

QC
802
U6
A5

NO.34
C.6

NOAA Data Report ERL AOML-34

CHEMICAL AND HYDROGRAPHIC MEASUREMENTS DURING THE INDIAN OCEAN 18 REPEAT CRUISE (IR8N) IN SEPTEMBER AND OCTOBER, 1995

E. Peltola	F. Millero	M. Roche
R. Wanninkhof	P. Quay	J.A. Goen
R. Molinari	R. Castle	F. Millero III
B. Huss	G. Thomas	K. Buck
R. Feely	R. Roddy	M. Kelly
J. Bullister	T. Lantry	F. Menzia
J-Z. Zhang	M. Roberts	A. Huston
F. Chavez	H. Chen	T. Waterhouse
A. Dickson	D. Greeley	S. Becker
A. Ffield	K. Lee	C. Mordy
D. Hansell		

Atlantic Oceanographic and Meteorological Laboratory
Miami, Florida
December 1998

018913



**UNITED STATES
DEPARTMENT OF COMMERCE**

**William M. Daley
Secretary**

**NATIONAL OCEANIC AND
ATMOSPHERIC ADMINISTRATION**

**D. JAMES BAKER
Under Secretary for Oceans
and Atmosphere/Administrator**

**Environmental Research
Laboratories**

**James L. Rasmussen
Director**



**NOAA Miami Library / AOML
4301 Rickenbacker Causeway
Miami, Florida 33149**

NOTICE

Mention of a commercial company, or product does not constitute an endorsement by NOAA/AOML. Use of information from this publication concerning proprietary products or the tests of such products for publicity or advertising purposes is not authorized.

REMOTE ACCESS TO DATA LISTED IN THIS REPORT

The data presented in this report is available on Internet FTP and the World Wide Web (WWW). For information regarding electronic access to the data sets contact:

Ms. Betty E. Huss
Data Manager, OACES
at: U.S. Dept. of Commerce
NOAA/AOML/OCD
4301 Rickenbacker Causeway
Miami, Florida 33149-1026

Telephone: (305) 361-4395
Internet address: huss@aoml.noaa.gov
WWW address: <http://www.aoml.noaa.gov/ocd/oaces/ftp/io9518.html>
CTD data: http://whpo.ucsd.edu/whp_data.html
ADCP data: <http://ilikai.soest.hawaii.edu/sadcp>
LADCP data: <http://www.nodc.noaa.gov>
UWpCO2 data: <ftp://ftp.aoml.noaa.gov/pub/ocd/carbon/uwpc0295>

PRINCIPAL INVESTIGATORS

<u>Project</u>	<u>Name</u>	<u>Institution</u>
Chlorofluorocarbons	John Bullister	PMEL/OCRD
Bio./Productivity	Francisco Chavez	MBARI
UW pH	Andrew Dickson	SIO
CTD/Hydrography	Amy Ffield	LDEO
CTD/Hydrography	Robert Molinari	AOML/PhOD
TOC/TON	Dennis Hansell	BBSR
TA/pH	Frank Millero	UM/RSMAS
¹³ C	Paul Quay	UW
fCO ₂ /DIC	Rik Wanninkhof	AOML/OCD
fCO ₂ /DIC	Richard Feely	PMEL/OCRD
Nutrients	Jia-Zhong Zhang	AOML/OCD/CIMAS
Nutrients	Calvin Mordy	PMEL/OCRD/JISAO

LIST OF PARTICIPANTS

<u>Function</u>	<u>Name</u>	<u>Institution</u>
Chief Scientist	Robert Molinari	AOML/PhOD
Co-chief Scientist	Rik Wanninkhof	AOML/OCD
Data Management	Robert Castle	AOML/OCD
CTD	Paula Gilbert	AOML/PhOD
CTD/ET	Douglas Anderson	AOML/PhOD
Salinity	Gregg Thomas	AOML/PhOD
Oxygen	Robert Roddy	AOML/PhOD
L/ADCP	Ryan Smith	AOML/PhOD/META
L/ADCP	David Fratantoni	UM/RSMAS
DIC	Thomas Landry	AOML/OCD
DIC	Marilyn Roberts	PMEL/OCRD
fCO ₂	Hua Chen	AOML/OCD/CIMAS
fCO ₂	Dana Greeley	PMEL/OCRD
UW pH	Andrew Dickson	SIO
TA/pH	Kitack Lee	UM/RSMAS
TA/pH	Mary Roche	UM/RSMAS
TA/pH	Jamie Ann Goen	UM/RSMAS
TA/pH	Frank Millero III	UM/RSMAS
Biology/Productivity	Kurt Buck	MBARI
Biology/Productivity	Michael Kelly	MBARI
Chlorofluorocarbons	Fred Menzia	PMEL/OCRD
C-13/Data	Adrienne Huston	UW
TOC	Tye Waterhouse	BBSR
TOC	Susan Becker	BBSR
Nutrients	Jia-Zhong Zhang	AOML/OCD/CIMAS
Nutrients	Calvin Mordy	PMEL/OCRD/JISAO

The Chief Survey Technician aboard the R/V BALDRIDGE for the cruise was Dennis Sweeney.

<u>Institutional Abbreviation</u>	<u>Institution</u>	<u>Address</u>
AOML - OCD - PhOD - META	Atlantic Oceanographic and Meteorological Laboratory, Ocean Chemistry Division Physical Oceanography Division Maria Elena Torano Associates	4301 Rickenbacker Cwy, Miami, FL 33149-1098
BBSR	Bermuda Biological Station for Research	St. Georges, GE-01, Bermuda
LDEO	Lamont-Doherty Earth Observatory	Palisades, NY 10964-8000
MBARI	Monterey Bay Aquarium Research Institute	7700 Sandholdt Road, Moss Landing, CA 95039- 0628
PMEL - OCRD	Pacific Marine Environmental Laboratory Ocean Climate Research Division	7600 Sand Point Way NE, Seattle, WA 98115-0070
SIO	Scripps Institution of Oceanography	San Diego, La Jolla, CA 92093-0208
UM/RSMAS - CIMAS	University of Miami/Rosenstiel School of Marine and Atmospheric Science Cooperative Institute for Marine and Atmospheric Studies	4600 Rickenbacker Cwy, Miami, FL 33149-1098
UW - JISAO	University of Washington Joint Institute for Study of the Atmosphere and Ocean	Box 357940, Seattle, WA 98195-7940

CONTENTS

ABSTRACT	1
1. INTRODUCTION	2
1.1. DESCRIPTION OF STUDY AREA	3
2. DATA COLLECTION AND ANALYTICAL METHODS	3
2.1. HYDROGRAPHIC METHODS	4
2.1.1. CTD AND HYDROGRAPHIC OPERATIONS	4
2.1.2. NUTRIENT ANALYSIS METHODS	7
2.2. CARBON PARAMETERS.....	8
2.2.1. TOTAL DISSOLVED INORGANIC CARBON (DIC).....	8
2.2.2. FUGACITY OF CO ₂ (fCO ₂)... ..	11
2.2.3. TOTAL ALKALINITY (TA).....	11
2.2.4. pH	14
2.2.5. TOTAL ORGANIC CARBON AND NITROGEN METHODS	16
2.2.6. ¹³ C/ ¹² C OF (DIC).....	17
2.2.7. CHLOROFLUOROCARBONS (CFC)	19
2.3. BIOLOGICAL PARAMETERS.....	21
2.4. UNDERWAY MEASUREMENT METHODS.....	21
2.4.1. UNDERWAY fCO ₂	21
2.4.2. UNDERWAY pH.....	22
3. ACKNOWLEDGMENTS	23
4. REFERENCES	24
FIGURES	
1. Cruise track for the Indian Ocean I8NR cruise in September - October 1995	29
2. Conductivity slope and offset of sensors T ₀ and C ₀	30
3. Conductivity slope and offset of sensors T ₁ and C ₁	31
4. Oxygen slope and offset	32
5. The difference of CTD and bottle salinity vs. pressure	33
6. The difference of CTD and bottle salinity vs. number of samples	34
7. The difference of CTD and bottle oxygen vs. pressure	35
8. The difference of CTD and bottle oxygen vs. number of samples	36
9. The results of the CRM measurements	37
10. The difference of the DIC duplicates during the course of the cruise	38
11. Potentiometric TA and DIC measurements on the Certified Reference Materials (CRMs) during the cruise	39
12. Spectrophotometric and potentiometric pH measurements on the Certified Reference Materials (CRMs) during the cruise	40
TABLES	
1. Station locations	41
2. Results for the certified reference material, CRM	44
3. Dissolved inorganic carbon duplicates	47
4. Replicate dissolved CFC-11 analyses	52
5. Replicate dissolved CFC-12 analyses	54
6. CFC air measurements	56
7. CFC air values (interpolated to station locations)	58
APPENDICES	
A. WOCE quality control flags	61
B. Bottle data	63

CHEMICAL AND HYDROGRAPHIC MEASUREMENTS DURING THE INDIAN OCEAN I8 REPEAT CRUISE (IR8N) IN SEPTEMBER AND OCTOBER, 1995

E. Peltola, R. Wanninkhof, R. Molinari, B. Huss, R. Feely, J. Bullister, J-Z. Zhang, F. Chavez, A. Dickson, A. Ffield, D. Hansell, F. Millero, P. Quay, R. Castle, G. Thomas, R. Roddy, T. Landry, M. Roberts, H. Chen, D. Greeley, K. Lee, M. Roche, J.A. Goen, F. Millero III, K. Buck, M. Kelly, F. Menzia, A. Huston, T. Waterhouse, S. Becker, and C. Mordy

ABSTRACT

This document contains data and metadata from the I8 repeat cruise in the Indian Ocean cruise in 1995 from Fremantle, Australia to Male in the Maldives. From September 22 to October 25, 1995, the National Oceanic and Atmospheric Administration's (NOAA) sponsored an oceanographic research cruise conducted aboard the NOAA Ship MALCOLM BALDRIGE. This report presents the analytical and quality control procedures and data from the cruise that was conducted for the Ocean-Atmosphere Carbon Exchange Study (OACES). Samples were taken at 101 stations.

The data presented in this report includes: hydrography, nutrients, total dissolved inorganic carbon dioxide (DIC), fugacity of carbon dioxide ($f\text{CO}_2$), total alkalinity (TA), pH, total organic carbon and nitrogen data (TOC/TON), chlorofluorocarbons, ^{13}C , and biological parameters.

1. INTRODUCTION

Probably the most significant environmental issue of the next century will be the systematic changes in the earth's climate due to increase in the atmospheric burden of radiatively important trace gases, or "greenhouse gases". CO₂, as well as other "greenhouse gases" (e.g., water vapor, methane, ozone, chlorofluorocarbons, carbon monoxide and nitrous oxide), serve to reduce radiation of heat from the earth to the stratosphere and space. At present, CO₂ accounts for about 50 % of this effect. This phenomenon has a tight coupling to climate in that it exerts significant controls on the temperature of the troposphere and the Earth's surface. It is, in fact, this "greenhouse" control on temperature that makes the Earth habitable to man, and its variability during glacial and interglacial periods has altered that habitability.

In light of these questions, the NOAA/OGP Ocean-Atmosphere Carbon Dioxide Exchange Study (OACES) was started to determine how the ocean/atmosphere carbon system is functioning, i.e., determine how much carbon, of what origin, is going where. That is the first step required if we are to determine the extent of the CO₂ increases in our global system and their climate impacts. Although coupled ocean/atmosphere models appear the best means of predicting long-term climate impacts resulting from increases of "greenhouse gases" (such as CO₂) and have already given some provocative projections, they lack sufficient data and information about relevant processes to constrain them adequately for reliable prediction. Data from the field work will be used to test and correct the models so that they result in a proper understanding of the global system and its various components. Models include: (1) atmosphere-ocean CO₂ transport models; and (2) process models of air-sea CO₂ exchange and invasion into the deep ocean.

The National Oceanic and Atmospheric Administration's (NOAA) OACES program sponsored an oceanographic research cruise conducted aboard the NOAA Ship MALCOLM BALDRIGE from September 22 to October 25, 1995. The primary objectives of the cruise were to: (1) extend the data base for carbon fugacity (fCO₂) in the surface ocean and overlying atmosphere, (2) perform measurements of total dissolved inorganic CO₂ (DIC), and discrete fCO₂ in the surface and deep ocean water masses to provide better estimates of CO₂ exchange and ventilation on seasonal to decadal time scales; and (3) provide a better understanding of physical and biological processes that affect seasonal variations in the distribution of carbon species in the ocean. The data presented in this report includes: hydrography, nutrients, total dissolved inorganic carbon dioxide (DIC), discrete fugacity of carbon dioxide (fCO₂), discrete partial pressure of carbon dioxide (pCO₂), total alkalinity (TA), pH, total organic carbon and nitrogen data (TOC/TON), chlorofluorocarbons, ¹³C, and biological parameters.

Detailed information of the CTD operations can be found in LDEO-98-1 technical report (Ffield et al, 1998). A description of the analyses and procedures of the underway fCO₂ data has been described by Masters et al. (1997) and total alkalinity (TA) and pH data by Millero et al. (1997).

1.1. DESCRIPTION OF STUDY AREA

Samples were taken at 101 stations along a south-north transit. The cruise can be divided into three sections - the 95° E line (stations 3-17), the middle section steaming from the 95° E line to the 80° E line (stations 18-35), and the 80° E line (stations 36-101). The 95° E line was followed from 43° S to 31.65° S latitude with 1° spacing except for the last four stations near the Mid-Indian Ridge which were closer together. The 80° E line was followed from 34° S to 5.8° N with 1° spacing to 15° S and 0.5° spacing northward except for the section from 1° S to 1° N, where 0.25° spacing was used. The cruise track and station locations are presented in Figure 1 and Table 1.

2. DATA COLLECTION AND ANALYTICAL METHODS

One hundred and one CTD (Conductivity-Temperature- Depth) hydrographic stations were occupied to collect discrete water samples and hydrographic data. A CTD/Rosette unit with a Seabird-911 CTD instrument equipped with 24, specially designed 10-L samples bottles was utilized for these casts. These bottles have the same outer dimensions as standard Niskin bottles, but are modified to reduce chlorofluorocarbon sample contamination. Water samples were collected for salinity, oxygen, nutrients, chlorofluorocarbons, ¹³C, biological parameters, as well as carbon related parameters including total dissolved inorganic CO₂ (DIC), discrete fugacity of CO₂ (fCO₂), total alkalinity (TA), pH, and total organic carbon/nitrogen (TOC/TON) on all casts during the cruise using these modified “Niskin” style bottles. In the data tables the missing values are assigned a value of -9.0. The WOCE quality control flags have been listed in Appendix A. All the cruise data have been presented in Appendix B. Detailed information on individual data collection, or analyses procedures may be found in the respective method sections.

2.1. HYDROGRAPHIC METHODS

2.1.1. CTD AND HYDROGRAPHIC OPERATIONS

Description of Measurement Techniques and Calibrations

CTD and in situ O₂

Depth profiles were obtained with a Seabird 911 plus CTD, deck unit, and rosette pylon. The CTD included 2 temperature sensors, 2 conductivity sensors, 1 Beckman oxygen sensor, 1 Paroscientific pressure transducer, and 2 pumps to decrease the response time. Twenty-four 10 liter PVC bottles were mounted on the frame, along with the CTD, pinger, Lowered Acoustic Doppler Current Profiler (LADCP), and LADCP external battery pack. The bottles were specially designed to reduce chlorofluorocarbon contamination. These bottles have the same outer dimensions as standard 10 liter "Niskin" bottles, but use a modified end-cap design to minimize the contact of the water sample with the end-cap O-rings after closing. The O-rings used in these water sample bottles were vacuum-baked prior to the first station. Stainless steel springs covered with a nylon powder coat were substituted for the internal elastic tubing standardly used to close "Niskin" bottles. Seabird software was used to acquire, plot, and process the CTD data on PC's. Raw data were stored on VHS tapes, PC hard drives, and SyQuest drives. Typically each cast sampled to within 10 meters of the sea floor as indicated by the pinger signal. A small subset of stations on this cruise were sampled to 3000 db, rather than the full water column. The CTD/O₂ data were processed and calibrated following Seabird recommendations (CTD Data Acquisition Software and Technical Notes, Seabird Electronics, Inc., 1808 - 136th Place NE, Bellevue, Washington 98005). Exceptional items are noted below. Details can be found in the LDEO-98-1 technical report (Ffield et al, 1998) .

The pressure sensor was calibrated by using the pre-cruise laboratory calibration with a linear offset drift of approximately 0.5 db/year. The linear offset was determined by analyzing CTD pressure measurements at the sea surface.

Pre- and post-cruise laboratory calibrations were obtained for the temperature sensors. The temperature sensors were calibrated using both pre- and post-cruise laboratory calibrations with a linear offset drift over time determined from these calibrations. The reported temperature is an average of the two independently calibrated temperature sensors used on each cast.

Pre- and post-cruise laboratory calibrations were also obtained for the conductivity sensors. The conductivity sensors were calibrated using both pre- and post-cruise laboratory calibrations, with slope and offset drifts determined from the differences between the rosette bottle salinity measurements and the uptrace conductivity sensor measurements converted to salinity. To determine slope and offset drifts, all good bottles below 300 db and within 5 days of each station were used. The nominal Seabird temperature and pressure corrections for the conductivity sensors were used. The calculated drifts were smoothed by a 5 station running mean (Figures 2 and 3). The reported salinity is an average of the salinities calculated from the two calibrated conductivity-temperature sensor pairs used on each cast. A small temperature dependency in the surface values and a small pressure dependency in the deep values remain in the final data. However, the above procedure produced the best overall fit to the rosette bottle salinity measurements. For a few stations there was a problem with one of the conductivity sensors. In these cases, the reported salinity values are only determined from the optimally performing conductivity sensor. The most significant case was the failure of the "C₁" conductivity sensor between CTD casts 268 and 291.

The oxygen sensor was calibrated by using the pre-cruise laboratory calibration, with slope and offset drifts determined from the rosette oxygen measurements and the uptrace oxygen sensor measurements. A better overall fit was obtained when using the uptrace oxygen sensor measurements, rather than the downtrace measurements as is often the procedure for the oxygen calibration. To determine slope and offset drifts, all good bottles within 5 days of each station were used. Rather than using the Seabird nominal temperature and pressure corrections for the oxygen sensor, the values were adjusted slightly for each sensor. The calculated slopes and drifts were smoothed by a 5 station running mean (Figure 4). Apparent oxygen utilization (AOU) is defined as $O_2 \text{ measured} - O_2 \text{ sat.}$, where $O_2 \text{ sat.}$ is the saturation value at potential temperature and salinity of the sample determined according to Weiss (1970)

Pressure plots and histograms of the differences between the calibrated CTD/O₂ sensors and the rosette bottle measurements are shown for all stations for salinity (Figures 5 and 6) and for oxygen (Figures 7 and 8). The average differences meet WOCE criteria. The CTD data are available through internet address http://whpo.ucsd.edu/whp_data.html

Measurement of Currents

A hull-mounted RD Instruments 150 kHz narrowband acoustic Doppler current profiler (ADCP) operated continuously during the cruise. Velocity data, averaged in earth coordinates using gyrocompass heading, were logged in three-minute (approximately 180 pings) ensembles using RDI Data Acquisition Software (DAS) version 2.48. Vertical bin size was 8 meters. The center of the first bin was located at 16 meters. Range varied from

200 to 400 meters, depending primarily on sea state. A user exit program (UE4, provided by Eric Firing, U. Hawaii) was used to interface navigation and heading equipment. Position was logged at the beginning and end of each ensemble from a Trimble Centurion P-code GPS receiver (estimated position accuracy of 5 - 10 meters). Mean gyrocompass corrections for each ensemble were recorded from an Ashtech 3DF GPS attitude determination system; 3DF array orientation was calibrated using P-code GPS and ADCP bottom track comparison. These data are used in post-processing to calculate mean ship velocity to reference ensemble means, and to compensate for dynamic gyrocompass errors. Estimated errors for an ensemble are 1-2 cm/s for relative velocity and 3-4 cm/s for ship speed errors due to position inaccuracy; errors induced by heading inaccuracies are reduced to less than 1 cm/s using GPS heading data. This total error of 4-6 cm/s over a three minute ensemble is reduced further by averaging during postprocessing; fifteen minute averages commonly used represent an average over five kilometers at cruising speed, and should be accurate to 1-3 cm/s. The ADCP data will be available through internet address <http://ilikai.soest.hawaii.edu/sadcp>

On-station velocity profiles were obtained using a RDI 150 kHz Narrowband ADCP (Lowered or LADCP) mounted looking downward from the CTD frame. This technique measures and records velocity shear profiles extending 150 to 350 meters below the instrument approximately once per second. In postprocessing, the individual shear profiles are averaged by depth to produce a full-depth shear profile, which is integrated to estimate the depth dependent (baroclinic) component of the velocity field. The depth-independent (barotropic) component of velocity can be recovered if positions at the start and end of the cast are known; positions were logged on this cruise using a Trimble Centurion P-code GPS receiver, accurate to 5 - 10 meters. Readers are advised to refer to Fischer and Visbeck (1993) for a full explanation of methods and standard processing procedures. The LADCP data will be available through internet address <http://www.nodc.noaa.gov>

Salinity Technique

A Guildline 8400B autosal was used for the salinity analysis with batch P125 standard water. The autosal van was maintained at 22 °C, and the autosal was set at 24 °C.

Oxygen Technique

An automatic titration system was used for the oxygen analysis with the Carpenter modification of the Winkler method using a photometric determined endpoint described by Friederich and Codispoti (1991). Reagents for the Carpenter method titration were mixed by the AOML/OCD Group of George Berberian as specified in Friederich's MBARI Technical Report #91-6 (Friederich et al, 1991). Apparent oxygen utilization (AOU) is defined as $O_2 \text{ measured} - O_2 \text{ sat.}$, where $O_2 \text{ sat.}$ is the saturation value at potential temperature and salinity of the sample determined according to Weiss (1970)

2.1.2. NUTRIENT ANALYSIS METHODS

Sampling and analytical methods

Nutrient samples were collected from 10-L "Niskin" bottles in acid washed 25-mL linear polyethylene bottles after three complete seawater rinses and analyzed within 1 hour of sample collection. Measurements were made in a temperature-controlled van ($20 \pm 2^\circ\text{C}$). Concentrations of dissolved nitrite (NO_2^-), dissolved nitrate (NO_3^-), phosphate (PO_4^{3-}) and silicic acid (H_4SiO_4) were determined using an Alpkem Flow Solution Auto-Analyzer aboard the ship. The following analytical methods were employed:

Nitrate and Nitrite:

Nitrite was determined by diazotizing with sulfanilamide and coupling with N-1 naphthyl ethylenediamine dihydrochloride to form an azo dye. The color produced is measured at 540 nm (Armstrong et al., 1967; Atlas et al., 1971). Samples for nitrate analysis were passed through an Open Tubular Cadmium Reactor (OTCR, Alpkem) coil, which reduced nitrate to nitrite and the resulting nitrite concentration was then determined as described above. Nitrate concentration was determined from the difference of nitrate + nitrite and nitrite.

Phosphate:

Phosphate in the samples was determined by reacting with molybdenum (VI) and antimony (III) in an acidic medium to form an antimonyphosphomolybdate complex at temperature of 42°C . This complex was subsequently reduced with ascorbic acid to form a blue complex and the absorbance was measured at 880 nm (Armstrong et al., 1967, Grasshoff et al., 1983).

Silicic Acid:

Silicic acid in the sample was analyzed by reacting with molybdate in a acidic solution to form β -molybdosilicic acid. The β -molybdosilicic acid was then reduced by stannous chloride to form molybdenum blue (Armstrong et al., 1967; Atlas et al., 1971). The absorbance of the molybdenum blue was measured at 820 nm.

Calibration and standards:

Stock standard solutions were prepared by dissolving high purity standard materials (KNO_3 , NaNO_2 , KH_2PO_4 and Na_2SiF_6) in deionized water. Working standards were freshly made at each station by diluting the stock solutions in low nutrient seawater. The low nutrient seawater used for the preparation of working standards, determination of blank and wash between samples was filtered seawater obtained from the surface of the central Indian Ocean. Standardizations were performed prior to each sample run with working standard solutions. Five replicate samples were collected from the "Niskin" bottle sampled at deepest depth at each cast. The relative standard deviation from the results of these five replicate samples were used to estimate the overall precision obtained by the sampling and analytical procedures. The precisions of these samples were 0.2 $\mu\text{mol/kg}$ for nitrate, 0.01 $\mu\text{mol/kg}$ for nitrite, 0.01 $\mu\text{mol/kg}$ for phosphate and 0.1 $\mu\text{mol/kg}$ for silicic acid.

2.2. CARBON PARAMETERS

2.2.1. TOTAL DISSOLVED INORGANIC CARBON (DIC)

Sampling

Samples were drawn from 10 l "Niskin" bottles into 0.5 l Pyrex bottles using Tygon tubing. Bottles were rinsed once and filled from the bottom, overflowing half a volume while taking care not to entrain any bubbles. The tube was pinched off and withdrawn, creating a 5 ml headspace volume. 0.2 ml of saturated mercuric chloride (HgCl_2) solution was added as a preservative. The sample bottles were sealed with glass stoppers lightly covered with Apiezon-L grease. The samples were stored at room temperature in the dark for a maximum of two days.

Analysis

The DIC analyses were performed by extracting the inorganic carbon in a seawater sample by acidification and subsequent displacement of the gaseous CO_2 into a coulometer cell. Two coulometers (AOML-1 and PMEL-1) were used on the cruise. Both were equipped with the SOMMA (Single Operator Multiparameter Metabolic Analyzer) inlet system developed by Ken Johnson of Brookhaven National Laboratory (BNL).

For analysis on the SOMMA system, a 0.5 l sample bottle was inserted in a water bath at 20°C. Water from the bottle was displaced by pressurization into a thermostatted pipette using compressed air containing 700 parts per million by volume (ppm) CO₂ in air. The sample was injected into an extraction chamber which contained 1 ml 10% H₃PO₄ solution previously stripped of CO₂. The evolved CO₂ gas from the sample was run through a condenser and a magnesium perchlorate drying column to dry the gas stream, and through an ORBO-53TM tube to remove volatile acids, using a carrier stream of CO₂-free ultra high purity nitrogen. In the coulometer cell the CO₂ is absorbed by a proprietary solution procured from Utopia Instrument Company (UIC). This solution changes color from blue to colorless by addition of the (acid) CO₂ gas. A photo diode detects the color change and causes a current to pass through the cell with electrolytic production of hydroxide ions at the cathode. The titration current is turned off when the solution reaches the original color. The current passed through the cell is measured by a counter and is directly proportional to the amount of CO₂ injected. The details of the system can be found in Johnson (1992) and Johnson et al. (1993). The coulometer cell solution was replaced after 30 milligram of carbon was titrated or when the coulometer runs were less than 9 minutes. This typically was after 18-20 hours of continuous use. Typical sample titration times were 9 to 16 minutes.

Both coulometers were calibrated by injecting aliquots of pure CO₂ using an 8-port valve with two sample loops. The CO₂ gas volumes bracketed the amount of CO₂ extracted from the water samples for the two AOML systems. The gas loops were calibrated at BNL. Liquid certified reference materials (CRMs) consisting of poisoned, filtered, and UV irradiated seawater supplied by Dr. A. Dickson of Scripps Institution of Oceanography (SIO) were run on each cell. The results were close to the values determined manometrically by Keeling at SIO as shown below. The CRM results have been presented in Figure 9 and Table 2.

Av. value of CRMs run on AOML-2: 1901.46 μmol/kg ± 1.47 n = 42

Av. value of CRMs run on PMEL-1: 1902.62 μmol/kg ± 1.33 n = 49

The manometric value [SIO reference material batch #29] was
1902.33 μmol/kg ± 1.06 n = 11.

Replicate seawater samples were taken from the deepest "Niskin"TM sample and run at different times during the cell. The first replicate was used at the start of the cell with fresh coulometer solution, the second at the end of the cell after about 30 milligrams of C were titrated, while the third analysis was performed using a new coulometer cell solution. No systematic difference between the replicates was observed. As example, the replicate samples run on SOMMA AOML-2 had an average deviation from the mean of 1 μmol/kg with a standard deviation of 0.6 μmol/kg for 63 sets of duplicates. The deviation is very similar to that observed for the CRMs and suggest no strong

dependency of results with amount of carbon titrated for a particular cell. The results of the duplicate samples have been presented in Figure 10 and Table 3.

The data of the two instruments were normalized using the averages of the reference material for the cruise.

Calculations

The instruments were calibrated three times during each cell solution with a set of CO₂ gas loop injections. Calculation of the amount of CO₂ injected was according to the Department of Energy (DOE) CO₂ handbook [DOE, 1994]. The gas loops yielded a calibration factor for the instrument defined as:

$$\text{Cal. factor} = \frac{\text{calculated moles of CO}_2 \text{ injected from gas loop}}{\text{actual moles of CO}_2 \text{ injected}} \quad (1)$$

The concentration of CO₂ ([CO₂]) in the samples was determined according to:

$$[\text{CO}_2] = \text{Cal. factor} * \frac{(\text{Counts} - \text{Blank} * \text{Run Time}) * K \text{ muMol} / \text{count}}{\text{pipette volume} * \text{density of sample}} \quad (2)$$

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 of the solution, "Run Time" is the length of coulometric titration (in minutes), and K is the conversion factor from counts to μmol which is dependent on the slope and intercept relation between instrument response and charge. For a unit with Ecal slope of 1 and intercept of 0, the constant is $2.0728 * 10^{-4}$.

The pipette volume was determined by taking aliquots at known temperature of distilled water from the volumes prior to, during, and after the cruise. The weights with the appropriate densities were used to determine the volume of the syringes and pipette.

Calculation of pipette volumes, density, and final CO₂ concentration were performed according to procedures outlined in the DOE CO₂ handbook (DOE, 1994).

All DIC values were corrected for salinity, volume and CRM. Salinity correction was done using CTD salinity. A volume correction was done due to dilution by 200 μl of saturated mercuric chloride solution. The assumed total water volume in the sampling bottles was 540 ml and therefore the correction factor used was 1.00037. Also, the

following CRM corrections were applied to the data: AOML-2, + 0.87 $\mu\text{mol/kg}$; PMEL-1, - 0.29 $\mu\text{mol/kg}$ to normalize results from both SOMMAs to the manometric value.

2.2.2. FUGACITY OF CO_2 ($f\text{CO}_2$)

Gas Chromatographic (GC) Method

Approximately 1800 discrete $f\text{CO}_2$ samples from 101 stations were taken and analyzed on the cruise using a newly developed GC based analysis system (Neill et al., 1997). $f\text{CO}_2$ was measured in the headspace of a crimp sealed bottle at constant temperature of 20 $^\circ\text{C}$. Overall precision was 3 μatm over the observed range of 200 to 1500 μatm . A comparison of discrete $f\text{CO}_2$ with the underway $f\text{CO}_2$ values showed correspondence of values to within 1 μatm suggesting a good accuracy of the analyses as well. Discrete $f\text{CO}_2$ values showed a similar pattern as DIC except that the bottom waters were less enriched than DIC. Calcite dissolution increases the alkalinity in the bottom water and thereby suppresses the $f\text{CO}_2$ increase.

2.2.3. TOTAL ALKALINITY (TA)

Titration system

The titration systems used to determine TA consist of a Metrohm 665 Dosimat titrator and an Orion 720A pH meter that is controlled by a personal computer (Millero et al., 1993b). Both the acid titrant in a water jacketed burette and the seawater sample in a water jacketed cell are controlled to a constant temperature of 25 ± 0.1 $^\circ\text{C}$ with a Neslab constant temperature bath. The plexiglass water jacketed cells used during the cruise are similar to that used by Bradshaw and Brewer (1988) except a larger volume (about 200 ml) is used to increase the precision. This cell is closed off with a fill and drain valve which increase the reproducibility of the cell volume.

A Lab Windows-C program is used to run the titration and record the volume of the added acid and emf of the electrodes using RS232 interfaces. The titration is made by adding HCl to seawater past the carbonic acid end point. A typical titration records the emf reading after the readings become stable (± 0.1 mV) and then adds enough acid to change the voltage to a pre-assigned increment (~ 13 mV). In contrast to the delivery of a fixed volume increment of acid, this method gives data points in the range of a rapid

increase in the emf near the endpoint. A full titration (25 points) takes about 20 minutes. Using three systems a 24-bottle station cast can be completed in 3.5 hours.

Electrodes

The electrodes used to measure the emf of the sample during a titration consists of a ROSS glass pH electrode and an Orion double junction Ag, AgCl reference electrode.

Standard acids

The HCl used throughout the cruise were made, standardized, and stored in 0.5 l glass bottles in the laboratory. The 0.2554 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 standardized using a coulometric technique by our group and Dr. Andrew G. Dickson (Taylor and Smith, 1959; Marinenko and Taylor, 1968). Both results agree to within ± 0.0001 N.

Volume of the cells

The volumes of the cells were determined by comparing the values of TA obtained for Gulf stream seawater with open (weighed amount of seawater) and closed cells ($V_{\text{cell}} = \text{TA}(\text{closed}) \times V(\text{assigned}) / \text{TA}(\text{open})$). The density of seawater at the temperature of the measurements (25 °C) was calculated from the international equation of state of seawater (Millero and Poisson, 1981). The nominal volumes of all cells is approximately 200 ml and the values determined before the start of the cruise were:

cell 4: 202.56 ml cell 17: 206.01 ml cell 18: 203.49 ml

Results on CRM 29 obtained in the laboratory and during the cruise indicate that the volumes were not accurately assigned in the laboratory before the cruise. Thus, all cruise data (TA and DIC) have been adjusted by about 2 to 4 $\mu\text{mol/kg}$ lower than the original values collected during the cruise.

Evaluation of the Carbonate Parameters

The total alkalinity of seawater was evaluated from the proton balance at the alkalinity equivalence point, $\text{pH}_{\text{equiv}} = 4.5$, according to the exact definition of total alkalinity (Dickson, 1981)

$$\begin{aligned} \text{TA} = & [\text{HCO}_3^-] + 2 [\text{CO}_3^{2-}] + [\text{B}(\text{OH})_4^-] + [\text{OH}^-] + [\text{HPO}_4^{2-}] + 2[\text{PO}_4^{3-}] \\ & + [\text{SiO}(\text{OH})_3^-] + [\text{HS}^-] + [\text{NH}_3] - [\text{H}^+] - [\text{HSO}_4^-] - [\text{HF}] - [\text{H}_3\text{PO}_4] \quad (3) \end{aligned}$$

The full titration is used to evaluate TA from any given experiment. This is accomplished with a program that is patterned after those developed by Dickson (1981), Johansson and Wedborg (1982) and Dickson (DOE, 1994). The program determines pH, E^* (for the electrode), TA, DIC and pK_1 . The program uses the Levenberg-Marquardt nonlinear least squares algorithm to perform the calculations. The program assumes that the nutrients are negligible in the calculation of TA. Neglecting the concentration of nutrients in the seawater sample little affects the accuracy of TA, but does affect the carbonate alkalinity. The pH and pK_1 of the carbonic acid used in the program are on the seawater scale, $[\text{H}^+]_{\text{sw}} = [\text{H}^+] + [\text{HSO}_4^-] + [\text{HF}]$ (Dickson, 1984). The dissociation constants used in the program were taken from Dickson and Millero (1987) for carbonic acid, from Dickson (1990a) for boric acid, from Dickson and Riley (1979) for HF, from Dickson (1990b) for HSO_4^- and from Millero (1995) for water. The program requires as input the concentration of acid, volume of the cell, salinity, temperature, measured emf (E), and volume of HCl (V_{HCl}). To obtain a reliable TA from a full titration at least 25 data points should be collected (9 data points between pH 3.0 to 4.5). The precision of the fit is less than $0.4 \mu\text{mol/kg}$ when pK_1 is allowed to vary and $1.5 \mu\text{mol/kg}$ when pK_1 is fixed. Our titration program has been compared to the titration programs used by others (Johansson and Wedborg, 1982; Bradshaw *et al.*, 1981; Bradshaw and Brewer, 1988) and the values of TA agree to within $\pm 1 \mu\text{mol/kg}$.

Measurements of TA on 72 samples of Certified Reference Materials (CRMs) gave the following results: $\text{pH} = 8.004 \pm 0.006$, $\text{DIC} = 1915.0 \pm 2.4 \mu\text{mol/kg}$, and $\text{TA} = 2184.3 \pm 1.5 \mu\text{mol/kg}$ (Figure 11). The TA ranges from 2230 to 2360 $\mu\text{mol kg}^{-1}$ in the Indian Ocean. The ranges of surface normalized alkalinity ($\text{NTA} = \text{TA} \times 35 / S$) and DIC (NDIC) nominally along 80°E are 2290-2325 and 1940-2100 $\mu\text{mol kg}^{-1}$, respectively. These values remain constant between 30°S and 10°N and increase toward higher latitudes.

A more detailed description of the analyses and procedures of the total alkalinity (TA) data has been described by Millero *et al.* (1997).

2.2.4. pH

The pH measurements of seawater were made using the spectrophotometric techniques of Clayton and Byrne (1993). The pH of samples using m-cresol purple (mCP) is determined from

$$\text{pH} = \text{pK}_{\text{ind}} + \log [(R - 0.0069) / (2.222 - 0.133 R)] \quad (4)$$

where pK_{ind} is the dissociation constant for the indicator and $R (A_{578}/A_{434})$ is the ratio of the absorbance of the acidic and basic forms of the indicator corrected for baseline absorbance at 730 nm. The pH of the samples is perturbed by the addition of an indicator. The magnitude of this perturbation is a function of the difference between the seawater acidity and indicator acidity; this correction was quantified for each batch of dye solution. To a sample of seawater (~ 30 ml), a normal volume of mCP (0.080 ml, in this case) was added and the absorbance ratio was measured. From a second addition of mCP and absorbance ratio measurement, the change in absorbance ratio per ml of added indicator (ΔR) was calculated. From a series of such measurements over a range of seawater pH, ΔR was described as a linear function of the value of the absorbance ratio (R_m) measured subsequent to the initial addition of the indicator (i.e. $R = -0.03540 - 0.1289 R_m$). In the course of routine seawater pH analyses, this correction was applied to every measured absorbance ratio (R_m); i.e. the corrected absorbance ratio is calculated as

$$R = R_m - (-0.03450 - 0.1289 R_m) V_{\text{ind}} \quad (5)$$

Where V_{ind} (0.08 ml) is the volume of mCP used. Clayton and Byrne (1993) calibrated the m-cresol purple indicator using TRIS buffers (Ramette et al., 1977) and the pH equations of Dickson (1993). They found that

$$\text{pK}_{\text{ind}} = 1245.69/T + 3.8275 + (2.11 \times 10^{-3}) (35 - S) \quad (6)$$

where T is temperature in Kelvin and is valid from 293.15 to 303.15 K and $S = 30$ to 37. The values of pH calculated from equations (4) and (6) are on the total scale in units of moles per kilogram. The total proton scale (Hansson, 1973) defines pH in terms of the sum of the concentrations of free hydrogen ion, $[H^+]$, and bisulfate, $[HSO_4^-]$

$$\text{pH}_T = -\log[H^+]_T = -\log\{[H^+] + [HSO_4^-]\} = -\log\{[H^+] (1 + [SO_4^{2-}] / K_{\text{HSO}_4})\} \quad (7)$$

where the concentration of total sulfate, $[SO_4^{2-}] = 0.0282 \times 35 / S$, and K_{HSO_4} is the dissociation constant for the bisulfate in seawater (Dickson, 1990a).

Lee and Millero (1995) redetermined the value of pK_{ind} from 273.15 to 313.15 K using a 0.04 m TRIS buffer (Ramette et al., 1977). The pH of the TRIS buffer was determined from emf measurements made with the $H_2, Pt | AgCl, Ag$ electrode system (Millero et al., 1993a). At 25°C the buffer had a pH of 8.0760 and yielded spectrophotometric values of pH that were in excellent agreement (~ 0.0001) with those found using equations (4) and (6). Their results from 273.15 to 313.15 K (0 to 40°C) for $S = 35$ were fitted to the equation

$$pK_{ind} = 35.913 - 216.404 / T - 10.9913 \log (T) + (2.11 \times 10^{-3})(35-S) \quad (8)$$

with the standard error of 0.001 in pK_{ind} where the constants are on the total proton scale (moles per kilogram of H_2O). The use of equations (4) and (8) from 0 to 40°C makes the assumption that R is independent of the temperature. The salinity dependence is taken from Clayton and Byrne (1993).

The values of pH calculated from equations (4) and (8) are on the total scale in units of mole per kilogram of H_2O . The conversion of the pH_T ($\text{mol (kg-H}_2\text{O)}^{-1}$) to the seawater pH_{SWS} ($\text{mol (kg-soln)}^{-1}$) can be made using (Dickson and Riley, 1979; Dickson and Millero, 1987)

$$pH_{SWS} = pH_T - \log \left\{ \frac{(1 + [SO_4^{2-}] / K_{HSO_4} + [F^-] / K_{HF})}{(1 + [SO_4^{2-}] / K_{HSO_4})} \right\} - \log (1 - 1.005 \times 10^{-3} S) \quad (9)$$

where the total concentration of fluoride, $[F^-] = 0.000067 \times 35 / S$, and K_{HF} is the dissociation constant for hydrogen fluoride (Dickson and Riley, 1979). The seawater pH_{SWS} scale was used in this paper since the carbonate constants used are on this scale (Dickson and Millero, 1987; Millero et al., 1993a).

The absorbance measurements were made using a Diode Array 8452A spectrophotometer. The temperature was controlled to a constant temperature of 25°C with a Neslab refrigerated circulating temperature bath that regulates the temperature to $\pm 0.01^\circ\text{C}$. The temperature was measured using a Guildline 9540 digital platinum resistance thermometer.

Spectrophotometric pH measurements were made on 21 samples of CRMs. The average pH of these measurements was 8.011 ± 0.001 (Figure 12). The values of pH (measured at 25°C) for surface waters range from 7.85 to 8.10.

A more detailed description of the analyses and procedures of the pH data has been described by Millero et al. (1997).

2.2.5. TOTAL ORGANIC CARBON AND NITROGEN METHODS

Total Organic Carbon

All TOC samples were analyzed by high-temperature combustion using a non-commercial system described more fully in Hansell et al., 1997. In brief, a quartz combustion tube (490 mm x 13 mm) was packed with platinum coated alumina beads (Shimadzu, Inc.), Cuprox (Leeman Labs), and Sulfix (Wako Pure Chemical Industries, Inc.). Four platinum pillows were placed 15 cm from the top of the tube. Below the pillows were 2 g of Cuprox and then 10 g of Sulfix and 10 g of platinum catalyst. The catalyst, 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 750 °C in a Thermolyne 21100 tube furnace.

Samples from Stations 2-41 were run at sea during the cruise, while the remainder were stored frozen for analysis in a shore based laboratory. At the time of analysis, the samples were sparged of inorganic CO₂ following acidification with high purity phosphoric acid (50 μ l added to 20 ml of sample). Carbon dioxide generated from 100 μ l 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 2-4 times daily with a 4-point standard curve using glucose in Milli-Q water (0-100 μ mol/l C). The system blank (normally 7-8 μ mol/ l C) was determined at intervals of approximately 6 seawater samples using vialled Milli-Q water produced at the Bermuda Biological Station for Research, Inc. The organic carbon content of this water (~ 3 μ mol/ l C) was determined by intercomparison with the low-carbon water prepared by Dr. Jon Sharp (Univ. of Delaware) for the TOC intercomparison exercises he organized. Vialled seawater, collected from 2600 m at the U.S. JGOFS Bermuda Atlantic Time-Series Study site in the Sargasso Sea, was also analyzed several times each day to monitor the system blank and the behavior of the analyzer. The percent relative standard deviation (RSD) for all 174 TOC samples at depths >1000 m, with a mean concentration of 42.3 μ mol/ l, was 2.0%.

Total Organic Nitrogen

Concentrations of TON were determined by UV photo-oxidation 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.). 50 μ l of 30% hydrogen peroxide was added to each tube and placed in a homemade irradiation unit overnight (17-20 hours). Testing the recovery of known compounds, such as glycine, showed that inconsistent results were obtained with shorter irradiation periods. The irradiation unit contained a 1200 W UV lamp (Hanovia) protected by a quartz jacket. A 2-tiered aluminum tube holder (40 tubes total) fitted around the lamp and held the samples 8 cm from the lamp. A fan placed at the bottom of the unit blew air across the samples for cooling. 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 photo-oxidized 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 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 nitrate. Therefore, a new column (i.e. efficiency >98%) was employed when analyzing nitrate samples >10 $\mu\text{mol/l}$. The column efficiency was generally > 90% when running the low nitrate samples. Low nutrient seawater (Sargasso Sea surface water) was always processed with the samples as a daily quality control measure.

2.2.6. $^{13}\text{C}/^{12}\text{C}$ OF DISSOLVED INORGANIC CARBON

Shipboard Sample Collection Methods

Samples were collected in pre-washed and baked (450 °C) 250 or 0.5 l ground glass-stoppered bottles using the following method. A length of Tygon tubing was attached to the "Niskin" bottle or seawater line and 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 with an amount equal to its volume if "Niskin" water volume permitted,

otherwise with at least half its volume. Flow was stopped as the Tygon tubing was removed from the top of the bottle to avoid any splashing in the top. Using a syringe or turkey baster, 10 to 20 ml were withdrawn off the top of the sample to lower the water level to approximately 1 ml below the neck of the bottle, avoiding backwash of water from the turkey baster into the sample. The ground glass joint of the bottle was wiped dry with Kimwipes. Then 100 μ l of a saturated HgCl_2 solution (per 250 ml of seawater) was injected beneath the surface of the sample using an Eppendorf pipet. The ground-glass stopper, which had been pre-greased with Apiezon M grease, was then inserted straight into the bottle without twisting. If any air streaked in the grease seal 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 inverted a couple of times to mix the HgCl_2 throughout the sample.

Laboratory Methods

CO_2 is extracted from the DIC seawater sample using a modification of the helium stripping technique described by Kroopnick (1974) as described in Quay et al (1992). The stripper is comprised of 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 which the He passes through, and a stainless steel fitting containing a 3-layer silicone rubber septum at the top. Approximately 1 ml phosphoric acid is injected into the stripper and bubbled with He for 10 minutes. The gas is then evacuated out of the stripper and the stripper is weighed. Then 80 to 125 ml of the sample is drawn into the stripper and it is weighed again to calculate the weight of water analyzed. A stainless steel needle pierces the septum and connects the stripper to the extraction line, which has been evacuated and filled with helium. The sample is stripped with 99.997% pure He at a flow rate of about 200 ml/min for 20 minutes. Water is trapped out in two glass traps submerged in Dewars containing a slush mixture of dry ice and isopropanol at -70°C . CO_2 is collected at -196°C in glass loop traps submerged in liquid N_2 . The $\delta^{13}\text{C}$ is then measured on a Finnigan MAT 251 mass spectrometer. The efficiency of the extraction method is 100 ± 0.5 percent based on gravimetrically prepared Na_2CO_3 standards. The precision of the ^{13}C analysis is ± 0.02 per mil based on a replicate analysis of standards and seawater samples.

2.2.7. CHLOROFLUOROCARBONS (CFC)

CFC samples were drawn from approximately 70 % of 2300 water samples collected during the expedition. When taken, water samples for CFC analysis were usually the first samples drawn from the 10 liter "Niskin" bottles. Care was taken to co-ordinate the sampling of CFCs with other samples to minimize the time between the initial opening of each bottle and the completion of sample drawing. In most cases, dissolved oxygen, total CO₂, alkalinity and pH samples were collected within several minutes of the initial opening of each bottle. To minimize contact with air, the CFC samples were drawn directly through the stopcocks of the 10 liter "Niskin" bottles into 100 ml precision glass syringes equipped with 2-way metal stopcocks. The syringes were immersed in a holding tank of clean surface seawater until analysed.

To reduce the possibility of contamination from high levels of CFCs frequently present in the air inside research vessels, the CFC extraction/analysis system and syringe holding tank were housed in a modified 20' laboratory van on the aft deck of the ship.

For air sampling, a ~100 meter length of 3/8" OD Dekaron tubing was run from the CFC lab van to the bow of the ship. Air was pulled through this line into the CFC van using an Air Cadet pump. The air was compressed in the pump, with the downstream pressure held at about 1.5 atm using a back-pressure regulator. A tee allowed a flow (~100 ml/min) of the compressed air to be directed to the gas sample valves, while the bulk flow of the air (>7 l/minute) was vented through the back pressure regulator. A list of air measurements is given in Table 6 and interpolated values are shown in Table 7.

Concentrations of CFC-11 and CFC-12 in air samples, seawater and gas standards on the cruise were measured by shipboard electron capture gas chromatography (EC-GC), using techniques similar to those described by Bullister and Weiss (1988). For seawater analyses, a ~30-ml aliquot of seawater from the glass syringe was transferred into the glass sparging chamber. The dissolved CFCs in the seawater sample were extracted by passing a supply of CFC-free purge gas through the sparging chamber for a period of 4 minutes at ~70 ml/min. Water vapor was removed from the purge gas during passage through a 7" long x 3/8" diameter glass tube packed with magnesium perchlorate dessicant. The sample gases were concentrated on a cold-trap consisting of a 3-inch section of 1/8-inch stainless steel tubing packed with Porapak N (60-80 mesh) immersed in a bath of isopropanol held at -20 °C. After 4 minutes of purging the seawater sample, the sparging chamber was closed and the trap was held open for an additional one minute to allow nitrous oxide (N₂O) to pass through the trap and thereby minimize its interference with CFC-12. The trap was then isolated, and the cold isopropanol in the bath was forced away from the trap. The trap was then heated electrically to 125 degrees C. The sample gases held in the trap were then injected onto a precolumn (12 inches of 1/8-inch O.D. stainless steel tubing packed with 80-100 mesh Porasil C, held at 90

degrees C), for the initial separation of the CFCs and other rapidly eluting gases from more slowly eluting compounds. The CFCs then passed into the main analytical column (10 feet, 1/8-inch stainless steel tubing packed with Porasil C 80-100 mesh, held at 90 degrees C), and then into the EC detector.

The CFC analytical system was calibrated frequently using standard gas of known CFC composition. Gas sample loops of known volume were thoroughly flushed with standard gas and injected into the system. The temperature and pressure was recorded so that the amount of gas injected could be calculated. The procedures used to transfer the standard gas to the trap, precolumn, main chromatographic column and EC detector were similar to those used for analyzing water samples. Two sizes of gas sample loops were present in the analytical system. Multiple injections of these loop volumes could be done to allow the system to be calibrated over a relatively wide range of CFC concentrations. Air samples and system blanks (injections of loops of CFC-free gas) were injected and analyzed in a similar manner. The typical analysis time for a seawater, air, standard or blank sample was about 12 minutes.

Concentrations of CFC-11 and CFC-12 in air, seawater samples and gas standards are reported relative to the SIO93 calibration scale (Cunnold, et. al., 1994). CFC concentrations in air and standard gas are reported in units of mole fraction CFC in dry gas, and are typically in the parts-per-trillion (ppt) range. Dissolved CFC concentrations are given in units of picomoles of CFC per kg seawater (pmol/kg). CFC concentrations in air and seawater samples were determined by fitting their chromatographic peak areas to multi-point calibration curves, generated by injecting multiple sample loops of gas from a CFC working standard (PMEL cylinder 33790) into the analytical instrument. The concentrations of CFC-11 and CFC-12 in this working standard were calibrated before and after the cruise versus a primary standard (36743) (Bullister, 1984). No measurable drift in the concentrations of CFC-11 and CFC-12 in the working standard could be detected during this interval. Full range calibration curves were run at intervals of ~ 3 days during the cruise. Single injections of a fixed volume of standard gas at one atmosphere were run much more frequently (at intervals of 1 to 2 hours) to monitor short term changes in detector sensitivity.

Extremely low (<0.01 pmol/kg) CFC concentrations were measured in deep water (>2000 meters) on the 80E section north of ~30 S. Based on the median of CFC concentration measurements in the deep water of this region, which is believed to be nearly CFC-free, blank corrections of 0.0018 pmol/kg for CFC-11 and 0.0015 pmol/kg for CFC-12 have been applied to the data set.

On this expedition, we estimate precisions (1 standard deviation) of about 1% or 0.005 pmol/kg (whichever is greater) for dissolved CFC-11 and 2% or 0.005 pmol/kg (whichever is greater) for dissolved CFC-12 measurements (see listing of replicate samples given in Tables 4 and 5).

A number of water samples had clearly anomalous CFC-11 and/or CFC-12 concentrations relative to adjacent samples. These anomalous samples appeared to occur more or less randomly during the cruise, and were not clearly associated with other features in the water column (eg. elevated oxygen concentrations, salinity or temperature features, etc.). This suggests that the high values were due to individual, isolated low-level CFC contamination events. Measured concentrations for these samples are included in this report, but are given a quality flag of either 3 (questionable measurement) or 4 (bad measurement). A total ~7 analyses of CFC-11 were assigned a flag of 3 and ~9 analyses of CFC-12 were assigned a flag of 3. A total of ~27 analyses of CFC-11 were assigned a flag of 4 and ~69 CFC-12 samples assigned a flag of 4.

2.3. BIOLOGICAL PARAMETERS

Samples were collected from 31 discrete stations for biological and bio-optical parameters. A total of 306 primary productivity, 428 chlorophyll, 31 particulate organic carbon, 173 ^{15}N uptake, 164 epifluorescence microscopy, 257 flow cytometry, 110 A^* (the absorption of light by suspended particles normalized to chlorophyll concentration) and 179 nutrient samples were taken for the characterization of prokaryotic and protistan biomass, growth rates and composition in the upper 300 meters of the water column. The Profiling Reflectance Radiometer was deployed to 100-140 m at the stations which were occupied between 0900 and 1500 hours of local time. In addition underway mapping system continuously measured nitrate concentration, chlorophyll fluorescence, photosynthetically active radiation and transparency, attenuation and absorbance at multiple wavelengths. All the productivity, chlorophyll and much of the epifluorescence microscopy samples have been analyzed aboard ship, however, the A^* , ^{15}N , POC, and nutrient samples were analyzed in various laboratories. The data is available through the following internet addresses:
<http://www.mbari.org/~reiko/indian/introduction.htm> and
<http://www.aoml.noaa.gov/ocd/oaces/>

2.4. UNDERWAY MEASUREMENT METHODS

2.4.1. UNDERWAY $f\text{CO}_2$

The Underway $p\text{CO}_2$ System version 1.5 (Ho *et al.* 1997) was used to determine the $p\text{CO}_2$ of surface water and overlaying air on a continuous basis (Keeling 1965, Wanninkhof and Thoning 1993). When in operation, seawater is drawn from the uncontaminated seawater intake from the bow bubble approximately 6 meters below the water line to a shower head equilibrator located in the main laboratory, where the

headspace and seawater reach equilibrium on a short time scale. At specific times during an hourly cycle, the content of the headspace is measured by an infrared CO₂ analyzer. Uncontaminated air from the marine boundary layer is drawn continuously from the bow mast to the underway pCO₂ system. At a designated time, air is analyzed by a the infrared CO₂ analyzer, otherwise the air is bled off through a vent .

The CO₂ measurements are made by a Li-Cor differential, non-dispersive, infrared (NDIR) CO₂ analyzer (model 6251), and the result is based on the difference in absorption of infrared (IR) radiation passing through two gas cells. The reference cell is continuously flushed with a gas of known CO₂ concentration using the lowest concentration of three reference gas standards. The sample cell is flushed with one of three reference gas standards, marine boundary layer air, or headspace gas from the equilibrator. Standards were calibrated by NOAA's Climate Monitoring & Diagnostic Laboratory (CMDL) before and after the cruise.

The description of the analyses and procedures of the underway fCO₂ data has been described by Masters et al. (1997). The data may be downloaded via anonymous ftp at <ftp://ftp.aoml.noaa.gov/pub/ocd/carbon/uwpc0295>

2.4.2. UNDERWAY pH

Measurements of pH were made throughout the cruise using an automated, spectrophotometric measurement of pH with a sensitivity of better than 0.001 in pH and with a period of approximately 6 min. (0.1 hr). The potential accuracy of pH measurements measured using this technique has been estimated to be about 0.003. However, this is as yet unconfirmed. The probable sources of uncertainty are in the values that are used for the dissociation constant of the indicator dye and for the various extinction coefficient ratios used in calculating the pH.

The system is capable of being operated in one of two modes: constant temperature, or tracking sea surface temperature. In constant temperature mode, the pH of sea water is a sensitive indicator of the ratio of total alkalinity to total dissolved inorganic carbon in the water mass being measured. Changes in pH are thus indicative of changes in the water mass being monitored. In sea surface temperature mode, the pH is inversely correlated with the sea surface pCO₂ and thus indicates changes in this parameter (note however, that it is probably better to measure pCO₂ directly if accurate measurements are needed).

The system is controlled by computer, and the software provides a near real-time display of sea surface temperature, salinity, and pH (plotted against time) as well as of parameters that are more directly related to instrument performance (which can thus be used to assess whether or not problems exist). Values for sea surface temperature and salinity were obtained from the SCS (Shipboard Computer System), time and position are obtained directly from a GPS (as well as being available from the SCS data stream). During this cruise, the system was operated predominantly in “constant temperature” mode, and despite a number of problem with the valve on the syringe pump — resulting from wear during the previous few months — the system operated for about 80% of the total time of the cruise, *i. e.* it made about 6,500 measurements. The latest update of the data can be obtained from Dr. Andrew Dickson at: adickson@ucsd.edu

3. ACKNOWLEDGMENTS

The dedication and assistance of the officers and crew of the NOAA Ship MALCOLM BALDRIGE is gratefully appreciated and hereby acknowledged. This research was supported by Ocean Atmospheric Carbon Exchange Study (OACES). We wish to acknowledge the OACES program managers Dr. James Todd and Lisa Dilling for supporting the field program.

4. REFERENCES

- Armstrong, F.A.J., C.R. Stearns, and Strickland, J.D.H., 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.
- Atlas, E. L., J.C. Callaway, R.D. Tomlinson, L.I. Gordon, L. Barstow, and Park, P.K., 1971. A practical manual for use of the Technicon Autoanalyzer for nutrient analysis, revised. Oregon State University, Technical Report 215, Reference No. 71-22.
- Bradshaw, A. L. and Brewer, P. G., 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.
- Bradshaw, A. L., Brewer, P. G., Shafer, D. K., and Williams, R. T., 1981. Measurements of total carbon dioxide and alkalinity by potentiometric titration in the GEOSECS program, *Earth and Planet. Sci. Lett.*, **55**, 99-115.
- Bullister, J.L. Anthropogenic Chlorofluoromethanes as Tracers of Ocean Circulation and Mixing Processes: Measurement and Calibration Techniques and Studies in the Greenland and Norwegian Seas, Ph.D. dissertation, Univ. Calif. San Diego, pp. 172
- Bullister, J.L. and Weiss, R.F., 1988. Determination of CCl₃F and CCl₂F₂ in seawater and air, *Deep-Sea Res.*, **35** (5), 839-853.
- Clayton T. and Byrne, R. H., 1993. Calibration of m-cresol purple on the total hydrogen ion concentration scale and its application to CO₂-system characteristics in seawater, *Deep Sea Res.*, **40**, 2115-2129.
- Cunnold, D.M., Fraser, P.J., Weiss, R.F., Prinn, R.G., Simmonds, P.G., Miller, B.R., Alyea, F.N., and Crawford, A.J., 1994. Global trends and annual releases of CCl₃F and CCl₂F₂ estimated from ALE/GAGE and other measurements from July 1978 to June 1991, *J. Geophys. Res.*, **99**, 1107-1126.
- Dickson, A.G., 1993. pH buffers for sea water media based on the total hydrogen ion concentration scale, *Deep Sea Res.*, **40**, 107-118.
- Dickson, A. G., 1990a. Thermodynamics of the dissociation of boric acid in synthetic seawater from 273.15 to 318.15 K. *Deep-Sea Res.*, **37**: 755-766

- Dickson, A. G., 1990b. Standard potential of the ($\text{AgCl} + 1/2 \text{H}_2 = \text{Ag} + \text{HCl(aq)}$) cell and the dissociation of bisulfate ion in synthetic sea water from 273.15 to 318.15 K, *J. Chem. Thermody.*, **22**, 113-127.
- Dickson, A. G. and Millero, F. J., 1987. A comparison of the equilibrium constants for The dissociation of carbonic acid in seawater media, *Deep-Sea Res.*, **34**, 1733-1743.
- Dickson, A. G., 1984. pH scales and proton-transfer reactions in saline media such as seawater, *Geochim. Cosmochim. Acta*, **48**, 2299-2308.
- 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.
- Dickson, A. G. and Riley, J. P., 1979. The estimation of acid dissociation constants in sea water media from potentiometric titrations with strong base-I. The ionic production of water- K_w , *Mar. Chem.*, **78**, 89-99.
- DOE, 1994. Handbook of methods for the analysis of the various parameters of the carbon dioxide system in sea water. *Version 2*. (A. Dickson and C. Goyet ed.) ORNL/CDIAC-74, 1991.
- Ffield, A., Fleurant, C., Molinari, R., and Wilson, D. NOAA Ship MALCOLM BALDRIGE 1995 Cruises: MB95-02, MB95-04, MB95-07 hydrographic data. LDEO-98-1 technical report, 1998.
- Fischer, J., and Visbeck, M., 1993. Deep Velocity Profiling with Self-contained ADCP'S, *Journal of Atmospheric and Oceanic Technology*, **10**, 764-773.
- Friederich, G.E., Codispoti, L.A., and Sakamoto, C.M., 1991. An easy-to-construct automated Winkler titration system. MBARI Tech. Rep. 91-6.
- Grasshoff, K., Ehrhardt, M. and Gremling, K. (eds), 1983. *Methods of Seawater Analysis*, 2nd edition. Verlag Chemie GmbH., Weinheim, pp.419.
- Hacker, P., Firing, E., Wilson, W. D., and Molinari, R., 1996. Direct observations of the current structure east of the Bahamas, *Geophys. Res. Lett.*, **23**, 1127-1130.
- Hansell, D.A, Carlson, C.A., Bates, N., and Poisson, A, 1997. Horizontal and vertical removal of organic carbon in the equatorial Pacific Ocean: a mass balance assessment. *Deep-Sea Res. II*, **44**, 2115-2130.

- Hansson, I., 1973. A new set of acidity constants for carbonic acid and boric acid in sea water, *Deep Sea Res.*, **20**, 461-478.
- Ho, D. T., Wanninkhof, R., Masters, J., Feely, R.A., Cosca, C., 1997. Measurements of Underway fCO₂ in the Eastern Equatorial Pacific on NOAA Ships MALCOLM BALDRIGE and DISCOVERER from February to September, 1994. NOAA Data Report ERL AOML-30, 52pp.
- Johansson, O. and Wedborg, M., 1982. On the evaluation of potentiometric titrations of seawater with hydrochloric acid, *Oceanol. Acta*, **5**, 209-218.
- Johnson K. M., Wills K. D., Butler D. B., Johnson W. K., and Wong C. S., 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.
- Johnson K. M. and Wallace D. W. R., 1992. The single-operator multiparameter metabolic analyzer for total carbon dioxide with coulometric detection. DOE Research Summary, No. 19, Carbon Dioxide Information Analysis Center, Oak Ridge National Laboratory, Oak Ridge, Tenn.
- Keeling C. D., 1965. Carbon dioxide in surface waters of the Pacific Ocean 2. Calculation of the exchange with the atmosphere. *J. Geophys. Res.* **70**, 6099-6102.
- Knap, A. H., Michaels, A.F., Dow, R.L., Johnson, R. J., Gundersen, K., Sorenson, J. C., Close, A. R., Howse, F. A., Hammer, M., Bates, N., Doyle, A., and Waterhouse, T., 1993. BATS Method Manual, U.S. JGOFS Planning Office, Woods Hole, MA.
- Kroopnick, P., 1974. The dissolved O₂-CO₂-¹³C system in the equatorial Pacific, *Deep-Sea Res.*, **21**, 211-227.
- Lee, K. and Millero, F. J., 1995. The thermodynamic studies of the carbonate system in seawater. *Deep Sea-Res.*, **42**: 2035-2061.
- LI-COR. 1990. LI-6262 CO₂/H₂O Analyzer Operating and Service Manual. 9003-59, LICOR, Lincoln, NB.
- Marinenko, G., and Taylor, J.K., 1968. Electrochemical equivalents of benzoic and oxalic acid. *Anal. Chem.*, **40**, 1645-1651.

- Masters, J., Wanninkhof, R., Ho, D.T., Steckley, M., Feely, R., Cosca, C., 1997. Continuous air and surface seawater measurements of $f\text{CO}_2$ on board the NOAA Ship MALCOLM BALDRIGE around-the-world cruise during 1995. NOAA data report ERL AOML-31.
- Millero, F.J., Lee, K., Roche, M., Goen, J., and Millero III, F.J., 1997. The Carbonate System Measurements in the Indian Ocean. Ocean Atmosphere Carbon Exchange Study, Leg I. University of Miami Technical Report, No. RSMAS 97-004.
- Millero, F. J., 1995. Thermodynamics of the carbon dioxide system in the oceans. *Geochim. Cosmochim. Acta*, **59**, no. 4, 661-677
- Millero, F. J., Zhang, J. Z., Fiol, S., Sotolongo, S., Roy, R., Lee, K., and Mane, S., 1993a. The use of buffers to measure the pH of seawater, *Mar. Chem.*, **44**, 143-152.
- Millero, F. J., Zhang, J. Z., Lee, K., and Campbell, D. M., 1993b. Titration alkalinity of seawater, *Mar. Chem.*, **44**, 153-16.
- Millero, F.J., and Poisson, A., 1981. International one-atmosphere equation of state of seawater. *Deep-Sea Res.*, **28**, 625–629.
- Neill, C., Johnson, K.M., Lewis, E., and Wallace, D.W.R., 1997. Accurate headspace analysis of $f\text{CO}_2$ in discrete water samples using batch equilibration. *Limnol. Oceanogr.*, **42(8)**, 1774-1783
- Quay P.D., Tilbrook, B., and Wong, C.S., 1992. Ocean uptake of fossil fuel CO_2 : Carbon-13 evidence, *Science*, **256**, 74-79.
- Ramette, R. W., Culberson, C. H., and Bates, R. G., 1977. Acid base properties of tris (hydroxymethyl) aminomethane (tris) buffers in seawater from 5 to 40°C. *Anal. Chem.*, **49**, 867-870.
- Taylor, J.K., and Smith S.W., 1959. Precise coulometric titration of acids and bases. *J. Res. Natl. Bur. Stds.*, **69A**, 153–159.
- Walsh, T. W., 1989. Total dissolved nitrogen in seawater: a new-high-temperature combustion method and a comparison with photo-oxidation. *Marine Chemistry*, **26**, 295-311.
- Wanninkhof R. and Thoning K., 1993. Measurement of fugacity Of CO_2 in surface water using continuous and discrete sampling methods. *Mar. Chem.*, **44**, 189-205.

Weiss R. F., Janke R. A., and Keeling C. D., 1982. Seasonal effects of temperature and salinity on the partial pressure Of CO₂ in seawater. *Nature*, **300**, 511-513.

Weiss R. F. 1974. Carbon dioxide in water and seawater: the solubility of a non-ideal gas. *Mar. Chem.* **2**, 203-215.

Weiss, R.F. 1970. The solubility of nitrogen, oxygen and argon in water and seawater. *Deep-Sea Res.*, **17**, 721-735.

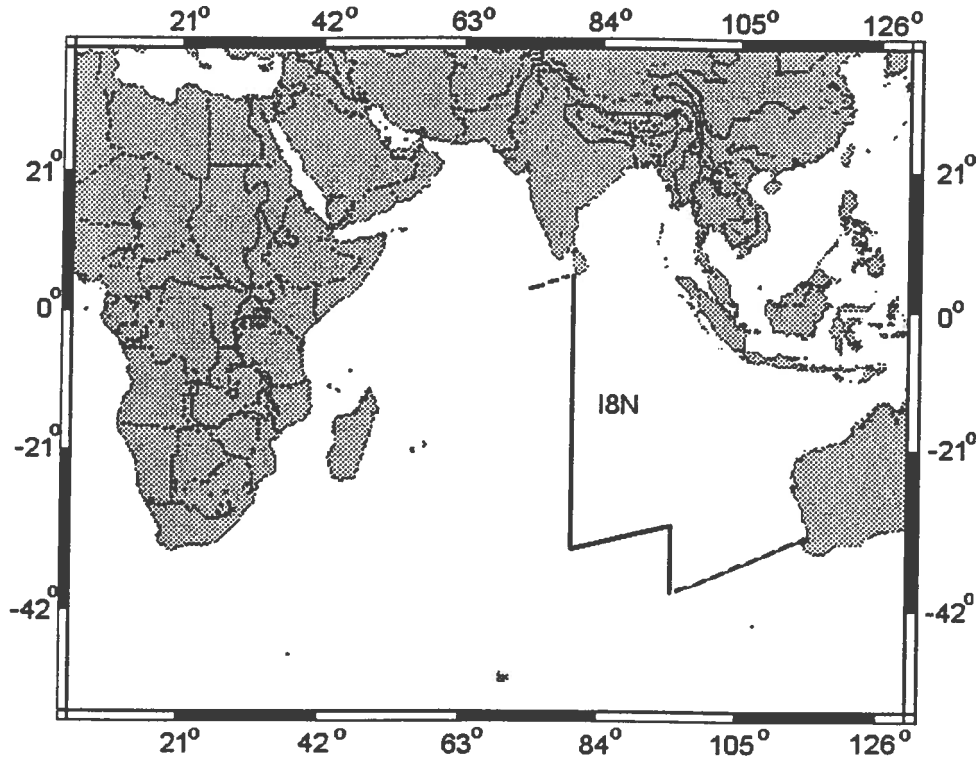


Figure 1. Cruise track for the Indian Ocean I8NR cruise in September-October 1995

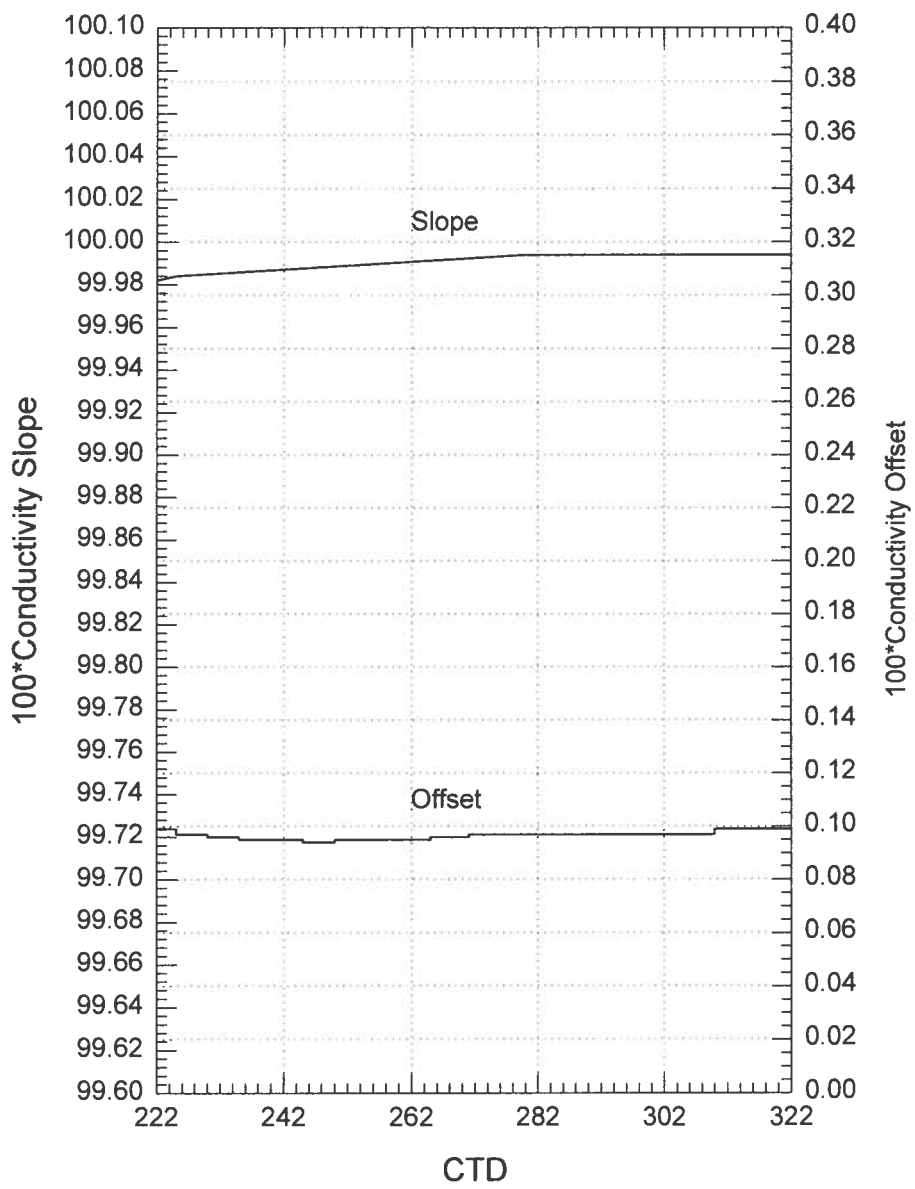


Figure 2. Conductivity slope and offset of sensors T_0 and C_0

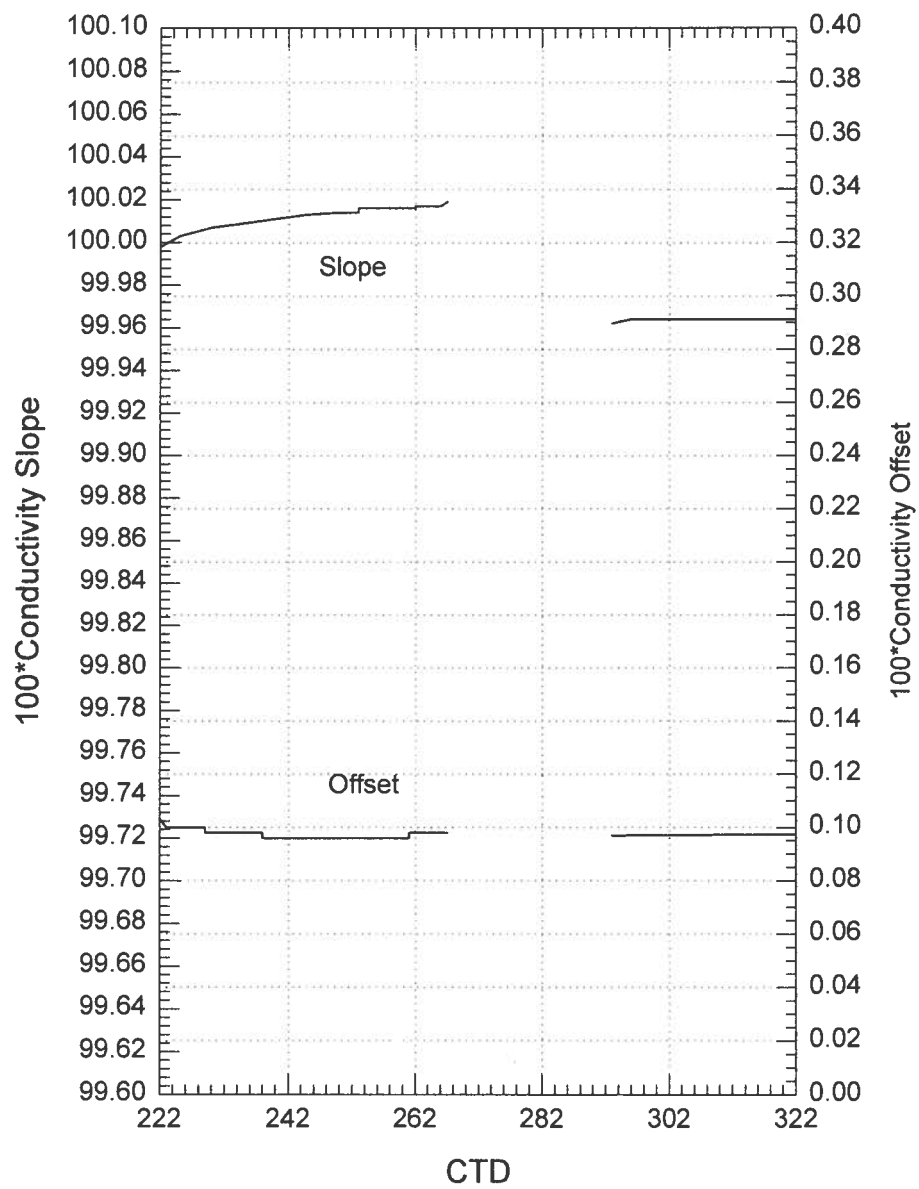


Figure 3. Conductivity slope and offset of sensors T_1 and C_1

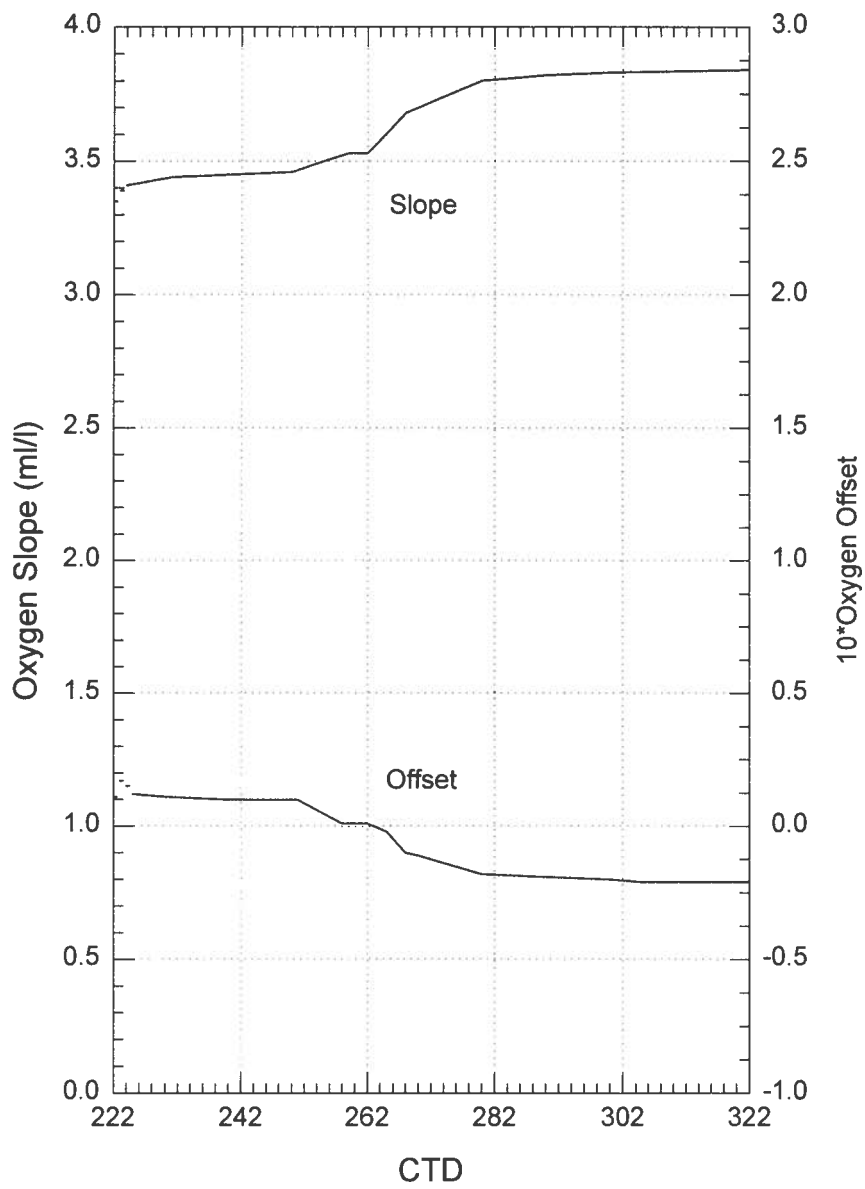


Figure 4. Oxygen slope and offset

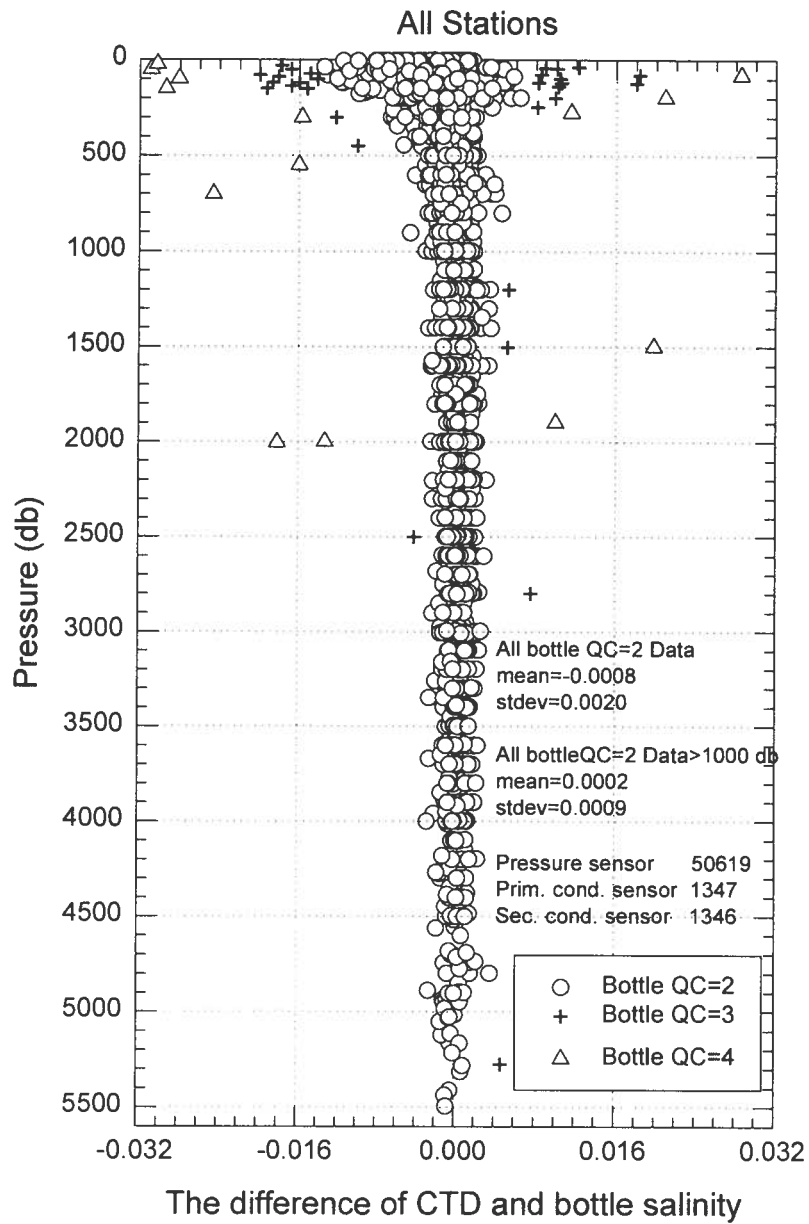


Figure 5. The difference of CTD and bottle salinity vs. pressure

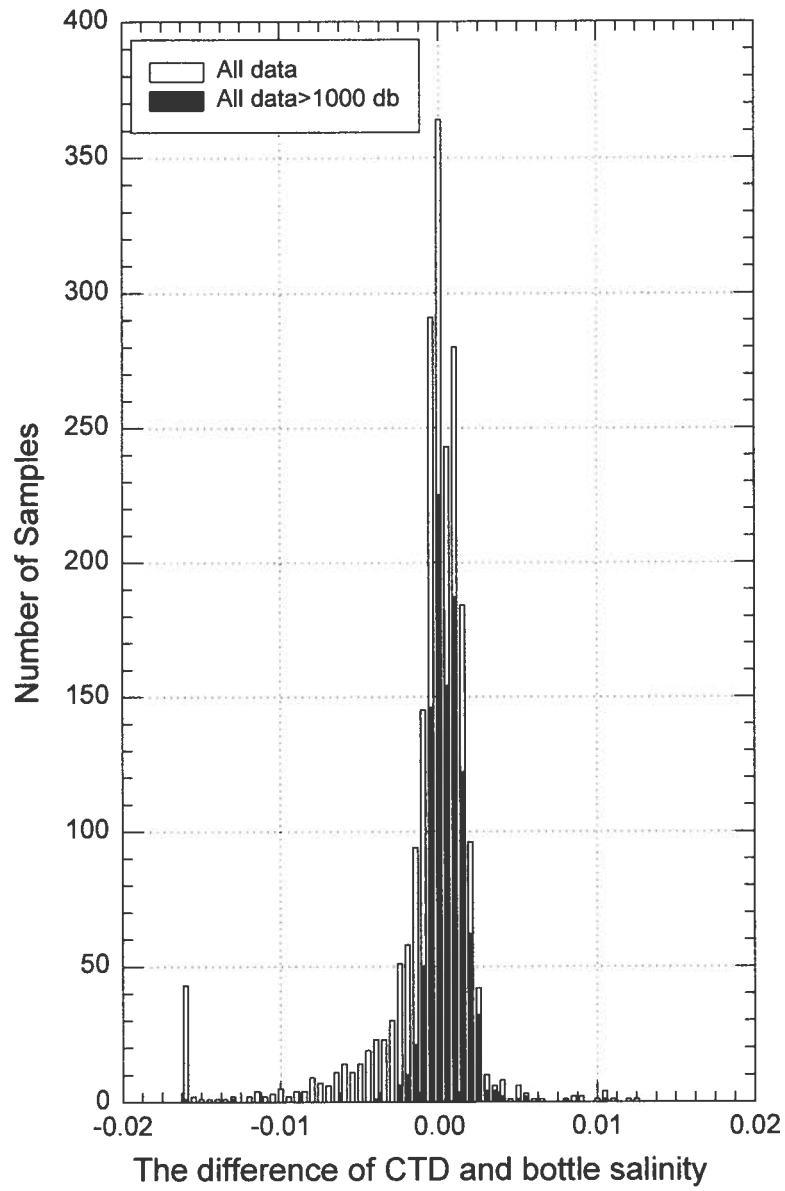


Figure 6. The difference of CTD and bottle salinity vs. number of samples

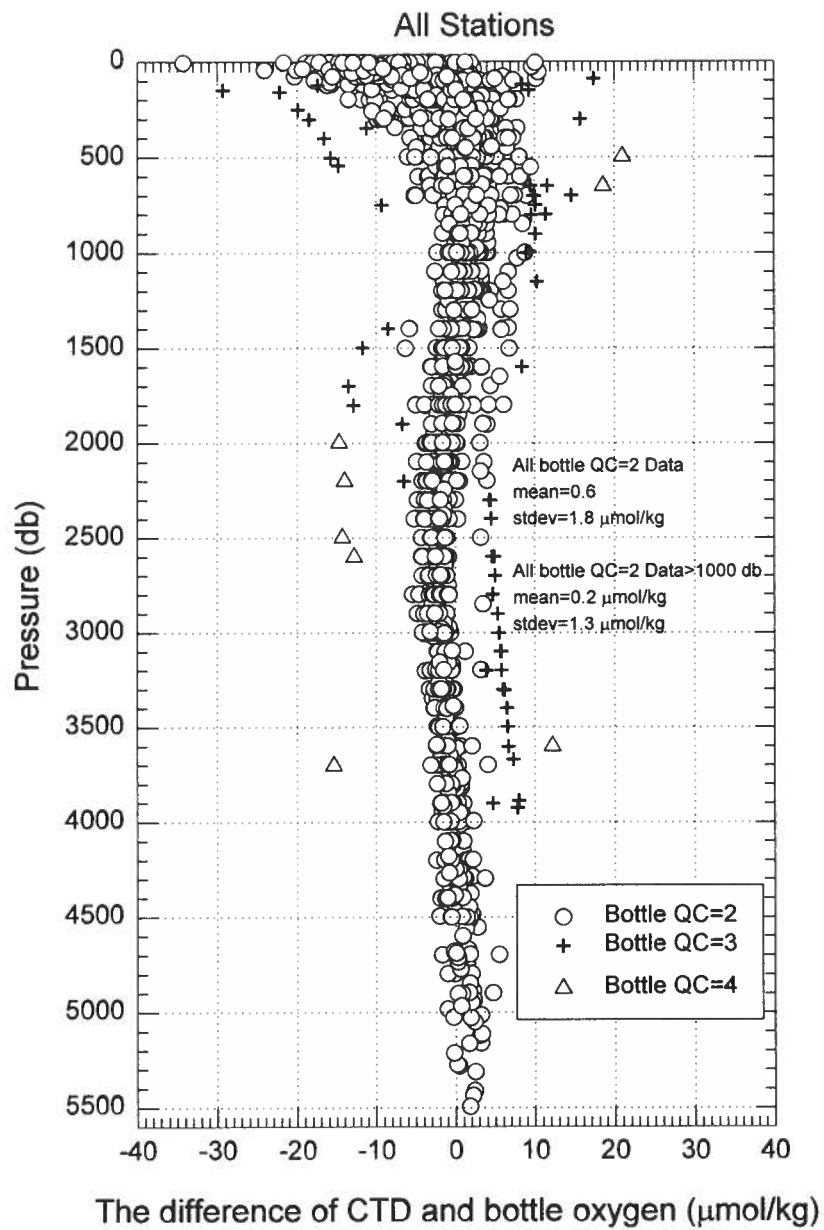


Figure 7. The difference of CTD and bottle oxygen vs. pressure

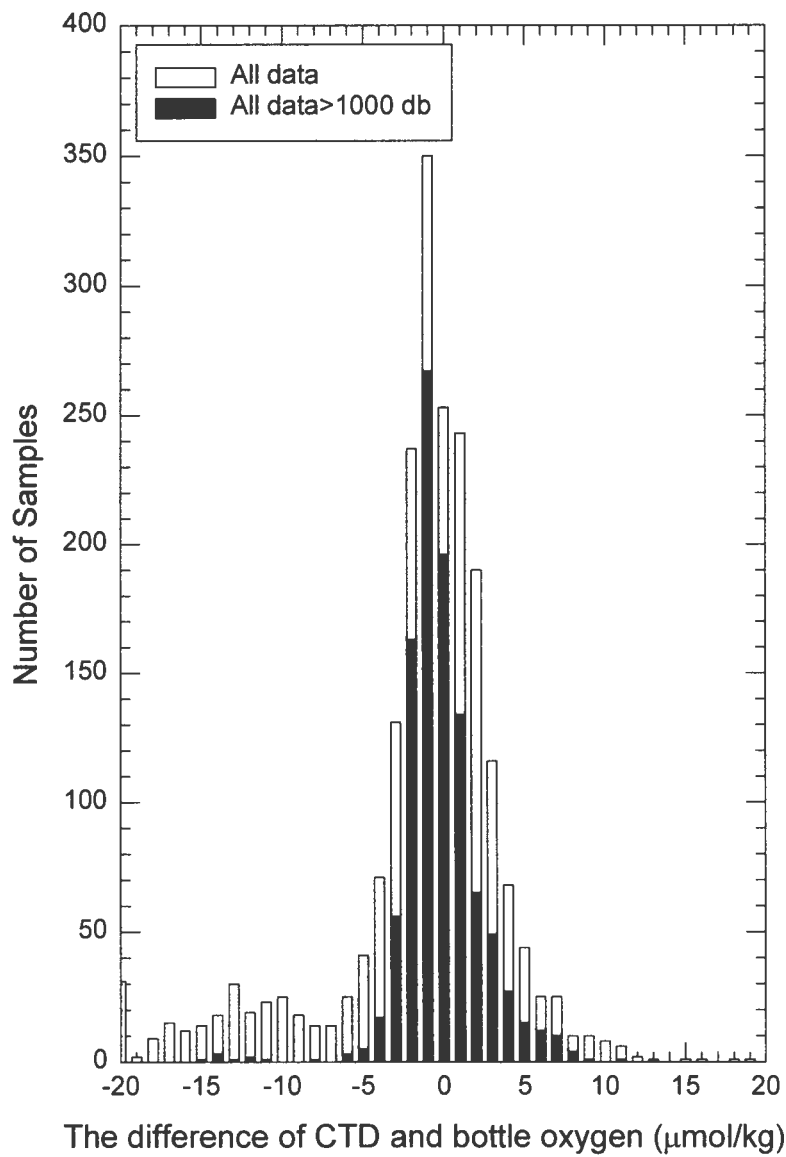


Figure 8. The difference of CTD and bottle oxygen vs. number of samples

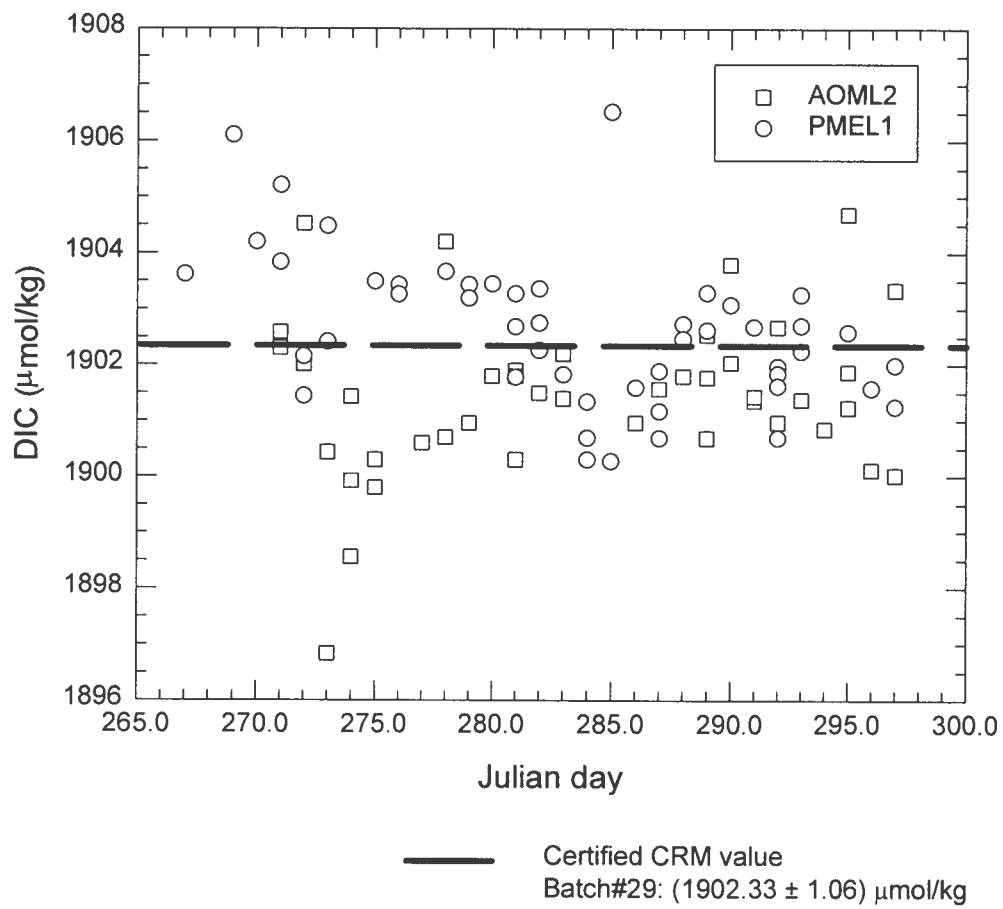


Figure 9. The results of the CRM measurements

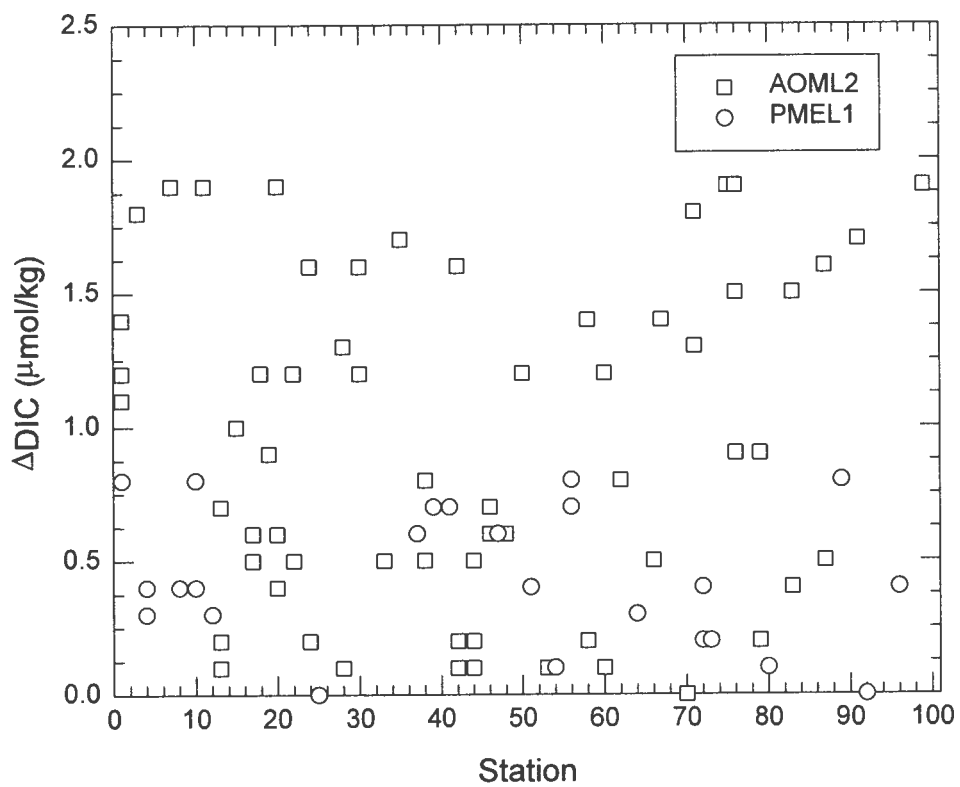


Figure 10. The difference of the DIC duplicates during the course of the cruise

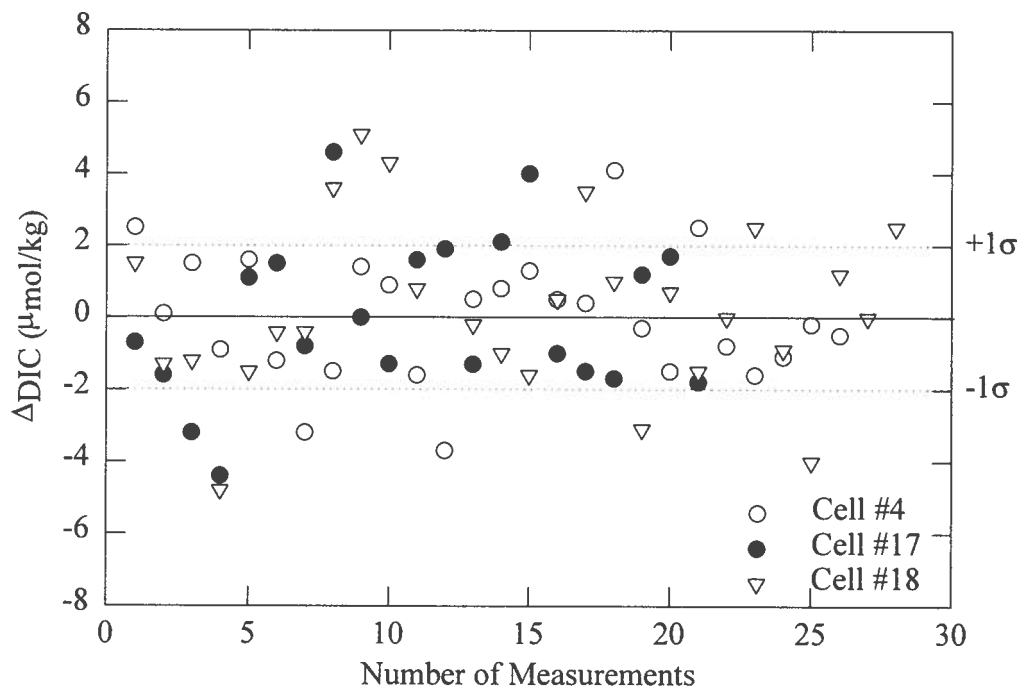
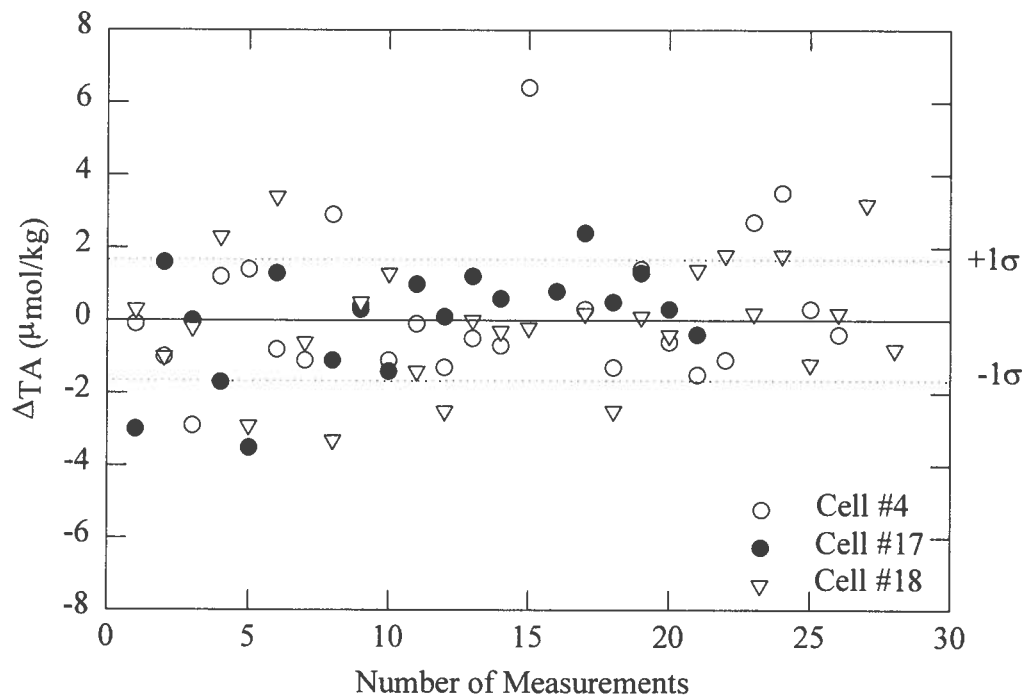


Figure 11. Potentiometric TA and DIC measurements on the Certified Reference Materials (CRMs) during the cruise.

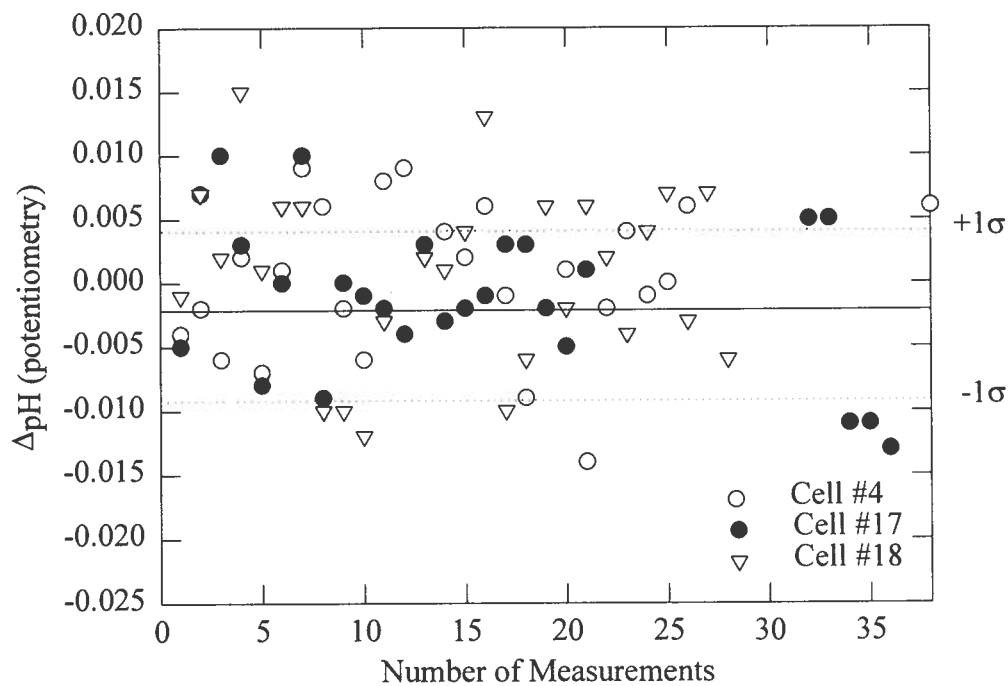
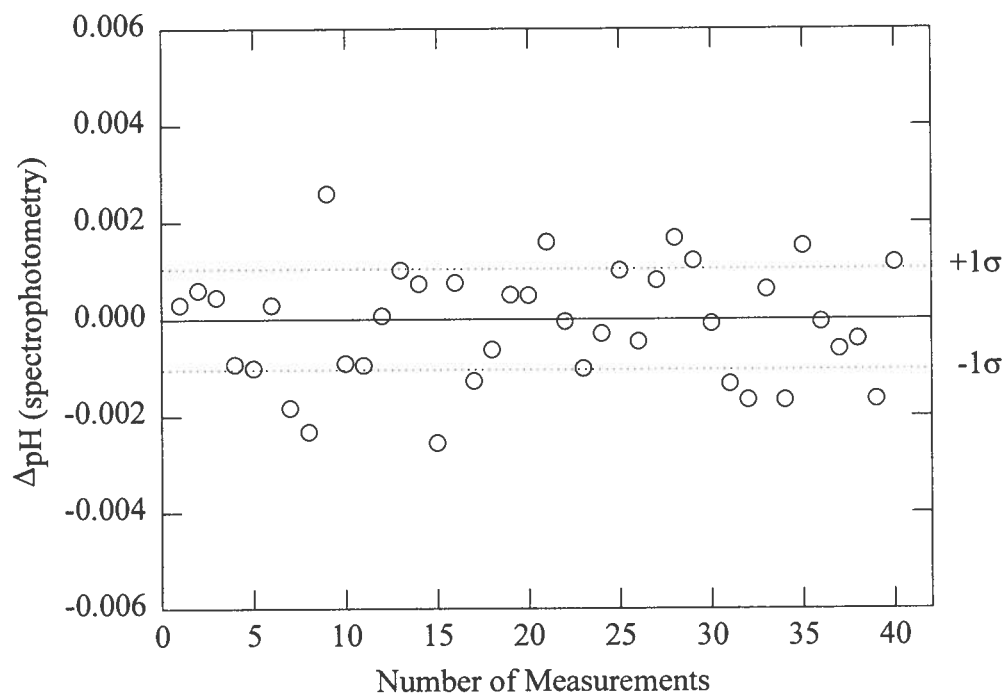


Figure 12. Spectrophotometric and potentiometric pH measurements on the Certified Reference Materials (CRMs) during the cruise.

Table 1. Station locations

Station	Cast	CTD cast	Latitude	Longitude	Date
1	2	222	36 1.40 'S	112 43.14 'E	9/23/1995
2	2	223	40 2.34 'S	109 21.2 'E	9/24/1995
3	2	224	43 0.00 'S	95 1.12 'E	9/28/1995
4	1	225	41 59.51 'S	95 1.03 'E	9/28/1995
5	1	226	40 59.95 'S	94 59.9 'E	9/28/1995
6	2	227	39 59.60 'S	95 0.91 'E	9/29/1995
7	1	228	39 0.39 'S	95 0.86 'E	9/29/1995
8	1	229	38 0.03 'S	95 0.15 'E	9/29/1995
9	2	230	36 59.95 'S	94 59.93 'E	9/30/1995
10	1	231	36 0.82 'S	95 1.24 'E	9/30/1995
11	1	232	34 59.92 'S	94 58.82 'E	9/30/1995
12	2	233	34 0.18 'S	94 58.68 'E	10/1/1995
13	1	234	33 0.41 'S	95 0.35 'E	10/1/1995
14	1	235	32 30.18 'S	94 59.81 'E	10/1/1995
15	1	236	32 0.31 'S	95 0.05 'E	10/1/1995
16	2	237	31 44.76 'S	94 59.72 'E	10/2/1995
17	1	238	31 39.14 'S	95 0.05 'E	10/2/1995
18	1	239	32 27.42 'S	92 35.84 'E	10/2/1995
19	2	240	33 10.26 'S	90 10.16 'E	10/3/1995
20	1	241	33 59.95 'S	87 46.04 'E	10/3/1995
21	2	242	34 10.06 'S	87 9.3 'E	10/4/1995
22	1	243	34 18.06 'S	86 37.55 'E	10/4/1995
23	1	244	34 27.17 'S	86 2.77 'E	10/4/1995
24	1	245	34 36.99 'S	85 28.12 'E	10/4/1995
25	1	246	34 45.71 'S	84 52.77 'E	10/4/1995
26	2	247	34 54.17 'S	84 17.42 'E	10/5/1995
27	1	248	35 3.09 'S	83 42.2 'E	10/5/1995
28	1	249	35 13.13 'S	83 8.62 'E	10/5/1995
29	1	250	35 21.56 'S	82 33.07 'E	10/5/1995
30	2	251	35 31.82 'S	81 58.18 'E	10/6/1995
31	1	252	35 27.37 'S	81 29.01 'E	10/6/1995
32	1	253	35 19.63 'S	80 49.1 'E	10/6/1995
33	1	254	35 0.13 'S	80 20.01 'E	10/6/1995
34	1	255	34 39.67 'S	79 49.6 'E	10/7/1995
35	2	256	34 20.14 'S	79 20.6 'E	10/7/1995
36	1	257	33 59.63 'S	80 0.01 'E	10/7/1995
37	1	258	33 0.01 'S	80 0.06 'E	10/7/1995
38	1	259	31 58.96 'S	80 0.29 'E	10/8/1995
39	1	260	30 59.85 'S	80 0.6 'E	10/8/1995
40	1	261	30 0.11 'S	79 59.77 'E	10/8/1995
41	1	262	28 59.94 'S	79 59.89 'E	10/9/1995
42	1	263	27 59.71 'S	80 0.22 'E	10/9/1995
43	1	264	26 59.84 'S	79 59.9 'E	10/9/1995
44	1	265	25 59.42 'S	79 59.59 'E	10/9/1995

Table 1. Station locations (continued)

Station	Cast	CTD cast	Latitude	Longitude	Date
45	2	266	25 0.38 'S	79 59.68 'E	10/10/1995
46	1	267	24 0.96 'S	79 59.13 'E	10/10/1995
47	1	268	22 59.23 'S	79 59.21 'E	10/11/1995
48	2	269	22 0.94 'S	80 0.11 'E	10/11/1995
49	1	270	20 59.48 'S	79 59.67 'E	10/11/1995
50	1	271	19 59.46 'S	80 0.53 'E	10/12/1995
51	1	272	19 0.00 'S	80 0.1 'E	10/12/1995
52	1	273	18 0.02 'S	80 0.31 'E	10/12/1995
53	2	274	16 58.85 'S	79 59.64 'E	10/13/1995
54	1	275	15 59.63 'S	80 0.01 'E	10/13/1995
55	1	276	14 59.17 'S	79 59.95 'E	10/13/1995
56	1	277	14 30.03 'S	79 59.98 'E	10/14/1995
57	2	278	13 59.58 'S	79 59.94 'E	10/14/1995
58	1	279	13 29.94 'S	80 0.01 'E	10/14/1995
59	1	280	13 0.24 'S	79 59.64 'E	10/14/1995
60	1	281	12 29.85 'S	80 0.04 'E	10/14/1995
61	2	282	11 59.60 'S	80 0.35 'E	10/15/1995
62	1	283	11 29.90 'S	79 59.75 'E	10/15/1995
63	1	284	10 59.46 'S	79 59.52 'E	10/15/1995
64	1	285	10 29.48 'S	80 0.22 'E	10/15/1995
65	2	286	9 59.46 'S	80 0.88 'E	10/16/1995
66	2	287	9 29.90 'S	80 0.29 'E	10/16/1995
67	1	288	9 0.01 'S	80 0.56 'E	10/16/1995
68	1	289	8 24.03 'S	80 0.19 'E	10/16/1995
69	2	290	7 59.88 'S	80 0.34 'E	10/17/1995
70	1	291	7 30.07 'S	79 59.72 'E	10/17/1995
71	1	292	7 0.00 'S	79 59.43 'E	10/17/1995
72	1	293	6 29.26 'S	79 59.3 'E	10/17/1995
73	1	294	5 59.72 'S	79 58.47 'E	10/18/1995
74	1	295	5 29.71 'S	79 59.1 'E	10/18/1995
75	1	296	4 59.75 'S	80 0.27 'E	10/18/1995
76	1	297	4 29.73 'S	80 0.22 'E	10/18/1995
77	1	298	3 59.39 'S	80 0.36 'E	10/19/1995
78	1	299	3 29.98 'S	80 0.35 'E	10/19/1995
79	1	300	2 59.54 'S	80 0.01 'E	10/19/1995
80	1	301	2 30.19 'S	80 0.27 'E	10/19/1995
81	1	302	2 0.34 'S	80 0.44 'E	10/20/1995
82	1	303	1 29.96 'S	80 0.4 'E	10/20/1995
83	1	304	1 0.26 'S	80 0.92 'E	10/20/1995
84	1	305	0 45.57 'N	79 59.98 'E	10/20/1995
85	1	306	0 30.35 'N	80 0.48 'E	10/20/1995
86	1	307	0 15.33 'N	80 0.35 'E	10/21/1995
87	1	308	0 0.46 'N	80 0.35 'E	10/21/1995
88	1	309	0 14.71 'N	80 0.35 'E	10/21/1995

Table 1. Station locations (continued)

Station	Cast	CTD cast	Latitude	Longitude	Date
89	1	310	0 29.77 'N	80 0.15 'E	10/21/1995
90	1	311	0 44.53 'N	80 0.06 'E	10/21/1995
91	1	312	0 59.63 'N	80 0.35 'E	10/21/1995
92	2	313	1 28.65 'N	80 0.14 'E	10/22/1995
93	1	314	1 59.79 'N	80 1.01 'E	10/22/1995
94	1	315	2 29.93 'N	79 59.81 'E	10/22/1995
95	1	316	2 59.47 'N	80 0.1 'E	10/22/1995
96	2	317	3 29.16 'N	79 59.8 'E	10/23/1995
97	1	318	3 59.35 'N	79 59.86 'E	10/23/1995
98	1	319	4 29.63 'N	80 0.09 'E	10/23/1995
99	1	320	4 59.61 'N	79 59.43 'E	10/23/1995
100	1	321	5 30.97 'N	79 59.43 'E	10/24/1995
101	2	322	5 47.22 'N	79 59.83 'E	10/24/1995

Table 2. Results of the certified reference material, CRM
 (Assigned value by SIO Batch 29 = (1902.33 ± 1.06) $\mu\text{mol/kg}$
 Coulometer: AOML-2

Date	Time	Julian Day	DIC ($\mu\text{mol/kg}$)
9/27/91	10:01:23	271	1902.3
9/27/91	23:15:45	271	1902.6
9/28/91	16:33:29	272	1904.5
9/28/91	19:54:06	272	1902.0
9/29/91	8:54:42	273	1900.4
9/29/91	17:47:02	273	1896.8
9/30/91	1:41:40	274	1901.4
9/30/91	12:43:34	274	1899.9
9/30/91	16:06:38	274	1898.6
10/1/91	2:12:11	275	1899.8
10/1/91	13:36:11	275	1900.3
10/3/91	1:47:30	277	1900.6
10/4/91	3:26:33	278	1900.7
10/4/91	17:42:19	278	1904.2
10/5/91	23:21:38	279	1901.0
10/6/91	15:25:35	280	1901.8
10/7/91	2:53:24	281	1901.9
10/7/91	13:40:38	281	1901.8
10/7/91	16:38:14	281	1900.3
10/8/91	9:46:52	282	1901.5
10/9/91	2:53:45	283	1902.2
10/9/91	14:28:37	283	1901.4
10/12/91	23:27:49	286	1901.0
10/13/91	15:00:19	287	1901.6
10/14/91	4:46:02	288	1901.8
10/15/91	6:58:01	289	1902.5
10/15/91	14:30:43	289	1900.7
10/15/91	19:21:40	289	1901.8
10/16/91	14:13:08	290	1903.8
10/16/91	20:12:56	290	1902.0
10/17/91	12:51:34	291	1901.4
10/17/91	20:08:23	291	1901.4
10/18/91	9:34:28	292	1902.7
10/18/91	23:16:50	292	1901.0
10/19/91	12:43:56	293	1901.4
10/20/91	4:21:52	294	1900.9
10/21/91	3:52:39	295	1901.9
10/21/91	15:55:30	295	1904.7
10/21/91	20:39:06	295	1901.2
10/22/91	11:46:41	296	1900.1
10/23/91	0:51:30	297	1903.3
10/23/91	3:07:16	297	1900.0

Table 2. Results of the certified reference material, CRM (continued)
 (Assigned value by SIO Batch 29 = (1902.33 ± 1.06) $\mu\text{mol/kg}$
 Coulometer: PMEL-1

Date	Time	Julian Day	DIC ($\mu\text{mol/kg}$)
9/23/91	19:00:19	267	1903.62
9/25/91	13:01:51	269	1906.10
9/26/91	13:36:04	270	1904.20
9/27/91	8:27:33	271	1905.21
9/27/91	15:09:44	271	1903.83
9/28/91	9:23:56	272	1902.15
9/28/91	15:49:32	272	1901.44
9/29/91	11:51:02	273	1904.48
9/29/91	22:39:20	273	1902.41
10/1/91	7:54:47	275	1903.49
10/2/91	8:47:21	276	1903.43
10/2/91	19:50:11	276	1903.26
10/4/91	9:37:11	278	1903.66
10/5/91	6:36:14	279	1903.43
10/5/91	21:44:11	279	1903.19
10/6/91	12:14:13	280	1903.45
10/7/91	2:26:36	281	1903.27
10/7/91	14:20:10	281	1901.78
10/7/91	17:05:47	281	1902.68
10/8/91	6:45:50	282	1902.26
10/8/91	15:22:36	282	1902.75
10/8/91	19:04:45	282	1903.36
10/9/91	10:25:59	283	1901.83
10/10/91	3:09:22	284	1900.69
10/10/91	13:05:28	284	1901.34
10/10/91	20:36:19	284	1900.30
10/11/91	13:42:00	285	1906.52
10/11/91	14:09:47	285	1900.27
10/12/91	12:07:59	286	1901.59
10/13/91	4:29:17	287	1900.68
10/13/91	16:32:57	287	1901.17
10/13/91	21:33:43	287	1901.89
10/14/91	7:11:08	288	1902.73
10/14/91	10:44:15	288	1902.46
10/15/91	4:08:42	289	1902.62
10/15/91	18:38:45	289	1903.29
10/16/91	10:13:52	290	1903.07
10/17/91	4:26:09	291	1902.68
10/18/91	5:03:11	292	1901.97
10/18/91	7:43:39	292	1901.84
10/18/91	18:49:56	292	1900.69
10/18/91	19:25:57	292	1901.62
10/19/91	4:44:58	293	1902.24
10/19/91	13:38:01	293	1903.26
10/19/91	17:00:08	293	1902.70

Table 2. Results of the certified reference material, CRM (continued)
(Assigned value by SIO Batch 29 = (1902.33 ± 1.06) $\mu\text{mol/kg}$)
Coulometer: PMEL-1

Date	Time	Julian Day	DIC ($\mu\text{mol/kg}$)
10/21/91	8:17:04	295	1902.58
10/22/91	4:50:48	296	1901.58
10/23/91	3:55:10	297	1901.99
10/23/91	13:20:23	297	1901.25

Table 3. Dissolved inorganic carbon duplicates

Station#	Cast#	Bottle#	Pressure/db	DIC ($\mu\text{mol/kg}$)	Stdev	Coulometer
1	2	2	2000	2265.5	0.00	AOML2/PMEL1
2	2	1	4675	2263.9	1.88	AOML2
2	2	23	30	2087.3	1.59	AOML3
3	2	2	3200	2254.6	1.27	AOML4
3	2	22	50	2093.5	1.94	AOML5
4	1	1	3293	2258.1	0.31	PMEL1
4	1	23	50	2093.8	0.24	PMEL1
5	1	1	3487	2259.1	1.74	AOML2
5	1	22	100	2094.3	2.24	AOML2
6	2	23	50	2094.6	2.52	PMEL1
7	1	2	3400	2256.5	3.33	AOML2
7	1	23	50	2086.0	1.34	AOML2
8	1	1	4150	2268.5	0.27	PMEL1
8	1	24	8	2089.4	2.05	PMEL1
9	2	2	3900	2264.4	3.38	AOML2
9	2	9	2200	2260.4	4.71	AOML2
9	2	23	50	2081.2	3.34	AOML2
10	1	2	4000	2262.7	1.13	PMEL1
10	1	6	2500	2247.6	0.26	PMEL1
10	1	23	50	2082.0	2.52	PMEL1
11	1	1	4556	2266.2	3.10	AOML2
11	1	6	3000	2253.1	1.37	AOML2
11	1	24	10	2079.5	2.47	AOML2
12	2	2	4200	2266.4	1.66	PMEL1
12	2	15	1000	2138.6	0.24	PMEL1
13	1	2	3800	2265.2	0.04	AOML2
13	1	9	1700	2264.6	0.16	AOML2
13	1	23	50	2072.4	0.52	AOML2
14	1	24	7	2072.0	1.01	PMEL1
15	1	1	4244	2266.4	0.74	AOML2
16	2	1	3010	2256.9	1.21	PMEL1
17	1	2	1400	2257.4	1.45	AOML2
17	1	6	1000	2188.1	0.35	AOML2
17	1	22	7	2075.0	0.45	AOML2
18	1	2	4300	2267.4	2.65	AOML2
18	1	24	9	2064.1	0.83	AOML2
19	2	2	3600	2262.9	2.75	AOML2
19	2	5	2700	2251.2	2.28	AOML2
19	2	24	9	2073.9	0.65	AOML2
20	1	1	3643	2265.1	0.40	AOML2
20	1	4	2600	2250.8	1.36	AOML2
20	1	24	6	2078.1	0.30	AOML2
21	2	24	7	2076.4	0.24	PMEL1
22	1	1	3342	2260.2	0.32	AOML2
22	1	24	7	2077.5	0.01	AOML2

Table 3. Dissolved inorganic carbon duplicates (continued)

Station#	Cast#	Bottle#	Pressure/db	DIC ($\mu\text{mol/kg}$)	Stdev	Coulometer
23	1	1	3342	2262.4	0.67	PMEL1
23	1	23	40	2079.9	1.65	PMEL1
24	1	1	3541	2263.5	1.13	AOML2
24	1	10	1700	2258.8	0.11	AOML2
25	1	1	3711	2263.8	0.03	PMEL1
25	1	24	9	2080.2	1.15	PMEL1
26	2	1	3822	2264.3	1.88	AOML2
26	2	24	7	2080.2	1.77	AOML2
27	1	1	3804	2265.9	2.12	PMEL1
27	1	24	9	2078.0	2.99	PMEL1
28	1	1	3722	2262.7	0.10	AOML2
28	1	24	7	2076.4	0.95	AOML2
29	1	1	3770	2264.8	3.22	PMEL1
29	1	24	6	2075.8	0.45	PMEL1
30	2	1	4293	2262.2	0.87	AOML2
30	2	24	6	2077.5	1.12	AOML2
31	1	1	2976	2259.0	4.21	PMEL1
31	1	24	7	2077.0	2.14	PMEL1
32	1	1	2992	2252.3	3.02	PMEL1
32	1	24	7	2079.1	1.54	PMEL1
33	1	24	6	2078.2	0.36	AOML2
34	1	1	3200	2257.9	1.22	PMEL1
34	1	21	120	2081.6	2.30	PMEL1
34	1	23	40	2076.3	3.10	PMEL1
35	2	1	2973	2267.5	2.49	AOML2
35	2	24	9	2071.9	1.18	AOML2
36	1	1	3608	2255.3	3.39	AOML2
36	1	24	8	2073.1	2.75	AOML2
37	1	1	3300	2258.5	0.42	PMEL1
37	1	24	7	2071.0	0.91	PMEL1
38	2	1	3924	2265.6	0.38	AOML2
38	2	24	7	2066.4	0.55	AOML2
39	1	1	3888	2268.0	0.49	PMEL1
39	1	24	7	2063.9	2.02	PMEL1
40	1	1	3800	2268.8	2.36	AOML2
40	1	24	7	2062.7	1.42	AOML2
41	1	1	4011	2273.3	0.47	PMEL1
41	1	2	3650	2268.3	3.75	PMEL1
41	1	24	7	2056.9	0.85	PMEL1
42	1	1	4252	2275.9	0.04	AOML2
42	1	11	1250	2243.3	0.17	AOML2
42	1	24	8	2044.3	1.14	AOML2
43	1	1	4448	2277.3	1.59	PMEL1
43	1	24	7	2031.6	0.38	PMEL1
44	1	1	4336	2279.0	0.06	AOML2

Table 3. Dissolved inorganic carbon duplicates (continued)

Station#	Cast#	Bottle#	Pressure/db	DIC ($\mu\text{mol/kg}$)	Stdev	Coulometer
44	1	12	950	2183.2	0.14	AOML2
44	1	24	4	2006.1	0.36	AOML2
45	2	1	3673	2278.1	2.62	PMEL1
45	2	24	9	1993.6	1.22	PMEL1
46	1	1	4441	2288.5	0.46	AOML2
46	1	24	7	1994.3	0.42	AOML2
47	1	1	4561	2290.2	0.41	PMEL1
47	1	24	7	2003.8	0.13	PMEL1
48	2	1	4800	2294.3	0.45	AOML2
48	2	24	7	1982.5	1.75	AOML2
49	1	1	4745	2293.0	2.68	PMEL1
49	1	24	6	1967.9	0.17	PMEL1
50	1	1	4937	2295.8	1.46	AOML2
50	1	24	7	1973.1	0.83	AOML2
51	1	1	4889	2294.7	0.30	PMEL1
51	1	24	8	1950.5	0.34	PMEL1
52	1	1	5162	2292.7	0.77	PMEL1
52	1	4	3900	2290.3	3.90	PMEL1
52	1	24	7	1949.1	0.54	PMEL1
53	2	1	5204	2296.2	1.48	AOML2
53	2	24	6	1946.4	0.04	AOML2
54	1	1	5117	2298.1	0.07	PMEL1
54	1	24	9	1943.9	0.04	PMEL1
55	1	1	5053	2298.9	1.56	AOML2
55	1	24	8	1942.2	1.74	AOML2
56	1	1	3000	2290.6	0.53	PMEL1
56	1	15	50	1947.4	0.50	PMEL1
57	2	1	5032	2298.2	0.69	PMEL1
57	2	24	7	1942.3	0.10	PMEL1
58	1	1	3000	2292.9	0.16	AOML2
58	1	16	7	1952.5	0.99	AOML2
59	1	1	4949	2297.6	1.44	PMEL1
59	1	24	8	1950.7	1.14	PMEL1
60	1	1	3000	2295.6	0.85	AOML2
60	1	14	75	1998.2	0.04	AOML2
61	2	2	5163	2299.8	1.34	PMEL1
61	2	24	7	1959.2	2.01	PMEL1
62	1	1	3000	2297.1	1.66	AOML2
62	1	16	8	1949.6	0.53	AOML2
63	1	1	5411	2296.0	1.76	AOML2
64	1	1	3000	2296.4	0.20	PMEL1
64	1	16	7	1932.9	0.11	PMEL1
65	2	1	5436	2295.4	2.07	PMEL1
65	2	24	8	1924.1	1.06	PMEL1
66	1	9	3000	2301.6	1.61	AOML2

Table 3. Dissolved inorganic carbon duplicates (continued)

Station#	Cast#	Bottle#	Pressure/db	DIC ($\mu\text{mol/kg}$)	Stdev	Coulometer
66	1	24	8	1908.2	0.38	AOML2
67	1	1	5286	2299.2	1.03	AOML2
67	1	24	7	1899.9	1.66	AOML2
68	1	16	6	1902.4	1.73	PMEL1
69	2	1	5493	2294.4	2.52	PMEL1
69	2	24	7	1900.3	0.58	PMEL1
70	1	16	8	1885.1	0.03	AOML2
71	1	1	4485	2294.2	0.92	AOML2
71	1	24	6	1882.1	1.26	AOML2
72	1	1	3000	2303.9	0.18	PMEL1
72	1	15	40	1909.5	0.26	PMEL1
73	2	1	5275	2293.1	0.16	PMEL1
73	2	24	9	1882.0	0.22	PMEL1
75	1	1	5213	2294.7	1.36	AOML2
75	1	24	7	1912.3	2.57	AOML2
76	1	1	3000	2307.3	0.66	AOML2
76	1	16	8	1913.4	1.05	AOML2
77	2	1	4861	2300.4	0.81	PMEL1
77	2	24	6	1920.5	0.66	PMEL1
79	1	1	5029	2299.7	0.66	AOML2
79	1	24	6	1923.9	0.14	AOML2
80	1	1	3000	2307.4	0.05	PMEL1
80	1	16	6	1937.2	1.39	PMEL1
81	1	24	6	1928.5	0.35	PMEL1
82	1	2	2500	2308.6	2.26	AOML2
83	2	1	4740	2305.4	1.09	AOML2
83	2	24	9	1932.9	0.28	AOML2
84	1	11	250	2201.6	0.99	PMEL1
85	1	1	4773	2305.2	3.35	PMEL1
85	1	24	6	1931.9	1.77	PMEL1
86	1	1	3000	2312.8	2.46	PMEL1
86	1	16	6	1944.9	0.21	PMEL1
87	2	1	4739	2304.5	0.35	AOML2
87	2	24	8	1946.2	1.13	AOML2
88	1	11	250	2203.5	0.48	PMEL1
89	1	1	4714	2305.2	0.55	PMEL1
90	1	1	3000	2314.4	0.82	PMEL1
90	1	16	6	1937.1	0.08	PMEL1
91	1	1	4691	2305.4	3.17	AOML2
91	1	24	7	1945.7	1.17	AOML2
92	2	1	3000	2314.8	0.00	PMEL1
93	1	24	7	1942.5	1.97	PMEL1
94	1	1	3160	2320.7	1.55	AOML2
96	2	11	350	2233.8	0.30	PMEL1
96	2	16	9	1949.3	0.51	PMEL1

Table 3. Dissolved inorganic carbon duplicates (continued)

Station#	Cast#	Bottle#	Pressure/db	DIC ($\mu\text{mol/kg}$)	Stdev	Coulometer
97	1	1	4402	2311.4	1.60	PMEL1
97	1	24	7	1947.9	1.35	PMEL1
98	1	1	3000	2327.6	1.50	AOML2
99	1	1	4210	2310.5	1.32	AOML2
99	1	24	7	1928.8	1.34	AOML2
100	1	17	400	2260.7	0.92	PMEL1

Table 4. Replicate dissolved CFC-11 Analyses

Station	Cast	Bottle	CFC-11 pmol/kg	CFC-11 Stdev
2	2	18	3.632	0.004
2	2	24	3.661	0.060
3	2	17	2.952	0.043
4	1	12	1.431	0.004
5	1	15	2.837	0.006
6	2	24	3.506	0.001
7	1	7	0.029	0.005
7	1	14	2.460	0.062
9	2	10	0.008	0.002
9	2	24	3.264	0.005
10	1	10	0.020	0.005
11	1	14	0.842	0.026
11	1	20	3.358	0.020
12	2	8	0.003	0.002
12	2	16	2.830	0.016
13	1	6	0.003	0.001
13	1	22	3.131	0.004
14	1	18	3.180	0.052
14	1	21	3.091	0.015
15	1	16	3.042	0.017
17	1	11	2.386	0.005
17	1	21	3.019	0.019
18	1	1	0.008	0.002
18	1	24	2.728	0.024
19	2	14	2.129	0.010
19	2	21	2.942	0.019
20	1	11	0.192	0.021
21	2	11	0.751	0.000
23	1	11	0.331	0.001
24	1	11	0.185	0.004
26	2	14	1.564	0.014
28	1	11	0.913	0.003
28	1	14	2.986	0.004
30	2	11	0.198	0.001
30	2	21	3.192	0.029
32	1	6	0.037	0.000
34	1	11	0.772	0.004
34	1	23	3.074	0.034
36	1	7	0.030	0.002
37	1	10	0.379	0.004
38	2	10	0.079	0.001
38	2	22	3.031	0.003
39	1	11	0.432	0.008
40	1	8	0.008	0.003
41	1	20	2.838	0.021
42	1	21	2.901	0.013
43	1	13	0.956	0.003

Table 4. Replicate dissolved CFC-11 Analyses
(continued)

Station	Niskin Bottle		CFC-11 pmol/kg	CFC-11 Stdev
44	1	21	2.316	0.024
45	2	14	1.553	0.008
46	1	7	0.000	0.000
47	1	14	0.017	0.002
48	2	16	2.713	0.014
49	1	14	0.071	0.000
50	1	17	0.319	0.004
51	1	18	2.758	0.002
52	1	12	0.000	0.000
53	2	18	2.238	0.011
54	1	15	0.159	0.002
55	1	20	1.899	0.035
57	2	14	0.026	0.002
59	1	20	1.333	0.000
61	2	18	0.754	0.011
63	1	19	0.794	0.000
65	2	18	0.885	0.002
67	1	14	0.012	0.001
69	2	17	0.484	0.003
71	1	18	0.319	0.007
73	2	18	0.191	0.003
75	1	20	0.778	0.004
79	1	22	1.626	0.007
81	1	20	0.884	0.000
83	2	18	0.446	0.003
85	1	21	1.596	0.004
87	2	17	0.643	0.006
89	1	16	0.126	0.004
91	1	15	0.056	0.002
93	1	17	0.213	0.000
95	1	18	0.474	0.001
97	1	18	0.130	0.002
99	1	16	0.040	0.002

Table 5. Replicate dissolved CFC-12 Analyses

Station	Cast	Bottle	CFC-12 pmol/kg	CFC-12 Stdev
2	2	18	1.854	0.007
2	2	24	1.855	0.019
3	2	17	1.456	0.012
4	1	12	0.654	0.002
5	1	15	1.371	0.001
6	2	24	1.770	0.001
7	1	7	0.006	0.001
7	1	14	1.158	0.024
9	2	10	-0.001	0.002
10	1	10	0.004	0.002
11	1	14	0.394	0.015
11	1	20	1.706	0.002
12	2	8	-0.002	0.000
12	2	16	1.367	0.006
13	1	6	-0.001	0.000
13	1	22	1.659	0.010
14	1	18	1.596	0.009
14	1	21	1.620	0.033
15	1	16	1.502	0.005
17	1	21	1.603	0.017
18	1	1	0.004	0.001
18	1	24	1.485	0.031
19	2	14	1.041	0.009
19	2	21	1.561	0.004
20	1	11	0.098	0.010
21	2	11	0.376	0.002
23	1	11	0.169	0.001
24	1	11	0.096	0.003
26	2	14	0.765	0.011
28	1	11	0.436	0.005
28	1	14	1.505	0.027
30	2	2	0.001	0.000
30	2	11	0.093	0.005
30	2	21	1.703	0.004
30	2	23	1.700	0.002
32	1	6	0.018	0.000
34	1	11	0.380	0.002
34	1	23	1.638	0.017
36	1	7	0.017	0.002
37	1	10	0.187	0.002
38	2	10	0.041	0.001
38	2	22	1.628	0.003
39	1	11	0.219	0.004
40	1	8	0.004	0.003
41	1	20	1.520	0.002
42	1	21	1.538	0.003
43	1	13	0.497	0.001

Table 5. Replicate dissolved CFC-12 Analyses
(continued)

Station	Niskin Bottle		CFC-12 pmol/kg	CFC-12 Stdev
44	1	21	1.287	0.015
45	2	14	0.780	0.005
46	1	7	0.000	0.000
47	1	14	0.009	0.001
48	2	16	1.360	0.017
49	1	14	0.044	0.001
50	1	17	0.178	0.006
51	1	18	1.399	0.000
52	1	12	0.001	0.001
53	2	18	1.196	0.002
54	1	15	0.094	0.002
55	1	20	1.086	0.029
57	2	14	0.017	0.002
59	1	20	0.720	0.005
61	2	18	0.389	0.010
63	1	19	0.435	0.003
65	2	18	0.458	0.002
67	1	14	0.006	0.002
69	2	17	0.260	0.003
71	1	18	0.175	0.001
73	2	18	0.111	0.001
75	1	20	0.425	0.002
79	1	22	0.926	0.005
81	1	20	0.495	0.007
83	2	18	0.257	0.003
85	1	21	0.934	0.002
87	2	17	0.363	0.000
89	1	16	0.074	0.002
91	1	15	0.038	0.003
93	1	17	0.128	0.001
95	1	18	0.272	0.002
97	1	18	0.080	0.000
99	1	16	0.025	0.003

Table 6. CFC Air Measurements
(Local time = GMT + 5 h)

Date	GMT (hhmm)	Latitude	Longitude	CFC-11 ppt	CFC-12 ppt
24-Sep-95	947	40 01.5 S	109 58.7 E	259.6	522.4
24-Sep-95	959	40 01.5 S	109 58.7 E	260.4	520.8
24-Sep-95	1011	40 01.5 S	109 58.7 E	260.0	523.4
24-Sep-95	1023	40 01.5 S	109 58.7 E	261.5	524.2
25-Sep-95	1125	40 41.5 S	107 10.6 E	261.5	516.5
25-Sep-95	1137	40 41.5 S	107 10.6 E	261.5	518.7
26-Sep-95	422	41 16.8 S	103 48.6 E	259.7	519.5
26-Sep-95	434	41 16.8 S	103 48.6 E	261.0	516.7
26-Sep-95	446	41 16.8 S	103 48.6 E	260.7	516.3
26-Sep-95	458	41 16.8 S	103 48.6 E	261.7	514.0
27-Sep-95	935	42 39.4 S	096 46.1 E	260.2	522.5
27-Sep-95	947	42 39.4 S	096 46.1 E	260.6	521.7
27-Sep-95	959	42 39.4 S	096 46.1 E	260.7	522.9
27-Sep-95	1011	42 39.4 S	096 46.1 E	260.1	521.4
28-Sep-95	713	43 00.0 S	095 00.0 E	261.6	520.6
28-Sep-95	725	43 00.0 S	095 00.0 E	260.8	520.5
28-Sep-95	737	43 00.0 S	095 00.0 E	262.1	521.0
28-Sep-95	749	43 00.0 S	095 00.0 E	260.9	519.8
1-Oct-95	800	34 00.0 S	095 00.0 E	261.5	516.8
1-Oct-95	812	34 00.0 S	095 00.0 E	261.1	520.5
1-Oct-95	824	34 00.0 S	095 00.0 E	261.2	522.1
1-Oct-95	836	34 00.0 S	095 00.0 E	260.7	519.2
3-Oct-95	855	33 10.5 S	090 10.5 E	260.8	505.3
3-Oct-95	908	33 10.5 S	090 10.5 E	260.8	512.6
3-Oct-95	921	33 10.5 S	090 10.5 E	261.0	510.2
3-Oct-95	934	33 10.5 S	090 10.5 E	261.0	505.3
6-Oct-95	1711	35 19.3 S	080 49.5 E	263.2	523.7
6-Oct-95	1724	35 19.3 S	080 49.5 E	263.8	526.0
6-Oct-95	1737	35 19.3 S	080 49.5 E	262.3	521.1
6-Oct-95	1750	35 19.3 S	080 49.5 E	-9.0	-9.0
8-Oct-95	443	32 00.0 S	080 00.0 E	260.3	517.7
8-Oct-95	456	32 00.0 S	080 00.0 E	261.0	518.5
8-Oct-95	509	32 00.0 S	080 00.0 E	260.9	520.4
8-Oct-95	522	32 00.0 S	080 00.0 E	261.1	521.8
10-Oct-95	1033	25 00.0 S	080 00.0 E	261.5	522.9
10-Oct-95	1045	25 00.0 S	080 00.0 E	262.0	522.0
10-Oct-95	1056	25 00.0 S	080 00.0 E	261.5	522.4
10-Oct-95	1108	25 00.0 S	080 00.0 E	261.5	521.6
13-Oct-95	2254	15 00.0 S	080 00.0 E	261.0	524.9
13-Oct-95	2306	15 00.0 S	080 00.0 E	262.2	522.5
13-Oct-95	2318	15 00.0 S	080 00.0 E	261.2	521.5
13-Oct-95	2330	15 00.0 S	080 00.0 E	261.7	531.4
15-Oct-95	1837	11 30.0 S	080 00.0 E	261.6	525.7
15-Oct-95	1849	11 30.0 S	080 00.0 E	261.3	522.1
15-Oct-95	1901	11 30.0 S	080 00.0 E	261.4	522.7

Table 6. CFC Air Measurements (continued)
(Local time = GMT + 5 h)

Date	GMT (hhmm)	Latitude	Longitude	CFC-11 ppt	CFC-12 ppt
15-Oct-95	1912	11 30.0 S	080 00.0 E	261.5	523.2
16-Oct-95	1936	09 30.0 S	080 00.0 E	262.8	523.3
16-Oct-95	1948	09 30.0 S	080 00.0 E	263.0	521.5
16-Oct-95	1959	09 30.0 S	080 00.0 E	261.6	522.6
16-Oct-95	2011	09 30.0 S	080 00.0 E	261.7	520.2
19-Oct-95	613	04 00.0 S	080 00.0 E	262.3	519.8
19-Oct-95	625	04 00.0 S	080 00.0 E	261.9	520.9
19-Oct-95	636	04 00.0 S	080 00.0 E	261.1	527.0
19-Oct-95	648	04 00.0 S	080 00.0 E	262.3	520.4
23-Oct-95	809	04 00.0 N	080 00.0 E	263.5	519.7
23-Oct-95	820	04 00.0 N	080 00.0 E	263.0	522.6
23-Oct-95	832	04 00.0 N	080 00.0 E	262.4	521.1
23-Oct-95	844	04 00.0 N	080 00.0 E	262.1	525.9

Table 7. CFC Air values (interpolated to station locations)
(Local time = GMT + 5 h)

Station	GMT (hhmm)	Latitude	Longitude	CFC-11 ppt	CFC-12 ppt
2	40 02.2 S	109 58.6 E	24-Sep-95	260.8	521.0
3	42 59.7 S	095 00.4 E	28-Sep-95	260.9	521.3
4	41 59.6 S	095 00.9 E	28-Sep-95	260.9	521.3
5	40 59.8 S	095 00.0 E	28-Sep-95	260.9	521.3
6	39 59.7 S	095 00.7 E	29-Sep-95	260.9	521.3
7	39 00.1 S	095 00.0 E	29-Sep-95	260.9	521.3
8	38 00.1 S	095 00.0 E	29-Sep-95	261.0	520.8
9	37 00.0 S	094 59.6 E	30-Sep-95	261.0	517.6
10	36 00.9 S	095 01.2 E	30-Sep-95	261.0	514.0
11	34 60.0 S	094 58.7 E	30-Sep-95	261.0	514.0
12	34 00.2 S	094 58.6 E	1-Oct-95	261.0	514.0
13	33 00.5 S	095 00.3 E	1-Oct-95	261.0	514.0
14	32 30.2 S	094 59.7 E	1-Oct-95	261.0	514.0
15	32 00.4 S	094 60.0 E	1-Oct-95	261.0	514.0
16	31 44.7 S	094 59.8 E	2-Oct-95	261.0	514.0
17	31 39.1 S	095 00.0 E	2-Oct-95	261.0	514.0
18	32 27.4 S	092 35.9 E	2-Oct-95	261.0	514.0
19	33 10.3 S	090 10.1 E	3-Oct-95	261.0	514.0
20	33 59.9 S	087 46.0 E	3-Oct-95	261.6	516.6
21	34 10.2 S	087 09.3 E	4-Oct-95	261.9	514.9
22	34 17.9 S	086 37.5 E	4-Oct-95	261.9	514.9
23	34 27.2 S	086 02.8 E	4-Oct-95	261.9	514.9
24	34 37.0 S	085 28.1 E	4-Oct-95	261.9	514.9
25	34 45.7 S	084 52.7 E	5-Oct-95	261.5	516.6
26	34 54.2 S	084 17.4 E	5-Oct-95	261.8	521.3
27	35 03.1 S	083 43.0 E	5-Oct-95	261.8	521.3
28	35 13.1 S	083 08.6 E	5-Oct-95	261.8	521.3
29	35 21.6 S	082 33.1 E	5-Oct-95	261.8	521.3
30	35 31.8 S	081 58.2 E	6-Oct-95	261.8	521.3
31	35 27.4 S	081 29.0 E	6-Oct-95	261.8	521.3
32	35 19.6 S	080 49.1 E	6-Oct-95	261.8	521.3
33	35 00.1 S	080 19.5 E	8-Oct-95	261.8	521.3
34	34 39.7 S	079 49.2 E	7-Oct-95	261.8	521.3
35	34 20.2 S	079 20.6 E	7-Oct-95	261.8	521.3
36	33 59.6 S	080 00.5 E	7-Oct-95	261.8	521.3
37	33 00.0 S	080 00.1 E	7-Oct-95	261.8	521.3
38	31 59.0 S	080 00.3 E	8-Oct-95	261.8	521.3
39	30 59.9 S	080 00.6 E	8-Oct-95	261.8	521.3
40	30 00.1 S	079 59.8 E	8-Oct-95	261.7	521.7
41	28 60.0 S	079 59.9 E	9-Oct-95	261.2	520.9
42	27 59.7 S	080 00.2 E	9-Oct-95	261.2	520.9
43	26 59.8 S	079 59.9 E	9-Oct-95	261.2	520.9
44	25 59.4 S	079 59.6 E	9-Oct-95	261.2	520.9
45	25 00.4 S	079 59.7 E	10-Oct-95	261.2	520.9
46	24 00.9 S	079 59.1 E	10-Oct-95	261.2	520.9

Table 7. CFC Air values (interpolated to station locations, continued)
(Local time = GMT + 5 h)

Station	GMT (hhmm)	Latitude	Longitude	CFC-11 ppt	CFC-12 ppt
47	22 59.2 S	079 59.2 E	11-Oct-95	261.6	523.6
48	22 00.9 S	080 00.1 E	11-Oct-95	261.6	523.6
49	20 59.8 S	079 59.3 E	11-Oct-95	261.6	523.6
50	19 59.5 S	080 00.5 E	12-Oct-95	261.6	523.6
51	18 59.4 S	080 00.1 E	12-Oct-95	261.6	523.6
52	18 00.0 S	080 00.3 E	12-Oct-95	261.5	523.6
53	16 58.9 S	079 59.6 E	13-Oct-95	261.5	524.3
54	15 59.6 S	080 00.0 E	13-Oct-95	261.5	524.3
55	14 59.5 S	079 60.0 E	13-Oct-95	261.5	524.3
56	14 29.9 S	079 60.0 E	14-Oct-95	261.5	524.3
57	13 59.9 S	079 59.9 E	14-Oct-95	261.5	524.3
58	13 30.1 S	079 60.0 E	14-Oct-95	261.5	524.3
59	13 00.7 S	079 59.6 E	14-Oct-95	261.5	524.3
60	12 29.8 S	080 00.0 E	14-Oct-95	261.8	523.5
61	11 59.6 S	080 00.1 E	15-Oct-95	261.9	522.7
62	11 29.9 S	079 59.8 E	15-Oct-95	261.9	522.7
63	10 59.4 S	079 59.5 E	15-Oct-95	261.9	522.7
64	10 29.5 S	080 00.2 E	15-Oct-95	261.9	522.7
65	09 59.4 S	080 00.9 E	16-Oct-95	261.9	522.7
66	09 29.9 S	080 00.3 E	16-Oct-95	261.9	522.7
67	08 60.0 S	080 00.6 E	16-Oct-95	261.9	522.7
68	08 29.7 S	080 00.2 E	16-Oct-95	261.9	522.7
69	07 59.9 S	080 00.3 E	17-Oct-95	261.9	522.5
70	07 30.1 S	079 59.7 E	17-Oct-95	261.9	522.5
71	07 00.0 S	079 59.4 E	17-Oct-95	262.1	522.0
72	06 29.9 S	079 59.3 E	17-Oct-95	262.1	522.0
73	05 59.7 S	079 58.4 E	18-Oct-95	262.1	522.0
74	05 30.0 S	079 59.1 E	18-Oct-95	262.1	522.0
75	04 59.8 S	080 00.3 E	18-Oct-95	262.1	522.0
76	04 29.7 S	080 00.2 E	18-Oct-95	262.1	522.0
77	03 59.5 S	080 00.2 E	19-Oct-95	262.1	522.0
78	03 29.9 S	080 00.4 E	19-Oct-95	262.1	522.0
79	02 59.5 S	080 00.0 E	19-Oct-95	262.3	522.1
80	02 30.2 S	080 00.3 E	19-Oct-95	262.3	522.1
81	02 00.3 S	080 00.4 E	20-Oct-95	262.3	522.2
82	01 30.0 S	080 00.4 E	20-Oct-95	262.3	522.2
83	01 00.3 S	080 00.9 E	20-Oct-95	262.3	522.2
84	00 45.6 S	079 60.0 E	20-Oct-95	262.3	522.2
85	00 30.4 S	080 00.4 E	20-Oct-95	262.3	522.2
86	00 15.3 S	080 00.4 E	21-Oct-95	262.3	522.2
87	00 00.4 S	080 01.3 E	21-Oct-95	262.3	522.2
88	00 14.7 N	080 00.4 E	21-Oct-95	262.3	522.2
89	00 29.7 N	080 00.2 E	21-Oct-95	262.3	522.2
90	00 44.5 N	080 00.1 E	21-Oct-95	262.3	522.2
91	00 59.6 N	080 00.3 E	21-Oct-95	262.3	522.2

Table 7. CFC Air values (interpolated to station locations, continued)
(Local time = GMT + 5)

Station	GMT (hhmm)	Latitude	Longitude	CFC-11 ppt	CFC-12 ppt
92	01 28.6 N	080 00.2 E	22-Oct-95	262.3	522.2
93	01 59.8 N	080 00.0 E	22-Oct-95	262.3	522.2
94	02 29.9 N	079 59.8 E	22-Oct-95	262.3	522.2
95	02 59.5 N	080 00.1 E	22-Oct-95	262.3	522.2
96	03 29.2 N	079 59.8 E	23-Oct-95	262.3	522.2
97	03 60.0 N	079 59.9 E	23-Oct-95	262.3	522.2
98	04 29.6 N	080 00.1 E	23-Oct-95	262.3	522.2
99	04 59.6 N	079 59.4 E	23-Oct-95	262.3	522.2
100	05 31.0 N	079 59.4 E	24-Oct-95	262.3	522.2
101	05 47.2 N	079 59.8 E	24-Oct-95	262.3	522.2

Appendix A. WOCE Quality Control Flags

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

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
9	Sample not drawn for measurement

Appendix B. Bottle Data

I8NR
NOAA Ship Baldridge

LATITUDE 40° 2.34' S
LONGITUDE 109° 21.2' E

STATION 2 DATE 9/24/1995
CAST 2 GMT 10:48
CTD CAST 223

Bottle Number	CTD			Bottle			CTD			Bottle			CO2		F* TA µmol/kg	F* pH	F* DIC µmol/kg	F* CFC-11 pmol/kg	F* CFC-12 pmol/kg	F* Si(OH) ₄ µmol/kg	F* PO ₄ µmol/kg	F* NO ₃ µmol/kg	F* NO ₂ µmol/kg	F* AOU	Sigma Theta	O ₂ µmol/kg	O ₂ µmol/kg	F* Temp °C	F* Pot °C	F* Salinity	Chi-a µg/l	Phaeo µg/l						
	db	Pressure	Salinity	db	Pressure	Salinity	db	Pressure	Salinity	db	Pressure	Salinity	db	Pressure																			Salinity	F* FOC	F* TON	F* TOC		
224	2	7.1	34.819	34.820	2	10.559	10.558	26.715	280.2	274.3	2	-2.5	0.27	2	9.10	2	0.74	2	2.26	2	3.661	6	1.855	6	509.0	2	2086.7	2	7.8684	2	2304	2	50.00	2	3.58	2	-9	-9
223	2	29.7	34.819	34.818	2	10.556	10.552	26.714	278.6	274.7	2	-2.8	0.24	2	9.05	2	0.73	2	2.18	2	3.702	2	1.882	2	510.5	2	2087.3	6	7.8685	2	2298	2	50.37	2	-9.00	9	-9	-9
222	2	57.1	34.820	34.818	2	10.564	10.557	26.713	277.7	273.9	2	-2.1	0.24	2	9.05	2	0.73	2	2.18	2	3.632	2	1.861	2	509.3	2	2085.4	2	7.8684	2	2301	2	50.60	2	3.39	2	-9	-9
221	2	91.8	34.820	34.817	2	10.571	10.560	26.712	276.6	274.2	2	-2.4	0.23	2	9.05	2	0.73	2	2.18	2	3.645	2	1.842	2	509.3	2	2089.5	2	7.8692	2	-9	9	50.18	2	3.57	2	-9	-9
220	2	119.8	34.816	34.815	2	10.539	10.525	26.717	274.8	273.0	2	-1.0	0.25	2	9.14	2	0.74	2	2.19	2	3.632	2	1.869	2	510.9	2	2091.4	2	7.8676	2	2301	2	49.89	2	3.38	2	-9	-9
219	2	149.7	34.816	34.815	2	10.457	10.439	26.732	271.7	270.5	2	2.0	0.31	2	9.42	2	0.76	2	2.19	2	3.624	2	1.841	2	518.2	2	2092.1	2	7.8634	2	2297	9	49.21	2	3.50	2	-9	-9
218	2	252.5	34.810	34.809	2	10.229	10.199	26.769	267.8	266.9	2	7.1	0.13	2	10.71	2	0.85	2	2.91	2	3.632	6	1.854	6	537.0	2	2095.0	2	7.8513	2	2304	2	49.04	2	3.36	2	-9	-9
217	2	348.5	34.717	34.717	2	9.597	9.557	26.806	257.7	257.2	2	20.8	0.00	2	13.70	2	1.00	2	4.02	2	3.610	2	1.809	2	585.5	2	2106.1	2	7.8177	2	2295	2	49.31	2	3.38	2	-9	-9
216	2	508.1	34.678	34.677	2	9.308	9.251	26.825	256.3	257.0	2	23.0	0.00	2	14.81	2	1.07	2	4.38	2	3.570	2	1.791	2	597.9	2	2108.4	2	7.8099	2	-9	9	45.55	2	2.83	2	-9	-9
215	2	653.1	34.676	34.675	2	9.202	9.129	26.843	257.1	260.6	2	20.1	0.00	2	14.84	2	1.09	2	4.80	2	3.472	2	1.741	2	593.0	2	2107.4	2	7.8111	2	2297	2	-9.00	9	-9.00	9	-9	-9
214	2	801.7	34.555	34.554	2	8.341	8.255	26.885	235.5	238.9	2	47.6	0.00	2	18.90	2	1.33	2	7.32	2	2.882	2	1.418	2	673.3	2	2125.7	2	7.7641	2	2294	2	-9.00	9	-9.00	9	-9	-9
213	2	998.8	34.409	34.409	2	6.050	5.959	27.091	202.3	204.1	2	98.3	0.00	2	26.82	2	1.86	2	20.03	2	1.338	2	0.632	2	885.2	2	2168.2	2	7.6600	2	2294	2	-9.00	9	-9.00	9	-9	-9
212	2	1297.2	34.370	-9.000	9	3.670	3.573	27.328	196.9	-9.0	9	-9.0	-9.00	9	-9.00	9	-9.00	9	-9.00	9	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	-9
211	2	1701.0	34.580	34.580	2	2.823	2.700	27.577	162.1	162.8	3	164.2	0.00	2	33.59	2	2.40	2	72.20	2	0.041	2	0.007	2	1194.0	2	2255.6	2	7.5561	2	-9	9	44.49	2	-9.00	9	-9	-9
210	2	1896.3	34.645	34.644	2	2.642	2.505	27.645	163.2	164.6	3	163.8	0.00	2	33.04	2	2.33	2	78.76	2	0.029	2	0.004	2	1169.3	2	2256.9	2	7.5636	2	-9	9	-9.00	9	-9.00	9	-9	-9
209	2	2201.4	34.708	34.707	2	2.380	2.220	27.719	168.4	169.8	3	160.9	0.00	2	32.19	2	2.27	2	86.68	2	0.004	2	-0.004	2	1125.5	2	2264.8	2	7.5801	2	2364	2	-9.00	9	-9.00	9	-9	-9
208	2	2498.7	34.736	34.736	2	2.151	1.968	27.763	179.7	195.4	3	137.3	0.00	2	31.07	2	2.18	2	88.15	2	0.012	2	-0.002	2	1082.1	2	2258.8	2	7.5950	2	2363	2	-9.00	9	-9.00	9	-9	-9
207	2	2795.5	34.747	34.746	2	1.920	1.713	27.790	187.9	190.7	2	144.2	0.00	2	30.53	2	2.13	2	90.92	2	0.006	2	-0.004	2	1052.8	2	2254.6	2	7.6058	2	-9	9	41.67	2	-9.00	9	-9	-9
206	2	3094.0	34.745	34.744	2	1.675	1.445	27.809	194.0	197.3	2	139.9	0.00	2	30.52	2	2.12	2	95.68	2	0.012	2	-0.003	2	1045.4	2	2255.3	2	7.6082	2	2363	2	-9.00	9	-9.00	9	-9	-9
205	2	3397.2	34.734	34.732	2	1.353	1.101	27.823	198.7	201.6	3	138.6	0.00	2	30.82	2	2.15	2	104.10	2	0.008	2	-0.003	2	1043.1	2	2257.4	2	7.6068	2	-9	9	-9.00	9	-9.00	9	-9	-9
204	2	3702.7	34.722	34.721	2	1.099	0.822	27.833	203.2	205.2	2	137.5	0.00	2	31.18	2	2.20	2	110.88	2	0.019	2	-0.001	2	1055.5	2	2260.7	2	7.6059	2	2366	2	-9.00	9	-9.00	9	-9	-9
203	2	4001.1	34.711	34.710	2	0.896	0.594	27.838	207.3	209.5	2	135.3	0.00	2	31.44	2	2.20	2	115.73	2	0.032	2	0.010	2	1063.0	2	2260.6	2	7.6018	2	-9	9	41.45	2	-9.00	9	-9	-9
202	2	4300.9	34.708	34.707	2	0.836	0.503	27.841	209.9	210.2	2	135.4	0.00	2	31.51	2	2.22	2	117.36	2	0.040	2	0.007	2	1062.5	2	2262.4	2	7.6022	2	2370	2	-9.00	9	-9.00	9	-9	-9
201	2	4672.4	34.707	-9.000	9	0.855	0.480	27.843	212.0	210.3	2	135.5	0.00	2	31.68	2	2.21	2	118.10	2	0.042	2	0.010	2	1086.1	2	2263.9	6	7.6028	2	2375	2	-9.00	9	-9.00	9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR
NOAA Ship Baldrige

STATION 3 DATE 9/28/1995
 CAST 2 GMT 08:40
 CTD CAST 224

LATITUDE 43° 0.00' S
 LONGITUDE 95° 1.12' E

Bottle Number	CTD										Bottle										fCO2																
	db	Pressure	Salinity	Temp	Pot	Sigma	O2	O2	Theta	Theta	AOU	NO2	NO3	PO4	Si(OH)4	F* CFC-11	F* CFC-12	F* at 20 °C	H ₂ O	DIC	F*	pH	TA	TOC	F*	Chl-a											
		°C	°C	°C	°C	kg/m ³	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	µg/l										
323	2	4.5	34.848	34.847	2	10.526	10.525	26.742	273.1	269.9	2	2.1	0.13	2	10.78	2	0.81	2	4.04	2	3.524	2	2.172	3	518.3	2	2094.9	2	7.8581	2	2301	2	53.58	2	4.33	2	-9
322	2	50.0	34.847	34.848	2	10.497	10.491	26.749	271.6	269.8	2	2.4	0.12	2	10.78	2	0.81	2	4.03	2	3.513	2	1.794	2	517.9	2	2093.5	6	7.8592	2	2302	2	53.52	2	-9.00	9	-9
321	2	147.5	34.847	34.847	2	10.497	10.479	26.750	267.2	268.4	2	3.8	0.13	2	10.79	2	0.81	2	4.02	2	3.538	2	1.788	2	531.6	2	2094.6	2	7.8567	2	2303	2	51.51	2	4.48	2	-9
320	2	200.0	34.846	34.846	2	10.499	10.475	26.750	266.0	266.9	2	5.4	0.12	2	10.79	2	0.82	2	4.01	2	3.513	2	1.775	2	519.4	2	2095.7	2	7.8563	2	2301	2	52.37	2	3.96	2	-9
319	2	299.1	34.846	34.846	2	10.508	10.472	26.750	264.4	267.4	2	4.9	0.13	2	10.80	2	0.82	2	4.00	2	3.490	2	1.792	2	526.6	2	2095.7	2	7.8564	2	2302	2	52.35	2	4.13	2	-9
318	2	396.6	34.841	34.840	2	10.485	10.437	26.752	260.6	267.0	2	5.5	0.11	2	11.07	2	0.88	2	4.16	2	3.438	2	1.758	2	531.1	2	2096.2	2	7.8492	2	2304	2	49.93	2	3.98	2	-9
317	2	500.7	34.736	34.739	2	9.616	9.559	26.823	237.2	240.3	2	37.7	0.00	2	15.50	2	1.12	2	6.81	2	2.952	6	1.457	6	610.6	2	2117.6	2	7.8002	2	2297	2	44.56	2	3.29	2	-9
316	2	597.3	34.610	34.610	2	8.616	8.552	26.884	219.9	222.1	2	62.4	0.00	2	19.39	2	1.37	2	9.98	2	2.442	2	1.177	2	705.2	2	2134.9	2	7.7510	2	2294	2	45.15	2	-9.00	9	-9
315	2	701.5	34.502	34.500	2	7.409	7.339	26.978	212.9	214.4	2	78.3	0.00	2	22.90	2	1.60	2	14.22	2	1.788	2	0.897	2	-9.0	9	2150.0	2	7.7086	2	2296	2	-9.00	2	-9.00	9	-9
314	2	842.2	34.398	34.397	2	5.917	5.842	27.096	212.8	213.3	2	90.0	0.00	2	26.46	2	1.84	2	20.57	2	1.848	2	0.849	2	868.9	2	2169.0	2	7.6659	2	2293	2	-9.00	2	-9.00	9	-9
313	2	999.0	34.347	34.349	2	4.598	4.518	27.213	210.4	210.3	2	102.9	0.00	2	29.42	2	2.04	2	29.58	2	1.336	2	0.607	2	959.3	2	2187.7	2	7.6291	2	2300	2	43.09	2	-9.00	9	-9
312	2	1197.5	34.342	34.341	2	3.454	3.367	27.325	209.5	209.3	2	112.9	0.00	2	31.43	2	2.20	2	40.72	2	1.484	2	0.688	2	1032.6	2	2205.6	2	7.6112	2	2311	2	-9.00	2	-9.00	9	-9
311	2	1397.4	34.444	34.443	2	3.020	2.921	27.448	188.5	187.6	2	137.9	0.00	2	33.08	2	2.31	2	55.23	2	0.678	2	0.292	3	1126.3	2	2231.0	2	7.5697	2	2322	2	-9.00	2	-9.00	9	-9
310	2	1600.2	34.544	34.541	2	2.756	2.643	27.551	179.1	177.7	2	149.9	0.00	2	33.08	2	2.31	2	64.80	2	0.346	2	0.143	3	1152.7	2	2245.6	2	7.5615	2	2332	2	42.09	2	-9.00	9	-9
309	2	1799.7	34.622	34.622	2	2.608	2.480	27.629	179.0	177.4	2	151.3	0.00	2	32.17	2	2.24	2	69.94	2	0.185	2	0.081	3	1142.2	2	2246.2	2	7.5674	2	2343	2	-9.00	2	-9.00	9	-9
308	2	1992.6	34.675	34.675	2	2.525	2.381	27.680	182.8	181.6	2	147.8	0.00	2	31.17	2	2.17	2	71.70	2	0.106	2	0.032	3	1115.4	2	2244.2	2	7.5801	2	2343	2	-9.00	2	-9.00	9	-9
307	2	2201.3	34.726	34.726	2	2.370	2.210	27.735	189.7	188.4	2	142.3	0.00	2	30.21	2	2.09	2	75.05	2	0.050	2	0.010	2	1056.4	2	2242.2	2	7.5967	2	2348	2	41.73	2	-9.00	9	-9
306	2	2398.5	34.746	34.746	2	2.217	2.042	27.765	194.3	192.8	2	139.3	0.00	2	29.86	2	2.05	2	79.34	2	0.036	2	0.007	2	1039.2	2	2242.9	2	7.6056	2	2351	2	-9.00	2	-9.00	9	-9
305	2	2597.9	34.754	34.754	2	2.028	1.838	27.787	197.9	197.5	2	136.3	0.00	2	29.73	2	2.04	2	85.18	2	0.025	2	0.005	2	1032.1	2	2246.6	2	7.6105	2	2356	2	-9.00	2	-9.00	9	-9
304	2	2800.3	34.751	34.751	2	1.815	1.610	27.802	200.3	198.3	2	137.4	0.00	2	29.89	2	2.07	2	92.02	2	0.030	2	0.003	2	1027.0	2	2250.4	2	7.6111	2	2360	2	-9.00	4	-9.00	9	-9
303	2	3004.1	34.745	34.745	2	1.650	1.429	27.811	202.1	199.9	2	137.4	0.00	2	30.22	2	2.10	2	98.05	2	0.039	2	0.004	2	1034.3	2	2251.9	2	7.6087	2	2363	2	-9.00	2	-9.00	9	-9
302	2	3201.4	34.743	34.743	2	1.584	1.345	27.815	203.4	200.2	2	137.9	0.00	2	30.35	2	2.10	2	100.71	2	0.033	2	0.005	2	1024.8	2	2254.6	6	7.6074	2	2364	2	-9.00	2	-9.00	9	-9
301	2	3260.7	34.741	34.743	2	1.583	1.339	27.816	203.9	200.3	2	137.8	0.00	2	30.39	2	2.11	2	100.90	2	-9.000	9	-9.000	9	1050.8	2	2256.6	2	7.6067	2	2368	2	42.21	2	-9.00	9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

18NR
NOAA Ship Baldrige

STATION 4 DATE 9/28/1995
CAST 1 GMT 15:58
CTD CAST 225

LATITUDE 41° 59.51' S
LONGITUDE 95° 1.03' E

Bottle Number	F* Pressure db	CTD		Bottle		Sigma T	Theta	Pot. T °C	F* Temp °C	CTD		Bottle		1002																							
		Salinity	Salinity	O2	O2					AOU	NO2	NO3	F* PO4	F* Si(OH)4	F* CFC-11	F* CFC-12	F* at 20 °C	DIC	F* pH	F* TA	F* TOC	F* TON	Chi-a														
424	2	3.5	34.920	34.919	2	10.766	10.766	271.8	267.8	2	2.6	0.12	2	9.86	2	0.75	2	3.82	2	3.488	2	1.887	2	524.8	2	2094.0	2	7.8641	2	-9	9	51.09	2	3.89	2	-9	-9
423	2	52.3	34.920	34.918	2	10.773	10.767	270.5	267.6	2	2.8	0.12	2	9.85	2	0.75	2	3.81	2	3.509	2	1.789	2	523.7	2	2093.8	2	7.8649	2	-9	9	51.86	2	3.17	2	-9	-9
422	2	101.7	34.920	34.917	2	10.779	10.767	267.5	269.4	2	3.0	0.12	2	9.97	2	0.75	2	3.80	2	3.519	2	1.782	2	528.1	2	2094.1	2	7.8637	2	2306	2	51.17	2	3.62	2	-9	-9
421	2	150.7	34.920	34.917	2	10.787	10.769	267.5	268.0	2	3.3	0.12	2	9.99	2	0.76	2	3.76	2	-9.000	2	-9.000	2	527.9	2	2094.5	2	7.8645	2	2308	2	50.80	2	3.62	2	-9	-9
420	2	201.5	34.920	34.918	2	10.783	10.768	267.5	266.6	2	3.1	0.11	2	10.00	2	0.76	2	3.77	2	-9.000	2	-9.000	2	524.0	2	2094.8	2	7.8833	2	-9	9	50.41	2	3.09	2	-9	-9
419	2	302.9	34.920	34.919	2	10.799	10.762	267.6	264.7	2	5.7	0.10	2	10.30	2	0.77	2	3.80	2	3.412	2	1.777	2	533.6	2	2094.7	2	7.8605	2	2307	2	49.33	2	3.67	2	-9	-9
418	2	400.3	34.862	34.883	2	10.457	10.409	267.7	264.5	2	8.1	0.01	2	12.59	2	0.91	2	4.67	2	-9.000	2	-9.000	2	556.8	2	2107.2	2	7.8318	2	2302	2	46.73	2	3.22	2	-9	-9
417	2	503.5	34.806	34.805	2	10.071	10.012	267.8	250.1	2	25.0	0.00	2	13.76	2	1.08	2	4.92	2	3.214	2	1.629	2	568.9	2	2110.8	2	7.8217	2	2287	2	46.12	2	2.57	2	-9	-9
416	2	804.7	34.749	34.747	2	9.684	9.614	241.2	243.7	2	33.9	0.00	2	15.36	2	1.08	2	5.79	2	-9.000	2	-9.000	2	591.6	2	2115.8	2	7.8045	2	2297	2	45.17	2	-9.00	2	-9	-9
415	2	705.4	34.629	34.629	2	8.819	8.741	225.4	228.4	2	54.9	0.00	2	18.88	2	1.30	2	7.81	2	-9.000	2	-9.000	2	685.4	2	2129.9	2	7.7645	2	-9	9	-9.00	2	-9.00	2	-9	-9
414	9	802.4	34.534	-9.000	9	7.831	7.748	211.6	-9.0	2	-9.0	-9.00	2	-9.00	2	-9.00	2	-9.00	2	-9.000	2	-9.000	2	-9.0	2	-9.0	2	-9.0000	2	-9	9	-9.00	2	-9.00	2	-9	-9
413	2	902.0	34.440	34.439	2	6.590	6.505	210.4	211.1	2	87.4	0.00	2	25.55	2	1.72	2	17.36	2	-9.000	2	-9.000	2	828.9	2	2162.1	2	7.6613	2	2290	2	43.34	2	-9.00	2	-9	-9
412	2	1004.6	34.383	34.382	2	5.520	5.433	207.8	208.4	2	97.9	0.00	2	28.26	2	1.90	2	23.23	2	1.431	2	0.655	2	890.9	2	2178.3	2	7.6502	2	2288	2	-9.00	2	-9.00	2	-9	-9
411	2	1200.7	34.350	34.348	2	4.090	3.997	206.3	206.1	2	111.1	0.00	2	31.06	2	2.11	2	35.29	2	-9.000	2	-9.000	2	970.1	2	2199.9	2	7.6132	2	-9	9	-9.00	2	-9.00	2	-9	-9
410	3	1398.6	34.417	34.416	3	3.344	3.241	187.9	187.0	2	136.0	0.00	2	33.21	2	2.27	2	51.29	2	-9.000	2	-9.000	2	1101.2	2	2226.2	2	7.5788	2	2316	2	41.90	2	-9.00	2	-9	-9
409	2	1803.8	34.515	34.514	2	2.967	2.851	170.9	169.3	2	156.6	0.00	2	34.20	2	2.34	2	65.78	2	-9.000	2	-9.000	2	1163.0	2	2248.0	2	7.5560	2	2333	2	-9.00	2	-9.00	2	-9	-9
408	2	1802.6	34.592	34.590	2	2.723	2.593	170.2	161.6	2	146.3	0.00	2	33.61	2	2.31	2	72.38	2	0.140	2	0.040	2	1162.7	2	2253.8	2	7.5593	2	-9	9	-9.00	2	-9.00	2	-9	-9
407	2	1981.6	34.658	34.657	2	2.559	2.416	172.3	171.5	2	157.7	0.00	2	32.80	2	2.24	2	77.42	2	-9.000	2	-9.000	2	1118.9	2	2256.3	2	7.5690	2	2348	2	41.93	2	-9.00	2	-9	-9
406	2	2193.6	34.697	34.696	2	2.448	2.287	177.2	176.4	2	153.7	0.00	2	31.93	2	2.18	2	79.95	2	-9.000	2	-9.000	2	1095.4	2	2255.5	2	7.5781	2	2350	2	-9.00	2	-9.00	2	-9	-9
405	2	2401.2	34.731	34.729	2	2.311	2.134	187.4	188.2	2	143.1	0.00	2	30.79	2	2.09	2	78.76	2	-9.000	2	-9.000	2	1049.6	2	2247.7	2	7.5949	2	-9	9	-9.00	2	-9.00	2	-9	-9
404	2	2593.3	34.752	34.751	2	2.138	1.946	194.7	193.8	2	139.1	0.00	2	30.14	2	2.03	2	81.45	2	0.021	2	-0.002	2	1028.4	2	2245.7	2	7.6078	2	2353	2	41.86	2	-9.00	2	-9	-9
403	2	2791.8	34.755	34.753	2	1.956	1.749	197.8	197.1	2	137.4	0.00	2	30.13	2	2.04	2	87.06	2	0.018	2	-0.001	2	1020.0	2	2247.8	2	7.6094	2	-9	9	-9.00	2	-9.00	2	-9	-9
402	2	2997.5	34.748	34.746	2	1.688	1.467	200.9	199.2	2	137.8	0.00	2	30.56	2	2.06	2	96.01	2	0.017	2	0.001	2	1027.9	2	2255.0	2	7.6087	2	-9	9	-9.00	2	-9.00	2	-9	-9
401	2	3294.6	34.740	34.739	2	1.508	1.262	203.6	200.6	2	138.2	0.00	2	30.93	2	2.09	2	102.93	2	0.019	2	0.000	2	1035.1	2	2258.1	2	7.6044	2	2366	2	41.84	2	-9.00	2	-9	-9

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

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

*** PSS-78 scale

**** ITS-90 scale

18NR
NOAA Ship Baldrige

STATION 5 DATE 9/28/1995
CAST 1 GMT 23:06
CTD CAST 226

LATITUDE 40° 59.95' S
LONGITUDE 94° 59.9' E

Bottle Number	CTD		Bottle		CTD		Bottle		1002												Chi-a µg/l																
	F* db	Salinity	Temp	Pot	Theta	O2	Sigma	AOU	NO2	NO3	PO4	Si(OH)4	F* µmol/kg	F* µmol/kg	F* µmol/kg	F* µmol/kg	DIC	pH	F* µmol/kg	TA		F* µmol/kg	TOC	F* µmol/l	TON	F* µmol/l											
	°C	°C	°C	°C	°C	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	µmol/kg											
523	2	3.7	34.940	34.942	10.845	10.845	26.759	272.9	267.6	2	2.3	0.16	2	9.50	2	0.75	2	3.34	2	3.530	2	1.776	2	512.9	2	2092.6	2	7.8654	2	2307	2	50.41	3	4.04	2	-9	
522	2	100.0	34.939	34.940	10.866	10.854	26.756	271.0	267.7	2	2.2	0.16	2	9.51	2	0.75	2	3.40	2	3.535	2	1.791	2	510.1	2	2094.3	6	7.8647	2	2306	2	52.87	2	3.85	2	-9	
521	2	149.4	34.939	34.938	10.873	10.855	26.754	270.2	267.1	2	2.8	0.17	2	9.51	2	0.75	2	3.41	2	3.498	2	1.762	2	518.8	2	2095.9	2	7.8659	2	2303	2	52.18	2	3.69	2	-9	
520	2	200.5	34.939	34.939	10.878	10.853	26.755	269.4	267.6	2	2.3	0.17	2	9.52	2	0.75	2	3.43	2	3.553	2	1.804	2	514.4	2	2095.4	2	7.8653	2	2306	2	52.28	2	3.93	2	-9	
519	2	299.9	34.925	34.924	10.810	10.773	26.758	264.4	264.7	2	5.7	0.13	2	9.91	2	0.78	2	3.54	2	3.508	2	1.767	2	522.9	2	2097.7	2	7.8608	2	2306	2	50.98	2	3.79	2	-9	
518	2	400.5	34.872	34.871	10.507	10.459	26.772	253.3	253.9	2	18.4	0.03	2	11.93	2	0.90	2	4.28	2	3.375	2	1.689	2	554.2	2	2103.9	2	7.8392	2	2286	3	48.42	2	3.58	2	-9	
517	2	498.0	34.824	34.822	10.146	10.087	26.798	253.0	255.2	2	19.4	0.00	2	12.70	2	0.95	2	4.28	2	3.488	2	1.721	2	573.7	2	2108.0	2	7.8284	2	2289	2	48.24	2	3.45	2	-9	
516	2	573.4	34.793	-9.000	9	9.946	9.879	26.811	252.7	255.3	2	20.6	0.00	2	13.28	2	0.98	2	4.45	2	3.435	2	1.688	2	577.2	2	2106.8	2	7.8231	2	2300	2	47.79	2	3.33	2	-9
515	2	698.2	34.645	34.643	8.876	8.898	26.855	234.5	236.8	2	45.5	0.00	2	17.55	2	1.25	2	6.78	2	2.837	6	1.371	6	646.2	2	2125.9	2	7.7756	2	2293	2	-9.00	9	-9.00	9	-9	
514	2	908.6	34.455	34.454	6.743	6.656	27.036	207.1	207.3	2	90.1	0.00	2	25.13	2	1.74	2	17.05	2	1.579	2	0.729	2	839.2	2	2161.2	2	7.6811	2	2295	2	-9.00	9	-9.00	9	-9	
513	2	997.3	34.374	34.377	5.500	5.413	27.133	213.2	212.8	2	93.7	0.00	2	27.54	2	1.91	2	22.46	2	1.703	2	0.780	2	898.2	2	2172.3	2	7.6598	2	2294	2	45.17	2	-9.00	9	-9	
512	2	1200.2	34.350	34.348	3.998	3.906	27.277	206.4	206.3	2	111.6	0.00	2	30.84	2	2.14	2	36.12	2	1.158	2	0.518	3	1004.4	2	2200.7	2	7.6112	2	2306	2	-9.00	9	-9.00	9	-9	
511	2	1402.4	34.413	34.410	3.251	3.149	27.400	191.9	191.1	2	132.7	0.00	2	32.72	2	2.29	2	50.44	2	0.712	2	0.308	3	1103.7	2	2221.7	2	7.5793	2	2318	2	-9.00	9	-9.00	9	-9	
510	2	1596.0	34.513	34.511	2.942	2.827	27.510	172.6	171.8	2	154.3	0.00	2	33.67	2	2.36	2	64.97	2	0.213	2	0.088	3	1177.0	2	2244.3	2	7.5576	2	2333	2	42.19	2	-9.00	9	-9	
509	2	1799.2	34.599	34.597	2.701	2.572	27.602	170.2	169.1	2	158.9	0.00	2	33.26	2	2.33	2	72.89	2	0.113	2	0.036	3	1177.6	2	2253.4	2	7.5569	2	2342	2	-9.00	9	-9.00	9	-9	
508	2	2002.9	34.663	34.681	2.541	2.396	27.684	173.2	175.3	2	154.0	0.00	2	31.95	2	2.22	2	78.39	2	0.047	2	0.010	2	1129.8	2	2252.5	2	7.5739	2	2352	2	-9.00	9	-9.00	9	-9	
507	2	2203.4	34.707	34.706	2.402	2.241	27.717	181.6	180.8	2	149.7	0.00	2	31.23	2	2.17	2	78.09	2	0.044	2	0.009	2	1095.8	2	2249.9	2	7.5828	2	2348	2	41.96	2	-9.00	9	-9	
506	2	2397.2	34.735	34.734	2.258	2.082	27.752	187.1	186.3	2	145.5	0.00	2	30.36	2	2.12	2	81.20	2	0.021	2	0.003	2	1067.8	2	2247.9	2	7.5952	2	2353	2	-9.00	9	-9.00	9	-9	
505	2	2602.6	34.750	34.748	2.095	1.903	27.777	191.9	191.6	2	141.6	0.00	2	30.25	2	2.10	2	85.01	2	0.013	2	0.000	2	1050.1	2	2252.5	2	7.6039	2	2359	2	-9.00	9	-9.00	9	-9	
504	2	2798.6	34.752	34.751	1.916	1.709	27.795	195.6	195.4	2	139.5	0.00	2	30.15	2	2.08	2	89.55	2	0.010	2	0.001	2	1039.7	2	2253.5	2	7.6072	2	2358	2	42.91	2	-9.00	9	-9	
503	2	2999.5	34.748	34.747	1.671	1.450	27.811	209.4	199.3	2	137.8	0.00	2	30.21	2	2.09	2	95.85	2	0.017	2	0.001	2	1037.0	2	2250.0	2	7.6071	2	2360	2	-9.00	9	-9.00	9	-9	
502	2	3200.3	34.740	34.738	1.454	1.219	27.820	203.3	197.3	2	141.9	0.00	2	30.67	2	2.12	2	102.81	2	0.024	2	0.001	2	1045.8	2	2260.0	6	7.6052	2	2362	2	-9.00	9	-9.00	9	-9	
501	2	3490.3	34.729	34.729	1.266	1.006	27.827	206.2	203.5	2	137.6	0.00	2	31.07	2	2.15	2	109.80	2	0.024	2	0.003	2	1059.6	2	2259.1	2	7.6035	2	2366	2	42.02	2	-9.00	9	-9	

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

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

*** PSS-78 scale

**** ITS-90 scale

18NR NOAA Ship Baldrige

STATION 6 DATE 9/29/1995
 CAST 2 GMT 07:09
 CTD CAST 227

LATITUDE 39° 59.60' S
 LONGITUDE 95° 0.91' E

Bottle Number	CTD		Bottle		Sigma T _{theta}	O ₂ H ₂ O	O ₂ H ₂ O	F ₂ O ₂	F ₂ O ₂	NO ₂ H ₂ O	F ₂ NO ₃	F ₂ NO ₃	F ₂ PO ₄	F ₂ PO ₄	F ₂ Si(OH) ₄	F ₂ Si(OH) ₄	F ₂ CFC-11	F ₂ CFC-11	F ₂ CFC-12	F ₂ at 20°C	DIC H ₂ am	F ₂ DIC	pH	F ₂ TA	F ₂ TA	F ₂ TOC	F ₂ TOC	F ₂ Chl-a							
	db	Salinity	Temp	Pot																									Temp	Salinity	Temp	Pot	Temp	Salinity	Temp
624	4.1	34.948	34.947	11.044	11.043	26.727	273.7	267.7	2	1.1	0.06	2	9.36	2	0.70	2	3.24	2	3.506	8	1.770	6	509.8	2	2095.6	2	7.8674	2	2306	2	51.77	2	3.44	2	-9
623	48.6	34.949	34.947	10.958	10.952	26.743	271.9	267.5	2	1.8	0.07	2	9.36	2	0.70	2	3.24	2	3.511	2	1.770	2	513.0	2	2092.8	2	7.8672	2	2311	2	51.33	2	3.03	2	-9
622	98.3	34.948	34.946	10.957	10.945	26.744	270.4	267.1	2	2.2	0.06	2	9.36	2	0.70	2	3.24	2	-9.000	9	-9.000	9	511.4	2	-9.0	9	7.8680	2	2305	2	50.88	2	3.30	2	-9
621	147.9	34.947	34.945	10.956	10.938	26.744	269.5	266.9	2	2.5	0.06	2	9.36	2	0.70	2	3.25	2	3.523	2	1.775	2	512.2	2	2092.4	2	7.8682	2	2306	2	51.49	2	3.52	2	-9
620	203.7	34.946	34.945	10.958	10.933	26.745	268.6	266.0	2	3.4	0.06	2	9.36	2	0.70	2	3.25	2	-9.000	9	-9.000	9	513.8	2	2093.2	2	7.8662	2	2311	3	50.52	2	3.21	2	-9
619	300.0	34.944	34.942	10.948	10.911	26.747	265.8	266.2	2	3.3	0.05	2	9.42	2	0.69	2	3.25	2	3.319	2	1.766	2	516.0	2	2095.0	2	7.8644	2	2305	2	50.44	2	2.95	2	-9
618	404.0	34.888	34.888	10.626	10.577	26.765	252.6	252.8	2	18.8	-9.00	9	-9.00	9	-9.00	9	3.96	2	-9.000	9	-9.000	9	545.8	2	2102.6	2	7.8407	2	2304	2	48.86	2	2.72	2	-9
617	501.8	34.821	34.820	10.185	10.125	26.790	248.5	249.9	2	24.5	0.00	2	-9.00	9	1.00	2	4.67	2	3.306	2	1.633	2	572.3	2	2106.1	2	7.8236	2	2305	2	45.85	2	3.27	2	-9
616	600.5	34.749	34.748	9.681	9.611	26.821	240.3	244.5	2	33.1	0.00	2	15.10	2	1.11	2	5.57	2	-9.000	9	-9.000	9	593.9	2	2113.4	2	7.7610	2	-9	9	-9.00	9	-9.00	9	-9
615	703.0	34.629	34.628	8.799	8.722	26.871	223.2	226.1	2	57.3	0.00	2	18.78	2	1.34	2	7.51	2	2.477	2	1.179	2	679.3	2	2129.8	2	7.7115	2	2294	2	-9.00	9	-9.00	9	-9
614	799.2	34.523	34.521	7.667	7.586	26.959	211.4	212.0	2	79.0	0.00	2	22.70	2	1.60	2	12.65	2	-9.000	9	-9.000	9	773.5	2	2149.0	2	7.6505	2	2298	2	43.72	2	-9.00	9	-9
613	895.7	34.370	34.369	5.376	5.290	27.141	212.6	-9.0	9	-9.0	0.00	2	27.85	2	1.95	2	23.10	2	1.638	2	0.751	2	903.0	2	2175.5	2	7.6093	2	2305	2	-9.00	9	-9.00	9	-9
612	1188.7	34.355	34.352	3.940	3.849	27.286	204.2	204.2	2	114.1	0.00	2	31.04	2	2.18	2	37.27	2	1.051	2	0.466	3	1014.1	2	2200.3	2	7.5741	2	2322	2	-9.00	9	-9.00	9	-9
811	1402.3	34.427	34.425	3.227	3.125	27.415	185.6	185.0	2	138.9	0.00	2	33.05	2	2.33	2	53.24	2	-9.000	9	-9.000	9	1116.1	2	2232.0	2	7.5579	2	2337	2	42.01	2	-9.00	9	-9
610	1599.1	34.517	34.516	2.878	2.763	27.520	174.4	173.4	2	153.2	0.00	2	33.82	2	2.41	2	64.57	2	0.252	2	0.098	3	1171.7	2	2248.0	2	7.5626	2	2341	2	-9.00	9	-9.00	9	-9
609	1799.7	34.605	34.603	2.641	2.512	27.611	174.3	173.6	2	154.9	0.00	2	32.96	2	2.32	2	72.56	2	-9.000	9	-9.000	9	1156.7	2	2253.7	2	7.5750	2	2347	2	-9.00	9	-9.00	9	-9
608	2000.7	34.669	34.668	2.512	2.388	27.676	178.0	177.4	2	152.1	0.00	2	31.92	2	2.24	2	74.14	2	0.079	2	0.022	2	1136.7	2	2253.7	2	7.5887	2	2352	2	42.01	2	-9.00	9	-9
607	2195.5	34.713	34.712	2.390	2.230	27.722	183.9	183.6	2	147.0	0.00	2	30.96	2	2.16	2	76.07	2	-9.000	9	-9.000	9	1090.4	2	2250.3	2	7.6009	2	2353	2	-9.00	9	-9.00	9	-9
606	2399.8	34.743	34.741	2.234	2.058	27.760	190.5	190.3	2	141.6	0.00	2	30.09	2	2.09	2	79.25	2	0.026	2	0.004	2	1045.7	2	2246.2	2	7.6076	2	2356	2	-9.00	9	-9.00	9	-9
605	2600.1	34.754	34.752	2.060	1.869	27.783	194.5	194.6	2	138.9	0.00	2	29.91	2	2.08	2	83.82	2	-9.000	9	-9.000	9	1034.6	2	2249.4	2	7.6097	2	2366	2	41.87	2	-9.00	9	-9
604	2902.9	34.749	34.749	1.715	1.502	27.809	198.9	199.1	2	137.6	0.00	2	30.20	2	2.10	2	94.26	2	0.015	2	0.000	2	1033.9	2	2254.0	2	7.6040	2	2365	2	-9.00	9	-9.00	9	-9
603	3202.2	34.737	34.736	1.402	1.168	27.822	202.7	202.3	2	137.3	0.00	2	30.67	2	2.14	2	104.00	2	0.024	2	0.000	2	1043.2	2	2258.9	6	7.6036	2	2372	2	-9.00	9	-9.00	9	-9
602	3501.0	34.728	34.727	1.213	0.954	27.829	205.5	204.5	2	137.0	0.00	2	31.05	2	2.17	2	110.37	2	0.024	2	0.004	2	1051.3	2	2261.7	2	7.6036	2	2370	2	-9.00	9	-9.00	9	-9
601	3817.1	34.725	34.724	1.189	0.898	27.830	207.2	204.6	2	137.4	0.00	2	31.11	2	2.17	2	112.34	2	0.026	2	0.004	2	1057.0	2	2263.4	2	7.6049	2	2370	2	41.95	2	-9.00	9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR
NOAA Ship Baldridge

STATION 7 DATE 9/29/1995
 CAST 1 GMT 14:30
 CTD CAST 228

LATITUDE 39° 0.39' S
 LONGITUDE 95° 0.86' E

Bottle Number	CTD		Bottle		CTD		Bottle		fCO ₂		F* TA µmol/kg	F* pH	F* DIC µmol/kg	F* TA µmol/kg	F* TOC µmol/l	F* TON µmol/l	F* Chl-a µg/l															
	F* Pressure db	Salinity	Pot	Temp	Sigma	O ₂	F* AOU µmol/kg	F* NO ₃ µmol/kg	F* PO ₄ µmol/kg	F* Si(OH) ₄ µmol/kg								F* CFC-11 pmol/kg	F* CFC-12 pmol/kg	F* H ₂ O µmol/kg												
724	2	7.9	35.039	35.038	2	11.587	11.586	26.698	273.5	268.6	-3.1	0.23	2	6.96	2	0.60	2	2.08	2	1.786	2	1.786	2	2086.9	2	7.8856	2	2313	2	-9.00	9	-9
723	2	49.5	35.033	35.032	2	11.471	11.465	26.716	272.4	268.0	-1.8	0.23	2	6.94	2	0.59	2	2.10	2	1.767	2	1.767	2	2086.0	6	7.8854	2	2311	2	-9.00	9	-9
722	2	101.8	35.028	35.026	2	11.434	11.421	26.719	268.7	265.7	0.8	0.29	2	7.22	2	0.61	2	2.18	2	1.764	2	1.764	2	2087.4	2	7.8809	2	2316	2	-9.00	9	-9
721	2	149.2	35.028	35.026	2	11.438	11.419	26.719	267.8	265.2	1.3	0.29	2	7.20	2	0.61	2	2.14	2	1.756	2	1.756	2	2084.5	2	7.8809	2	2310	2	-9.00	9	-9
720	2	199.7	35.029	35.027	2	11.444	11.419	26.720	266.9	264.9	1.6	0.30	2	7.21	2	0.62	2	2.13	2	1.757	2	1.757	2	2088.1	2	7.8803	2	2316	2	-9.00	9	-9
719	2	300.9	34.996	34.996	2	11.254	11.216	26.733	259.7	258.2	2	0.16	2	8.66	2	0.70	2	2.57	2	1.743	2	1.743	2	2093.0	2	7.8656	2	2309	2	-9.00	9	-9
718	2	401.8	34.867	34.867	2	10.424	10.376	26.784	254.9	254.4	18.4	0.00	2	11.74	2	0.89	2	3.64	2	1.737	2	1.737	2	2099.4	2	7.8351	2	2305	2	-9.00	9	-9
717	2	489.8	34.818	34.817	2	10.131	10.073	26.797	255.3	255.3	19.4	0.00	2	12.48	2	0.93	2	4.09	2	1.698	2	1.698	2	2101.9	2	7.8279	2	-9	9	-9.00	9	-9
716	2	600.9	34.772	34.771	2	9.845	9.775	26.812	253.0	253.9	22.7	0.00	2	13.45	2	0.99	2	4.50	2	1.706	2	1.706	2	2104.5	2	7.8190	2	2299	2	-9.00	9	-9
715	2	701.3	34.695	34.694	2	9.359	9.279	26.834	244.4	246.2	33.6	0.00	2	15.56	2	1.13	2	5.38	2	1.559	2	1.559	2	2112.8	2	7.7975	2	2299	2	-9.00	9	-9
714	2	800.2	34.597	34.596	2	8.578	8.491	26.882	223.5	224.9	60.0	0.00	2	19.39	2	1.36	2	8.13	2	1.158	6	1.158	6	2129.8	2	7.7523	2	-9	9	-9.00	9	-9
713	3	899.0	34.516	34.516	2	7.571	7.479	26.970	206.5	206.7	85.0	0.00	2	23.18	2	1.62	2	13.43	2	0.745	2	0.745	2	2148.4	2	7.7035	2	2292	2	-9.00	9	-9
712	3	1005.3	34.418	34.417	3	6.116	6.024	27.089	203.7	203.1	98.9	0.00	2	26.84	2	1.85	2	20.75	2	0.583	2	0.583	2	2166.9	2	7.6591	2	2297	2	-9.00	9	-9
711	2	1203.7	34.362	34.361	2	4.190	4.096	27.268	201.3	204.0	112.4	0.00	2	30.75	2	2.14	2	36.33	2	0.358	3	0.358	3	2196.7	2	7.6109	2	-9	9	-9.00	9	-9
710	3	1398.3	34.436	34.434	3	3.489	3.395	27.396	178.9	188.4	133.3	0.00	2	33.06	2	2.32	2	54.51	2	0.282	2	0.282	2	2224.1	2	7.5727	2	2324	2	-9.00	9	-9
709	2	1602.1	34.517	34.515	2	3.076	2.959	27.502	167.5	167.8	157.2	0.00	2	33.79	2	2.37	2	66.97	2	0.131	2	0.131	2	2248.4	2	7.5569	2	2339	2	-9.00	9	-9
708	2	1798.6	34.597	34.597	2	2.783	2.652	27.595	165.1	164.3	163.1	0.00	2	33.49	2	2.35	2	75.31	2	0.064	2	0.064	2	2254.1	2	7.5567	2	2348	2	-9.00	9	-9
707	2	1998.9	34.658	34.659	2	2.602	2.456	27.661	168.3	177.9	150.9	0.00	2	32.76	2	2.29	2	80.55	2	0.030	6	0.030	6	2256.1	2	7.5662	2	2354	2	-9.00	9	-9
706	2	2201.9	34.702	34.699	2	2.435	2.274	27.708	173.8	187.6	142.6	0.00	2	31.94	2	2.23	2	84.30	2	0.009	2	0.009	2	2256.3	2	7.5779	2	2359	2	-9.00	9	-9
705	2	2501.4	34.739	34.737	2	2.202	2.017	27.760	186.4	199.0	133.3	0.00	2	30.54	2	2.12	2	84.53	2	0.005	2	0.005	2	2250.5	2	7.5973	2	2360	2	-9.00	9	-9
704	2	2802.3	34.752	34.751	2	1.901	1.694	27.796	196.0	198.1	138.9	0.00	2	29.94	2	2.07	2	89.62	2	0.007	2	0.007	2	2247.5	2	7.6087	2	2361	2	-9.00	9	-9
703	2	3096.3	34.744	34.742	2	1.572	1.344	27.814	200.5	200.4	137.7	0.00	2	30.31	2	2.10	2	99.19	2	0.005	2	0.005	2	2251.5	2	7.6062	2	2362	2	-9.00	9	-9
702	2	3398.7	34.732	34.732	2	1.299	1.048	27.827	204.7	203.6	137.1	0.00	2	30.73	2	2.13	2	107.81	2	0.022	2	0.022	2	2256.5	6	7.6034	2	-9	9	-9.00	9	-9
701	2	3779.3	34.723	34.722	2	1.125	0.840	27.832	208.3	205.8	136.8	0.00	2	31.16	2	2.16	2	113.89	2	0.015	2	0.015	2	2263.7	2	7.6039	2	2370	2	-9.00	9	-9

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

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

*** PSS-78 scale

**** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 8 DATE 9/29/1995
 CAST 1 GMT 22:19
 CTD CAST 229

LATITUDE 38° 0.03' S
 LONGITUDE 95° 0.15' E

Bottle Number	CTD				Bottle				fCO2																													
	Pressure db	Salinity	Temp °C	Pot. T °C	Sigma Theta	O2 μmol/kg	O2 μmol/kg	Theta	F* AOU	N2 μmol/kg	F* NO3 μmol/kg	F* PO4 μmol/kg	F* Si(OH)4 μmol/kg	F* CFC-11 pmol/kg	F* CFC-12 pmol/kg	F* at 20 °C μatm	DIC μmol/kg	F* pH	F* TA μmol/kg	F* TOC μmol/l	F* TON μmol/l	Chl-a μg/l	Phase μg/l															
824	2	7.8	35.008	35.007	2	11.362	11.361	28.715	274.9	269.6	2	-2.8	0.22	2	7.42	2	0.61	2	2.61	2	3.475	2	1.901	2	488.1	2	2089.4	6	7.8811	2	2309	2	56.88	2	3.43	2	-9	-9
823	2	50.8	35.008	35.006	2	11.368	11.362	26.714	273.2	269.2	2	-2.4	0.22	2	7.42	2	0.81	2	2.57	2	3.496	2	1.771	2	490.8	2	2089.3	2	7.8807	2	2307	2	56.51	2	3.64	2	-9	-9
822	2	150.8	35.010	35.008	2	11.361	11.342	26.720	268.1	265.7	2	1.2	0.28	2	7.58	2	0.62	2	2.48	2	-9.000	9	491.7	2	2088.4	2	7.8751	2	-9	9	55.39	2	3.88	2	-9	-9		
821	2	199.3	34.986	34.984	2	11.247	11.222	28.723	268.9	267.2	2	0.5	0.27	2	8.04	2	0.66	2	2.77	2	3.440	2	1.731	2	496.0	2	2088.9	2	7.8737	2	2307	2	55.47	2	3.29	2	-9	-9
820	2	300.8	34.926	34.924	2	10.834	10.797	26.753	253.8	252.9	2	17.3	0.09	2	10.97	2	0.82	2	3.61	2	-9.000	9	548.4	2	2103.7	2	7.8431	2	2305	2	55.96	2	3.68	2	-9	-9		
819	2	401.9	34.860	34.860	2	10.381	10.333	26.786	254.3	254.6	2	18.5	0.00	2	12.05	2	0.89	2	3.99	2	3.524	2	1.745	2	566.2	2	2105.5	2	7.8329	2	-9	9	52.25	2	3.55	2	-9	-9
818	2	504.1	34.818	34.817	2	10.121	10.061	26.799	254.2	255.3	2	19.5	0.00	2	12.64	2	0.93	2	4.16	2	-9.000	9	570.0	2	2103.4	2	7.8262	2	2301	2	47.24	2	3.13	2	-9	-9		
817	2	602.2	34.770	34.769	2	9.832	9.762	28.812	250.1	252.5	2	24.2	0.00	2	13.68	2	0.98	2	4.50	2	3.410	2	1.676	2	585.9	2	2108.8	2	7.8170	2	2302	2	46.11	2	-9.00	2	-9	-9
816	2	798.1	34.579	34.578	2	8.403	8.317	26.895	219.3	220.8	2	65.3	0.00	2	20.22	2	1.39	2	8.94	2	-9.000	9	715.3	2	2139.9	2	7.7420	2	-9	9	43.88	2	-9.00	2	-9	-9		
815	2	997.0	34.407	34.406	2	5.925	5.835	27.104	203.6	203.2	2	100.1	0.00	2	27.41	2	1.86	2	21.68	2	1.214	2	0.555	2	893.9	2	2177.5	2	7.6549	2	-9	9	9.00	2	-9.00	2	-9	-9
814	2	1199.1	34.361	34.360	2	4.003	3.911	27.286	201.0	200.2	2	117.6	0.00	2	31.32	2	2.15	2	38.22	2	-9.000	9	1023.1	2	2202.5	2	7.6074	2	-9	9	9.00	2	-9.00	2	-9	-9		
813	2	1399.6	34.479	34.478	2	3.582	3.478	27.424	165.3	164.4	2	156.8	0.00	2	33.85	2	2.37	2	61.71	2	0.122	2	0.048	3	1149.9	2	2242.6	2	7.5623	2	2337	2	42.57	2	-9.00	2	-9	-9
812	2	1600.8	34.551	34.549	2	3.196	3.077	27.518	157.6	155.6	2	188.4	0.00	2	34.28	2	2.39	2	72.76	2	-9.000	9	1189.3	2	2256.9	2	7.5553	2	2345	2	-9.00	2	-9.00	2	-9	-9		
811	2	1798.0	34.613	34.611	2	2.857	2.725	27.599	160.7	160.6	2	166.1	0.00	2	33.88	2	2.36	2	78.95	2	0.019	2	0.001	2	1181.0	2	2263.7	2	7.5578	2	2346	2	-9.00	2	-9.00	2	-9	-9
810	3	2000.1	34.657	34.655	3	2.561	2.416	27.661	172.4	171.9	2	157.3	0.00	2	32.65	2	2.25	2	77.01	2	-9.000	9	1161.4	2	2256.1	2	7.5694	2	-9	9	42.04	2	-9.00	2	-9	-9		
809	2	2201.9	34.707	34.704	2	2.405	2.244	27.715	180.9	181.0	2	149.5	0.00	2	31.36	2	2.15	2	77.74	2	0.040	2	0.010	2	1097.0	2	2253.4	2	7.5857	2	2348	2	-9.00	2	-9.00	2	-9	-9
808	2	2399.7	34.736	34.735	2	2.268	2.092	27.752	187.2	187.5	2	144.2	0.00	2	30.55	2	2.09	2	79.90	2	-9.000	9	1067.3	2	2252.5	2	7.5956	2	2351	2	-9.00	2	-9.00	2	-9	-9		
807	2	2803.3	34.753	34.751	2	2.082	1.890	27.781	192.8	193.7	2	139.6	0.00	2	30.08	2	2.05	2	83.73	2	0.014	2	-0.001	2	1043.3	2	2247.5	2	7.6055	2	-9	9	42.05	2	-9.00	2	-9	-9
806	2	2799.2	34.753	34.751	2	1.859	1.653	27.799	196.2	196.9	2	138.5	0.00	2	30.19	2	2.06	2	90.01	2	-9.000	9	1041.6	2	2248.8	2	7.6076	2	2358	2	-9.00	2	-9.00	2	-9	-9		
805	2	2998.1	34.746	34.744	2	1.604	1.385	27.813	198.9	199.9	2	137.8	0.00	2	30.51	2	2.09	2	97.80	2	0.009	2	-0.001	2	1043.2	2	2253.4	2	7.6070	2	2361	2	-9.00	2	-9.00	2	-9	-9
804	2	3300.7	34.735	34.734	2	1.355	1.112	27.824	202.1	203.1	2	137.0	0.00	2	30.86	2	2.11	2	105.45	2	-9.000	9	1045.2	2	2256.2	2	7.6057	2	2362	2	41.77	2	-9.00	2	-9	-9		
803	2	3599.6	34.724	34.722	2	1.127	0.860	27.831	206.0	206.1	2	136.3	0.00	2	31.34	2	2.15	2	112.48	2	0.019	2	0.003	2	1059.6	2	-9.0	9	7.6018	2	2365	2	-9.00	2	-9.00	2	-9	-9
802	2	3898.7	34.716	34.715	2	0.989	0.695	27.836	207.8	207.2	2	136.7	0.00	2	31.66	2	2.17	2	117.05	2	0.021	2	0.002	2	1048.6	2	2263.6	2	7.6060	2	2370	2	-9.00	2	-9.00	2	-9	-9
801	2	4151.8	34.713	34.712	2	0.962	0.642	27.837	209.6	207.6	2	136.8	0.00	2	31.79	2	2.18	2	118.65	2	0.011	2	0.003	2	1048.1	2	2268.5	6	7.6083	2	-9	9	41.45	2	-9.00	2	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 9 DATE 9/30/1995
 CAST 2 GMT 06:43
 CTD CAST 230

LATITUDE 36° 59.95' S
 LONGITUDE 94° 59.93' E

Bottle Number	CTD		Bottle		CTD		Bottle		CO2		F*		F*		F*		F*		F*		F*		F*														
	Pressure db	Salinity	Temp °C	Pot T	Sigma T	O2	O2	Theta	Hmol/kg	Hmol/kg	F*	F*	F*	F*	F*	F*	F*	F*	F*	F*	F*	F*	F*	F*	F*												
924	2	8.4	35.195	35.194	12.291	12.290	26.684	268.6	264.9	2	-3.6	0.13	2	5.92	2	0.52	2	2.05	2	3.264	6	2.461	3	485.6	2	2082.6	2	7.9037	2	2317	2	-9.00	9	-8.00	9	-8	-9
923	2	51.6	35.194	35.192	12.259	12.252	26.690	267.6	264.5	2	-3.0	0.13	2	5.57	2	0.53	2	2.04	2	3.309	2	1.722	2	463.0	2	2081.2	6	7.9028	2	2317	2	-9.00	9	-8.00	9	-8	-9
922	2	150.7	35.131	35.131	11.955	11.935	26.704	263.2	261.6	2	1.8	0.20	2	6.51	2	0.57	2	2.17	2	3.339	2	1.739	2	480.1	2	2086.9	2	7.8898	2	-9	9	-9.00	9	-8.00	9	-8	-9
921	2	201.4	35.089	35.088	11.767	11.741	26.707	259.8	259.3	2	5.2	0.20	2	7.32	2	0.82	2	2.30	2	3.336	2	1.736	2	489.9	2	2088.6	2	7.8828	2	2311	2	-9.00	9	-8.00	9	-8	-9
920	2	289.6	34.940	34.940	10.928	10.891	26.749	247.8	247.1	2	22.6	0.00	2	11.20	2	0.85	2	3.58	2	3.316	2	1.676	2	546.8	2	2101.7	2	7.8406	2	2303	2	-9.00	9	-8.00	9	-8	-9
919	2	402.1	34.859	34.859	10.403	10.355	26.781	248.8	249.2	2	23.7	0.00	2	12.38	2	0.92	2	3.84	2	3.333	2	1.683	2	566.4	2	2104.9	2	7.8290	2	-9	9	-9.00	9	-8.00	9	-8	-9
918	2	502.7	34.791	34.791	9.974	9.915	26.804	246.6	248.3	2	27.4	0.00	2	13.64	2	1.00	2	4.27	2	3.257	2	1.630	2	580.9	2	2107.6	2	7.8174	2	2298	2	-9.00	9	-8.00	9	-8	-9
917	2	599.9	34.719	34.718	9.505	9.436	26.827	238.2	240.3	2	38.5	0.00	2	15.66	2	1.12	2	5.08	2	2.990	2	1.477	2	619.0	2	2117.2	2	7.7956	2	2294	2	-9.00	9	-8.00	9	-8	-9
916	2	796.7	34.554	34.553	8.030	7.947	26.931	210.0	211.9	2	76.6	0.00	2	21.85	2	1.51	2	10.79	2	1.759	2	0.836	2	753.1	2	2144.0	2	7.7225	2	-9	9	-9.00	9	-8.00	9	-8	-9
915	2	999.9	34.392	34.390	7.540	7.453	27.138	203.5	203.7	2	102.4	0.00	2	28.13	2	1.94	2	24.09	2	1.103	2	0.515	2	914.4	2	2177.4	2	7.6458	2	2295	2	-9.00	9	-8.00	9	-8	-9
914	2	1195.2	34.401	34.400	7.058	6.965	27.313	185.6	185.2	2	132.1	0.00	2	31.96	2	2.22	2	44.23	2	0.394	2	0.179	2	1041.6	2	2213.0	2	7.5932	2	2312	2	-9.00	9	-8.00	9	-8	-9
913	2	1395.0	34.490	34.489	6.469	6.365	27.443	163.8	163.4	2	158.4	0.00	2	33.91	2	2.37	2	63.19	2	0.110	2	0.046	3	1164.1	2	2243.5	2	7.5606	2	2333	2	-9.00	9	-8.00	9	-8	-9
912	2	1602.5	34.564	34.563	5.137	5.019	27.535	156.5	155.8	2	168.6	0.00	2	34.19	2	2.39	2	74.11	2	0.028	2	0.011	2	1194.7	2	2256.0	2	7.5523	2	2346	2	-9.00	9	-8.00	9	-8	-9
911	2	1802.5	34.625	34.623	4.828	4.696	27.611	159.2	158.7	2	168.2	0.00	2	33.66	2	2.35	2	80.27	2	0.013	2	0.002	2	1179.0	2	2263.7	2	7.5574	2	2353	2	-9.00	9	-8.00	9	-8	-9
910	2	1997.6	34.670	34.668	4.616	4.470	27.667	164.6	164.3	2	164.4	0.00	2	32.95	2	2.31	2	84.24	2	0.008	2	0.001	6	1152.4	2	2263.7	2	7.5674	2	2356	2	-9.00	9	-8.00	9	-8	-9
909	2	2199.0	34.706	34.704	4.415	4.254	27.714	172.9	172.8	2	157.6	0.00	2	32.06	2	2.22	2	85.97	2	0.007	2	0.001	2	1118.7	2	2257.1	2	7.5803	2	2359	2	-9.00	9	-8.00	9	-8	-9
908	2	2400.5	34.730	34.728	4.235	4.059	27.749	181.3	181.4	2	150.6	0.00	2	31.28	2	2.16	2	86.81	2	0.005	2	0.002	2	1077.2	2	2253.7	2	7.5914	2	2358	2	-9.00	9	-8.00	9	-8	-9
907	2	2601.0	34.747	34.745	4.081	3.889	27.776	190.0	191.0	2	142.4	0.00	2	30.42	2	2.09	2	85.63	2	0.006	2	0.001	2	1048.8	2	2247.6	2	7.6030	2	2357	2	-9.00	9	-8.00	9	-8	-9
906	2	2800.5	34.751	34.750	3.876	3.670	27.797	194.7	195.9	2	139.3	0.00	2	30.32	2	2.07	2	90.13	2	0.006	2	0.001	2	1035.0	2	2250.0	2	7.6054	2	2358	2	-9.00	9	-8.00	9	-8	-9
905	2	3000.7	34.746	34.744	3.630	3.410	27.811	198.3	199.4	2	138.1	0.00	2	30.49	2	2.09	2	97.00	2	0.005	2	0.002	2	1039.9	2	2248.9	2	7.6086	2	-9	9	-9.00	9	-8.00	9	-8	-9
904	2	3300.6	34.734	34.733	3.331	3.089	27.825	201.9	203.1	2	137.2	0.00	2	30.95	2	2.12	2	105.97	2	0.006	2	0.001	2	1046.1	2	2252.8	2	7.6047	2	2364	2	-9.00	9	-8.00	9	-8	-9
903	2	3603.0	34.723	34.721	3.096	2.829	27.832	205.7	206.1	2	136.6	0.00	2	31.36	2	2.14	2	112.95	2	0.015	2	0.003	2	1049.4	2	2258.0	2	7.6041	2	2367	2	-9.00	9	-8.00	9	-8	-9
902	2	3902.0	34.716	34.714	2.891	2.697	27.835	207.3	207.0	2	136.9	0.00	2	31.63	2	2.18	2	116.73	2	0.014	2	0.004	2	1046.6	2	-8.0	9	7.6045	2	-9	9	-9.00	9	-8.00	9	-8	-9
901	2	4201.2	34.713	34.711	2.865	2.639	27.836	209.7	207.6	2	136.8	0.00	2	31.72	2	2.18	2	118.35	2	0.014	2	0.001	2	1050.6	2	2263.4	2	7.6073	2	2375	2	-9.00	9	-8.00	9	-8	-9

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

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

*** PSS-78 scale

**** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 10 DATE 9/30/1995
 CAST 1 GMT 14:37
 CTD CAST 231

LATITUDE 36° 0.82'S
 LONGITUDE 95° 1.24'E

Bottle Number	CTD				Bottle				CTD				Bottle				fCO ₂										
	db	Pressure	Salinity	Temp	Pot	Sigma	Theta	O ₂	O ₂	AOU	NO ₂	NO ₃	PO ₄	Si(OH) ₄	CFC-11	CFC-12	F _{am}	DIC	pH	F _a	TA	F _a	TOC	F _a	chl-a		
1024	2	7.4	35.319	12.961	12.960	26.648	263.1	260.5	-3.0	0.15	4.14	0.43	1.60	2	3.190	2	1.655	2	7.9195	2	2327	2	58.49	2	4.84	2	-9
1023	2	53.8	35.317	12.932	12.925	26.653	261.2	259.9	-2.2	0.15	4.16	0.43	1.61	2	3.203	2	1.680	2	7.9176	2	2328	2	57.87	2	4.32	2	-9
1022	2	148.3	35.312	12.922	12.902	26.654	258.2	257.8	0.0	0.17	4.31	0.45	1.86	2	3.294	2	1.714	2	7.9120	2	-9	9	57.36	2	4.67	2	-9
1021	2	200.8	35.309	12.916	12.888	26.655	257.9	257.2	0.7	0.18	4.36	0.45	1.63	2	-9.000	9	-9.000	9	7.9145	2	2324	2	56.06	2	3.95	2	-9
1020	2	302.4	34.998	11.300	11.262	26.727	245.3	244.9	2.25	0.00	10.41	0.80	3.18	2	3.349	2	1.659	2	7.8479	2	2307	2	52.91	2	3.22	2	-9
1019	2	407.3	34.907	10.718	10.668	26.762	247.6	247.7	2.33	0.00	11.60	0.88	3.49	2	-9.000	9	-9.000	9	7.8360	2	2307	2	49.25	2	3.10	2	-9
1018	2	503.3	34.821	10.185	10.125	26.792	248.6	248.6	2.58	0.00	12.71	0.94	3.61	2	3.405	2	1.709	2	7.8243	2	2300	2	48.00	2	2.88	2	-9
1017	2	590.8	34.767	9.838	9.769	26.810	245.5	247.1	2.95	0.00	14.10	1.03	4.27	2	-9.000	9	-9.000	9	7.8120	2	2298	2	46.42	2	-9.00	2	-9
1016	2	704.7	34.669	8.179	8.100	26.843	232.2	234.6	4.63	0.00	17.11	1.22	5.73	2	-9.000	9	-9.000	9	7.7799	2	-9	9	45.60	2	-9.00	2	-9
1015	2	800.8	34.584	8.409	8.323	26.898	217.0	219.0	6.70	0.00	20.46	1.42	8.80	2	2.106	2	1.006	2	7.7427	2	2291	2	-9.00	2	-9.00	2	-9
1014	2	903.5	34.497	7.284	7.194	26.995	201.9	203.5	9.02	0.00	24.35	1.67	14.74	2	-9.000	9	-9.000	9	7.6944	2	2290	2	-9.00	2	-9.00	2	-9
1013	2	1132.7	34.387	4.522	4.431	27.253	191.0	191.1	12.27	0.00	30.96	2.15	37.02	2	0.520	2	0.240	2	7.6087	2	-9	9	42.22	2	-9.00	2	-9
1012	2	1400.2	34.483	3.493	3.388	27.434	165.3	164.8	15.69	0.00	33.91	2.38	62.37	2	0.115	2	0.047	3	7.5636	2	2330	2	-9.00	2	-9.00	2	-9
1011	2	1657.5	34.576	3.010	2.889	27.555	159.2	158.6	16.69	0.00	34.08	2.39	75.03	2	-9.000	9	-9.000	9	7.5542	2	2347	2	-9.00	2	-9.00	2	-9
1010	2	1801.8	34.624	2.780	2.649	27.616	162.3	162.0	16.53	0.00	33.52	2.35	79.24	2	0.021	6	0.004	6	7.5599	2	2351	2	42.79	2	-9.00	2	-9
1009	2	2003.4	34.672	2.573	2.427	27.672	168.0	167.9	16.11	0.00	32.70	2.29	82.56	2	-9.000	9	-9.000	9	7.5692	2	2352	2	-9.00	2	-9.00	2	-9
1008	2	2202.2	34.710	2.387	2.227	27.720	176.3	176.5	15.41	0.00	31.73	2.21	83.75	2	0.011	2	0.000	2	7.5634	2	-9	9	-9.00	2	-9.00	2	-9
1007	2	2501.1	34.743	2.134	1.951	27.769	188.3	189.2	14.37	0.00	30.39	2.11	85.27	2	-9.000	9	-9.000	9	7.6021	2	2358	2	42.04	2	-9.00	2	-9
1006	2	2802.7	34.750	1.807	1.602	27.801	195.9	196.7	13.91	0.00	30.39	2.09	92.51	2	0.004	2	0.001	2	7.6078	2	2356	2	-9.00	2	-9.00	2	-9
1005	2	3095.6	34.740	1.470	1.244	27.818	200.8	201.3	13.77	0.00	30.73	2.12	102.27	2	-9.000	9	-9.000	9	7.6066	2	2363	2	-9.00	2	-9.00	2	-9
1004	2	3397.7	34.729	1.229	0.980	27.828	203.6	204.0	13.73	0.00	31.17	2.15	109.80	2	0.008	2	0.000	2	7.6078	2	2365	2	42.13	2	-9.00	2	-9
1003	2	3701.6	34.721	1.082	0.808	27.832	205.3	205.3	13.76	0.00	31.46	2.18	114.84	2	-9.000	9	-9.000	9	7.6088	2	2373	2	-9.00	2	-9.00	2	-9
1002	2	4000.5	34.717	1.033	0.727	27.836	207.2	206.0	13.76	0.00	31.65	2.19	116.86	2	-0.004	2	-0.001	2	7.6079	2	2376	2	-9.00	2	-9.00	2	-9
1001	2	4287.6	34.715	1.024	0.687	27.837	209.2	206.7	13.73	0.00	31.70	2.19	117.95	2	0.007	2	-0.002	2	7.6091	2	2375	2	38.60	2	-9.00	2	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 11 DATE 9/30/1995
 CAST 1 GMT 22:36
 CTD CAST 232

LATITUDE 34° 59.92' S
 LONGITUDE 94° 58.82' E

Bottle Number	F** Pressure db	CTD		Bottle		Sigma T	Theta	O2	O2	F* Salinity	F* Temp °C	Pot. T °C	IC02																								
		F** Salinity	F** Temp	F* Salinity	F* Temp								PO4	Si(OH)4	F* CFC-11	F* CFC-12	F* at 20°C	F* DIC	pH	TA	F* TOC	F* Chl-a															
1124	2	10.0	35.442	35.443	2	13.468	13.467	26.642	262.4	281.4	2	-6.8	0.06	2	3.12	2	0.35	2	1.61	2	3.126	2	1.765	2	428.4	2	2079.5	6	7.9318	2	2332	2	-9.00	9	-9.00	9	-9
1123	2	51.1	35.443	35.442	2	13.484	13.477	26.639	260.2	259.4	2	-4.9	0.06	2	3.12	2	0.36	2	1.60	2	3.117	2	1.655	2	428.2	2	2081.9	2	7.9322	2	2331	2	-9.00	9	-9.00	9	-9
1122	2	150.5	35.329	35.329	2	12.990	12.939	26.661	255.0	255.4	2	2.2	0.12	2	4.49	2	0.46	2	1.72	2	3.183	2	1.654	2	450.7	2	2087.9	2	7.9102	2	2322	2	-9.00	9	-9.00	9	-9
1121	2	201.1	35.170	35.171	2	12.247	12.220	26.680	250.6	250.3	2	11.4	0.04	2	6.69	2	0.58	2	2.17	2	3.267	2	1.694	2	484.6	2	2088.3	2	7.8864	2	2317	2	-9.00	9	-9.00	9	-9
1120	2	303.2	34.938	34.942	3	10.906	10.869	26.755	248.2	285.9	2	3.9	0.00	2	11.12	2	0.85	2	3.49	2	3.358	2	1.706	2	548.1	2	2106.5	2	7.8407	2	2302	2	-9.00	9	-9.00	9	-9
1119	2	403.2	34.856	34.855	2	10.376	10.328	26.783	251.4	251.4	2	21.7	0.00	2	12.19	2	0.91	2	3.87	2	3.285	2	1.661	2	563.9	2	2102.2	2	7.8307	2	2303	2	-9.00	9	-9.00	9	-9
1118	2	502.9	34.775	34.775	2	9.895	9.836	26.805	246.8	247.2	2	29.0	0.00	2	13.59	2	0.99	2	4.14	2	3.350	2	1.681	2	590.9	2	2110.5	2	7.8142	2	2296	2	-9.00	9	-9.00	9	-9
1117	2	602.0	34.705	34.704	2	9.456	9.387	26.824	242.1	243.8	2	35.3	0.00	2	15.27	2	1.10	2	4.62	2	3.240	2	1.616	2	615.7	2	2111.9	2	7.7965	2	2294	2	-9.00	9	-9.00	9	-9
1116	2	703.3	34.618	34.619	2	8.797	8.720	26.865	229.2	230.9	2	52.5	0.00	2	18.34	2	1.29	2	6.75	2	2.673	2	1.288	2	676.1	2	2123.3	2	7.7645	2	2293	2	-9.00	9	-9.00	9	-9
1115	2	799.4	34.526	34.524	2	7.768	7.686	26.947	207.7	208.5	2	81.8	0.00	2	22.75	2	1.57	2	11.93	2	2.616	2	0.770	2	778.0	2	2144.9	2	7.7114	2	2290	2	-9.00	9	-9.00	9	-9
1114	2	1000.0	34.385	34.386	2	5.173	5.089	27.178	199.9	199.0	2	109.8	0.00	2	29.12	2	2.02	2	28.11	2	0.842	2	0.395	2	956.7	2	2179.7	2	7.6344	2	2296	2	-9.00	9	-9.00	9	-9
1113	2	1195.1	34.426	34.424	2	3.862	3.791	27.349	177.8	176.9	2	141.7	0.00	2	32.85	2	2.28	2	50.58	2	0.260	2	0.118	2	1101.6	2	2225.0	2	7.5820	2	2318	2	-9.00	9	-9.00	9	-9
1112	2	1386.4	34.509	34.508	2	3.363	3.260	27.468	161.0	160.6	2	162.0	0.00	2	33.97	2	2.39	2	66.48	2	0.079	2	0.031	2	1182.6	2	2251.0	2	7.5571	2	2335	2	-9.00	9	-9.00	9	-9
1111	2	1586.0	34.578	34.577	2	3.007	2.891	27.557	158.5	157.6	2	167.8	0.00	2	34.03	2	2.39	2	75.45	2	0.032	2	0.008	2	1199.1	2	2260.8	2	7.5536	2	2347	2	-9.00	9	-9.00	9	-9
1110	2	1798.6	34.640	34.639	2	2.783	2.652	27.628	158.7	158.0	2	169.2	0.00	2	33.57	2	2.35	2	83.65	2	0.008	2	0.000	2	1188.1	2	2268.5	2	7.5591	2	2358	2	-9.00	9	-9.00	9	-9
1109	2	2087.0	34.701	34.701	2	2.436	2.284	27.709	171.1	171.3	2	158.8	0.00	2	32.17	2	2.25	2	86.46	2	0.006	2	-0.001	2	1119.9	2	2261.3	2	7.5783	2	2358	2	-9.00	9	-9.00	9	-9
1108	2	2401.9	34.735	34.735	2	2.166	1.991	27.760	183.4	183.9	2	148.6	0.00	2	31.01	2	2.15	2	87.74	2	0.003	2	-0.001	2	1073.2	2	2256.4	2	7.5662	2	2361	2	-9.00	9	-9.00	9	-9
1107	9	2686.5	34.748	-9.000	9	1.925	1.728	27.791	191.2	184.2	2	150.5	-9.00	9	-9.00	9	-9.00	9	-9.00	9	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
1106	2	2999.3	34.745	34.744	2	1.602	1.383	27.813	197.9	199.8	2	137.9	0.00	2	30.46	2	2.10	2	98.29	2	0.001	2	-0.001	2	1041.4	2	2253.1	6	7.6084	2	2364	2	-9.00	9	-9.00	9	-9
1105	2	3298.9	34.732	34.731	2	1.300	1.059	27.825	201.7	203.3	2	137.3	0.00	2	30.93	2	2.14	2	107.38	2	0.006	2	-0.001	2	1049.7	2	-9.0	9	7.6064	2	2364	2	-9.00	9	-9.00	9	-9
1104	2	3602.3	34.722	34.721	2	1.103	0.836	27.832	204.0	205.0	2	137.6	0.00	2	31.34	2	2.16	2	113.74	2	0.006	2	-0.001	2	1043.0	2	2263.6	2	7.6087	2	2366	2	-9.00	9	-9.00	9	-9
1103	2	3901.7	34.718	34.716	2	1.038	0.742	27.834	205.6	206.3	2	137.2	0.00	2	31.50	2	2.18	2	116.32	2	0.005	2	0.000	2	1046.9	2	-9.0	9	7.6104	2	2374	2	-9.00	9	-9.00	9	-9
1102	2	4197.3	34.715	34.714	2	1.010	0.684	27.836	207.1	206.7	2	137.3	0.00	2	31.57	2	2.18	2	117.65	2	0.012	2	0.003	2	1048.2	2	2263.3	2	7.6101	2	-9	9	-9.00	9	-9.00	9	-9
1101	2	4555.2	34.714	34.714	2	1.037	0.670	27.837	209.0	206.9	2	137.2	0.00	2	31.82	2	2.18	2	117.95	2	0.006	2	0.001	2	1054.7	2	2266.2	6	7.6108	2	2374	2	-9.00	9	-9.00	9	-9

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

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

*** PSS-78 scale

**** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 12 DATE 10/01/1995
 CAST 2 GMT 07:08
 CTD CAST 233

LATITUDE 34° 0.18' S
 LONGITUDE 94° 58.68' E

Bottle Number	CTD		Bottle		Sigma T	Theta	Temp °C	Pot. T °C	Salinity	AOU	NO2	NO3	PO4	Si(OH)4	CFC-11	CFC-12	F* at 20°C	DIC	pH	TA	TOC	F*	TON	Chi-a			
	db	Pressure	Salinity	Temp																							
1224	7.8	35.357	35.356	13.478	13.477	26.572	265.1	263.0	-8.3	0.06	2.91	0.36	1.34	3.124	1.720	428.0	2057.8	3	7.9312	2	2327	58.34	2	4.52	2	-9	
1223	48.7	35.357	35.356	13.390	13.383	26.591	263.6	262.8	-7.6	0.06	2.94	0.36	1.44	3.177	1.652	433.3	2059.6	3	7.9312	2	2328	57.46	2	-9.00	9	-9	
1222	101.2	35.319	35.319	13.055	13.041	26.632	258.6	257.9	-0.9	0.12	3.87	0.42	1.62	3.119	1.639	449.3	2065.5	3	7.9163	2	2326	54.71	2	3.92	2	-9	
1221	150.4	35.272	35.271	12.774	12.754	26.653	255.2	254.7	4.0	0.20	4.87	0.49	1.72	-9.000	-9.000	460.7	2066.1	3	7.9070	2	2322	54.36	2	3.74	2	-9	
1220	198.8	35.170	35.169	12.245	12.219	26.679	251.7	263.6	-1.9	0.08	6.71	0.59	2.27	3.276	1.677	485.8	2094.1	3	7.8861	2	2316	52.79	2	3.65	2	-9	
1219	299.9	34.934	34.933	10.869	10.832	26.754	248.9	247.4	22.6	0.00	10.84	0.94	3.14	3.397	1.707	551.6	2098.7	3	7.8404	2	2305	48.88	2	3.67	2	-9	
1218	400.6	34.842	-9.000	10.307	10.259	26.784	248.5	-9.0	-9.0	-9.00	-9.00	-9.00	-9.00	-9.000	-9.000	-9.0	-9.0	-9.000	9	-9.0000	9	-9	-9.00	9	-9.00	9	-9
1217	498.3	34.767	34.765	9.814	9.756	26.810	250.3	251.4	25.3	0.00	13.56	1.00	4.26	-9.000	-9.000	586.5	2111.1	2	7.8162	2	2297	46.17	2	-9.00	9	-9	
1216	602.1	34.669	34.672	9.183	9.116	26.843	233.4	235.1	45.7	0.00	16.76	1.20	5.52	2.830	1.367	640.2	2119.6	2	7.7808	2	2293	44.70	2	-9.00	9	-9	
1215	701.9	34.576	34.575	8.350	8.275	26.899	217.1	218.6	67.8	0.00	20.38	1.43	8.76	-9.000	-9.000	720.8	2138.6	6	7.7400	2	2291	-9.00	9	-9.00	9	-9	
1214	801.0	34.503	34.502	7.387	7.307	26.984	202.8	198.6	94.3	0.00	23.87	1.66	14.18	1.382	0.660	807.5	2156.1	2	7.6950	2	2291	-9.00	9	-9.00	9	-9	
1213	1029.7	34.371	34.370	4.675	4.592	27.222	199.0	198.8	113.8	0.00	29.99	2.08	32.48	-9.000	-9.000	972.4	2194.5	2	7.6212	2	2301	43.39	2	-9.00	9	-9	
1212	1298.6	34.505	34.503	3.542	3.445	27.446	158.3	157.5	163.7	0.00	33.95	2.40	66.18	-9.000	-9.000	1172.3	2250.4	2	7.5566	2	2338	-9.00	9	-9.00	9	-9	
1211	1602.2	34.602	34.600	3.001	2.884	27.576	154.1	153.2	172.2	0.00	33.99	2.40	80.12	-9.000	-9.000	1198.3	2265.2	2	7.5521	2	2353	-9.00	9	-9.00	9	-9	
1210	2000.3	34.692	34.690	2.480	2.336	27.696	169.7	169.4	160.3	0.00	32.30	2.27	85.25	-0.004	0.000	1129.9	2261.1	2	7.5752	2	2357	42.64	2	-9.00	9	-9	
1209	2299.4	34.730	34.728	2.222	2.056	27.749	181.7	182.1	149.9	0.00	31.01	2.16	86.50	-9.000	-9.000	1084.8	2253.7	2	7.5928	2	2359	-9.00	9	-9.00	9	-9	
1208	2602.0	34.748	34.745	1.946	1.757	27.786	191.7	194.9	139.6	0.00	30.25	2.10	92.45	0.003	-0.002	1035.9	2249.9	2	7.6066	2	2361	-9.00	9	-9.00	9	-9	
1207	3280.1	34.747	-9.000	1.744	1.540	27.804	195.1	-9.0	-9.0	-9.00	-9.00	-9.00	-9.00	-9.000	-9.000	-9.0	-9.0	-9.000	9	-9.0000	9	-9	-9.00	9	-9.00	9	-9
1206	3000.6	34.742	34.740	1.534	1.316	27.815	198.2	199.7	138.6	0.00	30.41	2.12	100.46	-0.002	-0.003	1026.1	2252.4	2	7.6082	2	2362	-9.00	9	-9.00	9	-9	
1205	3300.7	34.731	34.729	1.275	1.034	27.825	202.0	203.2	137.6	0.00	30.80	2.14	107.94	-9.000	-9.000	1043.0	2256.3	2	7.5947	2	2368	-9.00	9	-9.00	9	-9	
1204	3601.2	34.722	34.720	1.106	0.839	27.831	204.0	204.7	137.9	0.00	31.15	2.17	113.48	-9.000	-9.000	1046.5	2261.4	2	7.6068	2	2372	42.53	2	-9.00	9	-9	
1203	3898.9	34.717	34.715	1.036	0.741	27.833	205.7	206.4	137.1	0.00	31.15	2.17	113.42	-9.000	-9.000	1040.5	2263.5	2	7.6091	2	2374	-9.00	9	-9.00	9	-9	
1202	4196.7	34.714	34.712	0.998	0.672	27.835	207.3	206.7	137.4	0.00	31.41	2.19	117.74	0.007	0.004	1046.1	2286.4	6	7.6084	2	2378	-9.00	9	-9.00	9	-9	
1201	4486.2	34.712	34.711	1.001	0.643	27.836	208.9	207.5	136.9	0.00	31.50	2.20	118.65	0.007	0.000	1051.1	32271.5	3	7.6122	2	2379	42.76	2	-9.00	9	-9	

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 13 DATE 10/01/1995
 CAST 1 GMT 14:40
 CTD CAST 234

LATITUDE 33° 0.41' S
 LONGITUDE 95° 0.35' E

Bottle Number	CTD		Bottle		Sigma T	Theta	Pot. T	F* Temp	F* Salinity	CTD		Bottle		NO2	NO3	PO4	Si(OH)4	CFC-11	CFC-12	F* at 20°C	DIC	pH	TA	F* TOC	F* TON	Chl-a							
	db	Pressure	O2	O2						Salinity	Temp	Salinity	Temp														Salinity	Temp	Salinity	Temp	Salinity	Temp	Salinity
1324	7.0	35.358	35.357	14.057	14.056	26.452	262.5	261.5	-9.8	0.05	2	1.26	2	0.32	2	1.30	2	3.118	2	1.960	3	414.5	2	7.9418	2	2327	2	60.34	2	-9.00	9	-9	
1323	50.7	35.347	35.348	13.804	13.797	26.500	262.4	262.1	-9.0	0.05	2	1.30	2	0.33	2	1.39	2	3.131	2	1.652	2	421.1	2	7.9396	2	2326	2	-8.78	4	-9.00	9	-9	
1322	102.3	35.322	35.323	13.539	13.525	26.537	257.5	257.1	-2.6	0.08	2	1.39	2	0.39	2	1.38	2	3.143	2	1.658	6	430.2	2	7.9274	2	2327	2	56.57	2	-9.00	9	-9	
1321	150.2	35.316	35.316	13.494	13.473	26.542	255.1	255.9	-1.1	0.09	2	1.38	2	0.41	2	1.38	2	3.143	2	1.647	2	436.7	2	7.9259	2	2325	2	55.28	2	-9.00	9	-9	
1320	200.3	35.139	35.137	12.268	12.241	26.650	239.3	239.2	22.5	0.00	2	2.77	2	0.70	2	2.77	2	3.219	2	1.660	2	514.6	2	7.8656	2	2314	2	51.20	2	-9.00	9	-9	
1319	300.8	34.994	34.994	11.305	11.267	26.723	243.1	242.9	24.5	0.00	2	3.34	2	10.50	2	3.34	2	3.250	2	1.663	2	539.9	2	7.8457	2	2306	2	50.58	2	-9.00	9	-9	
1318	403.3	34.904	34.902	10.707	10.658	26.761	243.4	243.5	27.6	0.00	2	3.64	2	11.83	2	3.64	2	3.224	2	1.619	2	566.2	2	7.8319	2	2302	2	48.70	2	-9.00	9	-9	
1317	502.9	34.796	34.795	10.019	9.960	26.799	238.5	240.1	35.3	0.00	2	4.27	2	13.84	2	4.27	2	3.028	2	1.502	2	598.9	2	7.8101	2	2300	2	46.97	2	-9.00	9	-9	
1316	603.7	34.703	34.701	9.397	9.328	26.831	232.7	234.6	44.9	0.00	2	5.40	2	16.21	2	5.40	2	2.774	2	1.352	2	630.7	2	7.7865	2	2298	2	44.09	2	-9.00	9	-9	
1315	703.5	34.599	34.598	8.522	8.446	26.891	218.5	219.3	65.9	0.00	2	8.56	2	19.85	2	8.56	2	-9.000	9	-9.000	9	710.0	2	7.7457	2	2291	2	-9.00	9	-9.00	9	-9	
1314	796.3	34.503	34.503	7.303	7.224	26.996	203.7	204.1	89.4	0.00	2	14.74	2	23.89	2	14.74	2	1.311	2	0.618	2	810.0	2	7.6953	2	2297	2	-9.00	9	-9.00	9	-9	
1313	899.3	34.430	34.430	6.086	6.004	27.102	199.6	200.0	102.1	0.00	2	22.04	2	26.88	2	22.04	2	0.951	2	0.450	2	884.2	2	7.6581	2	2296	2	42.73	2	-9.00	9	-9	
1312	1000.1	34.395	-9.000	9	4.895	4.813	27.217	192.9	192.8	118.1	0.00	2	29.90	2	33.35	2	29.90	2	0.573	2	0.270	2	979.0	2	7.6205	2	2304	2	-9.00	9	-9.00	9	-9
1311	1203.0	34.456	-9.000	9	3.827	3.736	27.380	169.5	169.4	149.6	0.00	2	32.97	2	33.67	2	32.97	2	0.166	2	0.070	3	1127.7	2	7.5737	2	2331	2	-9.00	9	-9.00	9	-9
1310	1403.8	34.540	34.537	3.365	3.261	27.491	155.7	155.2	167.4	0.00	2	71.08	2	0.045	2	71.08	2	0.045	2	0.013	2	1191.8	2	7.5530	2	2343	2	42.28	2	-9.00	9	-9	
1309	1698.1	34.634	34.634	2.811	2.689	27.621	159.1	158.7	166.3	0.00	2	81.87	2	0.013	2	81.87	2	0.013	2	0.001	2	1181.3	2	7.5595	2	2352	2	-9.00	9	-9.00	9	-9	
1308	1998.8	34.697	34.711	2.459	2.315	27.715	169.3	172.7	157.2	0.00	2	88.19	2	0.006	2	88.19	2	0.006	2	-0.002	2	1127.4	2	7.5819	2	2364	2	-9.00	9	-9.00	9	-9	
1307	2299.3	34.731	34.731	2.172	2.006	27.756	182.3	183.1	149.3	0.00	2	99.27	2	0.006	2	99.27	2	0.006	2	-0.002	2	1075.7	2	7.5939	2	2361	2	42.23	2	-9.00	9	-9	
1306	2602.4	34.745	34.743	1.865	1.677	27.791	191.6	193.2	142.0	0.00	2	93.14	2	0.003	2	93.14	2	0.003	2	-0.001	6	1044.0	2	7.6053	2	2363	2	-9.00	9	-9.00	9	-9	
1305	2895.1	34.742	34.742	1.615	1.405	27.810	196.1	197.7	139.8	0.00	2	99.27	2	0.008	2	99.27	2	0.008	2	-0.001	2	1041.9	2	7.6076	2	2366	2	-9.00	9	-9.00	9	-9	
1304	3187.8	34.735	34.735	1.405	1.172	27.821	199.4	200.7	138.9	0.00	2	105.24	2	0.000	2	105.24	2	0.000	2	-0.002	2	1042.2	2	7.6080	2	2369	2	42.07	2	-9.00	9	-9	
1303	3498.6	34.728	34.727	1.249	0.989	27.827	201.5	202.8	138.4	0.00	2	110.39	2	0.003	2	110.39	2	0.003	2	0.000	2	1041.6	2	7.6090	2	2371	2	-9.00	9	-9.00	9	-9	
1302	3798.7	34.723	34.721	1.148	0.860	27.830	203.7	204.3	138.1	0.00	2	113.37	2	0.005	2	113.37	2	0.005	2	0.000	2	1040.5	2	7.6102	2	-9	9	-9.00	9	-9.00	9	-9	
1301	4211.1	34.718	34.717	1.099	0.768	27.833	206.5	-9.0	9	-9.0	0.00	2	115.79	2	0.004	2	115.79	2	0.004	2	-0.001	2	1035.2	2	7.6127	2	-9	9	42.25	2	-9.00	9	-9

* WOCe water sample quality flag (F) for parameter from previous column
 ** WOCe quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 14 DATE 10/01/1995
 CAST 1 GMT 19:54
 CTD CAST 235

LATITUDE 32° 30.18' S
 LONGITUDE 94° 59.81' E

Bottle Number	F* Pressure db	Salinity	F* Salinity	CTD		Bottle		Sigma	Theta	Temp** °C	Pot. T*** °C	AOU	NO2 Hmol/kg	F* NO3 Hmol/kg	PO4 Hmol/kg	F* Si(OH)4 Hmol/kg	CFC-11 pmol/kg	F* CFC-12 pmol/kg	F* at 20 °C H ₂ O	DIC Hmol/kg	pH	TA Hmol/kg	F* TOC Hmol/l	TON Hmol/l	F* Chl-a µg/l	Phase µg/l										
				O2 Hmol/kg	O2 Hmol/kg																															
1424	2	6.7	35.355	35.354	2	14.005	14.004	26.461	26.461	282.2	261.6	2	-9.6	0.04	2	2.24	2	3.091	2	1.654	2	416.2	2	2072.0	6	7.9407	2	-9	9	-9.00	9	-9.00	9	-9		
1423	2	50.0	35.351	35.349	2	13.776	13.769	26.506	26.506	261.7	264.2	2	-11.0	0.04	2	2.39	2	3.090	2	1.649	2	421.5	2	2073.6	2	7.9373	2	2330	2	-9.00	9	-9.00	9	-9		
1422	2	99.7	35.327	35.327	2	13.528	13.514	26.542	26.542	257.0	257.1	2	-2.6	0.07	2	2.88	2	3.129	2	1.667	2	-9.0	9	2075.7	2	7.9272	2	2326	2	-9.00	9	-9.00	9	-9		
1421	2	148.9	35.357	35.354	2	13.542	13.521	26.562	26.562	250.9	251.6	2	2.9	0.13	2	3.43	2	3.091	2	1.621	2	437.5	2	2080.5	2	7.9226	2	2326	2	-9.00	9	-9.00	9	-9		
1420	2	199.7	35.130	35.124	2	12.206	12.180	26.651	26.651	238.7	238.6	2	23.5	0.00	2	8.83	2	2.81	2	2.900	2	539.0	9	2098.8	2	7.8618	2	2313	2	-9.00	9	-9.00	9	-9		
1419	2	301.2	34.991	34.991	2	11.289	11.251	26.723	26.723	244.6	244.5	2	24.2	0.00	2	10.62	2	3.37	2	2.900	2	539.0	9	2102.3	2	7.8439	2	-9	9	-9.00	9	-9.00	9	-9		
1418	2	400.2	34.916	34.915	2	10.789	10.740	26.757	26.757	246.2	246.4	2	24.2	0.00	2	11.66	2	3.75	2	3.180	2	566.0	9	2102.7	2	7.8340	2	2300	2	-9.00	9	-9.00	9	-9		
1417	2	501.0	34.850	34.849	2	10.366	10.308	26.782	26.782	245.9	248.3	2	25.0	0.00	2	12.67	2	3.93	2	2.900	2	566.0	9	2105.6	2	7.8270	2	2302	2	-9.00	9	-9.00	9	-9		
1416	2	598.7	34.755	34.754	2	9.760	9.690	26.813	26.813	240.4	243.2	2	33.9	0.00	2	14.72	2	4.62	2	2.444	2	673.5	2	2125.1	2	7.7649	2	2292	2	-9.00	9	-9.00	9	-9		
1415	2	700.3	34.647	34.645	2	8.970	8.892	26.858	26.858	225.2	227.3	2	55.0	0.00	2	18.35	2	6.85	2	2.444	2	673.5	2	2125.1	2	7.7649	2	2292	2	-9.00	9	-9.00	9	-9		
1414	2	797.5	34.533	34.531	2	7.747	7.665	26.955	26.955	207.3	208.2	2	82.2	0.00	2	22.95	2	1.56	2	2.07	2	988.3	2	2149.3	2	7.7108	2	2292	2	-9.00	9	-9.00	9	-9		
1413	2	998.5	34.395	34.394	2	4.932	4.849	27.212	27.212	192.9	193.1	2	117.5	0.00	2	30.17	2	2.07	2	32.81	2	988.3	2	2149.3	2	7.7108	2	2292	2	-9.00	9	-9.00	9	-9		
1412	2	1199.9	34.469	34.466	2	3.791	3.700	27.392	27.392	164.4	165.6	2	153.6	0.00	2	33.60	2	2.35	2	58.50	2	0.063	3	1142.1	2	2236.6	2	7.5670	2	2329	2	-9.00	9	-9.00	9	-9
1411	2	1401.0	34.540	34.539	2	3.238	3.136	27.505	27.505	159.0	158.1	2	165.5	0.00	2	34.33	2	2.39	2	70.58	2	0.000	9	1199.0	2	2251.7	2	7.5536	2	2343	2	-9.00	9	-9.00	9	-9
1410	2	1600.3	34.604	34.602	2	2.924	2.809	27.585	27.585	158.6	158.2	2	167.9	0.00	2	34.09	2	2.37	2	78.02	2	0.000	9	1199.0	2	2251.7	2	7.5536	2	-8	9	-9.00	9	-9.00	9	-9
1409	2	1899.9	34.685	34.683	2	2.558	2.422	27.683	27.683	163.9	163.8	2	165.2	0.00	2	33.19	2	2.31	2	88.49	2	0.000	9	1199.0	2	2251.7	2	7.5694	2	2361	2	-9.00	9	-9.00	9	-9
1408	2	2200.6	34.723	34.722	2	2.267	2.109	27.740	27.740	178.8	179.2	2	152.4	0.00	2	31.71	2	2.18	2	86.95	2	0.000	9	1199.0	2	2254.0	2	7.5679	2	2359	2	-9.00	9	-9.00	9	-9
1407	2	2502.2	34.741	34.739	2	2.027	1.846	27.775	27.775	187.6	188.5	2	145.2	0.00	2	31.07	2	2.12	2	89.91	2	0.000	9	1062.4	2	2254.0	2	7.6014	2	2362	2	-9.00	9	-9.00	9	-9
1406	2	2801.3	34.744	34.743	2	1.751	1.547	27.801	27.801	193.9	195.2	2	141.1	0.00	2	30.99	2	2.11	2	96.11	2	0.002	2	-9.0	9	2253.0	2	7.6072	2	2367	2	-9.00	9	-9.00	9	-9
1405	2	3098.7	34.740	34.737	2	1.529	1.302	27.813	27.813	197.3	199.1	2	139.3	0.00	2	31.13	2	2.13	2	102.00	2	0.000	9	1045.9	2	2255.3	2	7.8067	2	2365	2	-9.00	9	-9.00	9	-9
1404	2	3401.0	34.731	34.730	2	1.326	1.074	27.823	27.823	200.2	202.0	2	138.5	0.00	2	31.39	2	2.15	2	107.80	2	0.000	9	1049.4	2	2257.0	2	7.8069	2	2370	2	-9.00	9	-9.00	9	-9
1403	2	3700.0	34.725	34.724	2	1.183	0.904	27.830	27.830	202.8	203.3	2	138.7	0.00	2	31.62	2	2.17	2	112.33	2	0.005	2	1047.1	2	2261.3	2	7.6087	2	-9	9	-9.00	9	-9.00	9	-9
1402	2	3999.5	34.721	34.721	2	1.130	0.821	27.833	27.833	204.3	204.5	2	138.2	0.00	2	31.67	2	2.17	2	114.34	2	0.006	2	1046.9	2	2285.3	2	7.6102	2	2375	2	-9.00	9	-9.00	9	-9
1401	2	4377.5	34.715	34.714	2	1.057	0.709	27.834	27.834	208.0	205.9	2	137.9	0.00	2	31.80	2	2.18	2	117.00	2	0.007	2	1051.9	2	2266.3	2	7.6105	2	2378	2	-9.00	9	-9.00	9	-9

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

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

*** PSS-78 scale

**** ITS-90 scale

I8NR NOAA Ship Baldridge

STATION 15 DATE 10/01/1995
 CAST 1 GMT 01:07
 CTD CAST 236

LATITUDE 32° 0.31' S
 LONGITUDE 95° 0.05' E

Bottle Number	CTD										Bottle										IC02																
	F** Pressure db	Salinity	Temp °C	Pot. T °C	Sigma Theta	O2	O2	F* AOU	NO2	F* NO3	F* PO4	F* Si(OH)4	F* CFC-11	F* CFC-12	F* H2am	DIC	F* pH	F* TA	F* TOC	F* TON	F* Chl-a																
	db	‰	°C	°C	kg/m ³	‰	‰	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																
1524	2	4.9	35.463	35.462	2	14.426	14.425	26.454	257.6	256.0	2	-6.3	0.03	2	1.82	2	0.29	2	1.43	2	3.034	2	1.623	2	409.5	2	2073.0	2	7.9469	2	2335	2	59.93	2	5.28	2	-9
1523	2	50.0	35.483	35.485	2	14.302	14.295	26.500	254.9	257.2	2	-6.9	0.04	2	1.92	2	0.30	2	1.39	2	2.993	2	1.587	2	-9.0	9	2072.5	2	7.9466	2	2334	2	60.59	2	4.23	2	-9
1522	2	99.1	35.476	35.476	2	14.189	14.175	26.519	251.0	250.9	2	0.0	0.06	2	2.28	2	0.34	2	1.51	2	3.004	2	1.597	2	419.7	2	2077.9	2	7.9383	2	-9	9	57.98	2	4.29	2	-9
1521	2	150.2	35.451	35.452	2	14.097	14.075	26.521	250.7	251.9	2	-0.5	0.06	2	2.31	2	0.34	2	1.50	2	-9.000	9	-9.000	9	-9.0	9	2079.1	2	7.9381	2	2332	2	56.50	2	-9.00	9	-9
1520	2	199.1	35.285	35.278	2	13.135	13.107	26.587	235.4	235.5	2	21.3	0.00	2	6.60	2	0.57	2	2.24	2	3.079	2	1.801	2	484.3	2	2092.9	2	7.8875	2	2322	2	52.40	2	3.38	2	-9
1519	2	299.9	35.023	35.024	2	11.520	11.482	26.706	241.2	241.3	2	24.8	0.00	2	10.34	2	0.81	2	3.37	2	-9.000	9	-9.000	9	-9.0	9	2102.1	2	7.8475	2	2308	2	49.24	2	3.05	2	-9
1518	2	400.0	34.939	34.938	2	10.955	10.905	26.745	244.8	245.5	2	24.1	0.00	2	11.40	2	0.87	2	3.76	2	3.261	2	1.633	2	545.9	2	2104.6	2	7.8381	2	2304	2	48.75	2	2.69	2	-9
1517	2	499.9	34.862	34.860	2	10.441	10.381	26.777	240.7	242.5	2	30.3	0.00	2	12.78	2	0.95	2	3.90	2	-9.000	9	-9.000	9	-9.0	9	2106.3	2	7.8234	2	2301	2	46.92	2	3.09	2	-9
1516	2	599.5	34.755	34.755	2	9.770	9.700	26.812	238.3	240.6	2	36.5	0.00	2	14.84	2	1.08	2	4.70	2	3.043	2	1.502	2	604.1	2	2113.7	2	7.8015	2	2296	2	45.40	2	-9.00	9	-9
1515	2	698.5	34.653	34.650	2	9.017	8.939	26.854	225.7	227.6	2	54.4	0.00	2	18.25	2	1.29	2	6.71	2	2.447	2	1.196	2	-9.0	9	2127.0	2	7.7861	2	2290	2	-9.00	9	-9.00	9	-9
1514	2	800.5	34.538	34.536	2	7.774	7.692	26.955	206.9	208.1	2	82.2	0.00	2	22.89	2	1.58	2	12.49	2	-9.000	9	-9.000	9	764.9	2	2148.4	2	7.7114	2	2294	2	-9.00	9	-9.00	9	-9
1513	2	1000.2	34.396	34.395	2	5.095	5.011	27.194	195.1	195.3	2	114.1	0.00	2	29.65	2	2.05	2	30.63	2	0.636	2	0.319	2	-9.0	9	2188.7	2	7.6271	2	2301	2	41.84	2	-9.00	9	-9
1512	2	1201.1	34.446	34.445	2	3.965	3.873	27.358	170.6	170.5	2	147.4	0.00	2	33.06	2	2.32	2	54.03	2	-9.000	9	-9.000	9	1108.7	2	2229.1	2	7.5752	2	2322	2	-9.00	9	-9.00	9	-9
1511	2	1398.8	34.540	34.541	2	3.358	3.255	27.485	155.2	154.4	2	168.2	0.00	2	34.38	2	2.42	2	72.02	2	0.043	2	0.022	2	1196.0	2	2257.1	2	7.5518	2	2342	2	-9.00	9	-9.00	9	-9
1510	2	1600.9	34.607	34.606	2	3.016	2.899	27.580	154.2	153.6	2	171.7	0.00	2	34.18	2	2.40	2	80.30	2	-9.000	9	-9.000	9	1192.3	2	2264.6	2	7.5522	2	2353	2	41.85	2	-9.00	9	-9
1509	2	1901.0	34.677	34.676	2	2.603	2.466	27.674	163.1	162.9	2	165.8	0.00	2	33.02	2	2.32	2	87.42	2	0.006	2	0.001	2	-9.0	9	2268.1	2	7.5672	2	2361	2	-9.00	9	-9.00	9	-9
1508	2	2201.4	34.718	34.716	2	2.306	2.147	27.732	175.4	176.1	2	155.2	0.00	2	31.89	2	2.22	2	88.63	2	-9.000	9	-9.000	9	1094.3	2	2260.8	2	7.5844	2	2360	2	-9.00	9	-9.00	9	-9
1507	2	2500.4	34.739	34.743	2	2.057	1.875	27.776	186.3	187.7	2	145.8	0.00	2	30.90	2	2.14	2	89.64	2	0.005	2	0.002	2	-9.0	9	2254.7	2	7.5994	2	2357	2	42.15	2	-9.00	9	-9
1506	2	2799.5	34.745	34.743	2	1.790	1.586	27.798	193.0	197.9	2	138.1	-9.00	9	-9.00	9	-9.00	9	-9.000	9	-9.000	9	-9.000	9	1049.3	2	2253.5	2	7.6047	2	2361	2	-9.00	9	-9.00	9	-9
1505	2	3099.8	34.739	34.738	2	1.541	1.313	27.813	196.7	198.5	2	139.9	0.00	2	30.93	2	2.13	2	101.92	2	0.003	2	0.001	2	1038.6	2	2256.8	2	7.6053	2	2364	2	-9.00	9	-9.00	9	-9
1504	2	3397.4	34.732	34.731	2	1.341	1.089	27.823	199.9	201.6	2	138.7	0.00	2	31.19	2	2.15	2	107.80	2	-9.000	9	-9.000	9	1040.7	2	2259.5	2	7.6062	2	2369	2	42.48	2	-9.00	9	-9
1503	2	3699.0	34.725	34.725	2	1.204	0.925	27.829	202.1	198.8	2	143.0	0.00	2	31.29	2	2.16	2	112.09	2	0.003	2	0.002	2	1046.5	2	2264.0	2	7.6086	2	2374	2	-9.00	9	-9.00	9	-9
1502	2	3997.1	34.720	34.719	2	1.119	0.811	27.832	204.3	204.6	2	138.2	0.00	2	31.59	2	2.18	2	114.86	2	0.005	2	0.000	2	1041.9	2	2263.8	2	7.6088	2	-9	9	-9.00	9	-9.00	9	-9
1501	2	4245.3	34.717	34.716	2	1.074	0.740	27.834	207.0	206.3	2	137.2	0.00	2	31.62	2	2.18	2	116.32	2	0.002	2	0.001	2	1044.8	2	2266.4	2	7.6087	2	-9	9	41.95	2	-9.00	9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR NOAA Ship Baldridge

STATION 17 DATE 10/02/1995
 CAST 1 GMT 07:25
 CTD CAST 238

LATITUDE 31° 39.14' S
 LONGITUDE 95° 0.05' E

Bottle Number	CTD		Bottle		CTD		Bottle		fCO2		TA		F* TA		F* TOC		F* TON		F* Chl-a		F* Phaeo									
	Pressure db	Salinity	Pot. °C	Temp °C	Sigma T	O2	O2 Theta	AOU	NO2	NO3	PO4	Si(OH)4	F* Si(OH)4	F* CFC-11	F* CFC-12	F* H _{am}	F* H _{am}	F* H _{am}	F* H _{am}	F* H _{am}	F* H _{am}	F* H _{am}	F* H _{am}							
1722	7.3	35.465	14.627	14.626	26.413	257.6	257.8	-8.1	0.04	1.82	0.26	1.28	3.035	1.615	2	407.8	2	2075.0	6	7.9478	2	2336	2	2336	2	-9.00	9	-9.00	9	-9
1721	30.0	35.468	14.315	14.311	26.484	258.9	259.4	-8.2	0.04	1.75	0.26	1.28	3.020	1.603	6	404.4	2	2073.5	2	7.9630	2	2336	2	2336	2	-9.00	9	-9.00	9	-9
1720	59.5	35.462	14.235	14.226	26.498	256.3	257.0	-6.3	0.05	1.96	0.28	1.28	3.002	1.608	2	412.8	2	2073.0	2	7.9405	2	2336	2	2336	2	-9.00	9	-9.00	9	-9
1719	75.7	35.459	14.147	14.136	26.514	252.6	253.6	-2.5	0.06	2.18	0.30	1.41	2.999	1.580	2	416.4	2	2075.9	2	7.9399	2	2334	2	2334	2	-9.00	9	-9.00	9	-9
1718	120.0	35.447	14.067	14.050	26.523	251.8	252.0	-0.4	0.06	2.36	0.32	1.41	3.063	1.612	2	421.2	2	2078.1	2	7.9365	2	2333	2	2333	2	-9.00	9	-9.00	9	-9
1717	150.1	35.450	14.077	14.055	26.524	252.1	252.4	-0.8	0.07	2.28	0.33	1.38	3.020	1.607	2	421.6	2	2079.8	2	7.9349	2	2335	2	2335	2	-9.00	9	-9.00	9	-9
1716	201.7	35.247	12.946	12.918	26.603	237.2	237.0	20.8	0.00	6.78	0.57	2.25	3.119	1.621	2	481.8	2	2096.1	2	7.8829	2	2320	2	2320	2	-9.00	9	-9.00	9	-9
1715	301.0	35.054	11.689	11.650	26.699	241.4	241.1	24.0	0.01	9.73	0.75	2.97	3.268	1.667	2	526.7	2	2101.5	2	7.8525	2	2311	2	2311	2	-9.00	9	-9.00	9	-9
1714	401.7	34.918	10.806	10.757	26.754	244.6	244.7	25.8	0.00	11.75	0.88	3.68	3.246	1.656	2	555.8	2	2104.9	2	-9.0000	9	-9	2	-9	2	-9.00	9	-9.00	9	-9
1713	498.8	34.837	10.290	10.230	26.787	243.0	243.8	30.1	0.00	12.92	0.94	3.81	3.175	1.616	2	575.1	2	2109.0	2	7.8192	2	2300	2	2300	2	-9.00	9	-9.00	9	-9
1712	598.7	34.750	9.734	9.664	26.812	239.0	239.9	37.4	0.00	14.88	1.06	4.42	3.007	1.509	2	604.2	2	2112.0	2	7.8003	2	-9	2	-9	2	-9.00	9	-9.00	9	-9
1711	700.7	34.640	8.916	8.838	26.884	225.3	226.4	56.2	0.00	18.42	1.30	6.78	2.385	1.175	6	668.6	2	2124.8	2	7.7637	2	2292	2	2292	2	-9.00	9	-9.00	9	-9
1710	798.4	34.546	7.901	7.818	26.944	210.4	210.0	79.4	0.00	22.27	1.54	11.49	1.571	0.773	2	758.8	2	2143.3	2	7.7161	2	2289	2	2289	2	-9.00	9	-9.00	9	-9
1709	901.4	34.463	6.630	6.545	27.058	200.4	199.1	99.1	0.00	25.97	1.78	19.77	0.982	0.487	2	855.5	2	2164.3	2	7.6700	2	2293	2	2293	2	-9.00	9	-9.00	9	-9
1708	995.7	34.396	5.075	4.991	27.198	186.5	184.4	115.1	0.00	29.60	2.05	30.98	0.635	0.316	2	970.9	2	2188.3	2	7.6254	2	2298	2	2298	2	-9.00	9	-9.00	9	-9
1707	1000.9	34.397	5.042	4.958	27.201	186.8	-9.0	9	-9.0	29.59	2.04	30.92	-9.000	-9.000	9	958.5	2	-9.0	9	-9.0000	9	-9	2	-9	2	-9.00	9	-9.00	9	-9
1706	995.8	34.394	5.078	4.994	27.197	186.4	184.5	115.0	0.00	29.36	2.03	30.79	0.631	0.314	2	958.9	2	2187.8	2	7.6271	2	2301	2	2301	2	-9.00	9	-9.00	9	-9
1705	1099.6	34.421	4.375	4.288	27.295	181.4	178.9	135.9	0.00	31.79	2.21	44.85	0.324	0.164	2	1058.6	2	2213.1	2	7.5932	2	2315	2	2315	2	-9.00	9	-9.00	9	-9
1704	1202.2	34.474	4.025	3.932	27.374	164.3	161.2	156.2	0.00	33.60	2.33	58.48	0.142	0.070	2	1147.8	2	2235.2	2	7.5677	2	2328	2	2328	2	-9.00	9	-9.00	9	-9
1703	1302.3	34.496	3.778	3.679	27.415	161.3	158.1	161.2	0.00	33.68	2.36	63.10	0.092	0.046	2	1162.7	2	2242.3	2	7.5596	2	2334	2	2334	2	-9.00	9	-9.00	9	-9
1702	1402.0	34.548	3.364	3.260	27.501	156.5	152.8	169.7	0.00	34.00	2.39	72.93	0.035	0.014	2	1192.3	2	2257.4	6	7.5513	2	2343	2	2343	2	-9.00	9	-9.00	9	-9
1701	1589.1	34.597	3.062	2.946	27.568	158.7	153.9	171.0	0.00	34.19	2.38	79.08	0.015	0.005	2	1198.5	2	2262.0	2	7.5530	2	2352	2	2352	2	-9.00	9	-9.00	9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 18 DATE 10/02/1995
 CAST 1 GMT 20:56
 CTD CAST 239

LATITUDE 32° 27.42' S
 LONGITUDE 92° 35.84' E

Bottle Number	CTD										Bottle										fCO2																	
	Pressure db	Salinity	Temp °C	Pot. T °C	Sigma T	O2	O2	F ₂	AOU	NO2	NO3	PO4	Si(OH)4	F ₁₁	F ₁₂	CFC-11	CFC-12	F ₂ at 20 °C	DIC	F ₂	pH	TA	TOC	F ₂	Chl-a													
1824	2	8.8	35.840	35.844	2	16.057	16.056	26.385	244.7	246.7	2	-5.6	0.00	2	0.13	2	0.15	2	1.48	2	2.728	6	1.485	6	369.3	2	2064.1	6	7.9899	2	2351	2	61.24	2	4.40	2	-9	-9
1823	2	55.9	35.759	35.761	2	15.614	15.605	28.424	247.7	250.4	2	-7.0	0.01	2	0.34	2	0.19	2	1.32	2	2.767	2	1.484	2	379.2	2	2071.4	2	7.9797	2	2348	2	60.87	2	4.73	2	-9	-9
1822	2	89.9	35.693	35.696	2	15.139	15.125	26.482	246.8	249.7	2	-3.9	0.04	2	0.85	2	0.23	2	1.42	2	2.822	2	1.540	2	395.9	2	2073.7	2	7.9668	2	2345	2	56.52	2	4.68	2	-9	-9
1821	2	149.9	35.663	35.665	2	14.974	14.951	26.486	244.0	248.4	2	0.3	0.07	2	1.13	2	0.26	2	1.43	2	2.881	2	1.558	2	397.2	2	2075.1	2	7.9592	2	2343	2	56.45	2	4.22	2	-9	-9
1820	2	201.4	35.628	35.630	2	14.827	14.797	26.503	244.5	246.5	2	1.0	0.07	2	1.45	2	0.29	2	1.41	2	2.908	2	1.547	2	405.5	2	2077.0	2	7.9558	2	2341	2	52.00	2	4.18	2	-9	-9
1819	2	300.0	35.217	35.224	2	12.768	12.727	26.622	233.4	235.3	2	23.6	0.00	2	7.25	2	0.82	2	2.52	2	3.129	2	1.633	2	502.0	2	2098.8	2	7.8782	2	2318	2	47.31	2	3.94	2	-9	-9
1818	2	398.8	35.044	35.045	2	11.665	11.613	26.698	238.4	240.8	2	24.5	0.00	2	9.66	2	0.77	2	3.33	2	3.244	2	1.657	2	540.1	2	2100.6	2	7.8525	2	2308	2	45.75	2	3.57	2	-9	-9
1817	2	498.8	34.936	34.937	2	10.906	10.844	26.755	240.4	242.7	2	27.2	0.00	2	11.09	2	0.86	2	3.48	2	3.130	2	1.622	2	580.6	2	2106.6	2	7.8375	2	2304	2	44.37	2	3.38	2	-9	-9
1816	2	601.2	34.806	34.806	2	10.088	10.017	26.798	238.8	241.5	2	33.6	0.00	2	13.37	2	0.99	2	4.05	2	3.122	2	1.573	2	587.9	2	2109.3	2	7.8141	2	2297	2	43.31	2	-9.00	2	-9	-9
1815	2	701.0	34.684	34.683	2	9.277	9.198	26.838	230.7	233.6	2	46.7	0.00	2	18.62	2	1.19	2	5.49	2	2.740	2	1.358	2	640.1	2	2119.5	2	7.7832	2	2293	2	-9.00	2	-9.00	2	-9	-9
1814	2	800.2	34.575	34.578	2	8.263	8.178	26.916	213.3	215.7	2	71.3	0.00	2	20.79	2	1.45	2	9.62	2	1.855	2	0.908	2	728.8	2	2137.4	2	7.7363	2	2289	2	-9.00	2	-9.00	2	-9	-9
1813	2	999.1	34.411	34.410	2	5.277	5.192	27.185	189.5	190.3	2	117.7	0.00	2	29.70	2	2.04	2	31.39	2	0.595	2	0.300	2	969.2	2	2191.9	2	7.6264	2	2302	2	41.42	2	-9.00	2	-9	-9
1812	2	1302.6	34.507	34.506	2	3.705	3.606	27.433	154.9	154.8	2	165.1	0.00	2	34.32	2	2.39	2	66.23	2	0.068	2	0.034	2	1186.0	2	2249.8	2	7.5572	2	2336	2	-9.00	2	-9.00	2	-9	-9
1811	2	1801.7	34.605	34.604	2	3.040	2.923	27.576	152.8	152.9	2	172.2	0.00	2	34.45	2	2.40	2	80.41	2	0.013	2	0.008	2	1200.6	2	2263.3	2	7.5539	2	2355	2	-9.00	2	-9.00	2	-9	-9
1810	2	1898.9	34.674	34.674	2	2.603	2.466	27.672	163.8	164.2	2	164.5	0.00	2	33.17	2	2.31	2	85.84	2	0.009	2	0.006	2	1151.3	2	2264.3	2	7.5702	2	2357	2	41.24	2	-9.00	2	-9	-9
1809	2	2099.5	34.706	34.706	2	2.397	2.246	27.716	172.6	173.1	2	157.4	0.00	2	32.26	2	2.22	2	86.78	2	0.013	2	0.005	2	1117.6	2	2261.0	2	7.5811	2	2361	2	-9.00	2	-9.00	2	-9	-9
1808	2	2398.8	34.740	34.739	2	2.083	1.910	27.770	186.5	188.3	2	144.9	0.00	2	30.92	2	2.10	2	87.91	2	0.004	2	0.001	2	1055.1	2	2251.8	2	7.6001	2	2358	2	-9.00	2	-9.00	2	-9	-9
1807	2	2698.7	34.745	34.744	2	1.774	1.579	27.799	193.1	194.9	2	141.1	0.00	2	30.75	2	2.12	2	94.77	2	0.004	2	0.002	2	1041.6	2	2251.5	2	7.6076	2	2361	2	41.40	2	-9.00	2	-9	-9
1806	2	3000.8	34.739	34.738	2	1.528	1.310	27.814	196.9	198.8	2	139.6	0.00	2	30.93	2	2.12	2	101.81	2	0.002	2	0.005	2	1039.0	2	2258.0	2	7.6080	2	2366	2	-9.00	2	-9.00	2	-9	-9
1805	2	3296.5	34.731	34.730	2	1.319	1.077	27.823	199.6	201.7	2	138.7	0.00	2	31.26	2	2.14	2	107.85	2	0.006	2	0.004	2	1041.7	2	2258.5	2	7.6072	2	2366	2	-9.00	2	-9.00	2	-9	-9
1804	2	3601.3	34.724	34.724	2	1.189	0.920	27.829	201.7	203.4	2	138.5	0.00	2	31.48	2	2.16	2	112.09	2	0.018	2	0.007	2	1043.9	2	2264.6	2	7.6099	2	2374	2	41.94	2	-9.00	2	-9	-9
1803	2	3901.4	34.721	34.720	2	1.132	0.834	27.831	203.1	204.3	2	138.3	0.00	2	31.46	2	2.17	2	114.28	2	0.013	2	0.005	2	1034.5	2	2266.5	2	7.6123	2	2377	2	-9.00	2	-9.00	2	-9	-9
1802	2	4299.4	34.718	34.719	2	1.121	0.780	27.834	205.4	204.7	2	138.4	0.00	2	31.42	2	2.17	2	115.80	2	0.007	2	0.004	2	1035.4	2	2267.4	2	7.6113	2	2378	2	-9.00	2	-9.00	2	-9	-9
1801	2	4517.3	34.716	34.716	2	1.129	0.763	27.833	206.6	205.2	2	138.1	0.00	2	31.40	2	2.18	2	116.13	2	0.008	2	0.004	2	1040.2	2	2273.2	2	7.6124	2	2368	2	41.32	2	-9.00	2	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR
NOAA Ship Baldrige

STATION 19 DATE 10/03/1995
CAST 2 GMT 10:38
CTD CAST 240

LATITUDE 33° 10.26' S
LONGITUDE 90° 10.16' E

Bottle Number	CTD		Bottle		CTD		Bottle		CO2		F* at 20 °C F*		DIC	F*	TA	F*	TOC	F*	TON	F*	Chl-a	F*																	
	db	Salinity	Temp	Pot	Theta	O2	Hmol/Kg	O2	Hmol/Kg	Hmol/Kg	Hmol/Kg	Hmol/Kg											Hmol/Kg	Hmol/Kg	Hmol/Kg	Hmol/Kg	Hmol/Kg	Hmol/Kg	Hmol/Kg	Hmol/Kg	Hmol/Kg	Hmol/Kg	Hmol/Kg						
1924	2	9.5	35.654	14.945	14.944	26.490	250.5	251.6	2	-4.8	0.05	2	3.21	2	0.25	2	1.49	2	2.886	2	1.573	2	393.8	2	2073.9	6	7.9642	2	2342	2	59.67	2	4.46	2	-9	-9			
1923	9	49.2	35.650	-9.000	14.886	14.879	26.501	249.3	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0			
1922	2	99.7	35.611	35.612	14.685	14.670	26.517	248.0	250.8	2	-2.6	0.06	2	3.21	2	0.28	2	1.54	2	2.893	2	1.565	2	405.7	2	2075.8	2	7.9560	2	2342	2	59.49	2	4.61	2	-9	-9		
1921	2	147.7	35.573	35.505	14.489	14.467	26.479	248.1	250.9	2	-1.5	0.06	2	3.52	2	0.31	2	1.50	2	2.941	2	1.561	2	405.6	2	2077.2	2	7.9481	2	2345	2	58.52	2	4.97	2	-9	-9		
1920	2	200.2	35.502	35.239	14.181	14.152	26.340	249.0	251.4	2	0.0	0.08	2	3.62	2	0.37	2	1.63	2	2.994	2	1.613	2	403.1	2	2079.1	2	7.9404	2	2336	2	54.60	2	4.37	2	-9	-9		
1919	2	302.7	35.236	35.239	12.864	12.822	26.614	245.7	249.1	2	9.3	0.09	2	5.99	2	0.56	2	2.29	2	3.188	2	1.653	2	471.5	2	2077.2	2	7.8875	2	-9	9	49.79	2	4.26	2	-9	-9		
1918	2	400.4	35.042	35.045	11.704	11.652	26.691	238.2	241.1	2	24.0	0.00	2	10.30	2	0.80	2	3.59	2	3.151	2	1.622	2	525.2	2	2102.7	2	7.8531	2	2315	2	47.89	2	3.32	2	-9	-9		
1917	2	497.2	34.946	34.947	11.027	10.965	26.741	237.6	241.2	2	28.0	0.00	2	12.06	2	0.89	2	3.67	2	3.150	2	1.593	2	564.0	2	2105.7	2	7.8373	2	2307	2	47.27	2	3.15	2	-9	-9		
1916	2	599.8	34.847	34.847	10.399	10.328	26.777	236.2	240.6	2	32.5	0.00	2	13.15	2	0.98	2	4.05	2	3.053	2	1.549	2	576.9	2	2110.2	2	7.8196	2	2300	2	47.37	2	-9.00	9	-9	-9		
1915	2	700.3	34.734	34.735	9.640	9.559	26.820	232.3	236.8	2	41.2	0.00	2	15.61	2	1.14	2	4.98	2	2.820	2	1.423	2	621.4	2	2116.9	2	7.7948	2	2297	2	-9.00	9	-9.00	9	-9	-9		
1914	2	802.7	34.627	34.627	8.785	8.696	26.875	217.4	221.3	2	82.3	0.00	2	19.45	2	1.36	2	7.95	2	2.129	2	1.041	2	687.7	2	2132.4	2	7.7539	2	2293	2	-9.00	9	-9.00	9	-9	-9		
1913	2	998.7	34.431	34.431	6.159	6.067	27.095	199.1	201.1	2	100.5	0.00	2	27.20	2	1.88	2	21.30	2	1.032	2	0.511	2	888.5	2	2171.8	2	7.6600	2	2293	2	41.48	2	-9.00	9	-9.00	9	-9	-9
1912	2	1200.1	34.419	34.420	4.255	4.160	27.308	177.5	178.4	2	137.4	0.00	2	31.38	2	2.26	2	48.40	2	0.284	2	0.149	2	1076.8	2	2218.2	2	7.5898	2	2321	2	-9.00	9	-9.00	9	-9	-9		
1911	2	1397.4	34.516	34.516	3.625	3.519	27.450	153.6	154.1	2	166.4	0.00	2	34.65	2	2.43	2	68.01	2	0.052	2	0.020	2	1178.0	2	2251.9	2	7.5560	2	2340	2	-9.00	9	-9.00	9	-9	-9		
1910	2	1599.9	34.583	34.583	3.186	3.067	27.546	151.2	151.6	2	172.4	0.00	2	34.80	2	2.43	2	78.07	2	0.016	2	0.007	2	1202.2	2	2264.9	2	7.5491	2	2350	2	42.14	2	-9.00	9	-9.00	9	-9	-9
1909	2	1800.0	34.624	34.625	2.733	2.603	27.621	164.2	164.1	2	163.6	0.00	2	33.85	2	2.35	2	77.89	2	0.028	2	0.013	2	1176.6	2	2258.5	2	7.5600	2	2350	2	-9.00	9	-9.00	9	-9	-9		
1908	2	1998.3	34.681	34.681	2.501	2.357	27.687	171.6	185.1	2	144.5	0.00	2	32.69	2	2.27	2	81.11	2	0.015	2	0.005	2	1127.7	2	2255.6	2	7.5732	2	2351	2	-9.00	9	-9.00	9	-9	-9		
1907	2	2201.0	34.719	34.719	2.323	2.164	27.733	180.3	181.9	2	149.2	0.00	2	31.51	2	2.18	2	81.79	2	0.012	2	0.008	2	1065.6	2	2252.8	2	7.5688	2	2355	2	41.23	2	-9.00	9	-9.00	9	-9	-9
1906	2	2402.1	34.737	34.738	2.110	1.936	27.767	186.9	186.9	2	146.1	0.00	2	30.79	2	2.15	2	87.70	2	0.006	2	0.003	2	1063.7	2	-9.0	9	7.5989	2	2358	2	-9.00	9	-9.00	9	-9	-9		
1905	2	2698.6	34.746	34.747	1.795	1.600	27.800	195.2	196.4	2	139.4	0.00	2	30.51	2	2.12	2	92.86	2	0.004	2	0.004	2	1040.4	2	2251.2	2	7.6085	2	2360	2	-9.00	9	-9.00	9	-9	-9		
1904	2	3000.9	34.737	34.738	1.489	1.272	27.816	198.4	199.7	2	139.0	0.00	2	31.08	2	2.14	2	102.47	2	0.004	2	-0.001	2	1046.1	2	2255.9	2	7.6076	2	2366	2	41.76	2	-9.00	9	-9.00	9	-9	-9
1903	2	3299.5	34.728	34.729	1.282	1.041	27.825	201.5	202.1	2	138.7	0.00	2	31.31	2	2.16	2	108.72	2	0.004	2	0.002	2	1052.1	2	2258.8	2	7.6050	2	2370	2	-9.00	9	-9.00	9	-9	-9		
1902	2	3599.5	34.722	34.723	1.170	0.902	27.829	203.4	203.4	2	138.6	0.00	2	31.69	2	2.18	2	112.70	2	0.005	2	0.003	2	1049.2	2	2262.9	2	7.6076	2	2370	2	-9.00	9	-9.00	9	-9	-9		
1901	2	3959.4	34.718	34.720	1.116	0.812	27.833	205.6	203.9	2	138.9	0.00	2	31.86	2	2.19	2	115.00	2	0.007	2	0.005	2	1048.6	2	2266.2	2	7.6109	2	2379	2	41.86	2	-9.00	9	-9.00	9	-9	-9

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

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

*** PSS-78 scale

**** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 20 DATE 10/03/1995
 CAST 1 GMT 00:04
 CTD CAST 241

LATITUDE 33° 59.95' S
 LONGITUDE 87° 46.04' E

Bottle Number	Bottle		CTD		Bottle		fCO2																											
	F** Pressure db	Salinity	Temp** °C	Pot.*** °C	Sigma T****	O2	O2	AOU	NO2	F* NO3	F* PO4	F* S(OH)4	F* CFC-11	F* CFC-12	F* at 20 °C	H*atm	DIC	pH	F* TA	F* TOC	F* TON	F* Chl-a												
						µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	pmol/kg	pmol/kg	pmol/kg	pmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µg/l											
2024	2	6.5	35.545	35.546	2	14.339	14.338	26.538	253.3	253.9	2	-3.9	0.07	2	1.62	2	2.984	2	1.624	2	2.078.1	6	7.9503	2	2337	2	59.81	2	4.34	2	-9	-9		
2023	2	41.0	35.544	35.545	2	14.348	14.342	26.536	252.0	253.9	2	-4.0	0.07	2	1.67	2	2.964	2	1.591	2	2.077.7	7	7.9499	2	2339	2	59.32	2	4.51	2	-9	-9		
2022	2	77.2	35.544	35.545	2	14.346	14.335	26.538	251.3	252.8	2	-2.8	0.08	2	1.67	2	2.981	2	1.587	2	2.073.9	7	7.9484	2	2338	2	59.58	2	4.54	2	-9	-9		
2021	2	119.1	35.542	35.544	2	14.344	14.326	26.539	249.8	252.2	2	-2.2	0.08	2	1.67	2	2.984	2	1.613	2	2.079.4	7	7.9472	2	2341	2	56.66	2	4.12	2	-9	-9		
2020	2	155.8	35.532	35.533	2	14.299	14.276	26.541	248.4	250.3	2	0.0	0.11	2	1.59	2	2.986	2	1.599	2	2.080.0	7	7.9433	2	2337	2	54.40	2	4.21	2	-9	-9		
2019	2	197.3	35.517	35.521	2	14.231	14.202	26.548	248.3	250.7	2	0.0	0.11	2	1.68	2	2.990	2	1.584	2	2.080.3	7	7.9429	2	2341	2	52.08	2	4.19	2	-9	-9		
2018	2	299.1	35.037	35.040	2	11.626	11.588	26.699	240.4	241.7	2	23.8	0.00	2	3.60	2	-9.000	9	-9.000	9	535.0	2	2.102.9	7	7.8513	2	2309	2	47.75	2	3.85	2	-9	-9
2017	2	398.7	34.890	34.890	2	10.638	10.589	26.764	242.3	244.1	2	27.4	0.00	2	4.11	2	3.200	2	1.640	2	572.3	2	2.107.5	7	7.8299	2	2304	2	46.26	2	3.40	2	-9	-9
2016	2	498.2	34.760	34.761	2	9.791	9.733	26.811	238.5	240.4	2	36.5	0.00	2	4.74	2	2.998	2	1.505	2	605.6	2	2.114.6	7	7.8038	2	2298	2	42.16	2	3.38	2	-9	-9
2015	2	602.1	34.638	34.639	2	8.857	8.791	26.869	222.2	224.4	2	58.5	0.00	2	7.28	2	2.309	2	1.135	2	682.3	2	2.130.5	7	7.7633	2	2292	2	-9.00	9	-9.00	9	-9	-9
2014	2	697.1	34.509	34.510	2	7.394	7.325	26.988	203.7	204.2	2	88.6	0.00	2	14.49	2	1.341	2	0.658	2	798.8	2	2.155.6	7	7.6981	2	2294	2	-9.00	9	-9.00	9	-9	-9
2013	2	796.6	34.435	34.436	2	6.163	6.091	27.096	197.9	198.0	2	103.4	0.00	2	21.72	2	0.943	2	0.472	2	892.4	2	2.173.8	7	7.6586	2	2289	2	42.28	2	-9.00	9	-9	-9
2012	2	1000.8	34.393	34.393	3	4.301	4.223	27.280	189.2	188.5	2	126.8	0.00	2	40.21	2	0.480	2	0.239	2	1029.7	2	2.208.1	7	7.6041	2	2311	2	-9.00	9	-9.00	9	-9	-9
2011	2	1201.3	34.461	34.461	2	3.661	3.571	27.401	168.6	168.6	2	151.7	0.00	2	57.59	2	0.192	6	0.098	6	1133.0	2	2.238.3	7	7.5687	2	2332	2	-9.00	9	-9.00	9	-9	-9
2010	2	1397.7	34.528	34.528	2	3.294	3.192	27.491	158.9	158.6	2	164.5	0.00	2	69.03	2	0.065	2	0.034	2	1194.1	2	2.252.8	7	7.5547	2	2341	2	41.90	2	-9.00	9	-9	-9
2009	2	1598.0	34.593	34.593	2	2.984	2.868	27.572	157.4	156.9	2	168.7	0.00	2	77.27	2	0.019	2	0.011	2	1197.3	2	2.261.4	7	7.5549	2	2349	2	-9.00	9	-9.00	9	-9	-9
2008	2	1799.4	34.648	34.648	2	2.652	2.523	27.647	165.8	165.6	2	162.7	0.00	2	79.91	2	0.126	4	0.018	2	1162.8	2	2.259.5	7	7.5651	2	-9	9	-9.00	9	-9.00	9	-9	-9
2007	2	1999.6	34.698	34.698	2	2.424	2.281	27.707	175.1	175.2	2	155.0	0.00	2	81.58	2	0.015	2	0.011	2	1120.8	2	2.257.0	7	7.5807	2	2358	2	42.29	2	-9.00	9	-9	-9
2006	2	2200.6	34.732	34.733	2	2.218	2.060	27.753	185.8	186.2	2	145.8	0.00	2	82.18	2	0.007	2	0.003	2	1071.5	2	2.249.9	7	7.5969	2	2356	2	-9.00	9	-9.00	9	-9	-9
2005	2	2400.4	34.748	34.747	2	2.020	1.848	27.781	192.1	192.7	2	141.0	0.00	2	30.04	2	2.09	2	0.003	2	1048.6	2	2.249.1	7	7.6047	2	2361	2	-9.00	9	-9.00	9	-9	-9
2004	2	2599.0	34.748	34.749	2	1.807	1.621	27.800	195.7	196.9	2	138.8	0.00	2	30.00	2	2.09	2	0.015	2	1039.3	2	2.250.8	7	7.6081	2	2359	2	42.73	2	-9.00	9	-9	-9
2003	2	2893.2	34.739	34.738	2	1.481	1.274	27.816	200.1	200.8	2	137.9	0.00	2	30.38	2	2.13	2	0.002	2	1053.3	2	2.255.8	7	7.6075	2	2363	2	-9.00	9	-9.00	9	-9	-9
2002	2	3199.1	34.728	34.728	2	1.248	1.018	27.826	202.8	198.3	2	142.7	0.00	2	30.86	2	2.16	2	0.003	2	1053.8	2	2.258.3	7	7.6065	2	2374	2	-9.00	9	-9.00	9	-9	-9
2001	2	3643.6	34.721	34.722	2	1.133	0.861	27.831	205.0	203.7	2	138.7	0.00	2	31.33	2	2.17	2	0.002	2	1055.0	2	2.265.1	7	7.6088	2	2379	2	42.25	2	-9.00	9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 21 DATE 10/04/1995
 CAST 2 GMT 06:34
 CTD CAST 242

LATITUDE 34° 10.06' S
 LONGITUDE 87° 9.3' E

Bottle Number	Bottle		CTD		Bottle		ICO2																																
	F** Pressure db	Salinity	Temp	Temp	Sigma T	O2	Theta	NO2	F* NO3	F* PO4	F* Si(OH)4	F* CFC-11	F* CFC-12	F* at 20°C	DIC	F* pH	F* TA	F* TOC	F* TON	F* Chl-a																			
			°C	°C	°C	µmol/kg	°C	µmol/kg	µmol/kg	µmol/kg	µmol/kg	pmol/kg	pmol/kg	µM	µmol/kg		µmol/kg	µmol/kg	µmol/kg	µmol/kg	µg/l																		
2124	2	6.9	35.535	35.538	2	14.311	14.310	26.538	254.0	254.2	2	-4.1	0.09	2	2.05	2	0.29	2	1.68	2	2.998	2	1.620	2	1.620	2	410.9	2	2076.4	6	7.9458	2	2334	2	-9.00	9	-9.00	9	-9
2123	2	30.8	35.533	35.534	2	14.244	14.240	26.550	253.3	254.3	2	-3.8	0.07	2	2.03	2	0.29	2	1.70	2	2.993	2	1.579	2	1.579	2	409.4	2	2076.3	2	7.9463	2	-9	9	-9.00	9	-9.00	9	-9
2122	2	59.1	35.531	35.532	2	14.229	14.220	26.552	252.8	254.3	2	-3.7	0.07	2	2.04	2	0.29	2	1.70	2	-9.000	9	-9.000	9	-9.000	9	408.2	2	2075.9	2	7.9480	2	2339	2	-9.00	9	-9.00	9	-9
2121	2	87.6	35.527	35.528	2	14.215	14.202	26.553	252.9	253.9	2	-3.2	0.07	2	2.07	2	0.30	2	1.70	2	2.984	2	1.581	2	1.581	2	413.3	2	2075.6	2	7.9455	2	2339	2	-9.00	9	-9.00	9	-9
2120	2	121.2	35.524	35.525	2	14.204	14.186	26.554	251.8	253.2	2	-2.4	0.08	2	2.18	2	0.31	2	1.69	2	-9.000	9	-9.000	9	-9.000	9	412.5	2	2077.6	2	7.9440	2	2338	2	-9.00	9	-9.00	9	-9
2119	2	149.5	35.520	35.522	2	14.194	14.172	26.555	251.5	253.3	2	-2.5	0.07	2	2.20	2	0.31	2	1.72	2	3.007	2	1.593	2	1.593	2	414.7	2	2077.8	2	7.9441	2	2340	2	-9.00	9	-9.00	9	-9
2118	2	200.2	35.253	35.252	2	12.945	12.917	26.605	243.4	244.0	2	13.8	0.09	2	6.18	2	0.55	2	2.57	2	-9.000	9	-9.000	9	-9.000	9	471.6	2	2090.3	2	7.8939	2	2321	2	-9.00	9	-9.00	9	-9
2117	2	300.8	35.068	35.071	2	11.850	11.811	26.681	239.8	240.5	2	23.7	0.00	2	9.84	2	0.77	2	3.58	2	3.198	2	1.636	2	1.636	2	529.2	2	2101.0	2	7.8547	2	2312	2	-9.00	9	-9.00	9	-9
2116	2	400.1	34.966	35.071	3	11.170	11.120	26.810	242.1	243.3	2	24.8	-9.00	9	-9.00	9	-9.00	9	-9.00	9	-9.000	9	-9.000	9	-9.000	9	542.8	2	2103.6	2	-9.00000	9	-9	9	-9.00	9	-9.00	9	-9
2115	2	499.3	34.874	34.875	2	10.539	10.478	26.772	245.0	248.3	2	23.9	0.00	2	12.30	2	0.92	2	4.14	2	-9.000	9	-9.000	9	-9.000	9	560.1	2	2106.1	2	7.8304	2	2308	2	-9.00	9	-9.00	9	-9
2114	2	800.8	34.770	34.772	2	9.871	9.801	26.808	238.8	241.4	2	35.0	0.00	2	14.55	2	1.05	2	4.88	2	3.047	2	1.512	2	1.512	2	589.0	2	2114.2	2	7.8059	2	2299	2	-9.00	9	-9.00	9	-9
2113	2	700.8	34.653	34.653	2	9.009	8.931	26.858	224.5	226.5	2	55.5	0.00	2	18.16	2	1.28	2	6.97	2	-9.000	9	-9.000	9	-9.000	9	665.1	2	2126.7	2	7.7651	2	2295	2	-9.00	9	-9.00	9	-9
2112	2	898.3	34.432	34.434	2	6.182	6.100	27.093	199.8	199.6	2	101.8	0.00	2	27.07	2	1.86	2	21.41	2	-9.000	9	-9.000	9	-9.000	9	882.3	2	2171.9	2	7.6573	2	2299	2	-9.00	9	-9.00	9	-9
2111	2	1001.2	34.384	34.386	2	5.037	4.953	27.194	198.3	197.8	2	112.0	0.00	2	29.50	2	2.03	2	30.02	2	0.752	2	0.377	2	0.377	2	961.6	2	2187.3	2	7.6282	2	2301	2	-9.00	9	-9.00	9	-9
2110	2	1100.4	34.388	34.389	2	4.317	4.230	27.276	190.7	189.7	2	125.6	0.00	2	31.48	2	2.17	2	40.03	2	-9.000	9	-9.000	9	-9.000	9	1023.6	2	2204.8	2	7.6025	2	2310	2	-9.00	9	-9.00	9	-9
2109	2	1295.9	34.475	34.475	2	3.592	3.495	27.419	166.0	165.1	2	155.7	0.00	2	33.77	2	2.37	2	61.01	2	-9.000	9	-9.000	9	-9.000	9	1163.8	2	2239.6	2	7.5623	2	2330	2	-9.00	9	-9.00	9	-9
2108	2	1501.4	34.550	34.549	2	3.065	2.956	27.529	161.6	161.2	2	163.8	0.00	2	34.10	2	2.38	2	71.50	2	0.063	2	0.029	2	0.029	2	1176.0	2	2258.7	2	7.5532	2	2342	2	-9.00	9	-9.00	9	-9
2107	2	1698.4	34.616	34.615	2	2.763	2.641	27.610	164.8	164.0	2	163.4	0.00	2	33.60	2	2.34	2	77.48	2	-9.000	9	-9.000	9	-9.000	9	1170.7	2	2258.8	2	7.5573	2	2343	2	-9.00	9	-9.00	9	-9
2106	2	1904.6	34.679	34.678	2	2.502	2.366	27.684	173.5	172.8	2	156.7	0.00	2	32.30	2	2.24	2	80.25	2	-9.000	9	-9.000	9	-9.000	9	1127.8	2	2256.1	2	7.5741	2	2352	2	-9.00	9	-9.00	9	-9
2105	2	2103.7	34.715	34.715	2	2.318	2.167	27.730	178.6	178.0	2	153.1	0.00	2	31.68	2	2.19	2	86.15	2	0.005	2	0.005	2	0.005	2	1083.9	2	2258.3	2	7.5851	2	2360	2	-9.00	9	-9.00	9	-9
2104	2	2301.7	34.733	34.734	2	2.140	1.975	27.761	186.4	185.4	2	147.3	0.00	2	30.89	2	2.14	2	87.81	2	-9.000	9	-9.000	9	-9.000	9	1067.3	2	2254.2	2	7.5972	2	2357	2	-9.00	9	-9.00	9	-9
2103	2	2501.3	34.741	34.742	2	1.932	1.752	27.784	191.4	190.8	2	143.7	0.00	2	30.80	2	2.12	2	92.11	2	-9.000	9	-9.000	9	-9.000	9	1052.2	2	2255.2	2	7.6034	2	2361	2	-9.00	9	-9.00	9	-9
2102	2	2702.0	34.741	34.742	2	1.772	1.577	27.797	194.5	193.4	2	142.6	0.00	2	30.97	2	2.12	2	96.73	2	0.001	2	0.000	2	0.000	2	1051.7	2	2257.9	2	7.6046	2	2367	2	-9.00	9	-9.00	9	-9
2101	2	2869.3	34.736	34.737	2	1.609	1.402	27.806	196.2	194.6	2	143.0	0.00	2	31.17	2	2.14	2	102.63	2	0.001	2	0.000	2	0.000	2	1057.4	2	2262.6	2	7.6041	2	2372	2	-9.00	9	-9.00	9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR

NOAA Ship Baldrige

STATION 22 DATE 10/04/1995
 CAST 1 GMT 11:17
 CTD CAST 243

LATITUDE 34° 18.06' S
 LONGITUDE 86° 37.55' E

Bottle Number	CTD				Bottle				CO2																													
	db	Pressure	Salinity	Salinity	Temp	Pot	Sigma	Theta	O2	O2	F* AOU	F* NO2	F* NO3	F* PO4	F* Si(OH)4	F* CFC-11	F* CFC-12	F* DIC	F* pH	F* TA	F* TOC	F* TON	F* Chi-a															
				°C	°C	°C	°C	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	µg/l															
2224	2	7.3	35.237	35.238	2	13.138	13.137	26.550	26.550	287.2	265.0	2	-8.3	0.11	2	4.48	2	0.46	2	2.35	2	3.260	2	1.806	2	447.3	2	2077.5	6	7.9145	2	2320	2	59.10	2	-9.00	9	-9
2223	2	40.8	35.236	35.236	2	12.944	12.938	26.589	26.589	266.7	265.3	2	-7.6	0.11	2	4.50	2	0.46	2	2.41	2	3.247	2	1.725	2	447.6	2	2079.1	2	7.9146	2	-9	9	60.11	2	-9.00	9	-9
2222	2	81.3	35.220	35.221	2	12.793	12.782	26.608	26.608	262.4	261.4	2	-2.8	0.15	2	4.98	2	0.51	2	2.46	2	-9.000	9	-9.000	9	453.6	2	2082.1	2	7.9085	2	-9	9	58.13	2	-9.00	9	-9
2221	2	119.7	35.187	35.187	2	12.570	12.554	26.627	26.627	259.5	259.2	2	0.7	0.21	2	5.60	2	0.55	2	2.51	2	3.302	2	1.689	2	464.0	2	2084.1	2	7.9011	2	2317	2	55.45	2	-9.00	9	-9
2220	2	152.7	35.175	35.176	2	12.516	12.496	26.630	26.630	259.3	259.0	2	1.2	0.23	2	5.70	2	0.56	2	2.65	2	-9.000	9	-9.000	9	468.8	2	2083.9	2	7.8990	2	2317	2	55.45	2	-9.00	9	-9
2219	2	198.1	35.139	35.144	2	12.343	12.317	26.640	26.640	255.3	243.0	2	18.3	0.21	2	6.56	2	0.59	2	2.87	2	3.273	2	1.711	2	479.0	2	2085.6	2	7.8919	2	2313	2	51.05	2	-9.00	9	-9
2218	2	301.5	35.014	35.019	2	11.502	11.464	26.706	26.706	242.7	243.1	2	23.1	0.00	2	10.64	2	0.83	2	4.01	2	3.217	2	1.664	2	528.9	2	2101.9	2	7.8490	2	2305	2	49.15	2	-9.00	9	-9
2217	2	397.9	34.982	34.963	2	11.129	11.079	26.733	26.733	245.2	246.0	2	22.5	0.00	2	11.22	2	0.86	2	4.07	2	3.301	2	1.706	2	544.6	2	2104.9	2	7.8420	2	2306	2	47.85	2	-9.00	9	-9
2216	2	499.1	34.880	34.860	2	10.577	10.516	26.769	26.769	244.5	245.2	2	26.8	0.00	2	12.41	2	0.93	2	4.24	2	-9.000	9	-9.000	9	565.9	2	2105.6	2	7.8290	2	2300	2	47.00	2	-9.00	9	-9
2215	2	600.4	34.789	34.789	2	9.999	9.928	26.800	26.800	241.6	238.7	2	36.9	0.00	2	13.87	2	1.02	2	4.34	2	3.214	2	1.613	2	592.9	2	2109.8	2	7.8125	2	2295	2	9.00	9	-9.00	9	-9
2214	2	701.5	34.704	34.704	2	9.412	9.332	26.833	26.833	229.4	232.1	2	47.3	0.00	2	16.71	2	1.21	2	6.07	2	-9.000	9	-9.000	9	639.7	2	2120.0	2	7.7631	2	2295	2	9.00	9	-9.00	9	-9
2213	2	800.0	34.571	34.571	2	8.207	8.122	26.919	26.919	211.7	213.7	2	73.7	0.00	2	21.34	2	1.49	2	10.55	2	1.830	2	0.902	2	729.7	2	2140.3	2	7.7288	2	2291	2	43.61	2	-9.00	9	-9
2212	2	999.2	34.394	34.393	2	5.487	5.400	27.147	27.147	201.5	202.5	2	104.0	0.00	2	28.45	2	1.97	2	25.39	2	1.017	2	0.503	2	920.0	2	2177.5	2	7.6435	2	2298	2	9.00	9	-9.00	9	-9
2211	2	1201.9	34.396	34.394	2	3.766	3.676	27.337	27.337	189.1	191.2	2	128.4	0.00	2	32.32	2	2.26	2	45.89	2	-9.000	9	-9.000	9	1059.5	2	2213.3	2	7.5895	2	2318	2	9.00	9	-9.00	9	-9
2210	2	1398.5	34.505	34.506	2	3.387	3.284	27.464	27.464	162.8	161.3	2	161.1	0.00	2	34.16	2	2.40	2	66.15	2	0.089	2	0.041	2	1169.4	2	2247.1	2	7.5559	2	2335	2	42.13	2	-9.00	9	-9
2209	2	1593.9	34.567	34.567	2	2.959	2.844	27.554	27.554	162.9	161.8	2	164.1	0.00	2	34.03	2	2.39	2	73.10	2	-9.000	9	-9.000	9	1198.9	3	2255.3	2	7.5533	2	2348	2	9.00	9	-9.00	9	-9
2208	2	1801.0	34.642	34.642	2	2.655	2.526	27.641	27.641	167.3	166.3	2	162.0	0.00	2	33.19	2	2.33	2	79.33	2	0.019	2	0.009	2	1154.7	2	2257.7	2	7.5622	2	-9	9	9.00	9	-9.00	9	-9
2207	2	1999.7	34.694	34.693	2	2.446	2.303	27.701	27.701	176.8	176.2	2	153.8	0.00	2	31.82	2	2.23	2	80.37	2	-9.000	9	-9.000	9	1102.5	2	2254.0	2	7.5790	2	2353	2	41.88	2	-9.00	9	-9
2206	2	2203.4	34.725	34.724	2	2.250	2.092	27.743	27.743	182.6	182.2	2	149.5	0.00	2	31.27	2	2.15	2	85.07	2	0.010	2	0.001	2	1068.8	2	2253.9	2	7.5919	2	2359	2	9.00	9	-9.00	9	-9
2205	2	2401.0	34.739	34.739	2	2.062	1.889	27.771	27.771	188.8	188.6	2	144.8	0.00	2	30.79	2	2.11	2	88.82	2	-9.000	9	-9.000	9	1054.1	2	2253.7	2	7.5990	2	2364	2	9.00	9	-9.00	9	-9
2204	2	2601.1	34.741	34.742	2	1.861	1.674	27.790	27.790	191.9	191.9	2	143.3	0.00	2	30.77	2	2.11	2	94.26	2	0.003	2	0.002	2	1045.4	2	2256.5	2	7.6040	2	2364	2	42.29	2	-9.00	9	-9
2203	2	2900.5	34.734	34.735	2	1.554	1.345	27.809	27.809	194.6	194.0	2	144.1	0.00	2	31.39	2	2.15	2	105.17	2	0.003	2	-0.001	2	1043.1	2	2264.1	2	7.6037	2	2372	2	9.00	9	-9.00	9	-9
2202	2	3200.4	34.733	34.734	2	1.416	1.181	27.819	27.819	200.6	199.3	2	140.2	0.00	2	31.20	2	2.13	2	106.30	2	0.002	2	0.002	2	1038.9	2	2260.6	2	7.6062	2	2373	2	9.00	9	-9.00	9	-9
2201	2	3342.6	34.729	34.730	2	1.306	1.060	27.824	27.824	203.3	201.2	2	139.4	0.00	2	31.22	2	2.13	2	109.01	2	0.004	2	0.001	2	1048.3	2	2260.2	6	7.6052	2	2370	2	42.80	2	-9.00	9	-9

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

** WOCE quality flag (F) for parameter from previous bottle

*** PSS-78 scale

**** ITS-90 scale

I8NR NOAA Ship Baldridge

STATION 24 DATE 10/04/1995
 CAST 1 GMT 20:38
 CTD CAST 245

LATITUDE 34° 36.99' S
 LONGITUDE 85° 28.12' E

Bottle Number	CTD		Bottle		F* Pressure db	Salinity	Pot. T** °C	Temp*** °C	Sigma T****	O2	O2 Hmol/kg	ADU	NO2 Hmol/kg	NO3 Hmol/kg	PO4 Hmol/kg	Si(OH)4 F* Hmol/kg	CFC-11 F* pmol/kg	CFC-12 F* pmol/kg	F* at 20 °C F* H ₂ O	DIC Hmol/kg	pH	F* TA Hmol/kg	TOC F* Hmol/kg	TON F* Hmol/kg	Chl-a Hg/l	Phaeo Hg/l
	Salinity	Temp	O2	Theta																						
2424	2	6.5	35.334	13.443	26.562	262.4	261.2	-6.3	0.08	3.20	0.40	2.179	2.3174	1.703	2.4344	-9.0	9	59.12	2.429	2	-9	-9	-9	-9	-9	-9
2423	2	48.3	35.310	13.332	26.565	262.9	262.4	-6.8	0.09	3.41	0.40	2.191	2.3167	1.671	2.4388	-9.0	9	58.85	2.444	2	-9	-9	-9	-9	-9	-9
2422	2	99.5	35.255	13.075	26.579	263.1	262.9	-5.8	0.09	3.71	0.43	2.191	2.3253	1.739	2.4526	-9.0	9	56.39	2.441	2	-9	-9	-9	-9	-9	-9
2421	2	149.2	35.223	12.915	26.587	260.1	261.0	-3.0	0.13	4.21	0.47	2.205	2.3284	1.655	2.4533	-9.0	9	56.04	2.445	2	-9	-9	-9	-9	-9	-9
2420	2	198.7	35.190	12.685	26.609	258.7	259.6	-0.3	0.17	4.76	0.51	2.205	2.3304	1.665	2.4637	-9.0	9	51.41	2.900	9	-9	-9	-9	-9	-9	-9
2419	3	300.7	35.045	11.704	26.687	241.4	242.5	22.6	0.00	9.97	0.79	2.355	2.3284	1.655	2.5333	-9.0	9	47.78	2.332	2	-9	-9	-9	-9	-9	-9
2418	2	398.7	34.964	11.144	26.732	245.4	246.3	22.1	0.00	10.95	0.85	2.391	2.3304	1.665	2.5438	-9.0	9	47.62	2.900	9	-9	-9	-9	-9	-9	-9
2417	2	499.6	34.902	10.716	26.762	245.5	246.8	24.3	0.00	11.77	0.91	2.391	2.3304	1.665	2.5631	-9.0	9	47.62	2.900	9	-9	-9	-9	-9	-9	-9
2416	3	599.1	34.811	10.137	26.794	243.3	240.5	34.3	-9.0	15.17	1.12	2.494	2.2992	1.467	2.6120	-9.0	9	9.00	9.000	9	0	9	-9.00	9.00	9	-9
2415	2	700.5	34.711	9.483	26.846	235.7	239.4	39.5	0.00	19.81	1.39	2.841	2.2199	1.064	2.7055	-9.0	9	22.96	2.900	9	-9	-9	-9	-9	-9	-9
2414	2	799.0	34.601	8.555	26.890	216.8	220.0	65.1	0.00	27.83	1.93	2.236	2.1049	0.505	2.9141	-9.0	9	22.99	2.900	9	-9	-9	-9	-9	-9	-9
2413	2	1000.9	34.402	5.696	27.128	202.1	202.1	102.9	0.00	32.04	2.24	2.4507	2.0325	0.164	2.1070	-9.0	9	22.95	2.900	9	-9	-9	-9	-9	-9	-9
2412	2	1198.8	34.408	4.126	27.311	182.8	182.5	134.3	0.00	33.59	2.36	2.5977	2.0185	0.096	2.1155	-9.0	9	22.95	2.900	9	-9	-9	-9	-9	-9	-9
2411	2	1400.4	34.470	3.398	27.434	170.9	170.0	152.4	0.00	33.63	2.36	2.7630	2.0081	0.088	2.1186	-9.0	9	22.95	2.900	9	-9	-9	-9	-9	-9	-9
2410	2	1699.1	34.600	2.895	27.587	162.8	163.5	162.9	0.00	31.84	2.22	2.7822	2.0022	0.008	2.1122	-9.0	9	22.95	2.900	9	-9	-9	-9	-9	-9	-9
2409	2	2000.5	34.683	2.486	27.689	176.0	175.4	154.3	0.00	30.46	2.11	2.8175	2.0010	0.010	2.1086	-9.0	9	22.95	2.900	9	-9	-9	-9	-9	-9	-9
2408	2	2301.7	34.735	2.218	27.755	186.7	187.1	144.9	0.00	30.26	2.09	2.9007	2.0009	0.000	2.1050	-9.0	9	22.95	2.900	9	-9	-9	-9	-9	-9	-9
2407	2	2599.8	34.747	1.892	27.762	194.7	194.9	140.0	0.00	30.35	2.10	2.9589	2.0005	0.000	2.1036	-9.0	9	22.95	2.900	9	-9	-9	-9	-9	-9	-9
2406	2	2801.7	34.744	1.717	27.803	196.5	196.7	139.9	0.00	30.91	2.13	2.1014	2.0009	0.000	2.1036	-9.0	9	22.95	2.900	9	-9	-9	-9	-9	-9	-9
2405	2	2949.1	34.738	1.565	27.810	197.2	197.2	140.8	0.00	31.06	2.13	2.1042	2.0003	0.002	2.1050	-9.0	9	22.95	2.900	9	-9	-9	-9	-9	-9	-9
2404	2	3097.5	34.735	1.466	27.815	199.5	198.5	140.5	0.00	31.12	2.14	2.1067	2.0005	0.003	2.1052	-9.0	9	22.95	2.900	9	-9	-9	-9	-9	-9	-9
2403	2	3247.6	34.732	1.393	27.819	200.0	199.4	140.4	0.00	31.07	2.15	2.1086	2.0004	0.002	2.1053	-9.0	9	22.95	2.900	9	-9	-9	-9	-9	-9	-9
2402	2	3401.9	34.729	1.312	27.823	202.3	201.3	139.3	0.00	31.35	2.15	2.1107	2.0004	0.005	2.1053	-9.0	9	22.95	2.900	9	-9	-9	-9	-9	-9	-9
2401	2	3537.5	34.725	1.227	27.828	204.2	202.8	138.7	0.00	31.35	2.15	2.1107	2.0004	0.005	2.1053	-9.0	9	22.95	2.900	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
 *** PSS-78 scale
 **** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 25 DATE 10/04/1995
 CAST 1 GMT 01:38
 CTD CAST 246

LATITUDE 34° 45.71' S
 LONGITUDE 84° 52.77' E

Bottle Number	CTD		Bottle		CTD		Bottle		Sigma Theta	Pot. T °C	F* Temp °C	Salinity	F* Salinity	S ₀	NO ₂ μmol/kg	NO ₃ μmol/kg	PO ₄ μmol/kg	Si(OH) ₄ μmol/kg	CFC-11 pmol/kg	CFC-12 pmol/kg	F* at 20 °C	DIC μmol/kg	pH	F* TA μmol/kg	F* TOC μmol/kg	F* TON μmol/kg	Chl-a μg/l	Phase μg/l									
	db	Pressure	O ₂ μmol/kg	O ₂ %	O ₂ μmol/kg	AOU	NO ₂ μmol/kg	NO ₃ μmol/kg																					PO ₄ μmol/kg	Si(OH) ₄ μmol/kg	CFC-11 μmol/kg	CFC-12 μmol/kg	H ₂ O	H ₂ CO ₃			
2524	2	9.0	35.392	35.393	2	13.582	13.581	26.579	259.0	258.4	-4.3	0.09	2	3.06	2	0.37	2	1.60	2	3.148	2	1.623	2	429.4	2	2080.2	8	7.9309	2	2329	2	-9.00	9	-9.00	9	-9	
2523	2	53.9	35.393	35.393	2	13.591	13.583	28.579	258.3	258.5	-4.4	0.08	2	3.05	2	0.38	2	1.63	2	-9.000	9	-9.000	9	-9.0	9	-9.0	9	7.9331	2	-9	9	-9.00	9	-9.00	9	-9	
2522	2	102.8	35.380	35.386	2	13.541	13.526	26.585	257.5	257.8	-3.4	0.08	2	3.14	2	0.39	2	1.66	2	-9.000	9	-9.000	9	-9.0	9	-9.0	9	7.9357	2	-9	9	-9.00	9	-9.00	9	-9	
2521	2	152.5	35.242	35.243	2	12.902	12.881	26.606	258.0	258.4	-0.4	0.17	2	4.50	2	0.49	2	2.05	2	3.273	2	1.682	2	447.9	2	2084.0	2	7.9126	2	2323	2	-9.00	9	-9.00	9	-9	
2520	2	202.8	35.236	35.238	2	12.847	12.819	26.614	256.4	258.1	2	0.3	0.19	2	4.71	2	0.50	2	1.92	2	-9.000	9	-9.000	9	-9.0	9	-9.0	9	7.9072	2	-9	9	-9.00	9	-9.00	9	-9
2519	2	301.2	35.055	35.055	2	11.754	11.715	26.887	240.7	241.5	2	23.3	0.00	2	9.94	2	0.79	2	3.39	2	-9.000	9	-9.000	9	528.2	2	2103.5	2	7.8536	2	2310	2	-9.00	9	-9.00	9	-9
2518	2	399.8	34.952	34.953	2	11.069	11.019	26.738	244.0	245.7	2	23.2	0.00	2	11.34	2	0.88	2	3.89	2	3.279	2	1.687	2	-9.0	9	-9.0	9	7.8421	2	-9	9	-9.00	9	-9.00	9	-9
2517	2	500.9	34.884	34.882	2	10.615	10.554	28.764	242.5	243.8	2	28.1	0.00	2	12.43	2	0.94	2	3.97	2	-9.000	9	-9.000	9	565.4	2	2108.4	2	7.8296	2	2305	2	-9.00	9	-9.00	9	-9
2516	2	600.5	34.807	34.807	2	10.083	10.012	26.800	251.1	253.2	2	21.9	0.00	2	13.06	2	0.98	2	4.08	2	-9.000	9	-9.000	9	-9.0	9	-9.0	9	7.8249	2	-9	9	-9.00	9	-9.00	9	-9
2515	2	701.9	34.694	34.696	2	9.354	9.274	26.836	234.6	236.3	2	43.5	0.00	2	16.53	2	1.20	2	5.57	2	2.893	2	1.401	2	632.0	2	2120.7	2	7.7870	2	2294	2	-9.00	9	-9.00	9	-9
2514	2	803.6	34.577	34.577	2	8.318	8.230	26.907	215.8	216.7	2	70.0	0.00	2	20.78	2	1.46	2	9.54	2	-9.000	9	-9.000	9	-9.0	9	-9.0	9	7.7368	2	-9	9	-9.00	9	-9.00	9	-9
2513	2	1000.3	34.405	34.405	2	5.623	5.535	27.140	198.7	199.0	2	106.5	0.00	2	28.31	2	1.97	2	24.90	2	-9.000	9	-9.000	9	927.6	2	2179.9	2	7.6462	2	2297	2	-9.00	9	-9.00	9	-9
2512	2	1200.8	34.411	34.405	3	4.175	4.081	27.305	182.7	183.9	2	132.5	0.00	2	31.92	2	2.26	2	44.50	2	0.890	2	0.433	2	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
2511	2	1399.3	34.491	34.490	2	3.482	3.387	27.442	163.6	163.2	2	158.5	0.00	2	33.77	2	2.39	2	83.22	2	-9.000	9	-9.000	9	1172.7	2	2245.0	2	7.5616	2	2333	2	-9.00	9	-9.00	9	-9
2510	2	1698.5	34.604	34.603	2	2.857	2.734	27.592	161.8	161.3	2	165.4	0.00	2	33.68	2	2.38	2	76.80	2	0.026	2	0.012	2	-9.0	9	-9.0	9	7.5573	2	-9	9	-9.00	9	-9.00	9	-9
2509	2	2099.5	34.703	34.703	2	2.412	2.260	27.713	176.0	175.3	2	155.0	0.00	2	31.80	2	2.24	2	83.78	2	-9.000	9	-9.000	9	1102.6	2	2258.3	2	7.5815	2	2358	2	-9.00	9	-9.00	9	-9
2508	2	2297.4	34.728	34.728	2	2.202	2.036	27.751	183.5	183.1	2	148.1	0.00	2	31.07	2	2.12	2	86.81	2	-0.005	4	-0.003	4	1076.2	2	2256.0	2	7.5947	2	2358	2	-9.00	9	-9.00	9	-9
2507	2	2599.5	34.746	34.746	2	1.912	1.724	27.790	193.9	194.7	2	140.1	0.00	2	29.98	2	2.09	2	89.88	2	-9.000	9	-9.000	9	1043.9	2	2252.3	2	7.6089	2	2364	2	-9.00	9	-9.00	9	-9
2506	2	2800.5	34.745	34.744	2	1.761	1.557	27.801	195.5	195.8	2	140.4	0.00	2	30.61	2	2.11	2	95.13	2	-9.000	9	-9.000	9	-9.0	9	-9.0	9	7.6074	2	-9	9	-9.00	9	-9.00	9	-9
2505	2	2998.6	34.741	34.741	2	1.579	1.380	27.812	199.0	199.1	2	138.8	0.00	2	30.68	2	2.13	2	98.47	2	0.006	2	0.003	2	1038.9	2	2254.7	2	7.6084	2	2363	2	-9.00	9	-9.00	9	-9
2504	2	3199.3	34.734	34.735	2	1.423	1.188	27.820	200.5	200.4	2	139.1	0.00	2	30.99	2	2.15	2	104.85	2	-9.000	9	-9.000	9	1046.8	2	2260.0	2	7.6082	2	2373	2	-9.00	9	-9.00	9	-9
2503	2	3399.7	34.731	34.731	2	1.340	1.088	27.823	202.2	201.7	2	138.8	0.00	2	30.89	2	2.16	2	107.29	2	-9.000	9	-9.000	9	1043.1	2	2260.9	2	7.6074	2	2371	2	-9.00	9	-9.00	9	-9
2502	2	3600.0	34.726	34.726	2	1.255	0.985	27.826	203.6	202.5	2	138.8	0.00	2	31.35	2	2.17	2	110.27	2	0.008	2	0.002	2	1050.1	2	2264.3	2	7.6070	2	2374	2	-9.00	9	-9.00	9	-9
2501	2	3714.0	34.725	34.725	2	1.241	0.959	27.827	204.8	203.5	2	138.0	0.00	2	31.48	2	2.17	2	110.99	2	0.007	2	0.004	2	1048.9	2	2263.8	2	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR

NOAA Ship Baldrige

STATION 26 DATE 10/05/1995
 CAST 2 GMT 07:17
 CTD CAST 247

LATITUDE 34° 54.17' S
 LONGITUDE 84° 17.42' E

Bottle Number	CTD		Bottle		Sigma T	Theta	O2	O2 Hmol/kg	AOU	NO2 Hmol/kg	NO3 Hmol/kg	PO4 Hmol/kg	Si(OH)4 Hmol/kg	CFC-11 pmol/kg	CFC-12 F* at 20°C F* Hmol/kg	DIC Hmol/kg	pH	TA Hmol/kg	TOC F* Hmol/l	TON F* Hmol/l	Chl-a Hg/l	Phase Hg/l											
	db	Salinity	Temp	Temp																													
2624	7.4	35.346	13.496	13.495	26.561	261.0	261.0	-6.4	0.11	3.47	2	0.39	2	1.90	2	3.206	2	1.737	2	434.9	2	2080.2	6	7.9269	2	2327	2	59.99	2	-9.0	9	-9	
2623	39.0	35.337	13.367	13.362	26.581	261.9	260.9	-5.8	0.11	3.52	2	0.39	2	1.93	2	3.125	2	1.698	2	433.0	2	2079.3	2	7.9259	2	2328	2	59.82	2	-9.0	9	-9	
2622	80.1	35.357	13.407	13.396	26.590	258.9	258.8	-3.7	0.12	3.43	2	0.40	2	1.93	2	-9.000	9	-9.000	9	436.3	2	2079.8	2	7.9251	2	2330	2	59.32	2	-9.0	9	-9	
2621	120.4	35.328	13.287	13.270	26.598	257.8	257.7	-1.9	0.13	3.68	2	0.42	2	2.01	2	3.167	2	1.661	2	437.7	2	2079.7	2	7.9220	2	2330	2	58.57	2	-9.0	9	-9	
2620	160.0	35.229	12.815	12.793	26.613	258.0	278.0	3	-19.5	0.20	4.70	2	0.49	2	2.15	2	3.255	2	1.696	2	457.0	2	2083.4	2	7.9086	2	2327	3	56.57	2	-9.0	9	-9
2619	199.8	35.220	12.772	12.745	26.617	257.9	259.0	-0.2	0.20	4.80	2	0.50	2	2.17	2	3.215	2	1.700	2	451.6	2	2083.8	2	7.9082	2	2318	2	52.89	2	-9.0	9	-9	
2618	299.7	35.071	11.862	11.823	26.679	239.7	240.2	23.9	0.01	9.41	2	0.76	2	3.53	2	3.239	2	1.638	2	523.7	2	2100.9	2	7.8539	2	-9	9	51.12	2	-9.0	9	-9	
2617	451.0	34.922	10.861	10.805	26.749	246.1	246.8	23.4	0.00	11.51	2	0.89	2	4.21	2	3.253	2	1.676	2	552.2	2	2105.0	2	7.8364	2	2300	2	48.56	2	-9.0	9	-9	
2616	599.3	34.814	10.159	10.088	26.792	241.0	242.6	32.0	0.00	13.47	2	1.00	2	4.62	2	3.123	2	1.573	2	590.7	2	2111.3	2	7.8125	2	2298	2	47.84	2	-9.0	9	-9	
2615	749.7	34.659	9.089	8.985	26.855	223.6	227.5	54.2	0.00	17.90	2	1.28	2	7.03	2	2.468	2	1.232	2	654.8	2	2126.6	2	7.7680	2	2293	2	-9.0	9	-9.0	9	-9	
2614	900.0	34.508	7.389	7.299	26.989	205.9	207.1	85.8	0.00	23.62	2	1.64	2	14.79	2	1.564	6	0.765	6	801.8	2	2154.2	2	7.6984	2	2295	2	-9.0	9	-9.0	9	-9	
2613	1101.8	34.373	4.673	4.583	27.225	200.2	199.7	112.9	0.00	29.77	2	2.08	2	32.54	2	0.788	2	0.388	2	980.4	2	2192.5	2	7.6205	2	2301	2	44.19	2	-9.0	9	-9	
2612	1300.9	34.450	-9.000	9	3.707	3.609	27.988	171.5	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	
2611	1500.7	34.504	3.123	3.014	27.488	170.8	170.2	154.4	0.00	33.69	2	2.35	2	63.76	2	0.182	2	0.088	2	1163.9	2	2243.7	2	7.5608	2	2332	2	-9.0	9	-9.0	9	-9	
2610	1703.6	34.599	2.793	2.670	27.595	167.5	166.8	160.4	0.00	33.62	2	2.32	2	73.87	2	0.065	2	0.025	2	1168.4	2	2254.0	2	7.5586	2	2342	2	42.71	2	-9.0	9	-9	
2609	1998.7	34.685	2.470	2.326	27.693	177.9	177.5	152.3	0.00	32.02	2	2.19	2	76.67	2	0.028	2	0.011	2	1117.9	2	2250.2	2	7.5759	2	2347	2	-9.0	9	-9.0	9	-9	
2608	2304.5	34.736	2.221	2.054	27.756	187.0	187.2	144.8	0.00	30.84	2	2.11	2	81.52	2	0.005	4	0.002	4	1071.2	2	2249.0	2	7.5945	2	2354	2	-9.0	9	-9.0	9	-9	
2607	2500.8	34.749	2.039	1.857	27.781	193.1	193.6	140.0	0.00	30.29	2	2.07	2	85.00	2	-9.000	9	-9.000	9	1042.8	2	2247.5	2	7.6042	2	2363	3	42.62	2	-9.0	9	-9	
2606	2798.6	34.746	1.699	1.497	27.807	198.0	198.8	137.9	0.00	30.62	2	2.09	2	94.85	2	0.004	2	0.001	2	1042.7	2	2251.2	2	7.6079	2	2361	2	-9.0	9	-9.0	9	-9	
2605	3099.2	34.735	1.414	1.189	27.820	201.1	201.3	138.1	0.00	31.15	2	2.12	2	103.82	2	-9.000	9	-9.000	9	1051.3	2	2257.9	2	7.6052	2	2371	2	-9.0	9	-9.0	9	-9	
2604	3298.2	34.730	1.301	1.060	27.825	202.4	202.3	138.3	0.00	31.30	2	2.15	2	107.92	2	0.002	2	0.001	2	1053.5	2	2256.9	2	7.6055	2	2370	2	42.78	2	-9.0	9	-9	
2603	3501.2	34.726	1.240	0.980	27.827	203.4	202.8	138.5	0.00	31.38	2	2.15	2	110.23	2	-9.000	9	-9.000	9	1052.4	2	2263.2	2	7.6040	2	2373	2	-9.0	9	-9.0	9	-9	
2602	3852.3	34.725	1.216	0.941	27.827	203.9	202.9	138.8	0.00	31.41	2	2.16	2	111.37	2	0.006	2	0.003	2	1048.1	2	2264.2	2	7.6051	2	2373	2	-9.0	9	-9.0	9	-9	
2601	3824.3	34.723	1.192	0.900	27.829	205.2	202.9	139.1	0.00	31.49	2	2.17	2	112.52	2	0.004	2	0.004	2	1054.0	2	2264.3	6	7.6084	2	2380	2	42.12	2	-9.0	9	-9	

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

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

*** PSS-78 scale

**** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 27 DATE 10/05/1995
 CAST 1 GMT 13:33
 CTD CAST 248

LATITUDE 35° 3.09' S
 LONGITUDE 83° 42.2' E

Bottle Number	CTD		Bottle		Sigma T	Theta	Pot. T °C	F* Temp °C	Salinity	AOU	NO2	NO3	PO4	Si(OH)4	CFC-11	CFC-12	F* at 20 °C	DIC	pH	TA	F* TOC	F* TON	Chi-a								
	db	Pressure	Salinity	O2																				O2	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg
2724	2	9.3	35.404	35.407	13.707	13.706	26.564	260.3	258.9	-5.5	0.09	3.16	0.36	1.73	3.131	2.048	3	421.6	2	2078.0	6	7.9343	2	2331	2	-9.00	9	-9.00	9	-9	
2723	2	41.0	35.403	35.403	13.669	13.663	26.570	259.3	259.0	-5.4	0.08	3.22	0.36	1.67	-9.000	9	-9.000	9	428.0	2	2079.5	2	7.9337	2	2332	2	-9.00	9	-9.00	9	-9
2722	2	78.0	35.376	35.378	13.511	13.500	26.584	255.0	255.3	-0.8	0.10	3.78	0.40	1.78	-9.000	9	-9.000	9	435.5	2	2082.9	2	7.9281	2	2332	2	-9.00	9	-9.00	9	-9
2721	2	121.1	35.253	35.254	12.926	12.909	26.609	248.0	247.5	10.4	0.13	6.06	0.54	2.28	-9.000	9	-9.000	9	467.2	2	2090.5	2	7.8983	2	2328	2	-9.00	9	-9.00	9	-9
2720	2	160.8	35.197	35.197	12.617	12.595	26.627	243.3	243.3	16.4	0.02	7.56	0.82	2.82	-9.000	9	-9.000	9	491.6	2	2095.9	2	7.8810	2	2318	2	-9.00	9	-9.00	9	-9
2719	2	199.4	35.138	35.139	12.286	12.260	26.648	239.8	239.9	21.7	0.00	9.03	0.70	3.11	3.209	2	1.668	2	509.2	2	2101.1	2	7.8655	2	2315	2	-9.00	9	-9.00	9	-9
2718	2	300.6	35.057	35.057	11.797	11.758	26.680	241.5	241.8	22.7	0.00	10.33	0.78	3.67	-9.000	9	-9.000	9	530.0	2	2098.2	2	7.8550	2	2317	2	-9.00	9	-9.00	9	-9
2717	2	400.0	34.996	34.996	11.398	11.347	26.709	243.2	243.2	23.7	0.00	10.78	0.83	3.91	-9.000	9	-9.000	9	542.9	2	2100.0	2	7.8468	2	2309	2	-9.00	9	-9.00	9	-9
2716	2	500.3	34.927	34.927	10.931	10.869	26.743	243.5	244.9	24.9	0.00	12.06	0.89	4.11	-9.000	9	-9.000	9	550.0	2	2102.6	2	7.8367	2	2305	2	-9.00	9	-9.00	9	-9
2715	2	600.0	34.849	34.847	10.417	10.344	26.773	240.3	242.0	31.0	0.00	13.53	0.98	4.49	3.102	2	1.580	2	578.8	2	2111.1	2	7.8207	2	2305	2	-9.00	9	-9.00	9	-9
2714	2	700.8	34.748	34.746	9.733	9.651	26.813	234.2	230.5	46.9	0.00	15.65	1.11	5.28	-9.000	9	-9.000	9	618.1	2	2119.2	2	7.7963	2	2298	2	-9.00	9	-9.00	9	-9
2713	2	793.5	34.627	34.627	8.749	8.662	26.880	217.2	218.6	65.2	0.00	19.67	1.36	8.36	-9.000	9	-9.000	9	694.0	2	2130.8	2	7.7509	2	2296	2	-9.00	9	-9.00	9	-9
2712	2	998.6	34.417	34.416	5.976	5.886	27.106	203.3	203.0	99.9	0.00	27.69	1.87	21.51	-9.000	9	-9.000	9	893.6	2	2169.9	2	7.6568	2	2301	2	-9.00	9	-9.00	9	-9
2711	2	1139.5	34.362	34.363	4.458	4.367	27.241	202.5	201.9	112.4	0.00	30.90	2.12	32.99	-9.000	9	-9.000	9	987.1	2	2191.6	2	7.6174	2	2302	2	-9.00	9	-9.00	9	-9
2710	2	1400.7	34.460	34.459	3.343	3.240	27.431	176.6	175.9	147.0	0.00	33.98	2.32	56.95	-9.000	9	-9.000	9	1128.0	2	2231.9	2	7.5681	2	2327	2	-9.00	9	-9.00	9	-9
2709	2	1645.5	34.576	34.575	2.872	2.753	27.568	167.3	166.5	160.1	0.00	34.15	2.34	71.09	-9.000	9	-9.000	9	1171.0	2	2250.8	2	7.5563	2	-9	9	-9.00	9	-9.00	9	-9
2708	2	1799.2	34.627	34.626	2.660	2.531	27.628	171.0	170.6	157.7	0.00	33.36	2.28	73.55	0.060	2	0.025	2	1159.5	2	2251.0	2	7.5631	2	2344	2	-9.00	9	-9.00	9	-9
2707	2	1997.4	34.688	34.687	2.461	2.318	27.695	178.4	178.1	151.8	0.00	32.02	2.18	75.94	-9.000	9	-9.000	9	1116.2	2	2248.6	2	7.5779	2	2349	2	-9.00	9	-9.00	9	-9
2706	2	2198.1	34.726	34.725	2.296	2.137	27.740	185.4	185.3	146.0	0.00	30.68	2.11	78.81	-9.000	9	-9.000	9	1066.6	2	2246.5	2	7.5943	2	2355	2	-9.00	9	-9.00	9	-9
2705	2	2550.1	34.750	34.749	1.907	1.723	27.792	195.0	195.8	139.2	0.00	30.49	2.07	87.83	-9.000	9	-9.000	9	1041.5	2	2246.6	2	7.6065	2	2356	2	-9.00	9	-9.00	9	-9
2704	2	2801.2	34.745	34.745	1.632	1.431	27.811	198.6	199.0	138.3	0.00	31.02	2.08	85.97	0.006	2	0.001	2	1034.3	2	2250.8	2	7.6061	2	2361	2	-9.00	9	-9.00	9	-9
2703	2	3100.0	34.733	34.732	1.359	1.135	27.821	201.1	202.0	137.9	0.00	31.19	2.12	104.88	-9.000	9	-9.000	9	1055.1	2	2257.0	2	7.6058	2	2369	2	-9.00	9	-9.00	9	-9
2702	2	3400.7	34.726	34.726	1.225	0.975	27.827	203.1	202.6	138.8	0.00	31.37	2.14	109.60	-9.000	9	-9.000	9	1053.4	2	2281.1	2	7.6046	2	2369	2	-9.00	9	-9.00	9	-9
2701	2	3804.3	34.723	34.723	1.183	0.893	27.830	204.8	203.1	139.0	0.00	31.38	2.16	112.08	0.008	2	0.003	2	1043.2	2	2285.9	6	7.6113	2	2375	2	-9.00	9	-9.00	9	-9

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

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

*** PSS-78 scale

**** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 28 DATE 10/05/1995
 CAST 1 GMT 18:44
 CTD CAST 249

LATITUDE 35° 13.13' S
 LONGITUDE 83° 8.62' E

Bottle Number	CTD										Bottle										rCO2																	
	F* Pressure db	Salinity	Temp** °C	Pot. T*** °C	Sigma Theta	O2 μmol/kg	O2 I μmol/kg	AOU μmol/kg	NO2 μmol/kg	NO3 μmol/kg	PO4 μmol/kg	Si(OH)4 μmol/kg	F* CFC-11 pmol/kg	F* CFC-12 pmol/kg	F* at 20°C μmol/kg	DIC μmol/kg	pH	F* TA μmol/kg	F* TOC μmol/l	TON μmol/l	Chl-a μg/l	Phaeo μg/l																
2824	2	6.6	35.395	35.397	2	13.668	13.667	26.565	260.8	259.8	2	-6.2	0.08	2	3.03	2	0.36	2	1.91	2	3.093	2	1.674	2	430.4	2	2076.4	6	7.9331	2	2330	2	81.45	2	4.27	2	-9	-9
2823	2	39.1	35.398	35.397	2	13.670	13.664	26.565	259.4	258.6	2	-4.9	0.06	2	3.02	2	0.36	2	1.85	2	3.110	2	1.643	2	425.4	2	2076.6	2	7.9374	2	2335	2	61.87	2	4.25	2	-9	-9
2822	2	77.3	35.349	35.349	2	13.427	13.416	26.579	258.5	258.2	2	-3.2	0.08	2	3.45	2	0.40	2	2.04	2	-9.000	9	-9.000	9	435.7	2	2078.7	2	7.9248	2	2326	2	59.88	2	4.45	2	-9	-9
2821	2	120.2	35.327	35.330	2	13.340	13.323	26.584	256.8	257.1	2	-1.6	0.09	2	3.71	2	0.42	2	2.09	2	3.120	2	1.646	2	438.3	2	2076.5	2	7.9218	2	2326	2	58.28	2	4.69	2	-9	-9
2820	2	158.2	35.273	35.272	2	13.041	13.019	26.600	252.6	253.4	2	3.9	0.17	2	4.88	2	0.50	2	2.27	2	-9.000	9	-9.000	9	457.3	2	2084.0	2	7.9094	2	-9	9	53.92	2	4.03	2	-9	-9
2819	2	198.4	35.249	35.250	2	12.908	12.881	26.611	250.4	251.1	2	6.9	0.16	2	5.56	2	0.53	2	2.40	2	3.149	2	1.656	2	467.2	2	2084.4	2	7.8931	2	2322	2	50.75	2	3.89	2	-9	-9
2818	2	302.7	35.069	35.069	2	11.866	11.827	26.676	243.1	242.9	2	21.2	0.00	2	9.76	2	0.76	2	3.71	2	3.214	2	1.654	2	517.7	2	2097.5	2	7.8583	2	2310	2	47.07	2	3.95	2	-9	-9
2817	2	399.6	34.983	34.983	2	11.302	11.251	26.717	243.3	243.4	2	24.1	0.00	2	11.12	2	0.84	2	4.13	2	3.153	2	1.612	2	546.6	2	2100.1	2	7.8449	2	2310	2	45.42	2	3.34	2	-9	-9
2816	2	501.2	34.908	34.713	3	10.815	10.753	26.597	241.5	242.3	2	28.6	0.00	2	12.27	2	0.93	2	4.37	2	3.130	2	1.601	2	566.4	2	2102.4	2	7.8321	2	2303	2	45.71	2	3.40	2	-9	-9
2815	2	599.0	34.836	34.835	2	10.287	10.215	26.787	246.8	248.3	2	25.5	0.00	2	12.80	2	0.95	2	4.14	2	3.287	2	1.652	2	573.5	2	2109.7	2	7.8250	2	2300	2	-9.00	9	-9.00	9	-9	-9
2814	2	699.9	34.727	34.728	2	9.601	9.520	26.821	236.7	239.3	2	38.9	0.00	2	15.41	2	1.11	2	4.82	2	2.986	8	1.505	6	621.3	2	2115.6	2	7.7962	2	2298	2	-9.00	9	-9.00	9	-9	-9
2813	2	802.2	34.636	34.638	2	8.826	8.737	26.877	219.7	221.2	2	62.1	0.00	2	19.04	2	1.33	2	8.10	2	2.226	2	1.090	2	687.7	2	2163.6	2	7.7561	2	2293	2	44.77	2	-9.00	9	-9	-9
2812	2	1001.4	34.434	34.434	2	6.293	6.200	27.080	203.4	204.2	2	96.5	0.00	2	26.33	2	1.82	2	18.75	2	1.273	2	0.610	2	864.9	2	2167.8	2	7.6677	2	2292	2	-9.00	9	-9.00	9	-9	-9
2811	2	1153.1	34.367	34.366	2	4.559	4.466	27.233	202.9	203.0	2	110.5	0.00	2	30.03	2	2.08	2	32.26	2	0.913	6	0.437	6	979.4	2	2190.8	2	7.6232	2	2304	2	-9.00	9	-9.00	9	-9	-9
2810	2	1409.5	34.462	34.460	2	3.326	3.222	27.433	176.8	175.5	2	147.5	0.00	2	33.42	2	2.33	2	57.33	2	0.273	2	0.132	2	1142.8	2	2234.7	2	7.5688	2	2327	2	42.14	2	-9.00	9	-9	-9
2809	2	1651.3	34.575	34.574	2	2.906	2.787	27.564	166.0	165.2	2	161.1	0.00	2	33.85	2	2.35	2	71.44	2	0.071	2	0.037	2	1166.0	2	2253.2	2	7.5578	2	2341	2	-9.00	9	-9.00	9	-9	-9
2808	2	1803.3	34.631	34.631	2	2.654	2.525	27.633	171.0	169.8	2	158.5	0.00	2	32.87	2	2.29	2	74.64	2	0.052	2	0.027	2	1142.3	2	2255.1	2	7.5644	2	2348	2	-9.00	9	-9.00	9	-9	-9
2807	2	2005.9	34.688	34.687	2	2.472	2.328	27.694	178.4	175.7	2	154.1	0.00	2	31.87	2	2.21	2	78.55	2	-9.000	9	-9.000	9	1107.6	2	2254.5	2	7.5791	2	2352	2	42.70	2	-9.00	9	-9	-9
2806	2	2204.4	34.726	34.725	3	2.294	2.135	27.741	185.1	185.1	2	146.2	0.00	2	30.82	2	2.12	2	78.97	2	0.012	2	0.006	2	1074.8	2	2246.7	2	7.5910	2	2350	2	-9.00	9	-9.00	9	-9	-9
2805	2	2497.2	34.751	34.750	2	1.948	1.769	27.790	194.9	195.0	2	139.4	0.00	2	30.07	2	2.07	2	86.53	2	-9.000	9	-9.000	9	1031.4	2	2247.3	2	7.6071	2	2359	2	-9.00	9	-9.00	9	-9	-9
2804	2	2803.9	34.744	34.743	2	1.617	1.416	27.810	199.0	199.3	2	136.1	0.00	2	30.42	2	2.09	2	96.70	2	0.005	2	0.002	2	1041.0	2	2251.8	2	7.6077	2	2362	2	42.15	2	-9.00	9	-9	-9
2803	2	3088.0	34.734	34.733	2	1.366	1.143	27.821	201.4	201.5	2	136.4	0.00	2	30.87	2	2.13	2	104.89	2	0.010	2	0.003	2	1034.9	2	2256.3	2	7.6064	2	2366	2	-9.00	9	-9.00	9	-9	-9
2802	2	3396.2	34.728	34.727	2	1.262	1.012	27.825	203.0	202.5	2	136.5	0.00	2	31.17	2	2.15	2	108.61	2	0.014	2	0.009	2	1046.0	2	2262.0	2	7.6052	2	-9	9	-9.00	9	-9.00	9	-9	-9
2801	2	3720.5	34.725	34.725	2	1.232	0.950	27.828	204.3	202.5	2	139.1	0.00	2	31.28	2	2.15	2	110.52	2	0.009	2	0.016	2	1048.4	2	2262.7	6	7.6075	2	2373	2	42.41	2	-9.00	9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR
NOAA Ship Baldrige

STATION 29 DATE 10/05/1995
CAST 1 GMT 23:56
CTD CAST 250

LATITUDE 35° 21.56' S
LONGITUDE 82° 33.07' E

Bottle Number	F** Pressure db	CTD			Bottle			F* Temp** °C	F* Salinity**	F* Pot.*** °C	Sigma T			F* AOU	NO2	NO3	PO4	Si(OH)4	CFC-11	CFC-12	F* at 20 °C			pH	TA	F* TOC	F* TON	Chi-a							
		Sigma	Theta	T	O2	Hm	Fam				DIC	F* CH4	F* Urea								F* POC														
2924	2	5.5	35.322	35.322	13.450	13.449	26.552	26.552	281.6	259.5	-4.8	0.12	3.44	2	0.39	2	2.09	2	3.172	2	1.653	2	436.3	2	2075.8	6	7.9281	2	2326	2	-9.00	9	-9.00	9	-9
2923	2	28.9	35.322	35.322	13.451	13.447	26.552	26.552	260.9	262.3	-7.4	0.12	3.45	2	0.39	2	1.95	2	-9.000	9	-9.000	9	436.0	2	2075.9	2	7.9250	2	-9	9	-9.00	9	-9.00	9	-9
2922	2	59.1	35.322	35.322	13.454	13.446	26.552	26.552	260.1	259.5	-4.6	0.12	3.45	2	0.40	2	1.99	2	-9.000	9	-9.000	9	-9.0	9	2077.4	2	7.9258	2	-9	9	-9.00	9	-9.00	9	-9
2921	2	98.7	35.359	35.361	13.483	13.469	26.578	26.578	258.3	258.0	-3.3	0.11	3.22	2	0.39	2	1.86	2	-9.000	9	-9.000	9	427.7	2	2076.7	2	7.9281	2	-9	9	-9.00	9	-9.00	9	-9
2920	2	199.2	35.288	35.288	13.127	13.099	26.597	26.597	254.9	255.2	1.6	0.18	4.28	2	0.47	2	2.10	2	-9.000	9	-9.000	9	-9.0	9	2081.5	2	7.9131	2	-9	9	-9.00	9	-9.00	9	-9
2919	2	298.6	35.106	35.106	12.113	12.074	26.658	26.658	241.5	241.8	20.9	0.00	9.15	2	0.73	2	3.59	2	1.636	2	1.636	2	508.7	2	2086.4	2	7.8637	2	-9	9	-9.00	9	-9.00	9	-9
2918	2	398.8	35.012	35.012	11.509	11.458	26.701	26.701	242.0	242.8	23.5	0.00	10.68	2	0.82	2	4.01	2	-9.000	9	-9.000	9	-9.0	9	2100.3	2	7.8497	2	-9	9	-9.00	9	-9.00	9	-9
2917	2	502.4	34.929	34.930	10.949	10.886	26.742	26.742	242.3	243.9	25.8	0.00	11.85	2	0.90	2	4.25	2	-9.000	9	-9.000	9	549.6	2	2107.4	2	7.8386	2	-9	9	-9.00	9	-9.00	9	-9
2916	2	599.2	34.830	34.831	10.292	10.220	26.783	26.783	239.0	240.8	33.0	0.00	13.61	2	1.00	2	4.85	2	-9.000	9	-9.000	9	-9.0	9	2111.9	2	7.8180	2	-9	9	-9.00	9	-9.00	9	-9
2915	2	697.1	34.731	34.730	9.611	9.530	26.821	26.821	231.7	234.3	43.9	0.00	15.82	2	1.14	2	5.59	2	2.785	2	2.785	2	824.6	2	2116.4	2	7.7925	2	-9	9	-9.00	9	-9.00	9	-9
2914	2	801.1	34.606	34.607	8.508	8.421	26.902	26.902	213.8	214.8	70.6	0.00	20.21	2	1.42	2	9.85	2	-9.000	9	-9.000	9	-9.0	9	2140.1	2	7.7408	2	-9	9	-9.00	9	-9.00	9	-9
2913	2	900.7	34.487	34.487	7.039	6.951	27.022	27.022	204.1	205.2	90.1	0.00	24.53	2	1.70	2	16.29	2	-9.000	9	-9.000	9	821.5	2	2160.6	2	7.6850	2	-9	9	-9.00	9	-9.00	9	-9
2912	2	1101.3	34.366	34.367	4.860	4.571	27.222	27.222	203.9	203.3	109.4	0.00	29.73	2	2.06	2	31.10	2	-9.000	9	-9.000	9	-9.0	9	2187.4	2	7.6250	2	-9	9	-9.00	9	-9.00	9	-9
2911	2	1200.0	34.375	34.374	3.921	3.829	27.306	27.306	197.0	196.6	121.8	0.00	31.39	2	2.19	2	40.57	2	0.895	2	0.895	2	1043.5	2	2206.4	2	7.6014	2	-9	9	-9.00	9	-9.00	9	-9
2910	2	1398.8	34.463	34.463	3.318	3.215	27.437	27.437	175.4	173.8	149.3	0.00	33.31	2	2.34	2	58.25	2	-9.000	9	-9.000	9	-9.0	9	2237.9	2	7.5671	2	-9	9	-9.00	9	-9.00	9	-9
2909	2	1598.8	34.557	34.556	2.890	2.775	27.551	27.551	167.8	168.8	157.6	0.00	33.54	2	2.36	2	69.87	2	-9.000	9	-9.000	9	1180.1	2	2251.6	2	7.5561	2	-9	9	-9.00	9	-9.00	9	-9
2908	2	1800.4	34.627	34.626	2.643	2.514	27.630	27.630	172.4	170.7	157.7	0.00	32.77	2	2.29	2	73.79	2	0.066	2	0.066	2	-9.0	9	2250.9	2	7.5640	2	-9	9	-9.00	9	-9.00	9	-9
2907	2	2000.5	34.684	34.683	2.476	2.332	27.691	27.691	179.0	177.4	152.4	0.00	31.66	2	2.20	2	78.01	2	-9.000	9	-9.000	9	1115.9	2	2253.3	2	7.5782	2	-9	9	-9.00	9	-9.00	9	-9
2906	2	2298.0	34.740	34.739	2.195	2.029	27.760	27.760	190.0	188.8	143.4	0.00	30.28	2	2.10	2	81.10	2	-9.000	9	-9.000	9	-9.0	9	2247.2	2	7.5988	2	-9	9	-9.00	9	-9.00	9	-9
2905	2	2592.9	34.751	34.750	1.893	1.706	27.794	27.794	196.5	196.1	138.8	0.00	29.98	2	2.07	2	88.41	2	-9.000	9	-9.000	9	1040.5	2	2251.0	2	7.6073	2	-9	9	-9.00	9	-9.00	9	-9
2904	2	2897.7	34.742	34.741	1.544	1.336	27.814	27.814	201.1	200.1	138.0	0.00	30.38	2	2.11	2	99.13	2	0.010	2	0.003	2	1043.1	2	2257.6	2	7.6079	2	-9	9	-9.00	9	-9.00	9	-9
2903	2	3197.3	34.730	34.729	1.299	1.088	27.823	27.823	202.7	202.2	138.3	0.00	30.85	2	2.14	2	107.18	2	-9.000	9	-9.000	9	1051.7	2	2256.5	2	7.6085	2	-9	9	-9.00	9	-9.00	9	-9
2902	2	3497.7	34.726	34.726	1.224	0.965	27.828	27.828	204.3	202.7	138.8	0.00	31.23	2	2.17	2	110.33	2	-8.000	9	-9.000	9	1056.8	2	2260.4	2	7.6077	2	-9	9	-9.00	9	-9.00	9	-9
2901	2	3789.5	34.723	34.723	1.187	0.901	27.829	27.829	205.7	202.7	139.3	0.00	31.34	2	2.16	2	112.32	2	0.006	2	0.001	2	1038.7	2	2262.5	2	7.6075	2	-9	9	-9.00	9	-9.00	9	-9

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

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

*** PSS-78 scale

**** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 30 DATE 10/06/1995
 CAST 2 GMT 06:19
 CTD CAST 251

LATITUDE 35° 31.82' S
 LONGITUDE 81° 31.82' E

Bottle Number	CTD										Bottle										IC02																	
	F** Pressure db	Salinity	F* Temp °C	Pot. T*** °C	Sigma Theta	O2 Hmol/kg	O2 Hmol/kg	AOU	NO2 Hmol/kg	NO3 Hmol/kg	PO4 Hmol/kg	Si(OH)4 Hmol/kg	CFC-11 pmol/kg	CFC-12 pmol/kg	F* at 20 °C Hum	DIC Hmol/kg	pH	F* TA Hmol/kg	TOC Hmol/kg	F* TON Hmol/kg	Chi-a Hg/l	Phase Hg/l																
3024	2	6.3	35.291	35.282	2	13.372	13.371	26.544	262.8	259.5	-4.1	0.13	0.13	2	3.60	2	0.42	2	2.16	2	3.176	2	1.694	2	436.2	2	2077.5	6	7.9235	2	2325	2	-9.00	9	-9.00	9	-9	-9
3023	2	30.8	35.293	35.283	2	13.365	13.361	26.547	262.0	262.7	-7.3	0.13	0.13	2	3.44	2	0.42	2	2.16	2	10.200	4	1.699	6	433.9	6	1900.2	2	7.9223	2	-9	9	-9.00	9	-9.00	9	-9	-9
3022	2	71.0	35.286	35.288	2	13.282	13.272	26.562	261.3	260.7	-4.8	0.14	0.14	2	3.62	2	0.43	2	2.28	2	3.196	2	1.696	2	438.6	2	2076.4	2	7.9201	2	2321	2	-9.00	9	-9.00	9	-9	-9
3021	2	109.2	35.282	35.283	2	13.089	13.074	26.598	260.8	260.1	-3.2	0.15	0.15	2	3.94	2	0.46	2	2.37	2	3.192	6	1.703	6	440.3	6	2080.9	2	7.9163	2	2328	2	-9.00	9	-9.00	9	-9	-9
3020	2	148.7	35.272	35.274	2	13.050	13.029	26.600	259.1	259.1	-1.9	0.17	0.17	2	4.20	2	0.48	2	2.37	2	3.206	2	1.701	2	445.0	2	2082.2	2	7.9154	2	2323	2	-9.00	9	-9.00	9	-9	-9
3019	2	251.2	35.091	35.093	2	12.024	11.991	26.664	242.3	241.9	21.2	0.00	0.00	2	9.41	2	0.76	2	3.80	2	3.955	4	2.120	4	509.8	4	2098.0	2	7.8609	2	-9	9	-9.00	9	-9.00	9	-9	-9
3018	2	349.7	35.001	35.002	2	11.429	11.385	26.707	243.5	243.5	23.2	0.00	0.00	2	10.73	2	0.85	2	4.28	2	3.189	2	1.666	2	534.5	2	2101.1	2	7.8475	2	2308	2	-9.00	9	-9.00	9	-9	-9
3017	2	450.5	34.928	34.929	2	10.939	10.883	26.742	243.3	244.3	25.4	0.00	0.00	2	11.41	2	0.91	2	4.52	2	3.628	4	1.797	4	557.4	4	2104.8	2	7.8361	2	2306	2	-9.00	9	-9.00	9	-9	-9
3016	2	551.1	34.835	34.836	2	10.331	10.285	26.779	236.1	237.6	35.9	0.00	0.00	2	13.53	2	1.03	2	5.01	2	-9.000	9	-9.000	9	568.5	2	2110.2	2	7.8141	2	-9	9	-9.00	9	-9.00	9	-9	-9
3015	2	697.2	34.657	34.658	2	8.980	8.903	26.866	219.3	220.7	61.5	0.00	0.00	2	16.36	2	1.33	2	8.09	2	2.168	2	1.076	2	679.3	2	2128.8	2	7.7601	2	2294	2	-9.00	9	-9.00	9	-9	-9
3014	2	898.7	34.440	34.439	2	6.283	6.200	27.084	199.0	199.3	101.4	0.00	0.00	2	26.30	2	1.86	2	20.72	2	-9.000	9	-9.000	9	876.0	2	2169.5	2	7.6800	2	2296	2	-9.00	9	-9.00	9	-9	-9
3013	2	1050.6	34.378	34.378	2	4.718	4.633	27.224	197.4	196.7	115.5	0.00	0.00	2	29.82	2	2.10	2	32.69	2	0.686	2	0.343	2	960.3	2	2193.2	2	7.6198	2	2313	2	-9.00	9	-9.00	9	-9	-9
3012	2	1300.6	34.433	34.433	2	3.506	3.410	27.394	179.7	178.9	142.7	0.00	0.00	2	33.26	2	2.33	2	53.58	2	0.327	2	0.158	2	1113.7	2	2228.3	2	7.5742	2	2318	2	-9.00	9	-9.00	9	-9	-9
3011	2	1502.1	34.513	34.513	2	2.983	2.875	27.508	172.6	171.7	154.0	0.00	0.00	2	33.18	2	2.36	2	64.23	2	0.197	6	0.093	6	1157.4	2	2243.5	2	7.5595	2	2328	2	-9.00	9	-9.00	9	-9	-9
3010	2	1751.1	34.618	34.618	2	2.684	2.539	27.621	169.5	168.9	159.3	0.00	0.00	2	32.31	2	2.33	2	74.38	2	0.055	2	0.024	2	1165.2	2	2254.0	2	7.5801	2	2342	2	-9.00	9	-9.00	9	-9	-9
3009	2	2098.0	34.709	34.709	2	2.375	2.224	27.720	180.8	180.5	150.1	0.00	0.00	2	30.69	2	2.18	2	78.78	2	-9.000	9	-9.000	9	1095.0	2	2250.5	2	7.5851	2	2350	2	-9.00	9	-9.00	9	-9	-9
3008	2	2353.3	34.743	34.743	2	2.158	1.988	27.767	189.5	190.0	142.5	0.00	0.00	2	30.44	2	2.11	2	82.31	2	0.018	2	0.004	2	1037.3	2	2248.0	2	7.5897	2	-9	9	-9.00	9	-9.00	9	-9	-9
3007	2	2804.4	34.750	34.751	2	1.915	1.726	27.794	194.4	195.5	139.2	0.00	0.00	2	29.81	2	2.09	2	88.12	2	-9.000	9	-9.000	9	1032.7	2	2246.4	2	7.6073	2	2354	2	-9.00	9	-9.00	9	-9	-9
3006	2	2901.9	34.742	34.741	2	1.566	1.357	27.813	198.6	200.0	138.0	0.00	0.00	2	29.64	2	2.12	2	98.72	2	0.004	2	0.001	2	1033.2	2	2250.5	2	7.6058	2	2360	2	-9.00	9	-9.00	9	-9	-9
3005	2	3300.4	34.729	34.729	2	1.273	1.032	27.825	201.1	202.7	138.1	0.00	0.00	2	31.21	2	2.18	2	108.65	2	0.003	2	0.003	2	1047.6	2	2257.8	2	7.6055	2	2374	2	-9.00	9	-9.00	9	-9	-9
3004	2	3599.4	34.725	34.724	2	1.207	0.938	27.828	202.4	202.8	138.9	0.00	0.00	2	31.10	2	2.18	2	111.25	2	0.009	2	0.002	2	1041.6	2	2259.4	2	7.6052	2	2374	2	-9.00	9	-9.00	9	-9	-9
3003	2	3902.3	34.723	34.723	2	1.208	0.907	27.829	202.7	198.2	143.8	0.00	0.00	2	30.93	2	2.18	2	112.56	2	0.007	2	0.002	2	1046.4	2	2260.8	2	7.6067	2	2378	2	-9.00	9	-9.00	9	-9	-9
3002	2	4102.2	34.723	34.722	2	1.224	0.902	27.828	203.5	202.7	139.3	0.00	0.00	2	31.45	2	2.18	2	112.77	2	0.242	4	0.002	6	1051.8	2	2282.7	2	7.6070	2	2375	2	-9.00	9	-9.00	9	-9	-9
3001	2	4291.6	34.722	34.723	2	1.246	0.902	27.829	204.6	202.9	139.1	0.00	0.00	2	31.44	2	2.18	2	112.63	2	0.008	2	0.002	2	1040.8	4	2262.2	6	7.6052	2	2379	2	-9.00	9	-9.00	9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

18NR NOAA Ship Baldrige

STATION 31 DATE 10/06/1995
 CAST 1 GMT 11:57
 CTD CAST 252

LATITUDE 35° 27.37'S
 LONGITUDE 81° 29.01'E

CTD		Bottle		CTD		Bottle		CO2																															
Bottle Number	F** Pressure db	Salinity	Temp** °C	Pot. T*** °C	Sigma T	O2 Hmol/kg	O2 Hmol/kg	NO2 Hmol/kg	NO3 Hmol/kg	F* PO4 Hmol/kg	F* Si(OH)4 Hmol/kg	F* CFC-11 pmol/kg	F* CFC-12 pmol/kg	F* DIC Hmol/kg	pH	F* TA Hmol/kg	F* TOC Hmol/kg	TON Hmol/l	F* Chl-a Hg/l																				
3124	2	7.3	35.361	35.362	2	13.604	13.603	26.551	259.9	258.2	2	4.2	0.15	2	2.82	2	0.36	2	1.63	2	1.83	2	-9.000	9	-9.000	9	428.9	2	2077.0	6	7.9330	2	2329	2	60.07	2	-8.00	9	-9
3123	9	50.6	35.363	-9.000	9	13.604	13.597	26.553	258.3	-9.0	9	-9.0	-9.0	9	-9.0	9	-9.0	9	-9.0	9	-9.0	9	-9.0	9	-9.0	9	-9.0	9	-9.0	9	-9.0	9	-9.0	9	-9.0	9	-9.0	9	-9
3122	2	75.7	35.364	35.366	2	13.589	13.578	26.559	257.5	257.1	2	-3.0	0.16	2	2.86	2	0.37	2	1.84	2	1.84	2	-9.000	9	-9.000	9	-9.0	9	2076.4	2	7.9303	2	-9	9	60.05	2	-8.00	9	-9
3121	2	110.1	35.362	35.364	2	13.556	13.540	26.565	255.0	255.3	2	-1.0	0.17	2	2.93	2	0.37	2	1.84	2	1.84	2	-9.000	9	-9.000	9	430.1	2	2077.6	2	7.9162	2	-9	9	58.04	2	-9.00	9	-9
3120	2	148.5	35.361	35.362	2	13.550	13.529	26.566	254.4	255.0	2	-0.6	0.17	2	2.94	2	0.39	2	1.87	2	1.87	2	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	56.02	2	-9.00	9	-9
3119	2	176.9	35.360	35.362	2	13.554	13.529	26.566	254.1	255.2	2	-0.8	0.17	2	2.92	2	0.39	2	1.88	2	1.88	2	-9.000	9	-9.000	9	433.7	2	2085.4	2	7.9288	2	2329	2	53.25	2	-9.00	9	-9
3118	2	249.9	35.357	35.358	2	13.551	13.515	26.566	253.0	255.0	2	-0.5	0.18	2	2.98	2	0.40	2	1.88	2	1.88	2	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	52.81	2	-9.00	9	-9
3117	2	350.4	35.146	35.148	2	12.338	12.281	26.648	231.3	231.9	2	29.5	0.00	2	8.90	2	0.71	2	3.13	2	3.13	2	-9.000	9	-9.000	9	521.1	2	2105.9	2	7.8610	2	2320	2	47.72	2	-9.00	9	-9
3116	3	449.6	34.810	34.820	3	9.958	9.905	26.828	221.7	220.6	2	55.1	0.00	2	15.63	2	1.11	2	5.75	2	5.75	2	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	44.35	2	-9.00	9	-9
3115	2	550.7	34.606	34.607	2	8.476	8.417	26.902	215.8	214.5	2	70.9	0.00	2	20.28	2	1.41	2	9.07	2	9.07	2	-9.000	9	-9.000	9	721.1	2	2142.2	2	7.7394	2	-9	9	-9.00	9	-9		
3114	2	651.0	34.524	34.527	2	7.537	7.472	26.980	203.2	202.9	2	88.8	0.00	2	23.37	2	1.82	2	13.67	2	13.67	2	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9		
3113	2	747.1	34.462	34.463	2	6.602	6.532	27.059	197.9	196.8	2	101.5	0.00	2	26.14	2	1.81	2	19.21	2	19.21	2	-9.000	9	-9.000	9	867.4	2	2172.6	2	7.6662	2	2286	2	42.14	2	-9.00	9	-9
3112	2	918.0	34.383	34.383	2	4.864	4.789	27.210	198.0	196.4	2	114.7	0.00	2	29.67	2	2.06	2	31.47	2	31.47	2	-9.000	9	-9.000	9	975.9	2	2195.3	2	7.6229	2	2304	2	-9.00	9	-9		
3111	2	1100.4	34.412	34.411	2	3.869	3.786	27.340	183.6	181.9	2	136.8	0.00	2	32.28	2	2.26	2	47.52	2	47.52	2	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9		
3110	2	1201.0	34.442	34.443	2	3.626	3.537	27.390	175.6	173.7	2	146.9	0.00	2	33.08	2	2.31	2	54.63	2	54.63	2	-9.000	9	-9.000	9	1121.0	2	2234.6	2	7.5723	2	2323	2	42.13	2	-9.00	9	-9
3109	2	1399.2	34.519	34.519	2	3.212	3.110	27.491	164.2	162.3	2	161.5	0.00	2	33.92	2	2.37	2	67.20	2	67.20	2	-9.000	9	-9.000	9	1175.8	2	2255.0	2	7.5535	2	2337	2	-8.00	9	-9		
3108	3	1498.2	34.559	-9.000	9	3.008	2.900	27.542	163.1	-9.0	9	-9.0	-9.0	9	-9.0	9	-9.0	9	-9.0	9	-9.0	9	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9		
3107	2	1695.6	34.611	34.612	2	2.714	2.593	27.612	168.7	167.0	2	160.8	0.00	2	33.18	2	2.31	2	74.51	2	74.51	2	-9.000	9	-9.000	9	1176.4	2	2258.2	2	7.5599	2	2344	2	42.18	2	-9.00	9	-9
3106	2	1898.9	34.672	34.673	2	2.503	2.368	27.680	175.0	173.4	2	156.1	0.00	2	32.12	2	2.23	2	77.59	2	77.59	2	-9.000	9	-9.000	9	1130.0	2	2259.1	2	7.5727	2	2351	2	-8.00	9	-9		
3105	2	2102.6	34.713	34.714	2	2.353	2.202	27.726	183.0	181.4	2	149.4	0.00	2	31.05	2	2.14	2	78.93	2	78.93	2	-9.000	9	-9.000	9	1087.9	2	2254.0	2	7.5877	2	2349	2	-8.00	9	-9		
3104	3	2302.1	34.741	34.742	3	2.164	1.998	27.765	191.5	190.2	2	142.2	0.00	2	30.13	2	2.06	2	81.14	2	81.14	2	-9.000	9	-9.000	9	1048.0	2	2249.0	2	-9.0000	9	-9	9	42.20	2	-9.00	9	-9
3103	2	2499.1	34.745	34.746	2	1.903	1.724	27.790	195.9	194.6	2	140.2	0.00	2	30.16	2	2.07	2	89.44	2	89.44	2	-9.000	9	-9.000	9	1039.7	2	2252.2	2	7.6049	2	2360	2	-8.00	9	-9		
3102	2	2750.5	34.743	34.744	2	1.739	1.540	27.802	198.3	196.9	2	139.5	-9.00	9	-9.00	9	-9.00	9	-9.00	9	-9.00	9	-9.000	9	-9.000	9	1038.2	2	2253.3	2	7.6065	2	2359	2	-8.00	9	-9		
3101	2	2976.6	34.740	34.741	2	1.540	1.324	27.815	202.8	200.3	2	137.9	0.00	2	30.49	2	2.09	2	98.39	2	98.39	2	-9.000	9	-9.000	9	1039.0	2	2256.0	2	7.6060	2	2359	2	41.81	2	-8.00	9	-9

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

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

*** PSS-78 scale

**** ITS-90 scale

I8NR
NOAA Ship Baldrige

STATION 32 DATE 10/06/1995
 CAST 1 GMT 16:46
 CTD CAST 253

LATITUDE 35° 19.63' S
 LONGITUDE 80° 49.1' E

Bottle Number	CTD		Bottle		Sigma Theta	Pot. T °C	F* Temp °C	F* Salinity	O2	O2	AOU	NO2	NO3	PO4	Si(OH)4	F* CFC-11	F* CFC-12	F* at 20 °C	DIC	pH	TA	F* TOC	F* TON	Chl-a	Phase									
	db	Salinity	Salinity	Temp																						Temp	Salinity	Salinity	Temp	Temp	Temp	Temp	Temp	Temp
3224	7.4	35.274	35.275	13.139	13.138	26.579	264.7	261.6	-5.0	0.17	2	3.97	2	0.43	2	2.19	2	3.207	2	1.918	2	440.3	2	2079.1	6	7.9213	2	2322	2	-9.00	9	-9.00	9	-9
3223	39.7	35.274	35.275	13.116	13.111	26.584	263.9	261.6	-4.8	0.18	2	3.88	2	0.42	2	2.07	2	3.206	2	1.711	2	439.5	2	2080.0	2	7.9212	2	-9	9	-9.00	9	-9.00	9	-9
3222	80.6	35.277	35.278	13.113	13.102	26.588	261.9	260.2	-3.4	0.18	2	3.87	2	0.44	2	2.10	2	3.196	2	1.714	2	448.7	2	2077.3	2	7.9194	2	2323	2	-9.00	9	-9.00	9	-9
3221	121.0	35.274	35.276	13.072	13.055	26.596	260.9	259.7	-2.7	0.18	2	4.03	2	0.44	2	2.14	2	3.189	2	1.731	2	444.4	2	2080.4	2	7.9169	2	2322	2	-9.00	9	-9.00	9	-9
3220	161.4	35.247	35.247	12.947	12.925	26.600	259.7	259.0	-1.2	0.20	2	4.59	2	0.48	2	2.30	2	3.217	2	1.738	2	453.2	2	2076.8	2	7.9127	2	-9	9	-9.00	9	-9.00	9	-9
3219	200.4	35.124	35.126	12.279	12.252	26.639	250.9	250.2	11.4	0.00	2	7.51	2	0.63	2	2.99	2	3.230	2	1.716	2	487.0	2	2088.7	2	7.8829	2	2312	2	-9.00	9	-9.00	9	-9
3218	299.7	35.027	35.029	11.802	11.564	26.695	243.3	242.2	23.4	0.00	2	10.25	2	0.80	2	3.86	2	3.184	2	1.652	2	533.6	2	2099.5	2	7.8521	2	2312	2	-9.00	9	-9.00	9	-9
3217	397.5	34.966	34.968	11.199	11.149	26.724	243.8	243.1	25.0	0.00	2	11.13	2	0.86	2	4.15	2	3.162	2	1.640	2	545.8	2	2103.9	2	7.8433	2	2308	2	-9.00	9	-9.00	9	-9
3216	500.6	34.897	34.899	10.755	10.693	26.752	241.5	241.8	29.1	0.00	2	12.38	2	0.93	2	4.54	2	3.085	2	1.601	2	563.3	2	2104.7	2	7.8311	2	2306	2	-9.00	9	-9.00	9	-9
3215	602.4	34.795	34.799	10.055	9.984	26.798	235.7	236.4	38.9	0.00	2	14.39	2	1.06	2	5.07	2	2.897	2	1.451	2	603.8	2	2112.0	2	7.8069	2	2299	2	-9.00	9	-9.00	9	-9
3214	700.1	34.650	34.651	8.929	8.851	26.869	220.8	221.2	61.3	0.00	2	18.65	2	1.31	2	7.68	2	2.243	2	1.100	2	685.0	2	2129.0	2	7.7594	2	2294	2	-9.00	9	-9.00	9	-9
3213	852.8	34.504	34.505	7.303	7.218	26.999	204.2	203.9	89.6	0.00	2	24.17	2	1.66	2	14.91	2	1.379	2	0.680	2	815.7	2	2154.9	2	7.6934	2	2295	2	-9.00	9	-9.00	9	-9
3212	1002.6	34.392	-9.000	5.408	5.322	27.156	202.2	-9.0	-9.0	-9.00	9	-9.00	9	-9.00	9	-9.00	9	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.000	9	-9	9	-9.00	9	-9.00	9	-9
3211	1101.2	34.375	34.376	4.480	4.392	27.248	197.4	195.7	118.4	0.00	2	30.30	2	2.11	2	35.03	2	0.634	2	0.316	2	1013.3	2	2198.5	2	7.6143	2	2303	2	-9.00	9	-9.00	9	-9
3210	1201.1	34.388	34.387	3.910	3.818	27.317	192.6	190.7	127.8	0.00	2	31.58	2	2.21	2	43.21	2	0.540	2	0.264	2	1061.5	2	2208.9	2	7.5957	2	2313	2	-9.00	9	-9.00	9	-9
3209	1340.5	34.430	34.430	3.288	3.191	27.413	187.1	185.4	138.0	0.00	2	32.73	2	2.28	2	52.44	2	0.510	2	0.242	2	1116.6	2	2227.3	2	7.5764	2	2323	2	-9.00	9	-9.00	9	-9
3208	1546.1	34.531	34.531	2.904	2.794	27.529	174.6	172.4	153.9	0.00	2	33.53	2	2.32	2	65.31	2	0.198	2	0.093	2	1168.0	2	2242.3	2	7.5602	2	2334	2	-9.00	9	-9.00	9	-9
3207	1749.7	34.622	34.621	2.638	2.512	27.626	177.5	175.8	152.6	0.00	2	32.42	2	2.24	2	69.94	2	-9.000	9	-9.000	9	1151.4	2	2244.7	2	7.5686	2	2342	2	-9.00	9	-9.00	9	-9
3206	1995.8	34.702	34.702	2.411	2.268	27.711	183.6	181.8	148.5	0.00	2	31.23	2	2.14	2	75.79	2	0.036	6	0.018	6	1094.8	2	2246.6	2	7.5855	2	2347	2	-9.00	9	-9.00	9	-9
3205	2190.4	34.734	34.734	2.242	2.085	27.752	189.9	188.6	149.1	0.00	2	30.23	2	2.08	2	79.03	2	-9.000	9	-9.000	9	1065.5	2	2244.8	2	7.5976	2	2356	2	-9.00	9	-9.00	9	-9
3204	2399.3	34.746	34.747	2.019	1.847	27.781	195.1	193.5	140.2	0.00	2	30.30	2	2.06	2	85.36	2	0.012	2	0.005	2	1046.6	2	2246.7	2	7.6061	2	2356	2	-9.00	9	-9.00	9	-9
3203	2596.1	34.746	34.747	1.893	1.706	27.792	196.8	195.2	139.7	0.00	2	30.34	2	2.07	2	89.86	2	-9.000	9	-9.000	9	1055.7	2	2249.5	2	7.6069	2	2363	2	-9.00	9	-9.00	9	-9
3202	2801.2	34.746	34.748	1.869	1.663	27.794	197.8	195.9	139.4	0.00	2	30.50	2	2.07	2	91.18	2	0.011	2	0.007	2	1051.4	2	2248.2	2	7.6059	2	2359	2	-9.00	9	-9.00	9	-9
3201	2991.9	34.745	34.746	1.811	1.588	27.800	199.6	196.7	139.2	0.00	2	30.57	2	2.07	2	93.11	2	0.011	2	0.008	2	1056.0	2	2250.2	2	7.6057	2	2363	2	-9.00	9	-9.00	9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 34 DATE 10/07/1995
 CAST 1 GMT 02:35
 CTD CAST 255

LATITUDE 34° 39.67' S
 LONGITUDE 79° 49.6' E

Bottle Number	CTD		Bottle		Sigma Theta	F* Temp*** °C	F* Salinity*** ‰	F* Pot. T**** °C	NO2 µmol/kg	NO3 µmol/kg	PO4 µmol/kg	F* Si(OH)4 µmol/kg	F* CFC-11 pmol/kg	F* CFC-12 pmol/kg	F* at 20°C µmol/kg	DIC µmol/kg	pH	F* TA µmol/kg	F* TOC µmol/l	F* TON µmol/l	F* Chl-a µg/l											
	db	Pressure	Salinity	Temp																												
3424	2	9.2	35.397	35.398	2	13.936	13.935	26.509	259.9	256.5	-4.2	0.00	2	1.83	2	3.083	2	1.723	2	417.7	2	2076.6	2	7.9400	2	2328	2	-9.00	9	-9	-9	
3423	2	38.8	35.400	35.401	2	13.936	13.930	26.513	259.2	256.2	-3.9	0.00	2	1.89	2	3.074	6	1.638	6	416.5	2	2078.5	2	7.9401	2	2329	2	-9.00	9	-9	-9	
3422	2	80.8	35.398	35.398	2	13.926	13.914	26.514	259.3	256.3	-3.9	0.00	2	1.98	2	3.042	2	1.91	2	423.2	2	2075.4	2	7.9382	2	2327	2	-9.00	9	-9	-9	
3421	2	118.7	35.373	35.376	2	13.807	13.790	26.523	258.4	255.8	-2.8	0.00	2	2.39	2	3.083	2	1.644	2	414.6	2	2083.2	2	7.9341	2	2329	2	-9.00	9	-9	-9	
3420	2	200.7	35.250	35.251	2	13.099	13.071	26.574	250.2	248.9	8.1	0.00	2	5.02	2	3.163	2	1.676	2	469.2	2	2086.1	2	7.9028	2	2319	2	-9.00	9	-9	-9	
3419	2	299.3	35.158	35.157	2	12.514	12.474	26.620	250.2	251.5	8.9	0.00	2	6.37	2	3.242	2	1.713	2	480.7	2	2087.9	2	7.8907	2	2312	2	-9.00	9	-9	-9	
3418	2	399.5	35.065	35.065	2	11.871	11.819	26.675	241.3	241.9	22.3	0.00	2	9.34	2	3.186	2	1.654	2	529.6	2	2102.8	2	7.8563	2	2308	2	-9.00	9	-9	-9	
3417	2	499.7	34.979	34.980	2	11.298	11.234	26.718	243.4	244.2	23.4	0.00	2	10.64	2	3.198	2	1.650	2	538.7	2	2103.3	2	7.8477	2	2307	2	-9.00	9	-9	-9	
3416	2	597.8	34.894	34.895	2	10.750	10.676	26.752	240.3	240.9	30.1	0.00	2	12.16	2	3.092	2	1.575	2	564.2	2	2108.6	2	7.8298	2	2302	2	-9.00	9	-9	-9	
3415	2	699.6	34.757	34.758	2	9.787	9.705	26.813	229.7	213.9	63.1	0.00	2	15.30	2	2.625	2	1.317	2	623.0	2	2119.8	2	7.7948	2	2297	2	-9.00	9	-9	-9	
3414	2	798.4	34.608	34.608	2	8.496	8.410	26.904	214.9	214.1	71.3	0.00	2	19.94	2	1.43	2	0.930	2	717.5	2	2139.0	2	7.7420	2	2293	2	-9.00	9	-9	-9	
3413	2	901.2	34.493	34.493	2	7.110	7.021	27.017	207.6	205.8	89.1	0.00	2	24.01	2	1.68	2	0.716	2	814.3	2	2158.6	2	7.6915	2	2293	2	-9.00	9	-9	-9	
3412	2	1101.9	34.371	34.371	2	4.864	4.773	27.203	207.9	205.3	105.9	0.00	2	28.95	2	2.02	2	0.529	2	955.7	2	2186.3	2	7.6341	2	2298	2	-9.00	9	-9	-9	
3411	2	1202.7	34.375	34.376	2	4.133	4.039	27.286	199.1	197.4	119.4	0.00	2	30.76	2	2.16	2	0.381	6	1023.5	2	2202.9	2	7.6075	2	2310	2	-9.00	9	-9	-9	
3410	2	1398.4	34.455	34.456	2	3.334	3.231	27.429	179.8	177.5	145.5	0.00	2	32.92	2	2.33	2	0.154	2	1139.9	2	2235.5	2	7.5699	2	2329	2	-9.00	9	-9	-9	
3409	2	1601.8	34.547	34.547	2	2.873	2.758	27.545	172.8	170.5	156.1	0.00	2	33.21	2	2.34	2	0.074	2	1164.4	2	2245.3	2	7.5596	2	2337	2	-9.00	9	-9	-9	
3408	2	1700.7	34.589	34.589	2	2.760	2.638	27.589	172.3	182.6	144.9	0.00	2	32.90	2	2.31	2	0.045	2	1166.8	2	2249.2	2	7.5610	2	2342	2	-9.00	9	-9	-9	
3407	2	1949.0	34.676	34.675	2	2.499	2.359	27.692	178.6	176.4	153.2	0.00	2	31.61	2	2.21	2	0.000	9	1124.4	2	2250.6	2	7.5769	2	2350	2	-9.00	9	-9	-9	
3406	2	2201.4	34.728	34.729	2	2.259	2.101	27.747	188.6	-9.0	9	-9.0	0.00	2	30.34	2	2.11	2	0.004	2	1070.5	2	2247.5	2	7.5959	2	2350	2	-9.00	9	-9	-9
3405	2	2399.9	34.745	34.744	2	2.054	1.881	27.776	194.4	192.7	140.7	0.00	2	30.01	2	2.08	2	0.000	9	1044.5	2	2247.5	2	7.6045	2	2356	2	-9.00	9	-9	-9	
3404	2	2600.8	34.746	34.747	2	1.876	1.688	27.793	197.0	195.4	139.7	0.00	2	29.92	2	2.09	2	0.008	2	1042.1	2	2249.3	2	7.6084	2	2361	2	-9.00	9	-9	-9	
3403	2	2802.4	34.744	34.744	2	1.749	1.545	27.801	198.0	196.4	139.9	0.00	2	30.31	2	2.11	2	0.000	9	1036.3	2	2252.4	2	7.6054	2	2361	2	-9.00	9	-9	-9	
3402	2	3001.5	34.737	34.738	2	1.652	1.431	27.805	197.2	194.3	143.0	0.00	2	30.58	2	2.14	2	0.006	2	1061.8	2	2259.2	2	7.6039	2	2368	2	-9.00	9	-9	-9	
3401	2	3196.9	34.738	34.739	2	1.616	1.377	27.810	199.8	196.6	141.2	0.00	2	30.81	2	2.13	2	0.005	2	1056.5	2	2257.9	6	7.6019	2	2367	2	-9.00	9	-9	-9	

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 35 DATE 10/07/1995
 CAST 2 GMT 08:09
 CTD CAST 256

LATITUDE 34° 20.14' S
 LONGITUDE 79° 20.6' E

Bottle Number	CTD		Bottle		Sigma T	Theta	O2	O2	F* AOU	NO2	NO3	PO4	Si(OH)4	F* CFC-11	F* CFC-12	F* at 20 °C	DIC	pH	TA	F* TOC	F* TON	F* Chl-a	Phase	
	db	Pressure	Salinity	Temp																				Temp
3524	2	8.5	35.441	14.329	26.461	259.8	255.6	2	-5.4	0.06	1.88	0.31	2	1.45	2	2071.9	6	-9.0000	9	60.73	2	-9.00	9	-9
3523	2	43.8	35.438	14.272	26.469	259.7	255.9	2	-5.4	0.07	1.91	0.30	2	1.44	2	2071.9	6	-9.0000	9	59.73	2	-9.00	9	-9
3522	2	90.9	35.382	13.975	26.491	260.4	257.2	2	-5.1	0.09	2.36	0.34	2	1.81	2	2071.9	6	-9.0000	9	59.35	2	-9.00	9	-9
3521	2	134.0	35.334	13.627	26.527	254.8	251.9	2	2.2	0.19	3.56	0.42	2	1.85	2	2071.9	6	-9.0000	9	52.74	2	-9.00	9	-9
3520	2	177.9	35.241	13.023	26.582	243.9	241.2	2	18.2	0.03	6.86	0.58	2	2.73	2	2071.9	6	-9.0000	9	51.77	2	-9.00	9	-9
3519	2	248.0	35.163	12.451	26.635	242.5	239.4	2	21.3	0.00	9.05	0.71	2	3.55	2	2071.9	6	-9.0000	9	48.01	2	-9.00	9	-9
3518	2	349.0	35.057	11.806	26.679	244.0	241.5	2	23.0	0.00	10.33	0.79	2	3.75	2	2071.9	6	-9.0000	9	46.82	2	-9.00	9	-9
3517	2	448.0	34.993	11.380	26.710	244.0	241.6	2	25.4	0.00	11.16	0.85	2	3.81	2	2071.9	6	-9.0000	9	43.08	2	-9.00	9	-9
3516	2	549.9	34.905	10.830	26.744	239.4	237.8	2	32.9	0.00	12.89	0.95	2	4.66	2	2071.9	6	-9.0000	9	9.00	2	-9.00	9	-9
3515	2	649.0	34.783	9.965	26.800	232.1	230.1	2	45.8	0.00	15.49	1.12	2	5.85	2	2071.9	6	-9.0000	9	9.00	2	-9.00	9	-9
3514	2	747.6	34.644	8.821	26.881	217.8	217.2	2	66.1	0.00	19.32	1.35	2	8.65	2	2071.9	6	-9.0000	9	9.00	2	-9.00	9	-9
3513	2	852.5	34.536	7.649	26.973	209.1	207.8	2	83.3	0.00	22.98	1.59	2	13.27	2	2071.9	6	-9.0000	9	9.00	2	-9.00	9	-9
3512	2	950.7	34.428	6.117	27.095	207.9	205.1	2	96.8	0.00	26.61	1.84	2	20.42	2	2071.9	6	-9.0000	9	9.00	2	-9.00	9	-9
3511	2	1094.0	34.362	4.524	27.231	207.7	205.0	2	108.8	0.00	29.99	2.07	2	31.54	2	2071.9	6	-9.0000	9	9.00	2	-9.00	9	-9
3510	2	1195.9	34.376	3.884	27.310	199.7	196.9	2	121.8	0.00	31.58	2.19	2	40.63	2	2071.9	6	-9.0000	9	9.00	2	-9.00	9	-9
3509	2	1345.9	34.448	3.276	27.426	183.1	180.3	2	143.1	0.00	33.16	2.31	2	54.89	2	2071.9	6	-9.0000	9	9.00	2	-9.00	9	-9
3508	2	1552.0	34.538	2.914	27.533	173.9	171.5	2	154.8	0.00	33.48	2.33	2	65.75	2	2071.9	6	-9.0000	9	9.00	2	-9.00	9	-9
3507	2	1751.2	34.635	2.623	27.636	174.8	172.1	2	156.4	0.00	32.81	2.26	2	73.32	2	2071.9	6	-9.0000	9	9.00	2	-9.00	9	-9
3506	2	1997.9	34.699	2.415	27.707	182.0	180.1	2	150.2	0.00	31.33	2.17	2	76.66	2	2071.9	6	-9.0000	9	9.00	2	-9.00	9	-9
3505	2	2248.5	34.736	2.125	27.761	190.9	188.9	2	143.8	0.00	30.51	2.10	2	83.48	2	2071.9	6	-9.0000	9	9.00	2	-9.00	9	-9
3504	2	2499.5	34.736	1.907	27.781	190.3	188.8	2	146.0	0.00	30.99	2.14	2	94.11	2	2071.9	6	-9.0000	9	9.00	2	-9.00	9	-9
3503	2	2748.6	34.732	1.743	27.790	189.5	187.2	2	149.2	0.00	31.51	2.18	2	102.72	2	2071.9	6	-9.0000	9	9.00	2	-9.00	9	-9
3502	2	2850.3	34.732	1.735	27.792	190.1	183.1	2	153.4	0.00	31.52	2.18	2	103.26	2	2071.9	6	-9.0000	9	9.00	2	-9.00	9	-9
3501	2	2972.4	34.732	1.714	27.795	190.7	187.9	2	148.9	0.00	31.56	2.19	2	104.51	2	2071.9	6	-9.0000	9	9.00	2	-9.00	9	-9

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

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

*** PSS-78 scale

**** ITS-90 scale

18NR
NOAA Ship Baldrige

STATION 36 DATE 10/07/1995
CAST 1 GMT 14:00
CTD CAST 257

LATITUDE 33° 59.63' S
LONGITUDE 80° 0.01' E

Bottle Number	CTD		Bottle		CTD		Bottle		F [*]		F [*]		F [*]		F [*]		F [*]		F [*]		F [*]		F [*]		F [*]		F [*]				
	Pressure	Salinity	Temp	Pot	Theta	Sigma	O ₂	O ₂	NO ₂	NO ₃	PO ₄	Si(OH) ₄	CFC-11	CFC-12	DIC	pH	F [*]	TA	TOC	TON	chl-a	chl-a	chl-a	chl-a	chl-a	chl-a	chl-a	chl-a	chl-a		
	db	‰	°C	‰	°C	kg/m ³	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	pmol/kg	pmol/kg	µmol/kg		µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l		
3624	2	8.2	35.384	35.384	13.882	13.882	26.510	264.5	259.3	-6.7	0.08	2	2.01	2	3.088	2	1.895	2	417.8	2	2073.1	6	7.9372	2	2330	2	60.11	2	6.13	2	-9
3623	2	40.6	35.393	35.393	13.920	13.920	26.508	262.6	258.4	-6.1	0.08	2	1.95	2	3.084	2	1.853	2	411.9	2	2074.4	2	7.9385	2	-9	9	60.45	2	4.85	2	-9
3622	2	81.0	35.412	35.411	13.983	13.971	26.512	260.5	256.5	-4.4	0.08	2	1.96	2	3.073	2	1.666	2	415.5	2	2075.1	2	7.9388	2	2329	2	60.21	2	4.74	2	-9
3621	2	121.9	35.298	35.297	13.368	13.371	26.548	259.6	255.4	-0.1	0.15	2	2.25	2	3.145	2	1.666	2	439.1	2	2075.3	2	7.9185	2	2325	2	57.88	2	4.48	2	-9
3620	2	159.7	35.279	35.279	13.249	13.227	26.564	259.2	255.4	0.7	0.19	2	2.26	2	3.257	2	1.771	2	441.5	2	2080.1	2	7.9171	2	2326	2	55.57	2	9.00	2	-9
3619	2	200.7	35.242	35.242	13.054	13.026	26.576	257.1	253.9	3.4	0.23	2	2.56	2	3.168	2	1.676	2	450.8	2	2082.1	2	7.9091	2	2321	2	53.63	2	3.98	2	-9
3618	2	301.9	35.089	35.089	12.012	11.972	26.664	244.0	240.8	22.5	0.00	2	3.87	2	3.176	2	1.650	2	528.5	2	2098.7	2	7.8587	2	2311	2	51.95	2	3.87	2	-9
3617	2	401.8	35.027	35.026	11.605	11.553	28.894	245.4	242.4	23.3	0.00	2	3.87	2	3.212	2	1.668	2	538.8	2	2101.3	2	7.8513	2	2310	2	50.82	2	9.00	2	-9
3616	2	501.5	34.838	34.837	11.039	10.976	26.731	241.9	239.8	29.4	0.00	2	4.56	2	3.036	2	1.553	2	565.9	2	2105.0	2	7.8351	2	2306	2	45.78	2	3.48	2	-9
3615	2	602.1	34.846	34.847	10.411	10.338	26.775	238.3	236.8	36.8	0.00	2	4.85	2	2.884	2	1.458	2	589.7	2	2109.8	2	7.8161	2	2306	2	9.00	2	9.00	2	-9
3614	2	701.1	34.721	34.721	9.515	9.434	26.829	230.3	229.1	49.7	0.00	2	8.16	2	2.520	2	1.237	2	634.5	2	2120.6	2	7.7842	2	2298	2	9.00	2	9.00	2	-9
3613	2	797.1	34.593	34.592	8.296	8.211	26.922	213.2	211.7	75.0	0.00	2	11.09	2	1.708	2	0.838	2	741.8	2	2137.3	2	7.7318	2	2293	2	45.19	2	9.00	2	-9
3612	2	998.7	34.405	34.404	5.700	5.612	27.130	208.3	204.4	100.5	0.00	2	23.45	2	1.164	2	0.568	2	900.1	2	2175.2	2	7.6507	2	2301	2	9.00	2	9.00	2	-9
3611	2	1199.6	34.386	34.386	4.188	4.094	27.288	194.3	192.3	124.1	0.00	2	40.13	2	0.571	2	0.284	2	1034.0	2	2203.1	2	7.6033	2	2311	2	9.00	2	9.00	2	-9
3610	2	1402.5	34.461	34.460	3.290	3.187	27.437	179.3	178.8	146.5	0.00	2	57.28	2	0.300	2	0.149	2	1142.5	2	2230.8	2	7.5679	2	2325	2	42.44	2	9.00	2	-9
3609	2	1653.0	34.567	34.565	2.800	2.682	27.566	173.1	170.6	156.6	0.00	2	68.68	2	0.126	2	0.059	2	1177.4	2	2244.3	2	7.5578	2	2339	2	9.00	2	9.00	2	-9
3608	2	1796.5	34.633	34.632	2.617	2.489	27.637	175.5	173.2	155.4	0.00	2	72.89	2	0.066	2	0.035	2	1158.0	2	2249.9	2	7.5658	2	2347	2	9.00	2	9.00	2	-9
3607	2	2001.1	34.696	34.694	2.429	2.286	27.703	182.7	180.3	149.8	0.00	2	76.08	2	0.031	6	0.018	8	1096.2	2	2247.0	2	7.5827	2	2347	2	41.91	2	9.00	2	-9
3606	2	2201.0	34.729	34.729	2.249	2.091	27.747	188.5	186.9	144.8	0.00	2	80.06	2	0.013	2	0.011	2	1063.3	2	2244.4	2	7.5956	2	2352	2	9.00	2	9.00	2	-9
3605	2	2497.0	34.746	34.744	1.926	1.747	27.786	195.0	193.5	141.1	0.00	2	88.97	2	0.007	2	0.004	2	1040.8	2	2249.4	2	7.6035	2	2364	2	9.00	2	9.00	2	-9
3604	2	2700.8	34.743	34.742	1.760	1.565	27.798	195.9	194.8	141.4	0.00	2	95.13	2	0.005	2	0.003	2	1036.9	3	2253.3	2	7.6041	2	2363	2	42.25	2	9.00	2	-9
3603	2	2997.3	34.740	34.739	1.604	1.385	27.809	198.6	197.5	140.2	0.00	2	99.80	2	-8.000	9	-9.000	9	1046.5	2	2254.2	2	7.6055	2	2365	2	9.00	2	9.00	2	-9
3602	3	3299.7	34.737	34.737	1.522	1.275	27.815	200.3	199.3	139.4	0.00	2	102.03	2	0.006	2	0.002	2	1047.3	2	2255.2	2	7.6043	2	-9	9	9.00	2	9.00	2	-9
3601	2	3611.1	34.735	34.735	1.482	1.205	27.819	202.4	199.7	139.6	0.00	2	104.34	2	0.002	2	0.001	2	1046.5	2	2255.3	6	7.6054	2	2365	2	42.01	2	9.00	2	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 37 DATE 10/07/1995
 CAST 1 GMT 20:43
 CTD CAST 258

LATITUDE 33° 0.01' S
 LONGITUDE 80° 0.06' E

Bottle Number	CTD		Bottle		Sigma T	Theta	O2		F* AOU	NO2	NO3	PO4	Si(OH)4	F* CFC-11	F* CFC-12	F* at 20°C	DIC	F* pH	TA	F* TOC	F* TON	F* Chl-a											
	Pressure db	Salinity	Temp	Pot			Hmol/kg	Hmol/kg															Hmol/kg	Hmol/kg	Hmol/kg	Hmol/kg	Hmol/kg	Hmol/kg	Hmol/kg	Hmol/kg	Hmol/kg	Hmol/kg	Hmol/kg
3724	2	6.7	35.409	35.410	2	14.188	14.187	26.465	262.5	258.0	2	-8.0	0.05	2	1.92	2	3.055	2	1.641	2	404.3	2	2071.0	6	7.9465	2	2329	2	-8.00	9	-9.00	9	-9
3723	2	28.5	35.409	35.409	2	14.191	14.187	26.464	281.6	258.9	2	-7.9	0.05	2	1.88	2	3.053	2	1.652	2	416.5	2	2069.7	2	7.9460	2	2330	2	-8.00	9	-9.00	9	-9
3722	2	56.9	35.409	35.409	2	14.193	14.185	26.465	281.8	258.0	2	-8.0	0.05	2	1.92	2	-9.000	9	-9.000	9	408.3	2	2070.4	2	7.9455	2	2330	2	-8.00	9	-9.00	9	-9
3721	2	90.1	35.417	35.417	2	14.184	14.171	26.474	280.8	258.5	2	-7.5	0.05	2	1.89	2	3.057	2	1.636	2	408.5	2	2069.8	2	7.9437	2	-9	9	-9.00	9	-9.00	9	-9
3720	2	120.5	35.422	35.417	2	14.100	14.082	26.483	258.4	255.8	2	-4.3	0.08	2	1.89	2	-9.000	9	-9.000	9	420.0	2	2074.0	2	7.9407	2	2330	2	-8.00	9	-9.00	9	-9
3719	2	252.6	35.228	35.229	2	12.886	12.851	26.801	240.1	237.0	2	2.12	0.00	2	3.75	2	3.069	2	1.611	2	494.7	2	2093.5	2	7.8789	2	2320	2	-8.00	9	-9.00	9	-9
3718	2	349.4	35.142	35.142	2	12.341	12.294	26.643	240.1	240.0	2	2.14	0.00	2	4.00	2	3.062	2	1.597	2	508.1	2	2096.2	2	7.8678	2	2314	2	-8.00	9	-9.00	9	-9
3717	2	447.0	35.033	35.034	2	11.671	11.613	26.889	242.0	242.1	2	2.33	0.00	2	4.15	2	3.105	2	1.646	2	530.0	2	2100.0	2	7.8537	2	2304	2	-8.00	9	-9.00	9	-9
3716	2	551.2	34.953	34.952	2	11.141	11.071	26.728	241.4	241.9	2	26.7	0.00	2	4.53	2	3.045	2	1.553	2	546.4	2	2104.6	2	7.8369	2	2311	2	-8.00	9	-9.00	9	-9
3715	2	649.1	34.839	34.837	2	10.365	10.306	26.772	236.1	230.8	2	42.5	0.00	2	5.38	2	2.824	2	1.433	2	583.1	2	2112.4	2	7.8140	2	2301	2	-8.00	9	-9.00	9	-9
3714	2	749.5	34.684	34.684	2	9.188	9.103	26.854	222.8	221.8	2	59.1	0.00	2	8.05	2	2.195	2	1.094	2	664.7	2	2128.4	2	7.7878	2	2294	2	-8.00	9	-9.00	9	-9
3713	2	848.8	34.540	34.539	2	7.708	7.621	26.968	211.9	210.2	2	80.5	0.00	2	13.62	2	-9.000	9	-9.000	9	772.4	2	2148.5	2	7.7121	2	2294	2	-8.00	9	-9.00	9	-9
3712	2	949.6	34.447	35.119	3	6.393	6.303	27.607	207.8	-8.0	9	-9.0	-9.00	9	-9.00	9	2.833	4	1.555	4	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
3711	2	1101.3	34.385	34.384	2	4.932	4.840	27.205	201.9	202.1	2	108.8	0.00	2	28.54	2	2.09	2	0.383	2	963.1	2	2188.8	2	7.6286	2	2301	2	-8.00	9	-9.00	9	-9
3710	2	1298.3	34.422	34.421	2	3.866	3.568	27.389	184.8	183.6	2	136.8	0.00	2	32.58	2	2.33	2	0.187	6	1104.9	2	2222.4	2	7.5829	2	2318	2	-8.00	9	-9.00	9	-9
3709	2	1502.9	34.521	34.516	2	3.068	2.959	27.502	171.3	170.7	2	154.3	0.00	2	33.58	2	2.39	2	-9.000	9	1168.9	2	2244.6	2	7.5580	2	2335	2	-8.00	9	-9.00	9	-9
3708	2	1899.0	34.607	34.606	2	2.743	2.621	27.604	170.8	169.3	2	158.3	0.00	2	33.19	2	2.36	2	0.032	2	1160.8	2	2252.8	2	7.5622	2	2342	2	-8.00	9	-9.00	9	-9
3707	2	1902.7	34.675	34.673	2	2.518	2.380	27.879	176.3	175.1	2	154.3	0.00	2	32.07	2	2.29	2	-9.000	9	1125.8	2	2254.1	2	7.5751	2	2350	2	-8.00	9	-9.00	9	-9
3706	2	2101.3	34.717	34.718	2	2.333	2.182	27.729	164.4	163.6	2	147.4	0.00	2	30.82	2	2.20	2	0.007	2	1088.3	2	2249.1	2	7.5899	2	2352	2	-8.00	9	-9.00	9	-9
3705	2	2301.0	34.742	34.741	2	2.141	1.976	27.766	161.9	161.3	2	141.3	0.00	2	30.15	2	2.14	2	-9.000	9	1054.3	2	2247.7	2	7.6010	2	2357	2	-8.00	9	-9.00	9	-9
3704	2	2596.0	34.747	34.745	2	1.768	1.583	27.799	168.1	168.1	2	137.9	0.00	2	30.04	2	2.15	2	0.003	2	1032.1	2	2250.2	2	7.6070	2	2359	2	-8.00	9	-9.00	9	-9
3703	2	2797.8	34.742	34.741	2	1.631	1.430	27.807	169.7	169.4	2	137.9	0.00	2	30.40	2	2.17	2	-9.000	9	1037.3	2	2253.4	2	7.6063	2	2364	2	-8.00	9	-9.00	9	-9
3702	2	3100.0	34.737	34.736	2	1.491	1.264	27.815	201.1	200.1	2	138.7	0.00	2	30.77	2	2.19	2	0.006	2	1040.0	2	2255.6	2	7.6052	2	2365	2	-8.00	9	-9.00	9	-9
3701	2	3304.4	34.735	34.736	2	1.450	1.204	27.819	202.3	200.5	2	138.8	0.00	2	30.91	2	2.21	2	0.007	2	1052.3	2	2258.5	2	7.6079	2	2365	2	-8.00	9	-9.00	9	-9

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

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

*** PSS-78 scale

**** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 38 DATE 10/08/1995
 CAST 1 GMT 04:35
 CTD CAST 259

LATITUDE 31° 58.96' S
 LONGITUDE 80° 0.29' E

Bottle Number	CTD		Bottle		Sigma Theta	O2 Hmol/kg	O2 Hmol/kg	F* Temp** °C	Pot. T*** °C	F* Salinity***	CO2												Chi-a Hg/l												
	db	Pressure	Salinity***	Temp** °C							F* NO3 Hmol/kg	F* NO2 Hmol/kg	F* AOU	F* Si(OH)4 Hmol/kg	F* PO4 Hmol/kg	F* DIC Hmol/kg	F* pH	F* TA Hmol/kg	F* TOC Hmol/kg	TON F*															
3824	2	6.7	35.431	14.470	14.469	26.422	263.5	259.7	-10.2	0.04	2	1.51	2	0.27	2	1.91	2	3.008	2	1.823	2	405.6	2	2066.4	6	7.9506	2	2330	2	63.01	2	4.25	2	-9	-9
3823	2	41.1	35.430	14.407	14.401	26.436	263.2	259.5	-9.7	0.05	2	1.51	2	0.28	2	1.81	2	3.004	2	1.621	2	402.8	3	2065.7	7	7.9500	2	2330	2	62.53	2	4.40	2	-9	-9
3822	2	80.2	35.417	14.229	14.217	26.465	260.2	254.7	-3.9	0.07	2	1.85	2	0.32	2	1.93	2	3.030	6	1.628	6	410.0	2	2067.9	2	7.9430	2	2328	2	60.51	2	3.90	2	-9	-9
3821	2	121.0	35.338	13.746	13.729	26.498	250.0	245.7	7.7	0.21	2	4.44	2	0.46	2	2.37	2	3.067	2	1.617	2	451.4	2	2079.4	2	7.9141	2	2323	2	56.27	2	3.47	2	-9	-9
3820	2	201.1	35.212	12.817	12.790	26.600	240.1	237.5	21.1	0.00	2	7.92	2	0.66	2	3.50	2	3.088	2	1.614	2	500.7	2	2093.4	2	7.8760	2	2315	2	55.25	2	2.93	2	-9	-9
3819	2	300.2	35.125	12.239	12.199	26.650	243.4	241.2	20.7	0.00	2	9.25	2	0.74	2	3.93	2	3.130	2	1.624	2	515.0	2	2095.7	2	7.8650	2	2311	2	53.34	2	2.81	2	-9	-9
3818	2	399.8	35.048	11.754	11.702	26.684	243.6	241.8	23.0	0.00	2	10.30	2	0.81	2	4.19	2	3.118	2	1.811	2	532.9	2	2098.1	2	7.8529	2	2306	2	53.05	2	2.97	2	-9	-9
3817	2	500.4	34.961	11.191	11.128	26.723	241.7	242.0	26.2	0.00	2	11.45	2	0.89	2	4.30	2	3.098	2	1.578	2	555.5	2	2101.6	2	7.8390	2	2307	2	50.82	2	2.94	2	-9	-9
3816	2	599.5	34.865	10.547	10.474	26.786	237.9	238.9	33.3	0.00	2	13.16	2	0.98	2	4.65	2	2.986	2	1.527	2	573.8	2	2108.1	2	7.8200	2	2303	2	49.42	2	2.90	2	-9	-9
3815	2	699.5	34.748	9.726	9.644	26.813	231.4	232.0	45.4	0.00	2	15.87	2	1.16	2	5.77	2	2.812	2	1.301	2	626.0	2	2118.0	2	7.7901	2	2298	2	49.00	2	2.90	2	-9	-9
3814	2	799.5	34.615	8.589	8.502	26.898	217.4	217.7	67.1	0.00	2	19.83	2	1.40	2	9.16	2	1.928	2	0.951	2	702.0	2	2135.3	2	7.7453	2	2294	2	49.00	2	2.90	2	-9	-9
3813	2	1000.7	34.415	5.877	5.787	27.118	205.7	203.9	99.8	0.00	2	27.33	2	1.90	2	22.76	2	1.092	2	0.535	2	900.2	2	2173.5	2	7.6525	2	2296	2	46.09	2	2.90	2	-9	-9
3812	9	1149.0	34.367	-9.000	4.278	27.254	201.0	-9.0	-9.0	-9.00	9	-9.00	9	-9.00	9	-9.00	9	-9.000	9	-9.000	9	-9.000	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	-9
3811	2	1399.3	34.474	3.303	3.200	27.447	175.2	175.1	148.1	0.00	2	33.15	2	2.35	2	59.58	2	0.231	2	0.115	2	1154.6	2	2237.1	2	7.5657	2	2330	2	49.00	2	2.90	2	-9	-9
3810	2	1598.8	34.577	2.857	2.743	27.570	168.4	167.7	159.0	0.00	2	33.55	2	2.35	2	71.65	2	0.080	6	0.041	6	1181.0	2	2252.9	2	7.5046	2	2343	2	42.91	2	2.90	2	-9	-9
3809	2	1800.3	34.652	2.618	2.489	27.653	171.7	170.5	156.1	0.00	2	32.71	2	2.29	2	77.71	2	0.032	2	0.018	2	1160.9	2	2255.1	2	-9.0000	9	2351	2	49.00	2	2.90	2	-9	-9
3808	2	2000.9	34.700	2.410	2.267	27.710	179.4	178.1	152.2	0.00	2	31.62	2	2.20	2	80.81	2	0.018	2	0.018	2	1104.7	2	2253.1	2	7.5825	2	2354	2	49.00	2	2.90	2	-9	-9
3807	2	2199.1	34.729	2.224	2.066	27.749	187.9	187.0	144.9	0.00	2	30.76	2	2.13	2	82.27	2	0.012	2	0.005	2	1073.6	2	2250.7	2	7.5944	2	2355	2	42.03	2	2.90	2	-9	-9
3806	2	2399.0	34.743	2.032	1.880	27.776	192.9	192.9	140.7	0.00	2	30.33	2	2.10	2	86.30	2	0.008	2	0.006	2	1051.0	2	2248.8	2	7.6027	2	2357	2	49.00	2	2.90	2	-9	-9
3805	2	2699.6	34.745	1.771	1.576	27.799	196.5	197.4	138.7	0.00	2	30.48	2	2.11	2	93.94	2	0.005	2	0.007	2	1047.4	2	2253.8	2	7.6052	2	2363	2	49.00	2	2.90	2	-9	-9
3804	2	3001.5	34.738	1.533	1.315	27.813	198.9	199.7	138.6	0.00	2	30.79	2	2.13	2	101.48	2	-9.000	9	-9.000	9	1053.7	2	2255.7	2	7.6059	2	2365	2	41.94	2	2.90	2	-9	-9
3803	2	3301.2	34.733	1.421	1.178	27.818	199.2	199.8	139.8	0.00	2	31.09	2	2.16	2	106.35	2	0.003	2	0.002	2	1046.4	2	2282.2	2	7.6065	2	2371	2	49.00	2	2.90	2	-9	-9
3802	2	3602.7	34.731	1.415	1.140	27.820	199.3	199.6	140.3	0.00	2	31.29	2	2.17	2	108.06	2	-9.000	9	-9.000	9	1049.3	2	2282.8	2	7.6063	2	2378	2	49.00	2	2.90	2	-9	-9
3801	2	3925.0	34.730	1.428	1.119	27.820	199.9	198.6	141.5	0.00	2	31.38	2	2.17	2	109.70	2	0.002	2	0.003	2	1056.7	2	2285.6	2	7.6081	2	2378	2	49.00	2	2.90	2	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR
NOAA Ship Baldridge

STATION 39 DATE 10/08/1995
 CAST 1 GMT 11:58
 CTD CAST 260

LATITUDE 30° 59.85' S
 LONGITUDE 80° 0.6' E

Bottle Number	CTD		Bottle		ICO2													F* CH-a Phaeo µg/l																	
	F** Pressure db	Salinity	Temp	Pot	F* Sigma T	O2	Theta	F* AOU	NO2	NO3	PO4	Si(OH)4	F* CFC-11	F* CFC-12	F* DIC	pH	F* TA		TOC	F* TON															
	°C	°C	°C	°C	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	pmol/kg	pmol/kg	µmol/kg		µmol/kg	µmol/kg	µmol/kg	µmol/kg															
3924	2	6.8	35.849	35.850	2	16.771	16.770	26.223	244.3	244.5	2	-6.7	0.00	2	0.00	2	1.52	2	2.629	2	1.533	2	385.4	2	2063.9	6	7.9915	2	2355	2	-8.00	9	-9.00	9	-9
3923	2	23.6	35.842	35.843	2	16.598	16.594	26.259	245.0	245.0	2	-6.4	0.00	2	0.00	2	1.58	2	2.709	2	1.475	2	359.9	2	2061.1	2	7.9921	2	-9	9	-9.00	9	-9.00	9	-9
3922	2	50.1	35.836	35.837	2	16.549	16.541	26.267	244.2	245.1	2	-6.2	0.00	2	0.04	2	1.58	2	2.697	2	1.480	2	361.7	2	2063.8	2	7.9899	2	-9	9	-9.00	9	-9.00	9	-9
3921	2	99.0	35.788	35.789	2	16.185	16.169	26.317	246.7	247.3	2	-6.6	0.00	2	0.04	2	1.49	2	2.751	2	1.497	2	367.5	2	2062.2	2	7.9832	2	2361	2	-9.00	9	-9.00	9	-9
3920	2	150.4	35.679	35.684	2	15.642	15.618	26.362	244.4	244.4	2	-1.0	0.08	2	0.55	2	1.67	2	2.795	2	1.515	2	386.8	2	2066.9	2	7.9705	2	-9	9	-9.00	9	-9.00	9	-9
3919	2	200.4	35.487	35.501	2	14.552	14.522	26.464	247.9	247.4	2	1.7	0.08	2	2.04	2	1.80	2	2.973	2	1.601	2	419.3	2	2074.3	2	7.9417	2	2336	2	-9.00	9	-9.00	9	-9
3918	2	299.5	35.207	35.208	2	12.744	12.703	26.614	239.9	238.6	2	20.5	0.00	2	8.26	2	3.75	2	-9.000	9	-9.000	9	503.3	2	2095.0	2	7.8752	2	-9	9	-9.00	9	-9.00	9	-9
3917	2	398.5	35.086	35.088	2	12.006	11.954	26.667	240.9	238.9	2	24.5	0.00	2	9.83	2	3.89	2	3.028	2	1.587	2	526.5	2	2100.7	2	7.8576	2	2313	2	-9.00	9	-9.00	9	-9
3916	3	498.8	34.977	34.978	3	11.300	11.237	26.716	241.3	239.1	2	28.5	0.00	2	11.46	2	4.23	2	-9.000	9	-9.000	9	538.8	2	2102.2	2	7.8407	2	2308	2	-9.00	9	-9.00	9	-9
3915	2	598.3	34.867	34.869	2	10.546	10.473	26.768	237.5	237.4	2	34.8	0.00	2	13.18	2	4.52	2	2.882	2	1.457	2	577.2	2	2108.7	2	7.8198	2	-9	9	-9.00	9	-9.00	9	-9
3914	2	700.5	34.742	34.743	2	9.675	9.594	26.820	232.0	231.9	2	45.8	0.00	2	15.85	2	5.64	2	-9.000	9	-9.000	9	613.2	2	2118.8	2	7.7914	2	2300	2	-9.00	9	-9.00	9	-9
3913	2	798.8	34.625	34.626	2	8.665	8.577	26.892	217.9	217.3	2	67.0	0.00	2	19.77	2	9.31	2	1.859	2	0.932	2	698.4	2	2132.4	2	7.7472	2	2295	2	-9.00	9	-9.00	9	-9
3912	2	1000.3	34.417	34.416	2	5.785	5.696	27.129	204.0	202.3	2	102.0	0.00	2	27.70	2	23.95	2	0.942	2	0.476	2	899.4	2	2176.4	2	7.6515	2	-9	9	-9.00	9	-9.00	9	-9
3911	2	1151.3	34.394	34.394	2	4.414	4.322	27.270	191.0	190.0	2	124.6	0.00	2	31.09	2	39.33	2	0.432	2	0.218	2	1024.5	2	2204.5	2	7.6066	2	2310	2	-9.00	9	-9.00	9	-9
3910	2	1395.0	34.502	34.503	2	3.484	3.380	27.453	163.6	162.3	2	159.4	0.00	2	34.14	2	84.78	2	0.078	2	0.040	2	1164.3	2	2246.3	2	7.5603	2	2338	2	-9.00	9	-9.00	9	-9
3909	3	1600.1	34.589	-9.000	9	3.069	2.952	27.561	158.7	-9.0	9	-9.0	-9.00	9	-9.00	9	-9.00	9	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.000	9	-9	9	-9.00	9	-9.00	9	-9
3908	2	1798.9	34.652	34.653	2	2.767	2.637	27.641	162.7	161.4	2	165.9	0.00	2	33.35	2	82.85	2	0.013	2	0.007	2	1165.1	2	2265.4	2	7.5619	2	-9	9	-9.00	9	-9.00	9	-9
3907	2	2000.3	34.697	34.698	2	2.436	2.293	27.706	177.1	176.2	2	153.9	0.00	2	31.81	2	81.75	2	-9.000	9	-9.000	9	1106.3	2	2253.4	2	7.5796	2	2354	2	-9.00	9	-9.00	9	-9
3906	2	2301.7	34.739	34.740	2	2.095	1.931	27.769	190.5	190.2	2	142.8	0.00	2	30.61	2	85.41	2	0.003	2	-0.002	2	1054.0	2	2249.0	2	7.6006	2	2359	2	-9.00	9	-9.00	9	-9
3905	2	2599.3	34.743	34.744	2	1.793	1.607	27.797	195.2	195.7	2	140.1	0.00	2	30.63	2	94.05	2	-9.000	9	-9.000	9	1045.2	2	2252.4	2	7.6056	2	2359	2	-9.00	9	-9.00	9	-9
3904	2	2901.5	34.738	34.739	2	1.559	1.350	27.812	197.7	198.2	2	138.8	0.00	2	30.97	2	101.85	2	0.003	2	0.002	2	1041.9	2	2257.3	2	7.6063	2	2362	2	-9.00	9	-9.00	9	-9
3903	2	3199.7	34.733	34.733	2	1.421	1.186	27.818	199.1	199.3	2	140.2	0.00	2	31.44	2	106.61	2	-9.000	9	-9.000	9	1046.6	2	2261.3	2	7.6076	2	2363	2	-9.00	9	-9.00	9	-9
3902	2	3497.5	34.731	34.731	2	1.412	1.148	27.819	199.1	199.1	2	140.7	0.00	2	31.40	2	108.11	2	0.002	2	0.001	2	1041.1	2	2263.7	2	7.6076	2	-9	9	-9.00	9	-9.00	9	-9
3901	2	3866.9	34.729	34.730	2	1.418	1.113	27.821	199.6	197.9	2	142.2	0.00	2	30.89	2	110.50	2	0.007	2	0.009	2	1050.7	2	2268.0	2	7.6097	2	2375	2	-9.00	9	-9.00	9	-9

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

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

*** PSS-78 scale

**** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 40 DATE 10/08/1995
 CAST 1 GMT 18:54
 CTD CAST 261

LATITUDE 30° 0.11' S
 LONGITUDE 79° 59.77' E

Number	CTD Bottle			CTD Bottle			IC02														
	F** Pressure db	Salinity	Temp**	O2	Sigma T	Pot. T***	AOU	NO2	NO3	PO4	Si(OH)4	CFC-11	CFC-12	F _{at 20°C}	DIC	pH	TA	TOC	TON	F _{Chl-a}	
	H _{mol/kg}	‰	°C	H _{mol/kg}	kg/m ³	°C	µmol/kg	µmol/kg	µmol/kg	µmol/kg	µmol/kg	pmol/kg	pmol/kg	µmol/kg	µmol/kg		µmol/kg	µmol/kg	µmol/kg	µmol/kg	µg/l
4024	5.7	35.871	16.809	26.231	243.4	16.808	-8.0	0.00	0.00	0.14	1.62	2.692	1.453	361.6	2062.7	7.9938	2355	65.36	4.66	2	-9
4023	31.9	35.841	16.616	26.255	244.7	16.611	-6.5	0.00	0.00	0.14	1.62	2.676	1.432	363.8	2064.1	7.9905	2351	66.12	4.82	2	-9
4022	68.1	35.778	16.214	26.302	246.8	16.203	-5.8	0.00	0.01	0.17	1.56	2.754	1.463	368.4	2064.1	7.9847	2350	64.41	5.28	2	-9
4021	104.3	35.652	15.596	26.348	242.5	15.580	2.4	0.14	0.87	0.24	1.63	2.817	1.518	390.6	2067.6	7.9637	2344	61.72	4.23	2	-9
4020	139.6	35.492	14.590	26.430	242.8	14.589	8.9	0.09	2.78	0.37	1.91	2.918	1.503	425.0	2081.0	7.9313	2332	55.48	4.12	2	-9
4019	198.6	35.289	13.409	26.542	233.3	13.381	24.0	0.00	6.29	0.57	2.80	3.053	1.560	485.8	2094.2	7.8651	2321	53.75	3.37	2	-9
4018	299.7	35.127	12.267	26.644	238.9	12.227	24.5	0.00	8.73	0.72	3.45	-9.000	-9.000	527.0	2099.2	7.8810	2313	53.93	3.37	2	-9
4017	399.1	35.020	11.578	26.688	240.9	11.527	26.5	0.00	10.20	0.81	3.76	3.122	1.606	540.6	2099.4	7.8463	2307	51.94	3.30	2	-9
4016	498.3	34.923	10.921	26.742	240.3	10.859	30.8	0.00	11.69	0.90	4.12	-9.000	-9.000	568.0	2107.1	7.8301	2303	49.36	3.39	2	-9
4015	601.3	34.817	10.204	26.788	237.3	10.132	38.4	0.00	13.49	1.01	4.80	2.896	1.484	592.4	2108.9	7.8109	2299	48.00	9.00	9	-9
4014	700.0	34.680	9.224	26.845	227.6	9.145	52.9	0.00	16.99	1.23	6.41	-9.000	-9.000	664.5	2123.4	7.7731	2298	48.00	9.00	9	-9
4013	798.3	34.557	7.986	26.942	210.9	7.903	78.2	0.00	21.39	1.51	11.62	1.549	0.769	756.4	2144.7	7.7197	2290	45.24	9.00	9	-9
4012	901.5	34.456	6.453	27.076	200.9	6.369	99.8	0.00	25.89	1.80	20.41	0.870	0.440	887.1	2167.9	7.6665	2290	48.00	9.00	9	-9
4011	997.8	34.404	5.276	27.181	195.7	5.191	113.1	0.00	28.62	2.01	29.57	0.595	0.307	959.3	2183.0	7.6295	2298	48.00	9.00	9	-9
4010	1151.2	34.425	4.108	27.328	178.7	4.019	139.2	0.00	31.75	2.25	48.13	0.216	0.113	1089.5	2220.3	7.5687	2317	42.39	9.00	9	-9
4009	1403.7	34.537	3.393	27.469	157.0	3.289	168.3	0.00	33.50	2.38	70.42	-9.000	-9.000	1194.0	2253.8	7.5527	2343	48.00	9.00	9	-9
4008	1650.8	34.639	2.969	27.811	154.4	2.849	172.9	0.00	33.33	2.37	84.43	0.008	0.004	1202.7	2266.2	7.5550	2358	48.00	9.00	9	-9
4007	1888.9	34.693	2.640	27.684	160.3	2.503	169.4	0.00	32.68	2.33	92.32	-9.000	-9.000	1158.8	2270.0	7.5672	2370	42.84	9.00	9	-9
4006	2150.6	34.716	2.287	27.734	174.3	2.133	158.3	0.00	31.53	2.23	93.29	0.005	0.006	1108.2	2267.3	7.5840	2368	48.00	9.00	9	-9
4005	2489.3	34.736	1.905	27.782	189.5	1.726	145.9	0.00	30.47	2.13	94.95	-9.000	-9.000	1052.6	2259.1	7.6008	2366	48.00	9.00	9	-9
4004	2789.4	34.738	1.660	27.803	194.9	1.458	142.1	0.00	30.39	2.12	99.84	0.003	0.008	1049.3	2255.1	7.6057	2364	42.59	9.00	9	-9
4003	3100.0	34.733	1.484	27.813	197.5	1.258	141.3	0.00	30.49	2.13	104.90	-9.000	-9.000	1038.0	2263.0	7.6074	2372	48.00	9.00	9	-9
4002	3399.9	34.729	1.391	27.816	197.3	1.137	143.0	0.00	30.87	2.15	110.20	0.003	0.004	1037.8	2268.8	7.6094	2385	48.00	9.00	9	-9
4001	3870.4	34.727	1.389	27.820	198.1	1.108	144.1	0.00	31.15	2.16	111.93	0.001	0.001	1056.3	2288.8	7.6113	2385	42.69	9.00	9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR

NOAA Ship Baldridge

STATION 41 DATE 10/09/1995
 CAST 1 GMT 02:18
 CTD CAST 262

LATITUDE 28° 59.94' S
 LONGITUDE 79° 59.89' E

Bottle Number	F** Pressure db	CTD		Bottle		CTD		Bottle		ICO2										F* Chl-a Phaeo µg/l															
		Salinity**	Salinity***	Temp***	Pot. T****	Temp***	Pot. T****	O2	O2	σ _t	Theta	AOU	NO2	F* NO3	F* PO4	F* Si(OH)4	F* CFC-11	F* CFC-12	F* at 20 °C		F* DIC	F* pH	F* TA	F* TOC	F* TON										
4124	2	7.3	35.889	35.890	2	17.269	17.268	26.134	240.9	241.2	-5.7	0.00	2	0.13	2	1.60	2	2.581	2	1.425	2	345.8	2	2056.9	6	8.0066	2	2354	2	-9.00	9	-9.00	9	-9	
4123	2	23.7	35.887	35.888	2	17.262	17.258	26.135	240.8	241.3	-5.8	0.00	2	0.14	2	1.60	2	2.598	2	1.444	2	344.1	2	2057.5	2	8.0002	2	2351	2	-9.00	9	-9.00	9	-9	
4122	2	49.4	35.887	35.887	2	17.265	17.257	26.135	241.3	241.4	-5.9	0.00	2	0.15	2	1.61	2	-9.000	9	-9.000	9	342.4	2	2057.5	2	8.0043	2	-9	9	-9.00	9	-9.00	9	-9	
4121	2	75.5	35.837	35.841	2	16.930	16.918	26.181	242.0	241.3	-4.2	0.00	2	0.18	2	1.55	2	2.613	2	1.415	2	353.9	2	2059.2	2	7.9859	2	2356	2	-9.00	9	-9.00	9	-9	
4120	2	149.9	35.603	35.607	2	15.260	15.237	26.388	245.5	263.2	-3	-17.8	0.10	2	1.11	2	1.54	2	2.838	6	1.520	6	396.9	2	2071.6	2	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
4119	2	249.6	35.220	35.218	2	12.906	12.872	26.588	236.9	235.4	22.7	0.00	2	0.65	2	3.16	2	3.077	2	1.591	2	500.0	2	2086.1	2	7.8762	2	2319	2	-9.00	9	-9.00	9	-9	
4118	2	350.7	35.067	35.071	2	11.864	11.818	26.679	239.8	237.4	26.7	0.00	2	0.78	2	3.53	2	-9.000	9	-9.000	9	538.7	2	2101.4	2	7.8542	2	2311	2	-9.00	9	-9.00	9	-9	
4117	2	451.5	34.957	34.960	2	11.116	11.059	26.734	240.9	239.0	29.6	0.00	2	1.153	2	3.85	2	2.986	2	1.518	2	556.1	2	2104.6	2	7.8357	2	2308	2	-9.00	9	-9.00	9	-9	
4116	2	550.7	34.855	34.858	3	10.449	10.382	26.775	240.1	239.0	33.8	0.00	2	1.319	2	4.30	2	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	
4115	2	650.0	34.737	34.738	2	9.638	9.563	26.821	233.9	233.7	44.2	0.00	2	1.583	2	5.24	2	2.577	2	1.287	2	621.6	2	2115.0	2	7.7908	2	2296	2	-9.00	9	-9.00	9	-9	
4114	2	753.2	34.605	34.607	2	8.518	8.437	26.899	218.6	218.3	67.0	0.00	2	1.999	2	8.87	2	-9.000	9	-9.000	9	704.8	2	2132.2	2	7.7438	2	2293	2	-9.00	9	-9.00	9	-9	
4113	2	901.0	34.441	34.442	2	6.172	6.090	27.100	199.6	198.0	103.4	0.00	2	2.718	2	1.87	2	22.43	2	0.794	2	880.4	2	2171.8	2	7.6530	2	2297	2	-9.00	9	-9.00	9	-9	
4112	2	1050.6	34.408	34.407	2	4.569	4.485	27.263	187.1	185.8	127.5	0.00	2	3.122	2	2.16	2	39.89	2	0.355	2	1019.0	2	2203.7	2	7.6017	2	2317	2	-9.00	9	-9.00	9	-9	
4111	2	1300.2	34.523	34.522	2	3.655	3.557	27.451	155.4	154.3	165.9	0.00	2	3.394	2	2.40	2	67.81	2	0.058	2	1171.0	2	2249.5	2	7.5491	2	2340	2	-9.00	9	-9.00	9	-9	
4110	2	1488.6	34.607	34.606	2	3.352	3.240	27.548	147.0	146.5	178.1	0.00	2	34.19	2	2.43	2	80.71	2	0.010	2	1205.0	2	2265.8	2	7.5432	2	2356	2	-9.00	9	-9.00	9	-9	
4109	2	1700.3	34.661	34.660	2	3.057	2.931	27.620	148.3	147.2	177.7	0.00	2	33.93	2	2.41	2	89.21	2	0.004	2	1203.7	2	2273.7	2	7.5514	2	2365	2	-9.00	9	-9.00	9	-9	
4108	2	1889.9	34.690	34.690	2	2.724	2.585	27.675	157.9	156.6	171.1	0.00	2	33.25	2	2.35	2	92.28	2	-9.000	9	-9.000	9	1157.3	2	2272.5	2	2389	2	-9.00	9	-9.00	9	-9	
4107	2	2101.7	34.710	34.710	2	2.330	2.179	27.725	175.0	174.3	156.7	0.00	2	31.97	2	2.24	2	90.41	2	0.003	2	1102.8	2	2261.6	2	7.5812	2	2366	2	-9.00	9	-9.00	9	-9	
4106	2	2401.3	34.734	34.734	2	1.992	1.820	27.773	187.6	187.2	146.8	0.00	2	30.99	2	2.15	2	93.04	2	0.001	2	1061.5	2	2257.5	2	7.6009	2	2366	2	-9.00	9	-9.00	9	-9	
4105	2	2697.8	34.740	34.740	2	1.705	1.512	27.801	194.7	195.1	141.5	0.00	2	30.76	2	2.12	2	98.20	2	0.002	2	1041.3	2	2256.4	2	-9.0000	9	2368	2	-9.00	9	-9.00	9	-9	
4104	2	3000.9	34.735	34.736	2	1.510	1.293	27.813	196.8	197.1	141.4	0.00	2	30.97	2	2.14	2	104.42	2	-9.000	9	-9.000	9	1038.3	2	2261.6	2	2373	2	-9.00	9	-9.00	9	-9	
4103	2	3299.3	34.731	34.731	2	1.412	1.168	27.818	198.7	197.1	142.5	0.00	2	31.34	2	2.16	2	109.31	2	0.002	2	1043.4	2	2265.6	2	7.6004	2	2378	2	-9.00	9	-9.00	9	-9	
4102	2	3648.8	34.727	34.728	2	1.388	1.107	27.820	195.9	195.8	144.4	0.00	2	31.65	2	2.18	2	112.72	2	0.003	2	1035.3	2	2270.9	2	7.6041	2	2384	2	-9.00	9	-9.00	9	-9	
4101	2	4013.0	34.726	34.727	2	1.407	1.089	27.820	196.9	195.1	145.2	0.00	2	31.72	2	2.19	2	114.06	2	0.005	2	1047.9	2	2273.3	6	7.6028	2	2386	2	-9.00	9	-9.00	9	-9	

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

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

*** PSS-78 scale

**** ITS-90 scale

I8NR
NOAA Ship Baldrige

STATION 42 DATE 10/09/1995
CAST 1 GMT 10:21
CTD CAST 263

LATITUDE 27° 59.71' S
LONGITUDE 80° 0.22' E

Bottle Number	CTD		Bottle		F* Temp** °C	Pot. T**** °C	Sigma T	Theta	O2 Hmol/kg	O2 Hmol/kg	NO2 F* Hmol/kg	NO3 F* Hmol/kg	PO4 F* Hmol/kg	Si(OH)4 F* Hmol/kg	CFC-11 F* pmol/kg	CFC-12 F* pmol/kg	DIC H*atm	pH F*	TA Hmol/kg	F* TOC Hmol/l	F* TON Hmol/l	Chl-a Hg/l	Pheeo Hg/l							
	db	Salinity**	Salinity**	Temp***																										
4224	7.6	35.849	35.948	2	18.102	18.101	25.898	236.7	236.3	-4.5	0.00	0.02	0.12	1.88	2.498	1.393	2	2044.3	6	8.0212	2	2350	2	68.36	2	5.64	2	-9	-9	
4223	19.9	35.852	35.854	2	17.610	17.607	26.024	240.4	239.7	-5.7	0.00	0.06	0.15	1.73	2.558	1.424	2	2054.4	2	8.0085	2	-9	9	67.28	2	4.39	2	-9	-9	
4222	77.6	35.663	35.666	2	16.107	16.095	26.239	228.8	226.8	14.4	0.01	1.72	0.30	1.88	-9.000	9	-9.000	9	407.1	2	2078.7	2	2342	2	61.14	2	4.98	2	-9	-9
4221	120.9	35.462	35.463	2	14.669	14.651	26.406	234.0	231.6	16.9	0.04	3.46	0.41	1.88	2.901	6	1.538	6	445.6	2	2086.5	2	2331	2	54.77	2	3.93	2	-9	-9
4220	157.8	35.344	35.346	2	13.785	13.762	26.505	231.1	228.5	24.7	0.00	5.99	0.55	2.43	2.946	2	1.540	2	471.6	2	2094.5	2	2324	2	50.47	2	3.23	2	-9	-9
4219	199.3	35.254	35.255	2	13.099	13.071	26.577	231.9	229.2	27.8	0.00	7.70	0.64	3.00	2.978	2	1.560	2	497.0	2	2097.7	2	2317	2	49.30	2	3.20	2	-9	-9
4218	301.9	35.124	35.127	2	12.247	12.207	26.649	238.2	235.9	26.0	0.00	9.38	0.74	3.44	3.037	2	1.624	2	521.0	2	2101.3	2	2316	2	49.72	2	3.21	2	-9	-9
4217	402.3	35.017	35.019	2	11.562	11.510	26.697	237.1	235.2	30.8	0.00	11.21	0.85	3.90	2.941	2	1.517	2	547.4	2	2105.1	2	2308	2	48.76	2	2.85	2	-9	-9
4216	499.2	34.925	34.927	2	10.938	10.876	26.742	236.7	235.0	34.8	0.00	12.14	0.93	4.13	2.772	2	1.407	2	555.0	2	2109.3	2	2309	2	42.57	2	2.75	2	-9	-9
4215	598.9	34.802	34.804	2	10.103	10.032	26.794	234.6	233.0	42.0	0.00	14.80	1.07	4.96	2.573	2	1.294	2	597.9	2	2115.1	2	2297	2	9.00	9	-9.00	9	-9	-9
4214	700.9	34.688	34.670	2	9.086	9.008	26.859	225.8	219.3	62.2	0.00	18.08	1.28	6.94	2.109	2	1.043	2	681.7	2	2125.0	2	2301	3	9.00	9	-9.00	9	-9	-9
4213	802.7	34.556	34.557	2	7.925	7.842	26.950	211.6	209.9	79.3	0.00	22.24	1.53	11.96	1.419	2	0.713	2	752.6	2	2143.6	2	2293	2	42.90	2	-9.00	9	-9	-9
4212	999.3	34.398	-9.000	9	4.911	4.829	27.218	194.4	-9.0	9	-9.0	-9.00	-9.00	-9.00	-9.000	9	-9.000	9	-9.0	9	-9.000	9	-9	9	-9.00	9	-9.00	9	-9	-9
4211	1249.2	34.503	34.504	2	3.703	3.609	27.431	158.6	157.7	182.2	0.00	34.05	2.38	64.52	0.059	2	0.030	2	1162.7	2	2243.3	6	2335	2	9.00	9	-9.00	9	-9	-9
4210	1498.5	34.602	34.604	2	3.261	3.150	27.555	149.3	148.9	174.4	0.00	34.22	2.42	79.91	0.008	2	0.004	2	1202.7	2	2263.2	2	2354	2	9.00	4	-9.00	9	-9	-9
4209	1748.5	34.670	34.671	2	2.851	2.724	27.647	155.1	154.4	172.2	0.00	33.68	2.35	86.04	0.003	2	0.000	2	1176.3	2	2268.6	2	2361	2	9.00	9	-9.00	9	-9	-9
4208	1998.4	34.702	34.703	2	2.423	2.280	27.711	171.3	171.2	159.0	0.00	32.44	2.25	88.59	0.005	2	0.000	2	1094.1	3	2269.5	2	2363	2	9.00	9	-9.00	9	-9	-9
4207	2204.7	34.725	34.727	2	2.134	1.977	27.755	181.4	181.9	150.8	0.00	31.42	2.17	90.63	0.008	2	0.004	2	1071.1	2	2256.8	2	2361	2	42.18	2	-9.00	9	-9	-9
4206	2399.0	34.739	34.739	2	1.938	1.768	27.781	189.9	190.5	143.9	0.00	30.90	2.12	91.48	0.003	2	0.003	2	1047.9	2	2253.1	2	2361	2	9.00	9	-9.00	9	-9	-9
4205	2598.1	34.740	34.741	2	1.753	1.568	27.797	192.9	194.0	142.1	0.00	30.83	2.12	96.62	0.002	2	0.002	2	1038.3	2	2254.4	2	2363	2	9.00	9	-9.00	9	-9	-9
4204	3000.6	34.733	34.734	2	1.482	1.285	27.814	195.1	196.3	142.5	0.00	31.21	2.15	105.73	0.003	2	0.000	2	1039.8	2	2261.3	2	2373	2	41.98	2	-9.00	9	-9	-9
4203	3401.0	34.729	34.730	2	1.415	1.161	27.818	195.2	196.4	143.3	0.00	31.81	2.17	109.73	0.001	2	-0.002	2	1043.8	2	2267.4	2	2378	2	9.00	9	-9.00	9	-9	-9
4202	3800.2	34.726	34.727	2	1.411	1.116	27.818	194.0	194.2	145.9	0.00	31.77	2.19	113.89	0.003	2	0.001	2	1044.0	2	2272.7	2	2386	2	9.00	9	-9.00	9	-9	-9
4201	4250.7	34.725	34.726	2	1.441	1.086	27.819	194.4	193.6	146.7	0.00	32.05	2.19	115.46	0.000	2	-0.004	2	1049.5	2	2275.9	6	2389	2	9.00	4	-9.00	9	-9	-9

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

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

*** PSS-78 scale

**** ITS-90 scale

I8NR
NOAA Ship Baldrige

STATION 43 DATE 10/09/1995
CAST 1 GMT 17:34
CTD CAST 264

LATITUDE 26° 59.84' S
LONGITUDE 79° 59.9' E

Bottle Number	CTD		Bottle		CTD		Bottle		ICO2										Chi-a	Phaeo															
	F* Pressure db	Salinity	Temp	Salinity	Temp	Pot	Sigma	Theta	O2	O2	F* AOU	NO2	NO3	PO4	Si(OH)4	F* CFC-11	F* CFC-12	F* at 20°C			DIC	F* pH	TA	F* TOC	F* TON	F* Chl-a									
4324	2	7.1	35.812	35.813	2	18.801	18.800	25.695	232.0	233.7	2	-4.8	0.00	2	0.10	2	1.95	2	2.403	2	1.335	2	321.4	2	2031.6	6	8.0329	2	2353	2	-9.00	9	-9.00	9	-9
4323	2	24.8	35.809	35.811	2	18.794	18.790	25.696	232.1	233.7	2	-4.8	0.00	2	0.11	2	2.04	2	-9.000	9	-9.000	9	321.2	2	2031.9	2	8.0333	2	2347	2	-9.00	9	-9.00	9	-9
4322	2	75.9	35.852	35.857	2	18.060	18.047	25.918	236.9	237.0	2	-4.9	0.00	2	0.14	2	1.87	2	2.481	2	1.354	2	338.2	2	2045.6	2	8.0160	2	2351	2	-9.00	9	-9.00	9	-9
4321	2	124.9	35.676	35.676	2	16.268	16.248	26.211	230.2	228.9	2	11.6	0.03	2	1.16	2	1.76	2	2.663	2	1.434	2	398.8	2	2073.3	2	7.9575	2	2348	2	-9.00	9	-9.00	9	-9
4320	2	172.1	35.535	35.544	2	15.086	15.060	26.379	235.0	233.8	2	12.6	0.15	2	2.36	2	1.76	2	-9.000	9	-9.000	9	431.7	2	2079.0	2	7.9397	2	2338	2	-9.00	9	-9.00	9	-9
4319	2	201.2	35.397	35.402	2	14.172	14.143	26.468	229.6	227.5	2	23.7	0.01	2	4.80	2	2.34	2	2.871	2	1.508	2	463.4	2	2089.7	2	7.9047	2	2327	2	-9.00	9	-9.00	9	-9
4318	2	351.2	35.110	35.111	2	12.113	12.067	26.663	235.1	232.6	2	30.1	0.00	2	9.48	2	3.45	2	-9.000	9	-9.000	9	524.2	2	2101.2	2	7.8579	2	2312	2	-9.00	9	-9.00	9	-9
4317	2	450.6	34.970	34.971	2	11.194	11.137	26.728	237.9	235.5	2	32.7	0.00	2	11.29	2	3.86	2	2.850	2	1.448	2	550.6	2	2104.8	2	7.8374	2	2308	2	-9.00	9	-9.00	9	-9
4316	2	551.9	34.844	34.843	2	10.353	10.287	26.780	238.2	235.9	2	37.5	0.00	2	13.29	2	4.32	2	2.747	2	1.379	2	588.9	2	2109.9	2	7.8159	2	2306	2	-9.00	9	-9.00	9	-9
4315	2	653.2	34.713	34.714	2	9.447	9.372	26.834	230.4	228.7	2	50.5	0.00	2	16.43	2	5.88	2	2.264	2	1.128	2	640.5	2	2119.0	2	7.7845	2	2298	2	-9.00	9	-9.00	9	-9
4314	2	748.9	34.596	34.597	2	8.348	8.268	26.917	215.6	214.4	2	72.0	0.00	2	20.38	2	10.11	2	-9.000	9	-9.000	9	718.3	2	2136.8	2	7.7388	2	2291	2	-9.00	9	-9.00	9	-9
4313	2	852.8	34.498	34.497	2	7.013	6.930	27.032	203.4	202.0	2	93.5	0.00	2	24.57	2	17.30	2	0.956	6	0.497	6	831.3	2	2159.1	2	7.6863	2	-9	9	-8.00	9	-9.00	9	-9
4312	2	1003.3	34.414	34.414	2	4.987	4.904	27.222	189.3	187.6	2	122.5	0.00	2	29.63	2	35.42	2	-9.000	9	-9.000	9	986.3	2	2197.4	2	7.6181	2	2306	2	-9.00	9	-9.00	9	-9
4311	2	1148.1	34.463	34.464	2	4.177	4.087	27.351	165.5	164.9	2	151.3	0.00	2	32.62	2	54.63	2	0.111	2	0.063	2	1112.8	2	2230.6	2	7.5754	2	2323	2	-9.00	9	-9.00	9	-9
4310	2	1287.1	34.538	34.538	2	3.781	3.683	27.451	147.3	147.2	2	172.0	0.00	2	33.95	2	70.41	2	0.024	2	0.014	2	1190.1	2	2255.8	2	7.5519	2	2344	2	-9.00	9	-9.00	9	-9
4309	2	1502.5	34.616	34.616	2	3.352	3.240	27.513	143.2	148.8	2	173.9	0.00	2	33.67	2	73.48	2	0.029	2	0.015	2	1194.5	2	2256.8	2	7.5544	2	-9	9	-8.00	9	-9.00	9	-9
4308	2	1749.3	34.678	34.678	2	2.954	2.825	27.644	147.4	148.0	2	177.7	0.00	2	33.65	2	91.84	2	0.001	2	0.000	2	1185.1	2	2276.9	2	7.5559	2	2388	2	-9.00	9	-9.00	9	-9
4307	2	2003.7	34.706	34.707	2	2.482	2.338	27.709	162.6	163.8	2	165.9	0.00	2	32.57	2	94.63	2	0.004	2	0.001	2	1135.7	2	2272.8	2	7.5749	2	2388	2	-9.00	9	-9.00	9	-9
4306	2	2499.8	34.738	34.739	2	1.884	1.706	27.785	188.9	191.0	2	143.9	0.00	2	30.43	2	100.78	2	0.003	2	0.000	2	1055.8	2	2255.4	2	7.6023	2	2367	2	-9.00	9	-9.00	9	-9
4305	2	2793.1	34.737	34.737	2	1.633	1.433	27.804	192.5	194.7	2	142.6	0.00	2	30.73	2	100.78	2	-9.000	9	-9.000	9	1045.0	2	2258.7	2	7.6065	2	2367	2	-9.00	9	-9.00	9	-9
4304	2	3199.3	34.731	34.731	2	1.433	1.198	27.816	193.3	196.1	2	143.3	0.00	2	31.05	2	108.42	2	0.002	2	0.002	2	1040.9	2	2266.7	2	7.6087	2	2376	2	-9.00	9	-9.00	9	-9
4303	2	3600.7	34.727	34.727	2	1.393	1.119	27.818	191.5	194.0	2	146.1	0.00	2	31.36	2	113.78	2	-9.000	9	-9.000	9	1043.7	2	2274.7	2	7.6096	2	2388	2	-9.00	9	-9.00	9	-9
4302	2	3998.8	34.725	34.725	2	1.409	1.092	27.818	191.1	192.5	2	147.8	0.00	2	31.70	2	116.14	2	0.002	2	0.000	2	1045.6	2	2278.5	2	7.6107	2	2391	2	-9.00	9	-9.00	9	-9
4301	2	4447.2	34.724	34.725	2	1.455	1.087	27.819	192.7	192.3	2	148.1	0.00	2	31.63	2	116.28	2	0.000	2	-0.001	2	1049.3	2	2277.3	6	7.6100	2	2392	2	-9.00	9	-9.00	9	-9

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

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

*** PSS-78 scale

**** ITS-90 scale

18NR NOAA Ship Baldrige

STATION 44 DATE 10/09/1995
 CAST 1 GMT 01:05
 CTD CAST 265

LATITUDE 25° 59.42' S
 LONGITUDE 79° 59.59' E

Bottle Number	CTD		Bottle		F* Pot. T** °C	F* Salinity***	Sigma T**** °C	O2 Hmol/kg	O2 Hmol/kg	AOU Hmol/kg	NO2 Hmol/kg	NO3 Hmol/kg	PO4 Hmol/kg	Si(OH)4 F* Hmol/kg	CFC-11 F* pmol/kg	CFC-12 F* pmol/kg	Hum Hmol/kg	DIC F* Hmol/kg	pH F*	TA Hmol/kg	F* TOC Hmol/l	F* TON Hmol/l	F* Chl-a Hg/l								
	db	Pressure	Salinity***	Theta																											
4424	2	3.8	35.587	35.588	20.180	20.179	25.164	224.5	229.5	-6.0	-9.0	-9.0	-9.0	-9.0	9	2.237	1.260	298.6	2	2006.1	6	8.0550	2	2331	2	69.41	2	4.84	2	-9	-9
4423	2	29.8	35.728	35.735	20.024	20.018	25.319	225.9	231.1	-7.2	0.0	0.0	0.0	2.10	2	2.302	1.280	306.2	2	2017.9	2	8.0538	2	2637	2	69.60	2	4.82	2	-9	-9
4422	2	59.4	35.755	35.759	19.936	19.925	25.362	226.2	228.4	-4.1	0.0	0.0	0.0	2.10	2	-9.000	9	305.9	2	2019.1	2	8.0474	2	2340	2	69.34	2	4.54	2	-9	-9
4421	2	86.9	35.779	35.781	19.676	19.660	25.449	225.2	227.5	-2.2	0.0	0.0	0.0	1.99	2	2.317	6	311.3	2	2022.3	2	8.0450	2	2343	2	65.93	2	4.88	2	-9	-9
4420	2	150.0	35.826	35.830	18.308	18.282	25.839	214.0	214.0	17.1	0.03	0.94	0.23	2.12	2	2.444	1.333	375.8	2	2064.7	2	7.9820	2	2348	2	59.40	2	4.31	2	-9	-9
4419	2	219.4	35.875	35.878	16.283	16.258	26.211	221.2	220.0	20.4	0.0	1.97	0.32	1.84	2	2.634	1.413	414.8	2	2080.0	2	7.9467	2	2344	2	55.37	2	3.92	2	-9	-9
4418	2	300.1	35.396	35.403	14.045	14.001	26.499	225.0	222.5	29.4	0.0	5.61	0.53	2.42	2	2.822	1.481	478.0	2	2095.1	2	7.8971	2	2329	2	51.36	2	3.63	2	-9	-9
4417	2	397.0	35.153	35.155	12.347	12.294	26.653	234.3	231.4	30.0	0.0	8.83	0.71	3.12	2	2.916	1.518	517.2	2	2101.2	2	7.8639	2	2318	2	47.75	2	3.08	2	-9	-9
4416	2	497.9	34.950	34.952	11.069	11.007	26.737	239.4	236.5	32.5	0.0	11.64	0.89	3.86	2	2.867	1.466	557.8	2	2105.8	2	7.8344	2	2305	2	44.78	2	3.49	2	-9	-9
4415	2	599.7	34.806	34.808	10.114	10.043	26.795	236.3	235.8	39.1	0.0	14.09	1.03	4.56	2	2.691	1.353	592.7	2	2110.6	2	7.8104	2	2300	2	9.00	2	9.00	2	-9	-9
4414	2	898.9	34.682	34.683	9.218	9.139	26.848	230.5	228.9	51.8	0.0	17.17	1.23	6.14	2	2.321	1.161	644.4	2	2122.1	2	7.7776	2	2301	2	9.00	2	9.00	2	-9	-9
4413	2	800.3	34.565	34.567	8.008	7.924	26.945	211.9	210.3	78.4	0.0	21.75	1.51	11.70	2	1.360	0.684	745.8	2	2143.3	2	7.7243	2	2295	2	41.64	2	9.00	2	-9	-9
4412	2	949.5	34.429	34.431	5.663	5.599	27.153	192.7	191.6	113.4	0.0	28.55	1.97	28.21	2	0.523	0.277	833.1	2	2183.2	8	7.6405	2	2300	2	9.00	2	9.00	2	-9	-9
4411	2	1251.9	34.527	34.527	3.902	3.806	27.430	147.1	146.6	171.7	0.0	33.94	2.43	68.91	2	0.027	0.016	1188.8	2	2251.7	2	7.5561	2	2341	2	9.00	2	9.00	2	-9	-9
4410	2	1553.6	34.633	34.632	3.187	3.072	27.585	144.2	143.9	179.9	0.0	34.56	2.44	85.97	2	-0.001	-0.001	1208.0	2	2272.1	2	7.5501	2	2357	2	41.93	2	9.00	2	-9	-9
4409	2	1851.6	34.698	34.698	2.760	2.645	27.676	149.5	149.8	177.4	0.0	33.94	2.39	97.31	2	-0.001	0.002	1181.1	2	2282.1	2	7.5615	2	2374	2	9.00	2	9.00	2	-9	-9
4408	2	2099.2	34.716	34.715	2.392	2.241	27.724	162.2	162.7	167.8	0.0	33.09	2.33	100.37	2	0.000	-0.001	1130.1	2	2277.7	2	7.5756	2	2373	2	9.00	2	9.00	2	-9	-9
4407	2	2398.8	34.727	34.727	2.014	1.842	27.765	180.7	182.4	151.4	0.0	31.99	2.19	96.40	2	0.000	0.002	1071.0	2	2264.0	2	7.5958	2	2369	2	41.22	2	9.00	2	-9	-9
4406	2	2698.7	34.736	34.735	1.753	1.559	27.793	189.3	191.2	145.0	0.0	30.99	2.16	99.33	2	-0.001	0.001	1053.6	2	2260.5	2	7.6038	2	2369	2	9.00	2	9.00	2	-9	-9
4405	2	2998.4	34.735	34.735	1.561	1.343	27.809	192.4	195.4	142.7	0.0	31.05	2.15	104.01	2	0.001	0.000	1044.0	2	2262.5	2	7.6083	2	2370	2	9.00	2	9.00	2	-9	-9
4404	2	3299.3	34.731	34.731	1.447	1.202	27.816	193.2	195.6	143.7	0.0	31.53	2.17	109.01	2	-0.002	-0.001	1038.6	2	2265.8	2	7.6091	2	2378	2	9.00	2	9.00	2	-9	-9
4403	2	3598.1	34.727	34.727	1.405	1.131	27.817	190.8	193.2	146.8	0.0	31.84	2.19	113.94	2	0.001	-0.001	1035.4	2	2275.2	2	7.6127	2	2383	2	9.00	2	9.00	2	-9	-9
4402	2	3946.9	34.725	34.725	1.417	1.106	27.817	189.7	191.7	148.5	0.0	32.12	2.21	116.52	2	0.000	0.001	1046.9	2	2278.3	2	7.6098	2	-9	2	9.00	2	9.00	2	-9	-9
4401	2	4336.1	34.725	34.725	1.453	1.098	27.818	190.5	191.3	149.0	0.0	32.16	2.21	117.29	2	0.000	-0.001	1050.2	2	2279.0	6	7.6095	2	2389	2	40.97	2	9.00	2	-9	-9

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

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

*** PSS-78 scale

**** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 45 DATE 10/10/1995
 CAST 2 GMT 09:57
 CTD CAST 266

LATITUDE 25° 03' S
 LONGITUDE 79° 59.68' E

Bottle Number	CTD		Bottle		Sigma T	O2	O2	Pot. T	Temp	Salinity	CTD		Bottle		F [*] Si(OH) ₄	F [*] PO ₄	F [*] NO ₃	F [*] NO ₂	F [*] AOU	F [*] AOU	F [*] O ₂	F [*] O ₂	ICO ₂		F [*] DIC	F [*] pH	F [*] TA	F [*] TOC	F [*] Chl-a
	db	°C	°C	‰							‰	‰	‰	‰									‰	‰					
4524	2	8.6	35.424	20.860	20.860	24.856	223.6	224.6	-3.6	0.02	0.02	2.15	2.211	1.245	2.293.6	1993.6	6	8.0640	2	2321	2	-9.00	9	-9.00	9	-9	-9		
4523	2	49.3	35.676	20.165	20.165	25.241	226.1	229.4	-5.9	0.02	0.02	2.12	2.275	1.275	301.5	2010.1	2	8.0559	2	2334	2	-9.00	9	-9.00	9	-9	-9		
4522	2	95.9	35.731	20.024	20.006	25.321	225.5	227.5	-3.5	0.03	0.03	2.05	2.280	1.264	302.9	2014.1	2	8.0518	2	2345	2	-9.00	9	-9.00	9	-9	-9		
4521	2	150.6	35.765	19.654	19.626	25.483	225.3	226.6	-1.1	0.00	0.03	2.01	2.308	1.285	311.8	2023.4	2	8.0443	2	2344	2	-9.00	9	-9.00	9	-9	-9		
4520	2	199.6	35.823	19.024	18.988	25.656	221.4	221.3	6.8	0.10	0.31	2.00	-9.000	-9.000	339.8	2044.3	2	8.0135	2	2353	2	-9.00	9	-9.00	9	-9	-9		
4519	2	299.8	35.675	16.333	16.284	26.214	228.3	225.3	15.0	0.02	1.43	1.68	2.660	1.440	407.4	2077.6	2	7.9543	2	2344	2	-9.00	9	-9.00	9	-9	-9		
4518	2	399.6	35.261	13.080	13.024	26.592	232.1	227.7	29.5	0.00	7.45	0.64	2.71	-9.000	506.5	2096.6	2	7.8776	2	2320	2	-9.00	9	-9.00	9	-9	-9		
4517	2	500.6	35.045	11.641	11.576	26.705	239.3	234.6	30.9	0.00	10.28	0.82	2.924	1.504	543.5	2101.8	2	7.8484	2	2309	2	-9.00	9	-9.00	9	-9	-9		
4516	2	601.0	34.873	10.542	10.469	28.772	241.0	236.3	35.9	0.00	12.90	0.98	2.777	1.428	576.8	2109.0	2	7.8208	2	2301	2	-9.00	9	-9.00	9	-9	-9		
4515	2	700.8	34.701	9.369	9.269	28.838	234.4	230.8	48.9	0.00	18.49	1.20	2.384	1.202	637.4	2119.8	2	7.7846	2	2295	2	-9.00	9	-9.00	9	-9	-9		
4514	2	799.5	34.594	8.359	8.273	28.915	217.0	175.3	71.8	0.00	20.56	1.45	10.03	0.780	718.0	2136.1	2	7.7379	2	2298	2	-9.00	9	-9.00	9	-9	-9		
4513	2	1000.7	34.452	5.436	5.349	27.200	177.3	131.4	131.4	0.00	30.12	2.12	37.52	0.151	1002.5	2200.5	2	7.6129	2	2310	2	-9.00	9	-9.00	9	-9	-9		
4512	2	1201.1	34.536	4.243	4.148	27.402	140.1	138.8	-178.8	0.00	34.27	2.45	69.40	0.019	1199.5	2255.1	2	7.5483	2	2346	2	-9.00	9	-9.00	9	-9	-9		
4511	9	1348.7	34.568	-9.000	3.741	36.38	140.5	140.5	-9.0	-9.00	-9.00	-9.00	-9.00	-9.000	-9.0	-9.0	-8.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	-9	
4510	2	1599.6	34.648	3.184	3.065	27.598	142.8	142.1	181.8	0.00	34.51	2.46	88.66	0.001	1213.5	2275.5	2	7.5486	2	2367	2	-9.00	9	-9.00	9	-9	-9		
4509	9	1849.6	34.700	-9.000	2.818	26.60	147.5	147.5	-9.0	-9.00	-9.00	-9.00	-9.00	-9.000	-9.0	-9.0	-9.0	-8.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	-9
4508	2	2102.1	34.719	2.484	2.331	27.720	155.7	155.6	174.1	0.00	33.46	2.38	104.00	0.001	1163.1	2283.4	2	7.5691	2	2378	2	-9.00	9	-9.00	9	-9	-9		
4507	2	2299.7	34.723	2.209	2.043	27.746	165.4	165.7	166.4	0.00	33.00	2.33	105.77	0.002	1130.1	2279.7	2	7.5608	2	2379	2	-9.00	9	-9.00	9	-9	-9		
4506	2	2399.7	34.724	2.097	1.924	27.757	170.2	170.6	162.5	0.00	32.66	2.31	105.15	-0.001	1108.8	2281.6	2	7.5853	2	2379	2	-9.00	9	-9.00	9	-9	-9		
4505	2	2598.0	34.727	1.922	1.734	27.775	178.8	179.4	155.3	0.00	32.10	2.25	104.11	-0.001	1079.8	2272.9	2	7.5844	2	2380	2	-9.00	9	-9.00	9	-9	-9		
4504	2	2798.9	34.732	1.780	1.576	27.790	186.4	187.7	148.4	0.00	31.63	2.20	102.89	0.000	1061.9	2265.0	2	7.6011	2	2378	2	-9.00	9	-9.00	9	-9	-9		
4503	2	3101.6	34.733	1.585	1.356	27.807	193.0	188.9	149.1	0.00	31.24	2.17	105.44	-0.000	1051.9	2254.9	2	7.6051	2	2377	2	-9.00	9	-9.00	9	-9	-9		
4502	2	3401.0	34.729	1.447	1.192	27.815	194.2	194.1	145.3	0.00	31.65	2.19	110.83	-0.001	1042.7	2270.0	2	7.6097	2	2382	2	-9.00	9	-9.00	9	-9	-9		
4501	2	3674.8	34.726	1.411	1.129	27.817	193.1	192.6	147.4	0.00	31.97	2.21	114.97	-0.001	1049.8	2278.1	2	7.6091	2	2386	2	-9.00	9	-9.00	9	-9	-9		

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

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

*** PSS-78 scale

**** ITS-90 scale

I8NR NOAA Ship Baldridge

STATION 46 DATE 10/10/1995
 CAST 1 GMT 17:54
 CTD CAST 267

LATITUDE 24° 0.96' S
 LONGITUDE 79° 59.13' E

Bottle Number	CTD		Bottle		ICO2														Chl-a																	
	Pressure db	Salinity	Temp °C	Salinity	σ _t	O ₂	O ₂	AOU	NO ₂	NO ₃	PO ₄	Si(OH) ₄	CFC-11	CFC-12	F ₂ at 20°C	H ₂ O	DIC	pH	TA	TOC	TON	F ₂	F ₂													
4624	2	5.6	35.406	35.409	2	20.914	20.913	24.830	223.1	224.4	2	-3.6	0.00	2	0.10	2	1.99	2	2.192	2	1.289	2	292.1	2	1994.3	6	8.0633	2	2324	2	66.90	2	5.33	2	-9	-9
4623	2	44.8	35.432	35.427	2	20.942	20.933	24.839	222.7	224.3	2	-3.6	0.00	2	0.10	2	2.00	2	2.197	2	1.228	2	293.5	2	1994.4	2	8.0637	2	2319	2	68.84	2	5.37	2	-9	-9
4622	2	89.6	35.722	35.734	2	20.630	20.613	25.159	217.7	218.6	2	3.0	0.00	2	0.13	2	2.01	2	2.268	2	1.268	2	311.7	2	2020.7	2	8.0448	2	2337	2	66.92	2	5.21	2	-9	-9
4621	2	134.8	35.805	35.809	2	19.929	19.904	25.406	210.1	210.3	2	14.0	0.11	2	0.79	2	2.16	2	2.260	2	1.241	2	342.6	2	2043.5	2	8.0137	2	2345	2	60.50	2	4.93	2	-9	-9
4620	2	178.9	35.634	35.638	2	18.807	18.775	25.720	208.2	204.7	2	24.3	0.00	2	1.60	2	2.43	2	2.363	2	1.276	2	372.7	2	2065.1	2	7.9821	2	2350	2	53.49	2	4.15	2	-9	-9
4619	2	250.5	35.740	35.744	2	16.874	16.833	26.126	215.0	212.0	2	25.7	0.00	2	2.01	2	3.34	2	2.556	2	1.358	2	408.0	2	2081.5	2	7.9496	2	2344	2	52.23	2	3.26	2	-9	-9
4618	2	350.5	35.381	35.386	2	13.882	13.831	26.522	227.7	222.7	2	30.1	0.00	2	6.00	2	2.33	2	2.816	2	1.467	2	475.6	2	2096.3	2	7.8939	2	2329	2	50.73	2	3.75	2	-9	-9
4617	2	450.1	35.114	35.118	2	12.056	11.996	26.682	236.8	231.2	2	31.9	0.00	2	9.31	2	3.01	2	2.926	2	1.508	2	526.3	2	2102.2	2	7.8575	2	2316	2	47.46	2	3.43	2	-9	-9
4616	2	550.3	34.884	34.886	2	10.580	10.513	26.774	240.7	234.9	2	37.1	0.00	2	12.37	2	3.92	2	2.867	2	1.442	2	576.4	2	2110.4	2	7.8212	2	2299	2	43.81	2	-9.00	9	-9	-9
4615	2	652.1	34.734	34.737	2	9.595	9.520	26.828	237.6	232.8	2	45.4	0.00	2	15.32	2	5.03	2	2.569	2	1.289	2	619.9	2	2117.7	2	7.7932	2	2297	2	-8.00	9	-9.00	9	-9	-9
4614	2	750.9	34.607	34.609	2	8.517	8.436	26.901	221.0	217.2	2	68.1	0.00	2	19.91	2	9.04	2	1.780	2	0.888	2	705.1	2	2133.5	2	7.7460	2	2296	2	-8.00	9	-9.00	9	-9	-9
4613	2	901.5	34.458	34.459	2	6.104	6.022	27.123	190.6	187.3	2	114.6	0.00	2	27.56	2	1.94	2	2.700	2	0.264	2	917.8	2	2180.3	2	7.6455	2	2305	2	-8.00	9	-9.00	9	-9	-9
4612	2	1101.8	34.509	34.510	2	4.561	4.472	27.346	147.0	145.0	2	168.2	0.00	2	33.62	2	2.38	2	-9.000	9	-9.000	9	1158.0	2	2242.9	2	7.5611	2	2335	2	-8.00	9	-9.00	9	-9	-9
4611	2	1303.2	34.571	34.571	2	3.864	3.764	27.469	137.8	136.3	2	182.2	0.00	2	34.73	2	2.48	2	76.99	2	0.015	2	1222.8	2	2265.6	2	7.5438	2	2350	2	-8.00	9	-9.00	9	-9	-9
4610	2	1501.9	34.626	34.626	2	3.303	3.191	27.569	142.0	140.9	2	182.0	0.00	2	34.28	2	2.46	2	85.46	2	0.002	2	1219.9	2	2273.9	2	7.5466	2	2383	2	-8.00	9	-9.00	9	-9	-9
4609	2	1701.2	34.662	34.663	2	2.946	2.821	27.648	145.3	144.7	2	181.1	0.00	2	34.18	2	2.43	2	94.55	2	0.003	2	1212.2	2	2280.3	2	7.5569	2	2370	2	-8.00	9	-9.00	9	-9	-9
4608	2	1999.0	34.717	34.717	2	2.505	2.361	27.716	154.4	154.4	2	175.1	0.00	2	33.17	2	2.37	2	103.32	2	0.000	2	1154.9	2	2284.9	2	7.5674	2	2378	2	-8.00	9	-9.00	9	-9	-9
4607	2	2298.7	34.725	34.726	2	2.143	1.978	27.754	167.0	167.1	2	165.6	0.00	2	32.82	2	2.32	2	105.90	2	0.000	6	1123.2	2	2280.2	2	7.5832	2	2383	2	-8.00	9	-9.00	9	-9	-9
4606	2	2598.1	34.728	34.728	2	1.884	1.697	27.777	176.0	177.0	2	158.1	0.00	2	32.12	2	2.26	2	107.81	2	0.002	2	1089.2	2	2277.4	2	7.5929	2	2386	2	-8.00	9	-9.00	9	-9	-9
4605	2	2899.9	34.732	34.733	2	1.715	1.503	27.796	185.6	187.0	2	149.7	0.00	2	31.69	2	2.20	2	105.60	2	0.005	2	1059.8	2	2270.0	2	7.6021	2	2379	2	-8.00	9	-9.00	9	-9	-9
4604	2	3300.7	34.731	34.732	2	1.464	1.238	27.814	190.7	192.7	2	146.3	0.00	2	31.05	2	2.19	2	109.96	2	0.001	2	1043.8	2	2289.2	2	7.6076	2	2381	2	-8.00	9	-9.00	9	-9	-9
4603	2	3701.3	34.725	34.727	2	1.399	1.114	27.818	189.0	191.0	2	149.1	0.00	2	31.50	2	2.22	2	116.96	2	0.002	2	1045.7	2	2280.2	2	-9.0000	9	2392	2	-8.00	9	-9.00	9	-9	-9
4602	2	4102.0	34.723	34.723	2	1.409	1.081	27.817	187.2	188.7	2	151.7	0.00	2	32.26	2	2.25	2	120.38	2	0.002	2	1049.1	2	2285.2	2	7.6091	2	2396	2	-8.00	9	-9.00	9	-9	-9
4601	2	4442.7	34.722	34.723	2	1.437	1.070	27.818	187.2	187.5	2	153.0	0.00	2	32.47	2	2.25	2	122.05	2	0.003	2	1049.8	2	2288.5	6	7.6089	2	2400	2	-8.00	9	-9.00	9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 47 DATE 10/11/1995
 CAST 1 GMT 01:56
 CTD CAST 268

LATITUDE 22° 59.23' S
 LONGITUDE 79° 59.21' E

Bottle Number	CTD										Bottle										fCO2																
	F* Pressure db	Salinity	Temp °C	Pot. T °C	Sigma Theta	O2 %	O2 μmol/kg	AOU	NO2 μmol/kg	NO3 μmol/kg	PO4 μmol/kg	Si(OH)4 μmol/kg	CFC-11 pmol/kg	CFC-12 pmol/kg	F* at 20 °C	taum	DIC μmol/kg	F* pH	TA μmol/kg	TON μmol/l	F* Chl-a μg/l																
4724	2	7.2	35.576	35.580	2	20.625	20.624	25.039	224.8	224.8	2	-3.1	0.00	2	0.10	2	2.09	2	2.234	2	1.279	2	2.234	2	301.8	2	2003.9	6	8.0575	2	2329	2	-9.00	9	-9.00	9	-9
4723	2	25.5	35.575	35.580	2	20.626	20.621	25.040	224.8	224.9	2	-3.2	0.00	2	0.11	2	2.10	2	-9.000	9	-9.000	9	298.4	2	2002.8	2	8.0596	2	2328	2	-9.00	9	-9.00	9	-9		
4722	2	50.7	35.599	35.630	2	20.641	20.631	25.075	224.9	224.6	2	-3.0	0.00	2	0.13	2	2.02	2	2.238	2	1.247	2	302.9	2	2006.0	2	8.0561	2	2331	2	-9.00	9	-9.00	9	-9		
4721	2	149.4	35.845	35.850	2	19.351	19.324	25.589	215.2	213.4	2	13.2	0.07	2	0.61	2	1.96	2	2.321	2	1.271	2	344.6	2	2047.5	2	8.0082	2	2349	2	-9.00	9	-9.00	9	-9		
4720	2	200.1	35.819	35.825	2	17.928	17.894	25.932	211.4	208.3	2	24.5	0.00	2	1.61	2	2.18	2	2.450	2	1.325	2	388.7	2	2071.8	2	7.9697	2	2347	2	-9.00	9	-9.00	9	-9		
4719	2	301.0	35.476	35.488	2	14.605	14.560	26.445	225.3	219.1	2	26.9	0.00	2	4.75	2	2.16	2	3.016	2	1.584	2	455.4	2	2090.3	2	7.9096	2	2330	2	-9.00	9	-9.00	9	-9		
4718	2	401.1	35.110	35.114	2	12.041	11.988	26.681	240.8	234.2	2	26.9	0.00	2	9.22	2	2.76	2	2.810	2	1.408	2	524.2	2	2098.6	2	7.8597	2	2311	2	-9.00	9	-9.00	9	-9		
4717	2	602.1	34.793	34.796	2	10.015	9.944	26.803	242.1	236.8	2	38.7	0.00	2	14.19	2	1.06	2	2.810	2	1.088	2	602.3	2	2110.0	2	7.8082	2	2298	2	-9.00	9	-9.00	9	-9		
4716	2	800.1	34.532	34.534	3	7.555	7.474	26.985	205.3	201.5	2	90.2	0.00	2	23.52	2	1.66	2	1.088	2	1.088	2	792.1	2	2153.0	2	7.7010	2	2297	2	-9.00	9	-9.00	9	-9		
4715	2	1002.7	34.467	34.468	2	4.777	4.695	27.288	163.7	161.1	2	150.5	0.00	2	32.36	2	2.29	2	50.01	2	0.129	2	1090.7	2	2223.5	2	7.5833	2	2324	2	-9.00	9	-9.00	9	-9		
4714	2	1201.9	34.546	34.549	2	3.780	3.689	27.459	145.2	142.8	2	176.3	0.00	2	34.35	2	2.48	2	72.55	2	0.017	6	1207.5	2	2257.8	2	7.5479	2	2348	2	-9.00	9	-9.00	9	-9		
4713	2	1402.5	34.623	34.626	2	3.299	3.196	27.568	142.7	141.0	2	181.9	0.00	2	34.11	2	2.48	2	85.17	2	0.001	2	1220.6	2	2272.7	2	7.5463	2	2363	2	-9.00	9	-9.00	9	-9		
4712	2	1602.3	34.679	34.682	3	2.919	2.803	27.649	147.0	145.8	2	180.1	0.00	2	33.95	2	2.45	2	93.82	2	-9.000	9	1200.1	2	2279.8	2	7.5549	2	2366	2	-9.00	9	-9.00	9	-9		
4711	2	1801.9	34.708	34.710	2	2.682	2.552	27.694	150.4	149.5	2	178.4	0.00	2	33.52	2	2.43	2	100.56	2	0.002	2	1182.0	2	2283.1	2	7.5634	2	2378	2	-9.00	9	-9.00	9	-9		
4710	2	1998.3	34.720	34.723	2	2.394	2.251	27.729	158.2	157.4	2	173.0	0.00	2	32.91	2	2.40	2	104.73	2	0.000	2	1147.2	2	2282.4	2	7.5736	2	2380	2	-9.00	9	-9.00	9	-9		
4709	2	2298.6	34.724	34.726	2	2.071	1.907	27.760	169.4	169.4	2	163.9	0.00	2	32.67	2	2.35	2	106.28	2	0.000	2	1108.3	2	2279.3	2	7.5896	2	2384	2	-9.00	9	-9.00	9	-9		
4708	2	2600.6	34.727	34.728	2	1.824	1.638	27.782	179.4	179.6	2	156.0	0.00	2	32.09	2	2.29	2	107.36	2	0.001	2	1085.4	2	2274.0	2	7.5983	2	2379	2	-9.00	9	-9.00	9	-9		
4707	2	2901.9	34.730	34.733	2	1.637	1.428	27.801	187.3	188.6	2	148.8	0.00	2	31.55	2	2.24	2	106.89	2	-9.000	9	1058.8	2	2268.3	2	7.6045	2	2380	2	-9.00	9	-9.00	9	-9		
4706	2	3203.3	34.729	34.730	2	1.473	1.237	27.812	190.0	191.9	2	147.1	0.00	2	31.52	2	2.25	2	110.72	2	0.000	2	1045.5	2	2271.9	2	7.6078	2	2386	2	-9.00	9	-9.00	9	-9		
4705	2	3349.0	34.727	34.730	2	1.430	1.181	27.816	189.7	191.7	2	147.8	0.00	2	31.68	2	2.24	2	113.10	2	-9.000	9	1040.9	2	2274.7	2	7.6125	2	2387	2	-9.00	9	-9.00	9	-9		
4704	2	3648.6	34.724	34.725	2	1.389	1.110	27.817	188.1	190.0	2	150.2	0.00	2	32.01	2	2.23	2	117.70	2	0.003	2	1046.0	2	2277.3	2	7.6109	2	2394	2	-9.00	9	-9.00	9	-9		
4703	2	4000.8	34.721	34.724	2	1.389	1.073	27.819	185.9	187.6	2	152.9	0.00	2	32.29	2	2.26	2	120.81	2	-9.000	9	1050.5	2	2284.8	2	7.6084	2	2397	2	-9.00	9	-9.00	9	-9		
4702	2	4274.9	34.720	34.721	2	1.407	1.060	27.817	185.4	188.4	2	154.2	0.00	2	32.56	2	2.28	2	123.16	2	-0.001	2	1049.6	2	2288.4	2	7.6068	2	2404	2	-9.00	9	-9.00	9	-9		
4701	2	4581.5	34.719	34.721	2	1.431	1.051	27.818	185.7	185.2	2	155.5	0.00	2	32.60	2	2.28	2	124.21	2	0.000	2	1051.1	2	2290.2	6	7.6110	2	2401	2	-9.00	9	-9.00	9	-9		

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 48 DATE 10/11/1995
 CAST 2 GMT 11:30
 CTD CAST 269

LATITUDE 22° 0.94'S
 LONGITUDE 80° 0.11'E

Bottle Number	CTD				Bottle				CTD										Bottle										CTD										Bottle									
	F** Pressure db	Salinity	Temp** °C	Pot. T**** °C	Sigma T	O2	O2	Theta	F* AOU	NO2	F* NO3	F* PO4	F* Si(OH)4	F* CFC-11	F* CFC-12	F* at 20 °C	DIC	pH	TA	F* TOC	F* TON	F* Chl-a	Phase																									
4824	2	6.9	35.243	21.792	24.463	221.7	2	-4.1	0.00	0.11	0.10	2.60	2.107	1.859	3	282.6	2	2309	2	68.58	2	4.98	2	-9																								
4823	2	48.7	35.531	20.930	24.921	225.3	2	-4.5	0.00	0.12	0.11	2.45	2.190	1.228	2	289.0	2	-9	9	68.74	2	4.78	2	-9																								
4822	2	120.0	35.674	20.232	20.210	25.227	202.3	204.6	18.7	0.05	0.21	3.16	2.193	1.197	2	336.0	2	2335	2	64.60	2	4.23	2	-9																								
4821	2	148.8	35.786	19.572	19.545	25.485	212.3	211.4	14.4	0.05	0.20	2.49	2.277	1.249	2	346.9	2	2346	2	59.03	2	4.28	2	-9																								
4820	2	199.2	35.785	18.369	18.334	25.793	210.0	206.1	24.8	0.00	0.29	2.71	2.397	1.293	2	378.5	2	2344	2	57.41	2	3.86	2	-9																								
4819	2	296.7	35.499	14.793	14.748	26.415	226.2	220.0	28.0	0.00	0.48	2.45	2.723	1.417	2	447.1	2	2334	2	53.35	2	3.55	2	-9																								
4818	2	398.2	35.205	12.707	12.653	26.623	235.8	229.2	30.1	0.00	0.69	3.10	2.914	1.496	2	508.5	2	2316	2	53.25	2	2.91	2	-9																								
4817	2	499.9	34.994	11.319	11.255	26.726	243.8	236.0	31.5	0.00	0.86	3.68	2.948	1.490	2	541.8	2	2309	2	47.03	2	2.95	2	-9																								
4816	2	599.9	34.811	10.126	10.055	26.797	242.2	235.3	39.5	0.00	1.04	4.56	2.713	1.360	6	593.8	2	2298	2	44.92	2	-9.00	9	-9																								
4815	2	699.7	34.664	9.052	8.974	26.861	230.7	226.8	54.9	0.00	1.28	6.86	2.167	1.066	2	657.8	2	2294	2	-9.00	9	-9.00	9	-9																								
4814	2	908.7	34.435	5.435	5.357	27.186	187.7	183.2	123.5	0.00	2.06	33.60	0.330	0.178	2	967.9	2	2302	2	-9.00	9	-9.00	9	-9																								
4813	2	999.0	34.460	4.614	4.534	27.301	166.4	163.9	148.9	0.00	2.29	50.53	0.113	0.064	2	1097.8	2	2322	2	42.93	2	-9.00	9	-9																								
4812	2	1199.7	34.573	3.886	3.794	27.468	137.9	136.3	181.9	0.00	2.49	76.53	0.004	0.005	2	1215.9	2	2348	2	-9.00	9	-9.00	9	-9																								
4811	2	1404.8	34.681	3.570	3.464	27.587	130.2	130.2	190.4	0.00	2.50	92.76	0.000	-0.001	2	1242.1	2	2370	2	-9.00	9	-9.00	9	-9																								
4810	2	1599.7	34.704	3.170	3.051	27.643	137.1	136.4	187.4	0.00	2.47	97.58	0.000	-0.001	2	1225.2	2	2373	2	42.75	2	-9.00	9	-9																								
4809	2	1896.8	34.722	2.629	2.492	27.708	149.9	149.3	179.1	0.00	2.34	104.40	0.003	0.000	2	1173.2	2	2381	2	-9.00	9	-9.00	9	-9																								
4808	2	2201.0	34.724	2.172	2.015	27.749	165.7	166.1	166.2	0.00	2.33	106.42	-0.001	-0.002	2	1124.8	2	2379	2	-9.00	9	-9.00	9	-9																								
4807	2	2301.2	34.725	2.065	1.901	27.759	169.5	170.6	162.7	0.00	2.30	106.75	0.000	-0.001	2	1084.2	2	2384	2	42.55	2	-9.00	9	-9																								
4806	3	2400.2	34.726	3.180	1.809	27.766	173.3	174.8	159.3	0.00	2.28	107.16	0.002	-0.001	2	1099.3	2	2378	2	-9.00	9	-9.00	9	-9																								
4805	2	2802.1	34.730	1.864	1.482	27.794	182.5	184.4	152.5	0.00	2.24	109.46	0.000	-0.001	2	1086.6	2	2387	2	-9.00	9	-9.00	9	-9																								
4804	2	3302.8	34.729	1.445	1.200	27.813	188.6	191.1	148.3	0.00	2.22	113.84	0.002	-0.001	2	1036.4	2	2390	2	42.85	2	-9.00	9	-9																								
4803	2	3800.1	34.724	1.390	1.095	27.816	186.1	189.0	151.3	0.00	2.25	120.07	0.002	0.006	2	1051.7	2	2397	2	-9.00	9	-9.00	9	-9																								
4802	2	4299.9	34.720	1.402	1.052	27.817	183.1	185.6	155.1	0.00	2.29	124.69	0.000	0.001	2	1047.2	2	2408	2	-9.00	9	-9.00	9	-9																								
4801	3	4798.6	34.720	1.443	1.035	27.815	183.6	185.6	155.2	0.00	2.28	126.81	0.001	0.000	2	1085.5	2	2411	2	43.03	2	-9.00	9	-9																								

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR NOAA Ship Baldridge

STATION 49 DATE 10/11/1995
 CAST 1 GMT 19:22
 CTD CAST 270

LATITUDE 20° 59.48' S
 LONGITUDE 79° 59.67' E

Bottle Number	CTD										Bottle										IC02											
	F** Pressure db	Salinity	Temp °C	Pot. T*** °C	Sigma Theta	O2 Hmol/kg	O2 Hmol/kg	F* AOU	NO2 Hmol/kg	NO3 Hmol/kg	PO4 Hmol/kg	Si(OH)4 Hmol/kg	F* CFC-11 pmol/kg	F* CFC-12 pmol/kg	F* at 20 °C F* H ₂ O	DIC Hmol/kg	pH	F* TA Hmol/kg	F* TOC Hmol/kg	F* TON Hmol/kg	Chi-a Hg/l	Phaeo Hg/l										
4924	2	6.4	35.051	22.322	22.321	24.171	218.9	219.0	2	0.00	2	0.10	2	2.28	2	2.087	2	1.494	3	277.4	2	1967.9	8	8.0705	2	2298	2	-8.00	9	-9.00	9	-9
4923	2	30.2	35.050	22.326	22.320	24.173	218.1	219.0	2	0.00	2	0.11	2	2.35	2	2.088	2	1.171	2	281.8	2	1967.3	2	8.0715	2	-9	9	-8.00	9	-9.00	9	-9
4922	2	59.8	35.484	21.197	21.186	24.817	219.8	219.2	2	0.05	2	0.11	2	2.21	2	-9.000	9	-9.000	9	290.3	2	1996.3	2	8.0570	2	-9	9	-8.00	9	-9.00	9	-9
4921	2	89.5	35.828	20.618	20.601	25.085	224.8	223.7	2	0.00	2	0.11	2	2.05	2	2.217	2	1.241	2	295.1	2	2003.8	2	8.0571	2	-9	9	-8.00	9	-9.00	9	-9
4920	2	121.4	35.741	20.187	20.164	25.287	228.3	224.3	2	0.00	2	0.13	2	2.15	2	-9.000	9	-9.000	9	308.2	2	2016.1	2	8.0470	2	2339	2	-8.00	9	-9.00	9	-9
4919	2	150.5	35.830	19.458	19.431	25.548	218.9	215.2	2	0.51	2	0.19	2	2.03	2	2.338	2	1.280	2	338.0	2	2040.8	2	8.0138	2	2348	2	-8.00	9	-9.00	9	-9
4918	2	250.5	35.627	15.914	15.874	28.262	220.4	214.4	2	3.22	2	0.40	2	2.23	2	2.614	2	1.374	2	432.7	2	2083.2	2	7.9320	2	2340	2	-8.00	9	-9.00	9	-9
4917	2	348.7	35.270	13.136	13.087	26.588	230.9	224.9	2	7.55	2	0.64	2	2.83	2	2.847	2	1.479	2	486.2	2	2095.8	2	7.8771	2	2322	2	-8.00	9	-9.00	9	-9
4916	2	548.4	34.811	10.128	10.063	26.794	242.9	236.5	2	14.00	2	1.02	2	4.14	2	-9.000	9	-9.000	9	568.0	2	2108.1	2	7.8099	2	2306	2	-8.00	9	-9.00	9	-9
4915	2	798.8	34.490	6.573	6.498	27.086	188.1	184.2	2	27.19	2	1.88	2	25.55	2	0.489	2	0.286	2	895.5	2	2173.6	2	7.6535	2	2303	2	-8.00	9	-9.00	9	-9
4914	2	948.9	34.492	4.801	4.724	27.306	154.1	150.8	2	32.88	2	2.33	2	54.69	2	0.071	6	0.044	8	1115.0	2	2230.7	2	7.5721	2	2332	2	-8.00	9	-9.00	9	-9
4913	2	1150.0	34.585	4.024	3.935	27.464	133.6	131.3	2	34.70	2	2.48	2	77.05	2	0.007	2	0.000	2	1229.4	2	2264.4	2	7.5403	2	2355	2	-8.00	9	-9.00	9	-9
4912	2	1349.8	34.647	3.824	3.522	27.555	130.7	129.6	2	34.94	2	2.49	2	88.37	2	0.003	2	0.001	2	1237.4	2	2277.7	2	7.5403	2	2368	2	-8.00	9	-9.00	9	-9
4911	2	1551.7	34.694	3.271	3.155	27.627	134.3	133.4	2	34.82	2	2.47	2	95.71	2	0.005	2	0.000	2	1228.5	2	2285.4	2	7.5447	2	2375	2	-8.00	9	-9.00	9	-9
4910	2	1753.1	34.714	2.928	2.799	27.676	142.1	141.6	2	34.21	2	2.43	2	100.36	2	-9.000	9	-9.000	9	1198.8	2	2286.5	2	7.5642	2	2377	2	-8.00	9	-9.00	9	-9
4909	2	2001.4	34.723	2.523	2.378	27.720	152.7	151.7	2	33.67	2	2.38	2	105.96	2	0.001	2	-0.001	2	1151.4	2	2283.5	2	7.5885	2	2384	2	-8.00	9	-9.00	9	-9
4908	2	2200.4	34.724	2.225	2.067	27.746	163.6	175.3	2	33.07	2	2.33	2	108.06	2	0.004	2	-0.002	2	1118.8	2	2279.4	2	7.5781	2	2381	2	-8.00	9	-9.00	9	-9
4907	2	2298.7	34.724	2.117	1.952	27.755	168.4	187.8	2	32.81	2	2.30	2	106.10	2	0.002	2	0.002	2	1100.2	2	2278.1	2	7.5872	2	2384	2	-8.00	9	-9.00	9	-9
4906	2	2403.8	34.725	2.011	1.838	27.785	172.2	172.0	2	32.49	2	2.28	2	108.77	2	0.002	2	0.002	2	1067.2	2	2274.7	2	7.5999	2	2386	2	-8.00	9	-9.00	9	-9
4905	2	2851.0	34.728	1.667	1.460	27.796	182.8	183.4	2	31.85	2	2.22	2	109.34	2	0.002	2	0.000	2	1062.0	2	2274.7	2	7.5999	2	2386	2	-8.00	9	-9.00	9	-9
4904	2	3349.2	34.725	1.436	1.188	27.813	183.4	185.0	2	32.15	2	2.25	2	119.27	2	-9.000	9	-9.000	9	1062.0	2	2283.1	2	7.6053	2	2398	2	-8.00	9	-9.00	9	-9
4903	2	3648.5	34.721	1.374	1.075	27.817	183.6	185.4	2	32.34	2	2.28	2	123.33	2	0.002	2	0.004	2	1052.8	2	2288.1	2	7.6069	2	2403	2	-8.00	9	-9.00	9	-9
4902	2	4348.4	34.719	1.384	1.030	27.818	182.9	184.3	2	32.50	2	2.27	2	125.46	2	-8.000	9	-8.000	9	1061.0	2	2291.7	2	7.6082	2	2405	2	-8.00	9	-9.00	9	-9
4901	2	4743.3	34.718	1.413	1.012	27.819	183.8	184.0	2	32.71	2	2.27	2	127.17	2	0.000	2	0.002	2	1055.4	2	2293.0	8	7.6060	2	2407	2	-8.00	9	-9.00	9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 50 DATE 10/12/1995
 CAST 1 GMT 03:17
 CTD CAST 271

LATITUDE 19° 59.46' S
 LONGITUDE 80° 05.3' E

Bottle Number	CTD		Bottle		Sigma T	Theta	O2	H ₂ O ₂	F* AOU	NO2	NO3	PO4	Si(OH)4	CFC-11	CFC-12	F* at 20 °C	H ₂ am	DIC	pH	F*	TA	F* TOC	F* TON	F* Chl-a		
	Pressure	Salinity	Temp	Temp																						
5024	8.0	35.114	22.470	22.468	24.178	217.8	218.3	-3.1	0.00	0.06	0.11	2.46	2.019	1.187	2.832	1973.1	6	8.0730	2	2300	2	69.77	2	5.47	2	-9
5023	59.9	35.261	22.012	22.000	24.420	219.5	220.2	-3.4	0.02	0.15	0.11	2.33	2.073	1.187	2.820	1984.5	2	8.0674	2	2307	2	89.15	2	5.12	2	-9
5022	120.1	35.394	21.794	21.770	24.564	202.3	204.8	12.7	0.19	1.07	0.19	2.74	2.047	1.157	3.038	2004.3	2	8.0410	2	2317	2	64.84	2	4.34	2	-9
5021	151.3	35.582	20.735	20.706	25.004	189.4	188.9	32.5	0.05	2.58	0.29	3.74	2.105	1.178	3.500	2036.4	2	7.9963	2	2327	2	60.00	2	3.60	2	-9
5020	201.5	35.707	19.432	19.395	25.464	193.4	190.8	35.6	0.04	3.01	0.33	3.89	2.209	1.214	3.754	2059.5	2	7.9750	2	2341	2	56.34	2	3.68	2	-9
5019	402.2	35.204	12.703	12.648	28.625	232.4	-9.0	9	-9.0	8.64	0.89	3.18	2.794	1.455	5.151	2100.1	2	7.8651	2	2317	2	53.76	2	3.81	2	-9
5018	600.7	34.731	9.529	9.480	28.835	232.7	225.8	52.8	0.00	16.47	1.17	5.89	2.362	1.205	6.423	2120.7	2	7.7836	2	2297	2	49.07	2	9.00	2	-9
5017	799.4	34.510	6.452	6.378	27.117	173.1	170.1	129.2	0.00	28.83	1.98	31.74	0.318	0.008	12.283	2267.0	2	7.5344	2	2348	2	45.85	2	9.00	2	-9
5016	999.3	34.596	4.953	4.870	27.371	118.7	117.1	192.9	0.00	34.99	2.49	72.46	0.013	0.008	12.283	2267.0	2	7.5344	2	2348	2	45.85	2	9.00	2	-9
5015	1201.9	34.666	4.314	4.218	27.499	115.3	114.1	200.6	0.00	35.98	2.54	86.16	0.003	0.000	12.583	2283.8	2	7.5291	2	2363	2	9.00	2	9.00	2	-9
5014	1401.3	34.700	3.801	3.692	27.581	129.4	119.5	189.2	0.00	35.33	2.52	95.03	0.002	0.001	12.530	2291.5	2	7.5309	2	2375	2	9.00	2	9.00	2	-9
5013	1598.1	34.716	3.318	3.196	27.642	129.5	128.8	193.8	0.00	34.67	2.49	100.28	-0.001	0.000	12.276	2294.9	2	7.5405	2	-9	9	43.32	2	9.00	2	-9
5012	1800.2	34.724	2.934	2.801	27.684	136.2	137.5	188.3	0.00	34.39	2.46	103.90	0.001	0.000	11.987	2294.4	2	7.5496	2	2384	2	9.00	2	9.00	2	-9
5011	2003.5	34.728	2.613	2.467	27.717	147.2	146.7	181.9	0.00	34.27	2.41	107.52	0.000	-0.002	11.609	2293.6	2	7.5635	2	2385	2	9.00	2	9.00	2	-9
5010	2198.3	34.727	2.342	2.183	27.739	156.9	156.8	174.1	0.00	33.61	2.36	108.25	-0.002	-0.001	10.353	2289.7	2	7.5717	2	2387	2	42.64	2	9.00	2	-9
5009	2299.7	34.728	2.219	2.053	27.750	160.7	160.8	171.2	0.00	33.45	2.34	108.88	0.001	-0.001	11.456	2286.0	2	7.5787	2	2385	2	9.00	2	9.00	2	-9
5008	2401.8	34.728	2.108	1.934	27.760	164.6	165.0	168.0	0.00	32.97	2.32	109.78	0.000	-0.003	11.191	2284.8	2	7.5846	2	2387	2	9.00	2	9.00	2	-9
5007	2681.2	34.727	1.873	1.678	27.760	174.3	175.2	160.0	0.00	31.80	2.27	109.81	0.000	0.001	10.938	2280.9	2	7.5920	2	2386	2	42.79	2	9.00	2	-9
5006	3101.0	34.728	1.621	1.391	27.801	181.8	183.8	153.9	0.00	31.85	2.25	112.06	0.001	-0.001	10.592	2279.6	2	7.6015	2	2388	2	9.00	2	9.00	2	-9
5005	3501.2	34.725	1.449	1.184	27.813	183.3	185.0	154.5	0.00	32.53	2.25	118.66	0.000	0.002	10.555	2284.8	2	7.6037	2	2396	2	9.00	2	9.00	2	-9
5004	3900.7	34.722	1.383	1.078	27.817	184.2	186.5	154.0	0.00	32.76	2.25	122.82	0.000	-0.002	10.475	2287.1	2	7.6075	2	2402	2	42.39	2	9.00	2	-9
5003	4300.6	34.719	-9.000	1.379	1.030	27.818	182.5	156.6	0.00	-8.00	9	125.53	0.001	0.000	10.557	2295.0	2	7.6098	2	2406	2	9.00	2	9.00	2	-9
5002	4698.9	34.718	1.408	1.011	27.818	182.5	179.6	161.5	0.00	-8.00	9	127.96	0.000	0.000	10.541	2294.8	2	7.6175	2	2405	2	9.00	2	9.00	2	-9
5001	4957.1	34.717	1.433	1.008	27.818	183.8	183.7	157.4	0.00	32.78	2.28	127.17	0.000	-0.002	10.508	2295.8	8	7.6153	2	2407	2	42.38	2	9.00	2	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

18NR
NOAA Ship Baldrige

STATION 51 DATE 10/12/1995
CAST 1 GMT 12:24
CTD CAST 272

LATITUDE 19° 0.00' S
LONGITUDE 80° 0.1' E

Bottle Number	CTD					Bottle			fCO2										Chl-a µg/l																	
	Pressure db	Salinity	Temp °C	Pot. T °C	Sigma T	O2 µmol/kg	O2 %	Theta	NO3 µmol/kg	NO2 µmol/kg	AOU µmol/kg	F* PO4 µmol/kg	F* Si(OH)4 µmol/kg	F* CFC-11 pmol/kg	F* CFC-12 pmol/kg	DIC µmol/kg	pH	F* TA µmol/kg		F* TOC µmol/kg	F* TON µmol/l															
5124	2	8.2	34.753	34.758	2	23.389	23.639	215.8	216.2	2	-3.9	0.00	0.00	2	0.11	2	2.13	2	1.949	2	1.124	2	277.6	2	1850.5	6	8.0780	2	2277	2	-9.00	9	-8.00	9	-8	
5123	2	48.6	34.782	34.762	2	23.289	23.671	215.3	215.8	2	-3.1	0.00	0.00	2	0.11	2	2.14	2	1.961	2	1.132	2	272.0	2	1948.9	2	8.0763	2	2276	2	-9.00	9	-8.00	9	-8	
5122	2	98.9	35.356	35.360	2	21.811	21.792	221.8	221.4	2	-3.9	0.00	0.00	2	0.10	2	2.28	2	2.115	2	1.179	2	284.4	2	1985.4	2	8.0684	2	2313	2	-9.00	9	-8.00	9	-8	
5121	2	146.9	35.568	35.571	2	20.982	20.954	24.943	220.8	218.6	2	1.8	0.00	2	0.13	2	2.14	2	2.190	2	1.225	2	300.4	2	2003.1	2	8.0539	2	2328	2	-9.00	9	-8.00	9	-8	
5120	2	280.4	35.800	35.607	2	18.042	17.997	25.892	214.1	208.3	2	24.1	0.00	2	0.28	2	2.12	2	2.417	2	1.333	2	388.8	2	2069.0	2	7.9683	2	2347	2	-9.00	9	-8.00	9	-8	
5119	2	345.6	35.432	35.438	2	14.313	14.282	26.471	228.9	220.5	2	30.0	0.00	2	0.59	2	2.30	2	2.772	2	1.454	2	462.9	2	2091.0	2	7.9030	2	2331	2	-9.00	9	-8.00	9	-8	
5118	2	444.7	35.058	35.063	2	11.738	11.678	26.700	236.8	227.0	2	37.9	0.00	2	10.54	2	0.80	2	2.758	2	1.399	2	541.7	2	2105.4	2	7.8456	2	2309	2	-9.00	9	-8.00	9	-8	
5117	9	507.1	34.878	-9.000	9	10.562	10.500	26.770	242.5	-9.0	9	-9.0	9	-9.00	9	-9.00	9	-9.00	9	9.000	9	-9.0	9	-9.0	9	-9.0	9	9.000	9	9	9	9.000	9	9	9	-9
5116	2	643.7	34.643	34.643	2	8.795	8.725	26.883	224.0	216.7	2	66.8	0.00	2	19.21	2	1.32	2	1.877	2	0.932	2	687.8	2	2130.8	2	7.7560	2	2295	2	-9.00	9	-8.00	9	-8	
5115	2	769.2	34.534	34.534	2	8.852	8.778	27.082	175.0	188.2	2	128.2	0.00	2	28.06	2	1.92	2	30.90	2	0.399	2	0.217	2	935.0	2	7.6388	2	2306	2	-9.00	9	-8.00	9	-8	
5114	2	898.1	34.538	34.540	2	5.463	5.388	27.285	142.2	138.7	2	167.6	0.00	2	32.55	2	2.29	2	54.13	2	0.063	2	0.037	2	1117.2	3	7.5696	2	2329	2	-9.00	9	-8.00	9	-8	
5113	2	999.6	34.596	34.597	2	4.954	4.871	27.371	123.0	121.0	2	189.0	0.00	2	34.40	2	2.44	2	70.50	2	0.017	2	0.008	2	1214.0	2	7.5418	2	2344	2	-9.00	9	-8.00	9	-8	
5112	2	1198.4	34.881	34.881	2	4.511	4.414	27.488	109.5	109.3	2	203.9	0.00	2	35.36	2	2.52	2	87.50	2	0.003	2	0.000	2	1289.0	2	7.5286	2	2366	2	-9.00	9	-8.00	9	-8	
5111	2	1399.5	34.693	34.693	2	3.951	3.841	27.558	117.9	116.8	2	200.8	0.00	2	35.12	2	2.52	2	83.01	2	0.002	2	-0.001	2	1289.0	2	7.5303	2	2369	2	-9.00	9	-8.00	9	-8	
5110	2	1800.1	34.721	34.722	2	3.008	2.874	27.875	137.0	136.8	2	188.8	0.00	2	34.99	2	2.44	2	103.00	2	0.001	2	-0.001	2	1221.8	2	7.5515	2	2383	2	-9.00	9	-8.00	9	-8	
5109	2	2198.4	34.727	34.728	2	2.360	2.200	27.738	155.2	154.8	2	176.0	0.00	2	33.75	2	2.34	2	109.58	2	-0.001	2	-0.001	2	1161.3	2	7.5692	2	2385	2	-9.00	9	-8.00	9	-8	
5108	2	2297.5	34.728	34.728	2	2.229	2.063	27.749	159.7	159.6	2	172.3	0.00	2	33.54	2	2.34	2	109.54	2	0.003	2	-0.001	2	1140.1	2	7.5743	2	2387	2	-9.00	9	-8.00	9	-8	
5107	2	2400.4	34.727	34.728	2	2.110	1.936	27.759	164.5	164.1	2	188.9	0.00	2	33.11	2	2.32	2	109.81	2	0.000	2	0.000	2	1125.1	2	7.5810	2	2385	2	-9.00	9	-8.00	9	-8	
5106	2	2898.0	34.728	34.728	2	1.893	1.898	27.777	171.0	171.7	2	163.4	0.00	2	32.94	2	2.27	2	112.84	2	0.001	2	-0.002	2	1085.3	2	7.5878	2	2387	2	-9.00	9	-8.00	9	-8	
5105	2	2997.8	34.727	34.728	2	1.705	1.484	27.793	174.8	175.4	2	161.5	0.00	2	32.82	2	2.27	2	118.52	2	0.001	2	0.000	2	1082.1	2	7.5935	2	2391	2	-9.00	9	-8.00	9	-8	
5104	2	3486.9	34.726	34.728	2	1.491	1.225	27.810	183.8	185.3	2	153.9	0.00	2	32.32	2	2.23	2	116.93	2	-0.002	2	-0.001	2	1086.0	2	7.6018	2	2395	2	-9.00	9	-8.00	9	-8	
5103	2	4000.1	34.721	34.721	2	1.398	1.082	27.818	183.2	184.7	2	155.7	0.00	2	32.70	2	2.25	2	123.95	2	0.001	2	0.001	2	1056.7	2	7.6085	2	2398	2	-9.00	9	-8.00	9	-8	
5102	2	4499.7	34.718	34.719	2	1.391	1.019	27.818	182.2	183.6	2	157.4	0.00	2	32.91	2	2.27	2	126.99	2	0.002	2	-0.001	2	1056.7	2	7.6005	2	2408	2	-9.00	9	-8.00	9	-8	
5101	2	4888.8	34.717	34.720	2	1.423	1.004	27.820	183.9	183.7	2	157.4	0.00	2	32.94	2	2.27	2	127.66	2	0.001	2	0.000	2	1086.2	2	7.6036	2	2405	2	-9.00	9	-8.00	9	-8	

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

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

**** PSS-78 scale

***** ITS-90 scale

I8NR
NOAA Ship Baldridge

STATION 52 DATE 10/12/1995
 CAST 1 GMT 20:20
 CTD CAST 273

LATITUDE 18° 0.02'S
 LONGITUDE 80° 0.31'E

		CTD				Bottle				ICO2																										
Bottle Number	F** Pressure db	Salinity	Sigma T****	Temp****		O2	O2 Theta	NO2	NO3	PO4	Si(OH)4	F* CFC-11	F* CFC-12	F* at 20°C	DIC	pH	F* TA	F* TOC	F* TON	F* Chl-a																
				°C	°C																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
5224	2	6.9	34.747	34.749	2	23.256	23.255	23.871	214.0	215.1	2	-2.3	0.00	2	0.11	2	2.01	2	1.984	2	1.151	2	274.3	2	1949.1	6	6.0785	2	2281	2	71.23	2	5.02	2	-9	-9
5223	2	38.3	34.745	34.748	2	23.255	23.247	23.873	214.0	215.2	2	-2.3	0.00	2	0.11	2	2.10	2	1.981	2	1.124	2	273.1	2	1949.1	2	6.0777	2	2278	2	70.51	2	5.13	2	-9	-9
5222	2	79.1	34.745	34.748	2	23.261	23.245	23.673	214.3	215.2	2	-2.3	0.00	2	0.18	2	2.19	2	2.012	2	1.150	2	275.0	2	1949.8	2	6.0773	2	2278	2	70.99	2	4.91	2	-9	-9
5221	2	120.5	34.767	34.779	2	23.230	23.205	23.708	215.0	213.9	2	-0.9	0.00	2	0.13	2	2.13	2	1.989	2	1.135	2	278.8	2	1951.7	2	6.0757	2	2278	2	85.68	2	4.91	2	-9	-9
5220	2	199.1	35.040	35.048	2	18.820	18.785	25.112	123.1	120.7	2	109.4	0.00	2	13.44	2	15.20	2	1.604	2	0.895	2	533.4	2	2097.1	2	7.8457	2	2304	2	57.08	2	-9.00	2	-9	-9
5219	2	275.5	35.521	35.509	2	18.955	18.909	25.928	172.8	165.7	2	72.0	0.00	2	8.18	2	9.49	2	1.998	2	1.096	2	488.0	2	2097.0	2	7.8966	2	2332	2	55.58	2	-9.00	2	-9	-9
5218	2	399.4	35.207	35.210	2	12.847	12.792	26.598	215.4	206.3	2	52.3	0.00	2	9.74	2	6.13	2	2.474	2	1.272	2	535.7	2	2109.8	2	7.8512	2	2321	2	53.26	2	-9.00	2	-9	-9
5217	2	598.7	34.713	34.714	2	9.412	9.344	26.839	235.1	228.8	2	52.5	0.00	2	18.38	2	1.17	2	5.87	2	2.290	2	1.154	2	698.5	2	7.7830	2	2294	2	52.00	2	-9.00	2	-9	-9
5216	2	800.8	34.543	34.544	2	8.134	6.061	27.185	147.4	144.2	2	157.2	0.00	2	30.94	2	2.18	2	45.05	2	0.144	2	0.084	2	1055.8	2	7.5911	2	2321	2	45.47	2	-9.00	2	-9	-9
5215	2	1098.4	34.670	34.671	2	4.903	4.811	27.436	107.0	103.6	2	206.8	0.00	2	35.06	2	2.54	2	82.04	2	0.009	2	0.005	2	1277.7	2	7.5269	2	2356	2	-9.00	2	-9.00	2	-9	-9
5214	2	1401.2	34.696	34.696	2	3.902	3.792	27.566	118.6	117.2	2	200.8	0.00	2	34.94	2	2.53	2	83.36	2	0.002	2	0.001	2	1281.7	2	7.5324	2	2373	2	-9.00	2	-9.00	2	-9	-9
5213	2	1698.5	34.718	34.716	2	3.201	3.073	27.852	132.2	131.2	2	192.4	0.00	2	34.60	2	2.47	2	101.29	2	0.002	2	0.001	2	1226.1	2	7.5462	2	2379	2	41.85	2	-9.00	2	-9	-9
5212	2	2000.2	34.727	34.727	2	2.820	2.474	27.714	147.2	146.3	2	182.2	0.00	2	34.13	2	2.41	2	107.03	2	-0.001	6	0.001	6	1177.7	2	7.5613	2	2387	2	-9.00	2	-9.00	2	-9	-9
5211	2	2200.3	34.728	34.729	2	2.319	2.180	27.742	156.9	157.6	2	173.5	0.00	2	33.38	2	2.36	2	109.21	2	0.000	4	-0.004	4	1149.3	2	7.5723	2	2390	2	-9.00	2	-9.00	2	-9	-9
5210	2	2301.1	34.728	34.729	2	2.196	2.030	27.752	180.9	180.3	2	171.9	0.00	2	33.22	2	2.34	2	109.74	2	0.001	2	-0.003	2	1143.6	2	7.5769	2	2390	2	42.01	2	-9.00	2	-9	-9
5209	2	2402.3	34.728	34.729	2	2.102	1.928	27.780	164.0	163.7	2	189.4	0.00	2	33.26	2	2.33	2	110.94	2	-0.001	2	-0.002	2	1131.7	2	7.5606	2	2389	2	-9.00	2	-9.00	2	-9	-9
5208	2	2699.3	34.729	34.729	2	1.857	1.661	27.781	172.1	172.3	2	183.1	0.00	2	32.52	2	2.29	2	112.56	2	0.001	2	-0.002	2	1099.7	2	7.5904	2	2389	2	-9.00	2	-9.00	2	-9	-9
5207	2	3000.5	34.728	34.727	2	1.882	1.461	27.794	174.8	175.7	2	181.4	0.00	2	-9.00	9	2.28	2	116.92	2	0.000	2	-0.001	2	1074.8	2	7.5959	2	2396	2	42.28	2	-9.00	2	-9	-9
5206	2	3300.5	34.728	34.726	2	1.556	1.308	27.804	176.7	176.2	2	160.2	0.00	2	32.75	2	2.28	2	120.67	2	0.000	2	-0.001	2	1090.4	2	7.5988	2	2397	2	-9.00	2	-9.00	2	-9	-9
5205	2	3600.0	34.724	34.724	2	1.450	1.175	27.812	179.3	181.1	2	156.5	0.00	2	-8.00	9	2.28	2	122.97	2	0.000	2	-0.001	2	1085.3	2	7.6024	2	2402	2	-9.00	2	-9.00	2	-9	-9
5204	2	3901.9	34.721	34.722	2	1.389	1.083	27.816	180.0	182.2	2	158.2	0.00	2	32.93	2	2.28	2	125.12	2	-0.002	2	-0.002	2	1082.6	2	7.6056	2	2407	2	-9.00	2	-9.00	2	-9	-9
5203	2	4249.7	34.718	34.720	2	1.372	1.029	27.818	181.2	183.8	2	157.3	0.00	2	32.86	2	2.28	2	127.02	2	-9.000	9	-9.000	9	1055.2	2	7.6088	2	2407	2	-9.00	2	-9.00	2	-9	-9
5202	2	4697.5	34.718	34.718	2	1.393	0.998	27.819	182.4	183.7	2	157.5	0.00	2	32.99	2	2.28	2	128.03	2	-0.001	2	-0.001	2	1053.9	2	7.6070	2	2409	2	-9.00	2	-9.00	2	-9	-9
5201	2	5182.1	34.718	34.718	2	1.439	0.987	27.820	184.3	184.4	2	156.9	0.00	2	33.01	2	2.28	2	127.74	2	0.000	2	0.000	2	1055.3	2	7.6066	2	2407	2	44.94	2	-9.00	2	-9	-9

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

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

*** PSS-78 scale

**** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 53 DATE 10/13/1995
 CAST 2 GMT 05:40
 CTD CAST 274

LATITUDE 16° 58.85' S
 LONGITUDE 79° 59.64' E

Bottle Number	CTD										Bottle										ICO2																
	F* Pressure db	Salinity	Temp	Pot	Theta	O2	O2	Sigma	NO2	NO3	PO4	SI(OH)4	F* Hmol/kg	CFC-11	CFC-12	F* Htam	DIC	F* Hmol/kg	pH	F* Hmol/kg	TA	F* Hmol/kg	TOC	F* Hmol/l	TON	F* Hmol/l	Chi-a	Hg/l									
5324	2	6.5	34.682	34.685	4	23.634	23.633	23.513	214.3	214.4	2	-2.9	0.00	2	0.00	2	0.11	2	2.06	2	1.950	2	1.124	2	270.7	2	1946.4	8	8.0804	2	2274	2	-9.00	9	-9.00	9	-9
5323	2	23.8	34.682	34.685	4	23.605	23.600	23.522	213.7	214.8	2	-2.9	0.00	2	0.00	2	0.11	2	2.13	2	1.951	2	1.134	2	271.1	2	1946.2	8	8.0591	2	-9	9	-9.00	9	-9.00	9	-9
5322	2	71.4	34.771	34.774	4	23.273	23.258	23.689	214.8	215.1	2	-2.3	0.00	2	0.00	2	0.11	2	2.27	2	1.998	2	1.149	2	276.4	2	1954.1	2	8.0767	2	2277	2	-9.00	9	-9.00	9	-9
5321	2	124.1	35.180	35.179	2	22.381	22.336	24.261	208.9	210.6	2	5.1	0.06	2	0.30	2	0.15	2	2.41	2	2.034	2	1.159	2	288.2	2	1982.2	2	8.0635	2	2300	2	-9.00	9	-9.00	9	-9
5320	2	150.7	35.299	35.329	2	21.900	21.870	24.506	202.5	200.0	2	17.2	0.13	2	1.52	2	0.22	2	3.25	2	1.998	2	1.129	2	309.3	2	2002.0	2	8.0433	2	2313	2	-9.00	9	-9.00	9	-9
5319	2	197.9	35.050	35.029	2	18.610	18.575	25.152	123.2	117.7	2	113.4	0.00	2	14.35	2	1.03	2	16.04	2	1.539	2	0.852	2	555.5	2	2104.6	2	7.8352	2	2302	2	-9.00	9	-9.00	9	-9
5318	2	288.8	35.562	35.568	2	18.032	15.984	26.189	192.2	185.4	2	56.5	0.00	2	6.81	2	0.57	2	6.72	2	2.237	6	1.197	6	463.8	2	2098.3	2	7.9023	2	2336	2	-9.00	9	-9.00	9	-9
5317	2	502.7	34.803	34.805	2	10.031	9.972	26.805	237.0	227.7	2	47.8	0.00	2	14.75	2	1.08	2	5.33	2	2.524	2	1.270	2	811.1	2	2115.5	2	7.8020	2	2299	2	-9.00	9	-9.00	9	-9
5316	2	702.5	34.559	34.561	2	8.500	8.435	27.150	149.4	143.7	2	155.0	0.00	2	30.10	2	2.14	2	42.02	2	0.152	2	0.089	2	1046.7	2	2215.3	2	7.5982	2	2317	2	-9.00	9	-9.00	9	-9
5315	2	900.7	34.682	34.682	2	5.590	5.511	27.363	94.0	92.7	2	212.4	0.00	2	35.52	2	2.55	2	78.50	2	0.006	2	0.008	2	1309.8	2	2280.2	2	7.5180	2	2358	2	-9.00	9	-9.00	9	-9
5314	2	1098.0	34.701	34.702	2	4.921	4.829	27.459	97.2	96.1	2	213.9	0.00	2	35.89	2	2.59	2	88.51	2	0.004	2	-0.001	2	1329.3	2	2290.3	2	7.5169	2	2366	2	-9.00	9	-9.00	9	-9
5313	2	1301.5	34.710	34.710	2	4.358	4.251	27.529	104.7	104.3	2	210.1	0.00	2	35.64	2	2.59	2	93.54	2	0.001	2	-0.002	2	1308.6	2	2295.7	2	7.5214	2	2375	2	-9.00	9	-9.00	9	-9
5312	2	1600.0	34.706	34.706	2	3.438	3.314	27.621	124.9	124.1	2	197.6	0.00	2	34.78	2	2.51	2	99.71	2	0.001	2	-0.001	2	1252.1	2	2294.9	2	7.5374	2	2380	2	-9.00	9	-9.00	9	-9
5311	2	1800.3	34.728	34.726	2	2.782	2.642	27.689	139.1	139.6	2	187.5	0.00	2	34.42	2	2.45	2	107.55	2	0.001	2	-0.002	2	1210.7	2	2297.6	2	7.5531	2	2387	2	-9.00	9	-9.00	9	-9
5310	2	2200.9	34.733	34.734	2	2.365	2.205	27.742	150.8	150.4	2	180.3	0.00	2	34.06	2	2.41	2	112.14	2	0.000	2	-0.002	2	1178.9	2	2296.7	2	7.5663	2	2391	2	-9.00	9	-9.00	9	-9
5309	2	2501.9	34.732	34.732	2	2.034	1.853	27.789	161.7	162.3	2	171.4	0.00	2	33.27	2	2.35	2	113.87	2	0.001	2	-0.001	2	1131.1	2	2292.7	2	7.5786	2	2390	2	-9.00	9	-9.00	9	-9
5308	2	2802.6	34.730	34.730	2	1.835	1.629	27.784	168.3	169.4	2	166.2	0.00	2	32.81	2	2.32	2	116.10	2	0.000	2	-0.001	2	1103.5	2	2290.7	2	7.5872	2	2393	2	-9.00	9	-9.00	9	-9
5307	2	3200.5	34.727	34.726	2	1.819	1.380	27.799	173.9	175.9	2	161.9	0.00	2	32.81	2	2.30	2	119.58	2	0.000	2	0.001	2	1088.2	2	2290.1	2	7.5957	2	2396	2	-9.00	9	-9.00	9	-9
5306	2	3573.0	34.724	34.724	2	1.466	1.193	27.811	179.4	181.4	2	158.0	0.00	2	32.86	2	2.27	2	121.65	2	0.000	2	0.001	2	1057.7	2	2290.8	2	7.6029	2	2399	2	-9.00	9	-9.00	9	-9
5305	2	3999.6	34.721	34.720	2	1.378	1.062	27.816	180.8	183.0	2	157.6	0.00	2	32.81	2	2.28	2	125.84	2	0.000	2	0.000	2	1062.2	2	2293.9	2	7.6058	2	2408	2	-9.00	9	-9.00	9	-9
5304	2	4400.7	34.719	34.719	2	1.382	1.022	27.818	180.8	183.1	2	157.9	0.00	2	32.78	2	2.29	2	127.46	2	0.000	2	-0.001	2	1059.4	2	2295.2	2	7.6068	2	2405	2	-9.00	9	-9.00	9	-9
5303	2	4798.0	34.719	34.719	2	1.418	1.010	27.819	181.6	183.1	2	158.0	0.00	2	32.73	2	2.29	2	127.98	2	0.001	2	-0.001	2	1053.9	2	2295.5	2	7.6088	2	2407	2	-9.00	9	-9.00	9	-9
5302	2	5019.5	34.718	34.719	2	1.440	1.005	27.819	182.4	183.3	2	157.8	0.00	2	-9.00	2	2.29	2	127.98	2	0.000	2	0.002	2	1054.0	2	2295.7	2	7.6083	2	2407	2	-9.00	9	-9.00	9	-9
5301	2	5122.2	34.718	34.719	2	1.450	1.002	27.819	183.2	183.4	2	157.7	0.00	2	32.93	2	2.29	2	127.90	2	0.000	2	0.003	2	1071.1	2	2296.2	6	7.6058	2	2407	2	-9.00	9	-9.00	9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 54 DATE 10/13/1995
 CAST 1 GMT 14:05
 CTD CAST 275

LATITUDE 15° 59.63' S
 LONGITUDE 80° 0.01' E

Bottle Number	CTD		Bottle		F* Pressure db	Salinity	Temp** °C	Pot. T*** °C	Sigma T	Theta	O2	O2 Hmol/kg	F* AOU	NO2 Hmol/kg	NO3 Hmol/kg	PO4 Hmol/kg	SI(OH)4 F* Hmol/kg	CFC-11 F* pmol/kg	CFC-12 F* pmol/kg	DIC F* Hmol/kg	pH	F* TA Hmol/kg	F* TOC Hmol/kg	TON F* Hmol/l	Chi-a Hg/l	Phaeo Hg/l												
	Depth	Temp	Salinity	Temp																																		
5424	2	8.5	34.669	34.671	2	23.866	23.864	23.434	212.3	213.7	2	-3.0	0.00	2	0.00	2	0.10	2	1.88	2	1.942	2	1.107	2	274.4	2	1943.9	6	8.0794	2	2269	2	66.89	2	4.71	2	-9	-9
5423	2	46.8	34.667	34.672	2	23.807	23.797	23.455	213.0	213.9	2	-2.9	0.00	2	0.01	2	0.11	2	1.85	2	1.950	2	1.110	2	273.2	2	1945.3	6	8.0791	2	2271	2	70.22	2	4.54	2	-9	-9
5422	2	86.8	34.693	34.696	2	23.454	23.436	23.579	213.8	214.0	2	-1.8	0.00	2	0.02	2	0.11	2	2.12	2	1.974	2	1.127	2	275.8	2	1947.6	6	8.0780	2	2273	2	86.16	2	5.03	2	-9	-9
5421	2	137.5	35.020	35.037	2	20.767	20.741	24.594	134.1	136.2	2	85.9	0.03	2	10.09	2	0.71	2	10.41	2	1.706	2	0.964	2	452.6	2	2062.3	6	7.9077	2	2297	2	59.54	2	-9.00	2	-9	-9
5420	2	173.0	35.056	35.056	2	19.159	19.128	25.032	126.9	122.4	2	106.3	0.00	2	13.12	2	0.91	2	14.24	2	1.617	2	0.893	2	524.9	2	2092.4	6	7.8533	2	2304	2	57.86	2	-9.00	2	-9	-9
5419	2	251.8	35.669	35.673	2	17.147	17.105	26.007	193.4	186.2	2	50.4	0.00	2	5.30	2	0.45	2	5.22	2	2.247	2	1.204	2	433.2	3	2069.0	6	7.9254	2	-9	9	56.41	2	-9.00	2	-9	-9
5418	2	349.4	35.224	35.227	2	12.890	12.842	26.801	223.8	213.6	2	44.7	0.00	2	9.09	2	0.89	2	4.56	2	2.640	2	1.358	2	523.4	2	2105.4	6	7.8588	2	2323	2	50.64	2	-9.00	2	-9	-9
5417	2	451.6	34.821	34.821	2	10.130	10.077	26.799	225.1	216.2	2	58.5	0.00	2	15.37	2	1.07	2	7.31	2	2.372	2	1.193	2	628.8	2	2122.3	6	7.7892	2	2300	2	50.69	2	-9.00	2	-9	-9
5416	2	551.7	34.615	34.616	2	8.290	8.232	26.938	199.2	192.2	2	94.4	0.00	2	22.36	2	1.52	2	15.63	2	1.158	2	0.595	2	771.9	2	2152.5	6	7.7092	2	2296	2	48.22	2	-9.00	2	-9	-9
5415	2	647.9	34.619	34.621	2	7.065	7.002	27.120	135.8	132.8	2	161.9	0.00	2	30.11	2	2.08	2	41.42	2	0.180	2	0.094	6	1051.6	2	2215.3	6	7.5975	2	2319	2	-8.00	2	-9.00	2	-9	-9
5414	9	746.4	34.673	-9.000	9	6.553	6.483	27.232	102.3	-9.0	9	-9.0	0.00	9	-9.00	9	-9.00	9	-9.00	9	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.000	9	-9	9	-9.00	9	-9.00	9	-9	-9
5413	2	849.6	34.693	34.694	2	5.988	5.912	27.322	90.7	89.3	2	212.8	0.00	2	34.96	2	2.50	2	74.52	2	0.009	2	0.004	2	1292.1	2	2274.8	6	7.5190	2	2351	2	42.53	2	-9.00	2	-9	-9
5412	2	998.1	34.698	34.698	2	5.399	5.313	27.399	90.4	89.9	2	216.8	0.00	2	35.52	2	2.55	2	84.12	2	0.004	2	0.001	2	1324.8	2	2286.4	6	7.5127	2	2362	2	-8.00	2	-9.00	2	-9	-9
5411	2	1253.0	34.701	34.702	2	4.474	4.372	27.510	103.0	102.4	2	211.1	0.00	2	35.62	2	2.56	2	92.65	2	0.000	2	-0.001	2	1298.8	2	2294.5	6	7.5191	2	2372	2	-8.00	2	-9.00	2	-9	-9
5410	2	1498.6	34.705	34.706	2	3.595	3.480	27.605	116.9	115.9	2	204.5	0.00	2	35.44	2	2.52	2	102.16	2	0.000	2	0.000	2	1291.6	2	2298.9	6	7.5276	2	2380	2	42.54	2	-9.00	2	-9	-9
5409	2	1798.5	34.723	34.724	2	2.860	2.728	27.689	136.5	135.6	2	190.8	0.00	2	34.63	2	2.44	2	107.35	2	-0.001	2	0.000	2	1221.0	2	2296.8	6	7.5485	2	2387	2	-8.00	2	-9.00	2	-9	-9
5408	2	2198.6	34.732	34.732	2	2.278	2.120	27.747	154.8	153.3	2	178.1	0.00	2	33.77	2	2.35	2	112.22	2	-0.002	2	-0.002	2	1172.5	2	2293.3	6	7.5692	2	2392	2	-8.00	2	-9.00	2	-9	-9
5407	2	2597.8	34.730	34.730	2	1.909	1.721	27.777	187.1	186.7	2	168.1	0.00	2	33.19	2	2.30	2	115.38	2	0.001	2	-0.001	2	1108.2	2	2290.0	6	7.5851	2	2396	2	42.43	2	-9.00	2	-9	-9
5406	2	2998.2	34.728	34.727	2	1.873	1.452	27.795	173.1	173.4	2	163.8	0.00	2	32.95	2	2.27	2	119.42	2	-0.001	2	-0.001	2	1082.3	2	2291.6	6	7.5931	2	2394	2	-9.00	2	-9.00	2	-9	-9
5405	2	3497.9	34.724	34.724	2	1.446	1.181	27.811	179.0	180.1	2	159.4	0.00	2	32.87	2	2.25	2	123.45	2	0.001	2	0.004	2	1072.0	2	2292.6	6	7.6011	2	2403	2	-9.00	2	-9.00	2	-9	-9
5404	2	3999.4	34.720	34.719	2	1.364	1.049	27.816	180.9	182.3	2	158.4	0.00	2	32.94	2	2.26	2	126.93	2	0.002	2	0.002	2	1059.2	2	2295.8	6	7.6083	2	2408	2	42.20	2	-9.00	2	-9	-9
5403	2	4499.2	34.719	34.718	2	1.388	1.016	27.818	180.3	182.0	2	159.0	0.00	2	-9.00	2	2.26	2	126.78	2	0.005	2	0.004	2	1053.4	2	2298.2	6	7.6089	2	2408	2	-8.00	2	-9.00	2	-9	-9
5402	2	5016.4	34.718	34.718	2	1.441	1.006	27.818	181.9	182.0	2	159.1	0.00	2	32.84	2	2.28	2	129.19	2	-0.001	2	0.003	2	1049.1	2	2298.7	6	7.6073	2	2411	2	-8.00	2	-9.00	2	-9	-9
5401	2	5114.5	34.718	34.718	2	1.453	1.006	27.818	182.7	182.5	2	158.6	0.00	2	32.95	2	2.28	2	129.28	2	0.000	2	0.002	2	1061.9	2	2298.1	6	7.6081	2	2412	2	42.12	2	-9.00	2	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

18NR
NOAA Ship Baldrige

STATION 55 DATE 10/13/1995
 CAST 1 GMT 22:35
 CTD CAST 276

LATITUDE 14° 59.17' S
 LONGITUDE 79° 59.95' E

Bottle Number	CTD		Bottle		Sigma T	Theta	Pot. T	Temp	Salinity	F [*]	AOU	NO ₂	F [*]	NO ₃	F [*]	PO ₄	F [*]	Si(OH) ₄	F [*]	CFC-11	F [*]	CFC-12	F [*]	DIC	F [*]	pH	TA	F [*]	TOC	F [*]	Chl-a	Phaeo						
	db	Pressure	db	Salinity																													°C	°C	‰	‰	‰	‰
5524	2	6.5	34.858	34.661	2	24.731	24.730	23.169	208.4	210.2	2	-2.5	0.00	2	0.00	2	0.16	2	2.06	2	1.878	2	1.231	3	269.0	2	1942.2	6	8.0877	2	2270	2	-9.00	9	-9.00	9	-9	
5523	2	29.4	34.657	34.660	2	24.728	24.722	23.170	208.0	210.1	2	-2.4	0.00	2	0.00	2	0.15	2	2.01	2	1.876	2	1.080	2	270.5	2	1941.9	2	8.0861	2	2288	2	-9.00	9	-9.00	9	-9	
5522	2	58.5	34.655	34.660	2	24.730	24.717	23.172	207.8	209.8	2	-2.1	0.00	2	0.02	2	0.17	2	2.08	2	1.880	2	1.109	2	266.6	2	1941.3	2	8.0850	2	2272	2	-9.00	9	-9.00	9	-9	
5521	2	89.8	34.676	34.881	2	24.135	24.116	23.387	211.2	211.0	2	-1.2	0.00	2	0.01	2	0.15	2	2.08	2	1.918	2	1.095	2	271.0	2	1948.0	2	8.0838	2	2273	2	-9.00	9	-9.00	9	-9	
5520	2	124.5	34.825	34.807	2	23.878	23.852	23.541	204.7	204.1	2	8.5	0.14	2	0.27	2	0.19	2	2.54	2	1.900	6	1.086	6	285.4	2	1981.3	2	8.0688	2	2283	2	-9.00	9	-9.00	9	-9	
5519	2	197.0	34.830	34.857	2	16.442	16.442	18.410	25.529	99.0	95.8	2	145.3	0.00	2	19.80	2	1.37	2	23.31	2	1.252	2	0.685	2	689.0	2	2138.7	2	7.9500	2	2300	2	-9.00	9	-9.00	9	-9
5518	2	300.6	35.132	35.131	2	13.442	13.442	13.400	26.414	157.6	148.1	2	107.4	0.00	2	15.80	2	1.16	2	18.01	2	1.642	2	0.863	2	640.4	2	2144.4	2	7.7855	2	2320	2	-9.00	9	-9.00	9	-9
5517	2	395.1	35.011	35.014	2	11.426	11.375	26.718	232.5	221.8	2	44.9	0.00	2	11.73	2	0.88	2	4.94	2	2.658	2	1.351	2	558.8	2	2111.9	2	7.8334	2	2310	2	-9.00	9	-9.00	9	-9	
5516	2	595.3	34.584	34.585	2	7.679	7.619	27.004	182.2	175.5	2	115.1	0.00	2	25.71	2	1.75	2	22.87	2	0.608	2	0.323	2	860.7	2	2174.6	2	7.6713	2	2301	2	-9.00	9	-9.00	9	-9	
5515	2	801.5	34.879	34.679	2	6.142	6.069	27.290	102.2	100.3	2	200.8	0.00	2	34.55	2	2.44	2	87.54	2	0.033	2	0.021	2	1243.1	2	2264.2	2	7.5354	2	2344	2	-9.00	9	-9.00	9	-9	
5514	2	1000.1	34.700	34.700	2	5.287	5.201	27.414	95.1	93.7	2	213.8	0.00	2	36.02	2	2.57	2	84.24	2	0.003	2	0.004	2	1323.3	2	2286.0	2	7.5169	2	2361	2	-9.00	9	-9.00	9	-9	
5513	2	1199.8	34.706	34.707	2	4.676	4.577	27.491	99.5	98.6	2	213.3	0.00	2	36.30	2	2.59	2	92.46	2	0.000	2	0.000	2	1328.3	2	2286.2	2	7.5170	2	2372	2	-9.00	9	-9.00	9	-9	
5512	2	1397.5	34.700	34.700	2	3.950	3.840	27.564	110.6	109.2	2	208.4	0.00	2	36.43	2	2.57	2	100.19	2	0.000	2	-0.002	2	1298.2	2	2289.8	2	7.5237	2	2378	2	-9.00	9	-9.00	9	-9	
5511	2	1598.9	34.709	34.710	2	3.328	3.207	27.634	123.9	122.3	2	200.3	0.00	2	36.13	2	2.53	2	105.59	2	-0.001	2	-0.001	2	1266.7	2	2302.8	2	7.5351	2	2380	2	-9.00	9	-9.00	9	-9	
5510	2	1900.7	34.724	34.723	2	2.854	2.722	27.689	136.2	135.2	2	191.3	0.00	2	35.37	2	2.47	2	108.28	2	-0.001	2	-0.001	2	1222.4	2	2298.4	2	7.5508	2	2385	2	-9.00	9	-9.00	9	-9	
5509	2	2002.9	34.729	34.730	2	2.501	2.356	27.726	147.8	146.7	2	182.8	0.00	2	34.05	2	2.41	2	110.59	2	-0.001	2	0.000	2	1178.5	2	2283.6	2	7.5615	2	2389	2	-9.00	9	-9.00	9	-9	
5508	2	2346.3	34.733	34.732	2	2.081	1.923	27.763	180.2	159.7	2	173.4	0.00	2	34.05	2	2.34	2	116.28	2	-0.001	2	0.000	2	1139.6	2	2294.7	2	7.5763	2	2393	2	-9.00	9	-9.00	9	-9	
5507	2	2648.4	34.730	34.730	2	1.836	1.845	27.783	188.6	168.3	2	167.2	0.00	2	33.49	2	2.32	2	117.49	2	-0.002	2	0.003	2	1103.3	2	2291.5	2	7.5878	2	2391	2	-9.00	9	-9.00	9	-9	
5506	2	2953.0	34.728	34.728	2	1.871	1.455	27.795	172.4	172.8	2	164.3	0.00	2	32.90	2	2.30	2	120.68	2	-0.002	2	0.003	2	1094.2	2	2295.3	2	7.5838	2	2395	2	-9.00	9	-9.00	9	-9	
5505	2	3449.7	34.724	34.724	2	1.451	1.191	27.811	178.6	179.5	2	160.0	0.00	2	32.79	2	2.28	2	124.63	2	-0.001	2	-0.002	2	1075.8	2	2292.3	2	7.6011	2	2402	2	-9.00	9	-9.00	9	-9	
5504	2	3850.6	34.720	34.721	2	1.359	1.049	27.818	180.6	182.3	2	158.4	0.00	2	32.95	2	2.28	2	128.44	2	-0.001	2	-0.001	2	1086.6	2	2296.3	2	7.6055	2	-9	9	-8.00	9	-9.00	9	-9	
5503	2	4447.7	34.719	34.720	2	1.378	1.013	27.819	180.0	182.2	2	158.8	0.00	2	-9.00	9	2.28	2	130.72	2	-0.001	2	0.003	2	1083.6	2	2298.6	2	7.6081	2	2407	2	-9.00	9	-9.00	9	-9	
5502	2	4949.0	34.718	34.719	2	1.433	1.007	27.819	181.1	182.2	2	158.9	0.00	2	32.93	2	2.28	2	131.29	2	0.000	2	0.000	2	1080.0	2	2298.3	2	7.6080	2	2410	2	-9.00	9	-9.00	9	-9	
5501	2	5052.2	34.718	34.719	2	1.445	1.006	27.819	182.0	182.6	2	158.5	0.00	2	32.89	2	2.28	2	130.39	2	-0.001	2	0.000	2	1058.0	2	2298.9	6	7.6064	2	-9	9	-8.00	9	-9.00	9	-9	

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

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

*** PSS-78 scale

**** ITS-90 scale

18NR

NOAA Ship Baldrige

STATION 56 DATE 10/14/1995
CAST 1 GMT 02:51
CTD CAST 277

LATITUDE 14° 30.03' S
LONGITUDE 79° 59.98' E

Bottle Number	F** db	Pressure	Salinity		Temp		Pot		Sigma Theta	O2	O2	ADU	NO2		NO3		PO4		Si(OH)4		CFC-11		CFC-12		DIC		pH	F*	TA	F*	TOC	F*	TON	F*	Chl-a		
			db	‰	‰	‰	‰	‰					‰	‰	‰	‰	‰	‰	‰	‰	‰	‰	‰	‰	‰	‰										‰	‰
5615	2	51.3	34.925	34.930	2	25.787	25.776	23.052	203.9	205.5	2	-1.8	0.00	2	0.00	2	0.17	2	1.83	2	1.809	2	1.075	2	270.5	2	1947.4	6	8.0896	2	2284	2	-9.00	9	-9.00	9	-9
5614	2	101.7	34.889	34.903	2	25.497	25.475	23.125	203.9	201.3	2	3.5	0.08	2	0.40	2	0.21	2	2.23	2	1.781	2	1.040	2	275.6	2	1953.6	2	8.0787	2	2285	2	-9.00	9	-9.00	9	-9
5613	2	150.1	34.750	34.769	2	18.146	18.120	25.067	88.5	87.3	2	146.2	0.00	2	16.67	2	1.30	2	20.39	2	1.346	2	0.762	2	860.2	3	2119.5	2	7.7642	2	-9	9	-9.00	9	-9.00	9	-9
5612	2	200.8	35.240	35.236	2	16.606	16.573	25.797	144.6	139.1	2	100.8	0.00	2	12.75	2	0.96	2	16.06	2	1.667	2	0.916	2	548.6	2	2113.9	2	7.8995	2	2321	2	-9.00	9	-9.00	9	-9
5611	2	298.1	35.141	35.142	2	13.208	13.166	26.470	165.4	156.6	2	100.1	0.00	2	14.59	2	1.08	2	16.38	2	1.766	2	0.918	2	622.1	2	2135.7	2	7.7952	2	2325	2	-9.00	9	-9.00	9	-9
5610	3	497.2	34.704	34.706	3	9.013	8.958	26.895	144.3	138.4	2	143.3	0.00	2	25.36	2	1.76	2	28.48	2	-8.000	9	-9.000	9	-9.0	9	-9.0	9	7.6506	2	-9	9	-9.00	9	-9.00	9	-9
5609	2	700.7	34.681	34.682	2	7.004	6.936	27.177	103.6	100.9	2	194.1	0.00	2	32.33	2	2.32	2	55.26	2	-8.000	9	-9.000	9	1196.1	2	2242.7	2	7.5498	2	2331	2	-9.00	9	-9.00	9	-9
5608	2	899.8	34.696	34.695	2	5.895	5.814	27.335	88.5	86.7	2	216.1	0.00	2	34.98	2	2.54	2	77.99	2	-8.000	9	-9.000	9	1320.2	2	-9.0	9	7.5144	2	2357	2	-9.00	9	-9.00	9	-9
5607	2	1198.5	34.699	34.700	2	4.711	4.612	27.482	98.3	96.3	2	215.4	0.00	2	35.41	2	2.57	2	92.81	2	-8.000	9	-9.000	9	1339.6	2	2293.2	2	7.5153	2	2371	2	-9.00	9	-9.00	9	-9
5606	2	1501.0	34.702	34.701	2	3.628	3.513	27.598	118.3	115.5	2	204.6	0.00	2	35.22	2	2.54	2	101.95	2	-8.000	9	-9.000	9	-9.0	9	-9.0	9	7.5289	2	-9	9	-9.00	9	-9.00	9	-9
5605	2	1800.1	34.724	34.725	2	2.860	2.728	27.690	138.5	135.0	2	191.4	0.00	2	34.45	2	2.45	2	107.84	2	-8.000	9	-9.000	9	1234.0	2	2296.2	2	-8.0000	9	2386	2	-9.00	9	-9.00	9	-9
5604	2	2101.3	34.736	34.735	2	2.413	2.261	27.738	151.6	148.4	2	181.9	0.00	2	33.80	2	2.39	2	112.37	2	-8.000	9	-9.000	9	-9.0	9	-9.0	9	7.5649	2	-9	9	-9.00	9	-9.00	9	-9
5603	2	2400.1	34.733	34.733	2	2.061	1.888	27.787	164.2	160.9	2	172.5	0.00	2	33.07	2	2.34	2	114.98	2	-8.000	9	-9.000	9	1130.3	2	2291.0	2	7.5792	2	2390	2	-9.00	9	-9.00	9	-9
5602	2	2699.3	34.730	34.730	2	1.824	1.628	27.784	172.6	168.9	2	166.7	0.00	2	32.92	2	2.30	2	116.97	2	-8.000	9	-9.000	9	-9.0	9	-9.0	9	7.5884	2	-9	9	-9.00	9	-9.00	9	-9
5601	2	3003.4	34.727	34.728	2	1.648	1.427	27.797	177.7	173.4	2	164.0	0.00	2	32.86	2	2.28	2	120.40	2	-8.000	9	-9.000	9	1093.8	2	2290.6	6	7.5942	2	2399	2	-9.00	9	-9.00	9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 57 DATE 10/14/1995
 CAST 2 GMT 09:53
 CTD CAST 278

LATITUDE 13° 59.58' S
 LONGITUDE 79° 59.94' E

Bottle Number	Bottle		CTD		Bottle		CO2		F* pH	F* DIC	F* pCO2	F* pH _{sum}	F* TA	F* TOC	F* TON	F* CHI-a																		
	F** Pressure db	Salinity	Pot. T** °C	Temp*** °C	Sigma Theta	O2	O2	F* SI(OH)4									F* CFC-11	F* CFC-12	F* at 20 °C															
5724	2	7.2	34.701	34.703	2	25.282	25.280	23.033	207.0	208.9	-3.2	0.00	2	0.15	2	2.30	2	1.834	2	1.067	2	270.2	2	1942.3	6	8.0823	2	2269	2	64.82	2	-9.00	9	-9
5723	2	29.7	34.740	34.742	2	25.309	25.303	23.056	206.3	208.3	-2.7	0.01	2	0.16	2	2.42	2	1.840	2	1.073	2	269.9	2	1943.8	2	8.0798	2	-9	9	65.99	2	5.08	2	-9
5722	2	89.9	34.893	34.900	2	25.351	25.331	23.166	204.7	199.3	6.0	0.05	2	0.36	2	2.69	2	1.805	2	1.045	2	282.7	2	1958.2	2	8.0715	2	2286	2	65.69	2	5.11	2	-9
5721	2	129.5	35.037	35.033	2	19.595	19.571	24.900	125.9	122.3	104.5	0.24	2	13.00	2	0.92	2	13.84	2	0.906	2	505.8	2	2086.2	2	7.8621	2	2299	2	53.83	2	3.55	2	-9
5720	2	177.4	35.140	35.150	2	16.772	16.743	25.691	135.3	130.4	108.7	0.01	2	14.00	2	1.00	2	17.30	2	0.856	2	565.1	2	2113.9	2	7.8323	2	2313	2	52.87	2	-9.00	9	-9
5719	2	250.8	34.871	34.872	2	12.830	12.796	26.335	108.7	104.1	155.1	0.00	2	22.41	2	1.57	2	29.05	2	0.533	2	808.7	2	2169.7	2	7.6938	2	2309	2	52.34	2	3.42	2	-9
5718	2	300.9	35.017	35.016	2	12.380	12.340	26.537	148.5	141.7	119.7	0.00	2	18.30	2	1.31	2	20.78	2	0.754	2	713.2	2	2152.4	2	7.7493	2	2317	2	49.00	2	3.13	2	-9
5717	2	400.2	34.815	34.815	2	10.147	10.100	26.791	185.3	176.6	97.9	0.00	2	19.23	2	1.34	2	16.53	2	0.827	2	727.1	2	2147.6	2	7.7384	2	2304	2	48.21	2	2.63	2	-9
5716	2	499.4	34.678	34.678	2	8.594	8.541	26.939	151.8	145.4	139.1	0.00	2	26.08	2	1.79	2	27.80	2	0.554	2	900.8	2	2182.7	2	7.6503	2	2304	2	47.41	2	2.29	2	-9
5715	2	599.7	34.684	34.685	2	7.738	7.677	27.074	114.3	110.8	179.2	0.00	2	30.84	2	2.16	2	44.24	2	0.146	2	1095.3	2	2223.5	2	7.5793	2	2320	2	-9.00	9	-9.00	9	-9
5714	2	748.9	34.700	34.700	2	6.668	6.595	27.238	89.8	88.2	209.1	0.00	2	34.32	2	2.46	2	66.44	2	0.025	2	1272.2	2	2262.4	2	7.5261	2	2334	2	-9.00	9	-9.00	9	-9
5713	2	850.1	34.694	34.694	2	6.075	5.998	27.311	85.3	83.9	217.6	0.00	2	35.48	2	2.55	2	77.75	2	0.006	2	1320.1	2	2278.0	2	7.5137	2	2351	2	44.53	2	-9.00	9	-9
5712	2	988.9	34.698	34.699	2	5.388	5.302	27.401	88.9	87.9	218.6	0.00	2	36.03	2	2.59	2	87.00	2	0.006	2	1329.0	2	2288.3	2	7.5119	2	2357	2	-9.00	9	-9.00	9	-9
5711	2	1202.2	34.696	34.696	2	4.568	4.470	27.494	97.0	96.3	216.4	0.00	2	36.44	2	2.62	2	97.30	2	0.000	2	1334.1	2	2298.4	2	7.5131	2	2383	2	-9.00	9	-9.00	9	-9
5710	2	1499.7	34.704	34.704	2	3.868	3.550	27.596	115.4	114.3	205.6	0.00	2	35.85	2	2.57	2	102.86	2	0.001	2	1292.1	2	2299.3	2	7.5278	2	2385	2	41.63	2	-9.00	9	-9
5709	2	1678.3	34.717	34.717	2	3.107	2.982	27.661	130.0	129.0	195.4	0.00	2	35.08	2	2.50	2	106.30	2	-9.000	2	1253.5	2	2296.4	2	7.5400	2	2392	2	-9.00	9	-9.00	9	-9
5708	2	2001.0	34.734	34.734	2	2.530	2.385	27.727	145.5	144.5	184.7	0.00	2	34.30	2	2.43	2	112.40	2	-0.001	2	1190.0	2	2297.1	2	7.5587	2	2394	2	-9.00	9	-9.00	9	-9
5707	2	2498.3	34.732	34.732	2	1.941	1.762	27.776	164.2	164.0	170.5	0.00	2	33.29	2	2.34	2	117.30	2	-9.000	2	1122.6	2	2292.0	2	7.5826	2	2404	2	41.34	2	-8.00	9	-9
5706	2	2981.8	34.728	34.728	2	1.668	1.449	27.796	171.4	172.6	164.6	0.00	2	32.90	2	2.30	2	121.71	2	0.000	2	1094.6	2	2282.8	2	7.5934	2	2396	2	-9.00	9	-9.00	9	-9
5705	2	3495.6	34.723	34.723	2	1.437	1.173	27.811	177.7	177.7	161.9	0.00	2	32.88	2	2.30	2	126.43	2	0.000	2	1078.2	2	2284.4	2	7.6004	2	2404	2	-9.00	9	-9.00	9	-9
5704	9	3999.3	34.719	-9.000	9	1.354	1.039	27.817	179.7	-9.0	-9.0	-9.00	9	-9.00	9	-9.00	9	-9.00	9	-9.000	9	-8.0	9	-9.0	9	-9.0000	9	-9	9	-8.00	9	-9.00	9	-9
5703	2	4500.9	34.718	34.718	2	1.381	1.009	27.818	179.9	181.8	159.3	0.00	2	33.00	2	2.29	2	131.06	2	-0.002	2	1056.8	2	2298.2	2	7.6120	2	2407	2	-9.00	9	-9.00	9	-9
5702	2	4834.9	34.718	34.718	2	1.426	1.002	27.819	180.3	181.7	159.4	0.00	2	-8.00	9	2.30	2	131.60	2	0.000	2	1069.6	2	2298.3	2	7.6073	2	2411	2	-9.00	9	-9.00	9	-9
5701	2	5030.6	34.718	34.718	2	1.437	1.001	27.820	181.0	182.0	159.1	0.00	2	32.97	2	2.29	2	131.21	2	0.000	2	1070.1	2	2298.2	6	7.6073	2	2406	2	41.85	2	-8.00	9	-9

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

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

*** PSS-78 scale

**** ITS-90 scale

I8NR
NOAA Ship Baldrige

STATION 58 DATE 10/14/1995
 CAST 1 GMT 14:29
 CTD CAST 279

LATITUDE 13° 29.94' S
 LONGITUDE 80° 0.01' E

Bottle Number	CTD				Bottle		CTD		Bottle		CTD		Bottle		CTD		Bottle		CTD		Bottle		CTD		Bottle		CTD		Bottle		CTD		Bottle	
	F** Pressure db	Salinity	Temp** °C	Pot. T*** °C	Sigma Theta	O2	O2	F* AOU	NO2	NO3	PO4	Si(OH)4	F* CFC-11	F* CFC-12	F* H ₂ am	DIC	pH	F* TA	F* TOC	F* TON	Chl-a													
5816	7.5	34.927	34.931	25.884	25.882	23.020	205.0	206.1	0.00	0.04	0.18	2.08	1.784	1.583	269.9	1952.5	6	8.0686	2	2287	-8.00	-9.00	-9.00	-9	-9									
5815	48.9	34.928	34.930	25.896	25.885	23.018	204.7	205.7	-2.4	0.01	0.18	2.14	1.787	1.037	287.6	1953.4	2	8.0687	2	2285	-8.00	-9.00	-9.00	-9	-9									
5814	101.4	35.104	35.101	21.409	21.389	24.486	151.8	148.3	71.1	0.31	0.62	8.88	1.789	1.013	415.5	2052.8	2	7.9348	2	2300	-8.00	-9.00	-9.00	-9	-9									
5813	150.1	35.170	35.174	17.075	17.050	25.637	137.5	132.5	105.1	0.01	0.98	16.35	1.616	0.879	549.5	2114.5	2	7.8384	2	2315	-8.00	-9.00	-9.00	-9	-9									
5812	249.1	34.955	34.951	12.725	12.891	28.417	124.6	117.5	142.1	0.00	2.058	1.46	25.37	1.184	768.8	2168.4	2	7.7130	2	2310	-8.00	-9.00	-9.00	-9	-9									
5811	401.1	34.765	34.767	9.685	9.639	28.831	207.1	196.9	80.5	0.00	18.34	1.28	12.18	1.785	694.8	2138.4	2	7.7555	2	-9	-9.00	-9.00	-9.00	-9	-9									
5810	502.9	34.692	34.692	8.472	8.419	26.989	127.9	122.9	162.3	0.00	28.35	1.96	34.56	-9.000	1016.2	2204.3	2	7.6122	2	2314	-8.00	-9.00	-9.00	-9	-9									
5809	599.1	34.694	34.693	7.703	7.642	27.086	97.6	95.2	195.1	0.00	32.30	2.28	50.33	-9.000	1192.5	2239.5	2	7.5535	2	2328	-8.00	-9.00	-9.00	-9	-9									
5808	763.2	34.675	34.675	6.477	6.406	27.243	80.0	78.8	219.9	0.00	35.16	2.53	74.85	-9.000	1328.4	2278.4	2	7.5083	2	2350	-8.00	-9.00	-9.00	-9	-9									
5807	999.7	34.664	34.663	5.291	5.205	27.376	87.8	86.0	221.4	0.00	35.71	2.59	92.17	-9.000	1339.2	2295.8	2	7.5076	2	2371	-8.00	-9.00	-9.00	-9	-9									
5806	1250.7	34.686	34.686	4.550	4.447	27.489	98.5	95.0	217.9	0.00	35.95	2.65	98.36	-9.000	1329.0	2301.3	2	7.5088	2	2376	-8.00	-9.00	-9.00	-9	-9									
5805	1501.4	34.711	34.710	3.763	3.646	27.592	111.0	108.9	210.2	0.00	35.68	2.59	104.10	-9.000	1309.5	2303.9	2	7.5255	2	2363	-8.00	-9.00	-9.00	-9	-9									
5804	1803.0	34.731	34.731	2.943	2.810	27.688	135.0	131.7	194.0	0.00	34.72	2.48	108.59	-9.000	1222.1	2299.8	2	7.5471	2	2369	-8.00	-9.00	-9.00	-9	-9									
5803	2000.4	34.736	34.736	2.571	2.426	27.725	146.3	143.4	185.5	0.00	34.25	2.42	111.60	-9.000	1196.9	2298.3	2	7.5568	2	2369	-8.00	-9.00	-9.00	-9	-9									
5802	2498.7	34.733	34.734	1.994	1.814	27.773	166.5	163.3	170.7	0.00	33.33	2.33	115.79	-9.000	1123.7	2294.5	2	7.5795	2	2395	-8.00	-9.00	-9.00	-9	-9									
5801	3008.6	34.728	34.729	1.677	1.455	27.798	177.1	173.1	164.0	0.00	33.13	2.30	119.69	-9.000	1100.9	2292.9	6	7.5915	2	2395	-8.00	-9.00	-9.00	-9	-9									

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR
NOAA Ship Baldridge

STATION 59 DATE 10/14/1995
 CAST 1 GMT 20:28
 CTD CAST 280

LATITUDE 13° 0.24' S
 LONGITUDE 79° 59.64' E

Bottle Number	CTD		Bottle		CTD		Bottle		fCO2																	
	F* Pressure db	Salinity	Temp** °C	Pot. T*** °C	Sigma T	O2	O2	AOU	NO2	NO3	PO4	Si(OH)4	CFC-11	CFC-12	F* at 20 °C	H ₂ O	DIC	pH	F*	TA	TOC	F*	Chl-a			
5924	7.8	34.914	25.906	25.906	23.004	203.2	205.0	-1.7	0.00	0.00	0.18	2.39	1.774	1.029	2.711	1950.7	6	8.0873	2	2286	2	-9.00	9	-9	-9	
5923	49.9	34.913	25.912	25.912	23.004	204.1	204.9	-1.6	0.00	0.02	0.19	2.34	1.767	1.020	2.699	1951.2	2	8.0878	2	2283	2	-9.00	9	-9	-9	
5922	77.3	34.927	25.877	25.880	23.030	206.4	204.4	-1.0	0.01	0.00	0.21	2.35	1.789	1.022	2.705	1953.4	2	8.0845	2	2290	2	-9.00	9	-9	-9	
5921	117.3	34.904	17.646	17.626	25.295	75.2	69.0	166.4	0.46	21.40	1.51	20.52	1.183	0.642	2.776	2	2148.6	2	7.7134	2	2294	2	-9.00	9	-9	
5920	161.0	35.020	15.114	15.090	25.968	120.2	115.5	131.6	0.00	17.61	1.30	22.46	1.333	0.720	6	666.9	2	2139.0	2	7.7688	2	2317	2	-9.00	9	-9
5919	200.1	35.157	13.974	13.945	26.322	148.6	141.2	111.4	0.00	15.01	1.16	18.24	-9.000	9	643.2	2	2139.1	2	7.7868	2	2323	2	-9.00	9	-9	
5918	300.0	34.796	10.791	10.754	26.663	95.5	92.0	178.7	0.00	25.90	1.87	33.03	0.623	0.333	2	996.9	2	2199.2	2	7.6199	2	2312	2	-9.00	9	-9
5917	400.1	34.781	9.670	9.624	26.844	111.5	107.1	170.4	0.00	26.60	1.90	31.27	0.497	0.263	2	1014.6	2	2199.4	2	7.6155	2	2310	2	-9.00	9	-9
5916	498.6	34.755	8.736	8.682	26.976	97.3	94.2	189.2	0.00	30.04	2.13	40.25	0.204	0.111	2	1117.2	2	2221.0	2	7.5726	2	2316	2	-9.00	9	-9
5915	598.1	34.726	7.919	7.857	27.081	82.8	81.8	207.0	0.00	32.83	2.36	52.90	0.069	0.038	2	1234.2	2	2246.3	2	7.5370	2	2328	2	-9.00	9	-9
5914	801.3	34.682	6.534	6.459	27.242	76.6	76.1	222.2	0.00	35.35	2.56	75.57	0.010	0.008	2	1350.4	2	2276.3	2	7.5078	2	2353	2	-9.00	9	-9
5913	1000.8	34.651	5.400	5.313	27.363	85.5	84.9	221.7	0.00	36.44	2.62	91.52	0.004	0.001	2	1356.6	2	2292.9	2	7.5071	2	2366	2	-9.00	9	-9
5912	1299.0	34.678	4.449	4.343	27.494	95.2	94.6	219.2	0.00	35.89	2.64	101.11	-0.001	-0.001	2	1358.5	2	2303.9	2	7.5115	2	2379	2	-9.00	9	-9
5911	1599.0	34.722	3.642	3.518	27.613	112.0	111.4	208.7	0.00	35.27	2.59	105.19	-0.001	-0.003	2	1301.3	2	2304.5	2	7.5253	2	2387	2	-9.00	9	-9
5910	1899.7	34.738	2.902	2.761	27.698	134.5	133.1	193.0	0.00	34.35	2.49	109.23	0.001	-0.001	2	1241.8	2	2299.8	2	7.5489	2	2388	2	-9.00	9	-9
5909	2198.7	34.736	2.323	2.164	27.747	152.4	151.6	179.5	0.00	33.55	2.40	113.42	-0.001	-0.003	2	983.7	4	2294.4	2	7.5688	2	2390	2	-9.00	9	-9
5908	2499.8	34.734	2.002	1.821	27.772	163.8	163.3	170.7	0.00	33.00	2.34	115.77	-9.000	9	1124.8	2	2291.7	2	7.5819	2	2395	2	-9.00	9	-9	
5907	2793.2	34.732	1.802	1.598	27.786	168.8	169.0	166.9	0.00	32.81	2.33	118.99	0.000	-0.003	2	1099.9	2	2293.6	2	7.5898	2	2401	2	-9.00	9	-9
5906	3198.0	34.727	1.585	1.347	27.801	172.3	173.0	165.1	0.00	32.74	2.33	123.70	-9.000	9	1089.5	2	2295.3	2	7.5954	2	2405	2	-9.00	9	-9	
5905	3599.5	34.723	1.399	1.125	27.814	178.9	180.5	159.5	0.00	32.58	2.30	125.99	0.000	-0.001	2	1076.3	2	2293.3	2	7.6040	2	2407	2	-9.00	9	-9
5904	3997.4	34.720	1.356	1.041	27.818	180.4	182.5	158.3	0.00	32.61	2.30	128.39	-9.000	9	1063.4	2	2294.2	2	7.6078	2	2407	2	-9.00	9	-9	
5903	4398.8	34.719	1.371	1.011	27.819	180.3	181.9	159.2	0.00	32.74	2.29	130.23	-0.001	0.000	2	1062.5	2	2298.9	2	7.6082	2	2407	2	-9.00	9	-9
5902	4849.3	34.719	1.419	1.005	27.818	181.1	181.8	159.3	0.00	32.72	2.30	130.14	-0.001	-0.002	2	1055.8	2	2298.8	2	7.6100	2	2417	2	-9.00	9	-9
5901	4949.5	34.719	1.431	1.005	27.818	181.4	181.9	159.2	0.00	32.69	2.29	130.13	0.000	-0.003	2	1072.9	2	2297.6	2	7.6080	2	2417	2	-9.00	9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR
NOAA Ship Baldrige

STATION 60 DATE 10/14/1995
CAST 1 GMT 01:06
CTD CAST 281

LATITUDE 12° 29.85' S
LONGITUDE 80° 0.04' E

Bottle Number	F** Pressure db	Salinity	Sigma T****	Temp**** °C	Pol. T**** °C	CTD		Bottle		O2 Hmol/Kg	O2 Hmol/Kg	AOU F* Hmol/Kg	NO2 F* Hmol/Kg	NO3 F* Hmol/Kg	PO4 F* Hmol/Kg	Si(OH)4 F* Hmol/Kg	CFC-11 F* pmol/Kg	CFC-12 F* pmol/Kg	D14 F* at 20 °C H ₂ O	DIC Hmol/Kg	F* pH	TA Hmol/Kg	F* TOC Hmol/Kg	F* TON Hmol/Kg	Chl-a Hg/l	Phase Hg/l									
						Theta	Depth	Depth	Depth																										
6016	2	34.938	34.942	25.929	25.928	23.014	202.3	205.0	-1.8	0.01	2	0.00	2	0.20	2	2.53	2	1.795	2	1.151	3	270.7	2	1956.2	2	2288	2	-9.00	9	-9.00	9	-9			
6015	2	34.937	34.942	25.934	25.933	23.015	203.1	206.8	-3.6	0.01	2	0.04	2	0.21	2	2.51	2	1.783	2	1.028	2	288.9	2	-9.0	9	8.0806	2	2293	2	-9.00	9	-9.00	9	-9	
6014	2	34.984	34.988	23.726	23.710	23.719	176.7	178.4	2	32.5	0.20	2	3.48	2	0.41	2	5.33	2	1.790	2	1.023	2	331.3	2	1998.2	6	8.0165	2	2298	2	-9.00	9	-9.00	9	-9
6013	2	35.120	35.122	15.953	15.929	25.859	121.8	117.0	2	125.9	0.00	2	17.14	2	1.22	2	19.73	2	1.405	2	0.757	2	640.6	2	2136.6	2	7.7865	2	2316	2	-9.00	9	-9.00	9	-9
6012	2	34.920	34.924	13.137	13.109	26.313	109.3	105.9	2	151.5	0.00	2	23.34	2	1.68	2	28.53	2	1.074	2	0.574	2	-9.0	9	2166.7	2	7.7082	2	2311	2	-9.00	9	-9.00	9	-9
6011	2	34.841	34.842	11.031	10.984	26.654	98.3	94.8	2	174.4	0.00	2	28.22	2	1.83	2	30.44	2	0.664	2	0.351	2	961.5	2	2196.4	2	7.6295	2	2314	2	-9.00	9	-9.00	9	-9
6010	2	34.737	34.738	8.810	8.756	26.952	101.7	96.1	2	186.9	0.00	2	30.55	2	2.12	2	40.10	2	-9.000	9	-9.000	9	-9.0	9	2221.0	2	7.5785	2	2319	2	-9.00	9	-9.00	9	-9
6009	2	34.700	34.699	7.153	7.085	27.170	76.6	75.9	2	218.1	0.00	2	35.00	2	2.51	2	66.37	2	-9.000	9	-9.000	9	1325.2	2	2266.6	2	7.5139	2	2345	2	-9.00	9	-9.00	9	-9
6008	2	34.697	34.695	8.120	8.038	27.307	78.9	78.2	2	223.1	0.00	2	36.10	2	2.61	2	81.36	2	-9.000	9	-9.000	9	1356.7	2	2285.7	2	7.5054	2	2358	2	-9.00	9	-9.00	9	-9
6007	2	34.669	34.667	4.775	4.875	27.448	91.4	90.0	2	221.3	0.00	2	38.61	2	2.65	2	99.36	2	-9.000	9	-9.000	9	1359.5	2	2302.5	2	7.5075	2	2377	2	-9.00	9	-9.00	9	-9
6006	2	34.704	34.702	3.898	3.780	27.572	106.8	104.8	2	213.3	0.00	2	36.44	2	2.63	2	105.00	2	-9.000	9	-9.000	9	-9.0	9	2306.3	6	7.5182	2	2382	2	-9.00	9	-9.00	9	-9
8005	2	34.734	34.733	3.149	3.013	27.871	128.5	126.1	2	198.0	0.00	2	35.58	2	2.54	2	107.85	2	-9.000	9	-9.000	9	1265.7	2	2302.3	2	7.5396	2	2392	2	-9.00	9	-9.00	9	-9
6004	2	34.738	34.736	2.541	2.387	27.729	147.8	144.6	2	184.6	0.00	2	34.72	2	2.45	2	112.16	2	-9.000	9	-9.000	9	-9.0	9	2299.0	2	7.5612	2	2390	2	-9.00	9	-9.00	9	-9
6003	2	34.735	34.735	2.115	1.941	27.764	162.5	159.3	2	173.7	0.00	2	33.98	2	2.37	2	115.08	2	-9.000	9	-9.000	9	1155.8	2	2294.2	2	7.5755	2	2394	2	-9.00	9	-9.00	9	-9
6002	2	34.732	34.730	1.854	1.658	27.782	171.9	168.4	2	187.0	0.00	2	33.56	2	2.34	2	117.25	2	-9.000	9	-9.000	9	-9.0	9	2291.5	2	7.5900	2	2394	2	-9.00	9	-9.00	9	-9
6001	2	34.729	34.728	1.671	1.450	27.796	174.9	170.7	2	186.5	0.00	2	33.56	2	2.34	2	122.49	2	-9.000	9	-9.000	9	1116.0	2	2295.6	6	7.5921	2	-9	9	-9.00	9	-9.00	9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

18NR
NOAA Ship Baldrige

STATION 61 DATE 10/15/1995
CAST 2 GMT 08:29
CTD CAST 282

LATITUDE 11° 59.60' S
LONGITUDE 80° 0.35' E

Bottle Number	F** Pressure db	CTD				Bottle				CTD				Bottle				CO2													
		Salinity	F* Temp	Pot. T****	Sigma T	O2	Theta	O2	Theta	F* Sal	F* S(OH)4	F* CFC-11	F* CFC-12	F* at 20°C	F* at 20°C	F* at 20°C	F* at 20°C	pCO2	pCO2	F* at 20°C	F* at 20°C	F* at 20°C	F* at 20°C								
6124	6.8	34.988	35.004	26.072	26.070	23.016	208.8	204.9	2	-2.3	0.00	0.15	0.22	2.71	1.781	1.038	2	269.8	2	1959.2	6	8.0895	2	2281	2	67.30	2	4.53	2	-9	
6123	34.3	34.999	35.006	26.052	26.044	23.026	210.8	207.0	2	-4.3	0.05	0.04	0.22	2.74	-9.000	9	-8.000	9	275.9	2	1957.2	2	8.0834	2	2290	2	66.89	2	4.54	2	-9
6122	88.8	35.245	35.254	19.435	19.419	25.109	149.6	148.1	2	81.0	0.22	9.69	0.76	11.73	1.766	0.971	2	465.4	2	2080.5	2	7.8963	2	2319	2	64.40	2	3.76	2	-9	
6121	127.9	34.810	34.811	15.240	15.220	25.778	66.8	64.8	2	182.1	0.09	24.46	1.73	26.64	0.979	0.539	2	871.4	2	2172.8	2	7.8633	2	2289	2	54.97	2	2.27	2	-9	
6120	200.8	34.967	34.971	13.134	13.106	26.350	85.8	81.8	2	175.5	0.00	24.34	1.72	24.85	0.831	0.451	2	904.4	2	2184.6	2	7.8580	2	2312	2	52.12	2	2.26	2	-9	
6119	297.4	34.908	34.907	11.378	11.340	26.641	109.4	105.2	2	161.9	0.00	24.29	1.71	25.64	0.811	0.423	2	897.4	2	2188.5	2	7.8541	2	2309	2	51.14	2	2.24	2	-9	
6118	400.6	34.817	34.815	9.922	9.875	26.829	132.4	126.5	2	149.4	0.00	25.05	1.75	25.18	0.754	0.389	6	911.1	2	2186.8	2	7.8517	2	2310	2	50.53	2	2.48	2	-9	
6117	489.2	34.776	34.779	9.029	8.974	26.950	108.7	105.0	2	178.5	0.00	29.01	2.04	34.37	0.314	0.176	2	1055.2	2	2213.0	2	7.5967	2	2312	2	49.87	2	2.38	2	-9	
6116	598.2	34.760	34.759	8.173	8.110	27.068	88.3	87.0	2	200.1	0.00	32.12	2.31	48.22	0.106	0.060	2	1165.8	2	2238.3	2	7.5485	2	2326	2	49.18	2	2.30	2	-9	
6115	699.5	34.779	34.778	7.576	7.505	27.173	76.6	76.0	2	215.0	0.00	33.95	2.47	58.91	0.046	0.031	2	1276.7	2	2258.6	2	7.5235	2	2339	2	9.00	9	9.00	9	-9	
6114	797.4	34.765	34.764	6.937	6.860	27.252	72.2	72.0	2	223.4	0.00	35.16	2.57	69.57	0.018	0.008	2	1344.5	2	2275.4	2	7.5061	2	2345	2	9.00	9	9.00	9	-9	
6113	998.5	34.666	34.666	5.582	5.494	27.352	83.4	82.9	2	222.3	0.00	35.88	2.64	88.51	0.004	0.003	2	1363.0	2	2290.8	2	7.5059	2	2366	2	43.15	2	2.30	2	-9	
6112	1193.8	34.673	34.673	4.916	4.815	27.437	88.3	88.2	2	222.0	0.00	36.25	2.66	97.29	0.000	0.001	2	1355.9	2	2299.8	2	7.5058	2	2378	2	9.00	9	9.00	9	-9	
6111	1400.3	34.714	34.713	4.309	4.195	27.537	96.7	96.3	2	218.5	0.00	36.21	2.66	101.72	-0.001	-0.001	2	1353.2	2	2308.4	2	7.5113	2	2378	2	9.00	9	9.00	9	-9	
6110	1599.0	34.732	34.731	3.761	3.635	27.610	109.4	109.0	2	210.1	0.00	35.79	2.62	104.61	-0.001	0.000	2	1317.4	2	2307.5	2	7.5207	2	2381	2	43.06	2	2.30	2	-9	
6109	2001.8	34.747	34.746	2.753	2.605	27.718	136.3	136.5	2	190.9	0.00	34.66	2.50	112.07	-0.001	-0.001	2	1233.1	2	2301.3	2	7.5515	2	2394	2	9.00	9	9.00	9	-9	
6108	2400.9	34.738	34.736	2.142	1.968	27.783	158.0	157.4	2	175.3	0.00	33.62	2.39	115.61	-0.001	-0.001	2	1147.5	2	2295.6	2	7.5752	2	2392	2	9.00	9	9.00	9	-9	
6107	2800.3	34.733	34.732	1.828	1.623	27.786	166.8	167.8	2	167.9	0.00	33.25	2.35	119.18	-0.001	-0.001	2	1108.1	2	2295.9	2	7.5873	2	2397	2	42.99	2	2.30	2	-9	
6106	3098.9	34.729	34.728	1.665	1.435	27.797	168.7	170.4	2	186.9	0.00	33.29	2.35	123.56	-0.001	0.003	2	1103.5	2	2298.3	2	7.5929	2	2402	2	9.00	9	9.00	9	-9	
6105	3599.9	34.723	34.722	1.421	1.146	27.812	176.5	178.7	2	181.2	0.00	33.01	2.33	128.57	-0.001	-0.002	2	1073.1	2	2296.7	2	7.6007	2	2407	2	9.00	9	9.00	9	-9	
6104	4097.5	34.720	34.719	1.352	1.026	27.818	178.7	181.8	2	159.3	0.00	33.04	2.32	129.55	-0.001	0.004	2	1062.4	2	2298.1	2	7.6060	2	2407	2	42.50	2	2.30	2	-9	
6103	4601.0	34.718	34.719	1.391	1.007	27.819	178.5	181.7	2	159.4	0.00	33.07	2.32	130.18	-0.001	-0.001	2	1062.4	2	2300.0	2	7.6069	2	2410	2	9.00	9	9.00	9	-9	
8102	5165.4	34.719	34.718	1.444	0.991	27.819	180.0	182.4	2	158.8	0.00	32.97	2.30	130.22	0.000	0.003	2	1076.5	2	2298.8	2	7.6068	2	2408	2	9.00	9	9.00	9	-9	
8101	5259.2	34.719	34.718	1.456	0.991	27.820	180.6	180.6	2	9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR
NOAA Ship Baldridge

STATION 62 DATE 10/15/1995
CAST 1 GMT 13:10
CTD CAST 283

LATITUDE 11° 29.90' S
LONGITUDE 79° 59.75' E

Bottle Number	F** Pressure db	Salinity	Sigma T****	Temp**** °C	F* Temp**** °C	Salinity	O2 Hmol/kg	O2 Hmol/kg	Sigma Theta	IC02																											
										CID	Bottle	O2	Hmol/kg	F* AOU	NO2	F*	NO3	F*	PO4	F*	Si(OH)4	F*	CFC-11	F*	CFC-12	F*	DIC	F*	TA	F*	TOC	F*	Chl-a	F*			
6216	2	7.4	34.965	34.970	2	26.464	26.462	22.868	202.7	203.9	2	-2.5	0.00	2	0.15	2	0.18	2	2.35	2	2.042	3	1.038	2	262.5	2	1949.6	6	6.0935	2	2287	2	-9.00	9	-9.00	9	-9
6215	2	48.0	34.966	34.973	2	26.364	26.353	22.904	205.2	202.8	2	-1.1	0.00	2	0.13	2	0.21	2	2.30	2	1.748	2	1.008	2	-9.0	9	1951.7	2	6.0904	2	2287	2	-9.00	9	-9.00	9	-9
6214	2	100.9	34.886	34.889	2	17.229	17.212	25.379	104.5	101.3	2	136.0	0.22	2	17.77	2	1.27	2	20.71	2	1.364	2	0.749	2	633.8	2	2125.0	2	7.7807	2	2306	2	-9.00	9	-9.00	9	-9
6213	2	176.7	34.835	34.836	2	12.992	12.968	26.273	66.2	66.2	2	192.1	0.00	2	26.48	2	1.87	2	29.95	2	-9.000	9	-9.000	9	995.1	2	2195.2	2	7.6189	2	-9	9	-9.00	9	-9.00	9	-9
6212	2	203.6	34.860	34.857	2	12.417	12.390	26.403	65.9	63.2	2	198.2	0.00	2	27.42	2	1.94	2	30.42	2	0.528	2	0.294	2	1043.6	2	2204.1	2	7.5984	2	2304	2	-9.00	9	-9.00	9	-9
6211	2	296.9	34.927	34.928	2	11.261	11.224	26.679	92.5	86.9	2	160.9	0.00	2	26.80	2	1.83	2	25.81	2	0.570	2	0.310	2	1000.7	2	2200.2	2	7.6161	2	2311	2	-9.00	9	-9.00	9	-9
6210	2	501.7	34.797	34.798	2	9.072	9.016	26.958	110.8	107.6	2	173.6	0.00	2	29.19	2	2.03	2	33.66	2	0.350	2	0.194	2	1042.9	2	2210.2	2	7.6003	2	2312	2	-9.00	9	-9.00	9	-9
6209	2	597.6	34.798	34.798	2	8.392	8.328	27.066	88.4	86.4	2	199.2	0.00	2	31.81	2	2.28	2	45.33	2	-9.000	9	-9.000	9	-9.0	9	2237.5	2	7.5525	2	2323	2	-9.00	9	-9.00	9	-9
6208	2	748.0	34.791	34.791	2	7.425	7.350	27.205	73.0	72.0	2	220.0	0.00	2	34.34	2	2.51	2	62.37	2	0.038	2	0.021	2	1309.8	2	2286.9	2	7.5141	2	2342	2	-9.00	9	-9.00	9	-9
6207	2	897.6	34.746	34.745	2	6.460	6.376	27.303	74.4	74.1	2	224.7	0.00	2	35.71	2	2.80	2	76.47	2	-9.000	9	-9.000	9	-9.0	9	2284.1	2	7.5035	2	2359	2	-9.00	9	-9.00	9	-9
6206	2	999.9	34.750	34.750	2	6.078	5.988	27.357	75.7	75.0	2	226.5	0.00	2	36.36	2	2.85	2	81.82	2	-9.000	9	-9.000	9	-9.0	9	2291.4	2	7.5016	2	2360	2	-9.00	9	-9.00	9	-9
6205	2	1250.5	34.722	34.723	2	4.907	4.801	27.479	86.0	87.0	2	223.2	0.00	2	36.15	2	2.86	2	95.78	2	-9.000	9	-9.000	9	1372.9	2	2302.0	2	7.5046	2	2377	2	-9.00	9	-9.00	9	-9
6204	2	1501.2	34.740	34.740	2	4.151	4.030	27.576	101.7	100.3	2	215.7	0.00	2	35.78	2	2.63	2	101.91	2	-9.000	9	-9.000	9	-9.0	9	2304.4	2	7.5160	2	2380	2	-9.00	9	-9.00	9	-9
6203	2	2003.1	34.744	34.744	2	2.732	2.584	27.718	139.2	137.2	2	190.4	0.00	2	34.55	2	2.48	2	111.73	2	-9.000	9	-9.000	9	1215.1	2	2301.4	2	7.5541	2	2383	2	-9.00	9	-9.00	9	-9
6202	2	2493.2	34.738	34.738	2	2.078	1.897	27.770	161.1	157.9	2	175.4	0.00	2	34.27	2	2.39	2	117.47	2	-9.000	9	-9.000	9	-9.0	9	2286.5	2	7.5704	2	2384	2	-9.00	9	-9.00	9	-9
6201	2	3006.2	34.730	34.730	2	1.740	1.517	27.792	172.6	168.7	2	167.9	0.00	2	33.27	2	2.34	2	121.65	2	-9.000	9	-9.000	9	1127.0	2	2287.1	6	7.5688	2	2403	2	-9.00	9	-9.00	9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 63 DATE 10/15/1995
 CAST 1 GMT 20:03
 CTD CAST 284

LATITUDE 10° 59.46' S
 LONGITUDE 79° 59.52' E

Bottle Number	CTD				Bottle				fCO2												Chl-a µg/l											
	Pressure db	Salinity	Temp °C	Pot. °C	Sigma Theta	O2 µmol/kg	O2 µmol/kg	AOU	NO2 µmol/kg	NO3 µmol/kg	PO4 µmol/kg	Si(OH)4 µmol/kg	CFC-11 pmol/kg	CFC-12 pmol/kg	F* µmol/kg	DIC µmol/kg	pH	TA µmol/kg	F* µmol/kg	TOC µmol/kg		F* µmol/kg	TON µmol/kg									
6324	2	6.4	34.825	34.831	2	26.708	28.708	22.886	202.6	2	-1.9	0.00	0.00	0.00	2	1.731	2	1.005	2	257.6	2	1937.9	6	8.1029	2	2286	2	-9.00	9	-9.00	9	-9
6323	2	40.5	34.825	34.834	2	26.704	26.895	22.892	206.1	2	-1.6	0.00	0.00	0.00	2	1.777	2	1.035	2	257.2	2	1938.2	2	8.1016	2	2284	2	-9.00	9	-9.00	9	-9
6322	2	79.7	35.441	35.441	2	20.820	20.805	24.884	180.2	2	46.2	0.06	2	4.52	2	2.849	4	1.132	4	375.2	2	2045.9	2	7.9784	2	2327	2	-9.00	9	-9.00	9	-9
6321	2	120.0	34.784	34.778	2	15.546	15.527	25.883	81.3	-9.0	-9.0	0.00	2	23.02	2	1.073	2	0.595	2	798.4	2	2156.4	2	7.8987	2	2301	2	-9.00	9	-9.00	9	-9
8320	2	161.1	34.866	34.874	2	13.873	13.850	26.122	91.8	89.0	164.6	0.00	2	22.98	2	2.766	2	0.968	2	821.2	2	2170.6	2	7.8889	2	-9	9	-9.00	9	-9.00	9	-9
8319	2	199.3	34.948	34.948	2	13.014	12.987	26.356	83.4	81.0	177.0	0.00	2	24.89	2	1.73	2	0.435	8	909.8	2	2188.0	2	7.6487	2	2307	2	-9.00	9	-9.00	9	-9
8318	2	300.9	34.942	34.942	2	11.322	11.284	26.679	107.9	101.7	185.7	0.00	2	24.98	2	1.72	2	0.398	2	921.7	2	2191.1	2	7.6435	2	2310	2	-9.00	9	-9.00	9	-9
8317	2	400.2	34.828	34.828	2	9.885	9.839	26.846	126.8	121.3	154.8	0.00	2	25.81	2	1.77	2	0.360	2	927.9	2	2188.0	2	7.6430	2	2307	2	-9.00	9	-9.00	9	-9
8316	2	499.2	34.774	34.773	2	8.816	8.762	26.979	104.8	101.3	181.6	0.00	2	29.82	2	2.08	2	0.144	2	1083.3	2	2218.9	2	7.5853	2	2316	2	-9.00	9	-9.00	9	-9
8315	2	599.5	34.782	34.782	2	8.147	8.084	27.090	85.6	84.8	202.4	0.00	2	32.55	2	2.31	2	0.059	2	1219.8	2	2242.0	2	7.5453	2	2329	2	-9.00	9	-9.00	9	-9
8314	2	800.8	34.751	34.746	2	8.850	8.773	27.250	74.4	74.2	221.8	0.00	2	35.41	2	2.55	2	0.014	2	1363.6	2	2272.6	2	7.5095	2	2349	2	-9.00	9	-9.00	9	-9
8313	2	998.6	34.755	34.755	2	5.975	5.884	27.374	75.6	75.3	226.9	0.00	2	36.18	2	2.83	2	0.008	2	1377.5	2	2290.0	2	7.5008	2	2362	2	-9.00	9	-9.00	9	-9
8312	2	1298.3	34.727	34.727	2	4.700	4.592	27.505	89.7	89.8	222.0	0.00	2	36.78	2	2.85	2	0.002	2	1371.3	2	2304.7	2	7.5064	2	2376	2	-9.00	9	-9.00	9	-9
8311	2	1701.4	34.757	34.756	2	3.470	3.338	27.659	115.2	114.9	206.5	0.00	2	36.36	2	2.58	2	0.000	2	1287.3	2	2305.6	2	7.5297	2	2391	2	-9.00	9	-9.00	9	-9
8310	2	2099.7	34.750	34.748	2	2.604	2.449	27.733	139.5	139.4	189.3	0.00	2	34.96	2	2.48	2	0.002	2	1199.7	2	2302.0	2	7.5566	2	2397	2	-9.00	9	-9.00	9	-9
8309	2	2500.6	34.740	34.739	2	2.077	1.895	27.771	156.3	157.1	176.2	0.00	2	33.90	2	2.38	2	-0.001	2	1139.3	2	2297.0	2	7.5764	2	2401	2	-9.00	9	-9.00	9	-9
8308	2	2899.2	34.733	34.733	2	1.832	1.617	27.787	184.3	184.3	168.6	0.00	2	33.54	2	2.34	2	-0.001	2	1089.5	2	2302.1	2	7.5833	2	2405	2	-9.00	9	-9.00	9	-9
8307	2	3296.4	34.728	34.726	2	1.597	1.349	27.801	167.8	170.5	187.8	0.00	2	33.58	2	2.34	2	-0.001	2	1098.5	2	2300.4	2	7.5894	2	2410	2	-9.00	9	-9.00	9	-9
8306	2	3696.7	34.723	34.722	2	1.440	1.155	27.812	173.3	178.5	163.3	0.00	2	33.45	2	2.33	2	-0.001	2	1059.2	2	2298.3	2	7.6093	2	2413	2	-9.00	9	-9.00	9	-9
8305	2	4099.1	34.719	34.719	2	1.356	1.030	27.818	177.9	181.6	159.3	0.00	2	33.28	2	2.30	2	-0.003	2	1059.2	2	2298.3	2	7.6093	2	2407	2	-9.00	9	-9.00	9	-9
8304	2	4498.3	34.719	34.718	2	1.371	1.000	27.819	178.5	181.9	159.3	0.00	2	33.14	2	2.30	2	-0.003	2	1053.8	2	2298.9	2	7.6096	2	2413	2	-9.00	9	-9.00	9	-9
8303	2	4898.1	34.718	34.718	2	1.403	0.984	27.820	179.1	182.6	156.7	0.00	2	32.97	2	2.30	2	0.000	2	1068.7	2	2298.8	2	7.6082	2	2411	2	-9.00	9	-9.00	9	-9
8302	2	5313.2	34.718	34.717	2	1.450	0.979	27.819	180.4	182.8	156.5	0.00	2	32.99	2	2.30	2	0.000	2	-9.0	9	2296.3	2	7.6082	2	2411	2	-9.00	9	-9.00	9	-9
8301	2	5411.9	34.718	34.718	2	1.463	0.979	27.820	180.9	183.1	156.2	0.00	2	33.00	2	2.30	2	0.000	2	1069.8	2	2296.0	6	7.8056	2	-9	9	-9.00	9	-9.00	9	-9

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

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

*** PSS-78 scale

**** ITS-90 scale

I8NR
NOAA Ship Baldrige

STATION 64 DATE 10/15/1995
 CAST 1 GMT 00:35
 CTD CAST 285

LATITUDE 10° 29.48' S
 LONGITUDE 80° 0.22' E

Bottle Number	CTD		Bottle		Sigma Theta	O2	O2	fCO2	PO4	NO3	NO2	AOU	NO2	F* CFC-11	F* CFC-12	F* at 20 °C	DIC	pH	TA	F* TOC	F* TON	Chl-a															
	Pressure db	Salinity	Temp °C	Pot. Temp °C																			Salinity	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C
6416	2	7.3	34.767	34.773	2	27.205	27.203	22.484	199.8	200.8	-1.6	0.00	0.00	2	0.03	2	0.15	2	1.97	2	1.671	2	0.967	2	256.9	2	1932.9	6	8.1047	2	2275	2	-9.00	9	-9.00	9	-9
6415	2	40.4	34.783	34.773	2	27.202	27.193	22.487	203.0	200.4	-1.2	0.00	0.00	2	0.08	2	0.17	2	1.94	2	1.681	2	0.986	2	254.2	2	1933.3	2	8.1039	2	2276	2	-9.00	9	-9.00	9	-9
6414	2	81.0	34.974	34.945	2	19.722	19.707	24.798	123.9	118.2	110.2	0.14	2	13.67	2	1.00	2	14.42	2	1.573	2	0.867	2	529.5	2	2087.6	2	7.8534	2	-9	9	-9.00	9	-9.00	9	-9	
6413	2	119.7	34.888	34.871	2	16.383	16.384	25.566	101.7	98.7	142.6	0.01	2	18.79	2	1.36	2	22.80	2	0.900	2	-9.000	2	877.9	2	2135.8	2	7.7612	2	2300	2	-9.00	9	-9.00	9	-9	
6412	2	199.2	34.892	34.899	2	13.086	13.088	26.301	71.7	69.3	188.4	0.00	2	25.61	2	1.81	2	27.70	2	0.897	2	0.378	2	954.5	2	2191.4	2	7.6286	2	2309	2	-9.00	9	-9.00	9	-9	
6411	2	300.2	34.824	34.823	2	10.847	10.810	26.872	99.8	95.7	174.6	0.00	2	25.92	2	1.84	2	31.28	2	0.651	2	0.356	2	-9.0	2	2197.8	2	7.8240	2	2311	2	-9.00	9	-9.00	9	-9	
6410	2	500.4	34.827	34.828	2	9.110	9.054	28.975	96.7	94.5	186.4	0.00	2	29.53	2	2.08	2	36.52	2	0.263	2	0.156	2	1089.2	2	2219.0	2	7.5820	2	2323	2	-9.00	9	-9.00	9	-9	
6409	2	701.2	34.724	34.722	2	7.062	6.994	27.201	76.4	75.9	218.7	0.00	2	34.42	2	2.50	2	66.94	2	-9.000	2	-9.000	2	9.0	2	2268.2	2	7.5104	2	2343	2	-9.00	9	-9.00	9	-9	
6408	2	899.5	34.753	34.753	2	6.312	6.228	27.328	74.1	73.8	228.0	0.00	2	35.40	2	2.60	2	78.49	2	0.005	2	0.002	2	1373.8	2	2285.0	2	7.5000	2	2355	2	-9.00	9	-9.00	9	-9	
6407	2	1201.4	34.724	-9.000	9	4.951	4.849	27.474	87.7	-9.0	9	-9.0	-9.00	9	-9.00	9	-9.00	9	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.000	9	-9	9	-9.00	9	-9.00	9	-9		
6406	2	1499.2	34.759	34.760	3	4.001	3.881	27.608	103.8	102.8	214.5	0.00	2	35.68	2	2.62	2	102.85	2	-9.000	2	-9.000	2	9.0	2	2304.6	2	7.5165	2	2383	2	-9.00	9	-9.00	9	-9	
6405	2	1797.0	34.754	34.755	3	3.177	3.041	27.686	123.8	121.8	202.0	0.00	2	35.07	2	2.54	2	109.91	2	-9.000	2	-9.000	2	1266.9	2	2308.9	2	7.5353	2	2391	2	-9.00	9	-9.00	9	-9	
6404	2	2097.0	34.748	34.748	2	2.577	2.423	27.735	143.4	141.4	187.5	0.00	2	34.38	2	2.46	2	114.48	2	-9.000	2	-9.000	2	9.0	2	2301.7	2	7.5597	2	2395	2	-9.00	9	-9.00	9	-9	
6403	2	2398.3	34.740	34.740	2	2.170	1.995	27.764	156.0	153.3	179.2	0.00	2	33.97	2	2.40	2	117.86	2	-9.000	2	-9.000	2	9.0	2	2301.3	2	7.5715	2	2401	2	-9.00	9	-9.00	9	-9	
6402	2	2700.6	34.734	34.735	2	1.937	1.739	27.780	185.9	183.1	171.6	0.00	2	33.83	2	2.35	2	118.80	2	-9.000	2	-9.000	2	9.0	2	2295.3	2	7.5849	2	2399	2	-9.00	9	-9.00	9	-9	
6401	2	3008.4	34.730	34.729	2	1.758	1.534	27.790	172.4	188.6	167.9	0.00	2	33.40	2	2.34	2	121.48	2	-9.000	2	-9.000	2	1119.3	2	2296.4	6	7.5872	2	2404	2	-9.00	9	-9.00	9	-9	

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

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

*** PSS-78 scale

**** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 65 DATE 10/16/1995
 CAST 2 GMT 08:16
 CTD CAST 286

LATITUDE 09° 59.46' S
 LONGITUDE 80° 0.88' E

Bottle Number	CTD										Bottle										fCO ₂												
	Pressure db	Salinity	Temp °C	Pot. Temp °C	Sigma T	O ₂ μmol/kg	O ₂ μmol/kg	AOU	NO ₂ μmol/kg	NO ₃ μmol/kg	F ⁻ μmol/kg	PO ₄ μmol/kg	Si(OH) ₄ μmol/kg	CFC-11 pmol/kg	CFC-12 pmol/kg	F ⁻ at 20°C μmol/kg	DIC μmol/kg	pH	F ⁻ μmol/kg	TA μmol/kg	F ⁻ μmol/kg	TOC μmol/kg	F ⁻ μmol/kg	TON μmol/kg	chl-a μg/l	Phase μg/l							
6524	2	34.638	27.581	27.579	22.265	199.1	215.9	3	-17.8	0.00	2	0.17	2	1.82	2	1.044	2	0.958	2	254.5	2	1924.1	6	8.1084	2	2270	2	70.89	2	4.73	2	-9	-9
6523	2	34.688	27.504	27.494	22.317	202.9	200.8	2	-2.4	0.00	2	0.17	2	1.77	2	1.853	2	0.967	2	252.9	2	1925.5	2	8.1072	2	2269	2	70.94	2	4.74	2	-9	-9
6522	2	35.029	19.433	19.416	24.975	126.8	130.6	3	96.8	0.16	2	11.71	2	13.25	2	1.948	2	0.913	2	517.9	4	2083.3	2	7.8779	2	-9	9	83.54	2	3.98	2	-9	-9
6521	2	34.772	15.007	14.967	25.601	80.0	77.8	2	170.5	0.04	2	23.08	2	1.67	2	27.57	2	1.002	2	846.6	2	2162.9	2	7.8630	2	2298	2	54.25	2	2.91	2	-9	-9
6520	2	34.839	13.540	13.540	28.167	93.5	89.1	2	166.3	0.00	2	23.17	2	1.68	2	28.74	2	0.922	2	863.4	2	2173.5	2	7.8603	2	2308	2	53.53	2	2.31	2	-9	-9
6519	2	34.800	11.744	11.712	28.490	86.9	83.4	2	181.8	0.00	2	26.32	2	1.88	2	32.82	2	0.946	2	863.4	2	2173.5	2	7.8603	2	2308	2	53.53	2	2.31	2	-9	-9
6518	2	34.838	10.327	10.285	28.778	133.5	127.6	3	145.8	0.00	2	24.11	2	1.89	2	24.11	2	0.885	2	867.5	2	2179.3	2	7.8637	2	2312	2	51.21	2	2.05	2	-9	-9
6517	2	34.765	9.122	9.073	28.923	110.0	106.2	2	174.7	0.00	2	29.23	2	2.04	2	34.35	2	0.353	2	1034.9	2	2209.7	2	7.5992	2	2312	2	47.80	2	1.09	2	-9	-9
6516	2	34.739	8.043	7.986	27.073	84.6	83.3	2	204.6	0.00	2	32.75	2	2.36	2	50.57	2	0.085	2	1229.6	2	2242.3	2	7.5404	2	2329	2	44.70	2	-9.00	2	-9	-9
6515	2	34.738	7.468	7.403	27.158	76.3	75.9	2	215.9	0.00	2	34.82	2	2.48	2	60.71	2	0.039	2	1292.8	2	2281.3	2	7.5198	2	2338	2	-9.00	2	-9.00	2	-9	-9
6514	2	34.700	6.890	6.816	27.238	74.2	74.1	2	221.6	0.00	2	34.95	2	2.57	2	89.82	2	0.018	2	1339.2	2	2272.6	2	7.5073	2	2347	2	-9.00	2	-9.00	2	-9	-9
6513	2	34.700	6.223	6.145	27.297	77.5	77.5	-9.0	9	-9.0	9	-9.00	9	-9.00	9	-9.00	9	-9.00	9	-9.00	9	-9.00	9	-9.00	9	-9	9	-9.00	9	-9.00	9	-9	-9
6512	2	34.738	5.750	5.660	27.389	77.6	76.0	2	225.9	0.00	2	35.95	2	2.85	2	85.70	2	0.003	2	1376.1	2	2291.6	2	7.5007	2	2362	2	-9.00	2	-9.00	2	-9	-9
6511	2	34.745	5.057	4.954	27.479	84.4	84.9	2	224.1	0.00	2	35.77	2	2.88	2	93.90	2	-0.001	2	1393.0	2	2302.2	2	7.5041	2	2371	2	-9.00	2	-9.00	2	-9	-9
6510	2	34.752	3.844	3.726	27.618	107.8	107.1	2	211.3	0.00	2	35.85	2	2.63	2	103.94	2	-0.001	2	1300.1	2	2303.2	2	7.5215	2	2385	2	41.53	2	-9.00	2	-9	-9
8509	2	34.751	3.061	2.928	27.693	127.1	127.0	2	197.7	0.00	2	35.33	2	2.57	2	108.92	2	-0.001	2	1234.0	2	2303.7	2	7.5421	2	2393	2	-9.00	2	-9.00	2	-9	-9
8508	2	34.744	2.371	2.211	27.750	146.6	146.8	2	183.8	0.00	2	34.41	2	2.47	2	118.07	2	-0.000	2	1178.5	2	2302.3	2	7.5629	2	2394	2	-9.00	2	-9.00	2	-9	-9
6507	2	34.736	1.985	1.776	27.778	158.9	160.0	2	174.4	0.00	2	33.77	2	2.38	2	118.78	2	0.000	2	1150.2	2	2300.1	2	7.5792	2	2404	2	41.22	2	-9.00	2	-9	-9
6506	2	34.730	1.740	1.517	27.792	164.3	166.7	2	169.9	0.00	2	33.56	2	2.36	2	123.02	2	0.000	2	1113.5	2	2298.5	2	7.5878	2	2405	2	-9.00	2	-9.00	2	-9	-9
6505	2	34.725	1.538	1.279	27.805	167.9	171.1	2	167.6	0.00	2	33.58	2	2.35	2	127.90	2	-0.000	2	9	9	2301.7	2	7.5943	2	2408	2	-9.00	2	-9.00	2	-9	-9
6504	2	34.719	1.367	1.063	27.815	176.9	180.3	2	160.3	0.00	2	33.31	2	2.32	2	128.80	2	-0.000	2	9	9	1079.6	2	7.6054	2	2409	2	41.50	2	-9.00	2	-9	-9
6503	2	34.718	1.359	0.989	27.819	177.7	182.0	2	159.2	0.00	2	33.21	2	2.31	2	129.73	2	-0.001	2	9	9	2298.1	2	7.6062	2	2408	2	-9.00	2	-9.00	2	-9	-9
6502	2	34.717	1.397	0.978	27.819	179.4	183.1	2	158.2	0.00	2	33.06	2	2.31	2	129.37	2	0.000	2	1070.4	2	2298.7	2	7.6057	2	2405	2	-9.00	2	-9.00	2	-9	-9
6501	2	34.716	1.455	0.968	27.820	181.3	183.6	2	157.8	0.00	2	33.00	2	2.30	2	128.95	2	0.001	2	1081.8	2	2295.4	2	7.6046	2	2408	2	-9.00	2	-9.00	2	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR
NOAA Ship Baldrige

STATION 66 DATE 10/16/1995
 CAST 2 GMT 13:02
 CTD CAST 287

LATITUDE 09° 29.90' S
 LONGITUDE 80° 0.29' E

Bottle Number	CTD		Bottle		Sigma Theta	O2	O2 Hmol/kg	F* AOU	NO2 Hmol/kg	NO3 Hmol/kg	PO4 Hmol/kg	Si(OH)4 Hmol/kg	CFC-11 pmol/kg	CFC-12 pmol/kg	F* at 20 °C H ₂ O	DIC Hmol/kg	pH	F* TA Hmol/kg	TOC Hmol/l	F* TON Hmol/l	Chl-a Hg/l	Phaeo Hg/l																					
	db	Pressure	Salinity	Temp																																							
6624	2	7.2	34.380	34.384	2	27.886	27.884	21.971	195.7	200.0	2	100.4	0.00	2	0.03	2	0.14	2	2.17	2	1.664	2	0.974	2	245.8	2	1908.2	6	8.1126	2	2249	2	2249	2	-9.00	9	-9.00	9	-9				
6623	2	47.6	34.379	34.387	2	27.877	27.866	21.980	200.1	200.0	2	103.3	0.00	2	0.10	2	0.15	2	2.10	2	1.652	2	0.966	2	242.7	2	1908.1	2	8.1140	2	2251	2	2251	2	-9.00	9	-9.00	9	-9				
6622	2	98.7	34.976	34.785	2	18.505	18.488	24.987	115.2	118.9	2	190.3	0.30	2	14.18	2	1.05	2	18.57	2	-9.000	9	-9.000	9	543.2	2	2101.2	2	7.8361	2	2303	2	2303	2	-9.00	9	-9.00	9	-9				
6621	2	150.0	34.784	35.003	2	14.714	14.692	26.042	63.7	62.8	2	253.1	0.00	2	24.80	2	1.77	2	28.03	2	0.867	2	0.468	2	900.8	2	2176.1	2	7.6476	2	2296	2	2296	2	-9.00	9	-9.00	9	-9				
6620	2	221.1	34.918	34.919	2	12.768	12.738	26.383	71.5	69.7	2	253.5	0.00	2	25.79	2	1.84	2	27.40	2	0.640	2	0.350	2	963.6	2	2197.5	2	7.6203	2	2305	2	2305	2	-9.00	9	-9.00	9	-9				
6619	2	351.9	34.858	34.859	2	10.614	10.571	26.743	121.9	117.5	2	211.8	0.00	2	24.13	2	1.73	2	25.40	2	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.000	9	-9.000	9	-9.00	9	-9.00	9	-9		
6618	2	501.7	34.743	34.744	2	8.696	8.642	26.975	105.4	102.1	2	231.1	0.00	2	29.42	2	2.09	2	36.74	2	0.250	2	0.141	2	1076.5	2	2219.5	2	7.5837	2	2317	2	2317	2	-9.00	9	-9.00	9	-9				
6617	2	699.2	34.784	34.784	2	7.442	7.372	27.196	75.0	74.3	2	260.8	0.00	2	33.82	2	2.49	2	61.62	2	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.000	9	-9.000	9	-9.00	9	-9.00	9	-9		
6616	2	898.0	34.750	34.749	2	6.259	6.176	27.332	74.4	74.5	2	260.8	0.00	2	35.31	2	2.62	2	79.55	2	0.006	2	0.004	2	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.000	9	-9.000	9	-9.00	9	-9.00	9	-9		
6615	2	1001.3	34.752	34.752	2	5.852	5.762	27.387	76.9	76.9	2	258.4	0.00	2	35.77	2	2.66	2	85.26	2	0.000	2	0.001	2	1384.0	2	2292.5	2	7.5016	2	2361	2	2361	2	-9.00	9	-9.00	9	-9				
6614	2	1201.8	34.740	34.737	2	4.924	4.822	27.487	86.6	86.7	2	248.8	0.00	2	36.51	2	2.66	2	96.22	2	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.000	9	-9.000	9	-9.00	9	-9.00	9	-9		
6613	2	1500.7	34.730	34.769	2	3.980	3.860	27.617	103.5	102.6	2	233.0	0.00	2	35.83	2	2.68	2	103.59	2	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.000	9	-9.000	9	-9.00	9	-9.00	9	-9		
6612	2	1798.8	34.752	34.751	2	3.085	2.950	27.691	127.3	125.7	2	210.1	0.00	2	34.68	2	2.56	2	110.20	2	-9.000	9	-9.000	9	1250.4	2	2304.6	2	7.5403	2	2391	2	2391	2	-9.00	9	-9.00	9	-9.00	9	-9.00	9	-9
6611	2	2201.2	34.744	34.744	2	2.359	2.199	27.751	145.3	145.3	2	190.8	0.00	2	33.88	2	2.49	2	117.53	2	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.000	9	-9.000	9	-9.00	9	-9.00	9	-9		
6610	2	2601.3	34.735	34.736	2	1.943	1.754	27.779	161.7	159.8	2	176.6	0.00	2	33.30	2	2.38	2	121.27	2	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.000	9	-9.000	9	-9.00	9	-9.00	9	-9		
6609	2	3004.0	34.730	34.731	2	1.718	1.496	27.795	169.0	165.5	2	171.3	0.00	2	33.33	2	2.37	2	125.22	2	-9.000	9	-9.000	9	1117.1	2	2301.6	6	7.5677	2	2403	2	2403	2	-9.00	9	-9.00	9	-9.00	9	-9.00	9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR
NOAA Ship Baldridge

STATION 67 DATE 10/16/1995
 CAST 1 GMT 19:48
 CTD CAST 288

LATITUDE 09° 0.01' S
 LONGITUDE 80° 0.56' E

Bottle Number	CTD		Bottle		Sigma T		Temp		Pot		Salinity		S _i (OH) ₄		CFC-11		CFC-12		F _{am}		DIC		pH		F _{TA}		F _{TOC}		F _{TON}		F _{chl-a}						
	db	°C	°C	°C	Theta	O ₂	O ₂	F _{AOU}	F _{NO2}	F _{NO3}	F _{PO4}	F _{Si(OH)4}	F _{pmol/kg}	F _{pmol/kg}	F _{pmol/kg}	F _{pmol/kg}	F _{pmol/kg}	F _{pmol/kg}	F _{pmol/kg}	F _{pmol/kg}	F _{pmol/kg}	F _{pmol/kg}	F _{pmol/kg}	F _{pmol/kg}	F _{pmol/kg}	F _{pmol/kg}	F _{pmol/kg}	F _{pmol/kg}	F _{pmol/kg}	F _{pmol/kg}	F _{pmol/kg}	F _{pmol/kg}					
6724	2	7.4	34.253	34.260	2	27.981	27.979	21.847	197.6	199.6	2	-2.2	0.00	2	0.11	2	2.03	2	1.646	2	1.004	2	239.6	2	1899.9	6	8.1179	2	-9	9	-9.00	9	-8.00	9	-9		
6723	2	41.0	34.251	34.260	2	27.981	27.981	21.847	202.6	199.6	2	-2.3	0.00	2	0.13	2	2.03	2	1.640	2	0.968	2	240.6	2	1898.8	2	8.1170	2	2245	2	-9.00	9	-9.00	9	-9		
6722	2	79.0	35.056	35.067	2	25.189	25.172	23.341	189.1	184.9	2	20.7	0.08	2	2.40	2	4.55	2	1.704	2	0.966	2	318.9	2	1992.5	2	8.0306	2	2298	2	-9.00	9	-9.00	9	-9		
6721	2	119.2	35.056	35.059	2	17.170	17.150	25.525	105.4	101.9	2	135.4	0.46	2	17.44	2	18.83	2	1.385	2	0.753	2	644.4	2	2130.9	2	7.7787	2	2311	2	-9.00	9	-9.00	9	-9		
6720	2	161.6	34.920	34.929	2	14.342	14.318	26.066	68.4	67.0	2	184.1	0.00	2	24.64	2	25.30	2	0.879	2	0.472	2	904.8	2	2185.1	2	7.6510	2	2303	2	-9.00	9	-9.00	9	-9		
6719	2	200.3	34.879	34.879	2	12.946	12.919	26.316	73.4	72.2	2	186.3	0.00	2	25.94	2	28.53	2	0.699	2	0.382	2	952.9	2	2195.6	2	7.6301	2	-9	9	-9.00	9	-9.00	9	-9		
6718	2	301.1	34.938	34.938	2	11.400	11.362	26.662	93.5	90.6	2	176.4	0.00	2	26.35	2	24.65	2	0.627	2	0.332	2	987.7	2	2194.3	2	7.6260	2	2312	2	-9	9	-9.00	9	-9.00	9	-9
6717	2	400.6	34.862	34.862	2	10.118	10.071	26.832	106.8	105.2	2	169.4	0.00	2	27.26	2	26.12	2	0.508	2	0.271	2	982.2	2	2200.4	2	7.6200	2	2307	2	-9.00	9	-9.00	9	-9.00	9	-9
6716	2	499.4	34.803	34.803	2	9.148	9.092	26.949	102.6	99.9	2	180.8	0.00	2	29.31	2	34.28	2	0.282	2	0.158	2	1073.7	2	2216.1	2	7.5888	2	2318	2	-9.00	9	-9.00	9	-9.00	9	-9
6715	2	598.1	34.790	34.789	2	8.313	8.250	27.071	85.3	85.0	2	201.1	0.00	2	32.14	2	46.59	2	0.110	2	0.062	2	1216.7	2	2241.6	2	7.5494	2	2318	2	-9.00	9	-9.00	9	-9.00	9	-9
6714	2	800.0	34.763	34.763	2	6.869	6.792	27.261	72.0	72.1	2	223.7	0.00	2	35.29	2	70.36	2	0.012	2	0.007	2	1350.4	2	2278.8	2	7.5076	2	2349	2	-9	9	-9.00	9	-9.00	9	-9
6713	2	998.4	34.724	34.723	2	5.700	5.611	27.383	77.8	78.5	2	225.7	0.00	2	36.19	2	87.45	2	0.001	2	0.000	2	1370.8	2	2285.0	2	7.5027	2	-9	9	-9.00	9	-9.00	9	-9.00	9	-9
6712	2	1198.5	34.730	34.730	2	4.925	4.824	27.482	84.7	85.3	2	224.7	0.00	2	36.50	2	96.92	2	0.001	2	0.000	2	1388.3	2	2305.1	2	7.5029	2	2374	2	-9.00	9	-9.00	9	-9.00	9	-9
6711	2	1502.7	34.751	34.751	2	3.908	3.789	27.610	103.6	103.6	2	199.6	0.00	2	35.47	2	110.99	2	0.006	2	-0.001	2	1254.1	2	2305.2	2	7.5403	2	-9	9	-9.00	9	-9.00	9	-9.00	9	-9
6710	2	1795.7	34.756	34.755	2	3.076	2.941	27.695	125.3	125.0	2	189.6	0.00	2	35.17	2	115.97	2	-0.000	2	-0.001	2	1206.0	2	2305.4	2	7.5545	2	2388	2	-9.00	9	-9.00	9	-9.00	9	-9
6709	2	2048.2	34.751	34.750	2	2.593	2.443	27.735	137.5	137.8	2	190.9	0.00	2	34.94	2	118.83	2	0.000	2	-0.001	2	1173.0	2	2301.4	2	7.5678	2	2400	2	-9.00	9	-9.00	9	-9.00	9	-9
6708	2	2299.4	34.742	34.742	2	2.210	2.044	27.762	150.0	150.3	2	181.8	0.00	2	34.94	2	122.56	2	-0.000	2	-0.001	2	1129.8	2	2299.3	2	7.5827	2	2403	2	-9.00	9	-9.00	9	-9.00	9	-9
6707	2	2702.2	34.734	34.734	2	1.871	1.674	27.784	161.2	162.3	2	172.9	0.00	2	34.77	2	126.28	2	-0.001	2	0.001	2	1115.8	2	2302.6	2	7.5892	2	2409	2	-9.00	9	-9.00	9	-9.00	9	-9
6706	2	3102.6	34.729	34.729	2	1.675	1.444	27.797	164.5	166.6	2	170.6	0.00	2	34.42	2	130.31	2	-0.000	2	-0.001	2	1099.9	2	2305.4	2	7.5962	2	2417	2	-9.00	9	-9.00	9	-9.00	9	-9
6705	2	3496.0	34.724	34.724	2	1.474	1.209	27.809	169.0	171.8	2	167.5	0.00	2	33.98	2	130.99	2	-0.000	2	-0.002	2	9.0	9	2302.0	2	7.6048	2	2414	2	-9.00	9	-9.00	9	-9.00	9	-9
6704	2	3904.7	34.720	34.720	2	1.375	1.070	27.816	174.5	177.9	2	162.6	0.00	2	33.69	2	130.99	2	-0.001	2	-0.002	2	1056.2	2	2302.1	2	7.6069	2	2412	2	-9.00	9	-9.00	9	-9.00	9	-9
6703	2	4400.7	34.718	34.718	2	1.353	0.984	27.819	178.8	182.5	2	158.7	0.00	2	33.19	2	130.14	2	-0.001	2	0.002	2	9.0	9	2295.8	2	7.6063	2	2409	2	-9.00	9	-9.00	9	-9.00	9	-9
6702	2	4899.5	34.718	34.717	2	1.396	0.977	27.819	180.0	179.5	2	161.9	0.00	2	32.93	2	129.71	2	-0.001	2	0.000	2	1078.2	2	2299.2	2	7.6053	2	-9	9	-9.00	9	-9.00	9	-9.00	9	-9
6701	2	5282.9	34.718	34.717	2	1.438	0.971	27.820	181.6	184.7	2	156.7	0.00	2	32.96	2	129.74	2	0.000	2	0.001	2	1078.2	2	2299.2	2	7.6053	2	-9	9	-9.00	9	-9.00	9	-9.00	9	-9

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

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

*** PSS-78 scale

**** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 68 DATE 10/16/1995
 CAST 1 GMT 00:29
 CTD CAST 289

LATITUDE 08° 24.03' S
 LONGITUDE 80° 0.19' E

Bottle Number	CTD				Bottle				CO2				F [*] CH ₄ H ₂ O/g																								
	F ^{**} Pressure db	Salinity	Temp ^{***} °C	Pot ^{****} Sigma T _{theta} °C	O ₂ H ₂ mol/kg	O ₂ H ₂ mol/kg	F [*] AUO H ₂ mol/kg	NO ₂ H ₂ mol/kg	F [*] NO ₃ H ₂ mol/kg	F [*] PO ₄ H ₂ mol/kg	F [*] Si(OH) ₄ H ₂ mol/kg	F [*] CFC-11 pmol/kg		F [*] CFC-12 pmol/kg	F [*] at 20 °C H ₂ mol/kg	DIC H ₂ mol/kg	F [*] pH	F [*] TA H ₂ mol/kg	F [*] TOC H ₂ mol/kg	F [*] TON H ₂ mol/kg																	
6816	2	5.8	34.276	34.285	2	27.975	27.974	21.866	196.8	196.8	2	2.23	2	1.650	2	1.008	2	244.5	2	1902.4	6	8.1155	2	2245	2	-9.00	9	-9.00	9	-9							
6815	2	40.3	34.722	34.467	2	28.185	28.155	21.960	201.1	199.3	2	-2.8	0.00	2	0.00	2	0.15	2	2.24	2	1.646	2	0.960	2	244.3	2	1913.5	2	8.1118	2	-9	9	-9.00	9	-9.00	9	-9
6814	2	79.5	35.234	35.225	2	22.655	22.639	24.209	158.1	151.7	2	62.8	0.40	2	7.57	2	0.68	2	7.28	2	-9.000	9	-9.000	9	404.2	2	2049.1	2	7.9460	2	-9	9	-9.00	9	-9.00	9	-9
6813	2	152.8	35.053	35.061	2	18.568	16.543	25.670	77.9	76.0	2	164.1	0.02	2	21.45	2	1.50	2	19.03	2	1.184	2	0.639	2	762.2	2	2155.6	2	7.7183	2	2307	2	-9.00	9	-9.00	9	-9
6812	2	250.8	34.949	34.951	2	12.271	12.238	26.506	78.1	73.9	2	188.1	0.00	2	26.39	2	1.84	2	26.22	2	0.603	2	0.328	2	985.9	2	2198.7	2	7.6209	2	2309	2	-9.00	9	-9.00	9	-9
6811	2	449.1	34.854	34.855	2	9.730	9.678	26.894	98.6	96.2	2	180.8	0.00	2	28.81	2	1.98	2	30.00	2	0.338	2	0.185	2	-9.0	9	2210.0	2	7.5956	2	2311	2	-9.00	9	-9.00	9	-9
6810	2	651.4	34.823	34.824	2	8.293	8.224	27.102	77.9	76.9	2	209.3	0.00	2	32.95	2	2.37	2	49.61	2	-9.000	9	-9.000	9	-9.0	9	2247.8	2	7.5386	2	2329	2	-9.00	9	-9.00	9	-9
6809	2	850.2	34.783	34.783	3	6.876	6.794	27.277	68.4	68.6	2	227.2	0.00	2	35.80	2	2.80	2	72.12	2	0.013	2	0.008	2	1328.3	2	2281.1	2	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
6808	2	1047.3	34.717	34.717	2	5.561	5.469	27.395	80.1	79.5	2	225.8	0.00	2	38.30	2	2.66	2	89.50	2	0.003	2	0.002	2	1371.8	2	2298.1	2	7.5010	2	2367	2	-8.00	9	-9.00	9	-9
6807	2	1248.2	34.736	34.735	2	4.775	4.670	27.503	87.5	87.3	2	223.8	0.00	2	36.54	2	2.87	2	98.50	2	-9.000	9	-9.000	9	1388.4	2	2306.2	2	7.5038	2	2380	2	-9.00	9	-9.00	9	-9
6806	2	1552.8	34.751	34.750	2	3.719	3.598	27.828	108.4	106.8	2	212.6	0.00	2	36.22	2	2.63	2	107.11	2	-9.000	9	-9.000	9	-9.0	9	2312.0	2	7.5201	2	2388	2	-9.00	9	-9.00	9	-9
6805	2	1850.5	34.749	34.750	2	2.837	2.701	27.713	132.3	129.7	2	198.9	0.00	2	35.35	2	2.53	2	114.16	2	-9.000	9	-9.000	9	-9.0	9	2308.4	2	7.5435	2	2396	2	-9.00	9	-9.00	9	-9
6804	2	2099.3	34.746	34.748	2	2.432	2.280	27.747	143.9	141.3	2	188.8	0.00	2	34.90	2	2.48	2	118.36	2	-9.000	9	-9.000	9	1208.8	2	2307.4	2	7.5585	2	2398	2	-9.00	9	-9.00	9	-9
6803	2	2401.4	34.740	34.739	2	2.091	1.918	27.769	157.4	154.1	2	179.0	0.00	2	34.31	2	2.42	2	120.46	2	-9.000	9	-9.000	9	-9.0	9	2305.9	2	7.5783	2	2402	2	-8.00	9	-9.00	9	-9
6802	2	2698.6	34.734	34.734	2	1.871	1.674	27.764	185.7	182.2	2	173.0	0.00	2	33.97	2	2.38	2	122.42	2	-9.000	9	-9.000	9	-9.0	9	2302.1	2	7.5831	2	2403	2	-8.00	9	-9.00	9	-9
6801	2	3004.0	34.729	34.729	2	1.699	1.477	27.764	170.9	166.8	2	170.2	0.00	2	33.83	2	2.35	2	125.81	2	-9.000	9	-9.000	9	-9.0	9	2303.1	2	7.5926	2	2410	2	-8.00	9	-9.00	9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR
NOAA Ship Baldridge

STATION 69 DATE 10/17/1995
CAST 2 GMT 08:03
CTD CAST 290

LATITUDE 07° 59.88' S
LONGITUDE 80° 0.34' E

Bottle Number	CTD				Bottle				CO2				F* at 20°C F*				TA	F*	pH	DIC	Si(OH)4	CFC-11	CFC-12	F* pmol/kg	F* pmol/kg	F* pmol/kg	F* pmol/kg	TON	F*	CH-a								
	db	Salinity	Temp	Pot	Theta	O2	Sigma	Theta	Salinity	Temp	Pot	Theta	O2	Sigma	Theta	Hmol/kg															Hmol/kg	Hmol/kg	Hmol/kg	Hmol/kg	Hmol/kg	Hmol/kg	Hmol/kg	Hmol/kg
6924	2	6.5	34.253	34.261	2	28.084	28.082	21.614	202.0	189.6	2	-2.8	0.00	2	0.00	2	0.13	2	2.07	2	1.653	2	0.948	2	240.8	2	1900.3	8	8.1177	2	2243	2	73.92	2	4.61	2	-9	-9
6923	2	49.5	35.161	35.164	2	25.955	25.944	23.176	188.7	181.0	2	21.8	0.04	2	0.81	2	0.34	2	3.81	2	1.628	2	0.913	2	313.2	2	1988.4	2	8.0345	2	2302	2	71.71	2	4.83	2	-9	-9
6922	2	70.9	35.204	35.214	2	22.440	22.428	24.262	146.7	143.4	2	71.9	0.04	2	0.81	2	0.34	2	3.77	2	1.597	2	0.886	2	426.7	2	2057.9	2	7.9248	2	2306	2	67.78	2	4.15	2	-9	-9
6921	2	123.3	35.212	-9.000	9	18.608	18.584	25.290	98.9	96.6	2	134.2	0.01	2	17.20	2	1.28	2	13.56	2	1.421	2	0.767	2	625.6	2	2127.0	2	7.7886	2	2309	2	55.77	2	4.01	2	-9	-9
6920	2	151.7	35.147	35.152	2	17.014	16.989	25.635	96.6	93.8	2	144.1	0.01	2	19.06	2	1.37	2	18.08	2	1.317	2	0.721	2	699.8	2	2142.6	2	7.7537	2	2307	2	54.88	2	3.07	2	-9	-9
6919	2	200.7	35.008	35.011	2	14.273	14.244	26.145	80.9	78.5	2	172.9	0.00	2	23.57	2	1.88	2	22.84	2	0.939	2	0.494	2	852.0	2	2176.7	2	7.6696	2	2308	2	53.23	2	-9.00	2	-9	-9
6918	2	300.3	34.979	34.980	2	11.790	11.751	26.621	97.1	93.3	2	171.4	0.00	2	24.91	2	1.75	2	22.82	2	0.721	2	0.371	2	922.4	2	2191.5	2	7.6376	2	2309	2	52.57	2	2.29	2	-9	-9
6917	2	396.4	34.909	34.909	2	10.563	10.515	26.792	101.2	95.4	2	178.5	0.00	2	26.91	2	1.88	2	25.62	2	0.484	2	0.260	2	986.4	2	2202.7	2	7.6102	2	2311	2	49.90	2	2.04	2	-9	-9
6916	2	497.0	34.861	34.861	2	9.527	9.470	26.933	88.3	85.9	2	192.4	0.00	2	29.93	2	2.09	2	33.22	2	0.200	2	0.112	2	1105.1	2	2221.9	2	7.5725	2	2313	2	48.73	2	2.38	2	-9	-9
6915	2	600.3	34.828	34.828	2	8.778	8.712	27.030	80.0	80.4	2	202.7	0.00	2	31.86	2	2.27	2	42.35	2	0.107	2	0.060	2	1182.4	2	2238.4	2	7.5480	2	2323	2	-9.00	2	-9.00	2	-9	-9
6914	2	796.1	34.802	34.802	2	7.270	7.191	27.236	67.9	68.6	2	224.4	0.00	2	34.70	2	2.57	2	66.26	2	-9.000	2	-9.000	2	1342.7	2	2273.9	2	7.5059	2	2343	2	-9.00	2	-9.00	2	-9	-9
6913	2	999.5	34.742	34.742	2	5.973	5.882	27.384	73.3	74.8	2	227.5	0.00	2	35.75	2	2.87	2	85.01	2	0.014	2	0.008	2	1392.1	2	2283.5	2	7.4662	2	2364	2	45.49	2	-9.00	2	-9	-9
6912	2	1198.0	34.717	34.716	2	4.859	4.758	27.478	85.2	85.7	2	224.8	0.00	2	36.05	2	2.89	2	96.57	2	0.004	2	0.001	2	1377.9	2	2303.9	2	7.5016	2	2377	2	-9.00	2	-9.00	2	-9	-9
6911	2	1396.8	34.758	34.758	2	4.302	4.188	27.574	93.8	93.7	2	221.1	0.00	2	38.00	2	2.88	2	102.60	2	-0.001	2	-0.002	2	1378.1	2	2307.3	2	7.5068	2	2380	2	-9.00	2	-9.00	2	-9	-9
6910	2	1688.0	34.762	34.763	2	3.410	3.280	27.670	115.0	114.7	2	207.2	0.00	2	35.38	2	2.80	2	109.22	2	0.000	2	-0.001	2	1288.4	2	2306.3	2	7.5284	2	2390	2	42.63	2	-9.00	2	-9	-9
6909	2	2103.2	34.744	-9.000	9	2.444	2.291	27.743	142.8	-9.0	2	9.0	-9.00	2	-9.00	2	-9.00	2	-9.00	2	-9.000	2	-9.000	2	-9.0	2	-9.0	2	-9.000	2	-9	2	-9.00	2	-9.00	2	-9	-9
6908	2	2501.3	34.739	34.738	2	2.022	1.841	27.774	154.9	155.5	2	178.3	0.00	2	33.81	2	2.42	2	121.63	2	-0.001	2	-0.002	2	1151.0	2	2301.5	2	7.5732	2	2400	2	-9.00	2	-9.00	2	-9	-9
6907	2	2898.0	34.731	34.732	2	1.775	1.582	27.791	163.3	164.8	2	171.4	0.00	2	33.42	2	2.37	2	124.04	2	0.000	2	-0.001	2	1118.5	2	2299.7	2	7.5852	2	2401	2	42.06	2	-9.00	2	-9	-9
6906	2	3198.3	34.728	34.725	2	1.610	1.371	27.789	166.2	168.7	2	169.2	0.00	2	33.41	2	2.36	2	127.66	2	-9.000	2	-9.000	2	1101.5	2	2303.4	2	7.5912	2	2403	2	-9.00	2	-9.00	2	-9	-9
6905	2	3498.3	34.724	34.723	2	1.493	1.227	27.807	168.7	169.9	2	169.2	0.00	2	33.80	2	2.37	2	131.95	2	0.001	2	-0.001	2	1110.3	2	2308.1	2	7.5931	2	2413	2	-9.00	2	-9.00	2	-9	-9
6904	2	3901.3	34.720	34.719	2	1.404	1.098	27.813	172.3	175.7	2	164.8	0.00	2	33.35	2	2.34	2	132.07	2	-9.000	2	-9.000	2	1085.9	2	2305.5	2	7.6023	2	2415	2	42.60	2	-9.00	2	-9	-9
6903	2	4398.1	34.719	34.718	2	1.376	1.016	27.818	177.0	180.9	2	160.1	0.00	2	33.25	2	2.34	2	130.60	2	-0.001	2	0.000	2	1081.6	2	2300.5	2	7.6057	2	2407	2	-9.00	2	-9.00	2	-9	-9
6902	2	4903.5	34.717	34.717	2	1.393	0.974	27.820	180.1	183.9	2	157.5	0.00	2	32.87	2	2.31	2	129.41	2	0.001	2	0.001	2	-9.0	2	2295.9	2	7.6024	2	2405	2	-9.00	2	-9.00	2	-9	-9
6901	2	5483.8	34.717	34.717	2	1.449	0.955	27.821	162.8	165.6	2	156.0	0.00	2	32.81	2	2.31	2	128.35	2	-0.001	2	-0.001	2	1091.5	2	2296.2	2	7.6058	2	2406	2	42.80	2	-9.00	2	-9	-9

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

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

*** PSS-78 scale

**** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 70 DATE 10/17/1995
 CAST 1 GMT 12:43
 CTD CAST 291

LATITUDE 07° 30.07' S
 LONGITUDE 79° 59.72' E

Bottle Number	CTD		Bottle		Sigma		Temp		Pot		Salinity		S(OH) ₄		CFC-11		CFC-12		F ₂ at 20 °C		DIC		pH		TA		F ₂ TOC		F ₂ Chl-a							
	db	Pressure	Salinity	Temp	Temp	Pot	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp						
7016	2	33.972	33.977	2	28.231	28.230	21.563	196.8	200.1	2	-3.2	0.00	2	0.12	2	0.11	2	2.04	2	1.648	2	0.859	2	237.3	2	1885.1	6	8.1193	2	2226	2	-9.00	9	-9.00	9	-9
7015	2	45.2	34.840	2	27.614	27.603	22.265	198.6	200.8	2	-2.7	0.00	2	0.09	2	0.22	2	2.31	2	2.023	4	0.845	4	-9.0	9	1944.4	3	8.1029	2	-9	9	-9.00	9	-9.00	9	-9
7014	2	87.9	35.262	2	21.145	21.128	24.664	106.3	105.8	2	114.4	0.03	2	14.52	2	1.08	2	9.94	2	-8.000	9	-8.000	9	545.2	2	2101.3	2	7.8443	2	2306	2	-9.00	9	-9.00	9	-9
7013	2	136.2	35.221	2	18.033	18.010	25.409	100.9	97.8	2	135.5	0.00	2	17.75	2	1.27	2	14.20	2	1.411	2	0.757	2	-9.0	9	2130.8	2	7.7817	2	2306	2	-9.00	9	-9.00	9	-9
7012	2	179.7	35.114	2	15.732	15.704	25.907	80.9	79.3	2	164.7	0.00	2	22.04	2	1.55	2	18.15	2	1.139	2	0.600	2	796.3	2	2184.1	2	7.7009	2	2310	2	-9.00	9	-9.00	9	-9
7011	2	251.1	35.008	2	12.868	12.834	26.435	84.8	82.6	2	176.1	0.00	2	24.56	2	1.72	2	22.52	2	0.790	2	0.418	2	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
7010	2	352.9	34.928	2	11.008	10.964	26.728	84.2	82.3	2	187.0	0.00	2	27.41	2	1.88	2	25.76	2	0.433	2	0.231	2	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
7009	2	550.2	34.648	2	9.348	9.286	26.954	84.7	83.7	2	195.7	0.00	2	30.51	2	2.14	2	35.11	2	0.151	2	0.084	2	1138.1	2	2222.1	2	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
7008	2	746.4	34.779	2	7.617	7.541	27.169	65.8	66.3	2	224.4	0.00	2	34.62	2	2.53	2	61.13	2	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
7007	2	850.1	34.763	2	6.819	6.737	27.268	65.1	65.9	2	230.3	0.00	2	35.55	2	2.62	2	73.43	2	0.007	2	0.005	2	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
7006	2	1000.9	34.717	2	5.667	5.578	27.383	75.9	76.5	2	228.0	0.00	2	36.00	2	2.67	2	89.11	2	0.007	2	0.002	2	1397.3	2	2297.0	2	7.4984	2	2364	2	-9.00	9	-9.00	9	-9
7005	2	1318.7	34.735	2	4.482	4.374	27.536	89.5	89.9	2	223.5	0.00	2	36.19	2	2.68	2	102.16	2	-0.003	4	-0.003	4	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
7004	2	1701.7	34.763	2	3.251	3.122	27.685	119.4	118.9	2	204.2	0.00	2	35.31	2	2.58	2	110.69	2	-9.000	9	-9.000	9	-9.0	9	2312.0	3	7.5308	2	2393	2	-9.00	9	-9.00	9	-9
7003	2	2200.6	34.744	2	2.257	2.099	27.759	148.3	147.2	2	184.4	0.00	2	34.12	2	2.45	2	119.43	2	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
7002	2	2600.0	34.734	2	1.876	1.689	27.784	162.7	161.6	2	173.5	0.00	2	33.62	2	2.37	2	122.33	2	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
7001	2	3007.1	34.728	2	1.669	1.447	27.797	168.6	166.8	2	170.4	0.00	2	33.52	2	2.36	2	126.37	2	-9.000	9	-9.000	9	1121.4	2	2301.6	2	7.5879	2	2408	2	-9.00	9	-9.00	9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 *** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 ***** ITS-90 scale

I8NR
NOAA Ship Baldrige

STATION 71 DATE 10/17/1995
 CAST 1 GMT 18:53
 CTD CAST 292

LATITUDE 07° 0.00' S
 LONGITUDE 79° 59.43' E

		CTD					Bottle			ICO2																								
Bottle Number	F** Pressure db	Salinity	Sigma T	Theta	Pot. T	Temp	Salinity	O2	O2	F* AOU	NO2	NO3	F* PO4		F* Si(OH)4		F* CFC-11	F* CFC-12	F* at 20 °C	H _{um}	DIC	pH	F* TA	F* TOC	F* Chl-a									
													Hmol/kg	Mmol/kg	Hmol/kg	Mmol/kg										Hmol/kg	Mmol/kg	pnmol/kg	pnmol/kg	Hmol/kg	Hmol/kg	Hmol/kg	Hmol/kg	Hmol/kg
7124	2	6.2	33.909	33.916	2	28.472	28.471	21.428	194.5	199.7	3	-3.5	0.00	0.01	2	1.92	2	1.638	2	0.947	2	234.3	2	1882.1	6	8.1220	2	2225	2	-9.00	9	-9.00	9	-9
7123	2	35.4	34.075	34.309	2	28.301	28.293	21.782	196.5	201.5	3	-5.2	0.00	0.06	2	1.94	2	1.638	2	0.948	2	245.6	2	1903.6	2	8.1162	2	2251	2	-9.00	9	-9.00	9	-9
7122	2	68.9	35.323	35.311	2	23.437	23.423	24.048	138.9	135.6	3	75.9	0.78	9.32	2	6.80	2	1.615	2	0.899	2	437.5	2	2063.7	2	7.9214	2	2317	2	-9.00	9	-9.00	9	-9
7121	2	104.2	35.248	35.243	2	20.656	20.636	24.779	90.3	95.3	3	128.9	0.05	15.83	2	1.15	2	1.485	2	0.806	2	569.5	2	2107.0	2	7.8249	2	2307	2	-9.00	9	-9.00	9	-9
7120	2	141.0	35.187	35.219	2	18.085	18.061	25.428	78.7	93.9	3	139.1	0.01	17.81	2	1.27	2	1.439	2	0.761	2	644.7	2	2133.2	2	7.7817	2	2309	2	-9.00	9	-9.00	9	-9
7119	2	225.6	35.011	35.003	2	13.742	13.710	26.251	74.3	74.3	3	179.8	0.00	24.65	2	1.72	2	0.844	2	0.434	2	900.3	2	2187.8	2	7.6506	2	2310	2	-9.00	9	-9.00	9	-9
7118	2	297.1	34.929	34.929	2	11.707	11.669	26.597	82.5	59.5	3	205.7	0.00	28.93	2	2.00	2	0.319	6	0.175	6	1109.3	2	2216.5	2	7.5735	2	2308	2	-9.00	9	-9.00	9	-9
7117	2	402.8	34.908	34.904	2	10.379	10.331	26.820	88.4	83.5	3	189.5	0.00	29.01	2	1.97	2	0.299	2	0.166	2	1069.5	2	2209.3	2	7.5844	2	2308	2	-9.00	9	-9.00	9	-9
7116	2	499.5	34.872	34.869	2	9.616	9.559	26.925	93.6	87.2	3	190.5	0.00	29.98	2	2.06	2	0.227	2	0.131	2	1104.0	2	2216.5	2	7.5767	2	2316	2	-9.00	9	-9.00	9	-9
7115	2	599.2	34.830	34.827	2	8.749	8.684	27.033	84.9	79.7	3	203.5	0.00	32.11	2	2.27	2	0.098	2	0.060	2	1192.4	2	2235.3	2	7.5480	2	2321	2	-9.00	9	-9.00	9	-9
7114	2	699.0	34.813	34.804	2	7.983	7.910	27.134	70.8	69.6	3	218.7	0.00	34.10	2	2.42	2	0.037	2	0.017	2	1308.4	2	2253.1	2	7.5192	2	2337	2	-9.00	9	-9.00	9	-9
7113	2	800.0	34.784	34.791	2	7.148	7.069	27.245	66.8	65.0	3	228.9	0.00	35.55	2	2.59	2	0.012	2	0.008	2	1366.1	2	2277.4	2	7.4983	2	2349	2	-9.00	9	-9.00	9	-9
7112	2	1002.2	34.718	34.726	2	5.609	5.521	27.396	79.1	75.2	3	229.7	0.00	36.50	2	2.67	2	0.004	2	-0.001	2	1381.2	2	2294.2	2	7.4966	2	2374	2	-9.00	9	-9.00	9	-9
7111	2	1204.2	34.724	34.726	2	4.715	4.615	27.502	89.4	85.8	3	225.8	0.00	36.58	2	2.89	2	0.000	2	-0.002	2	1377.4	2	2309.0	2	7.5022	2	2382	2	-9.00	9	-9.00	9	-9
7110	2	1399.9	34.767	34.766	3	4.057	3.946	27.606	102.4	100.4	3	216.2	0.00	35.96	2	2.66	2	0.062	4	0.031	4	1330.9	2	2309.3	2	7.5148	2	2382	2	-9.00	9	-9.00	9	-9
7109	2	1599.6	34.767	34.771	2	3.459	3.337	27.671	118.7	112.0	3	209.4	0.00	35.59	2	2.80	2	0.038	2	-9.000	9	1298.8	2	2306.9	2	7.5265	2	2389	2	-9.00	9	-9.00	9	-9
7108	2	1799.9	34.759	34.760	2	2.973	2.839	27.708	129.6	125.2	3	200.2	0.00	35.24	2	2.56	2	0.003	2	-0.002	2	1245.3	2	2308.8	2	7.5396	2	2394	2	-9.00	9	-9.00	9	-9
7107	2	2201.6	34.746	34.746	2	2.284	2.125	27.758	150.6	147.3	3	184.1	0.00	34.80	2	2.47	2	119.67	2	-9.000	9	1175.4	2	2305.9	2	7.5653	2	2397	2	-9.00	9	-9.00	9	-9
7106	2	2598.8	34.736	34.736	2	1.890	1.702	27.783	162.7	159.7	3	175.3	0.00	34.31	2	2.40	2	123.48	2	0.001	2	1137.4	2	2300.6	2	7.5804	2	2401	2	-9.00	9	-9.00	9	-9
7105	2	3001.0	34.730	34.731	2	1.673	1.452	27.798	166.1	163.6	3	173.6	0.00	34.10	2	2.40	2	127.74	2	-9.000	9	9.0	2305.3	2	7.5960	2	2408	2	-9.00	9	-9.00	9	-9	
7104	2	3501.0	34.724	34.724	2	1.478	1.212	27.809	170.0	168.4	3	170.9	0.00	33.85	2	2.36	2	132.40	2	0.000	2	1086.3	2	2311.7	2	7.5857	2	2408	2	-9.00	9	-9.00	9	-9
7103	2	4004.2	34.720	34.720	2	1.372	1.056	27.817	177.2	178.4	3	162.3	0.00	33.54	2	2.34	2	131.92	2	0.000	2	9.0	2304.8	2	7.8033	2	2408	2	-9.00	9	-9.00	9	-9	
7102	2	4496.4	34.718	34.718	2	1.357	0.987	27.820	179.1	182.8	3	156.5	0.00	33.19	2	2.31	2	130.04	2	-0.002	2	1068.4	2	2297.6	2	7.6082	2	2405	2	-9.00	9	-9.00	9	-9
7101	2	4985.2	34.717	34.718	2	1.380	0.951	27.822	183.0	185.6	3	156.0	0.00	32.99	2	2.29	2	128.45	2	-0.001	2	1069.5	2	2294.2	2	7.6060	2	2406	2	-9.00	9	-9.00	9	-9

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

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

*** PSS-78 scale

**** ITS-90 scale

18NR
NOAA Ship Baldrige

STATION 72 DATE 10/17/1995
CAST 1 GMT 23:34
CTD CAST 293

CTD			Bottle			CTD		Bottle		IC02																											
F** Pressure	Salinity***	F* Temp****	Pot. T****	Sigma	O2	O2	Theta	Sigma	O2	TA	F* PO4	F* SI(OH)4	F* CFC-11	F* CFC-12	F* at 20°C	F* DIC	pH	F*	TA	F*	TOC	F*	TON	F*	Chl-a												
db		°C	°C		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												
7218	2	5.6	33.896	-9.000	9	28.404	28.403	21.435	194.9	198.8	3	-0.3	-9.00	9	-9.00	9	-9.00	9	-9.00	9	-9.00	9	-9.00	9	-9.00	9	-9										
7215	2	41.1	34.174	34.172	2	27.663	27.653	21.887	196.6	198.9	3	-0.4	0.00	2	0.05	2	0.16	2	2.83	2	1.664	2	0.958	2	1909.5	6	6.0985	2	2241	2	-9.00	9	-9.00	9	-9		
7214	2	78.9	35.321	35.328	2	22.927	22.911	24.210	138.8	135.7	3	77.6	0.62	2	9.81	2	0.82	2	7.37	2	-9.000	9	-9.000	9	438.8	2	2066.4	2	-9	9	-9.00	9	-9.00	9	-9		
7213	2	118.8	35.183	35.185	3	19.085	19.064	25.155	84.7	84.3	3	144.4	0.01	2	18.43	2	1.33	2	13.73	2	1.388	2	0.753	2	-9.0	9	-9.000	9	-9	9	-9.00	9	-9.00	9	-9		
7212	2	200.2	35.085	35.086	2	14.408	14.378	28.174	85.0	82.9	3	167.7	0.00	2	22.68	2	1.61	2	20.02	2	1.033	2	0.551	2	832.4	2	2172.8	2	7.6809	2	2309	2	-9.00	9	-9.00	9	-9
7211	2	287.7	34.920	34.921	2	11.114	11.077	26.701	82.8	82.2	3	206.0	0.00	2	29.28	2	2.03	2	29.03	2	0.264	2	0.147	2	-9.0	9	2217.0	2	7.5678	2	2311	2	-9.00	9	-9.00	9	-9
7210	2	499.8	34.846	34.848	3	9.316	9.260	26.957	83.8	82.2	3	197.4	0.00	2	30.72	2	2.15	2	35.50	2	-9.000	9	-9.000	9	-9.0	9	-9.000	9	-9	9	-9.00	9	-9.00	9	-9		
7209	2	702.2	34.809	34.809	2	7.725	7.653	27.175	83.5	84.2	3	225.7	0.00	2	34.71	2	2.54	2	80.22	2	0.016	2	0.011	2	1338.5	2	2286.2	2	7.5080	2	2340	2	-9.00	9	-9.00	9	-9
7208	2	900.7	34.751	34.753	2	6.359	6.275	27.322	88.5	88.6	3	230.8	0.00	2	35.87	2	2.66	2	80.35	2	0.004	2	0.004	2	1398.8	2	2288.1	2	7.4942	2	2357	2	-9.00	9	-9.00	9	-9
7207	2	1199.4	34.737	34.736	2	4.795	4.695	27.501	84.6	84.8	3	228.2	0.00	2	36.27	2	2.69	2	99.20	2	0.002	2	-0.001	2	1378.2	2	2305.7	3	7.5003	2	2379	2	-9.00	9	-9.00	9	-9
7206	2	1499.9	34.773	34.774	2	3.851	3.733	27.834	105.0	104.8	3	213.4	0.00	2	35.77	2	2.64	2	105.51	2	-9.000	9	-9.000	9	-9.0	9	-9.000	9	-9	9	-9.00	9	-9.00	9	-9		
7205	2	1801.1	34.764	34.783	2	2.990	2.856	27.709	125.3	124.2	3	201.1	0.00	2	35.15	2	2.57	2	114.00	2	-9.000	9	-9.000	9	-9.0	9	-9.000	9	-9	9	-9.00	9	-9.00	9	-9		
7204	2	2098.8	34.749	34.749	2	2.387	2.218	27.753	145.0	145.5	3	185.1	0.00	2	34.37	2	2.48	2	119.44	2	-9.000	9	-9.000	9	1192.1	2	2305.8	2	7.5628	2	2398	2	-9.00	9	-9.00	9	-9
7203	2	2400.1	34.739	34.738	2	2.006	1.854	27.775	157.2	155.6	3	178.2	0.00	2	33.89	2	2.42	2	122.35	2	-9.000	9	-9.000	9	-9.0	9	-9.000	9	-9	9	-9.00	9	-9.00	9	-9		
7202	2	2700.0	34.732	34.732	2	1.773	1.578	27.789	164.2	162.2	3	173.9	0.00	2	33.89	2	2.39	2	125.97	2	-9.000	9	-9.000	9	-9.0	9	-9.000	9	-9	9	-9.00	9	-9.00	9	-9		
7201	2	3000.4	34.727	34.727	2	1.593	1.374	27.800	169.2	167.0	3	170.8	0.00	2	33.83	2	2.37	2	128.75	2	-9.000	9	-9.000	9	1116.2	2	2303.9	6	7.5888	2	2410	2	-9.00	9	-9.00	9	-9

* WOCE water sample quality flag (F) for parameter from previous column
*** WOCE quality flag (F) for PVC sample bottle
**** PSS-78 scale
***** ITS-90 scale

I8NR
NOAA Ship Baldrige

STATION 73 DATE 10/18/1995
CAST 1 GMT 07:00
CTD CAST 294

LATITUDE 05° 59.72' S
LONGITUDE 79° 58.47' E

Bottle Number	CTD		Bottle		CTD		Bottle		CTD		Bottle		CTD		Bottle		CTD		Bottle		CTD		Bottle		CTD		Bottle		CTD		Bottle		CTD		Bottle		CTD		Bottle	
	F* Pressure	Salinity	Temp	Pot	Sigma	Theta	O2	O2	F* AOU	NO2	NO3	PO4	SI(OH)4	F* CFC-11	F* CFC-12	F* at 20°C	Hum	DIC	F*	pH	F*	TA	F*	TOC	F*	TON	F*	Chi-a	Hgl	Phaeo										
7324	2	8.7	33.986	33.992	2	28.662	28.660	21.423	199.1	199.4	2	-3.9	0.00	0.04	2	0.12	2	2.05	2	1.614	2	0.964	2	231.8	2	1862.0	6	8.1221	2	2227	2	73.54	2	4.08	2	-9	-9			
7323	2	46.8	34.083	34.073	2	28.240	28.229	21.625	203.5	199.8	2	-3.0	0.00	0.03	2	0.14	2	2.20	2	1.627	2	0.943	2	239.9	2	1891.4	2	8.1121	2	2234	2	72.24	2	4.07	2	-9	-9			
7322	2	96.6	35.275	35.279	2	20.482	20.464	24.853	110.0	108.1	2	114.7	0.02	14.80	2	1.10	2	10.60	2	1.537	2	0.842	2	545.5	2	2103.0	2	7.8367	2	2310	2	65.65	2	4.26	2	-9	-9			
7321	2	113.1	35.225	35.228	2	19.290	19.270	25.127	107.4	103.9	2	123.9	0.02	15.88	2	1.17	2	12.49	2	1.485	2	0.810	2	590.5	2	2115.8	2	7.8113	2	2308	2	62.91	2	4.41	2	-9	-9			
7320	2	179.1	35.114	35.118	2	15.212	15.185	26.023	85.0	82.9	2	163.6	0.00	21.87	2	1.55	2	18.66	2	1.120	2	0.607	2	798.8	2	2166.0	2	7.6977	2	2311	2	51.58	2	9.00	2	-9	-9			
7319	2	247.7	34.931	34.923	2	12.082	12.049	26.520	59.0	57.7	2	205.4	0.00	28.38	2	1.99	2	28.54	2	0.375	2	0.209	2	1080.0	2	2210.8	2	7.5907	2	-9	9	51.73	2	9.00	2	-9	-9			
7318	2	348.5	34.913	34.913	2	10.697	10.655	26.770	63.7	63.0	2	208.1	0.00	30.10	2	2.07	2	30.21	2	0.191	2	0.112	2	1158.9	2	2222.0	2	7.5555	2	2309	2	51.59	2	2.95	2	-9	-9			
7317	2	449.9	34.875	34.876	2	9.732	9.680	26.910	78.3	77.1	2	199.9	0.00	30.86	2	2.12	2	32.89	2	0.155	2	0.090	2	1152.5	2	2222.3	2	7.5591	2	2311	2	51.52	2	1.75	2	-9	-9			
7316	2	549.5	34.841	34.841	2	9.016	8.955	27.001	78.1	77.4	2	204.1	0.00	31.73	2	2.25	2	40.03	2	0.104	2	0.058	2	1201.1	2	2231.9	2	7.5470	2	2319	2	45.99	2	9.00	2	-9	-9			
7315	2	787.0	34.779	34.778	2	7.068	6.991	27.245	63.6	64.8	2	229.7	0.00	35.47	2	2.82	2	70.50	2	0.006	2	0.003	2	-9.0	9	2279.4	2	7.4960	2	2346	2	9.00	2	9.00	2	-9	-9			
7314	2	952.3	34.745	34.745	2	5.881	5.775	27.380	71.6	72.6	2	230.4	0.00	36.26	2	2.68	2	86.93	2	-0.001	2	-0.001	2	1408.2	2	2295.9	2	7.4931	2	2367	2	9.00	2	9.00	2	-9	-9			
7313	2	999.6	34.743	34.743	2	5.657	5.568	27.404	73.6	74.5	2	230.0	0.00	36.27	2	2.69	2	89.65	2	0.000	2	0.001	2	1423.8	2	2297.4	2	7.4939	2	2367	2	42.05	2	9.00	2	-9	-9			
7312	2	1200.2	34.763	34.764	2	4.824	4.723	27.520	83.9	84.2	2	226.5	0.00	36.35	2	2.69	2	98.30	2	0.001	2	-0.002	2	1382.9	2	2305.4	2	7.4994	2	2375	2	9.00	2	9.00	2	-9	-9			
7311	2	1496.3	34.776	34.776	2	3.898	3.780	27.631	101.1	101.8	2	216.1	0.00	36.01	2	2.66	2	105.89	2	-0.001	2	-0.002	2	1329.5	2	2309.5	2	7.5146	2	2388	2	9.00	2	9.00	2	-9	-9			
7310	2	1793.4	34.760	34.759	2	2.994	2.861	27.706	124.4	124.9	2	200.3	0.00	35.21	2	2.56	2	113.53	2	-0.002	2	-0.001	2	1256.7	2	2306.8	2	7.5397	2	2393	2	41.58	2	9.00	2	-9	-9			
7309	2	2098.3	34.748	34.748	2	2.411	2.259	27.749	141.1	141.9	2	188.3	0.00	34.58	2	2.49	2	118.93	2	-9.000	2	-9.000	2	1195.2	2	2304.7	2	7.5560	2	2398	2	9.00	2	9.00	2	-9	-9			
7308	2	2403.2	34.740	34.739	2	2.011	1.839	27.775	154.2	155.3	2	178.5	0.00	34.01	2	2.42	2	122.50	2	-0.001	2	-0.003	2	1156.3	2	2302.5	2	7.5746	2	2403	2	9.00	2	9.00	2	-9	-9			
7307	2	2800.8	34.733	34.733	2	1.747	1.543	27.793	158.7	162.1	2	174.3	0.00	33.85	2	2.39	2	127.04	2	-9.000	2	-9.000	2	1130.0	2	2305.0	2	7.5932	2	2414	2	41.53	2	9.00	2	-9	-9			
7306	2	3200.3	34.727	34.728	2	1.545	1.308	27.804	162.9	166.7	2	171.7	0.00	33.86	2	2.37	2	131.83	2	0.000	2	-0.003	2	1110.3	2	2308.6	2	7.5898	2	2412	2	9.00	2	9.00	2	-9	-9			
7305	2	3598.1	34.722	34.723	2	1.414	1.140	27.813	167.1	170.2	2	169.7	0.00	33.78	2	2.37	2	133.80	2	-0.001	2	-0.001	2	1083.7	2	2309.8	2	7.5959	2	2417	2	9.00	2	9.00	2	-9	-9			
7304	2	4000.3	34.720	34.720	2	1.372	1.056	27.817	172.4	172.4	2	-9.0	-9.00	9	-9.00	9	-9.00	9	-9.000	2	-0.001	2	1083.7	2	2309.8	2	7.5959	2	2417	2	9.00	2	9.00	2	-9	-9				
7303	2	4402.3	34.719	34.718	2	1.364	1.004	27.819	176.1	181.1	2	160.0	0.00	33.20	2	2.33	2	131.29	2	0.000	2	-0.001	2	1069.8	2	2288.5	2	7.6055	2	2411	2	9.00	2	9.00	2	-9	-9			
7302	2	4798.9	34.718	34.716	2	1.379	0.973	27.819	179.2	184.1	2	157.3	0.00	33.02	2	2.32	2	129.87	2	0.000	2	0.001	2	1073.9	2	2284.1	2	7.6049	2	2408	2	9.00	2	9.00	2	-9	-9			
7301	2	5274.9	34.717	34.713	2	1.424	0.958	27.818	181.8	184.9	3	156.6	0.00	32.87	2	2.31	2	129.01	2	0.002	2	0.000	2	1076.5	2	2283.1	2	7.6040	2	2406	2	9.00	2	9.00	2	-9	-9			

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR

NOAA Ship Baldrige

STATION 74 DATE 10/18/1995
 CAST 1 GMT 12:13
 CTD CAST 295

LATITUDE 05° 29.71' S
 LONGITUDE 79° 59.1' E

Bottle Number	CTD			Bottle			CTD		Bottle		CO2		F [*] TA	F [*] pH	F [*] DIC	F [*] TA	F [*] TOC	F [*] TON	F [*] Chl-a													
	F ^{**} Pressure db	Salinity	Salinity	Pot. T ^{***} °C	F [*] Temp °C	Sigma Theta	O2	O2	NO2	NO3	PO4	Si(OH)4								F ⁻ CFC-11	F ⁻ CFC-12	F ⁻ H ₂ O										
7416	2	6.9	34.178	-9.000	9	28.675	28.673	21.558	197.0	198.2	-2.9	-9.00	-9.00	-9.00	9	1.584	2	1.250	3	244.5	2	1894.0	8	6.1154	2	2237	2	-9.00	9	-9.00	9	-9
7415	2	33.8	34.232	34.243	2	28.658	28.650	21.614	202.0	197.7	-2.4	-9.00	-9.00	-9.00	9	1.620	2	0.943	2	-8.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
7414	2	82.3	35.259	35.264	2	21.491	21.475	24.586	128.7	124.3	94.5	-9.00	-9.00	-9.00	9	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
7413	2	146.3	35.187	35.185	2	17.115	17.091	25.636	86.3	83.7	153.7	-9.00	-9.00	-9.00	9	1.296	2	0.705	2	-8.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
7412	2	199.9	34.978	34.981	2	13.534	13.506	26.276	68.8	66.9	188.3	-9.00	-9.00	-9.00	9	0.726	2	0.392	2	-8.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
7411	2	299.1	34.932	34.932	2	11.182	11.145	28.697	67.5	65.7	202.5	-9.00	-9.00	-9.00	9	0.274	2	0.162	2	-8.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
7410	2	401.4	34.893	34.895	2	10.090	10.043	26.863	95.7	92.3	182.4	-9.00	-9.00	-9.00	9	0.355	2	0.195	2	-8.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
7409	2	502.5	34.853	34.853	2	9.236	9.180	26.974	86.7	85.1	195.0	-9.00	-9.00	-9.00	9	0.177	2	0.100	2	-8.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
7408	2	699.3	34.820	34.821	2	7.873	7.801	27.163	87.0	87.0	221.9	-9.00	-9.00	-9.00	9	0.027	2	0.015	2	-8.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
7407	2	800.7	34.807	34.807	2	7.201	7.122	27.250	83.6	84.2	229.3	-9.00	-9.00	-9.00	9	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
7406	2	1001.6	34.752	34.753	2	5.787	5.697	27.396	74.0	74.0	229.8	-9.00	-9.00	-9.00	9	0.001	2	0.000	2	-8.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
7405	2	1250.3	34.781	34.781	2	4.780	4.675	27.539	83.3	83.2	227.8	-9.00	-9.00	-9.00	9	-0.001	2	-0.001	2	-8.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
7404	2	1500.9	34.776	34.775	2	3.873	3.755	27.633	103.4	102.6	215.5	-9.00	-9.00	-9.00	9	-9.000	9	-9.000	9	-8.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
7403	2	2001.8	34.757	34.756	2	2.549	2.404	27.743	138.8	137.0	192.0	-9.00	-9.00	-9.00	9	-9.000	9	-9.000	9	-8.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
7402	2	2500.2	34.739	34.738	2	1.950	1.770	27.780	159.2	156.7	177.7	-9.00	-9.00	-9.00	9	-9.000	9	-9.000	9	-8.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
7401	2	3021.5	34.730	34.730	2	1.635	1.413	27.800	166.4	163.5	174.0	-9.00	-9.00	-9.00	9	-9.000	9	-9.000	9	-8.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR NOAA Ship Baldridge

STATION 75 DATE 10/18/1995
 CAST 1 GMT 18:40
 CTD CAST 296

LATITUDE 04° 59.75' S
 LONGITUDE 80° 0.27' E

Bottle Number	F** Pressure db	CTD		Bottle		F* Temp** °C	Pot. T*** °C	Sigma T	O2 %	CTD		NO2 μmol/kg	F* NO3 μmol/kg	F* PO4 μmol/kg	F* Si(OH)4 μmol/kg	F* CFC-11 pmol/kg	F* CFC-12 μmol/kg	F* at 20 °C μmol/kg	DIC μmol/kg	pH	F* TA μmol/kg	F* TOC μmol/l	F* TON μmol/l	F* Chl-a μg/l											
		Salinity***	Depth	Salinity***	Depth																														
7524	2	6.2	34.395	34.403	2	28.804	28.803	21.684	197.6	197.0	2	-2.4	0.00	2	0.03	2	2.09	2	1.606	2	0.851	2	245.9	2	1912.3	6	8.1098	2	2255	2	-9.00	9	-8.00	9	-8
7523	2	40.1	34.452	34.457	2	28.711	28.701	21.758	200.4	197.3	2	-2.5	0.00	2	0.04	2	2.13	2	1.607	2	0.929	2	248.7	2	1915.2	2	8.1176	2	2256	2	-9.00	9	-8.00	9	-8
7522	2	78.1	35.284	35.289	2	22.286	22.270	24.363	124.2	118.6	2	97.2	0.22	2	11.87	2	8.54	2	1.585	2	0.885	2	484.7	2	2082.9	2	7.8658	2	2309	2	-9.00	9	-8.00	9	-9
7521	2	121.3	35.210	35.226	2	18.559	18.538	25.312	92.9	91.8	2	139.1	0.02	2	18.00	2	13.30	2	1.383	2	0.752	2	642.0	2	2133.5	2	7.7795	2	2309	2	-9.00	9	-8.00	9	-8
7520	2	160.6	34.898	34.900	2	14.532	14.508	26.002	57.4	56.9	2	193.3	0.01	2	26.12	2	1.83	2	26.05	2	0.778	2	947.9	2	2188.3	2	7.6336	2	2302	2	-9.00	9	-8.00	9	-8
7519	2	200.6	34.961	34.959	2	12.765	12.738	26.414	64.6	63.9	2	195.4	0.00	2	27.20	2	1.89	2	25.90	2	0.562	2	1010.8	2	2202.8	2	7.6149	2	2315	2	-9.00	9	-8.00	9	-8
7518	2	298.8	34.959	34.958	2	11.037	11.000	26.743	69.9	68.3	2	200.7	0.00	2	29.08	2	1.98	2	26.36	2	0.287	2	1106.5	2	2215.2	2	7.5753	2	2315	2	-9.00	9	-8.00	9	-8
7517	2	398.8	34.905	34.903	2	10.138	10.091	26.861	83.7	81.3	2	193.1	0.00	2	29.43	2	2.01	2	28.90	2	0.144	2	1087.2	2	2215.3	2	7.5814	2	2316	2	-9.00	9	-8.00	9	-8
7516	2	498.8	34.859	34.859	2	9.129	9.073	26.996	78.3	77.1	2	203.6	0.00	2	31.46	2	2.23	2	38.78	2	0.112	2	1197.2	2	2230.3	2	7.5495	2	2329	2	-9.00	9	-8.00	9	-8
7515	2	598.9	34.852	34.852	2	8.470	8.406	27.096	62.8	63.8	2	221.2	0.00	2	34.07	2	2.44	2	49.67	2	0.033	2	1303.4	2	2253.0	2	7.5174	2	2330	2	-9.00	9	-8.00	9	-8
7514	2	700.1	34.849	34.847	2	7.837	7.765	27.189	57.1	58.2	2	230.9	0.00	2	35.31	2	2.57	2	59.88	2	0.011	2	1373.0	2	2269.7	2	7.4985	2	2349	2	-9.00	9	-8.00	9	-8
7513	2	898.6	34.765	34.765	2	6.294	6.211	27.340	67.2	68.2	2	231.7	0.00	2	36.10	2	2.66	2	81.09	2	0.003	2	1420.0	2	2289.1	2	7.4928	2	2365	2	-9.00	9	-8.00	9	-8
7512	2	1098.8	34.786	34.786	2	5.277	5.182	27.484	76.6	77.1	2	230.1	0.00	2	36.36	2	2.70	2	93.26	2	0.000	2	1382.1	2	2303.0	2	7.4957	2	2376	2	-9.00	9	-8.00	9	-8
7511	2	1299.9	34.800	34.800	2	4.615	4.507	27.573	86.1	88.4	2	225.8	0.00	2	36.72	2	2.70	2	99.54	2	0.000	2	1420.0	2	2289.1	2	7.5052	2	2387	2	-9.00	9	-8.00	9	-8
7510	2	1500.1	34.786	34.785	2	3.888	3.769	27.639	102.9	103.3	2	214.6	0.00	2	36.29	2	2.65	2	105.07	2	0.005	2	1327.9	2	2310.3	2	7.5147	2	2390	2	-9.00	9	-8.00	9	-8
7509	2	1799.7	34.767	34.767	2	2.964	2.830	27.715	126.2	126.0	2	195.5	0.00	2	35.25	2	2.55	2	113.56	2	-9.000	2	1250.0	2	2310.0	2	7.5431	2	2400	2	-9.00	9	-8.00	9	-8
7508	2	2098.3	34.757	34.756	2	2.448	2.296	27.752	138.7	139.4	2	190.5	0.00	2	34.64	2	2.49	2	119.80	2	0.011	2	1200.1	2	2310.6	2	7.5579	2	2406	2	-9.00	9	-8.00	9	-8
7507	2	2500.4	34.742	34.742	2	2.025	1.844	27.777	150.6	152.1	2	181.7	0.00	2	34.42	2	2.44	2	123.98	2	-9.000	2	1161.8	2	2308.8	2	7.5729	2	2405	2	-9.00	9	-8.00	9	-8
7506	2	2800.5	34.733	34.732	2	1.752	1.539	27.792	158.5	161.3	2	175.1	0.00	2	34.18	2	2.41	2	127.53	2	-0.001	2	1129.2	2	2301.5	2	7.5896	2	2411	2	-9.00	9	-8.00	9	-8
7505	2	3284.4	34.727	34.728	2	1.560	1.316	27.805	162.2	164.8	2	173.6	0.00	2	33.91	2	2.38	2	131.09	2	-9.000	2	1109.4	2	2310.4	2	7.5835	2	2413	2	-9.00	9	-8.00	9	-8
7504	2	3702.0	34.722	34.722	2	1.433	1.147	27.812	166.2	182.9	2	156.9	0.00	2	33.65	2	2.37	2	133.81	2	0.000	2	1093.9	2	2312.0	2	7.6004	2	2421	2	-9.00	9	-8.00	9	-8
7503	2	4203.2	34.720	34.720	2	1.405	1.066	27.816	171.0	175.4	2	165.2	0.00	2	33.78	2	2.35	2	133.85	2	-0.001	2	1075.1	2	2308.4	2	7.6002	2	2417	2	-9.00	9	-8.00	9	-8
7502	2	4698.8	34.719	34.718	2	1.401	1.008	27.818	176.6	181.2	2	159.9	0.00	2	33.32	2	2.32	2	130.78	2	-0.001	2	1066.8	2	2303.2	2	7.6031	2	2411	2	-8.00	9	-8.00	9	-8
7501	2	5215.9	34.717	34.717	2	1.410	0.952	27.821	182.5	185.2	2	158.4	0.00	2	32.87	2	2.30	2	128.75	2	0.001	2	1052.2	2	2294.7	2	7.6000	2	2403	2	-8.00	9	-8.00	9	-8

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR
NOAA Ship Baldridge

STATION 76 DATE 10/18/1995
 CAST 1 GMT 23:15
 CTD CAST 297

LATITUDE 04° 29.73' S
 LONGITUDE 80° 02.2' E

Bottle Number	CTD		Bottle		Sigma Theta	O2	O2	F* AUO	NO2	F* NO3	F* PO4	F* Si(OH)4	F* CFC-11	F* CFC-12	F* at 20 °C	F* Hum	F* DIC	F* pH	F* TA	F* TOC	F* TON	F* Chl-a	Phaeo																
	Pressure db	Salinity	Temp °C	Pot. T °C																				Salinity	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C
7616	2	7.0	34.415	34.419	2	28.629	28.627	21.754	194.6	196.7	2	-1.6	0.00	2	0.07	2	0.17	2	2.46	2	-8.000	9	-9.000	9	-9.000	9	246.8	2	1912.7	2	8.1068	2	2254	2	-9.00	9	-9.00	9	-9
7615	2	46.7	35.264	35.143	2	26.958	26.947	22.844	201.5	195.6	2	4.0	0.00	2	0.17	2	0.28	2	3.39	2	1.655	2	0.943	2	-9.0	9	1981.8	2	8.0524	2	-9	9	-9.00	9	-9.00	9	-9		
7614	2	69.6	35.253	35.140	2	20.629	20.612	24.707	114.8	84.5	2	137.9	0.00	2	19.41	2	1.39	2	16.17	2	-9.000	9	-9.000	9	737.3	2	2147.2	2	7.7122	2	2309	2	-9.00	9	-9.00	9	-9		
7613	2	149.2	34.935	34.936	2	14.479	14.457	26.041	61.2	60.1	2	190.3	0.01	2	25.64	2	1.79	2	25.10	2	0.800	2	0.430	2	928.1	2	2186.6	2	7.6377	2	2304	2	-9.00	9	-9.00	9	-9		
7612	2	248.0	34.989	34.990	2	11.864	11.632	26.652	79.1	76.4	2	188.9	0.00	2	27.10	2	1.86	2	24.17	2	0.457	2	0.247	2	1009.7	2	2203.8	2	7.6053	2	2312	2	-9.00	9	-9.00	9	-9		
7611	2	449.9	34.889	34.870	2	9.403	9.352	26.959	70.0	64.6	2	214.4	0.00	2	31.98	2	2.22	2	37.57	2	0.083	2	0.049	2	-9.0	9	2234.0	2	7.5419	2	2316	2	-9.00	9	-9.00	9	-9		
7610	2	648.3	34.886	34.865	2	7.969	7.902	27.183	54.9	55.7	2	232.5	0.00	2	35.24	2	2.57	2	59.71	2	0.010	2	0.005	2	-9.0	9	2271.5	2	7.4970	2	2340	2	-9.00	9	-9.00	9	-9		
7609	2	800.2	34.822	34.822	2	6.933	6.855	27.299	62.4	62.9	2	232.4	0.00	2	36.02	2	2.65	2	73.15	2	0.006	2	0.002	2	1387.2	2	2285.0	2	7.4925	2	2354	2	-9.00	9	-9.00	9	-9		
7608	2	999.5	34.788	34.788	2	5.795	5.705	27.423	72.8	73.0	2	230.4	0.00	2	36.22	2	2.68	2	87.17	2	0.000	2	0.001	2	1404.2	2	2298.6	2	7.4951	2	2367	2	-9.00	9	-9.00	9	-9		
7607	2	1197.8	34.813	34.813	2	5.007	4.905	27.538	79.1	79.4	2	229.8	0.00	2	36.63	2	2.71	2	96.29	2	-9.000	9	-9.000	9	1404.4	2	2307.2	2	7.4952	2	2378	2	-9.00	9	-9.00	9	-9		
7606	2	1499.4	34.787	34.786	2	3.771	3.654	27.651	106.7	105.5	2	213.3	0.00	2	35.88	2	2.63	2	106.74	2	-9.000	9	-9.000	9	-8.0	9	2310.5	2	7.5207	2	2391	2	-9.00	9	-9.00	9	-9		
7605	2	1800.5	34.770	34.769	2	2.949	2.816	27.718	126.8	125.1	2	200.5	0.00	2	35.18	2	2.55	2	115.17	2	-9.000	9	-9.000	9	1258.1	2	2309.8	2	7.5414	2	2396	2	-9.00	9	-9.00	9	-9		
7604	2	2101.5	34.759	34.758	2	2.448	2.295	27.754	139.1	137.5	2	192.4	0.00	2	34.86	2	2.50	2	121.37	2	-9.000	9	-9.000	9	-9.0	9	2310.6	2	7.5562	2	2407	2	-9.00	9	-9.00	9	-9		
7603	2	2400.7	34.746	34.745	2	2.076	1.903	27.775	151.9	149.8	2	183.4	0.00	2	34.82	2	2.44	2	124.75	2	-9.000	9	-9.000	9	-9.0	9	2308.8	2	7.5698	2	2406	2	-9.00	9	-9.00	9	-9		
7602	2	2700.5	34.738	34.736	2	1.888	1.691	27.764	159.9	157.7	2	177.4	0.00	2	34.79	2	2.40	2	125.33	2	-9.000	9	-9.000	9	-9.0	9	2305.4	2	7.5786	2	2405	2	-9.00	9	-9.00	9	-9		
7601	2	3003.8	34.731	34.731	2	1.708	1.486	27.795	164.9	162.3	2	174.6	0.00	2	33.75	2	2.38	2	128.14	2	-9.000	9	-9.000	9	1137.6	2	2307.3	6	7.5853	2	2411	2	-9.00	9	-9.00	9	-9		

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 77 DATE 10/19/1995
 CAST 1 GMT 05:42
 CTD CAST 298

LATITUDE 03° 59.39' S
 LONGITUDE 80° 0.36' E

Bottle Number	CTD		Bottle		CTD		Bottle		fCO2		pH		F*		TA		F*		TOC		F*		Chl-a															
	db	Salinity	Temp	Pot	Sigma	O2	Hmol/Kg	Hmol/Kg	Theta	NO2	NO3	PO4	Si(OH)4	CFC-11	CFC-12	DIC	F*	F*	F*	F*	F*	F*	F*	F*	F*	F*												
7724	2	5.8	34.582	-9.000	9	28.605	28.604	21.884	198.3	197.5	2	-2.5	0.00	2	0.03	2	0.18	2	2.21	2	1.801	2	0.981	2	255.5	2	1920.5	6	-9.000	9	-9	9	71.36	2	4.23	2	-9	-9
7723	2	39.8	34.757	34.745	2	28.342	28.333	22.066	202.5	196.8	2	-1.2	0.00	2	0.13	2	0.20	2	2.19	2	1.590	2	0.932	2	254.9	2	1934.4	2	8.100	2	2276	2	71.49	2	4.49	2	-9	-9
7722	2	78.8	35.259	35.262	2	21.831	21.816	24.470	122.9	119.0	2	98.5	0.17	2	12.29	2	0.97	2	9.33	2	1.569	2	0.863	2	497.7	2	2064.8	2	7.874	2	2308	2	62.61	2	3.49	2	-9	-9
7721	2	119.8	34.939	34.934	2	15.888	15.869	25.728	55.1	55.0	2	188.5	0.01	2	24.91	2	1.77	2	23.74	2	0.910	2	0.514	2	891.3	2	2175.7	2	7.655	2	2302	2	58.12	2	3.66	2	-9	-9
7720	2	150.7	35.021	35.024	2	13.932	13.910	26.225	74.1	71.5	2	181.5	0.00	2	24.55	2	1.73	2	22.69	2	0.848	2	0.488	2	906.7	2	2185.0	2	7.650	2	2310	2	55.61	2	2.39	2	-9	-9
7719	2	199.8	35.039	35.038	2	12.504	12.477	26.527	97.0	92.5	2	168.1	0.00	2	24.01	2	1.70	2	21.26	2	0.818	2	0.458	2	893.5	2	2186.2	2	7.654	2	2311	2	55.17	2	2.01	2	-9	-9
7718	2	299.7	34.976	34.974	2	11.024	10.987	26.758	101.1	97.9	2	171.1	0.00	2	25.97	2	1.81	2	23.25	2	0.574	2	0.316	2	975.5	2	2194.2	2	7.627	2	2309	2	51.33	2	2.25	2	-9	-9
7717	2	384.1	34.921	34.919	2	10.108	10.063	26.878	79.4	78.0	2	196.6	0.00	2	29.87	2	2.07	2	29.99	2	0.199	2	0.125	2	1121.0	2	2217.2	2	7.570	2	2314	2	49.83	2	1.74	2	-9	-9
7716	2	551.5	34.879	34.879	2	8.897	8.836	27.050	72.3	71.8	2	210.4	0.00	2	32.37	2	2.33	2	43.27	2	0.082	2	0.044	2	1239.8	2	2240.2	2	7.534	2	2323	2	47.00	2	-9.00	2	-9	-9
7715	2	750.8	34.931	34.930	2	7.888	7.810	27.248	53.4	55.0	2	233.7	0.00	2	35.05	2	2.61	2	62.59	2	-9.000	2	-9.000	2	1400.3	2	2274.0	2	7.494	2	2343	2	-9.00	2	-9.00	2	-9	-9
7714	2	903.3	34.803	34.807	2	6.415	6.330	27.358	87.4	87.8	2	231.1	0.00	2	36.00	2	2.67	2	79.50	2	-9.000	2	-9.000	2	1412.7	2	2288.5	2	7.493	2	2361	2	-9.00	2	-9.00	2	-9	-9
7713	2	1097.4	34.776	34.776	2	5.314	5.219	27.472	77.2	78.3	2	228.7	0.00	2	36.41	2	2.71	2	92.95	2	-9.000	2	-9.000	2	1388.1	2	2302.4	2	7.494	2	2372	2	43.92	2	-9.00	2	-9	-9
7712	2	1199.4	34.821	34.821	2	5.144	5.040	27.529	76.8	77.7	2	230.5	0.00	2	36.55	2	2.73	2	94.80	2	-9.000	2	-9.000	2	1405.8	2	2307.5	2	7.493	2	2375	2	-9.00	2	-9.00	2	-9	-9
7711	2	1397.4	34.798	34.797	2	4.372	4.258	27.598	92.5	92.7	2	221.4	0.00	2	36.29	2	2.89	2	101.60	2	-9.000	2	-9.000	2	1345.7	2	2306.5	2	7.507	2	2385	2	-9.00	2	-9.00	2	-9	-9
7710	2	1599.4	34.784	34.783	2	3.644	3.519	27.662	109.1	109.1	2	210.8	0.00	2	35.78	2	2.84	2	108.10	2	-9.000	2	-9.000	2	1310.8	2	2306.4	2	7.520	2	2390	2	43.01	2	-9.00	2	-9	-9
7709	2	1901.0	34.770	34.769	2	2.835	2.694	27.728	128.2	128.2	2	188.4	0.00	2	35.18	2	2.56	2	116.74	2	-9.000	2	-9.000	2	1240.8	2	2308.4	2	7.541	2	2399	2	-9.00	2	-9.00	2	-9	-9
7708	2	2193.8	34.755	34.753	2	2.334	2.175	27.760	141.5	141.4	2	189.5	0.00	2	34.74	2	2.53	2	122.14	2	-9.000	2	-9.000	2	1202.6	2	2309.8	2	7.556	2	2407	2	-9.00	2	-9.00	2	-9	-9
7707	2	2497.2	34.744	34.744	2	2.039	1.858	27.778	150.0	150.4	2	183.2	0.00	2	34.38	2	2.46	2	125.44	2	-9.000	2	-9.000	2	1168.7	2	2307.9	2	7.569	2	2409	2	-9.00	2	-9.00	2	-9	-9
7706	2	2799.5	34.737	34.736	2	1.849	1.843	27.788	157.2	158.3	2	177.2	0.00	2	34.04	2	2.42	2	126.85	2	-9.000	2	-9.000	2	1146.5	2	2305.6	2	7.576	2	2409	2	-9.00	2	-9.00	2	-9	-9
7705	2	3198.8	34.729	34.727	2	1.627	1.388	27.799	182.1	163.7	2	174.0	0.00	2	33.90	2	2.41	2	130.86	2	-9.000	2	-9.000	2	1132.5	2	2308.4	2	7.585	2	2417	2	42.81	2	-9.00	2	-9	-9
7704	2	3594.2	34.723	34.722	2	1.477	1.201	27.808	166.6	168.5	2	170.9	0.00	2	33.82	2	2.38	2	133.95	2	-9.000	2	-9.000	2	9.0	2	2310.6	2	7.596	2	2416	2	-9.00	2	-9.00	2	-9	-9
7703	2	3998.6	34.721	34.720	2	1.396	1.080	27.815	171.5	174.0	2	166.4	0.00	2	33.58	2	2.36	2	134.13	2	-9.000	2	-9.000	2	1092.2	2	2307.4	2	7.604	2	2416	2	-9.00	2	-9.00	2	-9	-9
7702	2	4404.8	34.719	34.718	2	1.386	1.025	27.817	177.3	178.7	2	162.2	0.00	2	33.31	2	2.34	2	132.16	2	-9.000	2	-9.000	2	9.0	2	2302.3	2	7.603	2	2414	2	-9.00	2	-9.00	2	-9	-9
7701	2	4681.9	34.718	34.718	2	1.394	1.001	27.819	180.3	180.5	2	160.6	0.00	2	33.23	2	2.33	2	131.36	2	-9.000	2	-9.000	2	1079.7	2	2300.4	2	7.603	2	2409	2	42.52	2	-9.00	2	-9	-9

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

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

**** PSS-78 scale

***** ITS-90 scale

18NR NOAA Ship Baldrige

STATION 78 DATE 10/19/1995
 CAST 1 GMT 10:07
 CTD CAST 299

LATITUDE 03° 29.98' S
 LONGITUDE 80° 0.35' E

Bottle Number	CTD		Bottle		fCO ₂																													
	Pressure db	Salinity	Temp °C	Theta	O ₂ µmol/kg	Sigma Theta	AOU µmol/kg	NO ₂ µmol/kg	NO ₃ µmol/kg	PO ₄ µmol/kg	Si(OH) ₄ µmol/kg	CFC-11 pmol/kg	CFC-12 pmol/kg	F _{am} µmol/kg	DIC µmol/kg	pH	F _{TA} µmol/kg	TA µmol/kg	TOC µmol/l	F _{TON} µmol/l	Chl-a µg/l	Phaeo µg/l												
7816	2	7.4	34.507	-9.000	9	28.629	28.627	21.820	195.8	-9.0	-9.0	9	-9.0	9	-9.0	9	7.6057	2	-9	9	-9.00	9	-9	-9										
7815	2	45.0	35.167	35.158	2	26.410	26.400	23.029	187.5	188.6	2	12.7	0.07	2	1.55	2	0.36	2	3.69	2	1989.5	2	8.0418	2	2302	2	-9.00	9	-9.00	9	-9	-9		
7814	2	89.2	35.300	35.303	2	22.145	22.127	24.414	124.8	119.7	2	96.6	0.09	2	12.22	2	0.95	2	6.75	2	-9.00	9	-9.00	9	-9.00	2	2309	2	-9.00	9	-9.00	9	-9	-9
7813	2	140.5	35.059	35.060	2	14.681	14.660	26.093	75.0	71.9	2	177.3	0.00	2	23.71	2	1.68	2	21.13	2	-9.00	9	-9.00	9	-9.00	2	2306	2	-9.00	9	-9.00	9	-9	-9
7812	2	201.8	35.034	35.035	2	12.446	12.419	26.536	98.8	94.6	2	166.3	0.00	2	23.90	2	1.68	2	21.40	2	-9.00	9	-9.00	9	-9.00	2	2310	2	-9.00	9	-9.00	9	-9	-9
7811	2	300.0	34.983	34.984	2	11.147	11.110	26.744	108.5	103.7	2	164.6	0.00	2	25.11	2	1.75	2	22.45	2	-9.00	9	-9.00	9	-9.00	2	2311	2	-9.00	9	-9.00	9	-9	-9
7810	2	398.3	34.949	34.950	2	10.327	10.279	26.865	93.2	90.1	2	183.1	0.00	2	28.10	2	1.96	2	27.64	2	-9.00	9	-9.00	9	-9.00	2	2312	2	-9.00	9	-9.00	9	-9	-9
7809	2	547.0	34.892	34.893	2	9.060	8.999	27.035	75.1	74.1	2	207.0	0.00	2	31.88	2	2.28	2	41.14	2	-9.00	9	-9.00	9	-9.00	2	2312	2	-9.00	9	-9.00	9	-9	-9
7808	2	749.4	34.861	34.861	2	7.463	7.388	27.255	59.3	60.0	2	231.6	0.00	2	35.26	2	2.60	2	65.84	2	-9.00	9	-9.00	9	-9.00	2	2344	2	-9.00	9	-9.00	9	-9	-9
7807	2	899.5	34.926	34.926	2	6.994	6.906	27.374	52.4	53.8	2	240.9	0.00	2	36.05	2	2.70	2	75.78	2	-9.00	9	-9.00	9	-9.00	2	2344	2	-9.00	9	-9.00	9	-9	-9
7806	2	1198.0	34.819	34.818	2	5.172	5.068	27.523	76.4	76.5	2	231.5	0.00	2	36.51	2	2.72	2	95.03	2	-9.00	9	-9.00	9	-9.00	2	2387	2	-9.00	9	-9.00	9	-9	-9
7805	2	1500.9	34.800	34.801	2	3.988	3.868	27.642	102.0	101.1	2	216.0	0.00	2	35.95	2	2.64	2	104.94	2	-9.00	9	-9.00	9	-9.00	2	2387	2	-9.00	9	-9.00	9	-9	-9
7804	2	1798.9	34.777	34.778	2	3.083	2.948	27.713	123.7	121.7	2	202.8	0.00	2	35.46	2	2.58	2	113.40	2	-9.00	9	-9.00	9	-9.00	2	2387	2	-9.00	9	-9.00	9	-9	-9
7803	2	2199.4	34.755	34.755	2	2.302	2.143	27.764	143.3	141.7	2	189.5	0.00	2	34.91	2	2.49	2	122.79	2	-9.00	9	-9.00	9	-9.00	2	2387	2	-9.00	9	-9.00	9	-9	-9
7802	2	2600.9	34.743	34.743	2	1.988	1.798	27.782	153.4	151.1	2	183.0	0.00	2	34.53	2	2.46	2	126.18	2	-9.00	9	-9.00	9	-9.00	2	2387	2	-9.00	9	-9.00	9	-9	-9
7801	2	3002.4	34.733	34.732	2	1.746	1.523	27.793	162.8	159.9	2	176.6	0.00	2	33.91	2	2.40	2	128.68	2	-9.00	9	-9.00	9	-9.00	2	2408	2	-9.00	9	-9.00	9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 79 DATE 10/19/1995
 CAST 1 GMT 16:39
 CTD CAST 300

LATITUDE 02° 59.54' S
 LONGITUDE 80° 0.01' E

Bottle Number	CTD										Bottle										CO2															
	F* Pressure db	Salinity	Temp** °C	Pot. T*** °C	Sigma Theta	O2 Hmol/kg	O2 Hmol/kg	AOU	NO2 Hmol/kg	NO3 Hmol/kg	PO4 Hmol/kg	Si(OH)4 F* Hmol/kg	CFC-11 F* pmol/kg	CFC-12 F* pmol/kg	Hum Hmol/kg	DIC F* Hmol/kg	pH	F* Hmol/kg	TA Hmol/kg	TOC F* Hmol/kg	TON F* Hmol/kg	Chi-a Hg/l	Phaeo Hg/l													
7924	2	5.9	34.872	-9.000	9	28.744	28.743	197.4	196.4	2	-1.9	-9.00	9	-9.00	9	-9.00	9	1.614	2	0.966	2	255.2	2	1923.9	6	8.1048	2	2268	2	71.75	2	4.87	2	-9	-9	
7923	2	46.6	35.172	35.180	2	26.114	26.104	23.139	164.7	163.1	2	39.2	0.69	2	4.53	2	0.50	2	1.580	2	0.933	2	341.3	3	2012.7	8	8.0049	2	2302	2	71.71	2	4.78	2	-9	-9
7922	2	86.8	35.313	35.318	2	22.117	22.100	24.433	126.3	122.5	2	93.9	0.09	2	12.01	2	0.90	2	1.625	6	0.928	6	484.3	2	2081.7	2	7.6847	2	2311	2	60.76	2	4.66	2	-9	-9
7921	2	135.5	35.050	35.054	2	17.139	17.117	25.529	64.8	62.8	2	174.7	0.01	2	22.66	2	1.55	2	1.668	2	1.130	2	793.8	2	2157.3	2	7.6984	2	2302	2	58.50	2	2.61	2	-9	-9
7920	2	180.9	35.030	-9.000	9	12.864	12.839	26.449	92.0	83.8	2	175.0	-9.00	9	-9.00	9	-9.00	9	0.795	2	0.433	2	900.6	3	2188.9	2	7.6482	2	2310	2	52.75	2	2.26	2	-9	-9
7919	2	250.3	35.022	35.023	2	11.764	11.732	26.659	109.8	104.5	2	160.2	0.00	2	24.13	2	1.65	2	20.84	2	0.622	2	896.9	2	2183.9	2	7.6574	2	2312	2	52.66	2	2.36	2	-9	-9
7918	2	349.5	34.972	34.972	2	10.723	10.680	26.812	95.8	93.2	2	177.6	0.00	2	27.32	2	1.85	2	24.79	2	0.491	2	1182.6	3	2200.1	2	7.6118	2	2313	2	51.60	2	2.19	2	-9	-9
7917	2	451.2	34.911	34.911	2	9.708	9.656	26.941	76.1	78.3	2	200.7	0.00	2	30.69	2	2.11	2	33.09	2	0.164	2	1155.7	2	2224.6	2	7.5587	2	2318	2	50.39	2	2.02	2	-9	-9
7916	2	600.0	34.921	34.920	2	8.775	8.709	27.102	62.4	62.9	2	220.0	0.00	2	33.08	2	2.40	2	45.57	2	0.058	2	1293.4	2	2251.5	2	7.5208	2	2331	2	47.12	2	-9.00	9	-9	-9
7915	2	700.2	34.966	34.967	2	8.290	8.215	27.216	55.8	56.8	2	229.1	0.00	2	34.06	2	2.51	2	56.85	2	-9.000	9	1343.1	2	2264.6	2	7.5059	2	2341	2	-9.00	9	-9.00	9	-9	-9
7914	2	802.4	34.969	34.970	2	7.820	7.737	27.290	48.9	50.0	2	239.1	0.00	2	35.23	2	2.60	2	65.16	2	-9.000	9	1416.3	2	2281.7	2	7.4874	2	2349	2	-9.00	9	-9.00	9	-9	-9
7913	2	900.8	34.929	34.928	2	7.114	7.025	27.359	51.9	53.8	2	240.1	0.00	2	35.87	2	2.66	2	73.86	2	-9.000	9	1435.2	2	2290.4	2	7.4639	2	2358	2	44.72	2	-9.00	9	-9	-9
7912	2	1004.8	34.888	34.898	2	6.497	6.401	27.420	57.2	59.1	2	239.2	0.00	2	36.29	2	2.69	2	81.15	2	0.004	2	1427.3	2	2296.3	2	7.4840	2	2365	2	-9.00	9	-9.00	9	-9	-9
7911	2	1203.3	34.848	34.848	2	5.346	5.240	27.527	71.0	72.3	2	234.4	0.00	2	36.51	2	2.70	2	93.61	2	-9.000	9	1409.2	2	2307.1	2	7.4890	2	2376	2	-9.00	9	-9.00	9	-9	-9
7910	2	1404.6	34.827	34.827	2	4.634	4.516	27.593	84.8	85.6	2	226.5	0.00	2	36.21	2	2.67	2	100.13	2	-9.000	9	1384.0	2	2308.4	2	7.5022	2	2384	2	42.65	2	-9.00	9	-9	-9
7909	2	1602.0	34.803	34.802	2	3.801	3.674	27.662	103.9	105.0	2	213.6	0.00	2	35.74	2	2.61	2	107.22	2	0.001	2	1313.0	2	2311.1	2	7.5176	2	2389	2	-9.00	9	-9.00	9	-9	-9
7908	2	1602.9	34.781	34.780	2	3.164	3.027	27.707	119.2	119.4	2	204.4	0.00	2	35.26	2	2.55	2	113.34	2	-9.000	9	1289.2	2	2310.1	2	7.5346	2	2396	2	-9.00	9	-9.00	9	-9	-9
7907	2	2098.3	34.767	34.766	2	2.577	2.423	27.750	132.5	133.2	2	195.6	0.00	2	34.78	2	2.51	2	120.63	2	-9.000	9	1296.2	2	2313.5	2	7.5509	2	2411	2	42.49	2	-9.00	9	-9	-9
7906	2	2503.5	34.746	34.746	2	2.063	1.881	27.778	147.3	148.5	2	184.9	0.00	2	34.31	2	2.44	2	125.76	2	1.154	4	-0.004	2	1155.9	2	7.5690	2	2414	2	-9.00	9	-9.00	9	-9	-9
7905	2	3000.1	34.733	34.733	2	1.732	1.510	27.795	158.0	159.8	2	176.9	0.00	2	33.88	2	2.36	2	129.29	2	-9.000	9	1124.4	2	2309.3	2	7.5811	2	2415	2	-9.00	9	-9.00	9	-9	-9
7904	2	3501.5	34.725	34.725	2	1.401	1.243	27.808	164.3	166.9	2	172.1	0.00	2	33.68	2	2.36	2	133.23	2	-9.000	9	1096.9	2	2310.4	2	7.5928	2	2422	2	41.90	2	-9.00	9	-9	-9
7903	2	3984.4	34.721	34.719	2	1.399	1.065	27.815	170.2	169.5	2	170.9	0.00	2	33.35	2	2.34	2	134.22	2	-9.000	9	1079.3	2	2308.9	2	7.6033	2	2423	2	-9.00	9	-9.00	9	-9	-9
7902	2	4500.1	34.719	34.719	2	1.399	1.027	27.818	175.5	178.5	2	162.4	0.00	2	33.06	2	2.31	2	132.21	2	-9.000	9	1063.0	2	2303.4	2	7.6054	2	2419	2	-9.00	9	-9.00	9	-9	-9
7901	2	5027.7	34.718	34.718	2	1.427	0.992	27.819	179.3	181.3	2	159.9	0.00	2	32.99	2	2.29	2	131.19	2	-9.000	9	1069.5	2	2298.7	6	7.6053	2	2416	2	-9.00	4	-9.00	9	-9	-9

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

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

*** PSS-78 scale

**** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 80 DATE 10/19/1995
 CAST 1 GMT 21:07
 CTD CAST 301

LATITUDE 02° 30.19' S
 LONGITUDE 80° 0.27' E

Bottle Number	CTD										Bottle										CTD										Bottle																					
	F* Pressure db	Salinity	Temp	Pot	Sigma	Theta	O2	O2	AOU	NO2	NO3	PO4	Si(OH)4	CFC-11	CFC-12	F* at 20°C	DIC	pH	TA	TOC	TON	Chi-a	Salinity	Temp	Pot	Sigma	Theta	O2	O2	AOU	NO2	NO3	PO4	Si(OH)4	CFC-11	CFC-12	F* at 20°C	DIC	pH	TA	TOC	TON	Chi-a									
8016	2	5.8	34.891	28.754	28.753	22.071	195.8	197.3	-3.1	0.00	0.01	0.16	2.05	-9.000	-9.000	254.4	1937.2	6	8.1058	2	2288	2	-9.00	9	-9.00	9	-9	9	195.8	197.3	-3.1	0.00	0.01	0.16	2.05	-9.000	-9.000	254.4	1937.2	6	8.1058	2	2288	2	-9.00	9	-9.00	9	-9	9		
8015	2	30.7	35.140	28.329	28.322	22.401	200.0	198.6	-3.4	0.00	0.01	0.19	1.94	1.597	0.951	255.1	1948.6	2	8.1032	2	2306	2	-9.00	9	-9.00	9	-9	9	200.0	198.6	-3.4	0.01	0.19	1.94	1.597	0.951	255.1	1948.6	2	8.1032	2	2306	2	-9.00	9	-9.00	9	-9	9			
8014	2	60.0	35.108	26.004	25.981	23.126	170.5	165.2	37.6	0.52	4.17	0.49	4.51	-9.000	-9.000	331.9	2000.2	2	8.0158	2	2298	2	-9.00	9	-9.00	9	-9	9	170.5	165.2	37.6	0.52	4.17	0.49	4.51	-9.000	-9.000	331.9	2000.2	2	8.0158	2	2298	2	-9.00	9	-9.00	9	-9	9		
8013	2	99.5	35.192	19.568	19.550	25.027	87.2	82.4	144.3	0.04	18.32	1.32	13.46	1.392	0.790	-9.0	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	9	87.2	82.4	144.3	0.04	18.32	1.32	13.46	1.392	0.790	-9.0	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	9		
8012	2	199.7	35.061	12.408	12.381	26.564	87.5	83.3	177.8	0.01	24.95	1.76	21.27	0.660	-0.004	933.7	2190.8	2	7.6364	2	2312	2	-9.00	9	-9.00	9	-9	9	87.5	83.3	177.8	0.01	24.95	1.76	21.27	0.660	-0.004	933.7	2190.8	2	7.6364	2	2312	2	-9.00	9	-9.00	9	-9	9		
8011	2	401.1	34.967	10.436	10.388	26.862	97.3	94.1	178.4	0.00	27.18	1.92	27.14	0.509	0.289	-9.0	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	9	97.3	94.1	178.4	0.00	27.18	1.92	27.14	0.509	0.289	-9.0	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	9		
8010	2	601.8	34.929	8.831	8.765	27.102	68.9	69.1	213.4	0.00	32.29	2.37	46.19	-9.000	-9.000	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	9	68.9	69.1	213.4	0.00	32.29	2.37	46.19	-9.000	-9.000	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	9		
8009	2	801.3	34.973	7.951	7.867	27.274	49.9	50.9	237.3	0.00	34.84	2.62	63.33	-9.000	-9.000	9	1383.6	2277.2	2	7.4913	2	2347	2	-9.00	9	-9.00	9	-9	9	49.9	50.9	237.3	0.00	34.84	2.62	63.33	-9.000	-9.000	9	1383.6	2277.2	2	7.4913	2	2347	2	-9.00	9	-9.00	9	-9	9
8008	2	1002.0	34.898	6.470	6.375	27.424	57.1	58.5	239.9	0.00	36.28	2.71	81.84	-9.000	-9.000	9	1426.2	2297.2	2	7.4823	2	2371	2	-9.00	9	-9.00	9	-9	9	57.1	58.5	239.9	0.00	36.28	2.71	81.84	-9.000	-9.000	9	1426.2	2297.2	2	7.4823	2	2371	2	-9.00	9	-9.00	9	-9	9
8007	2	1188.9	34.853	5.512	5.405	27.510	68.3	69.1	236.3	0.00	36.85	2.73	91.99	-9.000	-9.000	9	1417.2	2305.0	2	7.4881	2	2378	2	-9.00	9	-9.00	9	-9	9	68.3	69.1	236.3	0.00	36.85	2.73	91.99	-9.000	-9.000	9	1417.2	2305.0	2	7.4881	2	2378	2	-9.00	9	-9.00	9	-9	9
8006	2	1500.3	34.816	4.190	4.068	27.632	95.4	94.8	220.7	0.00	36.17	2.67	104.12	-9.000	-9.000	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	9	94.8	94.8	220.7	0.00	36.17	2.67	104.12	-9.000	-9.000	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	9		
8005	2	1798.8	34.792	3.282	3.144	27.708	116.6	115.1	207.8	0.00	35.67	2.60	113.36	-9.000	-9.000	9	1285.5	2313.6	2	7.5328	2	2398	2	-9.00	9	-9.00	9	-9	9	115.1	115.1	207.8	0.00	35.67	2.60	113.36	-9.000	-9.000	9	1285.5	2313.6	2	7.5328	2	2398	2	-9.00	9	-9.00	9	-9	9
8004	2	2100.3	34.766	2.563	2.409	27.750	135.8	133.9	195.1	0.00	35.14	2.51	120.82	-9.000	-9.000	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	9	133.9	133.9	195.1	0.00	35.14	2.51	120.82	-9.000	-9.000	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	9		
8003	2	2399.3	34.750	2.154	1.980	27.773	147.5	145.3	187.3	0.00	35.01	2.48	125.23	-9.000	-9.000	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	9	145.3	145.3	187.3	0.00	35.01	2.48	125.23	-9.000	-9.000	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	9		
8002	2	2698.8	34.739	1.892	1.695	27.785	158.4	155.7	179.3	0.00	34.20	2.43	126.24	-9.000	-9.000	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	9	155.7	155.7	179.3	0.00	34.20	2.43	126.24	-9.000	-9.000	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	9		
8001	2	3000.5	34.732	1.697	1.475	27.798	164.3	160.7	176.3	0.00	33.80	2.40	129.58	-9.000	-9.000	9	1130.1	2307.4	6	7.5819	2	2413	2	-9.00	9	-9.00	9	-9	9	160.7	160.7	176.3	0.00	33.80	2.40	129.58	-9.000	-9.000	9	1130.1	2307.4	6	7.5819	2	2413	2	-9.00	9	-9.00	9	-9	9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR
NOAA Ship Baldrige

STATION 81 DATE 10/20/1995
 CAST 1 GMT 03:14
 CTD CAST 302

LATITUDE 02° 0.34' S
 LONGITUDE 80° 0.44' E

Bottle Number	CTD Bottle														ICO2																						
	F* Pressure db	Salinity	Temp	Pot	Sigma T	O2	O2	Theta	AOU	NO2	NO3	PO4	Si(OH)4	F* CFC-11	F* CFC-12	F* at 20°C	F* Ham	DIC	pH	F*	TA	F*	TOC	F*	TON	F*	Chl-a										
8124	2	6.2	34.868	34.773	2	28.744	28.743	21.982	195.2	197.1	2	-2.8	0.00	2	0.03	2	0.17	2	1.76	2	1.589	2	0.968	2	249.8	2	1928.5	6	8.1047	2	2276	2	71.04	2	4.77	2	-9
8123	2	39.9	35.477	35.484	2	28.682	28.672	22.539	197.7	195.9	2	-2.2	0.00	2	0.03	2	0.19	2	1.53	2	1.572	2	0.932	2	253.4	2	1980.5	2	8.1111	2	2325	2	69.54	2	4.99	2	-9
8122	2	80.2	35.158	35.178	2	24.902	24.885	23.513	141.8	147.9	2	58.5	0.88	2	6.77	2	0.84	2	5.69	2	1.553	2	0.907	2	373.0	2	2025.2	2	7.9772	2	2305	2	65.48	2	4.35	2	-9
8121	2	120.1	35.155	35.173	2	17.208	17.188	25.603	78.5	75.8	2	161.2	0.02	2	20.81	2	1.48	2	15.89	2	1.232	2	0.691	2	744.9	2	2152.2	2	7.7245	2	2309	2	62.48	2	2.91	2	-9
8120	2	159.4	35.106	35.107	2	13.820	13.797	26.313	80.8	77.8	2	175.9	0.01	2	23.97	2	1.71	2	20.13	2	0.884	2	0.495	2	898.8	2	2183.8	2	7.8573	2	-9	56.07	2	2.70	2	-9	
8119	2	249.0	35.058	35.058	2	11.984	11.951	26.644	94.2	90.1	2	173.3	0.00	2	25.04	2	1.77	2	21.88	2	0.735	2	0.412	2	940.9	2	2192.7	2	7.6372	2	2312	2	51.04	2	2.37	2	-9
8118	2	349.9	35.023	35.023	2	11.092	11.048	26.785	86.9	83.5	2	185.1	0.00	2	27.25	2	1.93	2	25.70	2	0.517	2	0.294	2	1038.4	2	2209.3	2	7.5996	2	2314	2	49.80	2	2.81	2	-9
8117	2	449.5	34.979	34.979	2	10.451	10.397	26.867	97.9	94.8	2	177.7	0.00	2	27.27	2	1.94	2	27.36	2	0.528	2	0.296	2	1011.1	2	2207.7	2	7.6056	2	2313	2	49.78	2	2.44	2	-9
8116	2	549.6	34.937	34.937	2	9.530	9.467	26.993	85.7	84.3	2	193.8	0.00	2	29.90	2	2.14	2	35.49	2	0.275	2	0.163	2	1127.8	2	2225.3	2	7.5696	2	2319	2	47.07	2	-9.00	2	-9
8115	2	650.4	35.003	34.999	2	8.873	8.801	27.150	50.3	51.6	2	230.6	0.00	2	33.81	2	2.51	2	51.56	2	0.063	2	0.041	2	1358.1	2	2284.5	2	7.5112	2	2338	2	-9.00	2	-9.00	2	-9
8114	2	749.6	34.993	34.937	2	8.437	8.356	27.171	43.4	55.2	2	229.9	0.00	2	35.88	2	2.70	2	72.76	2	0.010	2	0.014	2	1448.0	2	2291.9	2	7.4840	2	2353	2	-9.00	2	-9.00	2	-9
8113	2	950.8	34.932	34.932	2	7.144	7.049	27.359	47.7	50.0	2	243.7	0.00	2	36.31	2	2.72	2	74.48	2	0.000	2	0.006	2	1452.4	2	2291.8	2	7.4791	2	2355	2	42.80	2	-9.00	2	-9
8112	2	1200.1	34.881	34.860	2	5.582	5.474	27.508	66.3	67.7	2	237.2	0.00	2	36.73	2	2.74	2	91.66	2	0.006	2	0.003	2	1431.4	2	2304.9	2	7.4835	2	2376	2	-9.00	2	-9.00	2	-9
8111	2	1400.9	34.836	34.836	2	4.604	4.487	27.604	84.4	85.0	2	227.3	0.00	2	36.47	2	2.71	2	100.88	2	-0.001	2	0.001	2	1379.6	2	2308.5	2	7.5024	2	2383	2	-9.00	2	-9.00	2	-9
8110	2	1700.5	34.800	34.800	2	3.542	3.410	27.687	108.8	109.1	2	211.6	0.00	2	35.82	2	2.83	2	110.59	2	-9.000	2	-9.000	2	1302.8	2	2311.3	2	7.5256	2	2393	2	42.40	2	-9.00	2	-9
8109	2	2000.0	34.771	34.771	2	2.683	2.546	27.743	129.8	129.9	2	197.9	0.00	2	35.14	2	2.55	2	119.90	2	-0.001	2	0.008	2	1225.9	2	2313.1	2	7.5468	2	2403	2	-9.00	2	-9.00	2	-9
8108	2	2303.3	34.753	34.753	2	2.221	2.054	27.770	142.9	143.2	2	188.8	0.00	2	34.67	2	2.49	2	124.66	2	-9.000	2	-9.000	2	1182.0	2	2310.7	2	7.5441	2	2409	2	-9.00	2	-9.00	2	-9
8107	2	2600.7	34.742	34.742	2	1.953	1.764	27.763	151.4	152.0	2	182.4	0.00	2	34.37	2	2.45	2	127.19	2	-9.000	2	-9.000	2	1154.4	2	2311.9	2	7.5745	2	2416	2	-9.00	2	-9.00	2	-9
8106	2	2901.2	34.734	34.734	2	1.746	1.593	27.784	159.2	160.3	2	176.1	0.00	2	34.03	2	2.41	2	128.63	2	0.000	2	0.004	2	1133.2	2	2305.4	2	7.5882	2	2412	2	-9.00	2	-9.00	2	-9
8105	2	3302.0	34.726	34.726	2	1.529	1.282	27.806	163.2	165.2	2	173.5	0.00	2	33.96	2	2.40	2	133.36	2	-9.000	2	-9.000	2	1111.3	2	2310.7	2	7.5917	2	2421	2	-9.00	2	-9.00	2	-9
8104	2	3700.1	34.722	34.721	2	1.414	1.129	27.812	169.6	171.7	2	168.3	0.00	2	33.69	2	2.37	2	133.80	2	-9.000	2	-9.000	2	9.0	2	2308.6	2	7.6024	2	2419	2	42.46	2	-9.00	2	-9
8103	2	4102.8	34.719	34.719	2	1.389	1.062	27.815	172.2	175.0	2	165.6	0.00	2	33.53	2	2.35	2	133.93	2	-0.001	2	0.003	2	1068.2	2	2309.3	2	7.5989	2	2420	2	-9.00	2	-9.00	2	-9
8102	2	4501.0	34.719	34.718	2	1.408	1.035	27.816	174.8	177.2	2	163.6	0.00	2	33.43	2	2.34	2	132.91	2	-0.001	2	0.001	2	-6.0	2	2302.5	2	7.6082	2	2418	2	-9.00	2	-9.00	2	-9
8101	2	4988.0	34.718	-8.000	9	1.437	1.008	27.818	178.4	179.1	2	182.0	0.00	2	33.38	2	2.34	2	132.28	2	-0.001	2	0.001	2	1077.4	2	2302.5	6	-9.0000	9	2417	2	-9.00	2	-9.00	2	-9

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

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

*** PSS-78 scale

**** ITS-90 scale

I8NR
NOAA Ship Baldrige

STATION 82 DATE 10/20/1995
 CAST 1 GMT 08:27
 CTD CAST 303

LATITUDE 01° 29.96' S
 LONGITUDE 80° 0.4' E

Bottle Number	CTD			Bottle			CO2																											
	F** Pressure Salinity*** db	Salinity***	Temp**** °C	Pot. T**** °C	Sigma Theta	O2	O2	F* AOU	NO2	F* NO3	F* PO4	F* Si(OH)4	F* CFC-11	F* CFC-12	F* CHam	DIC	F* pH	F* TA	F* TOC	F* TON	F* Chl-a													
						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/l	µmol/l	µg/l													
8216	2	34.966	28.833	28.831	22.002	197.7	198.1	2	-4.1	0.01	2	0.02	2	0.17	2	1.88	2	-9.000	9	-9.000	9	250.5	2	1932.1	2	8.1083	2	2279	2	-9.00	9	-9.00	9	-9
8215	2	34.9	28.833	28.825	22.460	200.8	197.3	2	-4.0	0.01	2	0.01	2	0.19	2	1.73	2	-9.000	9	-9.000	9	-9.0	9	1958.5	2	8.1109	2	2317	2	-9.00	9	-9.00	9	-9
8214	2	71.1	26.794	26.794	23.054	177.4	168.8	2	31.0	0.26	2	3.64	2	0.45	2	3.94	2	-9.000	9	-9.000	9	305.8	2	1997.9	2	8.0396	2	2311	2	-9.00	9	-9.00	9	-9
8213	2	140.0	14.931	14.910	26.086	76.2	74.2	2	173.6	0.00	2	23.29	2	1.65	2	19.13	2	-9.000	9	-9.000	9	-9.0	9	2174.3	2	7.6765	2	2307	2	-9.00	9	-9.00	9	-9
8212	2	179.9	13.237	13.212	26.438	81.2	78.1	2	178.4	0.00	2	24.49	2	1.75	2	20.72	2	-9.000	9	-9.000	9	922.6	2	2188.6	2	7.6454	2	2311	2	-9.00	9	-9.00	9	-9
8211	2	200.7	12.847	12.820	26.505	77.4	74.8	2	183.8	0.00	2	25.35	2	1.80	2	21.75	2	-9.000	9	-9.000	9	-9.0	9	2183.5	2	7.6263	2	2312	2	-9.00	9	-9.00	9	-9
8210	2	300.0	11.625	11.586	26.709	80.4	78.3	2	187.2	0.00	2	26.80	2	1.94	2	24.39	2	-9.000	9	-9.000	9	1016.7	2	2205.2	2	7.6057	2	2312	2	-9.00	9	-9.00	9	-9
8209	2	499.3	10.262	10.202	26.900	93.6	90.6	2	183.0	0.00	2	28.07	2	2.02	2	29.59	2	-9.000	9	-9.000	9	-9.0	9	-9.0	9	7.5949	2	-9	9	-9.00	9	-9.00	9	-9
8208	2	594.9	9.716	9.647	27.007	71.9	70.9	2	206.0	0.00	2	30.81	2	2.23	2	37.52	2	-9.000	9	-9.000	9	-9.0	9	-9.0	9	7.5505	2	-9	9	-9.00	9	-9.00	9	-9
8207	2	798.3	8.377	8.291	27.232	44.7	46.4	2	239.0	0.00	2	34.92	2	2.66	2	59.72	2	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
8206	2	974.6	6.698	6.604	27.406	53.1	54.1	2	242.7	0.00	2	36.53	2	2.74	2	79.46	2	-9.000	9	-9.000	9	1446.4	2	2297.5	2	7.4779	2	2360	2	-9.00	9	-9.00	9	-9
8205	2	1194.2	5.517	5.411	27.519	69.4	69.9	2	235.5	0.00	2	36.39	2	2.73	2	91.82	2	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
8204	2	1594.1	3.937	3.809	27.665	99.3	98.9	2	218.6	0.00	2	36.25	2	2.67	2	107.92	2	-9.000	9	-9.000	9	-9.0	9	-9.0	9	7.5129	2	-9	9	-9.00	9	-9.00	9	-9
8203	2	1999.7	2.690	2.543	27.742	130.7	128.1	2	198.7	0.00	2	35.60	2	2.57	2	120.09	2	-9.000	9	-9.000	9	-9.0	9	2312.9	2	7.5443	2	2401	2	-9.00	9	-9.00	9	-9
8202	2	2500.6	2.007	1.826	27.780	152.1	149.8	2	184.1	0.00	2	34.34	2	2.45	2	125.65	2	-9.000	9	-9.000	9	1180.8	2	2308.6	6	7.5692	2	2407	2	-9.00	9	-9.00	9	-9
8201	2	3004.9	1.666	1.445	27.798	163.7	-9.0	9	-9.0	-9.00	9	-9.00	9	-9.00	9	-9.00	9	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 83 DATE 10/20/1995
 CAST 1 GMT 15:06
 CTD CAST 304

LATITUDE 01° 0.26' S
 LONGITUDE 80° 0.92' E

Bottle Number	CTD										Bottle										fCO2														
	Pressure db	Salinity	Temp	Pot	Sigma T	O2	H2O2	Theta	NO2	NO3	PO4	Si(OH)4	CFC-11	CFC-12	F _{am}	DIC	pH	F _a	TA	TOC	F _a	TON	Chl-a												
	°C	‰	°C	°C	kg/m ³	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												
8324	2	8.9	34.618	28.595	28.593	22.078	198.8	212.8	3	-18.1	0.00	2	0.09	2	0.17	2	1.74	2	1.605	2	0.974	2	250.7	2	1932.9	6	8.1141	2	2280	2	68.87	2	5.88	2	-9
8323	2	50.5	35.348	28.324	28.312	22.569	201.0	194.1	2	0.9	0.01	2	0.21	2	0.21	2	1.39	2	1.602	2	0.945	2	263.0	2	1963.0	2	8.1031	2	2311	2	68.25	2	5.46	2	-9
8322	2	96.5	35.193	18.228	18.211	25.369	64.3	62.5	2	169.9	0.03	2	21.64	2	1.54	2	15.59	2	1.187	2	0.663	2	759.1	2	2156.8	2	7.7178	2	2307	2	60.13	2	2.92	2	-9
8321	2	126.8	35.136	15.454	15.434	25.982	66.8	64.4	2	180.9	0.01	2	23.77	2	1.69	2	18.91	2	0.973	2	0.543	2	868.9	2	2178.9	2	7.6679	2	2308	2	54.77	2	3.37	2	-9
8320	2	151.3	35.139	14.057	14.035	26.288	79.1	76.4	2	175.8	0.00	2	23.89	2	1.71	2	19.52	2	0.931	2	0.510	2	901.1	2	2168.3	2	-9.0000	9	-9	9	52.40	2	3.07	2	-9
8319	2	251.4	35.059	11.906	11.873	26.660	85.8	81.0	2	182.9	0.00	2	26.29	2	1.84	2	22.83	2	0.638	2	0.362	2	1008.9	2	2204.0	2	7.6206	2	2313	2	51.90	2	2.67	2	-9
8318	2	348.6	35.035	11.236	11.192	26.768	76.8	74.4	2	193.3	0.00	2	28.23	2	1.96	2	25.60	2	0.446	2	0.257	2	1071.2	2	2214.7	2	7.5897	2	2316	2	51.69	2	2.36	2	-9
8317	2	449.7	35.018	10.605	10.550	26.871	72.4	70.8	2	200.7	0.00	2	29.86	2	2.08	2	30.01	2	0.357	2	0.209	2	1131.7	2	2223.5	2	7.5654	2	2316	2	50.32	2	2.18	2	-9
8316	2	543.7	34.980	10.038	9.974	26.941	82.0	80.8	2	194.2	0.00	2	29.71	2	2.09	2	32.20	2	0.543	2	0.198	2	1115.8	2	2224.9	2	7.5743	2	2320	2	43.56	2	-9.00	9	-9
8315	2	851.2	35.010	8.503	8.421	27.208	42.2	44.2	2	240.4	0.00	2	35.02	2	2.80	2	57.56	2	-9.000	9	-9.000	9	1412.5	2	2277.0	2	7.4871	2	2348	2	-9.00	9	-9.00	9	-9
8314	2	754.8	34.998	8.503	8.421	27.208	42.2	44.2	2	240.4	0.00	2	35.02	2	2.80	2	57.56	2	-9.000	9	-9.000	9	1412.5	2	2277.0	2	7.4871	2	2348	2	-9.00	9	-9.00	9	-9
8313	2	849.7	34.938	7.457	7.371	27.317	47.3	49.9	2	241.7	0.00	2	33.77	2	2.49	2	49.47	2	0.067	2	0.042	2	1348.0	2	2264.5	2	7.5042	2	2333	2	-9.00	9	-9.00	9	-9
8312	2	1002.6	34.936	6.584	6.488	27.439	52.8	54.5	2	243.1	0.00	2	36.49	2	2.73	2	81.34	2	-9.000	9	-9.000	9	1456.6	2	2300.5	2	7.4792	2	2371	2	-9.00	9	-9.00	9	-9
8311	2	1201.1	34.893	5.702	5.593	27.519	63.9	65.8	2	238.2	0.00	2	36.59	2	2.74	2	90.81	2	0.001	2	0.000	2	1447.2	2	2310.3	2	7.4853	2	2382	2	-9.00	9	-9.00	9	-9
8310	2	1398.8	34.836	4.527	4.411	27.612	86.7	87.2	2	225.7	0.00	2	36.22	2	2.70	2	101.08	2	-9.000	9	-9.000	9	1388.9	2	2313.4	2	7.5011	2	2391	2	42.19	2	-9.00	9	-9
8309	2	1597.6	34.817	3.748	3.622	27.880	103.0	103.3	2	215.7	0.00	2	35.83	2	2.64	2	109.28	2	-9.000	9	-9.000	9	1343.2	2	2316.1	2	7.5187	2	2389	2	-9.00	9	-9.00	9	-9
8308	2	1800.1	34.796	3.268	3.130	27.709	115.5	115.3	2	207.7	0.00	2	35.49	2	2.60	2	113.85	2	-0.001	2	0.001	2	1283.5	2	2312.6	2	7.5313	2	2408	2	-9.00	9	-9.00	9	-9
8307	2	2000.4	34.773	2.895	2.548	27.745	130.2	130.3	2	197.5	0.00	2	35.08	2	2.54	2	119.59	2	-9.000	9	-9.000	9	1230.0	2	2313.5	2	7.5526	2	2412	2	42.53	2	-9.00	9	-9
8306	2	2401.9	34.750	2.135	1.961	27.774	146.4	146.8	2	186.1	0.00	2	34.81	2	2.46	2	125.56	2	-9.000	9	-9.000	9	1182.4	2	2314.1	2	7.5671	2	2417	2	-9.00	9	-9.00	9	-9
8305	2	2800.0	34.735	1.749	1.545	27.783	158.5	159.1	2	177.2	0.00	2	34.72	2	2.40	2	128.28	2	-0.001	2	0.003	2	1140.7	2	2312.5	2	7.5666	2	2411	2	-9.00	9	-9.00	9	-9
8304	2	3201.4	34.730	1.618	1.379	27.802	159.6	160.8	2	177.0	0.00	2	34.18	2	2.41	2	132.58	2	-9.000	9	-9.000	9	1123.6	2	2313.8	2	7.5652	2	2418	2	42.64	2	-9.00	9	-9
8303	2	3701.6	34.724	1.452	1.166	27.811	165.7	167.5	2	172.2	0.00	2	33.79	2	2.38	2	135.51	2	0.000	2	0.002	2	0.0	2	-9.0	2	7.5952	2	2423	2	-9.00	9	-9.00	9	-9
8302	2	4201.1	34.720	1.393	1.055	27.816	173.2	175.2	2	165.5	0.00	2	33.39	2	2.34	2	133.54	2	0.000	2	0.002	2	1084.0	2	2306.7	2	7.6028	2	2413	2	-9.00	9	-9.00	9	-9
8301	2	4741.3	34.719	1.425	1.024	27.818	176.9	177.4	2	163.5	0.00	2	33.55	2	2.33	2	132.87	2	0.000	2	0.006	2	1073.8	2	2305.4	2	7.6074	2	2405	2	-9.00	4	-9.00	9	-9

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

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

*** PSS-78 scale

**** ITS-90 scale

I8NR
NOAA Ship Baldridge

STATION 84 DATE 10/20/1995
 CAST 1 GMT 18:35
 CTD CAST 305

LATITUDE 00° 45.57' S
 LONGITUDE 79° 59.98' E

Bottle Number	CTD		Bottle		CTD		Bottle		Sigma		Theta		F* Temp***		F* Salinity***		F* Pot. T****		F* AOU		NO2		NO3		F* PO4		F* Si(OH)4		F* CFC-11		F* CFC-12		F* DIC		F* pH		F* TA		F* TOC		F* TON		F* Chl-a				
	db	Salinity	Temp	Salinity	Temp	Temp	Salinity	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	
8416	2	6.1	34.953	34.958	2	28.723	28.722	22.128	199.0	196.8	3	-2.8	0.00	2	0.02	2	0.17	2	1.74	2	-9.000	9	-9.000	9	-9.000	9	-9.000	9	-9.000	9	-9.000	9	-9.000	9	248.2	2	1841.2	2	8.1094	2	2287	2	73.28	3	5.51	2	-9
8415	2	59.1	35.346	35.354	2	27.570	27.556	22.808	190.0	184.7	2	12.6	0.12	2	1.50	2	0.30	2	2.33	2	1.591	2	0.947	2	0.847	2	0.947	2	0.847	2	0.947	2	272.2	2	1975.8	2	8.0780	2	2310	2	87.73	2	4.51	2	-9		
8414	2	108.9	35.185	35.188	2	18.014	17.985	25.418	63.0	62.8	2	170.8	0.01	2	22.07	2	1.56	2	15.98	2	1.153	2	0.650	2	0.650	2	0.650	2	0.650	2	0.650	2	767.3	2	2155.6	2	7.7137	2	2305	2	52.56	2	2.86	2	-9		
8413	2	133.4	35.162	35.164	2	16.898	16.876	25.671	60.0	58.4	2	180.0	0.01	2	23.59	2	1.88	2	17.99	2	1.053	2	0.598	2	0.598	2	0.598	2	0.598	2	0.598	2	-9.0	9	2171.9	2	7.8819	2	2306	2	53.41	2	2.58	2	-9		
8412	2	180.0	35.124	35.125	2	13.624	13.598	26.368	75.2	72.5	2	182.0	0.00	2	24.83	2	1.75	2	20.57	2	-9.000	9	-9.000	9	-9.000	9	-9.000	9	-9.000	9	-9.000	9	921.7	2	2190.4	2	7.8431	2	2316	2	49.49	2	2.29	2	-9		
8411	2	250.8	35.065	35.064	2	12.018	11.985	26.642	81.3	78.5	2	184.7	0.00	2	28.41	2	1.83	2	22.67	2	0.815	2	0.348	2	0.348	2	0.348	2	0.348	2	0.348	2	1001.5	2	2201.6	6	7.6152	2	2312	2	49.50	2	2.06	2	-9		
8410	2	349.9	35.040	35.040	2	11.339	11.295	26.753	76.8	75.0	2	192.1	0.00	2	28.42	2	1.93	2	25.15	2	0.465	2	0.287	2	0.287	2	0.287	2	0.287	2	0.287	2	-9.0	9	-9.0	9	-9.0000	9	-9	9	53.47	3	3.13	2	-9		
6409	2	547.0	35.024	35.024	2	10.189	10.124	28.950	68.8	69.0	2	205.0	0.00	2	30.39	2	2.16	2	33.77	2	0.306	2	0.174	2	0.174	2	0.174	2	0.174	2	0.174	2	-9.0	9	-9.0	9	-9.0000	9	-9	9	47.05	2	-9.00	9	-9		
8408	2	750.4	34.999	34.997	2	8.565	8.483	27.198	43.9	45.5	2	238.7	0.00	2	34.97	2	2.58	2	56.53	2	-9.000	9	-9.000	9	-9.000	9	-9.000	9	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	44.73	2	-9.00	9	-9		
8407	2	899.6	34.938	34.937	2	7.234	7.144	27.349	48.0	49.9	2	243.2	0.00	2	36.47	2	2.70	2	73.18	2	-9.000	9	-9.000	9	-9.000	9	-9.000	9	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	9.00	9	-9.00	9	-9		
8406	2	1000.2	34.941	34.940	2	6.682	6.585	27.429	51.9	53.4	2	243.5	0.00	2	36.55	2	2.73	2	80.39	2	-9.000	9	-9.000	9	-9.000	9	-9.000	9	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	9.00	9	-9.00	9	-9		
8405	2	1400.1	34.833	34.832	2	4.505	4.389	27.811	87.9	87.7	2	225.3	0.00	2	36.47	2	2.68	2	101.17	2	-9.000	9	-9.000	9	-9.000	9	-9.000	9	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	43.00	2	-9.00	9	-9		
8404	2	1795.0	34.799	34.797	2	3.294	3.156	27.709	114.9	113.5	2	209.3	0.00	2	35.87	2	2.59	2	114.09	2	-9.000	9	-9.000	9	-9.000	9	-9.000	9	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	9.00	9	-9.00	9	-9		
8403	2	2201.8	34.765	34.763	2	2.457	2.295	27.758	137.5	135.4	2	194.5	0.00	2	35.03	2	2.52	2	122.80	2	-9.000	9	-9.000	9	-9.000	9	-9.000	9	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	40.80	2	-9.00	9	-9		
8402	2	2595.2	34.743	34.742	2	1.961	1.772	27.783	153.8	151.4	2	183.0	0.00	2	34.37	2	2.43	2	127.31	2	-9.000	9	-9.000	9	-9.000	9	-9.000	9	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	9.00	9	-9.00	9	-9		
8401	2	3004.3	34.733	34.731	2	1.705	1.483	27.796	162.2	158.5	2	178.4	0.00	2	34.35	2	2.40	2	130.96	2	-9.000	9	-9.000	9	-9.000	9	-9.000	9	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	41.18	2	-9.00	9	-9		

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 85 DATE 10/20/1995
 CAST 1 GMT 03:25
 CTD CAST 306

LATITUDE 00° 30.35' S
 LONGITUDE 80° 0.48' E

Bottle Number	Bottle										CTD										Bottle										CO2									
	F** Pressure db	Salinity	Temp °C	Pot T*** °C	Sigma Theta	O2	O2	F* AOU	NO2	NO3	PO4	S(OH)4	F* CFC-11	F* CFC-12	F* at 20 °C	DIC	pH	F*	TA	F*	TOC	F*	TON	F*	Chl-a															
8524	2	6.2	34.825	28.633	28.632	22.061	194.5	196.5	2	-1.9	0.00	2	0.00	2	0.16	2	1.71	2	1.584	2	0.954	2	246.9	2	-9.0	9	8.1084	2	2280	2	77.26	3	5.73	2	-9	-9				
8523	2	24.0	34.987	28.867	28.861	22.128	196.3	196.4	2	-2.7	0.00	2	0.02	2	0.17	2	1.70	2	1.589	2	0.963	2	-9.0	9	8.1112	2	2292	2	70.58	2	4.60	2	-9	-9						
8522	2	49.4	35.342	28.554	28.542	22.479	198.2	193.8	2	0.5	0.02	2	0.22	2	0.22	2	1.56	2	1.606	2	0.969	2	258.1	2	-9.0	9	8.1031	2	2311	2	70.12	2	5.63	2	-9	-9				
8521	2	74.1	35.214	28.554	28.542	22.479	198.2	142.2	2	65.1	0.70	2	7.62	2	0.69	2	5.95	2	1.586	2	0.934	2	-9.0	9	7.9595	2	2305	2	58.05	2	4.90	2	-9	-9						
8520	2	119.4	35.172	28.554	28.542	22.479	198.2	80.9	2	176.7	0.01	2	22.94	2	1.65	2	17.39	2	1.085	2	0.613	2	813.1	2	-9.0	9	7.6958	2	2307	2	56.51	2	3.63	2	-9	-9				
8519	2	149.8	35.136	28.554	28.542	22.479	198.2	68.1	2	180.6	0.00	2	24.11	2	1.73	2	19.33	2	0.929	2	0.520	2	-9.0	9	-9.0000	9	-9	9	54.00	2	2.56	2	-9	-9						
8518	2	199.5	35.089	28.554	28.542	22.479	198.2	74.9	2	184.7	0.00	2	25.49	2	1.82	2	21.55	2	0.679	2	0.370	2	970.8	2	-9.0	9	7.6241	2	2315	2	49.76	2	2.54	2	-9	-9				
8517	2	353.1	35.036	28.554	28.542	22.479	198.2	77.7	2	193.8	0.00	2	27.77	2	1.97	2	25.68	2	0.455	2	0.280	2	-9.0	9	-9.0000	9	-9	9	48.24	2	2.40	2	-9	-9						
8516	2	499.6	35.007	28.554	28.542	22.479	198.2	75.6	2	199.0	0.00	2	29.34	2	2.11	2	31.96	2	0.334	2	0.196	2	1128.5	2	-9.0	9	7.5687	2	2318	2	45.15	2	1.94	2	-9	-9				
8515	2	899.2	35.003	28.554	28.542	22.479	198.2	44.8	2	235.1	0.00	2	34.09	2	2.54	2	51.99	2	0.045	2	0.030	2	-9.0	9	-9.0000	9	-9	9	9.00	9	-9.00	9	-9	-9						
8514	2	897.8	34.954	28.554	28.542	22.479	198.2	47.3	2	243.8	0.00	2	35.99	2	2.73	2	74.85	2	0.004	2	0.005	2	1461.7	2	-9.0	9	7.4779	2	2364	2	-9.00	9	-9.00	9	-9	-9				
8513	2	1099.0	34.909	28.554	28.542	22.479	198.2	57.7	2	259.6	0.00	2	36.60	2	2.75	2	87.08	2	0.000	2	0.002	2	1459.7	2	-9.0	9	7.4782	2	2373	2	43.06	2	-9.00	9	-9	-9				
8512	2	1299.6	34.873	28.554	28.542	22.479	198.2	72.6	2	233.9	0.00	2	36.95	2	2.73	2	95.82	2	-8.000	2	-8.000	2	1419.1	2	-9.0	9	7.4807	2	2380	2	-9.00	9	-9.00	9	-9	-9				
8511	2	1499.7	34.833	28.554	28.542	22.479	198.2	92.9	2	222.5	0.00	2	36.55	2	2.71	2	105.09	2	-0.001	2	-0.002	2	-9.0	9	-9.0000	9	-9	9	9.00	9	-9.00	9	-9	-9						
8510	2	1699.5	34.787	28.554	28.542	22.479	198.2	108.3	2	212.7	0.00	2	35.59	2	2.65	2	111.50	2	-8.000	2	-8.000	2	1311.4	2	-9.0	9	7.5237	2	2394	2	-9.00	9	-9.00	9	-9	-9				
8509	2	2199.2	34.761	28.554	28.542	22.479	198.2	120.7	2	204.4	0.00	2	35.06	2	2.59	2	116.76	2	-8.000	2	-8.000	2	-9.0	9	-9.0000	9	-9	9	9.00	9	-9.00	9	-9	-9						
8508	2	2499.9	34.746	28.554	28.542	22.479	198.2	137.2	2	183.3	0.00	2	34.57	2	2.52	2	124.02	2	0.000	2	0.002	2	-9.0	9	-9.0000	9	-9	9	9.00	9	-9.00	9	-9	-9						
8507	2	2798.1	34.737	28.554	28.542	22.479	198.2	148.2	2	179.7	0.00	2	34.29	2	2.47	2	126.78	2	-8.000	2	-8.000	2	1185.9	2	-9.0	9	7.5703	2	2409	2	43.25	2	-9.00	9	-9	-9				
8506	2	3099.9	34.731	28.554	28.542	22.479	198.2	155.7	2	175.1	0.00	2	34.41	2	2.43	2	129.90	2	-8.000	2	-8.000	2	-9.0	9	-9.0000	9	-9	9	9.00	9	-9.00	9	-9	-9						
8505	2	3499.1	34.723	28.554	28.542	22.479	198.2	166.5	2	172.0	0.00	2	34.35	2	2.43	2	132.13	2	0.002	2	0.001	2	-9.0	9	-9.0000	9	-9	9	9.00	9	-9.00	9	-9	-9						
8504	2	3900.0	34.721	28.554	28.542	22.479	198.2	170.5	2	168.5	0.00	2	33.73	2	2.40	2	135.63	2	-8.000	2	-8.000	2	1123.3	2	-9.0	9	7.5853	2	2428	2	-9.00	9	-9.00	9	-9	-9				
8503	2	4298.6	34.719	28.554	28.542	22.479	198.2	171.2	2	169.5	0.00	2	33.35	2	2.37	2	135.04	2	-8.000	2	-8.000	2	-9.0	9	-9.0000	9	-9	9	9.00	9	-9.00	9	-9	-9						
8502	2	4775.2	34.718	28.554	28.542	22.479	198.2	177.4	2	163.4	0.00	2	33.27	2	2.34	2	133.83	2	0.002	2	0.004	2	-9.0	9	-9.0000	9	-9	9	9.00	9	-9.00	9	-9	-9						
8501	2	4775.2	34.718	28.554	28.542	22.479	198.2	177.5	2	163.4	0.00	2	33.27	2	2.34	2	133.00	2	0.001	2	0.004	2	1083.2	2	-9.0	9	7.6078	2	2419	2	-9.00	9	-9.00	9	-9	-9				

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

18NR
NOAA Ship Baldrige

LATITUDE 00° 15.33' S
LONGITUDE 80° 0.35' E

STATION 86 DATE 10/21/1995
CAST 1 GMT 03:03
CTD CAST 307

Bottle Number	CTD		Bottle		CTD		Bottle		F [*] Temp ^{****} °C	Pot. T ^{****} °C	Sigma Theta	O ₂		F [*] Salinity ^{***}		AOU	NO ₃		PO ₄	Si(OH) ₄		CFC-11		CFC-12		DIC	pH	TA	TOC	TON	Chl-a		
	db	Pressure	Salinity	Salinity	db	Pressure	db	Pressure				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
8616	2	6.2	35.084	35.103	28.903	28.902	22.177	191.4	195.5	-2.1	0.00	0.03	0.19	2	1.69	2	1.597	2	0.942	2	245.1	2	1944.9	6	8.1099	2	2300	2	89.24	2	4.75	2	-9
8615	2	50.5	35.378	35.374	28.982	28.980	22.354	195.9	194.3	-1.4	0.01	0.06	0.22	2	1.66	2	-9.000	9	-9.000	9	250.3	2	1958.5	2	8.1109	2	2312	2	85.59	2	4.81	2	-9
8614	2	110.2	35.223	35.229	20.579	20.558	24.789	77.7	76.1	146.4	0.06	18.25	1.37	2	12.44	2	1.334	2	0.752	2	635.4	2	2127.4	2	7.7825	2	2306	2	56.81	2	3.51	2	-9
8613	2	151.4	35.154	35.154	16.315	16.291	25.800	58.5	56.8	184.4	0.01	23.85	1.74	2	19.02	2	0.989	2	0.558	2	859.4	2	2178.2	2	7.8698	2	2308	2	55.08	2	2.22	2	-9
8612	2	201.9	35.100	35.101	12.941	12.913	26.489	72.1	70.7	187.4	0.00	25.81	1.81	2	21.56	2	0.703	2	0.404	2	974.4	2	2196.6	2	7.8256	2	2312	2	53.91	2	2.59	2	-9
8611	2	400.9	35.008	35.008	10.601	10.552	26.863	76.2	73.6	197.9	0.00	29.33	2.05	2	29.39	2	0.349	2	0.201	2	1121.6	2	2225.7	2	7.5731	2	2318	2	47.71	2	1.89	2	-9
8610	2	602.0	35.032	35.033	9.532	9.463	27.069	49.1	50.7	227.3	0.00	32.80	2.41	2	44.18	2	0.117	2	0.074	2	-9.0	9	-9.0000	9	-9.0000	9	-9	9	47.11	2	-9.00	9	-9
8609	2	798.8	34.986	34.984	8.027	7.943	27.270	42.6	45.1	242.6	0.00	35.31	2.64	2	64.19	2	-9.000	9	-9.000	9	-9.0	9	-9.0000	9	-9.0000	9	-9	9	46.19	2	-9.00	9	-9
8608	2	986.8	34.943	34.943	6.817	6.720	27.413	48.2	50.2	245.8	0.00	36.31	2.73	2	79.42	2	-9.000	9	-9.000	9	-9.0	9	-9.0000	9	-9.0000	9	-9	9	42.97	2	-9.00	9	-9
8607	2	1204.4	34.885	34.883	5.545	5.437	27.531	65.5	66.9	238.2	0.00	36.47	2.72	2	93.02	2	-9.000	9	-9.000	9	-9.0	9	-9.0000	9	-9.0000	9	-9	9	9.00	9	-9.00	9	-9
8606	2	1500.9	34.834	34.832	4.212	4.090	27.643	92.9	92.6	222.7	0.00	36.01	2.89	2	104.99	2	-9.000	9	-9.000	9	-9.0	9	-9.0000	9	-9.0000	9	-9	9	9.00	9	-9.00	9	-9
8605	2	1800.4	34.800	34.798	3.313	3.175	27.708	114.3	112.9	209.7	0.00	35.44	2.60	2	113.91	2	-9.000	9	-9.000	9	-9.0	9	-9.0000	9	-9.0000	9	-9	9	9.00	9	-9.00	9	-9
8604	2	2101.6	34.789	34.767	2.567	2.412	27.751	133.8	131.3	197.6	0.00	34.93	2.53	2	121.95	2	-9.000	9	-9.000	9	-9.0	9	-9.0000	9	-9.0000	9	-9	9	9.00	9	-9.00	9	-9
8603	2	2401.0	34.752	34.750	2.174	1.999	27.772	146.0	143.5	188.9	0.00	34.85	2.50	2	126.24	2	-9.000	9	-9.000	9	-9.0	9	-9.0000	9	-9.0000	9	-9	9	9.00	9	-9.00	9	-9
8602	2	2698.8	34.739	34.737	1.852	1.656	27.788	158.3	155.2	180.2	0.00	34.19	2.44	2	128.16	2	-9.000	9	-9.000	9	-9.0	9	-9.0000	9	-9.0000	9	-9	9	9.00	9	-9.00	9	-9
8601	2	3011.0	34.731	34.730	1.678	1.456	27.797	163.4	159.7	177.4	0.00	33.78	2.42	2	131.33	2	-9.000	9	-9.000	9	-9.0	9	-9.0000	9	-9.0000	9	-9	9	9.00	9	-9.00	9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 87 DATE 10/21/1995
 CAST 1 GMT 08:28
 CTD CAST 308

LATITUDE 00° 0.46' S
 LONGITUDE 80° 0.35' E

CTD		Bottle		CTD		Bottle		ICO2		F*		TA		F*		TOC		F*		TON		F*		Chl-a														
Number	db	Pressure	Salinity	Temp	Pot	Sigma	O2	O2	Theta	AOU	NO2	NO3	F*	PO4	F*	Si(OH)4	F*	CFC-11	F*	CFC-12	F*	DIC	F*	pH	F*	TA	F*	TA	F*	TOC	F*	TON	F*	Chl-a	F*			
		db	‰	°C	°C	kg/m ³	‰	‰	°C	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	μmol/kg	μmol/kg	μmol/kg	μmol/kg	μmol/kg	μg/l	μg/l
8724	2	8.0	35.103	35.109	28.995	28.993	22.151	195.7	2	-2.5	0.00	0.02	0.16	2	1.80	2	1.571	2	0.936	2	248.2	2	1946.2	6	8.1119	2	2295	2	70.67	2	4.98	2	-9	-9				
8723	2	24.6	35.119	35.127	29.012	29.006	22.160	194.5	2	1.7	0.00	0.01	0.17	2	1.46	2	1.576	2	0.944	2	246.3	2	1947.0	2	8.1113	2	2298	2	71.01	2	5.20	2	-9	-9				
8722	2	51.0	35.303	35.298	28.747	28.735	22.379	197.0	2	-1.5	0.00	0.04	0.21	2	1.36	2	1.576	2	0.948	2	251.8	2	1956.4	2	8.1078	2	2307	2	69.82	2	5.26	2	-9	-9				
8721	2	73.3	35.243	35.252	25.065	25.049	23.519	150.4	2	59.9	0.64	2	7.17	2	0.66	2	5.73	2	0.905	2	372.0	2	2036.9	2	7.9735	2	2304	2	58.62	2	4.86	2	-9	-9				
8720	2	100.2	35.229	35.231	20.058	20.039	24.929	78.5	2	146.9	0.05	2	18.36	2	1.37	2	12.83	2	0.748	2	648.7	2	2132.2	2	7.7787	2	2307	2	53.93	2	3.15	2	-9	-9				
8719	2	128.6	35.163	35.166	16.534	16.513	25.757	61.9	2	178.7	0.01	2	22.90	2	1.67	2	17.95	2	0.568	2	834.4	2	2173.6	2	7.6837	2	2305	2	52.68	2	9.00	2	-9	-9				
8718	2	155.1	35.142	-9.000	14.433	14.410	26.210	70.0	2	183.5	0.00	2	23.86	2	1.74	2	20.03	2	0.514	2	896.1	2	2183.9	2	7.6536	2	2310	2	49.36	2	2.97	2	-9	-9				
8717	2	200.2	35.079	35.079	12.303	12.276	26.588	78.1	2	185.5	0.00	2	25.91	2	1.88	2	22.43	2	0.363	2	1010.8	2	2202.7	2	7.6151	2	2314	2	48.76	2	2.72	2	-9	-9				
8716	2	397.9	35.004	-9.000	9.574	10.526	26.864	76.8	2	-9.0	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00			
8715	2	599.3	35.022	35.020	9.398	9.330	27.081	52.9	2	224.6	0.00	2	32.57	2	2.44	2	44.54	2	0.070	2	1291.6	2	2253.6	2	7.5158	2	2329	2	-8.00	2	-9.00	2	-9.00	2	-9.00	2	-9.00	
8714	2	799.7	34.983	34.983	7.934	7.850	27.283	42.2	2	243.6	0.00	2	35.50	2	2.72	2	65.12	2	0.009	2	1434.1	2	2285.3	2	7.4806	2	2351	2	-8.00	2	-9.00	2	-9.00	2	-9.00	2	-9.00	
8713	2	999.5	34.936	34.936	6.684	6.587	27.425	49.0	2	245.4	0.00	2	36.61	2	2.75	2	80.78	2	0.000	2	1479.6	2	2305.3	2	7.4738	2	2382	2	48.11	2	-9.00	2	-9.00	2	-9.00	2	-9.00	
8712	2	1199.1	34.883	34.883	5.510	5.403	27.535	66.1	2	238.0	0.00	2	36.54	2	2.74	2	92.97	2	-0.001	2	1437.4	2	2312.5	2	7.4845	2	2375	2	-8.00	2	-9.00	2	-9.00	2	-9.00	2	-9.00	
8711	2	1397.9	34.860	34.860	4.852	4.732	27.595	78.1	2	231.7	0.00	2	36.42	2	2.72	2	99.00	2	-0.003	2	1416.2	2	2316.7	2	7.4941	2	2382	2	-8.00	2	-9.00	2	-9.00	2	-9.00	2	-9.00	
8710	2	1600.2	34.817	34.817	3.795	3.668	27.675	101.9	2	216.7	0.00	2	35.94	2	2.68	2	108.18	2	-9.000	2	1334.0	2	2316.3	2	7.5181	2	2390	2	-8.00	2	-9.00	2	-9.00	2	-9.00	2	-9.00	
8709	2	1799.7	34.799	34.798	3.300	3.162	27.709	113.4	2	209.4	0.00	2	35.55	2	2.61	2	113.70	2	-0.002	2	1316.7	2	2317.6	2	7.5289	2	2397	2	-8.00	2	-9.00	2	-9.00	2	-9.00	2	-9.00	
8708	2	2103.2	34.769	34.769	2.591	2.436	27.771	142.9	2	197.7	0.00	2	35.18	2	2.56	2	120.91	2	-9.000	2	1225.6	2	2318.0	2	7.5477	2	2405	2	-8.00	2	-9.00	2	-9.00	2	-9.00	2	-9.00	
8707	2	2402.1	34.753	34.752	2.198	2.023	27.771	142.9	2	189.5	0.00	2	34.48	2	2.50	2	124.80	2	-9.000	2	1180.5	2	2316.1	2	7.5611	2	2407	2	42.72	2	-9.00	2	-9.00	2	-9.00	2	-9.00	
8706	2	2698.1	34.739	34.738	1.875	1.678	27.787	154.0	2	180.8	0.00	2	33.94	2	2.44	2	127.41	2	0.000	2	1153.7	2	2311.4	2	7.5766	2	2409	2	-8.00	2	-9.00	2	-9.00	2	-9.00	2	-9.00	
8705	2	2997.7	34.733	34.730	1.706	1.485	27.795	157.9	2	177.9	0.00	2	33.92	2	2.42	2	130.53	2	-9.000	2	1118.0	2	2311.1	2	7.5837	2	2413	2	-8.00	2	-9.00	2	-9.00	2	-9.00	2	-9.00	
8704	2	3393.9	34.726	34.724	1.527	1.271	27.805	161.2	2	176.3	0.00	2	33.89	2	2.41	2	135.09	2	-9.000	2	1117.4	2	2315.9	2	7.5883	2	2421	2	41.56	2	-9.00	2	-9.00	2	-9.00	2	-9.00	
8703	2	3799.7	34.721	34.719	1.413	1.118	27.812	167.4	2	170.9	0.00	2	33.78	2	2.38	2	135.80	2	0.004	2	1083.1	2	2313.9	2	7.5982	2	2421	2	-8.00	2	-9.00	2	-9.00	2	-9.00	2	-9.00	
8702	2	4200.7	34.719	34.718	1.395	1.057	27.815	173.1	2	166.3	0.00	2	33.60	2	2.35	2	133.44	2	0.002	2	1068.8	2	2307.9	2	7.6045	2	2420	2	-8.00	2	-9.00	2	-9.00	2	-9.00	2	-9.00	
8701	2	4737.4	34.718	34.716	1.427	1.026	27.815	177.7	2	163.2	0.00	2	33.46	2	2.34	2	132.21	2	-0.001	2	1080.0	2	2304.5	2	-9.0000	2	2413	2	42.33	2	-8.00	2	-9.00	2	-9.00	2	-9.00	

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 88 DATE 10/21/1995
 CAST 1 GMT 12:17
 CTD CAST 309

LATITUDE 00° 14.71' S
 LONGITUDE 80° 0.35' E

CTD		Bottle		CTD		Bottle		CO2																											
Number	F* Pressure db	Salinity**	Temp*** °C	Pot. T**** °C	Sigma Theta	O2 µmol/kg	O2 µmol/kg	F* AOU	NO2 µmol/kg	NO3 µmol/kg	F* P04 µmol/kg	F* Si(OH)4 µmol/kg	F* CFC-11 pmol/kg	F* CFC-12 pmol/kg	F* H ₂ O	DIC µmol/kg	F* TA µmol/kg	F* TOC µmol/kg	F* TON µmol/l	Chl-a µg/l	Phaeo µg/l														
8816	2	8.1	35.051	35.055	2	28.777	28.775	22.183	197.4	3	-3.5	0.00	2	0.00	2	0.18	2	1.87	2	1.615	2	0.951	2	252.0	2	2893	2	68.25	2	5.28	2	-9	-9		
8815	2	39.1	35.229	35.243	2	28.828	28.819	22.309	196.9	3	-3.4	0.00	2	0.05	2	0.20	2	1.65	2	1.602	2	0.946	2	249.8	2	2302	2	67.26	2	5.15	2	-9	-9		
8814	2	80.8	35.265	35.278	2	24.278	24.261	23.776	137.6	135.1	2	73.4	0.59	2	8.90	2	0.79	2	6.93	2	-9.000	9	412.0	2	2305	2	63.47	2	5.01	2	-9	-9			
8813	2	110.3	35.251	35.262	2	20.930	20.909	24.720	91.6	92.3	2	128.8	0.07	2	15.84	2	1.21	2	11.32	2	1.366	2	566.5	2	2320	2	60.01	2	3.47	2	-9	-9			
8812	2	178.7	35.109	35.109	2	13.129	13.104	26.457	80.3	77.3	2	179.8	0.00	2	24.58	2	1.78	2	21.35	2	0.804	2	935.4	2	2310	2	55.36	2	2.89	2	-9	-9			
8811	2	248.9	35.068	35.068	2	12.060	12.027	26.637	77.4	74.9	2	188.1	0.00	2	26.27	2	1.88	2	23.36	2	0.563	2	1010.7	2	2313	2	50.62	2	2.80	2	-9	-9			
8810	2	304.0	35.057	35.058	2	11.774	11.735	26.685	75.8	73.7	2	190.9	0.00	2	26.88	2	1.92	2	24.34	2	-9.000	9	-9.0	9	-9.000	9	9	48.83	2	2.51	2	-9	-9		
8809	2	482.1	34.995	34.995	2	10.374	10.316	26.894	83.4	81.5	2	191.4	0.00	2	28.51	2	2.05	2	30.19	2	0.409	2	0.233	2	-9.0	9	-9.000	9	9	48.73	2	2.78	2	-9	-9
8808	2	650.8	35.012	35.012	2	9.184	9.111	27.110	49.8	50.9	2	229.3	0.00	2	33.17	2	2.47	2	48.03	2	-9.000	9	-9.0	9	-9.000	9	9	46.64	2	-9.00	9	-9	-9		
8807	2	850.8	34.984	34.983	2	7.748	7.660	27.311	42.3	44.1	2	245.4	0.00	2	35.69	2	2.70	2	68.53	2	0.010	2	0.005	2	-9.0	9	-9.000	9	9	-9.00	9	-9	-9		
8806	2	998.9	34.950	34.951	2	6.954	6.855	27.400	46.5	48.6	2	248.4	0.00	2	36.35	2	2.74	2	78.27	2	-9.000	9	-9.0	9	-9.000	9	9	-9.00	9	-9.00	9	-9	-9		
8805	2	1198.5	34.895	34.894	2	5.629	5.521	27.529	63.5	64.4	2	240.1	0.00	2	36.66	2	2.75	2	93.28	2	-9.000	9	-9.0	9	-9.000	9	9	43.45	2	-9.00	9	-9	-9		
8804	2	1599.3	34.818	34.818	2	3.826	3.699	27.672	102.2	101.2	2	217.2	0.00	2	35.92	2	2.66	2	108.58	2	-9.000	9	-9.0	9	-9.000	9	9	-9.00	9	-9.00	9	-9	-9		
8803	2	1999.6	34.775	34.775	2	2.711	2.563	27.745	129.5	127.6	2	200.0	0.00	2	35.18	2	2.56	2	120.65	2	-9.000	9	-9.0	9	-9.000	9	9	41.67	2	-9.00	9	-9	-9		
8802	2	2483.9	34.750	34.750	2	2.126	1.943	27.778	147.7	145.5	2	187.4	0.00	2	34.53	2	2.48	2	126.34	2	-9.000	9	-9.0	9	-9.000	9	9	-9.00	9	-9.00	9	-9	-9		
8801	2	3006.2	34.732	34.732	2	1.700	1.478	27.797	162.3	158.9	2	178.0	0.00	2	34.24	2	2.41	2	131.50	2	-9.000	9	-9.0	9	-9.000	9	9	41.59	2	-9.00	9	-9	-9		

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 89 DATE 10/21/1995
 CAST 1 GMT 17:05
 CTD CAST 310

LATITUDE 00° 29.77' S
 LONGITUDE 80° 0.15' E

Bottle Number	CTD			Bottle			CTD			Bottle			fCO ₂																							
	Pressure db	Salinity	Temp °C	Temp °C	Pot. T	Sigma T	O ₂ Hmol/kg	O ₂ Hmol/kg	Theta	F* NO2 Hmol/kg	F* NO3 Hmol/kg	F* PO4 Hmol/kg	F* Si(OH) ₄ Hmol/kg	F* CFC-11 F* pmol/kg	F* CFC-12 F* pmol/kg	F* at 20 °C F* H-am	DIC F* Hmol/kg	pH F*	TA F* Hmol/kg	F* TOC F* Hmol/kg	TON F* Hmol/l	Chl-a F* Hg/l	Phaeo F* Hg/l													
8924	2	8.3	34.598	28.562	28.564	28.562	21.915	197.2	197.8	2	-2.7	0.00	2	0.02	2	1.46	2	1.616	2	0.973	2	248.1	2	1930.3	2	8.1046	2	2268	2	68.76	2	5.77	2	-9	-9	
8923	2	50.0	35.348	28.238	28.238	28.226	22.590	198.8	192.4	2	2.8	0.02	2	0.05	2	1.39	2	1.605	2	0.953	2	250.9	2	1958.6	2	8.1033	2	2309	2	68.68	2	5.84	2	-9	-9	
8922	2	98.5	35.256	21.151	21.132	24.656	91.7	87.4	2	132.8	0.02	2	16.60	2	1.26	2	11.10	2	1.374	2	0.812	2	585.7	2	2115.0	2	7.8138	2	2307	2	60.03	2	3.41	2	-9	-9
8921	2	150.1	35.126	14.714	14.692	26.137	56.3	55.8	2	183.1	0.00	2	25.25	2	1.84	2	21.20	2	0.829	2	0.466	2	945.6	2	2193.3	2	7.6336	2	2312	2	51.97	2	2.71	2	-9	-9
8920	2	201.5	35.078	12.310	12.283	26.596	80.2	77.2	2	184.4	0.00	2	25.78	2	1.84	2	22.01	2	0.653	2	0.358	2	975.5	2	2199.2	2	7.6194	2	2312	2	50.90	2	3.35	2	-9	-9
8919	2	324.8	35.040	11.396	11.355	26.743	78.0	75.2	2	191.6	0.00	2	27.45	2	1.94	2	24.57	2	0.483	2	0.274	2	1040.3	2	2208.7	2	7.5959	2	2314	2	48.68	2	3.07	2	-9	-9
8918	2	400.3	35.008	10.502	10.454	26.881	78.2	75.9	2	196.2	0.00	2	29.10	2	2.06	2	29.57	2	0.362	2	0.221	2	-9.0	9	-9.0	9	-9.0000	9	-9	9	47.78	2	2.25	2	-9	-9
8917	2	500.7	35.001	10.330	10.270	26.906	80.4	78.7	2	194.5	0.00	2	29.50	2	2.07	2	30.61	2	0.378	2	0.211	2	1102.0	2	2219.7	2	7.5773	2	2317	2	47.23	2	1.90	2	-9	-9
8916	2	599.0	35.034	9.564	9.495	27.066	49.5	52.1	2	225.7	0.00	2	32.87	2	2.42	2	43.05	2	0.126	6	0.074	6	-9.0	9	-9.0	9	-9.0000	9	-9	9	45.55	2	-9.00	9	-9	-9
8915	2	700.8	35.014	8.830	8.753	27.169	41.6	43.6	2	238.8	0.00	2	34.44	2	2.58	2	53.32	2	0.043	2	0.025	2	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	-9
8914	2	799.6	34.990	7.943	7.859	27.287	41.0	43.1	2	245.1	0.00	2	35.51	2	2.68	2	65.48	2	0.013	2	0.009	2	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	-9
8913	2	900.6	34.973	7.389	7.298	27.356	40.1	42.6	2	249.4	0.00	2	36.25	2	2.74	2	73.23	2	0.000	2	0.002	2	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	4	-9.00	9	-9	-9
8912	2	1001.4	34.939	6.704	6.607	27.425	47.4	49.6	2	247.1	0.00	2	36.61	2	2.75	2	80.85	2	-9.000	9	-9.000	9	1467.8	2	2302.7	2	7.4702	2	2364	2	-9.00	9	-9.00	9	-9	-9
8911	2	1200.5	34.883	5.451	5.344	27.542	66.4	67.3	2	238.5	0.00	2	36.68	2	2.74	2	93.95	2	-0.001	2	0.000	2	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	-9
8910	2	1401.4	34.846	4.548	4.431	27.618	84.0	84.7	2	228.0	0.00	2	36.64	2	2.72	2	102.08	2	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	41.88	2	-9.00	9	-9	-9
8909	2	1600.8	34.815	3.716	3.590	27.681	103.5	103.4	2	215.9	0.00	2	36.32	2	2.66	2	108.76	2	0.000	2	0.001	2	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	-9
8908	2	1800.5	34.784	3.213	3.076	27.714	115.7	115.1	2	208.3	0.00	2	35.67	2	2.61	2	114.14	2	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	-9
8907	2	2000.6	34.774	2.702	2.554	27.745	128.1	127.5	2	200.2	0.00	2	34.99	2	2.56	2	120.08	2	-9.000	9	-9.000	9	1244.0	2	2316.4	2	7.5447	2	2403	2	42.11	2	-9.00	9	-9	-9
8906	2	2402.6	34.750	2.133	1.959	27.775	145.1	144.8	2	188.0	0.00	2	34.50	2	2.48	2	125.63	2	0.001	2	0.003	2	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	-9
8905	2	2798.9	34.737	1.843	1.638	27.789	154.4	154.7	2	180.8	0.00	2	34.06	2	2.44	2	128.54	2	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	-9
8904	2	3201.0	34.729	1.621	1.382	27.801	160.1	160.2	2	177.6	0.00	2	33.86	2	2.41	2	132.31	2	-9.000	9	-9.000	9	1125.7	2	2313.5	2	7.5883	2	2416	2	42.00	2	-9.00	9	-9	-9
8903	2	3701.1	34.721	1.420	1.135	27.812	165.9	168.4	2	171.6	0.00	2	33.83	2	2.38	2	136.78	2	0.000	2	0.006	2	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	-9
8902	2	4200.2	34.719	1.392	1.054	27.816	173.1	174.5	2	166.2	0.00	2	33.52	2	2.35	2	133.89	2	0.000	2	0.008	2	1059.2	2	2308.8	2	7.6054	2	2422	2	-9.00	9	-9.00	9	-9	-9
8901	2	4713.9	34.717	1.424	1.026	27.816	177.3	177.6	2	163.3	0.00	2	33.12	2	2.34	2	132.23	2	0.001	2	0.013	2	1070.6	2	2305.2	2	7.6093	2	2422	2	42.14	2	-9.00	9	-9	-9

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

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

*** PSS-78 scale

**** ITS-90 scale

I8NR
NOAA Ship Baldrige

STATION 90 DATE 10/21/1995
CAST 1 GMT 20:33
CTD CAST 311

LATITUDE 00° 44.53' S
LONGITUDE 80° 0.06' E

Bottle Number	CTD										Bottle										CO2																			
	Pressure db	Salinity	F* Temp °C	Pot. T** °C	Sigma Theta	O2	O2	F* AOU	NO2	NO3	F* PO4	F* Si(OH)4	F* CFC-11	F* CFC-12	pmol/kg	pmol/kg	µmol/kg	DIC	F*	pH	F*	TA	F*	TOC	F*	TON	F*	CH-a												
9016	2	6.1	34.675	34.681	2	28.416	28.415	22.021	197.3	198.3	2	-2.8	0.00	2	0.40	2	0.20	2	1.77	2	-9.000	9	-9.000	9	-9.000	9	8.0991	2	2282	2	66.53	2	5.63	2	-9	-9				
9015	2	40.0	35.058	35.059	2	28.456	28.446	22.295	199.4	196.7	2	-1.8	0.00	2	0.41	2	0.21	2	1.67	2	1.826	2	0.964	2	0.964	2	1945.3	2	8.1058	2	2300	2	68.51	2	6.03	2	-9	-9		
9014	2	81.3	35.310	35.312	2	23.936	23.919	23.903	132.9	128.2	2	81.5	0.36	2	10.32	2	0.83	2	7.21	2	1.518	2	0.882	2	0.882	2	2055.4	2	7.9381	2	2316	2	58.04	2	4.96	2	-9	-9		
9013	2	135.1	35.106	35.106	2	16.144	16.123	25.802	39.0	35.9	2	206.1	0.01	2	26.44	2	1.92	2	22.22	2	-9.000	9	-9.000	9	963.9	2	2195.1	2	7.6236	2	2310	2	52.46	2	2.53	2	-9	-9		
9012	2	200.0	35.087	35.088	2	12.453	12.426	26.576	75.1	72.1	2	188.7	0.00	2	26.30	2	1.86	2	22.51	2	0.657	2	0.362	2	0.362	2	992.1	2	2203.3	2	7.6136	2	2321	2	51.31	2	1.67	2	-9	-9
9011	2	400.8	35.023	35.024	2	10.695	10.646	26.858	69.9	68.2	2	202.7	0.00	2	29.57	2	2.08	2	29.76	2	0.353	2	0.209	2	0.209	2	1139.6	2	2224.6	2	7.5668	2	2320	2	49.16	2	2.42	2	-9	-9
9010	2	601.4	35.028	35.030	2	9.431	9.362	27.083	48.2	49.9	2	228.7	0.00	2	33.10	2	2.44	2	45.31	2	0.108	2	0.063	2	0.063	2	-9.0	9	-9.0000	9	-9	9	53.19	3	2.58	2	-9	-9		
9009	2	801.3	34.993	34.993	2	8.012	7.928	27.280	40.0	42.0	2	245.8	0.00	2	35.78	2	2.68	2	64.83	2	0.015	2	0.008	2	0.008	2	-9.0	9	-9.0000	9	-9	9	46.55	2	-9.00	9	-9	-9		
9008	2	1001.4	34.937	34.936	2	6.747	6.650	27.417	48.0	49.7	2	246.7	0.00	2	36.71	2	2.74	2	80.23	2	-9.000	9	-9.000	9	-9.000	9	-9.0	9	-9.0000	9	-9	9	41.89	2	-9.00	9	-9	-9		
9007	2	1201.3	34.901	34.902	2	5.739	5.630	27.522	61.8	62.6	2	241.1	0.00	2	36.78	2	2.75	2	91.45	2	-9.000	9	-9.000	9	-9.000	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	-9		
9006	2	1499.9	34.833	34.833	2	4.187	4.065	27.647	93.2	92.0	2	223.5	0.00	2	36.31	2	2.69	2	105.56	2	-9.000	9	-9.000	9	-9.000	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	-9		
9005	2	1799.5	34.798	34.798	2	3.293	3.155	27.710	115.3	113.8	2	209.0	0.00	2	35.66	2	2.61	2	114.02	2	-9.000	9	-9.000	9	-9.000	9	-9.0	9	-9.0000	9	-9	9	41.91	2	-9.00	9	-9	-9		
9004	2	2100.4	34.770	34.770	2	2.617	2.462	27.749	132.1	130.1	2	198.4	0.00	2	35.20	2	2.54	2	121.62	2	-9.000	9	-9.000	9	-9.000	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	-9		
9003	2	2400.5	34.751	34.750	2	2.155	1.981	27.773	146.5	143.8	2	188.8	0.00	2	34.72	2	2.48	2	125.92	2	-9.000	9	-9.000	9	-9.000	9	-9.0	9	2313.8	2	7.5658	2	2414	2	41.91	2	-9.00	9	-9	-9
9002	2	2700.1	34.740	34.740	2	1.919	1.721	27.785	154.7	152.0	2	182.8	0.00	2	34.57	2	2.44	2	127.96	2	-9.000	9	-9.000	9	-9.000	9	-9.0	9	2313.1	2	7.5745	2	2418	2	-9.00	9	-9.00	9	-9	-9
9001	2	3002.1	34.732	34.732	2	1.717	1.495	27.796	161.5	158.0	2	178.8	0.00	2	34.22	2	2.41	2	131.04	2	-9.000	9	-9.000	9	-9.000	9	-9.0	9	2314.4	2	7.5831	2	2416	2	41.83	2	-9.00	9	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR NOAA Ship Baldridge

STATION 91 DATE 10/21/1995
 CAST 1 GMT 01:34
 CTD CAST 312

LATITUDE 00° 59.63' S
 LONGITUDE 80° 0.35' E

Bottle Number	CTD		Bottle		Sigma		Theta		F* Temp		Pot. T****		O2		O2		F* AOU		NO2		F* NO3		F* PO4		F* Si(OH)4		F* CFC-11		F* CFC-12		F* at 20 °C		DIC		pH		F*		TA		F* TOC		F* Chl-a	
	db	Salinity	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp	Temp
9124	2	6.8	34.821	34.827	28.343	28.341	22.155	196.6	198.4	2	-2.9	0.03	0.17	0.20	2	1.95	2	1.616	2	0.972	2	258.5	2	1945.7	6	8.0938	2	2282	2	68.83	2	5.75	2	-9	-9									
9123	2	25.3	34.818	34.826	28.347	28.341	22.154	198.7	198.4	2	-2.9	0.03	0.14	0.22	2	1.98	2	1.628	2	0.986	2	261.3	2	1946.1	2	-9.0000	9	-9	9	68.01	2	6.21	2	-9	-9									
9122	2	50.4	34.884	34.891	28.256	28.244	22.235	199.9	195.4	2	0.3	0.12	0.55	0.26	2	2.02	2	1.624	2	0.986	2	265.2	2	1952.3	2	8.0865	2	2294	2	66.23	2	6.24	2	-9	-9									
9121	2	100.0	35.239	35.251	20.876	20.857	24.725	82.8	80.6	3	140.7	0.08	17.58	1.31	2	11.93	2	1.343	2	0.771	2	598.7	2	2117.9	2	7.8027	2	2309	2	54.14	2	3.52	2	-9	-9									
9120	2	151.1	35.061	35.076	14.847	14.824	26.070	28.1	29.9	3	216.4	0.01	28.38	2.07	2	25.28	2	0.617	2	0.363	2	1090.2	2	2212.9	2	7.5781	2	2309	2	52.21	2	2.24	2	-9	-9									
9119	2	250.7	35.071	35.071	11.862	11.829	26.677	63.4	61.1	2	203.0	0.00	28.30	2.01	2	25.53	2	0.494	2	0.289	2	1107.3	2	2217.8	2	7.5772	2	2316	2	49.57	2	2.75	2	-9	-9									
9118	2	352.1	35.024	35.024	10.963	10.919	26.808	75.8	73.0	2	196.3	0.00	28.75	2.02	2	26.95	2	0.392	2	0.237	2	1080.0	2	2215.8	2	7.5803	2	2315	2	49.72	2	2.61	2	-9	-9									
9117	2	453.6	34.988	34.987	10.350	10.296	26.891	89.5	88.4	2	188.8	0.00	28.76	2.02	2	29.01	2	0.447	2	0.255	2	1059.3	2	2214.2	2	7.5892	2	2314	2	47.97	2	2.01	2	-9	-9									
9116	2	549.3	35.019	35.019	9.966	9.901	26.984	62.2	62.0	2	213.3	0.00	31.57	2.27	2	36.80	2	0.223	2	0.133	2	1214.0	2	2238.6	2	7.5410	2	2325	2	46.20	2	-9.00	2	-9	-9									
9115	2	644.4	35.020	35.018	9.069	8.997	27.133	43.3	45.2	3	235.7	0.00	34.17	2.54	2	50.10	2	0.056	6	0.038	6	1383.7	2	2263.4	2	7.4954	2	2335	2	-9.00	2	-9.00	2	-9	-9									
9114	2	797.2	35.007	35.006	8.136	8.051	27.271	37.2	39.7	3	247.2	0.00	35.75	2.69	2	64.35	2	0.012	2	0.007	2	1462.1	2	2287.3	2	7.4718	2	2347	2	-9.00	2	-9.00	2	-9	-9									
9113	2	998.2	34.947	34.946	6.808	6.711	27.416	46.9	48.7	2	247.3	0.00	36.72	2.76	2	79.85	2	0.001	2	0.004	2	1477.8	2	2303.8	2	7.4718	2	2368	2	42.78	2	-9.00	2	-9	-9									
9112	2	1300.4	34.886	34.886	5.368	5.252	27.555	67.1	67.9	2	238.6	0.00	36.91	2.76	2	95.29	2	-0.001	2	0.010	2	1444.7	2	2311.2	2	7.4819	2	2380	2	-9.00	2	-9.00	2	-9	-9									
9111	2	1595.7	34.822	34.823	3.904	3.777	27.669	98.7	98.8	2	219.0	0.00	36.43	2.68	2	107.82	2	-0.001	2	-0.003	2	1338.8	2	2317.3	2	7.5143	2	2390	2	-9.00	2	-9.00	2	-9	-9									
9110	2	1899.4	34.782	34.772	2.886	2.745	27.726	123.3	128.4	2	196.8	0.00	35.59	2.55	2	121.37	2	-0.002	2	0.000	2	1244.4	2	2315.3	2	7.5465	2	2407	2	42.41	2	-9.00	2	-9	-9									
9109	2	2195.9	34.763	34.764	2.445	2.284	27.760	135.1	134.9	2	195.1	0.00	35.32	2.55	2	123.22	2	-0.002	2	0.000	2	1225.3	2	2314.0	2	7.5551	2	2408	2	-9.00	2	-9.00	2	-9	-9									
9108	2	2495.2	34.748	34.748	2.088	1.906	27.777	146.2	146.3	2	188.9	0.00	34.61	2.48	2	125.88	2	-0.000	9	-0.000	9	1183.8	2	2314.7	2	7.5694	2	2408	2	-9.00	2	-9.00	2	-9	-9									
9107	2	2800.2	34.738	34.737	1.819	1.614	27.791	154.8	155.3	2	180.4	0.00	34.19	2.43	2	128.66	2	-0.002	2	-0.001	2	1156.9	2	2311.0	2	7.5765	2	2414	2	-9.00	2	-9.00	2	-9	-9									
9106	2	3101.8	34.731	34.730	1.690	1.459	27.797	156.8	158.2	2	178.9	0.00	34.22	2.42	2	131.69	2	0.000	2	-0.001	2	1135.8	2	2312.7	2	7.5833	2	2420	2	-9.00	2	-9.00	2	-9	-9									
9105	2	3399.2	34.726	34.725	1.548	1.291	27.805	158.2	159.9	2	178.7	0.00	34.37	2.42	2	136.30	2	-0.000	9	-0.000	9	1127.2	2	2317.6	2	7.5924	2	2423	2	-9.00	2	-9.00	2	-9	-9									
9104	2	3698.8	34.721	34.721	1.423	1.138	27.812	165.8	167.0	2	172.9	0.00	34.26	2.39	2	138.91	2	-0.000	9	-0.000	9	1099.2	2	2317.1	2	7.5984	2	2424	2	-9.00	2	-9.00	2	-9	-9									
9103	2	3996.6	34.719	34.720	1.393	1.077	27.815	171.0	172.5	2	168.0	0.00	34.24	2.38	2	135.02	2	-0.001	2	0.004	2	1086.7	2	2311.9	2	7.6038	2	2423	2	-9.00	2	-9.00	2	-9	-9									
9102	2	4299.3	34.718	34.718	1.394	1.045	27.816	174.1	175.5	2	165.3	0.00	33.76	2.35	2	132.92	2	-0.001	2	0.004	2	1078.4	2	2310.1	2	7.6077	2	2419	2	-9.00	2	-9.00	2	-9	-9									
9101	2	4691.3	34.717	34.716	1.419	1.024	27.816	177.5	177.8	2	163.1	0.00	33.35	2.34	2	132.13	2	-0.001	2	0.010	2	1075.1	2	2305.4	6	7.6076	2	2419	2	42.58	2	-9.00	2	-9	-9									

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

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

*** PSS-78 scale

**** ITS-90 scale

18NR NOAA Ship Baldrige

STATION 92 DATE 10/22/1995
 CAST 2 GMT 06:54
 CTD CAST 313

LATITUDE 01° 28.65' S
 LONGITUDE 80° 0.14' E

Bottle Number	CTD		Bottle		F* PO4	F* NO3	F* NO2	F* AOU	F* Si(OH)4	F* CFC-11	F* CFC-12	F* at 20 °C	F* DIC	F* pH	F* TA	F* TOC	F* TON	F* Chl-a	Phaseo																		
	Pressure db	Salinity	Temp °C	Pot. T °C																Sigma Theta	O2	O2	Hmol/kg	Hmol/kg	Hmol/kg	Hmol/kg	Hmol/kg	Hmol/kg	Hmol/kg	Hmol/kg	Hmol/kg	Hmol/kg	Hmol/kg	Hmol/kg			
9216	2	5.5	34.883	34.888	2	28.282	28.261	22.227	196.4	198.8	2	-3.1	0.05	2	0.23	2	0.22	2	1.92	2	-9.000	9	-9.000	9	259.5	2	1946.6	2	8.0909	2	2287	2	-9.00	9	-9.00	9	-9
9215	2	39.3	34.906	34.917	2	28.286	28.277	22.244	198.4	198.3	2	-2.7	0.05	2	0.30	2	0.25	2	1.79	2	1.638	2	0.962	2	257.3	2	1948.6	2	8.0901	2	2287	2	-9.00	9	-9.00	9	-9
9214	2	73.6	35.100	35.102	2	27.758	27.741	22.558	179.5	170.8	2	26.3	0.60	2	3.15	2	0.44	2	2.83	2	-9.000	9	-9.000	9	292.8	2	1980.4	2	8.0480	2	2298	2	-9.00	9	-9.00	9	-9
9213	2	100.3	35.122	35.125	2	20.818	20.799	24.645	60.3	58.4	2	163.3	0.07	2	20.27	2	1.51	2	14.84	2	1.180	2	0.678	2	683.8	2	2134.9	2	7.7551	2	2298	2	-9.00	9	-9.00	9	-9
9212	2	124.0	35.096	35.100	2	16.615	16.595	25.688	28.6	29.8	2	210.0	0.01	2	26.41	2	1.96	2	22.34	2	-9.000	9	-9.000	9	974.5	2	2194.5	2	7.6197	2	2309	2	-9.00	9	-9.00	9	-9
9211	2	199.8	35.084	35.085	2	12.211	12.185	26.620	52.0	50.8	2	211.3	0.00	2	26.58	2	2.06	2	25.95	2	0.472	2	0.270	2	1151.4	2	2220.3	2	7.5653	2	2312	2	-9.00	9	-9.00	9	-9
9210	2	300.6	35.040	35.043	2	11.246	11.208	26.772	75.3	73.8	2	193.8	0.00	2	27.86	2	1.98	2	25.79	2	0.467	2	0.267	2	1064.7	2	2213.2	2	7.5885	2	2317	2	-9.00	9	-9.00	9	-9
9209	2	399.8	35.020	35.020	2	10.752	10.703	26.845	73.8	72.1	2	198.5	0.00	2	28.94	2	2.05	2	28.73	2	0.370	2	0.212	2	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
9208	2	600.0	35.015	35.016	2	9.204	9.136	27.109	49.4	50.0	2	230.0	0.00	2	33.31	2	2.48	2	47.45	2	0.091	2	0.059	2	1307.0	2	2259.4	2	7.5074	2	2328	2	-9.00	9	-9.00	9	-9
9207	2	794.8	35.003	35.005	2	8.291	8.206	27.247	40.0	42.0	2	243.9	0.00	2	35.30	2	2.65	2	61.21	2	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
9206	2	1000.8	34.949	34.949	2	6.834	6.736	27.415	44.9	46.8	2	249.0	0.00	2	36.68	2	2.76	2	80.26	2	0.000	2	0.000	2	1495.9	2	2302.8	2	7.4668	2	2367	2	-9.00	9	-9.00	9	-9
9205	2	1198.9	34.909	34.910	2	5.847	5.737	27.515	58.6	60.2	2	242.7	0.00	2	36.75	2	2.76	2	91.04	2	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
9204	2	1601.3	34.827	34.827	2	3.853	3.726	27.677	99.6	99.0	2	219.2	0.00	2	35.94	2	2.68	2	109.31	2	-9.000	9	-9.000	9	1329.6	2	2315.9	2	7.5142	2	2391	2	-9.00	9	-9.00	9	-9
9203	2	1957.8	34.777	34.778	2	2.752	2.604	27.743	127.8	126.0	2	201.3	0.00	2	35.11	2	2.58	2	120.28	2	-9.000	9	-9.000	9	1269.2	2	2316.3	2	7.5439	2	2401	2	-9.00	9	-9.00	9	-9
9202	2	2498.4	34.745	34.744	2	2.024	1.843	27.779	151.2	148.7	2	185.1	0.00	2	34.32	2	2.47	2	126.60	2	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
9201	2	3005.4	34.731	34.732	2	1.698	1.476	27.797	160.7	157.6	2	179.3	0.00	2	34.07	2	2.43	2	131.85	2	-9.000	9	-9.000	9	1152.2	2	2314.8	2	7.5826	2	2415	2	-9.00	9	-9.00	9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 93 DATE 10/22/1995
 CAST 1 GMT 12:32
 CTD CAST 314

LATITUDE 01° 59.79' S
 LONGITUDE 80° 1.01' E

Bottle Number	CTD										Bottle										CO2																	
	F* Pressure db	Salinity	Salinity	F* Temp °C	Pot. T**** °C	Sigma Theta	O2 Hmol/kg	O2 Hmol/kg	NO2 Hmol/kg	NO3 Hmol/kg	PO4 Hmol/kg	SI(OH)4 F* Hmol/kg	F* CFC-11 pmol/kg	F* CFC-12 pmol/kg	F* DIC Hmol/kg	F* Hain	F* TA Hmol/kg	F* pH	F* TON Hmol/l	F* TOC Hmol/l	Chi-a Hg/l	Phaeo Hg/l																
9324	2	6.8	34.828	34.839	2	28.256	28.254	22.192	199.7	199.3	2	-3.5	0.06	2	0.18	2	0.23	2	1.97	2	1.563	2	0.945	2	281.4	2	1941.8	6	8.0950	2	2283	2	69.55	2	6.22	2	-9	-9
9323	2	48.7	34.957	34.965	2	28.159	28.147	22.322	201.3	198.0	2	-0.1	0.15	2	0.35	2	0.26	2	2.13	2	1.634	2	0.968	2	276.4	3	1952.8	2	-9.0000	9	2289	2	69.55	2	5.94	2	-9	-9
9322	2	99.5	35.084	35.090	2	20.282	20.243	24.787	57.1	55.8	2	168.2	0.06	2	20.26	2	1.54	2	15.55	2	1.129	2	0.646	2	705.5	2	2135.9	2	7.7456	2	2300	2	62.24	2	3.32	2	-9	-9
9321	2	148.5	35.039	35.044	2	15.374	15.351	25.929	23.8	25.3	2	220.5	0.02	2	27.84	2	2.09	2	25.72	2	0.635	2	0.367	2	1094.9	2	2204.1	2	7.5628	2	2303	2	54.74	2	2.89	2	-9	-9
9320	2	199.9	35.089	35.089	2	12.756	12.731	26.516	45.8	44.5	2	214.6	0.01	2	28.39	2	2.07	2	25.97	2	0.505	2	0.289	2	1129.6	2	2218.9	2	7.5657	2	2315	2	54.04	2	2.88	2	-9	-9
9319	2	298.3	35.038	35.039	2	11.292	11.254	26.760	76.5	74.1	2	193.3	0.00	2	27.32	2	1.98	2	25.45	2	0.459	2	0.263	2	1092.0	2	2211.2	2	7.5902	2	-9	9	52.84	2	1.97	2	-9	-9
9318	2	401.7	35.013	35.014	2	10.633	10.584	26.862	77.8	75.7	2	195.6	0.00	2	28.16	2	2.05	2	29.07	2	0.394	2	0.223	2	1110.7	2	2219.2	2	7.5791	2	2313	2	49.08	2	1.56	2	-9	-9
9317	2	500.4	35.019	35.021	2	9.931	9.872	26.991	61.7	60.9	2	214.8	0.00	2	30.66	2	2.29	2	37.60	2	0.213	2	0.128	2	1057.5	3	2240.7	2	7.5358	2	2324	2	47.98	2	2.12	2	-9	-9
9316	2	598.8	35.010	35.011	2	9.085	9.018	27.124	47.4	48.5	2	232.3	0.00	2	33.32	2	2.51	2	49.22	2	0.067	2	0.039	2	1308.1	2	2281.8	2	7.5036	2	2332	2	44.17	2	-9.00	9	-9	-9
9315	2	698.7	35.006	35.007	2	8.775	8.698	27.172	44.2	45.8	2	237.0	0.00	2	34.29	2	2.58	2	54.00	2	0.042	2	0.035	2	1380.1	2	2270.4	2	7.4927	2	2335	2	-9.00	9	-9.00	9	-9	-9
9314	2	798.0	35.011	35.012	2	8.427	8.341	27.232	38.5	38.5	2	246.5	0.00	2	35.05	2	2.68	2	60.91	2	0.019	2	0.009	2	1446.4	2	2283.3	2	7.4757	2	2347	2	-9.00	9	-9.00	9	-9	-9
9313	2	897.9	34.977	34.978	2	7.471	7.380	27.348	40.9	43.1	2	248.3	0.00	2	35.65	2	2.74	2	72.59	2	-9.000	2	-9.000	2	1470.5	2	2286.3	2	7.4719	2	2357	2	-9.00	4	-9.00	9	-9	-9
9312	2	1000.6	34.955	34.956	2	6.887	6.789	27.416	48.2	48.2	2	247.4	0.00	2	36.04	2	2.76	2	79.60	2	0.001	2	-0.001	2	1474.1	2	2303.2	2	7.4727	2	2367	2	-9.00	9	-9.00	9	-9	-9
9311	2	1201.3	34.906	34.907	2	5.866	5.756	27.510	58.3	59.8	2	243.0	0.00	2	36.75	2	2.78	2	91.62	2	0.000	2	0.006	2	1474.1	2	2311.6	2	7.4759	2	2377	2	-9.00	9	-9.00	9	-9	-9
9310	2	1399.3	34.868	34.869	2	4.824	4.704	27.805	74.5	74.8	2	235.8	0.00	2	36.85	2	2.77	2	102.37	2	-0.001	2	0.000	2	1434.1	2	2318.4	2	7.4876	2	2386	2	-9.00	4	-9.00	9	-9	-9
9309	2	1597.1	34.828	34.829	2	3.909	3.781	27.873	98.8	96.9	2	220.8	0.00	2	36.17	2	2.71	2	109.55	2	-9.000	2	-9.000	2	1356.4	2	2317.4	2	7.5114	2	2392	2	-9.00	9	-9.00	9	-9	-9
9308	2	1797.1	34.802	34.803	2	3.283	3.145	27.714	111.1	110.3	2	212.5	0.00	2	35.31	2	2.66	2	115.77	2	-0.001	2	0.001	2	1295.1	2	2320.7	2	7.5259	2	2402	2	-9.00	9	-9.00	9	-9	-9
9307	2	2000.3	34.775	34.775	2	2.674	2.527	27.748	127.9	127.2	2	200.7	0.00	2	34.54	2	2.58	2	121.75	2	-9.000	2	-9.000	2	1246.7	2	2318.2	2	7.5422	2	2403	2	-9.00	4	-9.00	9	-9	-9
9306	2	2200.8	34.780	34.759	2	2.331	2.171	27.765	136.3	135.7	2	195.2	0.00	2	34.51	2	2.55	2	126.40	2	-0.002	2	-0.003	2	1201.3	2	2319.2	2	7.5551	2	2415	2	-9.00	9	-9.00	9	-9	-9
9305	2	2379.7	34.752	34.752	2	2.182	1.989	27.774	142.3	141.4	2	191.1	0.00	2	34.21	2	2.52	2	127.44	2	-9.000	2	-9.000	2	1196.5	2	2317.5	2	7.5622	2	2420	2	-9.00	9	-9.00	9	-9	-9
9304	2	2600.4	34.740	34.739	2	1.887	1.699	27.786	150.7	161.4	2	173.6	0.00	2	34.00	2	2.49	2	130.43	2	-0.002	2	-0.001	2	1170.5	2	2316.7	2	7.5700	2	2418	2	-9.00	4	-9.00	9	-9	-9
9303	2	2995.1	34.731	34.730	2	1.663	1.443	27.798	158.0	158.8	2	178.4	0.00	2	33.63	2	2.44	2	132.16	2	-0.001	2	0.004	2	1125.6	2	2315.0	2	7.5816	2	2425	2	-9.00	9	-9.00	9	-9	-9
9302	2	3402.3	34.726	34.725	2	1.546	1.288	27.805	158.6	158.6	2	180.0	0.00	2	33.61	2	2.44	2	137.46	2	-0.001	2	-0.001	2	1137.5	2	2323.3	2	7.5837	2	2428	2	-9.00	9	-9.00	9	-9	-9
9301	2	3918.6	34.719	34.719	2	1.394	1.087	27.814	171.6	170.5	2	189.9	0.00	2	33.30	2	2.38	2	138.19	2	-0.002	2	-0.005	2	1100.3	2	2314.6	6	7.6042	2	2427	2	-9.00	4	-9.00	9	-9	-9

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

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

*** PSS-78 scale

**** ITS-90 scale

I8NR
NOAA Ship Baldridge

STATION 94 DATE 10/22/1995
 CAST 1 GMT 17:24
 CTD CAST 315

LATITUDE 02° 29.93' S
 LONGITUDE 79° 59.81' E

Bottle Number	F** Pressure db	Bottle Salinity***		Bottle Sigma T****		F* Temp**** °C	F* Salinity***	F* Pot. T**** °C	AOU	NO2	NO3	PO4	Si(OH)4	CFC-11	CFC-12	F* at 20 °C	DIC	pH	TA	TOC	TON	F* CH-a	Phase								
		‰	‰	‰	‰																			‰	‰	‰	‰	‰	‰	‰	‰
9415	2	40.5	35.076	35.086	2	28.265	28.255	22.378	198.5	195.8	2	0.23	1.47	2	1.626	2	0.945	2	259.2	2	1951.3	2	8.0954	2	2295	2	-9.00	9	-9.00	9	-9
9414	2	81.4	35.115	35.097	2	27.688	27.669	22.578	183.2	167.1	2	0.47	3.27	2	1.586	2	0.920	2	304.4	2	1986.8	2	8.0385	2	2297	2	-9.00	9	-9.00	9	-9
9413	2	121.3	35.032	35.035	2	16.607	16.587	25.639	35.6	36.4	2	203.6	0.01	2	26.25	2	1.91	2	22.56	2	7.62	2	0.439	2	2306	2	-9.00	9	-9.00	9	-9
9412	2	301.9	35.032	35.033	2	11.210	11.172	26.770	78.8	76.8	2	191.1	0.00	2	27.75	2	1.94	2	25.59	2	0.470	2	0.266	2	2313	2	-9.00	9	-9.00	9	-9
9411	2	445.5	35.053	35.054	2	10.287	10.234	26.954	32.7	34.3	2	239.0	0.00	2	33.34	2	2.41	2	39.89	2	0.133	2	0.081	2	2324	2	-9.00	9	-9.00	9	-9
9410	9	601.8	35.019	-9.000	9	8.975	8.908	27.148	44.0	-9.0	9	-9.00	9	-9.00	9	-9.00	9	-9.00	9	-9.0	9	-9.0	9	-9.00	9	-9.00	9	-9.00	9	-9	
9409	2	752.1	35.007	35.007	2	8.650	8.568	27.193	42.3	44.3	2	239.3	0.00	2	34.83	2	2.59	2	55.69	2	0.035	2	0.027	2	2343	2	-9.00	9	-9.00	9	-9
9408	2	999.4	34.950	34.951	2	6.887	6.789	27.410	46.4	48.2	2	247.3	0.00	2	36.59	2	2.75	2	79.00	2	-9.000	9	-9.000	9	2362	2	-9.00	9	-9.00	9	-9
9407	2	1250.6	34.901	34.902	2	5.687	5.573	27.529	60.4	61.2	2	242.9	0.00	2	36.91	2	2.77	2	92.83	2	-9.000	9	-9.000	9	2380	2	-9.00	9	-9.00	9	-9
9406	2	1500.0	34.856	34.857	2	4.499	4.373	27.633	80.3	80.5	2	232.6	0.00	2	36.77	2	2.74	2	105.80	2	-9.000	9	-9.000	9	-9	2	-9.00	9	-9.00	9	-9
9405	2	1750.0	34.810	34.810	2	3.432	3.296	27.706	101.8	101.1	2	220.5	0.00	2	36.32	2	2.68	2	118.17	2	-9.000	9	-9.000	9	2403	2	-9.00	9	-9.00	9	-9
9404	2	2000.7	34.780	34.781	2	2.789	2.620	27.744	122.7	121.3	2	205.9	0.00	2	35.59	2	2.59	2	122.87	2	-9.000	9	-9.000	9	-9	2	-9.00	9	-9.00	9	-9
9403	2	2245.9	34.759	34.760	2	2.337	2.173	27.765	136.6	134.9	2	196.0	0.00	2	35.21	2	2.52	2	126.50	2	-9.000	9	-9.000	9	2408	2	-9.00	9	-9.00	9	-9
9402	2	2599.5	34.746	34.746	2	2.049	1.858	27.779	147.5	145.6	2	188.0	0.00	2	34.58	2	2.47	2	128.45	2	-9.000	9	-9.000	9	-9	2	-9.00	9	-9.00	9	-9
9401	2	3161.5	34.728	34.729	2	1.602	1.367	27.802	159.9	156.9	2	181.0	0.00	2	34.48	2	2.42	2	135.95	2	-9.000	9	-9.000	9	2408	2	-9.00	9	-9.00	9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 ***** ITS-90 scale

I8NR
 NOAA Ship Baldridge

STATION 95 DATE 10/22/1995
 CAST 1 GMT 23:04
 CTD CAST 316

LATITUDE 02° 59.47' S
 LONGITUDE 80° 0.1' E

Bottle Number	CTD		Bottle		Sigma T	Theta	Pot. T	F* Temp	F* Salinity	CO2												Chl-a												
	db	Salinity	O2	Hmol/Kg						AOU	NO2	NO3	PO4	S(OH)4	CFC-11	CFC-12	H ₂ O	DIC	pH	TA	TOC		TON	F* µg/l										
9524	7.0	35.085	35.091	28.333	28.333	22.357	196.8	196.2	-1.0	0.04	2	0.05	2	0.19	2	1.47	2	1.617	2	0.962	2	253.1	2	1948.3	8	8.1000	2	2297	2	70.59	2	5.92	2	-8
9523	29.3	35.096	35.103	28.348	28.341	22.362	196.7	195.8	-0.6	0.03	2	0.06	2	0.21	2	1.82	2	1.608	2	0.964	2	256.8	2	1948.2	2	8.1126	2	2295	2	70.05	2	8.32	2	-8
9522	59.4	35.171	35.182	28.211	28.197	22.489	200.9	192.0	3.5	0.03	2	0.28	2	0.26	2	1.81	2	1.815	2	0.970	2	261.0	2	1955.9	2	8.0949	2	2301	2	67.04	2	8.52	2	-8
9521	89.3	35.007	35.002	28.237	28.217	22.969	141.9	130.4	71.7	0.22	2	8.94	2	0.77	2	6.39	2	1.465	2	0.846	2	382.3	2	2024.2	2	7.9652	2	2291	2	59.47	2	4.91	2	-8
9520	148.7	35.052	35.054	14.446	14.424	26.139	27.9	29.2	221.2	0.01	2	28.85	2	2.10	2	28.57	2	0.567	2	0.325	2	1101.5	2	2215.4	2	7.5738	2	2309	2	50.36	2	3.26	2	-8
9519	198.8	35.084	35.086	12.708	12.681	26.524	40.3	40.9	218.5	0.01	2	28.91	2	2.10	2	27.00	2	0.481	2	0.275	2	1157.9	2	2224.3	2	7.5568	2	2314	2	49.88	2	2.25	2	-8
9518	299.1	35.044	35.044	11.315	11.277	26.760	75.3	73.0	194.2	0.00	2	27.80	2	1.97	2	25.70	2	0.474	2	0.272	2	1036.1	2	2213.5	2	7.5888	2	2315	2	48.80	2	2.47	2	-8
9517	399.8	35.049	35.049	10.732	10.683	26.871	52.8	52.4	218.3	0.00	2	30.86	2	2.22	2	33.01	2	0.278	2	0.181	2	1246.1	2	2237.0	2	7.5300	2	2319	2	48.07	2	2.35	2	-8
9516	499.3	35.046	35.046	10.024	9.985	26.994	46.8	46.8	228.1	0.00	2	32.70	2	2.39	2	40.04	2	0.172	2	0.087	2	1298.8	2	2248.4	2	7.5148	2	2324	2	45.43	2	2.10	2	-8
9515	599.3	35.022	35.023	9.010	8.943	27.146	40.4	41.9	239.3	0.00	2	34.93	2	2.58	2	52.11	2	0.049	2	0.033	2	1392.3	2	2269.8	2	7.4904	2	2339	2	-9.00	2	-9.00	2	-8
9514	700.0	35.031	35.032	8.803	8.726	27.187	36.0	38.0	244.8	0.00	2	35.17	2	2.64	2	56.20	2	0.027	2	0.027	2	1441.5	2	2275.4	2	7.4618	2	2341	2	-9.00	2	-9.00	2	-8
9513	799.9	35.016	35.016	8.206	8.121	27.269	34.0	36.7	249.8	0.00	2	35.90	2	2.71	2	84.37	2	0.014	2	0.008	2	1469.6	2	2287.3	2	7.4665	2	2348	2	42.68	2	-9.00	2	-8
9512	997.6	34.956	34.957	8.704	8.607	27.439	48.2	49.8	246.9	0.00	2	36.62	2	2.76	2	81.17	2	0.003	2	0.008	2	1479.5	2	2304.0	2	7.4741	2	2368	2	-9.00	2	-9.00	2	-8
9511	1299.7	34.896	34.896	5.475	5.358	27.550	63.4	64.7	241.0	0.00	2	36.90	2	2.76	2	95.18	2	-9.000	2	-9.000	2	1471.9	2	2314.7	2	7.4790	2	2379	2	-9.00	2	-9.00	2	-8
9510	1800.5	34.845	34.846	4.208	4.076	27.656	88.5	88.1	227.3	0.00	2	36.46	2	2.71	2	107.52	2	-9.000	2	-9.000	2	1377.6	2	2318.6	2	7.5035	2	2391	2	42.67	2	-9.00	2	-8
9509	1897.2	34.792	34.792	3.018	2.875	27.731	113.3	112.8	212.3	0.00	2	35.80	2	2.64	2	121.09	2	-9.000	2	-9.000	2	1319.2	2	2323.7	2	7.5274	2	2408	2	42.08	2	-9.00	2	-8
9508	2198.7	34.763	34.764	2.401	2.240	27.783	130.8	130.2	200.2	0.00	2	35.19	2	2.56	2	127.35	2	-0.002	2	0.002	2	1240.3	2	2320.5	2	7.5484	2	2413	2	-8.00	2	-8.00	2	-8
9507	2501.3	34.749	34.749	2.095	1.912	27.778	141.5	141.6	191.6	0.00	2	34.75	2	2.50	2	129.40	2	0.000	2	0.006	2	1187.9	2	2318.1	2	7.5656	2	2414	2	42.91	2	-8.00	2	-8
9506	2798.8	34.737	34.738	1.820	1.815	27.791	148.1	148.3	187.4	0.00	2	34.58	2	2.46	2	133.73	2	0.000	2	0.006	2	1162.3	2	2320.8	2	7.5714	2	2422	2	-8.00	2	-8.00	2	-8
9505	3097.7	34.731	34.731	1.675	1.445	27.798	154.4	155.2	182.0	0.00	2	34.27	2	2.44	2	134.66	2	0.001	2	0.005	2	1144.1	2	2318.9	2	7.5823	2	2422	2	42.36	2	-8.00	2	-8
9504	3389.0	34.727	34.726	1.563	1.306	27.804	153.1	154.2	184.2	0.00	2	34.50	2	2.45	2	139.94	2	0.000	2	0.001	2	1131.4	2	2325.3	2	7.5829	2	2429	2	-8.00	2	-8.00	2	-8
9503	3699.6	34.721	34.722	1.426	1.141	27.813	162.6	163.8	178.1	0.00	2	34.12	2	2.40	2	139.20	2	-0.001	2	0.003	2	1107.4	2	2321.4	2	7.5969	2	2430	2	42.47	2	-8.00	2	-8
9502	3997.9	34.720	34.720	1.410	1.094	27.814	167.5	168.4	171.9	0.00	2	33.88	2	2.37	2	137.10	2	0.000	2	0.005	2	1077.1	2	2315.0	2	7.5958	2	2429	2	-8.00	2	-8.00	2	-8
9501	4385.8	34.718	34.719	1.410	1.051	27.818	173.5	173.3	167.4	0.00	2	33.61	2	2.35	2	135.10	2	-0.001	2	0.008	2	1076.8	2	2311.4	2	7.6042	2	-9	2	-9.00	2	-8.00	2	-8

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

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

*** PSS-78 scale

**** ITS-90 scale

I8NR
NOAA Ship Baldridge

STATION 96 DATE 10/23/1995
 CAST 2 GMT 04:24
 CTD CAST 317

LATITUDE 03° 29.16' S
 LONGITUDE 79° 59.8' E

Bottle Number	CTD		Bottle		Sigma Theta	O2	O2 H ₂ O	F* AOU	NO2 H ₂ O	NO3 H ₂ O	PO4 H ₂ O	Si(OH) ₄ H ₂ O	CFC-11 pmol/kg	CFC-12 pmol/kg	DIC H ₂ O	pH	TA H ₂ O	F* TOC H ₂ O	F* TON H ₂ O	F* Chla Phase H ₂ O								
	db	Pressure	Salinity	Temp																								
9618	2	8.6	35.086	28.325	28.323	22.360	195.7	197.3	-2.1	0.04	0.09	0.22	1.90	1.628	0.961	2	256.0	1949.3	6	8.1002	2	2295	2	-9.00	9	-9.00	9	-9
9615	2	74.4	35.320	27.949	27.931	22.665	183.4	188.8	7.4	0.11	0.90	0.31	1.88	1.601	0.947	2	266.5	1970.2	2	8.0860	2	2312	2	-9.00	9	-9.00	9	-9
9614	2	100.3	34.983	21.912	21.892	24.236	60.0	56.1	181.5	0.06	20.12	1.52	15.81	1.145	0.658	2	673.7	2125.6	2	7.7585	2	2293	2	-9.00	9	-9.00	9	-9
9613	2	125.9	34.944	15.598	15.576	25.803	24.9	26.2	218.7	0.03	28.23	2.09	27.65	0.569	0.338	2	1049.7	2201.0	2	7.5914	2	2300	2	-9.00	9	-9.00	9	-9
9612	2	247.7	35.085	12.110	12.077	28.642	50.8	50.1	212.8	0.00	28.78	2.08	28.88	0.488	0.288	2	1151.9	2222.2	2	7.5617	2	2312	2	-9.00	9	-9.00	9	-9
9611	2	349.1	35.055	11.030	10.987	28.822	48.3	50.3	218.8	0.00	30.65	2.20	31.60	0.313	0.177	2	1253.8	2233.8	6	7.5337	2	2320	2	-9.00	9	-9.00	9	-9
9610	2	548.4	35.040	9.562	9.499	27.081	35.1	38.0	239.7	0.00	33.88	2.53	47.11	0.070	0.048	2	-8.0	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
9609	2	749.8	35.023	8.328	8.246	27.254	30.9	33.5	252.1	0.00	35.78	2.72	83.93	0.012	0.010	2	-9.0	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
9608	2	949.5	34.956	6.957	6.864	27.404	42.4	44.4	250.5	0.00	36.64	2.77	79.75	-9.000	-9.000	9	-9.0	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
9607	2	1199.4	34.906	5.781	5.672	27.521	58.9	80.1	243.3	0.00	36.85	2.78	92.43	-9.000	-9.000	9	-9.0	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
9606	2	1501.3	34.856	4.514	4.388	27.629	82.7	83.1	229.9	0.00	36.28	2.74	104.94	-9.000	-9.000	9	-9.0	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
9605	2	1800.1	34.801	3.265	3.127	27.714	112.8	111.8	211.4	0.00	35.47	2.64	116.32	-9.000	-9.000	9	-9.0	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
9604	2	2101.1	34.770	2.551	2.397	27.755	128.7	127.1	201.9	0.00	35.01	2.59	125.77	-9.000	-9.000	9	-9.0	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
9603	2	2399.9	34.753	2.202	2.027	27.772	141.8	140.4	191.8	0.00	34.53	2.52	127.99	-9.000	-9.000	9	-9.0	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
9602	2	2700.4	34.740	1.903	1.706	27.785	150.0	148.2	186.7	0.00	34.28	2.49	132.07	-9.000	-9.000	9	-9.0	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9
9601	2	3010.4	34.732	1.714	1.491	27.795	156.6	154.2	182.6	0.00	34.03	2.45	134.66	-9.000	-9.000	9	-9.0	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR NOAA Ship Baldrige

STATION 97 DATE 10/23/1995
 CAST 1 GMT 10:02
 CTD CAST 318

LATITUDE 03° 59.35' S
 LONGITUDE 79° 59.86' E

Bottle Number	CTD			Bottle			CTD			Bottle			ICO2											Phi-a Hg/l					
	F** Pressure db	Salinity	Temp** C	F** Salinity	Temp** C	Pot. T*** C	Sigma Theta	O2 Hmol/kg	O2 Hmol/kg	F* AOU	NO2 Hmol/kg	F* NO3 Hmol/kg	PO4 Hmol/kg	F* Si(OH)4 Hmol/kg	F* CFC-11 pmol/kg	F* CFC-12 pmol/kg	F* at 20°C H ₂ O	DIC Hmol/kg	F* pH	F* TA Hmol/kg	F* TOC Hmol/kg	F* TON Hmol/kg	Phi-a Hg/l						
9724	2	7.3	35.035	35.042	28.480	28.488	22.268	197.3	196.7	-1.9	0.05	0.18	0.23	1.93	1.620	0.984	286.3	1947.9	6	8.1001	2	2294	2	-9.00	9	-9.00	9	-9	
9723	2	81.3	35.260	35.265	28.091	28.077	22.571	196.3	189.7	6.1	0.14	0.89	0.30	1.88	1.609	0.951	267.6	1965.7	2	8.0901	2	2306	2	-9.00	9	-9.00	9	-9	
9722	2	120.1	34.935	34.937	15.605	15.586	25.794	28.5	29.9	215.0	0.01	28.05	2.08	27.83	0.585	0.350	1025.4	2197.8	2	7.5982	2	2306	2	-9.00	9	-9.00	9	-9	
9721	2	173.9	35.058	35.062	13.707	13.682	26.302	24.1	25.8	228.4	0.00	29.76	2.19	28.27	0.469	0.279	1205.0	2222.5	2	7.5473	2	2311	2	-9.00	9	-9.00	9	-9	
9720	2	249.5	35.063	35.084	12.077	12.044	26.646	51.3	51.5	211.4	0.00	28.91	2.08	26.88	0.475	0.274	1139.0	2223.4	2	7.5631	2	2312	2	-9.00	9	-9.00	9	-9	
9719	2	351.5	35.053	35.055	11.021	10.977	28.823	44.4	45.2	223.7	0.00	31.29	2.24	32.24	0.287	0.162	1266.5	2236.5	2	7.5257	2	2319	2	-9.00	9	-9.00	9	-9	
9718	2	450.5	35.075	35.076	10.451	10.387	26.943	27.5	30.4	241.9	0.00	33.46	2.45	39.85	0.130	0.080	1392.9	2258.3	2	7.4889	2	2323	2	-9.00	9	-9.00	9	-9	
9717	2	549.6	35.035	35.037	9.508	9.445	27.075	21.6	24.9	253.2	0.00	35.36	2.63	51.03	0.043	0.033	1518.1	2275.3	2	7.4628	2	2335	2	-9.00	9	-9.00	9	-9	
9716	2	644.9	35.004	35.005	8.915	8.844	27.148	13.6	17.5	284.4	0.00	36.86	2.78	60.30	0.017	0.011	1595.7	2290.2	2	7.4418	2	2342	2	-9.00	9	-9.00	9	-9	
9715	2	750.4	35.006	35.007	8.266	8.186	27.252	25.8	29.5	256.6	0.00	36.59	2.76	66.01	0.008	0.010	1532.2	2293.2	2	7.4553	2	2350	2	-9.00	9	-9.00	9	-9	
9714	2	849.9	34.975	-9.000	9	7.452	7.366	27.348	37.6	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9	
9713	2	998.3	34.944	34.946	6.697	6.600	27.431	46.1	48.8	248.0	0.00	36.92	2.79	82.40	0.000	-0.001	1500.6	2306.2	2	7.4684	2	2368	2	-9.00	9	-9.00	9	-9	
9712	2	1198.9	34.900	34.901	5.733	5.624	27.522	58.6	60.5	243.2	0.00	37.03	2.79	93.38	-0.001	-0.003	1495.1	2313.6	2	7.4747	2	2378	2	-9.00	9	-9.00	9	-9	
9711	2	1396.5	34.873	-9.000	9	5.006	4.885	27.588	71.6	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9	
9710	2	1599.4	34.840	34.841	4.035	3.906	27.670	90.8	91.1	225.9	0.00	36.45	2.73	110.23	-0.001	-0.001	1399.2	2321.3	2	7.5043	2	2393	2	-9.00	9	-9.00	9	-9	
9709	2	1799.0	34.805	34.806	3.292	3.154	27.716	109.2	109.4	213.4	0.00	35.92	2.66	116.93	-0.000	-0.000	1340.4	2321.3	2	7.5220	2	2404	2	-9.00	9	-9.00	9	-9	
9708	2	1998.4	34.762	34.763	2.780	2.631	27.745	120.8	120.3	208.8	0.00	35.60	2.82	123.55	-0.001	0.000	1273.3	2322.8	2	7.5375	2	2406	2	-9.00	9	-9.00	9	-9	
9707	2	2199.7	34.766	-9.000	9	2.456	2.294	27.760	130.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0	-9	
9706	2	2498.4	34.750	34.750	2	2.139	1.956	27.775	140.2	140.6	192.2	0.00	34.84	2.53	129.32	-0.001	-0.001	1219.0	2319.0	2	7.5587	2	2414	2	-9.00	9	-9.00	9	-9
9705	2	2802.1	34.739	34.739	1.883	1.878	27.788	146.2	147.2	186.0	0.00	34.69	2.50	133.40	-0.001	0.001	1178.0	2321.9	2	7.5664	2	2420	2	-9.00	9	-9.00	9	-9	
9704	2	3158.8	34.730	34.730	1.648	1.412	27.800	148.3	151.2	186.3	0.00	34.64	2.49	139.23	-0.001	0.001	1170.2	2327.3	2	7.5753	2	2427	2	-9.00	9	-9.00	9	-9	
9703	2	3600.1	34.722	34.722	1.470	1.194	27.809	156.9	154.8	184.8	0.00	34.44	2.46	141.88	-0.001	0.000	1112.6	2327.6	2	7.5865	2	2435	2	-9.00	9	-9.00	9	-9	
9702	2	4000.8	34.719	34.720	1.420	1.103	27.813	165.5	167.1	173.1	0.00	34.08	2.41	138.82	-0.001	0.000	1105.8	2319.5	2	7.5881	2	2427	2	-9.00	9	-9.00	9	-9	
9701	2	4400.9	34.718	34.718	1.410	1.049	27.816	174.0	174.5	166.2	0.00	33.65	2.37	135.20	0.000	0.003	1076.4	2311.4	6	7.6036	2	2423	2	-9.00	9	-9.00	9	-9	

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR
NOAA Ship Baldridge

STATION 98 DATE 10/23/1995
CAST 1 GMT 14:52
CTD CAST 319

LATITUDE 04° 29.63' S
LONGITUDE 80° 0.09' E

Bottle Number	CTD		Bottle		Sigma Theta	O2	O2	F* AUO	NO2	F* NO3	F* PO4	F* Si(OH)4	F* CFC-11	F* CFC-12	F* at 20 °C	DIC	pH	F* TA	F* TOC	F* TON	F* Chl-a														
	db	Pressure	Salinity	Temp																		Temp	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C
9816	2	7.4	34.990	34.988	2	28.336	28.334	22.286	196.8	197.0	2	-1.7	0.07	2	0.61	2	1.66	2	1.618	2	0.961	2	266.8	2	1948.4	2	8.0984	2	2295	2	-9.00	9	-8.00	9	-9
9815	2	49.4	35.105	35.112	2	28.033	28.021	22.474	191.8	187.6	2	8.6	0.24	2	1.23	2	1.85	2	1.613	2	0.959	2	289.0	2	1959.9	2	8.0984	2	2297	2	-9.00	9	-8.00	9	-9
9814	2	100.3	34.637	34.681	2	20.572	20.553	24.373	49.2	51.1	2	172.3	0.04	2	21.88	2	18.83	2	0.962	2	0.566	2	717.6	2	2124.4	2	7.7385	2	2282	2	-9.00	9	-8.00	9	-9
9813	2	149.9	35.037	35.047	2	15.643	15.620	25.871	34.0	35.6	2	208.9	0.00	2	27.29	2	24.01	2	0.702	2	0.406	2	1028.6	2	2197.3	2	7.6102	2	2306	2	-9.00	9	-8.00	9	-9
9812	2	200.1	35.090	35.081	2	13.175	13.147	26.427	33.1	33.7	2	223.2	0.00	2	29.46	2	27.12	2	0.479	2	0.271	2	1182.6	2	2223.3	2	7.5513	2	2318	2	-9.00	9	-8.00	9	-9
9811	2	301.4	35.107	35.108	2	11.831	11.792	26.713	49.0	49.5	2	214.7	0.00	2	29.39	2	27.37	2	0.434	2	0.248	2	1188.4	2	2228.4	2	7.5504	2	2318	2	-9.00	9	-8.00	9	-9
9810	2	450.5	35.051	-8.000	9	10.275	10.221	26.954	16.8	-9.0	9	-9.0	-8.00	9	-8.00	9	-9.00	9	-8.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-8.00	9	-9
9809	2	598.8	35.024	35.026	2	9.222	9.154	27.114	18.7	22.4	2	257.5	0.00	2	35.96	2	2.68	2	54.19	2	0.023	2	1529.4	2	2281.9	2	7.4545	2	2335	2	-9.00	9	-8.00	9	-9
9808	2	683.0	34.996	34.987	2	8.542	8.467	27.200	20.6	24.1	2	260.2	0.00	2	36.91	2	2.74	2	62.97	2	0.012	2	1557.3	2	2291.2	2	7.4479	2	2344	2	-9.00	9	-8.00	9	-9
9807	2	884.4	34.965	-8.000	9	7.195	7.107	27.377	39.0	-9.0	9	-9.0	-8.00	9	-8.00	9	-9.00	9	-8.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-8.00	9	-9
9806	2	1001.6	34.937	34.938	2	6.594	6.498	27.439	45.8	47.8	2	249.7	0.00	2	37.02	2	2.80	2	83.44	2	-8.000	9	1505.8	2	2308.8	2	7.4658	2	2371	2	-8.00	9	-8.00	9	-9
9805	2	1199.4	34.898	34.900	2	5.685	5.578	27.527	58.8	60.2	2	243.9	0.00	2	37.04	2	2.78	2	83.42	2	-8.000	9	1446.4	3	2315.2	2	7.4759	2	2377	2	-8.00	9	-8.00	9	-9
9804	2	1501.9	34.857	34.859	2	4.541	4.415	27.830	78.8	79.0	2	233.8	0.00	2	36.85	2	2.75	2	105.74	2	-8.000	9	1421.2	2	2322.0	2	7.4887	2	2390	2	-8.00	9	-8.00	9	-9
9803	2	2000.1	34.785	34.786	2	2.859	2.709	27.741	118.8	117.5	2	208.9	0.00	2	35.73	2	2.62	2	123.04	2	-8.000	9	1258.1	3	2323.7	2	7.5324	2	2410	2	-8.00	9	-8.00	9	-9
9802	2	2500.2	34.750	34.751	2	2.133	1.950	27.776	135.1	133.8	2	199.2	0.00	2	35.32	2	2.56	2	133.74	2	-8.000	9	1246.8	2	2328.6	2	7.5486	2	2417	2	-8.00	9	-8.00	9	-9
9801	2	3005.1	34.733	34.734	2	1.732	1.509	27.796	151.3	149.1	2	187.6	0.00	2	34.72	2	2.47	2	137.08	2	-8.000	9	1172.7	2	2327.6	6	-9.0000	9	2425	2	-8.00	9	-8.00	9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR NOAA Ship Baldridge

STATION 99 DATE 10/23/1995
 CAST 1 GMT 20:19
 CTD CAST 320

LATITUDE 04° 59.61' S
 LONGITUDE 79° 59.43' E

Bottle Number	CTD										Bottle										ICO2										Chi-a							
	F* db	Pressure	Salinity	Temp	Pot	Sigma	O2	O2	Theta	F* AUO	NO2	F* NO3	F* PO4	F* Si(OH)4	F* CFC-11	F* CFC-12	F* at 20 °C	F* Hum	DIC	F* pH	F* TA	F* TOC	F* TON	F* Hmol/l	F* Hmol/l	Hg/l	Hg/l											
9924	2	7.5	34.331	34.498	2	28.472	28.470	21.865	200.4	199.9	2	-4.4	0.01	2	0.49	2	0.17	2	1.57	2	1.662	2	1.015	2	256.5	2	1928.8	6	8.1078	2	2270	2	71.71	2	6.38	2	-9	-9
9923	2	30.2	35.449	35.467	2	28.541	28.534	22.572	204.0	199.7	2	-5.6	0.01	2	0.57	2	0.26	2	1.23	2	1.617	2	0.971	2	261.7	2	1968.3	2	8.0997	2	2320	2	71.44	2	6.16	2	-9	-9
9922	2	58.3	35.331	35.335	2	27.265	27.252	22.892	168.8	163.6	2	34.7	0.66	2	4.88	2	0.51	2	3.60	2	1.553	2	0.923	2	311.0	2	2001.8	2	8.0386	2	2311	2	69.26	2	5.86	2	-9	-9
9921	2	90.0	34.886	34.905	2	20.902	20.885	24.454	50.2	46.1	2	175.6	0.01	2	22.50	2	1.64	2	17.38	2	1.032	2	0.606	2	741.1	2	2145.4	3	7.7279	2	2291	2	54.26	2	2.49	2	-9	-9
9920	3	149.5	35.064	35.061	2	16.147	16.123	25.767	34.5	35.9	2	206.2	0.01	2	26.80	2	1.94	2	23.17	2	0.771	2	0.445	2	957.2	2	2196.9	2	7.6253	2	2304	2	52.33	2	2.80	2	-9	-9
9919	2	249.8	35.066	35.069	2	12.241	12.208	26.603	19.5	22.0	2	240.0	0.02	2	31.68	2	2.30	2	32.14	2	0.300	2	0.179	2	1341.7	2	2244.2	2	7.5054	2	2316	2	50.76	2	2.89	2	-9	-9
9918	2	350.4	35.103	35.103	2	11.403	11.358	26.791	29.1	29.6	2	237.1	0.00	2	32.07	2	2.31	2	33.26	2	0.280	2	0.156	2	1347.7	2	2247.0	2	7.5032	2	2323	2	48.51	2	2.18	2	-9	-9
9917	2	450.5	35.040	35.042	2	10.315	10.261	26.940	12.2	15.9	2	257.2	0.00	2	35.10	2	2.56	2	44.55	2	0.084	2	0.061	2	1545.5	2	2268.8	2	7.4533	2	2328	2	48.17	2	1.89	2	-9	-9
9916	2	550.8	35.028	35.030	2	9.558	9.495	27.061	15.8	19.6	2	258.2	0.00	2	35.85	2	2.64	2	51.49	2	0.041	2	0.025	2	1539.2	2	2276.5	2	7.4515	2	2333	2	45.49	2	-9.00	2	-9	-9
9915	2	650.2	35.007	35.008	2	8.853	8.781	27.160	17.8	21.6	2	260.7	0.00	2	36.60	2	2.72	2	59.98	2	0.015	2	0.012	2	1539.9	2	2287.2	2	7.4491	2	2344	2	-9.00	2	-9.00	2	-9	-9
9914	2	750.3	34.981	34.983	2	8.057	7.978	27.264	24.2	27.8	2	259.9	0.00	2	37.11	2	2.78	2	68.75	2	0.007	2	0.007	2	1569.3	2	2298.0	2	7.4479	2	2351	2	-9.00	2	-9.00	2	-9	-9
9913	2	849.8	34.951	34.952	2	7.152	7.068	27.372	34.8	37.8	2	256.0	0.00	2	37.35	2	2.79	2	79.00	2	0.003	2	0.003	2	1553.9	2	2307.3	2	7.4549	2	2361	2	44.09	2	-9.00	2	-9	-9
9912	2	999.5	34.922	34.923	2	6.281	6.187	27.468	48.8	50.5	2	249.2	0.00	2	37.27	2	2.79	2	87.91	2	0.002	2	0.001	2	1492.1	2	2310.3	2	7.4653	2	2373	2	-9.00	2	-9.00	2	-9	-9
9911	2	1200.5	34.896	34.897	2	5.579	5.471	27.538	60.5	62.2	2	242.7	0.00	2	37.21	2	2.78	2	94.92	2	-9.000	2	-9.000	2	1473.6	2	2313.9	2	7.4780	2	2378	2	-9.00	2	-9.00	2	-9	-9
9910	2	1498.3	34.854	34.835	2	4.451	4.326	27.620	79.9	91.0	2	222.5	0.00	2	36.80	2	2.72	2	112.21	2	-0.002	2	0.004	2	1399.6	2	2323.2	2	7.5055	2	2395	2	42.92	2	-9.00	2	-9	-9
9909	2	1798.5	34.809	34.810	2	3.398	3.259	27.709	103.6	103.8	2	218.1	0.00	2	36.64	2	2.68	2	117.81	2	-8.000	2	-8.000	2	1371.8	2	2323.6	2	7.5173	2	2405	2	-9.00	2	-9.00	2	-9	-9
9908	2	2099.4	34.772	34.772	2	2.591	2.436	27.753	125.1	125.0	2	203.7	0.00	2	35.91	2	2.60	2	125.80	2	-8.000	2	-8.000	2	1254.7	2	2323.7	2	7.5409	2	2411	2	-9.00	2	-9.00	2	-9	-9
9907	2	2398.9	34.756	34.757	2	2.254	2.078	27.771	132.5	134.4	2	197.3	0.00	2	35.71	2	2.57	2	130.85	2	0.000	2	0.002	2	1225.1	2	2326.2	2	7.5544	2	2415	2	42.95	2	-9.00	2	-9	-9
9906	2	2697.6	34.741	34.742	2	1.923	1.726	27.788	141.3	142.3	2	192.5	0.00	2	35.09	2	2.52	2	135.83	2	0.000	2	0.002	2	1181.9	2	2326.8	2	7.5608	2	2424	2	-9.00	2	-9.00	2	-9	-9
9905	2	2996.3	34.733	34.734	2	1.736	1.514	27.796	148.5	149.6	2	187.0	0.00	2	34.69	2	2.47	2	136.96	2	0.000	2	0.002	2	1164.2	2	2323.5	2	7.5732	2	2424	2	-9.00	2	-9.00	2	-9	-9
9904	2	3300.8	34.727	34.727	2	1.571	1.323	27.804	152.3	154.0	2	184.3	0.00	2	34.44	2	2.46	2	140.46	2	0.001	2	0.001	2	1126.9	2	2325.9	2	7.5823	2	2429	2	42.79	2	-9.00	2	-9	-9
9903	2	3601.3	34.722	34.723	2	1.461	1.185	27.810	157.5	145.0	2	194.5	0.00	2	34.40	2	2.43	2	141.78	2	-0.003	2	0.002	2	1120.3	2	2324.8	2	7.5909	2	2434	2	-9.00	2	-9.00	2	-9	-9
9902	2	3900.8	34.720	34.721	2	1.419	1.113	27.814	165.2	166.2	2	174.0	0.00	2	33.91	2	2.40	2	138.87	2	0.001	2	0.003	2	1076.1	2	2318.5	2	7.5982	2	2432	2	-9.00	2	-9.00	2	-9	-9
9901	2	4289.5	34.718	34.720	2	1.396	1.050	27.817	173.6	173.6	2	167.1	0.00	2	33.78	2	2.36	2	136.12	2	-0.001	2	-0.001	2	1087.9	2	2310.5	2	7.6070	2	2426	2	43.07	2	-9.00	2	-9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

I8NR NOAA Ship Baldridge

STATION 100 DATE 10/24/1995
 CAST 1 GMT 01:46
 CTD CAST 321

LATITUDE 05° 30.97' S
 LONGITUDE 79° 59.43' E

Bottle Number	Bottle		CTD		Bottle		F* Temp*** °C	F* Temp*** °C	Sigma Theta	O2	O2	F* AO2	NO2	NO3	F* PO4	F* Si(OH)4	F* CFC-11	F* CFC-12	F* DIC	pH	F* TA	F* TOC	F* TON	F* Chl-a		
	Pressure db	Salinity	Temp	Temp	Temp	Temp																			Temp	Temp
10024	2	7.6	33.728	33.624	28.821	28.819	21.244	195.7	195.8	2	-0.5	0.00	0.12	0.14	2	2.06	2	1.597	2	0.953	2	-9.0	9	-9.00	9	-9
10023	2	41.0	35.306	35.302	26.072	26.062	22.604	199.2	192.3	2	3.5	0.10	0.43	0.31	2	1.75	2	1.616	2	0.981	2	-9.0	9	-9.00	9	-9
10022	2	60.8	34.957	34.961	24.368	24.351	23.509	81.4	80.6	2	126.0	0.07	14.76	1.20	2	10.13	2	1.314	2	0.776	2	-9.0	9	-9.00	9	-9
10021	2	119.9	34.995	34.996	19.789	19.767	24.821	29.8	29.8	2	196.3	0.02	24.09	1.82	2	19.72	2	0.959	2	0.580	2	-9.0	9	-9.00	9	-9
10020	2	149.7	34.934	34.939	16.172	16.148	25.686	14.6	15.2	2	227.0	0.01	26.97	2.16	2	27.62	2	0.589	2	0.338	2	-9.0	9	-9.00	9	-9
10019	2	201.3	35.126	35.129	13.501	13.473	26.397	50.3	50.6	2	204.5	0.00	27.02	1.99	2	23.84	2	0.664	2	0.378	2	-9.0	9	-9.00	9	-9
10016	2	300.2	35.075	35.077	11.803	11.764	26.694	23.8	26.3	2	238.1	0.00	31.65	2.32	2	32.86	2	0.288	2	0.167	2	-9.0	9	-9.00	9	-9
10017	2	398.9	35.054	35.055	10.655	10.606	26.890	16.5	19.8	2	251.3	0.00	34.17	2.50	2	40.85	2	0.131	2	0.080	2	-9.0	9	-9.00	9	-9
10016	2	499.8	35.032	35.033	9.898	9.839	27.006	12.1	16.3	2	259.4	0.00	35.82	2.65	2	49.17	2	0.050	2	0.032	2	-9.0	9	-9.00	9	-9
10015	2	598.5	35.013	35.014	9.145	9.076	27.117	15.0	16.6	2	261.8	0.00	36.77	2.73	2	57.17	2	0.023	2	0.019	2	-9.0	9	-9.00	9	-9
10014	2	700.4	34.996	34.998	8.437	8.362	27.218	21.2	24.3	2	260.6	0.00	37.14	2.76	2	64.69	2	-9.000	9	-9.000	9	-9.0	9	-9.00	9	-9
10013	2	799.4	34.972	34.972	7.676	7.594	27.312	29.2	32.2	2	257.8	0.00	37.08	2.81	2	73.41	2	-9.000	9	-9.000	9	-9.0	9	-9.00	9	-9
10012	2	899.0	34.941	34.943	6.859	6.772	27.406	39.4	41.6	2	254.0	0.00	37.07	2.80	2	82.06	2	-9.000	9	-9.000	9	-9.0	9	-9.00	9	-9
10011	2	1099.4	34.913	34.915	6.028	5.924	27.495	52.5	53.9	2	247.7	0.00	36.97	2.60	2	90.88	2	-9.000	9	-9.000	9	-9.0	9	-9.00	9	-9
10010	2	1399.3	34.869	34.870	4.875	4.755	27.601	72.2	74.0	2	236.2	0.00	36.74	2.78	2	102.66	2	-9.000	9	-9.000	9	-9.0	9	-9.00	9	-9
10009	2	1701.0	34.819	34.820	3.635	3.501	27.694	97.0	97.5	2	222.5	0.00	36.23	2.71	2	115.91	2	-9.000	9	-9.000	9	-9.0	9	-9.00	9	-9
10008	2	1999.1	34.785	34.785	2.663	2.733	27.736	114.8	115.1	2	211.1	0.00	35.64	2.65	2	124.31	2	-9.000	9	-9.000	9	-9.0	9	-9.00	9	-9
10007	2	2300.4	34.762	34.761	2.369	2.219	27.762	127.3	127.5	2	203.0	0.00	35.27	2.60	2	130.21	2	-9.000	9	-9.000	9	-9.0	9	-9.00	9	-9
10006	2	2599.9	34.746	34.746	2.040	1.849	27.780	136.3	138.8	2	194.9	0.00	34.82	2.54	2	133.95	2	-9.000	9	-9.000	9	-9.0	9	-9.00	9	-9
10005	2	2900.3	34.735	34.736	1.779	1.565	27.794	147.8	148.4	2	187.8	0.00	34.49	2.50	2	135.88	2	-9.000	9	-9.000	9	-9.0	9	-9.00	9	-9
10004	2	3198.3	34.728	34.728	1.614	1.375	27.801	149.2	150.4	2	187.4	0.00	34.53	2.49	2	140.84	2	-9.000	9	-9.000	9	-9.0	9	-9.00	9	-9
10002	2	3800.0	34.719	34.720	1.402	1.107	27.813	164.9	164.9	2	175.3	0.00	33.93	2.42	2	139.62	2	-9.000	9	-9.000	9	-9.0	9	-9.00	9	-9
10001	2	4161.5	34.716	34.719	1.400	1.064	27.815	170.1	170.2	2	170.4	0.00	33.64	2.39	2	137.40	2	-9.000	9	-9.000	9	-9.0	9	-9.00	9	-9

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale

18NR NOAA Ship Baldrige

STATION 101 DATE 10/24/1995
 CAST 2 GMT 05:01
 CTD CAST 322

LATITUDE 05° 47.22' S
 LONGITUDE 79° 59.83' E

Bottle Number	F** Pressure db	Bottle		Sigma T**** °C	Pot. T**** °C	CTD		O2 Hmol/kg	O2 Hmol/kg	F* AOU	NO2 Hmol/kg	NO3 Hmol/kg	PO4 Hmol/kg	F* Si(OH)4 Hmol/kg	F* CFC-11 pmol/kg	F* CFC-12 pmol/kg	F* at 20 °C H ₂ O	DIC Hmol/kg	F* pH	F* TA Hmol/kg	F* TOC Hmol/kg	F* TON Hmol/l	F* Chl-a Hg/l	F* Phaeo Hg/l														
		Salinity***	Temp****			Theta	Depth																		Depth													
10114	2	7.1	33.658	33.668	3	29.025	29.023	21.059	194.0	196.4	2	-1.6	0.00	2	0.15	2	2.20	2	1.586	6	0.943	6	246.0	2	1887.7	2	-9.0000	9	-9	9	71.54	2	5.31	2	-9	-9		
10113	2	7.0	33.658	-9.000	9	29.031	29.029	21.049	194.0	-9.0	9	-9.0	-9.00	9	-9.00	9	-9.00	9	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	-9		
10112	2	49.8	35.122	-9.000	9	28.098	28.086	22.460	197.8	-9.0	9	-9.0	-9.00	9	-9.00	9	-9.00	9	-9.000	9	-9.000	9	-9.0	9	-9.0	9	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	-9		
10111	2	100.0	35.083	35.093	2	25.140	25.118	23.377	102.3	104.8	2	101.0	0.27	2	11.78	2	0.99	2	8.45	2	1.395	2	0.824	2	439.3	2	2054.9	2	-9.0000	9	-9	9	60.70	2	4.55	2	-9	-9
10110	2	151.0	34.984	34.987	2	15.908	15.884	25.765	14.0	16.3	2	227.0	0.01	2	28.88	2	2.14	2	27.09	2	0.595	2	0.346	2	1100.5	2	2204.9	2	-9.0000	9	-9	9	53.43	2	2.73	2	-9	-9
10109	2	200.6	35.077	35.078	2	13.231	13.203	26.413	19.8	22.3	2	234.3	0.01	2	30.51	2	2.26	2	29.58	2	0.418	2	0.249	2	1243.0	2	2231.9	2	-9.0000	9	-9	9	53.16	2	3.13	2	-9	-9
10108	2	302.2	35.119	35.118	2	11.786	11.747	26.730	41.2	42.1	2	222.4	0.00	2	30.13	2	2.18	2	29.35	2	0.377	2	0.225	2	1223.9	2	2232.6	2	-9.0000	9	-9	9	49.73	2	2.74	2	-9	-9
10107	2	498.9	35.023	35.023	2	9.524	9.487	27.060	13.0	16.4	2	261.6	0.00	2	36.10	2	2.70	2	52.92	2	0.030	2	0.021	2	-8.0	9	-9.0000	9	-9	9	48.77	2	1.62	2	-9	-9		
10106	2	700.3	35.008	35.008	2	8.456	8.390	27.222	23.3	26.3	2	258.5	0.00	2	36.60	2	2.76	2	63.90	2	0.011	2	0.008	2	-8.0	9	-9.0000	9	-9	9	47.90	2	-9.00	9	-9	-9		
10105	2	898.7	34.953	34.953	2	7.171	7.081	27.371	36.1	38.2	2	255.3	0.00	2	37.25	2	2.80	2	78.89	2	-9.000	9	-9.000	9	1534.8	2	-9.0	9	-9.0000	9	-9	9	44.39	2	-9.00	9	-9	-9
10104	2	900.3	34.952	34.953	2	7.165	7.075	27.372	36.1	38.3	2	255.2	0.00	2	37.27	2	2.82	2	78.84	2	0.002	2	0.004	2	1549.8	2	2303.2	2	-9.0000	9	-9	9	-9.00	9	-9.00	9	-9	-9
10103	2	1100.2	34.911	34.911	2	6.093	5.991	27.484	51.5	52.6	2	248.5	0.00	2	37.35	2	2.81	2	90.83	2	0.004	2	0.003	2	-9.0	9	-9.0000	9	-9	9	42.13	2	-9.00	9	-9	-9		
10102	2	1301.4	34.881	34.883	2	5.322	5.207	27.558	63.9	63.9	2	242.9	0.00	2	37.27	2	2.79	2	98.87	2	0.000	2	0.002	2	-9.0	9	-9.0000	9	-9	9	-9.00	4	-9.00	9	-9	-9		
10101	2	1574.4	34.836	34.838	3	4.140	4.012	27.656	87.5	85.8	2	230.1	0.00	2	36.80	2	2.73	2	111.23	2	0.001	2	0.003	2	-9.0	9	-9.0000	9	-9	9	42.43	2	-9.00	9	-9	-9		

* WOCE water sample quality flag (F) for parameter from previous column
 ** WOCE quality flag (F) for PVC sample bottle
 *** PSS-78 scale
 **** ITS-90 scale