4	2	9	9	7.4085	2	-9	-9	-9	-9	-9		
109	2	1998.6	34.640	2	34.639	2	2.139	2.000	27.684	0.015	0.0	2	39.8	2	2.78	2	154.7	2	154.7	2	9	9	7.4704	2	-9	-9	-9	-9	-9		
108	2	2198.3	34.652	2	34.651	2	1.938	1.785	27.710	0.013	0.0	2	38.9	2	2.70	2	154.8	2	154.8	2	9	9	7.4933	2	-9	-9	-9	-9	-9		
106	3	2399.1	34.660	2	-9	5	1.823	1.654	27.726	0.011	-9	1	-9	1	-9	1	-9	1	-9	1	-9	1	-9	1	-9	-9	-9	-9	-9	-9	
105	2	2600.4	34.663	2	34.663	2	1.767	1.582	27.735	0.010	0.0	2	38.2	2	2.61	2	155.6	2	155.6	2	9	9	7.5243	2	-9	-9	-9	-9	-9	-9	-9
104	2	2800.7	34.667	2	34.667	2	1.729	1.526	27.741	0.010	0.0	2	38.0	2	2.61	2	159.4	2	159.4	2	9	9	7.5243	2	-9	-9	-9	-9	-9	-9	-9
103	2	2996.0	34.668	2	34.668	2	1.727	1.506	27.743	0.011	0.0	2	38.0	2	2.62	2	163.7	2	163.7	2	9	9	7.5243	2	-9	-9	-9	-9	-9	-9	-9
102	2	2997.6	34.668	2	34.667	2	1.727	1.506	27.743	0.011	0.0	6	38.0	6	2.61	6	159.6	6	159.6	6	9	9	7.5243	2	-9	-9	-9	-9	-9	-9	-9
101	2	3134.2	34.669	2	34.668	2	1.723	1.488	27.745	0.010	0.0	2	38.1	2	2.60	2	162.7	2	162.7	2	9	9	7.5243	2	-9	-9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18

NOAA Ship Discoverer

STATION 189 DATE 4/24/94 LATITUDE 21°29.9'N Btm Depth: 3209
 CAST 1 LONGITUDE 110°0.1'W

Sample ID	Pressure db	Salinity	P _{o2}	Temp °C	Temp °C	Sigma t	Theta cp	Beam										F _{OC2} µmole/kg	DIC µmole/kg	pH	P _{TAK} µmole/kg	F _{OC2} µmole/kg	δ13C per mil	TOC µmole/L	TON µmole/L	Chl-a µg/L	Phase										
								N02	N03	P04	P04	Si(OH) ₄	CFC-11	CFC-12	O2	P _{20°C}	DIC																				
136	2	34.384	2	34.386	2	21.401	21.399	23.917	0.076	0.0	2	0.1	2	0.32	2	1.2	2	-9	-9	-9	224.28	2	345	2	2004.5	2	8.0244	2	2281	6	-9	-9	94.7	-9	-9		
135	2	34.369	2	34.373	2	21.340	21.336	23.922	0.083	0.0	2	0.0	2	0.30	2	1.4	2	-9	-9	-9	224.79	2	-9	-9	-9	9	8.0216	2	-9	9	-9	-9	-9				
134	2	34.196	2	34.201	2	19.746	19.738	24.218	0.087	0.0	2	0.0	2	0.34	2	1.6	2	-9	-9	-9	234.10	2	362	2	2007.1	2	8.0053	2	2275	2	-9	-9	82.6	-9	-9		
133	2	34.145	2	34.155	2	18.564	18.551	24.481	0.111	0.0	2	0.0	2	0.39	2	2.0	2	-9	-9	-9	228.15	2	-9	-9	-9	9	7.9795	2	2259	9	-9	-9	74.1	-9	-9		
132	2	34.217	2	34.219	2	15.381	15.366	25.288	0.053	0.1	2	17.9	2	1.68	2	13.8	2	-9	-9	-9	87.05	2	947	2	2155.5	2	7.6467	2	-9	9	-9	-9	56.8	-9	-9		
131	2	34.460	2	34.438	2	13.855	13.837	25.804	0.037	0.0	2	24.4	2	2.12	2	21.5	2	-9	-9	-9	39.99	2	-9	-9	-9	9	7.5292	2	-9	9	-9	-9	-9	-9	-9		
130	2	34.667	2	34.638	2	13.310	13.289	26.077	0.032	0.0	2	26.6	2	2.40	2	24.7	2	-9	-9	-9	14.67	2	1426	2	2234.7	2	7.4796	2	2286	2	-9	-9	-9	-9	-9	-9	
129	2	34.687	2	34.688	2	12.607	12.583	26.233	0.030	0.0	2	27.5	2	2.50	2	27.7	2	-9	-9	-9	10.40	2	-9	-9	-9	9	7.4596	2	-9	9	-9	-9	-9	-9	-9		
128	2	34.661	2	34.662	2	11.816	11.790	26.366	0.030	0.0	2	27.8	2	2.54	2	30.3	2	-9	-9	-9	10.75	2	1557	2	2252.9	2	7.4441	2	2294	2	-9	-9	55.2	-9	-9		
127	2	34.630	2	34.630	2	10.800	10.769	26.529	0.031	0.0	2	27.4	2	2.68	2	34.8	2	-9	-9	-9	6.52	2	-9	-9	-9	9	2.869	2	-9	9	-9	-9	55.0	-9	-9		
126	2	34.645	2	34.638	2	10.223	10.188	26.643	0.031	0.1	2	26.6	2	2.79	2	40.9	2	-9	-9	-9	1.71	2	1803	2	2283.2	2	-9	9	5	-9	-9	-9	-9	-9	-9	-9	-9
125	2	34.611	2	34.603	2	9.614	9.574	26.720	0.038	0.0	2	28.6	2	2.89	2	46.9	2	-9	-9	-9	1.38	2	-9	-9	-9	9	7.3742	2	-9	9	-9	-9	-9	-9	-9		
124	3	398.3	34.562	34.560	2	8.865	8.822	26.804	0.031	0.0	2	30.7	2	2.94	2	53.4	2	-9	-9	-9	2.21	2	1917	2	2297.5	2	-9	9	2308	2	-9	-9	-9	-9	-9	-9	-9
122	2	498.7	34.494	34.493	2	7.808	7.758	26.912	0.031	0.0	2	34.1	2	3.04	2	58.5	2	-9	-9	-9	3.07	2	2004	2	2305.9	2	7.3490	2	2319	2	-9	-9	-9	-9	-9	-9	-9
121	2	601.0	34.483	34.484	2	6.764	6.707	27.052	0.027	0.0	2	37.2	2	3.16	2	70.4	2	-9	-9	-9	2.67	2	2072	2	2321.7	2	7.3375	2	2345	3	-9	-9	-9	-9	-9	-9	-9
120	2	700.6	34.490	34.490	2	6.021	5.959	27.155	0.028	0.0	2	40.1	2	3.24	2	80.7	2	-9	-9	-9	2.81	2	2080	2	2332.5	2	7.3330	2	2346	2	-9	-9	-9	-9	-9	-9	-9
119	2	797.6	34.496	34.495	2	5.392	5.325	27.287	0.027	0.0	2	41.9	2	3.27	2	91.1	2	-9	-9	-9	5.13	2	2118	2	2343.9	2	7.3292	2	2356	2	-9	-9	-9	-9	-9	-9	-9
118	2	899.7	34.510	34.510	2	4.907	4.833	27.306	0.027	0.0	2	42.9	2	3.29	2	99.8	2	-9	-9	-9	7.10	2	2134	2	2353.0	2	7.3285	2	2359	2	-9	-9	-9	-9	-9	-9	-9
117	2	1000.2	34.532	34.531	2	4.531	4.452	27.366	0.025	0.0	2	43.6	2	3.32	2	105.9	2	-9	-9	-9	9.79	2	2129	2	2361.9	2	7.3285	2	2370	6	-9	-9	-9	-9	-9	-9	-9
116	2	1099.7	34.546	34.546	2	4.139	4.054	27.420	0.026	0.0	2	43.8	2	3.31	2	111.7	2	-9	-9	-9	15.25	2	-9	-9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	
115	2	1198.7	34.561	34.560	2	3.780	3.689	27.469	0.024	0.0	2	43.7	2	3.26	2	120.9	2	-9	-9	-9	22.57	2	-9	-9	-9	9	7.3509	2	-9	9	-9	-9	-9	-9	-9	-9	
114	2	1296.3	34.574	34.573	2	3.477	3.381	27.509	0.024	0.0	2	44.1	2	3.24	2	128.6	2	-9	-9	-9	29.98	2	-9	-9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	
113	2	1399.6	34.586	34.586	2	3.200	3.098	27.546	0.021	0.0	2	43.0	2	3.12	2	130.6	2	-9	-9	-9	37.87	2	-9	-9	-9	9	7.3802	2	-9	9	-9	-9	-9	-9	-9	-9	
112	2	1499.9	34.598	34.597	2	3.009	2.901	27.573	0.021	0.0	2	42.5	2	3.08	2	137.7	2	-9	-9	-9	45.09	2	-9	-9	-9	9	7.4067	2	-9	9	-9	-9	-9	-9	-9	-9	
111	2	1600.3	34.606	34.605	2	2.841	2.727	27.595	0.018	0.0	2	42.1	2	3.04	2	142.4	2	-9	-9	-9	51.57	2	-9	-9	-9	9	7.4067	2	-9	9	-9	-9	-9	-9	-9	-9	
110	2	1799.7	34.623	34.621	2	2.480	2.353	27.641	0.017	0.0	2	41.4	2	2.91	2	147.6	2	-9	-9	-9	67.39	2	-9	-9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	
109	2	2000.1	34.640	34.639	2	2.183	2.044	27.680	0.017	0.0	2	40.2	2	2.83	2	150.5	2	-9	-9	-9	82.34	2	-9	-9	-9	9	7.4648	2	-9	9	-9	-9	-9	-9	-9	-9	
108	2	2197.8	34.652	34.650	2	1.975	1.822	27.707	0.014	0.0	2	40.0	2	2.74	2	152.9	2	-9	-9	-9	93.71	2	-9	-9	-9	9	-9	9	-9	9	-9	-9	-9	-9	-9	-9	
107	2	2400.2	34.659	34.658	2	1.849	1.681	27.723	0.012	0.0	2	39.1	2	2.72	2	157.7	2	-9	-9	-9	101.65	2	-9	-9	-9	9	7.5025	2	-9	9	-9	-9	-9	-9	-9	-9	
106	2	2600.0	34.664	34.663	2	1.769	1.584	27.735	0.011	0.0	2	38.8	2	2.69	2	161.4	2	-9	-9	-9	107.82	2	-9	-9	-9	9	7.5240	2	-9	9	-9	-9	-9	-9	-9	-9	
105	2	2796.5	34.668	34.668	2	1.705	1.503	27.744	0.010	0.0	2	38.6	2	2.65	2	163.9	2	-9	-9	-9	112.91	2	-9	-9	-9	9	7.5240	2	-9	9	-9	-9	-9	-9	-9	-9	
104	2	3001.0	34.671	34.670	2	1.669	1.449	27.750	0.010	0.0	6	38.3	6	2.62	6	161.6	6	-9	-9	-9	114.98	2	-9	-9	-9	9	7.5289	2	-9	9	-9	-9	-9	-9	-9	-9	
103	2	3097.2	34.671	34.672	2	1.668	1.438	27.751	0.011	0.0	2	38.4	2	2.64	2	167.8	2	-9	-9	-9	114.88	2	-9	-9	-9	9	7.5289	2	-9	9	-9	-9	-9	-9	-9	-9	
102	2	3099.1	34.671	34.671	2	1.668	1.438	27.751	0.011	0.0	2	38.3	2	2.62	2	163.2	2	-9	-9	-9	115.19	2	-9	-9	-9	9	7.5289	2	-9	9	-9	-9	-9	-9	-9	-9	
101	2	3220.4	34.673	34.671	2	1.661	1.420	27.753	0.013	0.0	2	38.2	2	2.62	2	164.2	2	-9	-9	-9	115.60	2	-9	-9	-9	9	7.5296	2	-9	9	-9	-9	-9	-9	-9	-9	

** WOCE water sample quality flag (F) for parameter from previous column

** WOCE quality flag (F) for PVC sample bottle

NOAA CGC94 WOCE P18 NOAA Ship Discoverer

STATION 190 DATE 4/25/94 LATITUDE 21°59.9'N Btm Depth: 3165
 CAST 1 LONGITUDE 110°0.0'W

Sample ID	Pressure db	Salinity P* CTD	Salinity P* Bottle	Temp °C	Temp °C	Potential		Sigma T	Sigma T	Theta	Theta	Beam Attenuation	NO2 P* umol/kg	NO3 P* umol/kg	PO4 P* umol/kg	Si(OH)4 P* umol/kg	CFC-11 P* pmol/kg	CFC-12 P* pmol/kg	O2 P* umol/kg	fO2	DIC P* umol/kg	pH P*	TA P* umol/kg	P* umol/kg	Si BIC per ml	TOC umol/L	TON umol/L	Chi-a P* umol/L	Phase umol/L
						Temp °C	Temp °C																						
136	9.6	34.315	2 34.316	20.714	20.713	24.050	0.102	0.0	0.0	0.1	2 0.32	2 1.3	2 2.408	2 1.267	2 227.12	2 358	2 2006.1	2 8.0163	2 2278	6	1.80	-9	-9	-9	-9	-9	-9		
135	22.9	34.309	2 34.318	20.685	20.681	24.054	0.106	0.0	0.0	2 0.0	2 0.29	2 1.2	2 2.395	2 1.255	2 226.65	2 358	2 2009.3	2 8.0177	2 2277	3	1.80	-9	-9	-9	-9	-9	-9		
134	50.5	34.093	2 34.098	18.842	18.833	24.370	0.227	0.0	0.0	2 0.0	2 0.44	2 3.5	2 2.603	2 1.362	2 239.85	2 993	2 2021.6	2 7.9734	2 2265	2	1.60	-9	-9	-9	-9	-9	-9		
133	74.6	34.128	2 34.123	18.263	18.250	24.543	0.112	0.0	0.0	2 0.2	2 0.53	2 5.4	2 2.597	6 1.326	6 233.75	2 430	2 2006.9	2 7.9428	2 2270	2	1.40	-9	-9	-9	-9	-9	-9		
132	99.3	34.313	2 34.623	15.277	15.262	25.385	0.051	0.0	0.0	2 19.2	2 1.81	2 17.0	2 1.893	2 0.946	2 75.77	2 989	2 2170.7	2 7.6229	2 2268	2	0.20	-9	-9	-9	-9	-9	-9		
131	125.4	34.585	2 34.584	13.607	13.590	25.936	0.036	0.0	0.0	2 25.7	2 2.34	2 26.1	2 1.167	2 0.581	2 29.57	2 1361	2 2227.1	2 7.4995	2 2286	2	-9	88.7	-9	-9	-9	-9	-9		
130	149.5	34.592	2 34.591	12.454	12.434	26.142	0.032	0.0	0.0	2 26.1	2 2.38	2 27.9	2 0.970	2 0.486	2 32.71	2 1421	2 2230.6	2 7.4857	2 2281	2	-0.10	-9	-9	-9	-9	-9	-9		
129	172.8	34.676	2 34.676	12.016	11.993	26.339	0.031	0.0	0.0	2 27.6	2 2.59	2 31.7	2 0.484	6 0.252	6 8.56	2 1587	2 2255.8	2 7.4408	2 2290	2	-9	-9	-9	-9	-9	-9	-9		
128	199.1	34.688	2 34.686	11.646	11.620	26.418	0.029	0.0	0.0	2 27.5	2 2.64	2 33.6	2 0.324	2 0.171	2 4.72	2 1649	2 2262.4	2 7.4259	2 2298	2	-0.20	57.7	-9	-9	-9	-9	-9		
127	250.4	34.644	2 34.651	10.844	10.813	26.532	0.030	0.0	0.0	2 27.0	2 2.72	2 37.4	2 0.202	2 0.109	2 3.50	2 1745	2 2270.9	2 7.4050	2 2298	2	-9	-9	-9	-9	-9	-9	-9		
126	301.2	34.588	2 34.586	10.020	9.985	26.633	0.029	0.0	0.0	2 27.8	2 2.76	2 41.8	2 0.142	2 0.071	2 -9	1 1816	2 2278.6	2 7.3891	2 2296	2	-0.30	-9	-9	-9	-9	-9	-9		
125	349.9	34.533	2 34.533	9.397	9.358	26.710	0.029	0.0	0.0	2 29.1	2 2.83	2 45.5	2 0.091	6 0.045	6 5.13	2 1875	2 2285.2	2 7.3753	2 2292	3	-9	-9	-9	-9	-9	-9	-9		
124	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
123	998.8	34.518	2 34.519	8.579	8.487	26.821	0.030	0.0	0.0	2 31.3	2 2.89	2 52.0	2 0.046	2 0.024	2 5.44	2 1953	2 2294.8	2 7.3589	2 2302	2	-0.30	-9	-9	-9	-9	-9	-9	-9	
122	500.0	34.491	2 34.490	7.559	7.506	26.975	0.029	0.0	0.0	2 35.3	2 3.07	2 64.3	2 0.015	2 -0.002	2 -9	1 2096	2 2312.1	2 7.3445	2 2320	2	-0.30	31.5	-9	-9	-9	-9	-9	-9	
121	598.2	34.488	2 34.487	6.559	6.484	27.085	0.029	0.0	0.0	2 37.9	2 3.14	2 76.5	2 0.031	2 0.004	2 4.19	2 2090	2 2325.1	2 7.3366	2 2329	2	-0.40	-9	-9	-9	-9	-9	-9	-9	
120	700.5	34.488	2 34.487	5.842	5.781	27.176	0.028	0.0	0.0	2 40.3	2 3.23	2 86.6	2 0.010	2 0.002	2 3.45	2 2123	2 2335.1	2 7.3309	2 2330	2	-0.40	-9	-9	-9	-9	-9	-9	-9	
119	804.7	34.501	2 34.502	5.222	5.154	27.262	0.028	0.0	0.0	2 42.1	2 3.27	2 96.1	2 0.005	2 -0.002	2 5.82	2 2142	2 2345.3	2 7.3279	2 2347	2	-0.40	-9	-9	-9	-9	-9	-9	-9	
118	895.5	34.518	2 34.517	4.824	4.751	27.321	0.028	0.0	0.0	2 42.8	2 3.28	2 102.0	2 0.009	2 -0.002	2 7.37	2 2149	2 2354.9	2 7.3291	2 2352	2	-0.40	-9	-9	-9	-9	-9	-9	-9	
117	997.2	34.534	2 34.535	4.425	4.346	27.379	0.027	0.0	0.0	2 43.4	2 3.30	2 108.9	2 0.002	2 -0.001	2 11.94	2 2133	2 2362.4	2 7.3331	2 2368	6	-0.40	40.8	-9	-9	-9	-9	-9	-9	
116	1102.6	34.551	2 34.550	4.085	3.999	27.429	0.030	0.0	0.0	2 43.2	2 3.31	2 119.4	2 -9	1 -9	1 1635	2 2104	2 2367.6	2 7.3420	2 2373	2	-9	-9	-9	-9	-9	-9	-9	-9	
115	1198.0	34.558	2 34.557	3.818	3.727	27.462	0.027	0.0	0.0	2 43.5	2 3.27	2 125.0	2 0.003	2 -0.002	2 22.17	2 -9	2 2370.3	2 7.3502	2 2384	2	-0.40	-9	-9	-9	-9	-9	-9	-9	
114	1399.5	34.592	2 34.592	3.168	3.067	27.554	0.024	0.0	0.0	2 42.2	2 3.17	2 140.9	2 -9	1 -9	1 3950	2 1910	2 2376.0	2 7.3831	2 2398	2	-0.40	-9	-9	-9	-9	-9	-9	-9	
113	1498.9	34.597	2 -9	5 3.074	2.965	27.567	0.024	0.0	0.0	2 43.5	2 3.34	2 140.1	2 0.006	2 0.000	2 43.15	2 -9	2 2375.1	2 7.3922	2 2406	2	-9	-9	-9	-9	-9	-9	-9	-9	
112	1573.7	34.603	2 34.603	2.091	2.017	27.585	0.024	0.0	0.0	2 42.6	2 3.12	2 138.8	2 -9	1 -9	1 4238	2 1848	2 2375.5	2 7.4007	2 2408	2	-0.30	-9	-9	-9	-9	-9	-9	-9	
111	1615.6	34.608	2 -9	5 2.800	2.685	27.601	0.022	-9	-9	1 -9	1 -9	1 -9	1 -9	1 -9	1 -9	1 -9	1 -9	1 -9	1 -9	1 -9	1 -9	1 -9	1 -9	1 -9	1 -9	1 -9	1 -9	1 -9	
110	1799.9	34.625	2 34.614	4 2.482	2.356	27.643	0.019	0.0	0.0	2 41.3	2 2.99	2 147.6	2 0.011	2 0.002	2 67.97	2 1693	2 2369.2	2 7.4393	2 2411	2	-0.20	-9	-9	-9	-9	-9	-9	-9	
109	2000.7	34.640	2 34.640	2.184	2.045	27.680	0.018	0.0	0.0	2 40.5	2 2.89	2 151.9	2 -9	1 -9	1 8222	2 1592	2 2367.7	2 7.4654	2 2421	2	-0.20	-9	-9	-9	-9	-9	-9	-9	
108	2200.1	34.654	2 34.654	2.193	1.779	27.712	0.016	0.0	0.0	2 39.1	2 2.77	2 156.1	2 -9	1 -9	1 9552	2 1501	2 2366.9	2 7.4921	2 2414	2	-9	-9	-9	-9	-9	-9	-9	-9	
107	2400.5	34.651	2 34.651	1.889	1.720	27.719	0.017	0.0	0.0	2 39.2	2 2.74	2 154.5	2 -9	1 -9	1 9901	2 1473	2 2365.9	2 7.4969	2 2414	2	-0.20	-9	-9	-9	-9	-9	-9	-9	
106	2599.8	34.661	2 34.660	2.1856	1.669	27.725	0.015	0.0	0.0	2 39.2	2 2.74	2 155.4	2 -9	1 -9	1 10101	2 1448	2 2362.5	2 7.5028	2 2427	2	-9	-9	-9	-9	-9	-9	-9	-9	
105	2799.1	34.666	2 34.665	2.1756	1.552	27.738	0.011	0.0	0.0	2 38.7	2 2.72	2 159.9	2 0.002	2 0.001	2 109.81	2 1393	2 2359.1	2 7.5184	2 2429	2	-9	-9	-9	-9	-9	-9	-9	-9	
104	2998.0	34.670	2 34.670	1.686	1.465	27.748	0.011	0.0	0.0	2 38.4	2 2.69	2 162.1	2 -9	1 -9	1 11416	2 1364	2 2358.0	2 7.5255	2 2428	2	-0.20	-9	-9	-9	-9	-9	-9	-9	
103	2998.7	34.670	2 34.670	1.686	1.465	27.748	0.011	0.0	0.0	2 39.8	2 2.68	2 165.2	2 -9	1 -9	1 11414	2 1359	2 2356.5	2 7.5288	2 2429	2	-9	-9	-9	-9	-9	-9	-9	-9	
102	3098.9	34.671	2 34.672	2.1668	1.438	27.751	0.013	0.0	0.0	2 38.4	2 2.68	2 165.2	2 0.006	2 0.002	2 115.33	2 1334	2 2357.7	2 7.5385	2 2429	2	-0.20	-9	-9	-9	-9	-9	-9	-9	
101	3173.8	34.672	2 -9	5 1.668	1.431	27.752	0.013	-9	-9	1 -9	1 -9	1 -9	1 -9	1 -9	1 115.69	2 1343	2 2355.9	2 7.5430	2 2430	2	-9	-9	-9	-9	-9	-9	-9	-9	

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 191 DATE 4/25/94 LATITUDE 22°29.8'N Btm Depth: 3071
CAST 1 LONGITUDE 109°59.7'W

Sample ID	P _{tot}	Pressure db	Salinity P _{tot}	Salinity Bottle	Temp °C	Temp °C	Potential		Sigma T	Sigma T _{theta}	NO ₂ P _{tot}	NO ₃ P _{tot}	PO ₄ P _{tot}	SiO ₄ P _{tot}	CFC-11 P _{tot}	CFC-12 P _{tot}	O ₂ P _{tot}	F ₂ @20°C P _{tot}	DIC P _{tot}	pH	P _{TA}	P _{TA} P _{tot}	P _{TA} P _{tot}	S13C per mil	TOC	TON	Chl-a	Phaeo															
							Temp °C	Temp °C																																			
136	9	-9	9	9	1	-9	-9	-9	-9	1	-9	1	-9	1	-9	1	-9	1	-9	9	9	9	9	-9	-9	-9	-9	-9															
135	9	-9	9	9	1	-9	-9	-9	-9	1	-9	1	-9	1	-9	1	-9	1	-9	9	9	9	9	-9	-9	-9	-9	-9															
134	9	-9	9	9	1	-9	-9	-9	-9	1	-9	1	-9	1	-9	1	-9	1	-9	9	9	9	9	-9	-9	-9	-9	-9															
133	9	-9	9	9	1	-9	-9	-9	-9	1	-9	1	-9	1	-9	1	-9	1	-9	9	9	9	9	-9	-9	-9	-9	-9															
132	9	-9	9	9	1	-9	-9	-9	-9	1	-9	1	-9	1	-9	1	-9	1	-9	9	9	9	9	-9	-9	-9	-9	-9															
131	9	-9	9	9	1	-9	-9	-9	-9	1	-9	1	-9	1	-9	1	-9	1	-9	9	9	9	9	-9	-9	-9	-9	-9															
130	9	-9	9	9	1	-9	-9	-9	-9	1	-9	1	-9	1	-9	1	-9	1	-9	9	9	9	9	-9	-9	-9	-9	-9															
129	9	-9	9	9	1	-9	-9	-9	-9	1	-9	1	-9	1	-9	1	-9	1	-9	9	9	9	9	-9	-9	-9	-9	-9															
128	9	-9	9	9	1	-9	-9	-9	-9	1	-9	1	-9	1	-9	1	-9	1	-9	9	9	9	9	-9	-9	-9	-9	-9															
127	2	6.9	34.165	2	18.174	18.175	24.590	0.451	0.2	2	2.5	2	0.68	2	2.317	2	1.300	2	215.48	2	473	2	2033.0	2	7.9123	2	2270	6	-9	-9	-9	-9	-9	-9	-9								
126	2	24.7	34.204	2	17.202	17.198	24.837	0.488	0.2	2	6.7	2	0.99	2	2.390	2	1.238	2	185.37	2	-9	2	9	-9	9	7.8367	2	-9	9	-9	-9	-9	-9	-9	-9								
125	2	49.8	34.288	2	16.379	16.371	25.115	0.275	0.4	2	12.9	2	1.41	2	2.159	2	1.083	2	141.71	2	762	2	2132.7	2	7.7945	2	2271	2	-9	-9	-9	-9	-9	-9	-9	-9							
124	9	-9	9	9	9	-9	-9	-9	-9	9	-9	9	-9	9	-9	9	-9	9	-9	9	9	9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9						
123	2	74.1	34.433	2	14.454	14.443	25.671	0.045	0.2	2	23.2	2	2.11	2	1.549	2	0.775	2	64.716	2	-9	2	9	-9	9	7.5468	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9					
122	2	100.0	34.396	2	13.381	13.367	26.006	0.041	0.0	2	26.3	2	2.40	2	1.086	2	0.548	2	26.28	2	1429	2	2232.0	2	7.4904	2	2289	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9				
121	2	149.0	34.661	2	12.034	12.015	26.323	0.032	0.0	2	27.5	2	2.52	2	0.561	2	0.290	2	12.49	2	1581	2	2252.7	2	7.4460	2	2295	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9			
120	2	196.2	34.645	2	11.383	11.358	26.434	0.031	0.0	2	27.7	2	2.58	2	0.377	2	0.199	2	8.90	2	1646	2	2260.9	2	7.4263	2	2297	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
119	2	251.1	34.634	2	10.659	10.629	26.549	0.031	0.0	2	27.6	2	2.67	2	0.112	2	0.059	2	5.90	2	1756	2	2271.8	2	7.4028	2	2297	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
118	2	303.0	34.602	2	9.923	9.888	26.660	0.031	0.0	2	28.2	2	2.78	2	0.112	2	0.059	2	1.97	2	1843	2	2281.6	2	7.3823	2	2303	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
117	2	396.7	34.564	2	8.610	8.567	26.845	0.032	0.0	2	31.5	2	2.98	2	0.093	2	0.040	2	1.56	2	1953	2	2301.7	2	7.3609	2	2317	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
116	2	503.3	34.521	2	7.440	7.391	26.987	0.031	0.0	2	34.7	2	3.07	2	0.068	2	0.040	2	1.05	2	2036	2	2315.0	2	7.3484	2	2327	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
115	2	600.8	34.510	2	6.498	6.383	27.116	0.028	0.0	2	38.1	2	3.18	2	0.022	2	0.006	2	0.82	2	2083	2	2327.9	2	7.3358	2	2337	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
114	2	696.8	34.511	2	5.694	5.634	27.212	0.028	0.1	2	24.6	4	2.20	4	38.1	4	-9	9	2.39	2	2047	2	2263.1	3	-9	1	2314	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9		
113	2	799.2	34.515	2	5.181	5.114	27.278	0.028	0.0	2	42.4	2	3.23	2	0.010	2	0.002	2	3.96	2	2155	2	2348.4	2	7.3263	2	2350	2	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
112	2	898.7	34.528	2	4.702	4.630	27.343	0.027	0.0	2	43.3	2	3.27	2	103.0	2	-9	9	7.47	2	2112	2	2358.8	2	7.3286	2	-9	5	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
111	2	1000.3	34.536	2	4.433	4.354	27.379	0.027	0.0	2	43.6	2	3.28	2	111.2	2	0.014	2	10.74	2	2112	2	2361.8	2	7.3329	2	2367	6	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
110	2	1199.7	34.551	2	4.022	3.929	27.436	0.024	0.0	2	43.9	2	3.28	2	119.9	2	-9	9	16.89	2	-9	9	-9	2361.8	2	7.3439	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	
109	2	1400.4	34.583	2	3.362	3.259	27.528	0.025	0.0	2	43.0	2	3.18	2	134.7	2	0.010	2	-0.001	2	32.81	2	-9	9	-9	2361.8	2	7.3439	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
108	2	1600.6	34.603	2	2.946	2.831	27.584	0.023	0.0	2	43.2	2	3.09	2	137.2	2	-9	9	47.33	2	-9	9	-9	2361.8	2	7.3439	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
107	2	1796.7	34.623	2	2.525	2.399	27.637	0.023	0.0	2	41.2	2	3.01	2	147.2	2	-9	9	64.78	6	-9	9	-9	2361.8	2	7.3439	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
106	2	2000.9	34.639	2	2.208	2.068	27.677	0.023	0.0	2	40.1	2	2.88	2	153.6	2	-9	9	80.02	2	-9	9	-9	2361.8	2	7.4633	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
105	2	2249.4	34.652	2	2.001	1.843	27.705	0.023	0.0	6	39.4	6	2.79	6	155.3	6	-9	9	90.60	2	-9	9	-9	2361.8	2	7.4633	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
104	2	2501.9	34.659	2	1.890	1.711	27.721	0.020	0.0	2	39.2	2	2.75	2	157.9	2	-9	9	103.04	2	-9	9	-9	2361.8	2	7.4633	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
103	2	2748.6	34.664	2	1.823	1.623	27.732	0.018	0.0	2	38.5	2	2.69	2	155.9	2	-9	9	103.04	2	-9	9	-9	2361.8	2	7.4633	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
102	2	2749.3	34.664	2	1.823	1.623	27.732	0.018	0.0	2	38.7	2	2.71	2	154.3	2	-9	9	102.80	2	-9	9	-9	2361.8	2	7.4633	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
101	2	3080.1	34.669	2	1.730	1.500	27.744	0.018	0.0	2	38.6	2	2.67	2	159.3	2	-9	9	110.21	2	-9	9	-9	2361.8	2	7.4633	2	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 192 DATE 4/25/94 LATITUDE 22°43.9'N Btm Depth: 2018
CAST 1 LONGITUDE 110°0.4'W

Sample ID	P* db	Pressure	Salinity	F* CTD	Temp °C	Temp °C	Beam		NO2 P*	NO3 P*	PO4 P*	Si(OH) ₄ P*	CFC-11 P*	CFC-12 P*	O2 P*	PO2 P*	DIC P*	pH P*	TAIK P*	SIC P*	TOC P*	TON P*	Chl-a P*	Phaeo P*												
							Sigma T	Trans																	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg
127	2	6.7	34.318	2	16.899	16.898	25.015	0.258	0.3	2	11.2	2	1.35	2	12.6	2	9	9	9	9	143.36	2	708	2	2123.4	2	7.7699	2	2273	6	-9	-9	-9	-9	2.577	0.704
126	2	25.4	34.351	2	15.925	15.921	25.266	0.245	0.3	2	16.3	2	1.65	2	15.8	2	-9	-9	-9	-9	112.88	2	-9	-9	9	7.6793	2	-9	9	-9	-9	0.956	0.441			
125	2	49.5	34.468	2	14.064	14.057	25.764	0.056	0.1	2	23.7	2	2.14	2	22.2	2	-9	-9	-9	-9	44.77	2	-9	-9	9	7.5378	2	-9	9	-9	-9	0.151	0.137			
124	9	-9	-9	-9	-9	-9	-9	-9	-9	9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
123	2	75.1	34.634	2	13.310	13.300	26.049	0.037	0.1	2	26.5	2	2.42	2	28.5	2	-9	-9	-9	-9	21.75	6	-9	-9	9	7.4681	2	-9	9	-9	-9	0.023	0.069			
122	2	99.5	34.662	2	13.053	13.059	26.123	0.039	0.1	2	26.9	2	2.51	2	30.6	2	-9	-9	-9	-9	17.18	2	-9	-9	9	7.4384	2	-9	9	-9	-9	0.018	0.062			
121	2	150.5	34.717	2	12.902	12.282	26.315	0.039	0.0	2	27.5	2	2.61	2	34.2	2	-9	-9	-9	-9	6.43	2	-9	-9	9	7.4261	2	-9	9	-9	-9	0.007	0.059			
120	2	199.3	34.714	2	11.810	11.784	26.408	0.030	0.0	2	27.4	2	2.65	2	35.2	2	-9	-9	-9	-9	4.08	2	-9	-9	9	7.4086	2	-9	9	-9	-9	0.007	0.033			
119	2	250.1	34.689	2	10.920	10.890	26.537	0.029	0.0	2	27.3	2	2.70	2	37.6	2	-9	-9	-9	-9	1.85	2	-9	-9	9	7.3859	2	-9	9	-9	-9	-9	-9	-9	-9	-9
118	2	300.4	34.631	2	10.158	10.122	26.642	0.031	0.0	2	27.9	2	2.79	2	42.9	2	-9	-9	-9	-9	0.98	2	-9	-9	9	7.3602	2	-9	9	-9	-9	-9	-9	-9	-9	-9
117	2	400.8	34.555	2	8.536	8.494	26.850	0.031	0.0	2	31.5	2	2.97	2	56.3	2	-9	-9	-9	-9	2.31	2	-9	-9	9	7.3465	2	-9	9	-9	-9	-9	-9	-9	-9	-9
116	2	498.8	34.517	2	7.464	7.415	26.980	0.030	0.0	2	34.4	2	3.07	2	66.0	2	-9	-9	-9	-9	1.37	2	-9	-9	9	7.3337	2	-9	9	-9	-9	-9	-9	-9	-9	-9
115	2	599.9	34.503	2	6.502	6.447	27.102	0.028	0.0	2	37.9	2	3.16	2	77.0	2	-9	-9	-9	-9	1.52	2	-9	-9	9	7.3264	2	-9	9	-9	-9	-9	-9	-9	-9	-9
114	2	699.9	34.510	2	6.036	5.973	27.169	0.026	0.0	2	39.6	2	3.19	2	81.6	2	-9	-9	-9	-9	1.85	2	-9	-9	9	7.3330	2	-9	9	-9	-9	-9	-9	-9	-9	-9
113	2	802.0	34.511	2	5.408	5.340	27.248	0.027	0.0	2	41.5	2	3.30	2	91.0	2	-9	-9	-9	-9	3.59	2	-9	-9	9	7.3264	2	-9	9	-9	-9	-9	-9	-9	-9	-9
112	2	899.8	34.524	2	4.856	4.782	27.323	0.027	0.0	2	42.8	2	3.31	2	100.6	2	-9	-9	-9	-9	6.35	2	-9	-9	9	7.3337	2	-9	9	-9	-9	-9	-9	-9	-9	-9
111	2	1003.8	34.537	2	4.415	4.335	27.382	0.025	0.0	2	43.4	2	3.32	2	107.6	2	-9	-9	-9	-9	10.17	6	-9	-9	9	7.3264	2	-9	9	-9	-9	-9	-9	-9	-9	-9
110	2	1000.8	34.537	2	4.427	4.348	27.381	0.025	0.0	2	43.6	2	3.32	2	107.2	2	-9	-9	-9	-9	10.14	2	-9	-9	9	7.3264	2	-9	9	-9	-9	-9	-9	-9	-9	-9
109	2	1001.5	34.536	2	4.425	4.345	27.381	0.025	0.0	2	43.4	2	3.32	2	107.2	2	-9	-9	-9	-9	10.14	2	-9	-9	9	7.3264	2	-9	9	-9	-9	-9	-9	-9	-9	-9
108	2	1000.8	34.537	2	4.420	4.341	27.382	0.025	0.0	2	43.4	2	3.32	2	108.5	2	-9	-9	-9	-9	10.11	2	-9	-9	9	7.3264	2	-9	9	-9	-9	-9	-9	-9	-9	-9
107	2	1001.0	34.536	2	4.425	4.346	27.381	0.025	0.0	2	43.3	2	3.30	2	107.5	2	-9	-9	-9	-9	10.11	2	-9	-9	9	7.3264	2	-9	9	-9	-9	-9	-9	-9	-9	-9
106	2	1199.6	34.561	2	3.809	3.718	27.466	0.027	0.0	2	43.1	2	3.24	2	119.9	2	-9	-9	-9	-9	21.03	3	-9	-9	9	7.3264	2	-9	9	-9	-9	-9	-9	-9	-9	-9
105	2	1400.5	34.584	2	3.343	3.240	27.530	0.024	0.0	2	42.7	2	3.18	2	128.0	2	-9	-9	-9	-9	42.03	2	-9	-9	9	7.3264	2	-9	9	-9	-9	-9	-9	-9	-9	-9
104	2	1601.1	34.597	2	3.083	2.966	27.566	0.024	0.0	2	42.1	2	3.15	2	135.8	2	-9	-9	-9	-9	-9	-9	-9	-9	9	7.3264	2	-9	9	-9	-9	-9	-9	-9	-9	-9
103	2	1799.6	34.617	2	2.634	2.505	27.623	0.023	0.0	2	41.2	2	3.03	2	143.4	2	-9	-9	-9	-9	61.19	6	-9	-9	9	7.3264	2	-9	9	-9	-9	-9	-9	-9	-9	-9
102	2	1798.9	34.617	2	2.634	2.505	27.623	0.022	0.0	2	41.3	2	3.01	2	142.4	2	-9	-9	-9	-9	60.35	2	-9	-9	9	7.3264	2	-9	9	-9	-9	-9	-9	-9	-9	-9
101	2	2085.7	34.642	2	2.148	2.002	27.685	0.025	0.0	2	39.8	2	2.86	2	147.8	2	-9	-9	-9	-9	83.59	2	-9	-9	9	7.3264	2	-9	9	-9	-9	-9	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
** WOCE quality flag (F) for PVC sample bottle

**NOAA CGC94
WOCE P18
NOAA Ship Discoverer**

STATION 193 DATE 4/25/94 LATITUDE 22°47.9'N Btm Depth: 950
 CAST 1 LONGITUDE 110°0.3'W

Sample ID	Pressure	Salinity	Salinity	Temp	Temp	Sigma	Theta	NO2	NO3	PO4	Si(OH)4	CFC-11	CFC-12	O2	fCO2	DIC	pH	TA	P _T	P _T	813C	TOC	TON	Chl-a	Fluoro											
																										eb	CITD	°C	°C	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg
117	2	9.0	34.299	2	34.308	2	18.554	18.553	24.598	0.497	0.2	2	4.7	2	0.90	2	8.8	2	2.268	6	1.174	6	187.98	2	514	2	2076.7	2	7.8797	2	2281	6	-9	73.8	-9	-9
116	2	24.0	34.334	2	34.338	2	16.386	16.382	25.148	0.237	0.3	2	13.9	2	1.51	2	13.9	2	2.000	2	1.026	2	110.82	2	-9	9	9	7.7098	2	-9	9	55.2	-9	-9		
115	2	45.9	34.455	2	34.461	2	14.653	14.646	25.628	0.093	0.2	2	22.2	2	2.08	2	20.4	2	1.595	2	0.804	2	51.30	6	1164	2	2201.3	2	7.5631	2	2280	2	-9	72.7	-9	-9
114	2	74.8	34.624	2	34.625	2	13.431	13.421	26.016	0.069	0.1	2	26.1	2	2.40	2	27.4	2	1.063	2	0.537	2	23.70	2	-9	9	9	7.4862	2	-9	9	53.8	-9	-9		
113	2	98.5	34.666	2	34.659	2	13.162	13.149	26.104	0.054	0.1	2	26.4	2	2.46	2	29.9	2	0.933	2	0.478	2	19.21	2	1454	2	2244.2	2	7.4749	2	-9	5	-9	-9	-9	
112	2	151.1	34.722	2	34.722	2	12.513	12.493	26.278	0.058	0.0	2	27.3	2	2.63	2	34.1	2	0.606	2	0.316	2	8.21	2	1580	2	2250.4	2	7.4465	2	2309	2	-9	69.2	-9	-9
111	2	199.4	34.705	2	34.706	2	11.781	11.756	26.406	0.035	0.0	2	27.2	2	2.64	2	35.6	2	0.376	2	0.202	2	3.66	2	1659	2	2268.2	2	7.4262	2	2308	2	-9	-9	-9	-9
110	2	250.5	34.684	2	34.684	2	11.194	11.163	26.500	0.041	0.0	2	27.2	2	2.71	2	36.8	2	0.267	2	0.140	2	1.74	2	1715	2	2276.8	2	7.4108	2	2303	2	-9	51.1	-9	-9
109	2	298.1	34.657	2	34.657	2	10.644	10.608	26.578	0.031	0.0	2	27.3	2	2.77	2	39.7	2	0.192	2	0.102	2	1.21	6	1776	2	2278.0	3	7.3961	2	2325	2	-9	65.0	-9	-9
108	2	403.4	34.571	2	34.573	2	8.918	8.874	26.802	0.035	0.0	2	30.2	2	2.96	2	43.1	2	0.088	2	0.041	2	1.09	2	1926	2	2295.8	2	7.3665	2	2316	2	-9	60.0	-9	-9
107	2	501.1	34.525	2	34.524	2	7.534	7.485	26.976	0.030	0.0	2	34.0	2	3.08	2	65.3	2	-9	1	-9	1	-9	1	-9	9	9	-9	9	-9	9	-0.30	-9	-9	-9	
106	2	499.8	34.524	2	34.524	2	7.514	7.465	26.978	0.031	0.0	2	34.2	2	3.10	2	63.7	2	0.050	2	0.018	2	1.14	2	2022	2	-9	9	7.3472	2	2329	2	-9	52.2	-9	-9
105	2	598.2	34.515	2	34.515	2	6.836	6.780	27.067	0.029	0.0	2	36.1	2	3.17	2	72.8	2	0.040	2	0.011	2	1.11	2	2070	2	2323.2	3	7.3400	2	2328	2	-9	-9	-9	-9
104	2	700.0	34.506	2	34.508	2	6.281	6.218	27.135	0.031	0.0	2	38.0	2	3.22	2	79.9	2	-9	9	-9	9	1.86	2	2102	2	2330.8	2	7.3357	2	2348	3	-9	50.6	-9	-9
103	2	805.4	34.512	2	34.513	2	5.514	5.445	27.235	0.035	0.0	2	40.7	2	3.27	2	90.5	2	0.010	2	-0.001	2	3.49	2	2131	2	2343.3	2	-9	9	2349	2	-9	-9	-9	-9
102	2	809.4	34.512	2	34.511	2	5.503	5.434	27.237	0.032	0.0	2	40.5	2	3.25	2	89.1	2	-9	9	-9	9	3.50	2	2137	2	2345.8	2	7.3302	2	2346	2	-9	-9	-9	-9
101	2	951.7	34.535	2	34.535	2	5.471	5.395	27.375	0.035	0.0	2	43.7	2	3.40	2	108.5	2	0.013	2	0.001	2	11.38	6	2108	2	2358.0	2	-9	9	2365	6	-9	-9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle

APPENDIX B
TABULATED DISCRETE BOTTLE DATA
(BIOLOGICAL CASTS)

NOAA CGC94
WOCE P18
NOAA Ship *Discoverer*

STATION 27 DATE 5-Mar-94 LATITUDE 58° 30.0S
 CAST 3 LONGITUDE 103° 0.0W

% S.I.	Depth m	Chl-a µg/L	F*	Phaeo µg/L	F*	Primary		Int. Depth	Biogenic Si ug-at/L	TOC µmol/L	F*	TON µmol/L	F*
						Productivity mg C m ⁻³ /day	F*						
-9	0.0	0.195	2	0.081	2	-9	9	-9	0.9288	-9	9	-9	9
-9	4.0	0.203	2	0.082	2	-9	9	-9	1.7008	-9	9	-9	9
-9	8.0	0.202	2	0.083	2	-9	9	-9	2.3307	-9	9	-9	9
-9	13.0	0.204	2	0.081	2	-9	9	-9	1.8838	-9	9	-9	9
-9	21.0	0.205	2	0.083	2	-9	9	-9	1.2539	-9	9	-9	9
-9	37.0	0.207	2	0.075	2	-9	9	-9	-9	-9	9	-9	9

STATION 30 DATE 7-Mar-94 LATITUDE 56° 30.0S
 CAST 1 LONGITUDE 103° 0.0W

% S.I.	Depth m	Chl-a µg/L	F*	Phaeo µg/L	F*	Primary		Int. Depth	Biogenic Si ug-at/L	TOC µmol/L	F*	TON µmol/L	F*
						Productivity mg C m ⁻³ /day	F*						
100	0.0	0.165	2	0.075	2	6.510	2	0.000	-9	-9	9	-9	9

STATION 33 DATE 8-Mar-94 LATITUDE 54° 29.6S
 CAST 1 LONGITUDE 102° 58.9W

% S.I.	Depth m	Chl-a µg/L	F*	Phaeo µg/L	F*	Primary		Int. Depth	Biogenic Si ug-at/L	TOC µmol/L	F*	TON µmol/L	F*
						Productivity mg C m ⁻³ /day	F*						
100	0.0	0.175	2	0.071	2	3.980	2	0.000	0.6673	-9	9	-9	9
50	6.0	0.17	2	0.076	2	4.030	2	12.000	1.2711	40.6	2	4.6	2
30	12.0	0.17	2	0.076	2	4.260	2	21.000	-9	41.1	2	4.5	2
15	18.0	0.16	2	0.080	2	3.960	2	34.000	-9	43.0	2	5.0	2
5	30.0	0.165	2	0.075	2	2.290	2	53.000	-9	43.2	2	4.5	2
1	53.0	0.165	2	0.081	2	0.030	2	81.000	-9	41.4	2	4.6	2

STATION 36 DATE 9-Mar-94 LATITUDE 52° 30.0S
 CAST 2 LONGITUDE 103° 0.0W

% S.I.	Depth m	Chl-a µg/L	F*	Phaeo µg/L	F*	Primary		Int. Depth	Biogenic Si ug-at/L	TOC µmol/L	F*	TON µmol/L	F*
						Productivity mg C m ⁻³ /day	F*						
100	0.0	0.141	2	0.052	2	3.110	2	0.000	0.1167	-9	9	-9	9
50	6.0	0.138	2	0.056	2	4.610	2	13.000	0.5783	-9	9	4.7	9
30	12.0	0.138	2	0.056	2	4.050	2	23.000	0.7204	-9	9	4.9	9
15	18.0	0.138	2	0.056	2	3.000	2	36.000	1.0930	-9	9	-9	9
5	30.0	0.138	2	0.054	2	1.590	2	57.000	0.6314	-9	9	4.8	9
1	53.0	0.162	2	0.073	2	0.070	2	86.000	-9	-9	9	5.0	9

* WOCE water sample quality flag (F) for parameter from previous column

**NOAA CGC94
WOCE P18
NOAA Ship *Discoverer***

STATION 101 DATE 1-Apr-94 LATITUDE 18° 53.6S
CAST 2 LONGITUDE 103° 8.5W

% S.I.	Depth m	Chl-a µg/L	F*	Phaeo µg/L	Primary			Int. Depth	Biogenic Si ug-at/L	TOC µmol/L	F*	TON µmol/L	F*
					F*	Productivity mg C m ⁻² /day	F*						
-9	0.0	0.034	2	0.008	2	-9	9	-9	-9	-9	9	-9	9
-9	15.0	0.034	2	0.007	2	-9	9	-9	-9	-9	9	-9	9
-9	30.0	0.034	2	0.013	2	-9	9	-9	-9	-9	9	-9	9
-9	45.0	0.035	2	0.011	2	-9	9	-9	-9	-9	9	-9	9
-9	76.0	0.062	2	0.021	2	-9	9	-9	-9	-9	9	-9	9
-9	134.0	0.119	2	0.071	2	-9	9	-9	-9	-9	9	-9	9

STATION 104 DATE 2-Apr-94 LATITUDE 17° 30.0S
CAST 2 LONGITUDE 103° 0.0W

% S.I.	Depth m	Chl-a µg/L	F*	Phaeo µg/L	Primary			Int. Depth	Biogenic Si ug-at/L	TOC µmol/L	F*	TON µmol/L	F*
					F*	Productivity mg C m ⁻² /day	F*						
100	0.0	0.045	2	0.014	2	2.780	2	0.000	-9	-9	9	-9	9
50	12.0	0.042	2	0.014	2	2.600	2	22.000	-9	-9	9	-9	9
30	25.0	0.041	2	0.016	2	1.960	2	38.000	-9	-9	9	-9	9
15	38.0	0.05	2	0.012	2	1.820	2	58.000	-9	-9	9	-9	9
5	63.0	0.062	2	0.021	2	1.620	2	87.000	-9	-9	9	-9	9
1	112.0	0.056	2	0.080	2	0.510	2	121.000	-9	-9	9	-9	9

STATION 108 DATE 3-Apr-94 LATITUDE 15° 30.0S
CAST 3 LONGITUDE 103° 0.0W

% S.I.	Depth m	Chl-a µg/L	F*	Phaeo µg/L	Primary			Int. Depth	Biogenic Si ug-at/L	TOC µmol/L	F*	TON µmol/L	F*
					F*	Productivity mg C m ⁻² /day	F*						
-9	0.0	0.036	2	0.011	2	-9	9	-9	0.3291	-9	9	-9	9
-9	10.0	0.033	2	0.008	2	-9	9	-9	0.2727	-9	9	-9	9
30	21.0	0.034	2	0.009	2	2.570	2	42.000	0.3185	-9	9	-9	9
15	31.0	0.04	2	0.013	2	1.010	2	64.000	0.4876	-9	9	-9	9
5	53.0	0.044	2	0.016	2	0.240	2	95.000	0.7779	-9	9	-9	9
1	93.0	0.071	2	0.031	2	0.190	2	130.000	0.4388	-9	9	-9	9

STATION 112 DATE 4-Apr-94 LATITUDE 13° 30.0S
CAST 2 LONGITUDE 103° 0.0W

% S.I.	Depth m	Chl-a µg/L	F*	Phaeo µg/L	Primary			Int. Depth	Biogenic Si ug-at/L	TOC µmol/L	F*	TON µmol/L	F*
					F*	Productivity mg C m ⁻² /day	F*						
100	0.0	0.096	2	0.033	2	2.480	2	0.000	0.5052	-9	9	-9	9
50	8.0	0.095	2	0.036	2	2.230	2	16.000	0.4978	-9	9	-9	9
30	17.0	0.097	2	0.033	2	2.170	2	27.000	0.6158	-9	9	-9	9
15	25.0	0.098	2	0.031	2	1.980	2	41.000	0.5052	-9	9	-9	9
-9	42.0	0.16	2	0.056	2	-9	9	-9	1.1023	-9	9	-9	9
1	75.0	0.182	2	0.091	2	1.450	2	92.000	0.4904	-9	9	-9	9

* WOCE water sample quality flag (F) for parameter from previous column

**NOAA CGC94
WOCE P18
NOAA Ship *Discoverer***

STATION 115 DATE 5-Apr-94 LATITUDE 12° 0.0S
CAST 3 LONGITUDE 103° 0.0W

% S.I.	Depth m	Chl-a µg/L	F*	Phaeo µg/L	F*	Primary		Int. Depth	Biogenic Si ug-at/L	TOC µmol/L	F*	TON µmol/L	F*
						Productivity mg C m ⁻² /day	F*						
100	0.0	0.164	2	0.073	2	8.900	2	0.000	0.8959	74.4	2	5.2	2
50	9.0	0.162	2	0.063	2	8.780	2	13.000	1.2571	81.7	2	5.2	2
30	17.0	0.165	2	0.063	2	9.860	2	22.000	0.7337	88.5	2	5.1	2
15	26.0	0.165	2	0.063	2	6.260	2	34.000	-9	-9	9	4.7	9
5	44.0	0.175	2	0.074	2	3.040	2	52.000	0.7190	-9	9	4.5	9
1	78.0	0.234	2	0.209	2	0.850	2	76.000	-9	-9	9	5.5	9

STATION 119 DATE 6-Apr-94 LATITUDE 10° 0.0S
CAST 3 LONGITUDE 103° 0.0W

% S.I.	Depth m	Chl-a µg/L	F*	Phaeo µg/L	F*	Primary		Int. Depth	Biogenic Si ug-at/L	TOC µmol/L	F*	TON µmol/L	F*
						Productivity mg C m ⁻² /day	F*						
100	0.0	0.117	2	0.048	2	9.110	2	0.000	0.7558	77.3	2	6.0	2
50	8.0	0.115	2	0.045	2	10.850	2	15.000	1.1539	76.4	2	6.0	2
30	16.0	0.117	2	0.048	2	8.470	2	23.000	1.0728	86.6	3	6.4	2
15	24.0	0.272	2	0.112	2	6.400	2	35.000	1.6331	78.1	2	6.1	2
5	41.0	0.272	2	0.112	2	3.920	2	51.000	0.9327	-9	9	6.0	9
1	72.0	0.277	2	0.231	2	1.970	2	74.000	-9	73.6	2	7.9	2

STATION 122 DATE 7-Apr-94 LATITUDE 8° 51.2S
CAST 3 LONGITUDE 104° 41.6W

% S.I.	Depth m	Chl-a µg/L	F*	Phaeo µg/L	F*	Primary		Int. Depth	Biogenic Si ug-at/L	TOC µmol/L	F*	TON µmol/L	F*
						Productivity mg C m ⁻² /day	F*						
100	0.0	0.18	2	0.066	2	11.680	2	0.000	0.4315	76.4	2	4.9	2
50	6.0	0.178	2	0.064	2	11.440	2	12.000	0.5126	71.3	2	5.6	2
30	12.0	0.181	2	0.062	2	9.390	2	21.000	0.7706	77.6	2	5.3	2
15	18.0	0.18	2	0.066	2	6.600	2	33.000	1.5593	72.9	2	5.4	2
5	30.0	0.196	2	0.070	2	2.980	2	50.000	1.0286	71.7	2	5.5	2
1	53.0	0.321	2	0.191	2	0.450	2	72.000	1.3013	72.9	2	5.7	2

STATION 126 DATE 8-Apr-94 LATITUDE 7° 18.4S
CAST 1 LONGITUDE 106° 57.3W

% S.I.	Depth m	Chl-a µg/L	F*	Phaeo µg/L	F*	Primary		Int. Depth	Biogenic Si ug-at/L	TOC µmol/L	F*	TON µmol/L	F*
						Productivity mg C m ⁻² /day	F*						
100	0.0	0.256	2	0.094	2	12.640	2	0.000	6.1962	-9	9	-9	9
50	6.0	0.244	2	0.091	2	13.420	2	10.000	5.3484	69.7	2	5.3	2
30	12.0	0.246	2	0.095	2	7.670	2	18.000	5.8128	73.3	2	5.5	2
15	18.0	0.252	2	0.091	2	4.080	2	28.000	8.1202	68.2	2	4.7	2
5	30.0	0.301	2	0.172	2	0.580	2	44.000	5.6138	63.0	2	5.1	2
1	53.0	0.246	2	0.223	2	0.000	4	68.000	3.2327	60.0	2	5.7	2

* WOCE water sample quality flag (F) for parameter from previous column

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STATION 160 DATE 17-Apr-94 LATITUDE 6° 0.0N
 CAST 3 LONGITUDE 110° 20.0W

% S.I.	Depth m	Chl-a µg/L	F*	Phaeo µg/L	F*	Primary		Int. Depth	Biogenic Si ug-at/L	TOC µmol/L	F*	TON µmol/L	F*
						Productivity mg C m ⁻² /day	F*						
100	0.0	0.125	2	0.057	2	7.590	2	0.000	-9	-9	9	-9	9
50	10.0	0.127	2	0.054	2	8.680	2	14.000	-9	-9	9	-9	9
30	20.0	0.171	2	0.069	2	6.890	2	23.000	-9	-9	9	-9	9
15	30.0	0.176	2	0.071	2	4.420	2	34.000	-9	-9	9	-9	9
5	51.0	0.336	2	0.171	2	0.820	2	51.000	-9	-9	9	-9	9
1	90.0	0.206	2	0.248	2	0.030	2	74.000	-9	-9	9	-9	9

STATION 164 DATE 18-Apr-94 LATITUDE 8° 0.0N
 CAST 3 LONGITUDE 110° 20.0W

% S.I.	Depth m	Chl-a µg/L	F*	Phaeo µg/L	F*	Primary		Int. Depth	Biogenic Si ug-at/L	TOC µmol/L	F*	TON µmol/L	F*
						Productivity mg C m ⁻² /day	F*						
100	0.0	0.116	2	0.049	2	7.610	2	0.000	-9	-9	9	-9	9
50	10.0	0.116	2	0.047	2	9.710	2	14.000	-9	-9	9	-9	9
30	20.0	0.122	2	0.052	2	7.710	2	25.000	-9	-9	9	-9	9
15	30.0	0.13	2	0.062	2	6.230	2	34.000	-9	-9	9	-9	9
5	51.0	0.555	2	0.255	2	4.940	2	44.000	-9	-9	9	-9	9
1	90.0	0.167	2	0.266	2	0.040	2	61.000	-9	-9	9	-9	9

STATION 168 DATE 19-Apr-94 LATITUDE 10° 9.9N
 CAST 2 LONGITUDE 110° 0.3W

% S.I.	Depth m	Chl-a µg/L	F*	Phaeo µg/L	F*	Primary		Int. Depth	Biogenic Si ug-at/L	TOC µmol/L	F*	TON µmol/L	F*
						Productivity mg C m ⁻² /day	F*						
100	0.0	0.173	2	0.055	2	8.640	2	0.000	-9	-9	9	-9	9
50	10.0	0.168	2	0.053	2	8.470	2	13.000	-9	-9	9	-9	9
30	20.0	0.154	2	0.073	2	7.110	2	22.000	-9	-9	9	-9	9
15	30.0	0.153	2	0.063	2	6.660	2	34.000	-9	-9	9	-9	9
5	50.0	0.184	2	0.079	2	3.880	2	51.000	-9	-9	9	-9	9
1	87.0	0.266	2	0.381	2	1.060	2	73.000	-9	-9	9	-9	9

STATION 172 DATE 20-Apr-94 LATITUDE 12° 40.3N
 CAST 2 LONGITUDE 109° 59.9W

% S.I.	Depth m	Chl-a µg/L	F*	Phaeo µg/L	F*	Primary		Int. Depth	Biogenic Si ug-at/L	TOC µmol/L	F*	TON µmol/L	F*
						Productivity mg C m ⁻² /day	F*						
100	0.0	0.106	2	0.038	2	4.080	2	0.000	0.2482	-9	9	-9	9
50	10.0	0.105	2	0.036	2	6.080	2	16.000	0.1951	-9	9	-9	9
30	20.0	0.104	2	0.040	2	5.990	2	27.000	0.1763	-9	9	-9	9
15	30.0	0.116	2	0.050	2	5.090	2	40.000	0.1158	-9	9	-9	9
5	51.0	0.198	2	0.078	2	2.990	2	58.000	0.1422	-9	9	-9	9
1	90.0	0.426	2	0.301	2	0.550	2	80.000	-9	-9	9	-9	9

* WOCE water sample quality flag (F) for parameter from previous column

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 WOCE P18
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STATION 192 DATE 25-Apr-94 LATITUDE 22° 43.8N
 CAST 3 LONGITUDE 110° 0.0W

% S.I.	Depth m	Chl-a µg/L	F*	Phaeo µg/L	F*	Primary		Int. Depth	Biogenic Si ug-at/L	TOC µmol/L	F*	TON µmol/L	F*
						Productivity mg C m ⁻³ /day	F*						
100	0.0	2.076	2	0.625	2	86.360	2	0.000	-9	-9	9	-9	9
50	3.0	2.306	2	0.729	2	100.940	2	4.000	-9	-9	9	-9	9
30	7.0	1.913	2	0.556	2	86.610	2	7.000	-9	-9	9	-9	9
15	10.0	2.143	2	0.610	2	78.570	2	11.000	-9	-9	9	-9	9
5	18.0	1.183	2	0.432	2	23.950	2	19.000	-9	-9	9	-9	9
1	31.0	0.508	2	0.294	2	1.310	2	34.000	-9	-9	9	-9	9

* WOCE water sample quality flag (F) for parameter from previous column