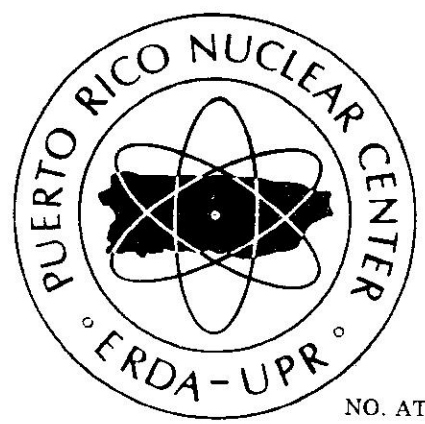


PRNC-177

PUERTO RICO NUCLEAR CENTER

HYDROGRAPHIC DATA REPORT,
NORTH COAST OF PUERTO RICO
1973 - 1974



OPERATED BY UNIVERSITY OF PUERTO RICO UNDER CONTRACT
NO. AT (40-1)-1833 FOR U S ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION

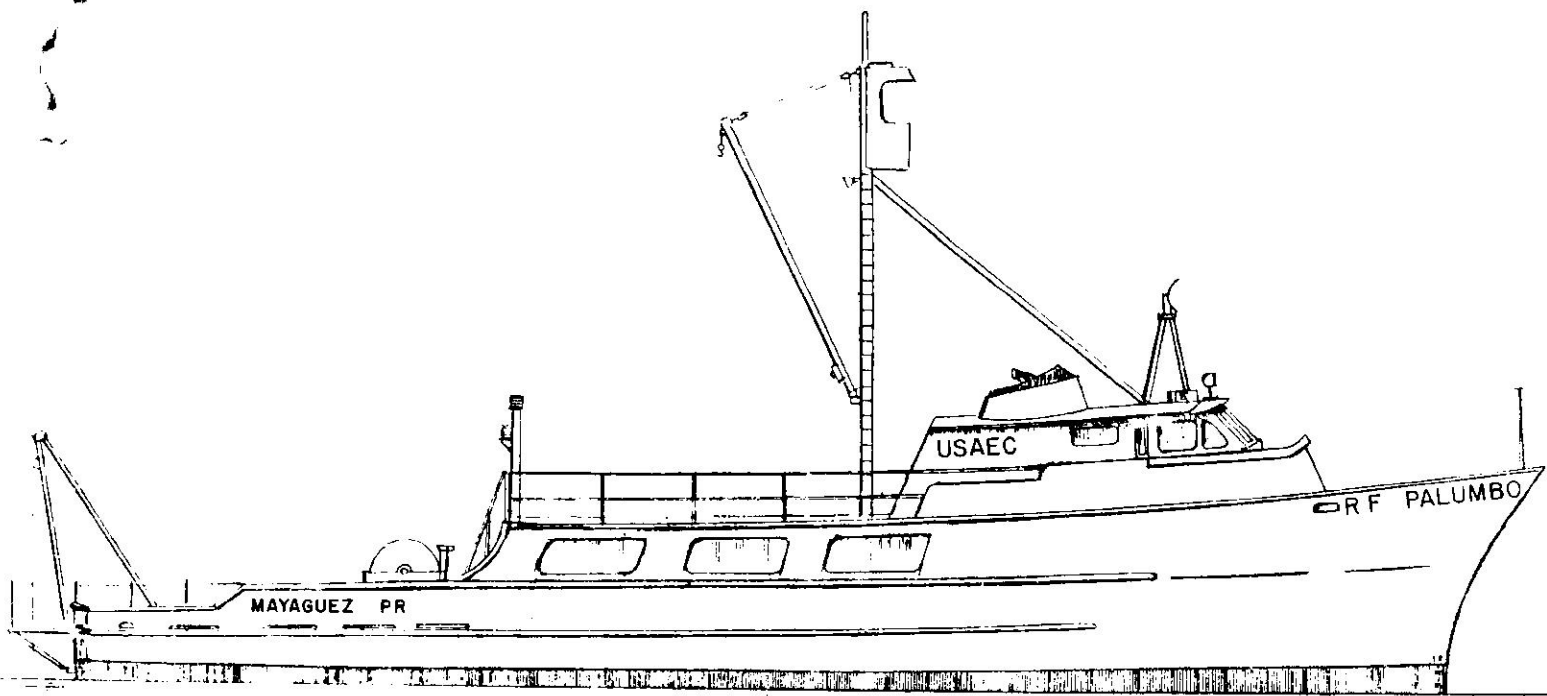
1-5-14

HYDROGRAPHIC DATA REPORT

NORTH COAST OF PUERTO RICO 1973-1974

by

T. Robert Kendall, E. D. Wood, and Trisha Smith



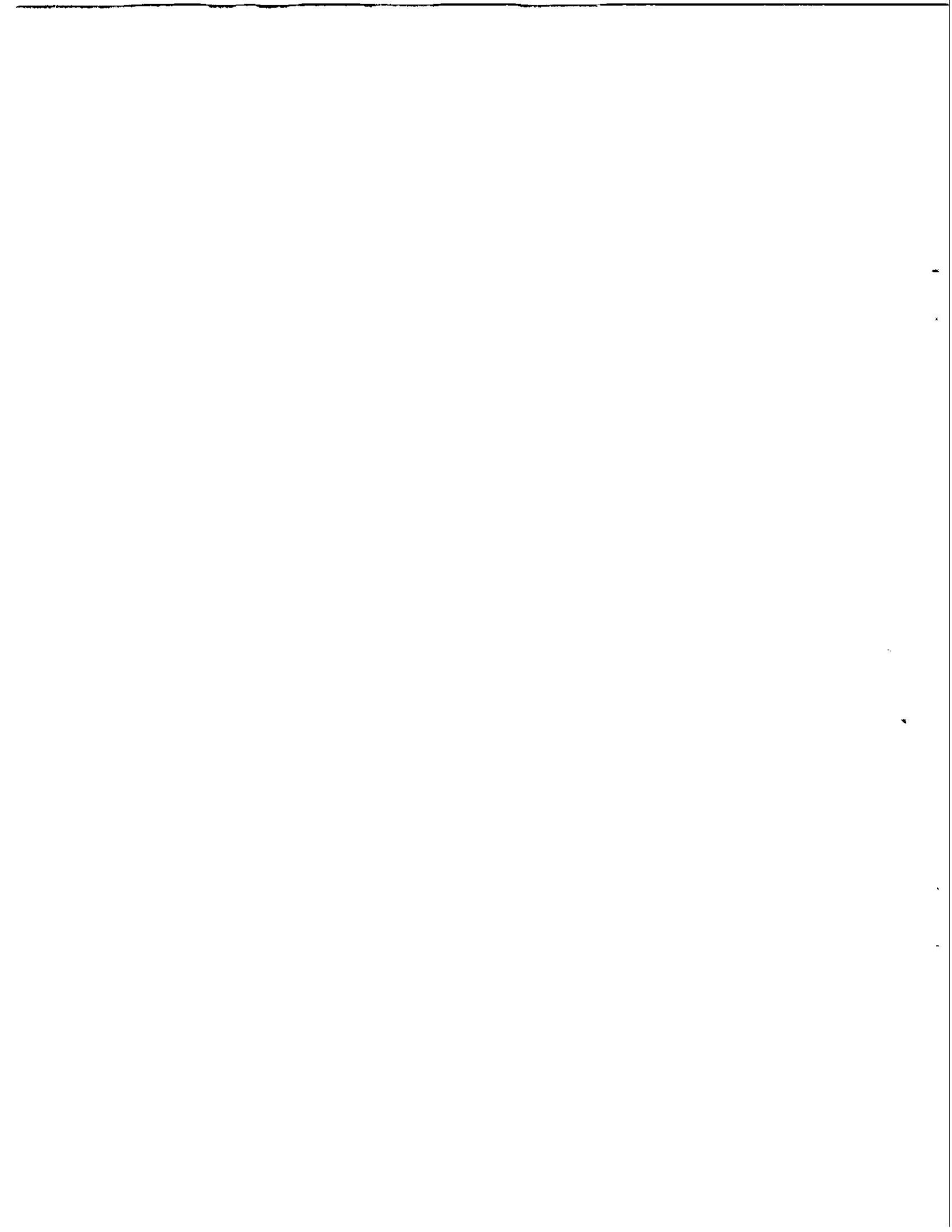


TABLE OF CONTENTS

	Page
Introduction	1
Itinerary of Cruises	1
Participating Scientific Personnel	1
Methods	3
Ship	3
Acknowledgements	3
Figures and Table	4
Data	13



INTRODUCTION.

The hydrographic data of this report were collected as part of an intensive effort to determine the basic oceanographic characteristics off three contiguous land regions along the north coast of Puerto Rico - Tortuguero, Punta Manati and Islote (see Figure 1). The area covered by sampling was approximately 26 kilometers alongshore by 10 kilometers offshore.

The cruises were designed to sample during each quarter of the year for 1973 and 1974 in order to establish seasonal characteristics. One of the eight cruises monitored short term changes (samples every 2 hours for one day) at one station only (ISL 3.7A, see Figure 1).

ITINERARY OF CRUISES.

The stations sampled are indicated in the figures and their respective position coordinates are listed in Table 1. Figures 2 through 8 indicate the chronological order of sampling of stations on each cruise. The data and time of sampling for each station are indicated on the figures. The sampling periods were:

29 January - 1 February 1973
 10-12 May
 6-8 August
 29-30 August (station ISL 3.7A only)
 24, 28-29 January 1974
 23-24 May
 14-16 August
 30 October - 1 November

The data is presented in chronological order.

PARTICIPATING SCIENTIFIC PERSONNEL.

The following persons participated in the various cruises. In some instances, cruise members were primarily engaged in other sampling programs as indicated.

Tortuguero and Manati, 29 January - 1 February 1973

E. Wood - Chief Scientist	M. Youngbluth
D. Martin - Chief Biologist	S. Martin
J. Kovarna - Cruise Leader	A. Szmant-Froelich
O. Perez-Rios	B. Buchanan
W. Ramirez-Ramirez	R. Castro
K. Gough	E. Rivera-Ruiz

Tortuguero and Manati, 10-12 May 1973

E. Wood - Chief Scientist	V. Vicenti (benthos)
O. Perez-Rios - Cruise Leader	J. Munoz
W. Ramirez-Ramirez	B. Buchanan
G. Owens (plankton)	R. Castro
E. Rivera-Ruiz	

Tortuguero, Manati, and Islote, 6-8 August 1973

E. Wood - Chief Scientist	J. Pedersen
O. Perez-Rios - Cruise Leader	R. Castro (benthos)
F. Laras	R. Cobiella
G. Owens (plankton)	E. Rodriguez
J. Munoz	M. Atwood
M. Nazario	

Islote, 29-30 August 1973

E. Wood - Chief Scientist	V. Vicente
O. Perez-Rios - Cruise Leader	R. Castro
W. Ramirez-Ramirez	B. Buchanan
M. Nazario	O. Menendez
G. Owen	

Tortuguero, Manati and Islote, 22-24 May 1974

E. Wood - Chief Scientist
 E. Stone
 G. Johnson
 F. Laras
 R. Agrait

Tortuguero, Manati and Islote, 14-16 August 1974

E. Wood - Chief Scientist	P. Yoshioka (benthos)
G. Johnson - Cruise Leader	V. Vicente (benthos)
E. Stone	R. Castro
J. Montalvo	
J. Stuart	

Tortuguero, Manati and Islote, 30 October-1 November 1974

E. Wood - Chief Scientist	J. Montalvo
G. Johnson	S. Pedersen
J. Stuart	P. Yoshioka (benthos)

METHODS.

Classical methods were used for sampling and analysing sea water. Samples were collected at standard depths of 0, 10 or 25, 50, 100, 150, 200, 250 and 300 meters, limited only by sea floor depth. The samples were analyzed for temperature (Celsius), salinity (parts per thousand), dissolved oxygen, reactive phosphate and reactive nitrate (off Isote only).

Standard hydrographic casts were made from the research ship R. F. PALUMBO. Niskin and Nansen bottles were suspended alternately on a 7/16" stainless steel hydrographic wire and tripped at depth with messengers. Salinity samples were drawn into 250 ml nalgene salt water aged bottles and analyzed on shore with a Beckman induction salinometer. Dissolved oxygen was drawn into 250 ml BOP bottles, pickled with manganous sulfate reagent, potassium iodide solution and sulfuric acid and analyzed on board by the standard Winkler titration method. Samples for nitrates and nitrites, and phosphates were drawn into 500 ml and 125 ml nalgene bottles respectively, frozen, and they were analyzed on shore using standard procedures¹. Temperature was measured by Kahl reversing thermometers (both protected and unprotected) accompanying each Niskin or Nansen bottle. A minimum of three minutes was allowed for thermometer equilibration at depth and prior to reading on deck. Vertical profiles of temperature versus depth at the deeper stations were obtained from a bathythermograph lowered to 300 meters by wire.

SHIP.

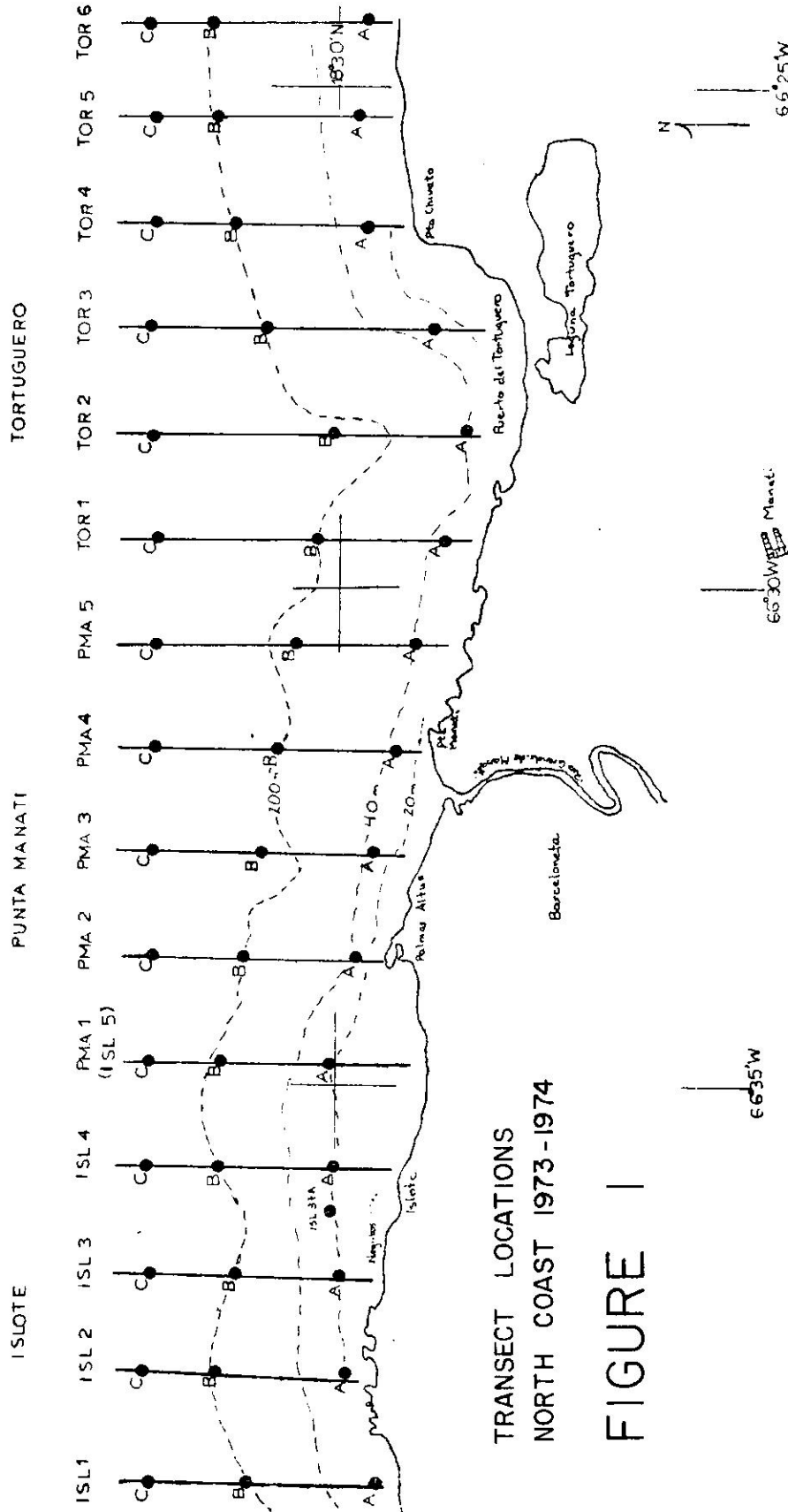
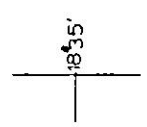
The R. F. PALUMBO was built by TATCO Shipbuilding Corporation in San Diego, California in 1971 for the U. S. Atomic Energy Commission. This ship is 95.5 feet in length, has a net displacement of 275 tons, and with its 350 horsepower Caterpillar diesel engine cruises at 10 knots. The R. F. PALUMBO has its home port at Guanajibo Bay next to the city of Mayaguez, Puerto Rico. The ship was under the command of David Green, Captain USN (retired) throughout 1973-1974.

ACKNOWLEDGEMENTS.

The data collection and this report were funded by the U. S. Atomic Energy Commission and the Puerto Rico Water Resources Authority.

1

Strickland, J. O. and T. R. Parsons (1965). A Manual of Seawater Analysis, Fisheries Research Board of Canada, Ottawa.

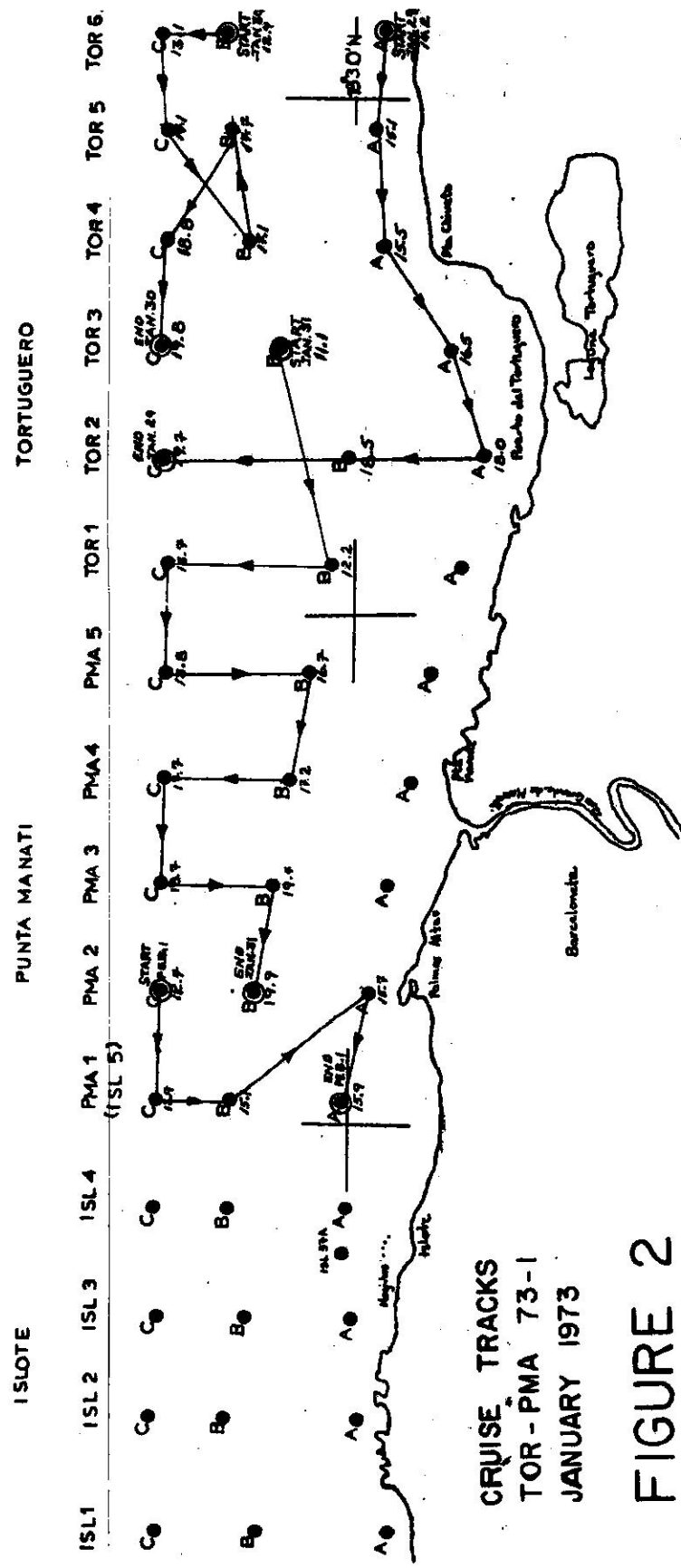
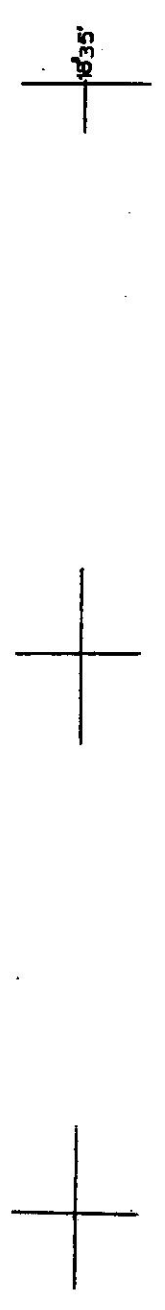


TRANSECT LOCATIONS
NORTH COAST 1973-1974

FIGURE 1

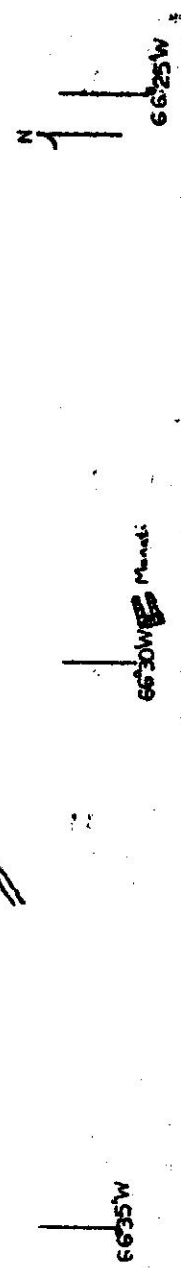
Table 1

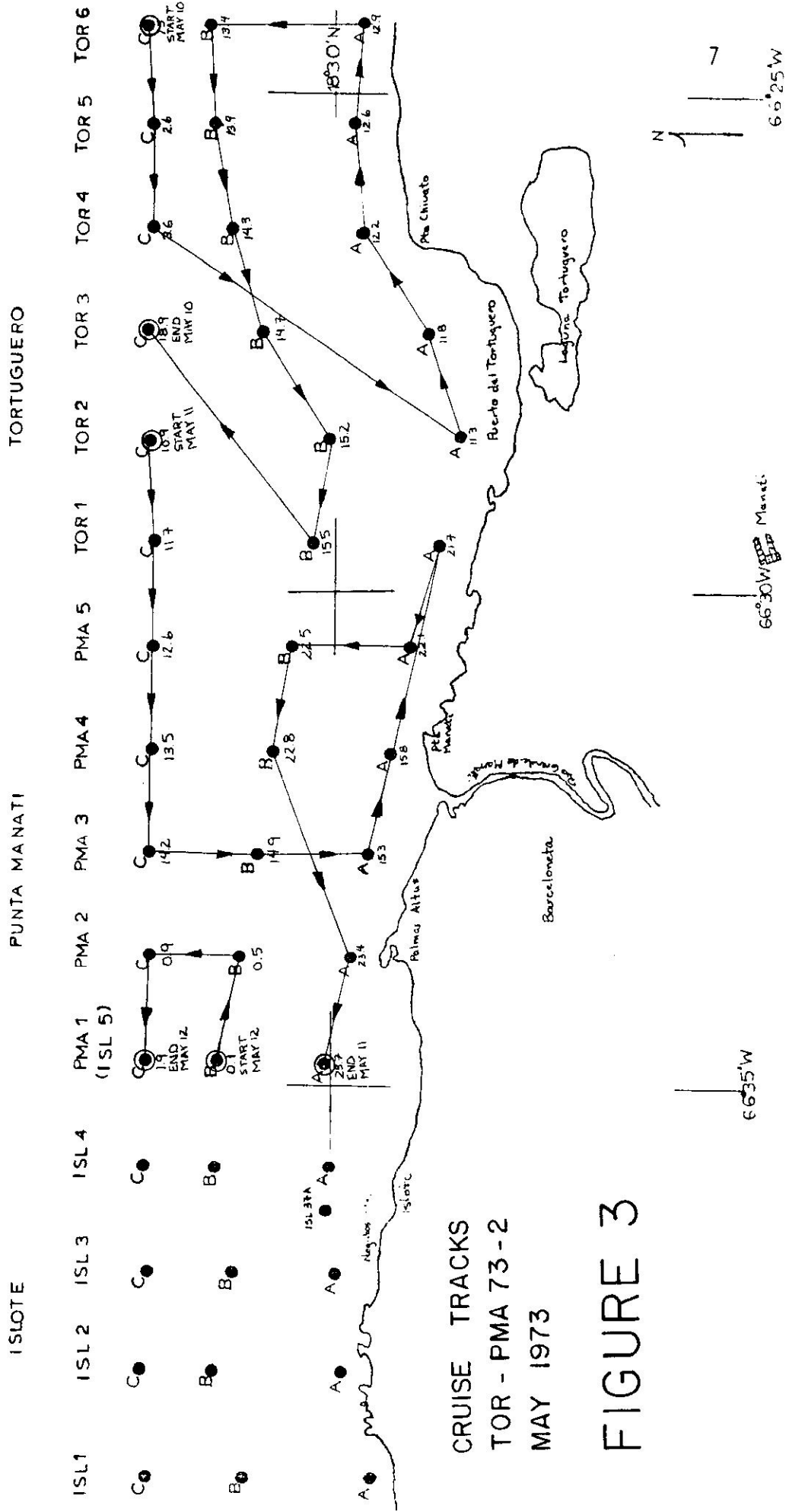
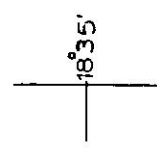
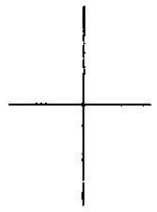
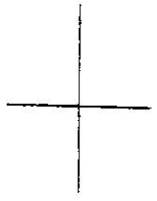
<u>Station</u>	<u>Location</u>	<u>Depth(m)</u>	<u>Number of Sample Depths</u>
ISL-1A	18°29.8'N 66°39.0'W	22	2
1B	18°30.9' 66°39.0'	180	4
1C	18°31.8' 66°39.0'	440	8
ISL-2A	18°29.9' 66°37.9'	18	2
2B	18°31.2' 66°37.9'	180	4
2C	18°31.8' 66°37.9'	410	8
ISL-3A	18°30.0' 66°36.9'	17	2
3.7A	18°29.8' 66°36.2'	12	2
3B	18°31.0' 66°36.9'	180	4
3C	18°31.8' 66°36.9'	500	8
OIS-00	18°32.2' 66°36.9'	500	11
15	18°45.5' 66°36.7'	2370	13
30	19°01.0' 66°36.7'	6035	13
45	19°15.0' 66°36.0'	4000	13
60	19°30.0' 66°38.0'	7498	13
ISL-4A	18°30.1' 66°35.8'	17	2
4B	18°31.3' 66°35.8'	180	4
4C	18°31.8' 66°35.8'	440	8
PMA-1A (ISL-5A)	18°30.2' 66°34.8'	18	2
1B (ISL-5B)	18°31.2' 66°34.8'	165	4
1C (ISL-5C)	18°31.8' 66°34.8'	400	8
PMA-2A	18°29.8' 66°33.7'	22	2
2B	18°30.9' 66°33.7'	180	4
2C	18°31.8' 66°33.7'	400	8
PMA-3A	18°29.7' 66°32.7'	22	2
3B	18°30.8' 66°32.7'	260	4
3C	18°31.8' 66°32.7'	440	8
PMA-4A	18°29.5' 66°31.6'	20	2
4B	18°30.6' 66°31.6'	180	4
4C	18°31.8' 66°31.6'	420	8
PMA-5A	18°29.3' 66°30.6'	30	2
5B	18°30.4' 66°30.6'	110	4
5C	18°31.8' 66°30.6'	360	8
TOR-1A	18°29.0' 66°29.5'	30	2
1B	18°30.2' 66°29.5'	190	4
1C	18°31.8' 66°29.5'	480	8
TOR-2A	18°28.9' 66°28.5'	35	2
2B	18°30.1' 66°28.5'	265	4
2C	18°31.8' 66°28.5'	410	8
TOR-3A	18°29.1' 66°27.4'	22	2
3B	18°30.8' 66°27.4'	180	4
3C	18°31.8' 66°27.4'	340	8
TOR-4A	18°29.8' 66°26.4'	25	2
4B	18°31.1' 66°26.4'	180	4
4C	18°31.8' 66°26.4'	350	8
TOR-5A	18°29.9' 66°25.3'	22	2
5B	18°31.2' 66°25.3'	180	4
5C	18°31.8' 66°25.3'	390	8
TOR-6A	18°30.0' 66°24.2'	24	2
6B	18°31.3' 66°24.2'	180	4
6C	18°31.8' 66°24.2'	390	8

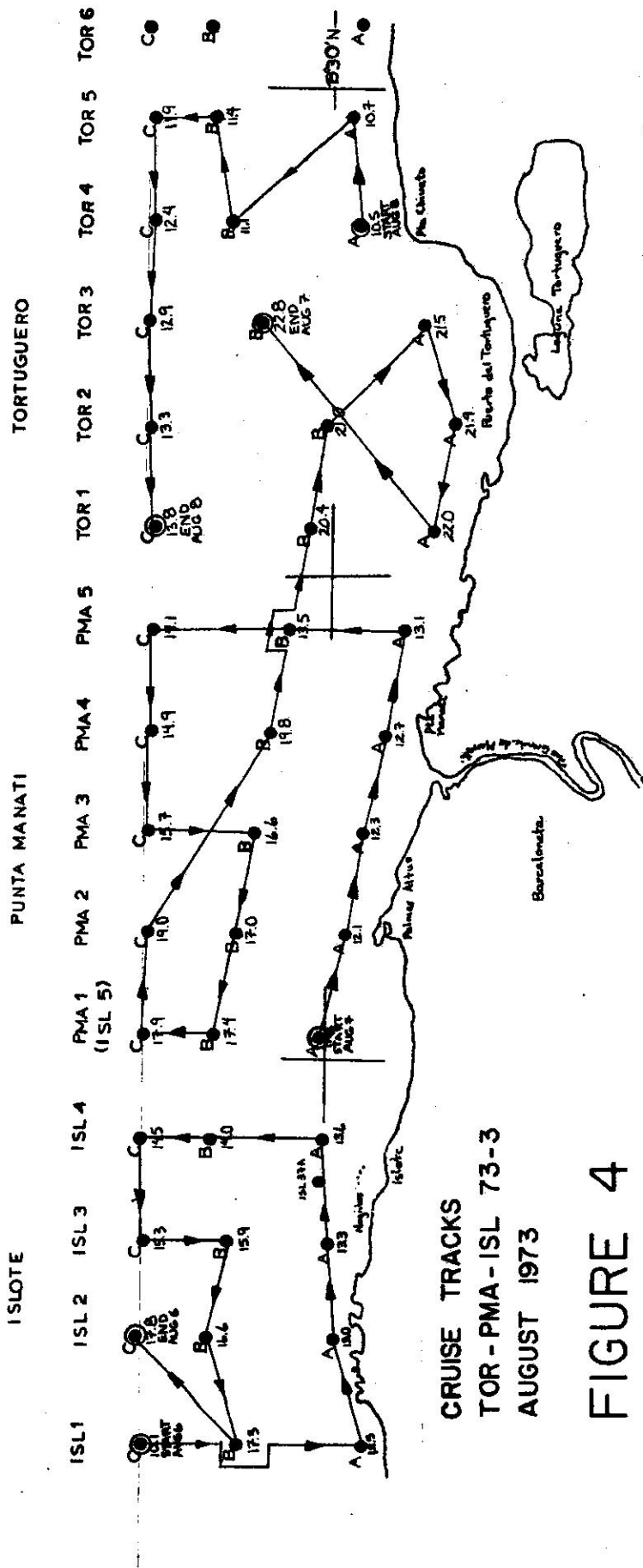
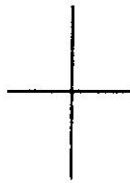
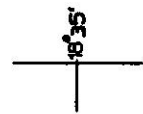


CRUISE TRACKS
 TOR-PMA 73-1
 JANUARY 1973

FIGURE 2







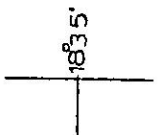
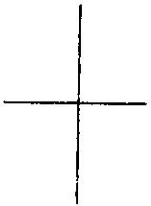
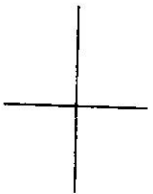
66°25'W

66°30'W Punta Manati

66°35'W

CRUISE TRACKS
TOR - PMA - ISL 73-3
AUGUST 1973

FIGURE 4



ISLOTE

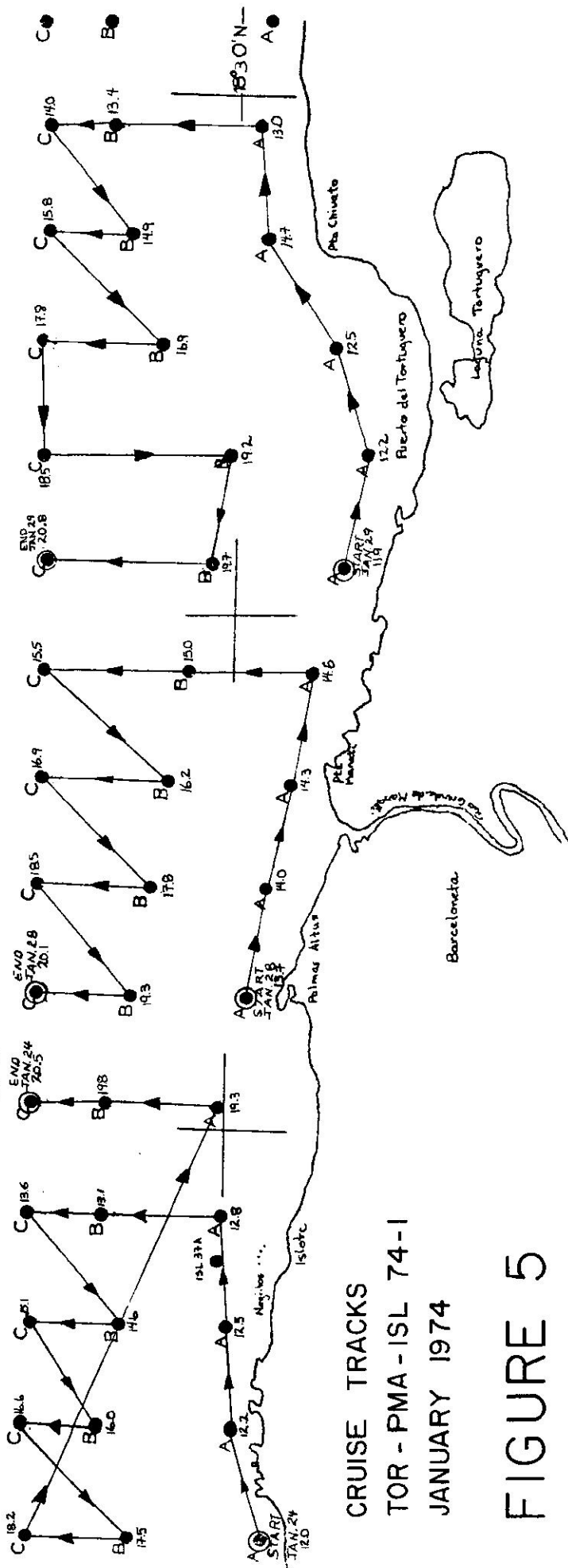
ISL1 ISL2 ISL3 ISL4 PMA 1 (ISL 5)

PUNTA MANATI

PMA 2 PMA 3 PMA 4 PMA 5 TOR 1

TORTUGUERO

TOR 2 TOR 3 TOR 4 TOR 5 TOR 6



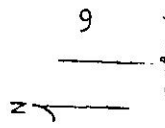
CRUISE TRACKS
TOR - PMA - ISL 74-1
JANUARY 1974

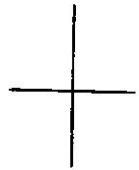
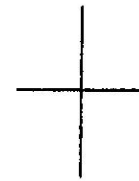
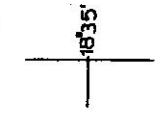
FIGURE 5

66°35'W

66°30'W

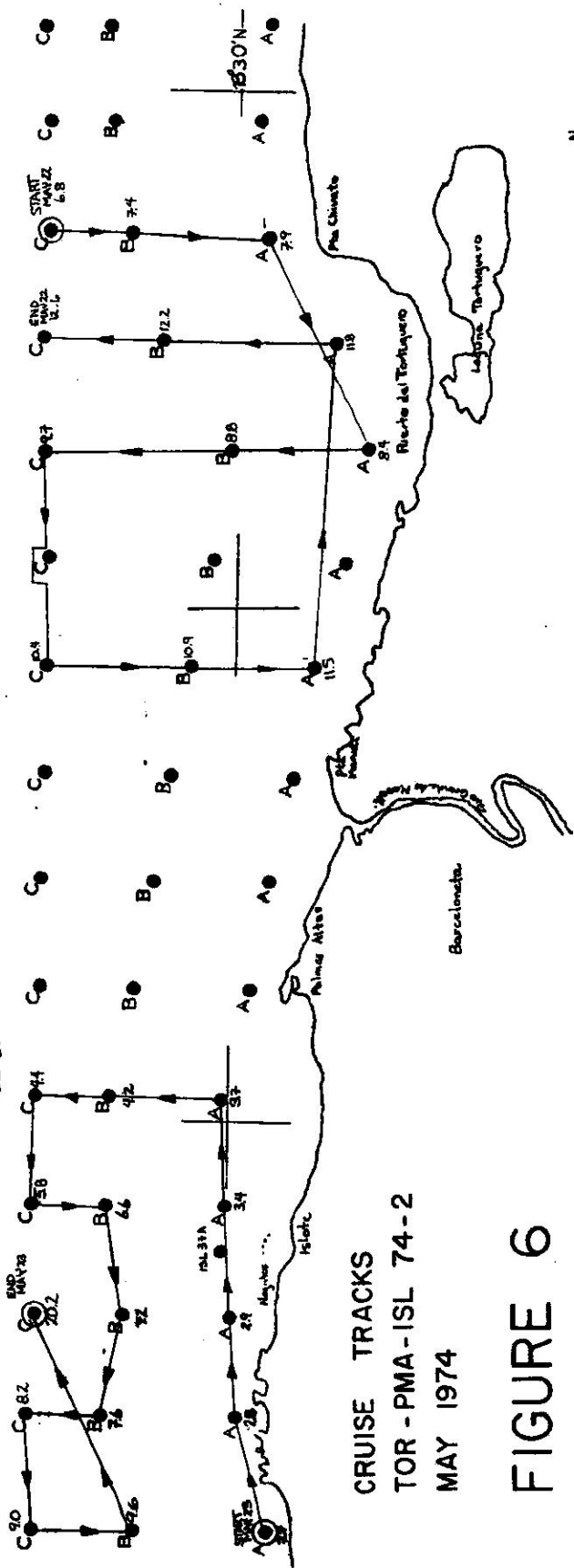
66°25'W





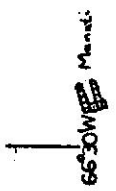
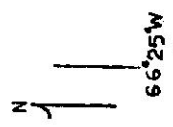
ISLOTE PUNTA MANATI TORTUGUERO

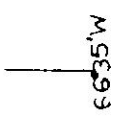
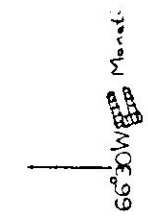
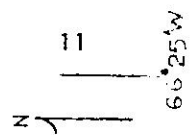
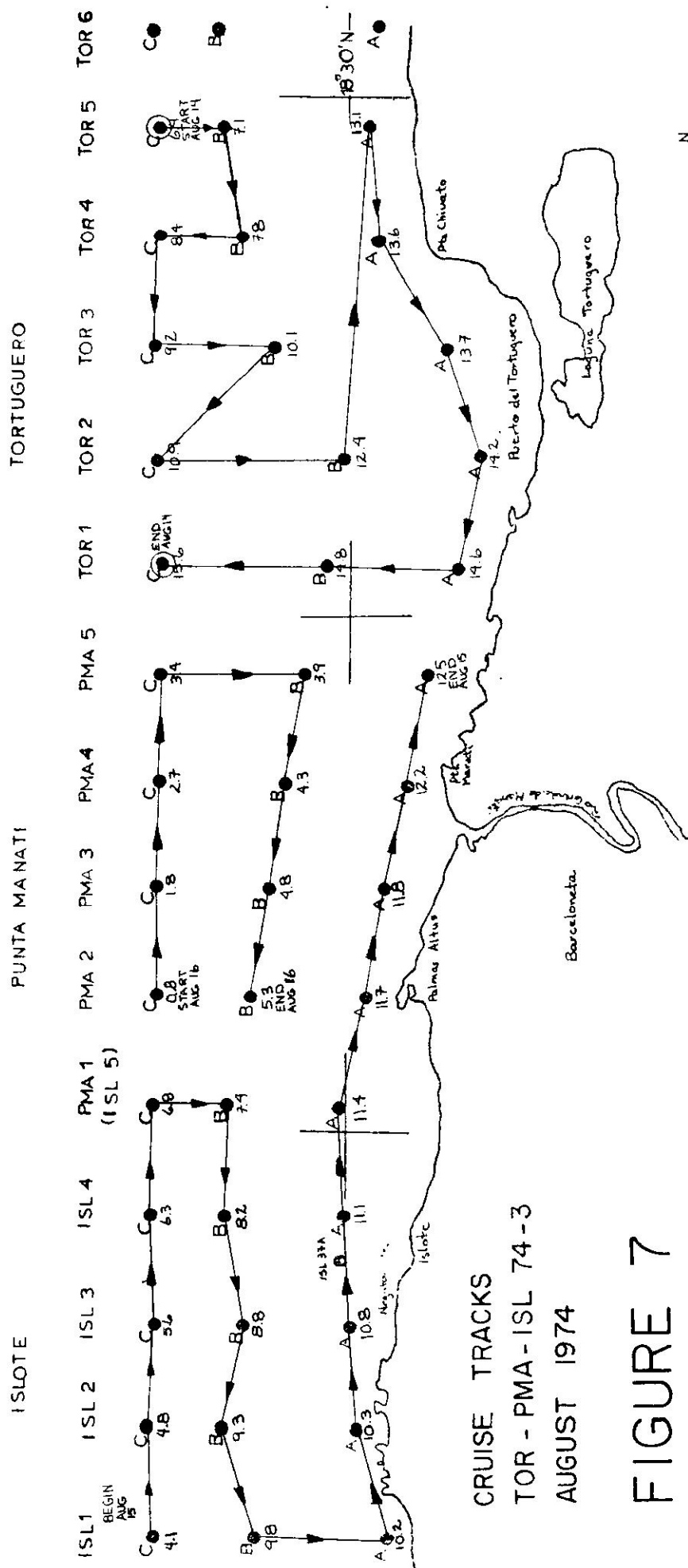
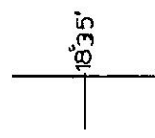
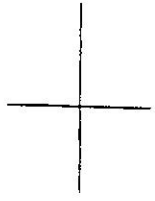
ISL 1 ISL 2 ISL 3 ISL 4 PMA 1 PMA 2 PMA 3 PMA 4 PMA 5 TOR 1 TOR 2 TOR 3 TOR 4 TOR 5 TOR 6

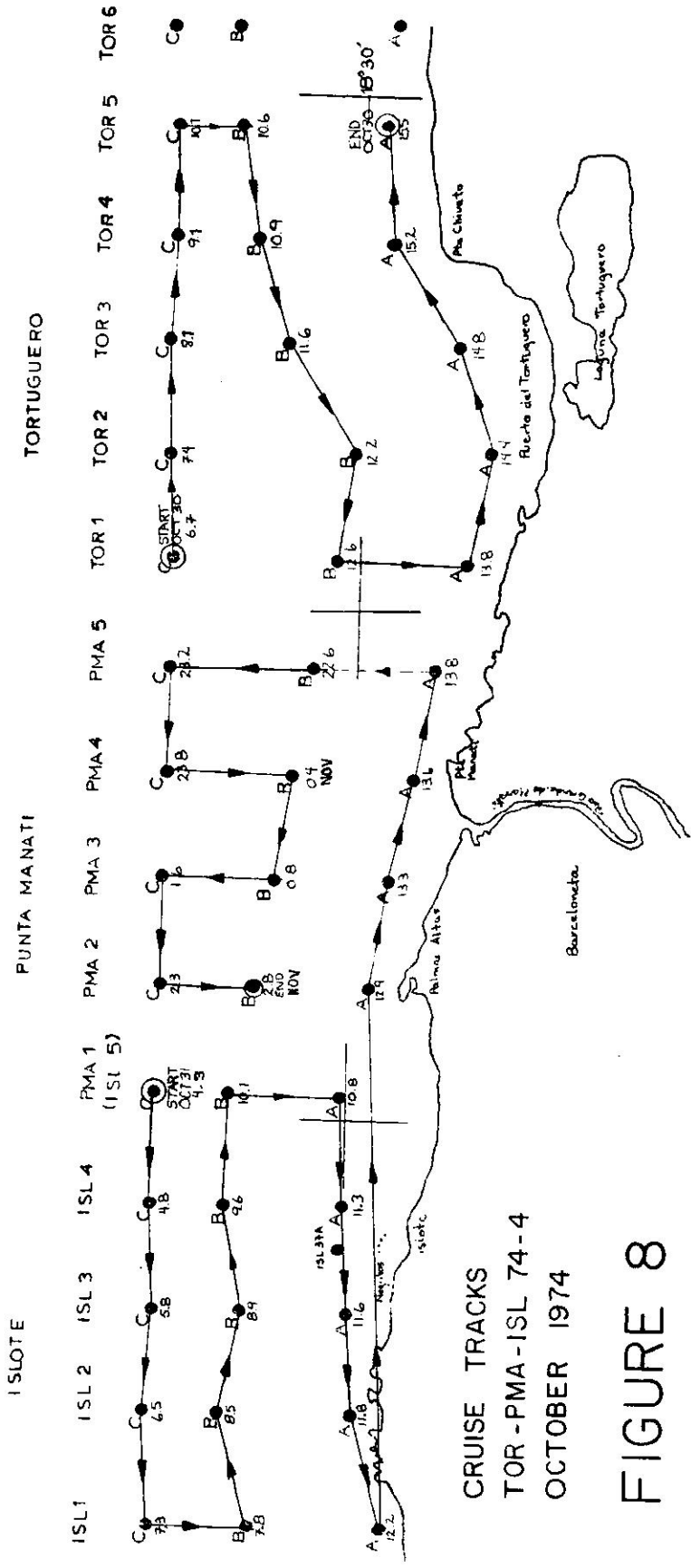
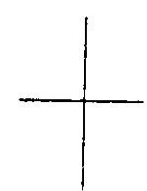
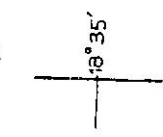


CRUISE TRACKS
TOR - PMA - ISL 74-2
MAY 1974

FIGURE 6

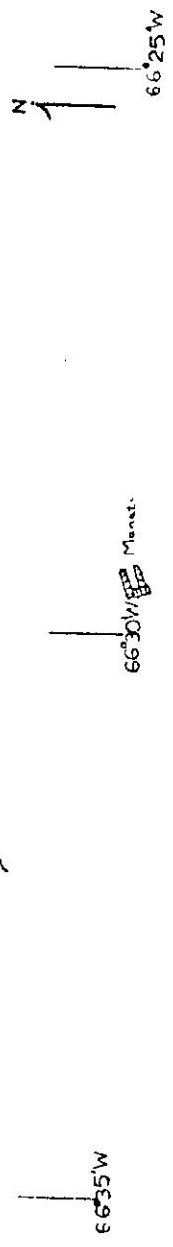






CRUISE TRACKS
TOR -PMA -ISL 74-4
OCTOBER 1974

FIGURE 8



DATA

ALL DEPTHS ARE IN METERS. NUTRIENTS IN UG-AT/L.
MAX-SAMP, DEPTH = MAXIMUM SAMPLING DEPTH * E-2.
WATER COLOR = FOREL WATER COLOR SCALE, H.O. 215.
TRANSPARENCY = SECCHI DISC DEPTH.
WIND AND WAVE DIRECTION COMING FROM * E-1 ROUNDED, TABLE IN H.O. 215.
WAVE HEIGHT = H.O. 215 WIND WAVE CODE.
WAVE PERIOD = IN SECONDS.
WIND SPEED = IN METERS PER SECOND.
WEATHER, VISIBILITY, CLOUD TYPE AND AMOUNT = H.O. 215 CODE.

R V PALUMBO CRUISE STATION TOR=6A PRNC REFERENCE 22265

DATE 1/29/73 BARO 1017.8 WEATHER 02 WIND VELOC 08 WAVE PERIOD 4
 HOUR 14.2 TEMP DRY 27.3 VISIBILITY 9 WIND DIREC 08 TRANSPAR *
 LAT 18=30.0 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0022
 LONG 66=24.0 W REL HUMID 079 CLOUD AMT 1 WAVE HEIGHT 2 COLOR 10

CAST 1 MESS TIME 14.1 GMT, 1009 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.026 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
	WIRE	CZ	TZ									BN	TL	TM	TH
0	0	0	10	26.38	26.38	35.948	23.65	4.74	6.77	99.03	.10
10	10	12	15	26.40	0.00	26.40	35.990	23.67	4.63	96.78	.04

R V PALUMBO CRUISE STATION TOR=5A PRNC REFERENCE 22266

DATE 1/29/73 BARO 1017.8 WEATHER 02 WIND VELOC 09 WAVE PERIOD 6
 HOUR 15.1 TEMP DRY 30.4 VISIBILITY 9 WIND DIREC 09 TRANSPAR *
 LAT 18=30.0 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 09 SONIC DEP 0023
 LONG 66=23.3 W REL HUMID 067 CLOUD AMT 2 WAVE HEIGHT 2 COLOR 10

CAST 1 MESS TIME 15.1 GMT, 1107 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.026 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
	WIRE	CZ	TZ									BN	TL	TM	TH
0	0	0	10	26.43	26.43	35.889	23.59	4.74	6.77	99.00	.04
10	10	9	15	26.44	0.00	26.44	35.891	23.59	4.76	99.45	.04

R V PALUMBO CRUISE STATION TOR-4A PRNC REFERENCE 22267

DATE 1/29/73 BARO 1017.8 WEATHER 02 WIND VELOC 08 WAVE PERIOD 4
 HOUR 15.5 TEMP DRY 31.3 VISIBILITY 9 WIND DIREC 08 TRANSPAR *

LAT 18-29.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0020
 LONG 66-26.4 W REL HUMID 067 CLOUD AMT 2 WAVE HEIGHT 2 COLOR 10

CAST 1 MESS TIME 15.5 GMT, 1129 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.026 METER WHEEL FACTOR .997

DEPTH (M) TEMP OXYGEN

WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
0	0	0	10	26.43	26.42	26.43	35.885	23.59	4.78	6.83	99.84	.06	.
10	10	12	15	26.40	0.00	26.40	35.894	23.60	4.72	6.74	98.53	.03	.

R V PALUMBO CRUISE STATION TOR-3A PRNC REFERENCE 22268

DATE 1/29/73 BARO 1017.0 WEATHER 02 WIND VELOC 05 WAVE PERIOD 6
 HOUR 16.5 TEMP DRY 31.5 VISIBILITY 9 WIND DIREC 08 TRANSPAR *

LAT 18-29.0 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0020
 LONG 66-27.4 W REL HUMID CLOUD AMT 4 WAVE HEIGHT 1 COLOR 10

CAST 1 MESS TIME 16.5 GMT, 1232 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.026 METER WHEEL FACTOR .997

DEPTH (M) TEMP OXYGEN

WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
0	0	0	10	26.51	26.51	26.51	35.818	23.51	4.75	6.79	99.20	.03	.
10	10	10	15	26.43	0.00	26.43	35.889	23.59	4.76	6.83	99.86	.00	.

R V PALUMBO CRUISE STATION TOR-2A PRNC REFERENCE 22269

DATE 1/29/73 BARO 1015.0 WEATHER 02 WIND VELOC 10 WAVE PERIOD 4
HOUR 18.0 TEMP DRY 32.5 VISIBILITY 9 WIND DIREC 08 TRANSPAR *
LAT 18-28.7 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0030
LONG 66-28.5 W REL HUMID 062 CLOUD AMT 5 WAVE HEIGHT 2 COLOR 10

CAST 1 MESS TIME 18.0 GMT, 1402 LOCAL MAX DEPTH 10 WIRE ANGLE 0
OXYGEN TITER 1.026 METER WHEEL FACTOR .997

DEPTH (M) WIRE CZ TZ BN TL TM TAVE SALIN SIG T ML/L MG/L XSAT PHOS NITRA
0 0 0 10 26.65 26.64 26.65 35.848 23.49 4.72 6.74 98.82 .10 .
10 10 9 15 26.49 0.00 26.49 35.850 23.54 4.78 6.83 99.88 .09 .

R V PALUMBO CRUISE STATION TOR-2B PRNC REFERENCE 22270

DATE 1/29/73 BARO 1015.5 WEATHER 02 WIND VELOC 07 WAVE PERIOD 7
HOUR 18.5 TEMP DRY 33.2 VISIBILITY 8 WIND DIREC 08 TRANSPAR *
LAT 18-30.1 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0275
LONG 66-28.5 W REL HUMID 061 CLOUD AMT 5 WAVE HEIGHT 2 COLOR 10

CAST 1 MESS TIME 18.5 GMT, 1430 LOCAL MAX DEPTH 100 WIRE ANGLE 12
OXYGEN TITER 1.026 METER WHEEL FACTOR .997

DEPTH (M) WIRE CZ TZ BN TL TM TAVE SALIN SIG T ML/L MG/L XSAT PHOS NITRA
0 0 0 10 26.62 26.60 26.61 35.834 23.49 4.79 6.85 100.24 .06 .
25 25 24 15 26.48 0.00 26.48 35.947 23.62 4.83 6.91 101.12 .08 .
50 49 49 12 26.36 0.00 26.36 36.594 24.14 4.79 6.85 99.18 .00 .
100 98 99 16 24.73 0.00 24.73 36.132 24.30 4.69 6.70 89.28 .03 .

REVERSE
SALINITIES

R V PALUMBO CRUISE STATION TOR#20 PRNC REFERENCE 22271

DATE 1/29/73 BARO 1015.4 WEATHER 02 WIND VELOC 09 WAVE PERIOD 5
 HOUR 19.7 TEMP DRY 34.2 VISIBILITY 8 WIND DIREC 09 TRANSPAR *
 LAT 18-31.0 N TEMP WET 0.0 CLOUD TYPE 0 CLOUD AMT 5 WAVE DIREC 09 SONIC DEP 0340
 LONG 66-28.5 W REL HUMID 061 CLOUD AMT 5 WAVE HEIGHT 2 COLOR 10
 19.7 1539

CAST 1 MESS TIME 20.1 GMT, 1607 LOCAL MAX DEPTH 100 WIRE ANGLE 0
 OXYGEN TITER 1.026 METER WHEEL FACTOR .997

WIRE	CZ	TZ	BN	TL	TM	TEMP	TAVE	SALIN	SIG T	OXYGEN		
										ML/L	MG/L	XSAT
150	150	0	10	23.02	23.02	23.02	23.02	36.727	25.26	4.66	6.66	89.91
200	200	194	15	20.27	0.00	20.27	36.691	26.00	4.14	5.91	78.30	.10
250	250	246	12	18.49	0.00	18.49	36.551	26.35	4.33	6.19	76.52	.17
300	300	303	16	17.78	0.00	17.78	36.472	26.47	4.42	6.32	77.66	.29

CAST 2 MESS TIME 20.1 GMT, 1607 LOCAL MAX DEPTH 100 WIRE ANGLE 0
 OXYGEN TITER 1.026 METER WHEEL FACTOR .997

WIRE	CZ	TZ	BN	TL	TM	TEMP	TAVE	SALIN	SIG T	OXYGEN		
										ML/L	MG/L	XSAT
0	0	0	10	26.50	26.51	26.51	35.543	23.30	4.89	6.98	101.43	.00
25	25	25	15	26.25	0.00	26.25	35.917	23.67	4.87	6.96	101.55	.00
50	50	48	12	26.39	0.00	26.39	36.240	23.87	4.87	6.96	100.23	.01
100	100	94	16	25.32	0.00	25.32	36.550	24.43	4.79	6.85	98.48	.05

R V PALUMBO CRUISE STATION TOR-68 PRNC REFERENCE 22272

DATE 1/30/73 BARO 1018.5 WEATHER 02 WIND VELOC 03 WAVE PERIOD 7
 HOUR 12.4 TEMP DRY 27.6 VISIBILITY 9 WIND DIREC 15 TRANSPAR *
 LAT 18-31.4 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0270
 LONG 66-24.2 W REL HUMID 072 CLOUD AMT 1 WAVE HEIGHT 2 COLOR 10

CAST 1 MESS TIME 12.4 GMT, 0822 LOCAL MAX DEPTH 100 WIRE ANGLE 7
 OXYGEN TITER 1.026 METER WHEEL FACTOR .997

WIRE	DEPTH (M)		TEMP		TAVE	SALIN	SIG T	OXYGEN		%SAT	PHOS	NITRA
	CZ	TZ	TL	TM				ML/L	MG/L			
0	0	0	26.37	26.35	26.36	35.708	23.47	4.69	6.70	97.49	.02	.
25	25	27	26.39	0.00	26.39	35.784	23.52	4.73	6.76	98.53	.04	.
50	50	49	26.38	0.00	26.38	35.993	23.68	4.31	6.16	90.11	.03	.
100	99	105	26.17	0.00	26.17	36.224	23.92	3.62	5.18	74.42	.01	.

R V PALUMBO CRUISE STATION TOR-6C PRNC REFERENCE 22273

DATE 1/30/73 BARO 1018.3 WEATHER 02 WIND VELOC 04 WAVE PERIOD 6
 HOUR 13.1 TEMP DRY 32.5 VISIBILITY 9 WIND DIREC 10 TRANSPAR *
 LAT 18-32.3 N TEMP WET 0.0 CLOUD TYPE 8 CLOUD AMT 1 WAVE DIREC 07 SONIC DEP 0450
 LONG 66-24.2 W REL HUMID 059 CLOUD AMT 1 WAVE HEIGHT 2 COLOR 10
 CAST # MESS TIME 13.8 GMT, 0909 LOCAL MAX DEPTH 100 WIRE ANGLE 14
 OXYGEN TITER 1.026 METER WHEEL FACTOR .997

DEPTH (M)	TEMP		TAVE	SALIN	SIG T	OXYGEN	XSAT	PHOS	NITRA
	TL	TM							
WIRE 150	10	23.21	23.21	36.731	25.20	4.04	5.78	78.14	.10
200	15	20.29	20.29	36.669	25.97	3.93	5.62	74.41	.15
250	12	18.67	18.67	36.476	26.25	4.75	6.79	83.82	.21
300	16	17.74	17.74	36.476	26.48	4.75	6.79	83.41	.28
CAST #	MESS TIME 13.8 GMT, 0932		LOCAL MAX DEPTH 100	WIRE ANGLE 14					
	OXYGEN TITER 1.026		METER WHEEL FACTOR .997						

DEPTH (M)	TEMP		TAVE	SALIN	SIG T	OXYGEN	XSAT	PHOS	NITRA
	TL	TM							
WIRE 0	10	26.30	26.30	35.646	23.45	4.19	5.98	86.87	.03
25	15	26.35	26.35	35.731	23.50	4.01	5.73	83.44	.03
50	12	26.27	26.27	35.847	23.61	4.19	5.98	87.15	.07
100	16	26.25	26.25	36.238	23.91	4.06	6.66	95.75	.05

R V PALUMBO CRUISE STATION TOR-5C PRNC REFERENCE 22274

DATE 1/30/73 BARO 1020.2 WEATHER 02 WIND VELOC 05 WAVE PERIOD 7
 HOUR 14.1 TEMP DRY 30.0 VISIBILITY 9 WIND DIREC 08 TRANSPAR *
 LAT 18-31.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0340
 LONG 66-25.3 W REL HUMID 068 CLOUD AMT 1 WAVE HEIGHT 2 COLOR 10

CAST 1 MESS TIME 14.7 GMT, ¹⁰⁰⁵ LOCAL MAX DEPTH ¹⁰⁰ WIRE ANGLE ¹² ††
 OXYGEN TITER 1.026 METER WHEEL FACTOR .997

DEPTH (M)	WIRE	CZ	TZ	BN	TL	TM	TEMP	TAVE	SALIN	SIG T	OXYGEN	MG/L	XSAT	PHOS	NITRA
150	147	0	15	23.67	23.67	23.67	23.67	23.67	35.694	24.28	4.80	6.86	94.53	.01	.
200	196	194	15	20.20	0.00	20.20	0.00	20.20	35.737	25.29	4.43	6.33	83.47	.04	.
250	245	240	12	18.45	0.00	18.45	0.00	18.45	35.854	25.83	4.93	7.04	89.35	.04	.
300	294	284	16	17.78	0.00	17.78	0.00	17.78	36.172	26.24	5.48	7.83	95.40	.07	.

CAST 2 MESS TIME 14.8 GMT, ¹⁰⁴¹ LOCAL MAX DEPTH ¹⁰⁰ WIRE ANGLE ¹² ††
 OXYGEN TITER 1.026 METER WHEEL FACTOR .997

DEPTH (M)	WIRE	CZ	TZ	BN	TL	TM	TEMP	TAVE	SALIN	SIG T	OXYGEN	MG/L	XSAT	PHOS	NITRA
0	0	0	10	26.44	26.44	26.44	26.44	26.44	36.674	24.10	4.20	6.00	87.04	.11	.
25	25	25	15	26.39	0.00	26.39	0.00	26.39	36.702	24.21	4.18	5.97	86.63	.11	.
50	49	47	12	26.28	0.00	26.28	0.00	26.28	36.552	24.14	2.35	3.36	48.58	.25	.
100	98	104	16	26.42	0.00	26.42	0.00	26.42	36.492	24.05	3.74	5.34	77.19	.25	.

REVERSED

R V PALUMBO CRUISE STATION TOR-48 PRNC REFERENCE 22275

DATE 1/30/73 BARO 1018.8 WEATHER 02 WIND VELOC 08 WAVE PERIOD 6
 HOUR 17.1 TEMP DRY 31.1 VISIBILITY 9 WIND DIREC 07 TRANSPAR *

LAT 18-31.1 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0250
 LONG 66-26.4 W REL HUMID 070 CLOUD AMT 2 WAVE HEIGHT 2 COLOR 10

CAST 1 MESS TIME 17.1 GMT, 1307 LOCAL MAX DEPTH 100 WIRE ANGLE 17
 OXYGEN TITER 1.026 METER WHEEL FACTOR .997

DEPTH (M)	WIRE CZ	TZ	BN	TL	TEMP			TAVE	SALIN	SIG Y	ML/L	MG/L	XSAT	PHOS	NITRA
					TM	DRY	WET								
0	0	0	10	26.64	26.63	26.64	26.64	35.689	23.37	5.95	8.50	124.16	.04	.	
25	24	27	15	26.42	0.00	26.42	35.794		23.52	4.83	6.91	100.73	.03	.	
50	48	47	12	26.40	0.00	26.40	35.834		23.56	5.07	7.24	105.70	.03	.	
100	96	102	16	26.37	0.00	26.37	36.227		23.86	4.26	6.08	87.55	.00	.	

R V PALUMBO CRUISE STATION TOR-58 PRNC REFERENCE 22276

DATE 1/30/73 BARO 1018.5 WEATHER 02 WIND VELOC 09 WAVE PERIOD 7
 HOUR 17.7 TEMP DRY 73.0 VISIBILITY 9 WIND DIREC 08 TRANSPAR *

LAT 18-31.2 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0216
 LONG 66-25.3 W REL HUMID 074 CLOUD AMT 2 WAVE HEIGHT 2 COLOR 10

CAST 1 MESS TIME 17.7 GMT, 1344 LOCAL MAX DEPTH 100 WIRE ANGLE 15
 OXYGEN TITER 1.026 METER WHEEL FACTOR .997

DEPTH (M)	WIRE CZ	TZ	BN	TL	TEMP			TAVE	SALIN	SIG Y	ML/L	MG/L	XSAT	PHOS	NITRA
					TM	DRY	WET								
0	0	0	10	26.49	26.47	26.48	26.48	35.653	23.40	4.78	6.83	99.48	.07	.	
25	25	27	15	26.43	0.00	26.43	35.889		23.59	5.50	7.86	114.85	.05	.	
50	49	47	12	26.41	0.00	26.41	35.859		23.57	3.42	4.88	71.30	.05	.	
100	97	102	16	26.09	0.00	26.09	36.347		24.04	4.19	5.98	86.16	.05	.	

R V PALUMBO CRUISE STATION TOR=4C PRNC REFERENCE 22277

DATE 1/30/73 BARO 1018.3 WEATHER 02 WIND VELOC 09 WAVE PERIOD 6
 HOUR 18.8 TEMP DRY 28.3 VISIBILITY 8 WIND DIREC 08 TRANSPAR *
 LAT 18-32.3 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0370
 LONG 66-26.5 W REL HUMID 072 CLOUD AMT 2 WAVE HEIGHT 2 COLOR 10

² CAST 2 MESS TIME 18.8 GMT, 1445 LOCAL MAX DEPTH 100 WIRE ANGLE 14
 OXYGEN TITER 1.026 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	TEMP		TAVE	SALIN	SIG T	OXYGEN		XSAT	PHOS	NITRA
		TZ	TL				ML/L	MG/L			
0	0	0	26.50	26.47	26.49	23.41	3.09	4.41	64.29	.04	.
25	25	26	26.32	0.00	26.32	23.47	4.84	6.92	100.60	.03	.
50	49	47	26.28	0.00	26.28	23.64	4.85	6.93	101.12	.03	.
100	97	100	26.18	0.00	26.18	24.04	4.86	6.95	100.19	.02	.

¹ CAST 2 MESS TIME 18.3 GMT, 1416 LOCAL MAX DEPTH 300 WIRE ANGLE 17
 OXYGEN TITER 1.026 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	TEMP		TAVE	SALIN	SIG T	OXYGEN		XSAT	PHOS	NITRA
		TZ	TL				ML/L	MG/L			
150	144	0	23.28	23.26	23.27	25.21	5.92	5.60	75.86	.11	.
200	191	197	20.46	0.00	20.46	26.00	4.25	6.07	80.60	.18	.
250	239	244	18.53	0.00	18.53	26.36	4.09	5.85	72.45	.28	.
300	287	297	17.84	0.00	17.84	26.48	3.20	4.57	56.29	.53	.

R V PALUMBO CRUISE STATION TOR-3C PRNC REFERENCE 22278

DATE 1/30/73 BARO 1018.1 WEATHER 02 WIND VELOC 08 WAVE PERIOD 6
HOUR 19.8 TEMP DRY 30.7 VISIBILITY 8 WIND DIREC 08 TRANSPAR #
LAT 18-32.3 N TEMP WET 0.0 CLOUD TYPE 8 CLOUD AMT 2 WAVE DIREC 08 SONIC DEP 0378
LONG 66-27.4 W REL HUMID 067 CLOUD AMT 2 WAVE HEIGHT 2 COLOR 10
CAST 1 MESS TIME 19.8 GMT, 1545 LOCAL MAX DEPTH 100 WIRE ANGLE 12
OXYGEN TITER 1.026 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			TAVE	SALIN	SIG T	OXYGEN						
	CZ	TZ	BN				TL	TM	ML/L	MG/L	XSAT	PHOS	NITRA
150	147	0	10	23.23	23.23	23.23	36.767	25.22	4.19	5.98	81.02	.05	.
200	196	196	15	20.71	0.00	20.71	36.779	25.94	4.04	5.78	76.85	.17	.
250	244	242	12	19.30	0.00	19.30	36.666	26.23	4.09	5.85	73.03	.18	.
300	293	300	16	18.12	0.00	18.12	36.540	26.44	4.36	6.23	76.87	.27	.

CAST 2 MESS TIME 19.8 GMT, 1545 LOCAL MAX DEPTH 300 WIRE ANGLE 12
OXYGEN TITER 1.026 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			TAVE	SALIN	SIG T	OXYGEN						
	CZ	TZ	BN				TL	TM	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	0	10	26.41	26.41	26.41	35.666	23.43	4.79	6.85	99.62	.07	.
25	25	26	15	26.32	0.00	26.32	35.672	23.46	4.69	6.70	97.37	.06	.
50	49	46	12	26.22	0.00	26.22	35.848	23.62	4.54	6.48	94.33	.01	.
100	98	101	16	26.02	0.00	26.02	36.359	24.07	4.12	5.88	84.67	.02	.

R V PALUMBO CRUISE STATION TOR=38 PRNC REFERENCE 22279 WAVE PERIOD 7
 DATE 1/31/73 BARO 1018.6 WEATHER 02 WIND VELOC 02 TRANSPAR *
 HOUR 11.1 TEMP DRY 22.9 VISIBILITY 8 WIND DIREC 11 SONIC DEP 0252
 LAT 18-30.8 N TEMP WET 0.0 CLOUD TYPE 8 CLOUD AMT 2 WAVE DIREC 08
 LONG 66-27.4 W REL HUMID 090 METER WHEEL FACTOR .997 WAVE HEIGHT 2 COLOR 10
 CAST 1 MESS TIME 11.1 GMT, 0706 LOCAL MAX DEPTH 100 WIRE ANGLE 0
 OXYGEN TITER 1.019

DEPTH (M)	WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	0	0	10	26.15	26.18	26.17	35.721	23.55	4.79	6.84	99.33	.06	.
25	25	25	25	15	26.40	0.00	26.40	35.725	23.47	4.92	7.03	102.43	.05	.
50	50	49	49	12	26.39	0.00	26.39	35.813	23.54	4.84	6.92	100.88	.10	.
100	100	105	105	16	26.34	0.00	26.34	36.096	23.77	4.87	6.96	101.97	.04	.

R V PALUMBO CRUISE STATION TOR=18 PRNC REFERENCE 22280 WAVE PERIOD 6
 DATE 1/31/73 BARO 1019.5 WEATHER 02 WIND VELOC 03 TRANSPAR *
 HOUR 12.2 TEMP DRY 26.2 VISIBILITY 8 WIND DIREC 11 SONIC DEP 0216
 LAT 18-30.2 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08
 LONG 66-29.5 W REL HUMID 076 CLOUD AMT 5 WAVE HEIGHT 3 COLOR 10
 CAST 1 MESS TIME 12.1 GMT, 0809 LOCAL MAX DEPTH 100 WIRE ANGLE 0
 OXYGEN TITER 1.019

DEPTH (M)	WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	0	0	11	26.38	26.39	26.39	35.655	23.43	4.57	6.52	94.86	.03	.
25	25	23	23	15	26.40	0.00	26.40	35.671	23.43	4.78	6.83	99.36	.06	.
50	50	48	48	12	26.36	0.00	26.36	35.781	23.53	4.81	6.87	100.14	.05	.
100	100	102	102	16	26.12	0.00	26.12	36.341	24.03	4.78	6.83	98.36	.03	.

R V PALUMBO CRUISE STATION TOR-1C PRNC REFERENCE 22281

DATE 1/31/73 BARO 1019.6 WEATHER 02 WIND VELOC 04 WAVE PERIOD 7
 HOUR 13.7 TEMP DRY 26.8 VISIBILITY 8 WIND DIREC 12 TRANSPAR *
 LAT 18-31.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 09 SONIC DEP 0460
 LONG 66-29.5 W REL HUMID 067 CLOUD AMT 6 WAVE HEIGHT 2 COLOR 10

CAST 1 MESS TIME 13.7 GMT, 0941 LOCAL MAX DEPTH 300 WIRE ANGLE 8
 OXYGEN TITER 1.019 METER WHEEL FACTOR .997

WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	OXYGEN		PHOS	NITRA
									ML/L	MG/L		
150	149	0	11	25.16	25.30	25.23	35.681	23.81	4.52	6.45	92.35	.05
200	198	239	15	24.78	0.00	24.78	35.859	24.08	4.67	6.67	93.94	.06
250	247	303	12	23.78	0.00	23.78	36.317	24.72	4.74	6.77	90.61	.04
300	297	210	16	21.20	0.00	21.20	36.769	25.80	4.28	6.12	81.64	.13

DISCARD GYROLOGS DEPTHS DISCARD LOW SALINITIES

CAST 2 MESS TIME 14.1 GMT, 1008 LOCAL MAX DEPTH 100 WIRE ANGLE 1
 OXYGEN TITER 1.019 METER WHEEL FACTOR .997

WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	OXYGEN		PHOS	NITRA
									ML/L	MG/L		
0	0	0	11	26.32	26.37	26.35	35.662	23.44	4.83	6.90	100.32	.04
25	25	28	15	26.38	0.00	26.38	35.664	23.44	4.74	6.77	98.47	.03
50	50	52	12	26.38	0.00	26.38	35.729	23.48	4.90	7.00	101.98	.04
100	100	103	16	26.24	0.00	26.24	36.305	23.96	4.90	7.00	100.67	.01

R V PALUMBO CRUISE STATION PMA-5C PRNC REFERENCE 22282

DATE 1/31/73 BARO 1020.4 WEATHER 53 WIND VELOC 08 WAVE PERIOD 5
 HOUR 13.8 TEMP DRY 26.9 VISIBILITY 8 WIND DIREC 12 TRANSPAR *
 LAT 18-31.6 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 09 SONIC DEP 0375
 LONG 66-30.6 W REL HUMID 100 CLOUD AMT 7 WAVE HEIGHT 2 COLOR 10

CAST 1 MESS TIME 13.9 GMT, 0951 LOCAL MAX DEPTH 300 WIRE ANGLE 4
 OXYGEN TITER 1.019 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN				PHOS	NITRA			
	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T			ML/L	MG/L	%SAT
150	0	0	11	22.13	22.12	22.12	36.789	25.56	2.08	2.97	39.95	.10	.
200	199	199	15	20.02	0.00	20.02	36.699	26.07	3.99	5.69	75.33	.17	.
250	249	247	12	18.55	0.00	18.55	36.567	26.35	4.21	6.01	74.44	.22	.
300	299	299	16	17.56	0.00	17.66	36.458	26.49	4.45	6.36	78.12	.28	.

CAST 2 MESS TIME 14.4 GMT, 1024³ LOCAL MAX DEPTH 100 WIRE ANGLE 0
 OXYGEN TITER 1.019 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN				PHOS	NITRA			
	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T			ML/L	MG/L	%SAT
0	0	0	11	26.31	26.29	26.30	35.612	23.02	4.83	6.90	100.17	.03	.
25	25	27	15	26.35	0.00	26.35	35.677	23.45	4.86	6.95	100.99	.02	.
50	50	47	12	26.35	0.00	26.35	35.794	23.54	4.83	6.90	100.57	.03	.
100	100	105	16	25.79	0.00	25.79	36.411	24.18	4.83	6.90	99.36	.03	.

R V PALUMBO CRUISE STATION PMA-5B PRNC REFERENCE 22283

DATE 1/31/73 BARO 1019.1 WEATHER 02 WIND VELOC 12 WAVE PERIOD 5
 HOUR 16.7 TEMP DRY 27.7 VISIBILITY 8 WIND DIREC 08 TRANSPAR *
 LAT 18-31.1 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0300
 LONG 66-30.6 W REL HUMID 074 CLOUD AMT 3 WAVE HEIGHT 4 COLOR 10

CAST 1 MESS TIME 16.7 GMT, 1242 LOCAL MAX DEPTH 100 WIRE ANGLE 3
 OXYGEN TITER 1.019 METER WHEEL FACTOR .997

WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	OXYGEN		XSAT	PHOS	NITRA
									ML/L	MG/L			
0	0	0	11	26.38	26.40	26.39	35.607	23.39	4.66	6.65	96.69	.02	.
25	25	19	15	26.37	0.00	26.37	35.625	23.41	4.75	6.79	98.60	.10	.
50	50	48	12	26.40	0.00	26.40	35.742	23.49	4.63	6.61	96.31	.04	.
100	100	97	16	24.31	0.00	24.31	36.613	24.79	4.36	6.23	84.55	.05	.

R V PALUMBO CRUISE STATION PMA-4B PRNC REFERENCE 22284

DATE 1/31/73 BARO 1018.9 WEATHER 02 WIND VELOC 12 WAVE PERIOD 6
 HOUR 17.2 TEMP DRY 28.2 VISIBILITY 8 WIND DIREC 08 TRANSPAR *
 LAT 18-30.6 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0234
 LONG 66-31.6 W REL HUMID 072 CLOUD AMT 2 WAVE HEIGHT 3 COLOR 10

CAST 1 MESS TIME 17.2 GMT, 1312 LOCAL MAX DEPTH 100 WIRE ANGLE 4
 OXYGEN TITER 1.019 METER WHEEL FACTOR .997

WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	OXYGEN		XSAT	PHOS	NITRA
									ML/L	MG/L			
0	0	0	11	26.48	26.46	26.47	35.608	23.36	4.83	6.90	100.39	.03	.
25	25	27	15	26.41	0.00	26.41	35.669	23.43	4.71	6.73	97.88	.04	.
50	50	0	12	26.74	0.00	26.74	35.694	23.34	4.75	6.79	99.24	.04	.
100	100	104	16	25.22	0.00	25.22	36.420	24.37	4.78	6.83	98.08	.08	.

R V PALUMBO CRUISE STATION PMA-4C PRNC REFERENCE 22285

DATE 1/31/73 BARO 1018.6 WEATHER 02 WIND VELOC 12 WAVE PERIOD 7
 HOUR 17.7 TEMP DRY 28.8 VISIBILITY 8 WIND DIREC 08 TRANSPAR *

LAT 18-31.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0340
 LONG 66-31.6 W REL HUMID 071 CLOUD AMT 5 WAVE HEIGHT 4 COLOR 10

CAST 1 MESS TIME 17.7 GMT, 1344 LOCAL MAX DEPTH 300 WIRE ANGLE 14
 OXYGEN TITER 1.019 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			OXYGEN			PHOS	NITRA						
	WIRE	CZ	TZ	HN	TL	TM			TAVE	SALIN	SIG T	ML/L	MG/L	%SAT
150	146	0	0	11	22.40	22.41	22.41	36.771	25.47	3.90	5.58	75.10	.10	.
200	194	199	0	15	20.67	0.00	20.67	36.741	25.93	3.54	5.05	67.18	.14	.
250	242	241	0	12	18.70	0.00	18.70	36.568	26.31	3.80	5.43	67.30	.24	.
300	291	295	0	16	17.85	0.00	17.85	36.504	26.48	3.71	5.30	65.22	.29	.

CAST 2 MESS TIME 18.1 GMT, 1405 LOCAL MAX DEPTH 100 WIRE ANGLE 6
 OXYGEN TITER 1.019 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			OXYGEN			PHOS	NITRA						
	WIRE	CZ	TZ	HN	TL	TM			TAVE	SALIN	SIG T	ML/L	MG/L	%SAT
0	0	0	0	11	26.45	26.45	26.45	35.621	23.38	4.83	6.90	100.39	.03	.
25	25	26	0	15	26.38	0.00	26.38	35.578	23.45	4.35	6.22	90.45	.01	.
50	50	48	0	12	26.37	0.00	26.37	35.718	23.48	4.45	6.36	92.62	.04	.
100	100	97	0	16	25.62	0.00	25.62	36.498	24.30	4.46	6.41	92.26	.02	.

R V PALUMBO CRUISE STATION PMA-3C PRNC REFERENCE 22286

DATE 1/31/73 BARO 1018.2 WEATHER 02 WIND VELOC 12 WAVE PERIOD 6
 HOUR 18.7 TEMP DRY 28.0 VISIBILITY 8 WIND DIREC 08 TRANSPAR *
 LAT 18-30.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0420
 LONG 66-32.8 W REL HUMID 073 CLOUD AMT 3 WAVE HEIGHT 4 COLOR 10

CAST 1 MESS TIME 18.7 GMT, 1440 LOCAL MAX DEPTH 300 WIRE ANGLE 17
 OXYGEN TITER 1.019 METER WHEEL FACTOR .997

WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	OXYGEN				
									ML/L	MG/L	%SAT	PHOS	NITRA
150	144	0	11	22.79	22.78	22.79	36.761	25.35	3.95	5.65	76.27	.06	.
200	191	199	15	20.96	0.00	20.96	36.763	25.86	3.70	5.29	70.43	.15	.
250	239	246	12	18.52	0.00	18.52	36.576	26.36	3.28	4.69	58.05	.24	.
300	287	299	16	17.61	0.00	17.61	36.461	26.50	3.75	5.36	65.78	.28	.

CAST 2 MESS TIME 19.0 GMT, ~~15.00~~^{14.58} LOCAL MAX DEPTH 100 WIRE ANGLE 0
 OXYGEN TITER 1.019 METER WHEEL FACTOR .997

WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	OXYGEN				
									ML/L	MG/L	%SAT	PHOS	NITRA
0	0	0	11	26.45	26.43	26.44	35.625	23.39	4.83	6.90	100.38	.02	.
25	25	26	15	26.42	0.00	26.42	35.684	23.44	4.62	6.60	96.02	.06	.
50	50	47	12	26.35	0.00	26.35	35.769	23.52	5.67	8.10	117.91	.05	.
100	100	95	16	25.88	0.00	25.88	36.431	24.17	4.88	6.97	100.48	.04	.

R V PALUMBO CRUISE STATION PMA-3B PRNC REFERENCE 22287

DATE 1/31/73 BARO 1017.7 WEATHER 02 WIND VELOC 12 WAVE PERIOD 7
 HOUR 19.4 TEMP DRY 27.0 VISIBILITY 8 WIND DIREC 08 TRANSPAR *
 LAT 18-30.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0250
 LONG 66-32.7 W REL HUMID 078 CLOUD AMT 2 WAVE HEIGHT 4 COLOR 10

CAST 1 MESS TIME 19.4 GMT, 1526 LOCAL MAX DEPTH 100 WIRE ANGLE 22
 OXYGEN TITER 1.019 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			OXYGEN			PHOS	NITRA			
	WIRE	CZ	TM	SIG T	ML/L	%SAT					
0	0	11	26.52	26.51	26.52	35.642	23.38	5.50	7.86	114.51	.02
25	24	15	26.42	0.00	26.42	35.691	23.44	4.79	6.04	99.63	.06
50	47	12	26.40	0.00	26.40	35.742	23.49	4.85	6.93	100.97	.05
100	93	102	25.81	0.00	25.81	36.325	24.11	3.98	5.68	81.67	.03

R V PALUMBO CRUISE STATION PMA-2B PRNC REFERENCE 22288

DATE 1/31/73 BARO 1017.6 WEATHER 02 WIND VELOC 10 WAVE PERIOD 6
 HOUR 19.9 TEMP DRY 28.0 VISIBILITY 8 WIND DIREC 08 TRANSPAR *
 LAT 18-30.9 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0180
 LONG 66-33.7 W REL HUMID 072 CLOUD AMT 2 WAVE HEIGHT 4 COLOR 10

CAST 1 MESS TIME 19.8 GMT, 1550 LOCAL MAX DEPTH 100 WIRE ANGLE 19
 OXYGEN TITER 1.019 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			OXYGEN			PHOS	NITRA			
	WIRE	CZ	TM	SIG T	ML/L	%SAT					
0	0	11	26.51	26.50	26.51	35.653	23.39	4.83	6.90	100.53	.05
25	24	15	26.44	0.00	26.44	35.659	23.41	3.69	5.27	76.72	.00
50	48	12	26.40	0.00	26.40	35.698	23.45	2.61	3.73	54.27	.07
100	95	104	25.17	0.00	25.17	36.448	24.40	5.13	7.32	105.16	.11

R V PALUMBO CRUISE STATION PMA-2C PRNC REFERENCE 22289

DATE 2/ 1/73 BARO 1019.6 WEATHER 02 WIND VELOC 03 WAVE PERIOD 6
 HOUR 12.4 TEMP DRY 23.2 VISIBILITY 8 WIND DIREC 16 TRANSPAR *
 LAT 18-31.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0376
 LONG 66-33.7 W REL HUMID 084 CLOUD AMT 4 WAVE HEIGHT 3 COLOR 10

CAST 1 MESS TIME 12.4 GMT, 0821 LOCAL MAX DEPTH 300 WIRE ANGLE 2
 OXYGEN TITER .997 METER WHEEL FACTOR .997

DEPTH (M)	WIRE	CZ	TZ	BN	TL	TM	TEMP	TAVE	SALIN	SIG T	OXYGEN ML/L	MG/L	XSAT	PHOS	NITRA
150	150	0	11	22.17	22.19	22.16	36.763	25.52	4.26	6.08	81.76	.08			
200	200	200	15	20.01	0.00	20.01	36.733	26.10	4.13	5.90	78.05	.18			
250	250	244	12	18.49	0.00	18.49	36.590	26.38	4.18	5.97	73.92	.17			
300	299	301	16	17.69	0.00	17.69	36.441	26.47	4.31	6.15	75.53	.32			

CAST 2 MESS TIME 12.7 GMT, 0843 LOCAL MAX DEPTH 100 WIRE ANGLE 4
 OXYGEN TITER .997 METER WHEEL FACTOR .997

DEPTH (M)	WIRE	CZ	TZ	BN	TL	TM	TEMP	TAVE	SALIN	SIG T	OXYGEN ML/L	MG/L	XSAT	PHOS	NITRA
0	0	0	11	26.36	26.35	26.36	35.629	23.42	4.78	6.82	99.14	.05			
25	25	27	15	26.37	0.00	26.37	35.604	23.39	4.66	6.94	100.77	.03			
50	50	50	12	26.32	0.00	26.32	35.778	23.54	4.48	6.40	93.14	.06			
100	100	101	16	24.21	0.00	24.21	36.652	24.85	4.61	6.58	89.38	.05			

R V PALUMBO CRUISE STATION PMA-1C PRNC REFERENCE 22290

DATE 2/ 1/73 BARO 1020.3 WEATHER 02 WIND VELOC 08 WAVE PERIOD 5
 HOUR 13.9 TEMP DRY 27.8 VISIBILITY 8 WIND DIREC 11 TRANSPAR *
 LAT 18-31.6 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0320
 LONG 66-34.8 W REL HUMID 072 CLOUD AMT 5 WAVE HEIGHT 3 COLOR 10

CAST 1 MESS TIME 13.9 GMT, 0956 LOCAL MAX DEPTH 300 WIRE ANGLE 15
 OXYGEN TITER .997 METER WHEEL FACTOR .997

DEPTH (M)	WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	OXYGEN		
										ML/L	MG/L	XSAT	PHOS NITRA
150	145	0	11	22.51	22.75	22.63	36.834	25.45	4.54	6.48	87.57	.05
200	193	200	15	20.20	0.00	20.20	36.754	26.06	4.69	6.70	88.73	.11
250	241	243	12	18.98	0.00	18.98	36.659	26.31	4.38	6.25	77.89	.22
300	289	301	16	18.10	0.00	18.10	36.575	26.47	4.25	6.07	74.94	.27

CAST 2 MESS TIME 14.4 GMT, 1025 LOCAL MAX DEPTH 100 WIRE ANGLE 10
 OXYGEN TITER .997 METER WHEEL FACTOR .997

DEPTH (M)	WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	OXYGEN		
										ML/L	MG/L	XSAT	PHOS NITRA
0	0	0	11	26.36	26.41	26.38	35.548	23.35	4.72	6.74	97.79	.02
25	25	27	15	26.39	0.00	26.39	35.675	23.44	4.72	6.74	98.03	.01
50	50	49	12	26.40	0.00	26.40	35.709	23.46	4.84	6.91	100.59	.04
100	99	90	16	24.68	0.00	24.68	36.556	24.63	4.80	6.85	92.95	.03

R V PALUMBO CRUISE STATION PMA-1B PRNC REFERENCE 22291

DATE 2/ 1/73 BARO 1020.5 WEATHER 02 WIND VELOC 13 WAVE PERIOD 5
 HOUR 15.1 TEMP DRY 27.5 VISIBILITY 8 WIND DIREC 09 TRANSPAR *
 LAT 18-31.3 N REL HUMID 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP
 LONG 66-34.7 W REL HUMID 075 CLOUD AMT 6 WAVE HEIGHT 4 COLOR 10

CAST 1 MESS TIME 15.1 GMT, 1107 LOCAL MAX DEPTH 100 WIRE ANGLE 27
 OXYGEN TITER ,997 METER WHEEL FACTOR ,997

DEPTH (M)	WIRE	CZ	TZ	BN	TL	BARO	TEMP	TM	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
0	0	0	0	11	26.38	26.42	26.40	35.580	23.37	4.69	6.70	97.25	.05	.	.	.
25	23	0	0	15	25.37	0.00	25.37	35.544	23.66	4.64	6.62	94.89	.02	.	.	.
50	45	0	0	12	26.39	0.00	26.39	35.721	23.48	4.40	6.28	91.48	.02	.	.	.
100	89	0	0	16	24.97	0.00	24.97	36.492	24.50	4.49	6.41	86.85	.04	.	.	.

R V PALUMBO CRUISE STATION PMA-2A PRNC REFERENCE 22292

DATE 2/ 1/73 BARO 1019.9 WEATHER 02 WIND VELOC 13 WAVE PERIOD 5
 HOUR 15.7 TEMP DRY 27.6 VISIBILITY 7 WIND DIREC 09 TRANSPAR *
 LAT 18-29.8 N REL HUMID 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0025
 LONG 66-33.7 W REL HUMID 075 CLOUD AMT 7 WAVE HEIGHT 4 COLOR 10

CAST 1 MESS TIME 15.7 GMT, 1144 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER ,997 METER WHEEL FACTOR ,997

DEPTH (M)	WIRE	CZ	TZ	BN	TL	BARO	TEMP	TM	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
0	0	0	0	11	26.40	26.41	26.41	35.563	23.35	4.74	6.77	98.26	.07	.	.	.
10	10	11	15	15	26.40	0.00	26.40	35.562	23.35	4.66	6.65	96.59	.03	.	.	.

R V PALUMBO CRUISE STATION PMA-1A PRNC REFERENCE 22293

DATE 2/ 1/73 BARO 1019.8 WEATHER 02 WIND VELOC 13 WAVE PERIOD 6
 HOUR 15.9 TEMP DRY 28.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR *
 LAT 18-30.2 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0018
 LONG 66-34.8 W REL HUMID 074 CLOUD AMT 7 WAVE HEIGHT 4 COLOR 10

CAST 1 MESS TIME 15.9 GMT, 1156 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER ,997 METER WHEEL FACTOR ,997

DEPTH (M)	TEMP		TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
	TZ	BN								
0	0	12	26.40	26.39	26.40	0.000	0.000	4.68	6.68	.03
10	0	16	26.43	26.43	26.43	0.000	0.000	4.73	6.75	.04

R V PALUMBO CRUISE STATION TOR-6C PRNC REFERENCE 28445

DATE 5/10/73 BARO 1019.5 WEATHER 02 WIND VELOC 07 WAVE PERIOD 3
 HOUR 1.5 TEMP DRY 27.0 VISIBILITY 8 WIND DIREC 08 TRANSPAR
 LAT 18-31.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0420
 LONG 66-24.1 W REL HUMID 084 CLOUD AMT 1 WAVE HEIGHT 4 COLOR 10

CAST 1 MESS TIME 1.6 GMT, 2137 LOCAL MAX DEPTH 300 WIRE ANGLE 2
 OXYGEN TITER 1.054 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CZ	TZ	BN	TL	TEMP			TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
						TM	TL	TL								
0	0	0	0	11	27.02	27.00	27.01	27.01	36.017	23.50	4.86	6.94	102.75	.07	.	.
25	25	26	26	12	26.98	0.00	26.98	26.98	36.024	23.52	4.80	6.85	101.38	.05	.	.
50	50	52	26	15	26.15	0.00	26.13	26.13	36.193	23.91	5.01	7.15	102.80	.05	.	.
100	100	97	24	16	24.73	0.00	24.73	24.73	36.594	24.65	4.97	7.09	96.41	.04	.	.
150	150	149	22	1	22.81	0.00	22.81	22.81	36.819	25.39	4.43	6.33	85.55	.05	.	.
200	200	200	19	2	19.75	0.00	19.75	19.75	36.661	26.11	4.21	6.01	75.24	.15	.	.
250	250	249	18	3	18.22	0.00	18.22	18.22	36.532	26.41	4.44	6.34	78.26	.20	.	.
300	299	294	17	4	17.07	0.00	17.07	17.07	36.363	26.56	4.47	6.39	78.01	.34	.	.

R V PALUMBO CRUISE STATION TOR-5C PRNC REFERENCE 28446

DATE 5/10/73 BARO 1019.5 WEATHER 02 WIND VELOC 06 WAVE PERIOD 4
 HOUR 2.6 TEMP DRY 26.0 VISIBILITY 8 WIND DIREC 07 TRANSPAR
 LAT 18-31.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0398
 LONG 66-25.3 W REL HUMID 086 CLOUD AMT 2 WAVE HEIGHT 4 COLOR 10

CAST 1 MESS TIME 2.8 GMT, 2248 LOCAL MAX DEPTH 300 WIRE ANGLE 2
 OXYGEN TITER 1.054 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CZ	TZ	BN	TL	TEMP			SALIN	SIG T	OXYGEN			XSAT	PMOS	NITRA
						TM	TAVE	TAVE			ML/L	MG/L	%SAT			
0	0	0	0	11	27.00	27.01	27.01	36.018	23.50	4.88	6.97	103.19	.00	.	.	
25	25	28	28	12	26.70	0.00	26.70	36.061	23.63	4.92	7.03	103.64	.00	.	.	
50	50	46	46	15	26.09	0.00	26.09	36.141	23.89	4.94	7.06	101.41	.04	.	.	
100	100	112	112	16	24.75	0.00	24.75	36.408	24.50	5.02	7.17	96.67	.03	.	.	
150	150	121	121	1	23.61	0.00	23.61	36.787	25.13	4.73	6.76	91.91	.03	.	.	
200	200	130	130	2	21.52	0.00	21.52	36.832	25.76	4.29	6.13	82.11	.07	.	.	
250	250	0	0	3	18.83	0.00	18.83	36.632	26.33	4.29	6.13	76.20	.12	.	.	
300	299	250	250	4	17.63	0.00	17.63	36.493	26.52	4.47	6.39	78.47	.29	.	.	

R V PALUMBO CRUISE

STATION TOR=4C

PRNC REFERENCE 28447

DATE 5/10/73 BARO 1019.5 WEATHER 02 WIND VELOC 08 WAVE PERIOD 4
 HOUR 3.6 TEMP DRY 25.0 VISIBILITY 8 WIND DIREC 07 TRANSPAR
 LAT 18=31.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0400
 LONG 66=26.3 W REL HUMID 085 CLOUD AMT 2 WAVE HEIGHT 4 COLOR 10

CAST 1 MESS TIME 3.6 GMT, 2337 LOCAL MAX DEPTH 300 WIRE ANGLE 2
 OXYGEN TITER 1.054 METER WHEEL FACTOR .997

WIRE	CZ	TZ	BN	TL	TEMP			TAVE	SALIN	SIG T	OXYGEN			PHOS	NITRA
					TM	TL	TM				ML/L	MG/L	XSAT		
0	0	0	11	27.01	26.99	27.00	36.019	23.51	4.87	6.96	102.96	.08	.		
25	25	32	12	26.56	0.00	26.56	36.079	23.69	4.93	7.05	103.64	.00	.		
50	50	55	15	25.83	0.00	25.83	36.266	24.06	4.98	7.11	102.16	.08	.		
100	100	100	16	24.06	0.00	24.06	36.635	24.88	5.02	7.17	97.20	.03	.		
150	150	151	1	22.69	0.00	22.69	36.832	25.43	4.39	6.27	84.69	.12	.		
200	200	200	2	19.32	0.00	19.32	36.630	26.20	4.25	6.07	75.68	.22	.		
250	250	246	3	17.86	0.00	17.86	36.484	26.46	4.45	6.36	78.18	.32	.		
300	299	294	4	17.12	0.00	17.12	36.378	26.56	4.47	6.39	78.05	.36	.		

R V PALUMBO CRUISE

STATION TOR=2A

PRNC REFERENCE 28448

DATE 5/10/73 BARO 1018.5 WEATHER 02 WIND VELOC 00 WAVE PERIOD 4
 HOUR 11.3 TEMP DRY 30.0 VISIBILITY 8 WIND DIREC
 LAT 18=28.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 06 SONIC DEP 0018
 LONG 66=29.5 W REL HUMID 060 CLOUD AMT 2 WAVE HEIGHT 20

CAST 1 MESS TIME 11.3 GMT, 0719 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.054 METER WHEEL FACTOR .997

WIRE	CZ	TZ	BN	TL	TEMP			TAVE	SALIN	SIG T	OXYGEN			PHOS	NITRA
					TM	TL	TM				ML/L	MG/L	XSAT		
0	0	0	11	26.77	26.75	26.76	36.041	23.60	4.74	6.78	99.92	.04	.		
10	10	14	12	26.75	0.00	26.75	36.025	23.59	4.74	6.78	99.87	.04	.		

R V PALUMBO CRUISE STATION TOR-3A PRNC REFERENCE 28449

DATE 5/10/73 BARO 1018.5 WEATHER 02 WIND VELOC 01 WAVE PERIOD 4
 HOUR 11.8 TEMP DRY 32.0 VISIBILITY 8 WIND DIREC 14 TRANSPAR
 LAT 18-29.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 04 SONIC DEP 0019
 LONG 66-27.3 W REL HUMID 063 CLOUD AMT 2 WAVE HEIGHT 5 COLOR 20

CAST 1 MESS TIME 11.8 GMT, 0747 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.054 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
	TZ	BN	TL								
0	0	11	26.73	26.73	36.031	23.60	4.82	6.88	101.40	.04	.
10	9	12	26.66	0.00	26.66	36.053	23.64	4.87	6.96	102.44	.04

R V PALUMBO CRUISE STATION TOR-4A PRNC REFERENCE 28450

DATE 5/10/73 BARO 1018.5 WEATHER 02 WIND VELOC 01 WAVE PERIOD 4
 HOUR 12.2 TEMP DRY 30.0 VISIBILITY 8 WIND DIREC 13 TRANSPAR
 LAT 18-29.6 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 04 SONIC DEP 0020
 LONG 66-26.3 W REL HUMID 072 CLOUD AMT 2 WAVE HEIGHT 3 COLOR 20

CAST 1 MESS TIME 12.2 GMT, 0811 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.054 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
	TZ	BN	TL								
0	0	11	26.77	26.76	26.77	35.997	23.56	4.83	6.90	101.61	.06
10	11	12	26.63	0.00	26.63	36.044	23.64	4.85	6.93	101.92	.05

R V PALUMBO CRUISE

STATION TOR-5A

PRNC REFERENCE 28451

DATE 5/10/73 BARO 1018.5 WEATHER 02 WIND VELOC 02 WAVE PERIOD 4
 HOUR 12.6 TEMP DRY 28.0 VISIBILITY 8 WIND DIREC 13 TRANSPAR
 LAT 18-29.5 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 03 SONIC DEP 0020
 LONG 66-25.3 W REL HUMID 078 CLOUD AMT 2 WAVE HEIGHT 4 COLOR 20

CAST 1 MESS TIME 12.6 GMT, 0834 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.054 METER WHEEL FACTOR .997

DEPTH (M)	WIRE	CZ	TZ	BN	TL	TM	TEMP	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	0	0	11	26.76	26.73	26.75	36.034	23.60	4.81	6.87	101.21	.00	.	
10	10	10	10	12	26.70	0.00	26.70	36.045	23.62	4.74	6.78	99.83	.08	.	

R V PALUMBO CRUISE

STATION TOR-6A

PRNC REFERENCE 28452

DATE 5/10/73 BARO 1018.5 WEATHER 02 WIND VELOC 02 WAVE PERIOD 5
 HOUR 12.9 TEMP DRY 28.0 VISIBILITY 8 WIND DIREC 12 TRANSPAR
 LAT 18-29.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 06 SONIC DEP 0023
 LONG 66-24.3 W REL HUMID CLOUD AMT 2 WAVE HEIGHT 4 COLOR 20

CAST 1 MESS TIME 12.9 GMT, 0856 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.054 METER WHEEL FACTOR .997

DEPTH (M)	WIRE	CZ	TZ	BN	TL	TM	TEMP	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	0	0	11	26.77	26.80	26.79	36.025	23.58	4.78	6.82	100.60	.03	.	
10	10	10	31	12	26.77	0.00	26.77	36.010	23.57	4.82	6.88	101.43	.00	.	

R V PALUMBO CRUISE STATION TOR-6B PRNC REFERENCE 28453

DATE 5/10/73 BARO 1016.5 WEATHER 02 WIND VELOC 06 WAVE PERIOD 4
 HOUR 13.4 TEMP DRY 28.0 VISIBILITY 8 WIND DIREC 10 TRANSPAR
 LAT 18-31.3 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0219
 LONG 66-24.2 W REL HUMID 079 CLOUD AMT 2 WAVE HEIGHT 4 COLOR 10

CAST 1 MESS TIME 13.4 GMT, 0923 LOCAL MAX DEPTH 100 WIRE ANGLE 0
 OXYGEN TITER 1.054 METER WHEEL FACTOR .997

DEPTH (M)	TZ	BN	TL	TEMP		TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
				TM	TH								
0	6	1	26.94	0.00	26.94	36.001	23.51	4.82	6.88	101.70	.00	.	
25	28	2	26.74	0.00	26.74	36.025	23.59	4.80	6.85	100.96	.00	.	
50	53	3	26.41	0.00	26.41	36.102	23.76	4.91	7.02	102.97	.08	.	
100	100	4	25.16	0.00	25.16	36.459	24.41	4.97	7.09	101.86	.00	.	

R V PALUMBO CRUISE STATION TOR-5B PRNC REFERENCE 28454

DATE 5/10/73 BARO 1017.5 WEATHER 02 WIND VELOC 07 WAVE PERIOD 4
 HOUR 13.9 TEMP DRY 28.0 VISIBILITY 8 WIND DIREC 11 TRANSPAR
 LAT 18-31.3 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 10 SONIC DEP 0168
 LONG 66-25.4 W REL HUMID 079 CLOUD AMT 2 WAVE HEIGHT 4 COLOR 10

CAST 1 MESS TIME 14.2 GMT, 0973 LOCAL MAX DEPTH 100 WIRE ANGLE 5
 OXYGEN TITER 1.054 METER WHEEL FACTOR .997

DEPTH (M)	TZ	BN	TL	TEMP		TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
				TM	TH								
0	9	1	26.90	0.00	26.90	36.001	23.52	4.83	6.90	101.85	.00	.	
25	24	2	26.60	0.00	26.60	36.066	23.67	4.82	6.88	101.25	.00	.	
50	47	3	26.38	0.00	26.38	36.116	23.78	4.88	6.97	102.28	.00	.	
100	104	4	24.95	0.00	24.95	36.500	24.51	4.96	7.08	95.93	.00	.	

R V PALUMBO CRUISE

STATION TOR-4B

PRNC REFERENCE 28455

DATE 5/10/73 BARO 1019.5 WEATHER 02 WIND VELOC 07 WAVE PERIOD 4
 HOUR 14.3 TEMP DRY 29.0 VISIBILITY 8 WIND DIREC 09 TRANSPAR
 LAT 18-31.1 N TEMP WET 0.0 CLOUD TYPE 0 WAVE DIREC 08 SONIC DEP 0164
 LONG 66-26.3 W REL HUMID 074 CLOUD AMT 2 WAVE HEIGHT 4 COLOR 10

CAST 1 MESS TIME 14.3 GMT, 1018 LOCAL MAX DEPTH 100 WIRE ANGLE 15
 OXYGEN TITER 1.054 METER WHEEL FACTOR .997

WIRE	CZ	TZ	BN	TL	TEMP		TAVE	SALIN	SIG T	OXYGEN				
					TM	TL				ML/L	MG/L	XSAT	PHOS	NITRA
0	0	6	1	26.96	0.00	0.00	26.96	36.001	23.50	4.82	6.88	101.73	.00	.
25	25	29	2	26.54	0.00	0.00	26.54	36.066	23.69	4.83	6.90	101.37	.04	.
50	49	52	3	26.23	0.00	0.00	26.23	36.131	23.83	4.85	6.93	99.40	.03	.
100	97	100	4	25.14	0.00	0.00	25.14	36.450	24.41	4.99	7.12	102.28	.03	.

R V PALUMBO CRUISE

STATION TOR-3B

PRNC REFERENCE 28456

DATE 5/10/73 BARO 1018.5 WEATHER 02 WIND VELOC 06 WAVE PERIOD 5
 HOUR 14.7 TEMP DRY 30.0 VISIBILITY 8 WIND DIREC 08 TRANSPAR
 LAT 18-30.9 N TEMP WET 0.0 CLOUD TYPE 0 WAVE DIREC 08 SONIC DEP 0159
 LONG 66-27.4 W REL HUMID 076 CLOUD AMT 2 WAVE HEIGHT 4 COLOR 10

CAST 1 MESS TIME 14.7 GMT, 1042 LOCAL MAX DEPTH 100 WIRE ANGLE 8
 OXYGEN TITER 1.054 METER WHEEL FACTOR .997

WIRE	CZ	TZ	BN	TL	TEMP		TAVE	SALIN	SIG T	OXYGEN				
					TM	TL				ML/L	MG/L	XSAT	PHOS	NITRA
0	0	12	1	26.93	0.00	0.00	26.93	36.003	23.52	4.81	6.87	101.46	.00	.
25	25	28	2	26.41	0.00	0.00	26.41	36.094	23.75	4.88	6.97	102.29	.03	.
50	50	54	3	26.20	0.00	0.00	26.20	36.147	23.86	4.84	6.91	99.28	.00	.
100	99	106	4	25.08	0.00	0.00	25.08	36.440	24.42	4.97	7.09	101.81	.02	.

R V PALUMBO CRUISE STATION TOR-2B PRNC REFERENCE 28457

DATE 5/10/73 BARO 1019.5 WEATHER 02 WIND VELOC 06 WAVE PERIOD 4
 HOUR 15.2 TEMP DRY 30.0 VISIBILITY 8 WIND DIREC 07 TRANSPAR
 LAT 18-30.1 N REL HUMID 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0220
 LONG 66-28.4 W REL HUMID 076 CLOUD AMT 2 WAVE HEIGHT 4 COLOR 10

CAST 1 MESS TIME 15.2 GMT, 1110 LOCAL MAX DEPTH 100 WIRE ANGLE 8
 OXYGEN TITER 1.054 METER WHEEL FACTOR .997

DEPTH (M)	WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	7	1	26.92	0.00	26.92	36.009	23.52	4.80	6.85	101.24	.03	.	
25	25	25	2	26.51	0.00	26.51	36.077	23.71	4.84	6.91	101.56	.03	.	
50	50	51	3	26.05	0.00	26.05	36.160	23.91	4.88	6.97	100.13	.00	.	
100	99	99	4	24.82	0.00	24.82	36.536	24.58	4.89	6.99	94.79	.03	.	

R V PALUMBO CRUISE STATION TOR-1B PRNC REFERENCE 28458

DATE 5/10/73 BARO 1018.5 WEATHER 02 WIND VELOC 06 WAVE PERIOD 5
 HOUR 15.5 TEMP DRY 30.0 VISIBILITY 8 WIND DIREC 07 TRANSPAR
 LAT 18-30.6 N REL HUMID 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0182
 LONG 66-29.6 W REL HUMID 075 CLOUD AMT 2 WAVE HEIGHT 3 COLOR 10

CAST 1 MESS TIME 15.5 GMT, 1132 LOCAL MAX DEPTH 100 WIRE ANGLE 14
 OXYGEN TITER 1.054 METER WHEEL FACTOR .997

DEPTH (M)	WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	0	11	27.00	27.00	27.00	35.985	23.48	4.78	6.82	100.87	.07	.	
25	25	28	12	26.81	0.00	26.81	35.997	23.55	4.83	6.90	101.69	.03	.	
50	49	0	15	26.21	0.00	26.21	36.120	23.83	4.89	6.99	102.20	.03	.	
100	97	98	16	24.94	0.00	24.94	36.480	24.50	4.88	6.97	94.41	.02	.	

R V PALUMBO CRUISE STATION TOR-3C PRNC REFERENCE 28459

DATE 5/10/73 BARO 1017.5 WEATHER 02 WIND VELOC 09 WAVE PERIOD 4
 HOUR 18.9 TEMP DRY 32.0 VISIBILITY 8 WIND DIREC 08 TRANSPAR
 LAT 18-31.8 N TEMP WET 0.0 CLOUD TYPE 0 WAVE DIREC 07 SONIC DEP 0402
 LONG 66-27.3 W REL HUMID CLOUD AMT 1 WAVE HEIGHT 3 COLOR 10

CAST 1 MESS TIME 18.9 GMT, 1454 LOCAL MAX DEPTH 100 WIRE ANGLE 18
 OXYGEN TITER 1.054 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	OXYGEN			
										ML/L	MG/L	XSAT	PHOS	NITRA
0	0	0	11	27.01	27.00	27.01	35.980	23.47	4.78	6.62	100.87	.04	.
25	24	25	12	26.81	0.00	26.81	36.009	23.56	4.81	6.87	101.27	.00	.
50	48	47	15	26.18	0.00	26.18	36.125	23.85	4.92	7.03	102.81	.03	.
100	95	106	16	25.34	0.00	25.34	36.369	24.29	5.01	7.15	102.74	.03	.

CAST 2 MESS TIME 20.3 GMT, 1615 LOCAL MAX DEPTH 300 WIRE ANGLE 17
 OXYGEN TITER 1.054 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	OXYGEN			
										ML/L	MG/L	XSAT	PHOS	NITRA
150	144	150	2	22.80	0.00	22.80	36.820	25.39	4.42	6.31	85.34	.06	.
200	191	207	4	20.01	0.00	20.01	36.649	26.03	4.25	6.07	80.29	.15	.
250	239	251	15	18.18	0.00	18.18	36.473	26.37	4.41	6.30	77.54	.24	.
300	287	296	16	16.94	0.00	16.94	36.305	26.55	4.45	6.36	77.50	.32	.

R V PALUMBO CRUISE STATION TOR-2C PRNC REFERENCE 28460

DATE 5/11/73 BARO 1017.5 WEATHER 1017.5 WAVE PERIOD 5
 HOUR 10.9 TEMP DRY 25.0 VISIBILITY 8 WIND DIREC 08 TRANSPAR
 LAT 16-31.3 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0320
 LONG 66-28.4 W REL HUMID 092 CLOUD AMT 2 WAVE HEIGHT 3 COLOR 10

CAST 1 MESS TIME 10.9 GMT, 0654 LOCAL MAX DEPTH 300 WIRE ANGLE 7
 OXYGEN TITER 1.054 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN				PHOS	NITRA			
	WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN			SIG T	ML/L	MG/L	XSAT
0	0	0	0	11	26.98	26.98	26.98	35.934	23.45	4.72	6.75	99.60	.04
25	25	24	12	12	26.97	0.00	26.97	35.960	23.47	4.79	6.84	100.98	.03
50	50	52	15	15	26.42	0.00	26.42	36.069	23.73	4.85	6.93	101.60	.06
100	99	99	16	16	25.37	0.00	25.37	36.393	24.30	4.98	7.11	102.12	.14
150	149	146	1	1	23.64	0.00	23.64	36.785	25.12	4.53	6.48	88.04	.19
200	198	195	2	2	20.89	0.00	20.89	36.697	25.83	4.30	6.15	81.78	.11
250	248	244	3	3	19.35	0.00	19.35	36.599	26.17	4.27	6.10	75.97	.15
300	297	292	4	4	18.03	0.00	18.03	36.473	26.41	4.46	6.37	78.40	.24

R V PALUMBO CRUISE STATION TOR-1C PRNC REFERENCE 28461

DATE 5/11/73 BARO 1017.5 WEATHER 02 WIND VELOC WAVE PERIOD 4
 HOUR 11.7 TEMP DRY 26.0 VISIBILITY 8 WIND DIREC TRANSPAR
 LAT 18-31.4 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0365
 LONG 66-29.4 W REL HUMID 087 CLOUD AMT 1 WAVE HEIGHT 3 COLOR 10

CAST 1 MESS TIME 11.7 GMT, 0744 LOCAL MAX DEPTH 300 WIRE ANGLE 7
 OXYGEN TITER 1.054 METER WHEEL FACTOR .997

WIRE	DEPTH (M)		BN	TEMP			TAVE	SALIN	SIG T	OXYGEN		XSAT	PHOS	NITRA
	CZ	TZ		TL	TM	TL				ML/L	MG/L			
0	0	0	11	27.08	27.10	27.09	35.932	23.41	4.79	6.84	101.12	.04	.	
25	25	26	12	26.88	0.00	26.88	35.984	23.52	4.83	6.90	101.78	.04	.	
50	50	52	15	26.49	0.00	26.49	36.047	23.69	4.83	6.90	101.24	.05	.	
100	99	99	16	25.77	0.00	25.77	36.234	24.06	4.93	7.05	101.23	.00	.	
150	149	144	1	23.73	0.00	23.73	36.797	25.10	4.60	6.57	89.36	.05	.	
200	198	195	2	20.43	0.00	20.43	36.679	25.94	4.26	6.09	80.72	.12	.	
250	248	245	3	18.54	0.00	18.54	36.660	26.42	4.40	6.28	78.00	.22	.	
300	297	293	4	17.17	0.00	17.17	36.380	26.55	4.47	6.39	78.07	.39	.	

R V PALUMBO CRUISE STATION PMA-5C PRNC REFERENCE 20462

DATE 5/11/73 BARO 1016.8 WEATHER 02 WIND VELOC 02 WAVE PERIOD 5
 HOUR 12.6 TEMP DRY 31.0 VISIBILITY 8 WIND DIREC 06 TRANSPAR
 LAT 18-31.5 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0429
 LONG 66-30.5 W REL HUMID 074 CLOUD AMT 1 WAVE HEIGHT 3 COLOR 10

CAST 1 MESS TIME 12.6 GMT, 0837 LOCAL MAX DEPTH 300 WIRE ANGLE 5
 OXYGEN TITER 1,054 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
0	0		0	11	27.11	27.12	27.12	35.973	23.43	4.81	6.87	101.71	.04	.
25	25		24	12	26.81	0.00	26.81	36.027	23.57	4.80	6.85	101.09	.03	.
50	50		54	15	26.48	0.00	26.48	36.094	23.73	4.83	6.90	101.31	.04	.
100	100		101	16	25.62	0.00	25.62	36.314	24.16	4.96	7.08	101.71	.03	.
150	149		149	1	23.19	0.00	23.19	36.822	25.28	4.51	6.45	87.44	.04	.
200	199		200	2	20.45	0.00	20.45	36.704	25.96	4.28	6.12	81.15	.12	.
250	249		247	3	18.55	0.00	18.55	36.546	26.33	4.38	6.25	77.32	.20	.
300	298		298	4	17.28	0.00	17.28	36.403	26.54	4.48	6.40	78.34	.33	.

R V PALUMBO CRUISE STATION PMA-4C PRNC REFERENCE 28463

DATE 5/11/73 BARO 1018.0 WEATHER 02 WIND VELOC 02 WAVE PERIOD 5
 HOUR 13.5 TEMP DRY 30.0 VISIBILITY 8 WIND DIREC 07 TRANSPAR
 LAT 18-31.7 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0420
 LONG 66-31.6 W REL HUMID 077 CLOUD AMT 2 WAVE HEIGHT 3 COLOR 10

CAST 1 MESS TIME 13.5 GMT, 0928 LOCAL MAX DEPTH 300 WIRE ANGLE 0
 OXYGEN TITER 1.054 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CZ	TZ	BN	TL	TM	TEMP		TAVE	SALIN	SIG T	OXYGEN		%SAT	PHOS	NITRA
							TL	TM				ML/L	MG/L			
0	0	0	0	11	27.16	27.16	27.16	27.16	35.984	23.43	4.78	6.82	101.14	.04	.	
25	25	26	26	12	26.74	0.00	26.74	26.74	36.035	23.60	4.82	6.88	101.43	.03	.	
50	50	57	57	15	26.34	0.00	26.34	26.34	36.118	23.79	4.84	6.91	101.33	.03	.	
100	100	103	103	16	25.14	0.00	25.14	25.14	36.472	24.43	4.99	7.12	102.30	.04	.	
150	150	152	152	1	23.11	0.00	23.11	23.11	36.844	25.32	4.45	6.36	86.22	.07	.	
200	200	209	209	2	20.46	0.00	20.46	20.46	36.703	25.95	4.24	6.06	80.35	.13	.	
250	250	251	251	3	18.34	0.00	18.34	18.34	36.564	26.40	4.45	6.36	78.58	.20	.	
300	300	299	299	4	17.28	0.00	17.28	17.28	36.422	26.55	4.45	6.36	77.82	.34	.	

R V PALUMBO CRUISE STATION PMA-3C PRNC REFERENCE 28464

DATE 5/11/73 BARO 1018.0 WEATHER 02 WIND VELOC 04 WAVE PERIOD 5
 HOUR 14.2 TEMP DRY 30.0 VISIBILITY 8 WIND DIREC 08 TRANSPAR
 LAT 18-31.7 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0490
 LONG 66-32.6 W REL HUMID 073 CLOUD AMT 2 WAVE HEIGHT 3 COLOR 10

CAST 1 MESS TIME 14.3 GMT, 1015 LOCAL MAX DEPTH 300 WIRE ANGLE 8
 OXYGEN TITER 1.054 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
0	0	0	11	27.18	27.19	27.19	36.005	23.44	4.80	6.85	101.69	.06	.	
25	25	26	12	26.77	0.00	26.77	36.056	23.61	4.81	6.87	101.31	.03	.	
50	50	53	15	26.29	0.00	26.29	36.145	23.83	4.89	6.99	100.39	.05	.	
100	99	99	16	25.05	0.00	25.05	36.509	24.49	5.02	7.17	102.92	.05	.	
150	149	147	1	22.88	0.00	22.88	36.859	25.40	4.47	6.39	86.51	.17	.	
200	198	197	2	20.47	0.00	20.47	36.751	25.99	4.29	6.13	81.40	.09	.	
250	247	251	3	18.32	0.00	18.32	36.559	26.40	4.40	6.28	77.63	.11	.	
300	297	295	4	17.05	0.00	17.05	36.389	26.58	4.47	6.39	78.05	.24	.	

R V PALUMBO CRUISE STATION PMA-3B PRNC REFERENCE 28465

DATE 5/11/73 BARO 1018.3 WEATHER 02 WIND VELOC 07 WAVE PERIOD 5
 HOUR 14.9 TEMP DRY 29.0 VISIBILITY 8 WIND DIREC 06 TRANSPAR
 LAT 18-30.5 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 06 SONIC DEP 0164
 LONG 66-32.6 W REL HUMID 074 CLOUD AMT 1 WAVE HEIGHT 3 COLOR 10

CAST 1 MESS TIME 15.0 GMT, 1058 LOCAL MAX DEPTH 100 WIRE ANGLE 9
 OXYGEN TITER 1.054 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
0	0	0	11	27.19	27.17	27.18	35.999	23.43	4.82	6.88	102.11	.04	.	
25	25	27	12	26.93	0.00	26.93	36.027	23.53	4.78	6.82	100.85	.06	.	
50	50	52	15	26.26	0.00	26.26	36.167	23.85	4.83	6.90	99.12	.03	.	
100	99	109	16	24.95	0.00	24.95	36.553	24.55	4.91	7.02	95.34	.03	.	

R V PALUMBO CRUISE STATION PMA-3A PRNC REFERENCE 28466

DATE 5/11/73 BARO 1018.0 WEATHER 02 WIND VELOC 07 WAVE PERIOD 5
 HOUR 15.3 TEMP DRY 29.0 VISIBILITY 8 WIND DIREC 06 TRANSPAR
 LAT 18-29.4 N TEMP WET 0.0 CLOUD TYPE 8 CLOUD AMT 2 WAVE DIREC 07 SONIC DEP 0020
 LONG 66-32.6 W REL HUMID 074 METER WHEEL FACTOR .997 WAVE HEIGHT 3 COLOR 20

CAST 1 MESS TIME 15.3 GMT, 1118 LOCAL MAX DEPTH 10 WIRE ANGLE 3
 OXYGEN TITER 1.054 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN									
	WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
0	0	0	0	11	27.24	27.22	27.23	35.664	23.16	4.77	6.81	100.19	.08	.
10	10	12	12	12	26.98	0.00	26.98	36.006	23.50	4.80	6.85	101.34	.17	.

R V PALUMBO CRUISE STATION PMA-4A PRNC REFERENCE 28467

DATE 5/11/73 BARO 1017.9 WEATHER 02 WIND VELOC 07 WAVE PERIOD 5
 HOUR 15.8 TEMP DRY 29.0 VISIBILITY 8 WIND DIREC 07 TRANSPAR
 LAT 18-29.3 N TEMP WET 0.0 CLOUD TYPE 8 CLOUD AMT 2 WAVE DIREC 07 SONIC DEP 0020
 LONG 66-31.6 W REL HUMID 076 METER WHEEL FACTOR .997 WAVE HEIGHT 3 COLOR 20

CAST 1 MESS TIME 15.8 GMT, 1146 LOCAL MAX DEPTH 10 WIRE ANGLE 5
 OXYGEN TITER 1.054 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN									
	WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
0	0	0	0	11	27.18	27.17	27.18	36.009	23.44	4.79	6.84	101.46	.10	.
10	10	13	12	12	27.03	0.00	27.03	35.998	23.48	4.80	6.85	101.40	.09	.

R V PALUMBO CRUISE STATION TOR-1A PRNC REFERENCE 28468

DATE 5/11/73 BARO 1015.5 WEATHER 02 WIND VELOC WAVE PERIOD 4
 HOUR 21.7 TEMP DRY 27.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-28.9 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 02 SONIC DEP 0018
 LONG 66-29.4 W REL HUMID 078 CLOUD AMT 8 WAVE HEIGHT 3 COLOR 20

CAST 1 MESS TIME 21.8 GMT, 1745 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.054 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN				PHOS	NITRA		
	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T			ML/L	MG/L	XSAT
0	0	0	11	27.32	27.17	27.25	36.036	23.44	4.98	7.11	105.68	.03
10	10	12	27.16	0.00	27.16	36.037	23.47	5.00	7.14	105.98	.00	

R V PALUMBO CRUISE STATION PMA-5A PRNC REFERENCE 28469

DATE 5/11/73 BARO 1015.5 WEATHER 02 WIND VELOC 04 WAVE PERIOD 5
 HOUR 22.1 TEMP DRY 28.0 VISIBILITY 8 WIND DIREC 09 TRANSPAR
 LAT 18-29.0 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 01 SONIC DEP 0020
 LONG 66-30.6 W REL HUMID 077 CLOUD AMT 8 WAVE HEIGHT 3 COLOR 20

CAST 1 MESS TIME 22.1 GMT, 1806 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.054 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN				PHOS	NITRA		
	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T			ML/L	MG/L	XSAT
0	0	0	11	27.15	27.15	27.15	36.001	23.44	4.87	6.96	103.18	.00
10	10	12	27.15	0.00	27.15	36.004	23.45	4.91	7.02	104.08	.05	

R V PALUMBO CRUISE

STATION PMA-5B

PRNC REFERENCE 28470

DATE 5/11/73 BARO 1015.5 WEATHER
 HOUR 22.5 TEMP DRY 28.0 VISIBILITY 8 WAVE PERIOD 5
 LAT 18-30.6 N TEMP WET 0.0 CLOUD TYPE 8 TRANSPAR
 LONG 66-30.7 W REL HUMID 081 CLOUD AMT 7 WAVE DIREC 02 SONIC DEP 0190
 WAVE HEIGHT 3 COLOR 10

CAST 1 MESS TIME 22.5 GMT, 1828 LOCAL MAX DEPTH 100 WIRE ANGLE 2
 OXYGEN TITER 1,054 METER WHEEL FACTOR .997

DEPTH (M)	WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	OXYGEN		PHOS	NITRA
										ML/L	MG/L			XSAT
0	0	0	11	27.08	27.09	27.09	36.005	23.47	4.85	6.93	102.63	.05	.
25	25	28	12	27.04	0.00	27.04	36.007	23.48	4.86	6.94	102.78	.03	.
50	50	72	15	26.68	0.00	26.68	36.066	23.64	4.83	6.90	101.61	.00	.
100	100	96	16	25.65	0.00	25.65	36.340	24.17	4.89	6.99	100.46	.04	.

R V PALUMBO CRUISE

STATION PMA-4B

PRNC REFERENCE 28471

DATE 5/11/73 BARO 1016.0 WEATHER
 HOUR 22.8 TEMP DRY 26.0 VISIBILITY 02 WAVE PERIOD 4
 LAT 18-30.6 N TEMP WET 0.0 CLOUD TYPE 8 TRANSPAR
 LONG 66-31.6 W REL HUMID 084 CLOUD AMT 8 WAVE DIREC 01 SONIC DEP 0182
 WAVE HEIGHT 3 COLOR 10

CAST 1 MESS TIME 22.9 GMT, 1852 LOCAL MAX DEPTH 100 WIRE ANGLE 2
 OXYGEN TITER 1,054 METER WHEEL FACTOR .997

DEPTH (M)	WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	OXYGEN		PHOS	NITRA
										ML/L	MG/L			XSAT
0	0	0	11	27.04	27.03	27.04	36.004	23.48	4.85	6.93	102.54	.03	.
25	25	25	12	27.03	0.00	27.03	35.999	23.48	4.85	6.93	102.52	.06	.
50	50	51	15	26.60	0.00	26.60	36.084	23.68	4.88	6.97	102.62	.03	.
100	100	99	16	25.36	0.00	25.36	36.421	24.32	4.93	7.05	101.28	.00	.

R V PALUMBO CRUISE STATION PMA=2A PRNC REFERENCE 28472

DATE 5/11/73 BARO 1016.0 WEATHER 02 WIND VELOC 07 WAVE PERIOD 4
 HOUR 23.4 TEMP DRY 27.0 VISIBILITY 8 WIND DIREC 09 TRANSPAR
 LAT 18-29.7 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 01 SONIC DEP 0020
 LONG 66-33.6 W REL HUMID 087 CLOUD AMT 8 WAVE HEIGHT 3 COLOR 20

CAST 1 MESS TIME 23.4 GMT, 1924 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.054 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			OXYGEN			PHOS NITRA					
	CZ	TZ	BN	TL	TM	TAVE		SALIN	SIG T	ML/L	MG/L	XSAT
0	0	0	11	27.20	27.20	27.20	35.879	23.34	4.83	6.90	102.05	.05
10	10	13	12	27.11	0.00	27.11	35.999	23.46	4.84	6.91	102.44	.00

R V PALUMBO CRUISE STATION PMA=1A PRNC REFERENCE 28473

DATE 5/11/73 BARO 1016.5 WEATHER 02 WIND VELOC 04 WAVE PERIOD 4
 HOUR 23.7 TEMP DRY 26.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-30.3 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 02 SONIC DEP 0021
 LONG 66-34.8 W REL HUMID 086 CLOUD AMT 5 WAVE HEIGHT 2 COLOR 20

CAST 1 MESS TIME 23.7 GMT, 1943 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.054 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			OXYGEN			PHOS NITRA					
	CZ	TZ	BN	TL	TM	TAVE		SALIN	SIG T	ML/L	MG/L	XSAT
0	0	0	11	27.22	27.23	27.23	35.942	23.30	5.00	7.14	105.83	.03
10	10	12	12	27.21	0.00	27.21	35.943	23.38	4.91	7.02	104.02	.03

R V PALUMBO CRUISE STATION PMA-1B PRNC REFERENCE 28474

DATE 5/12/73 BARO 1016.5 WEATHER 02 WIND VELOC 04 WAVE PERIOD 5
 HOUR 0.1 TEMP DRY 25.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-30.2 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 02 SONIC DEP 0164
 LONG 66-34.7 W REL HUMID 086 CLOUD AMT 5 WAVE HEIGHT 3 COLOR 10

CAST 1 MESS TIME 0.1 GMT, 2006 LOCAL MAX DEPTH 100 WIRE ANGLE 2
 OXYGEN TITER 1.054 METER WHEEL FACTOR .997

DEPTH (M)	WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	OXYGEN			PHOS	NITRA
										ML/L	MG/L	%SAT		
0	0	0	0	11	27.04	27.03	27.04	36.013	23.49	4.84	6.91	102.34	.03	.
25	25	27	27	12	26.80	0.00	26.80	36.032	23.58	4.90	7.00	103.31	.36	.
50	50	54	54	15	26.64	0.00	26.64	36.065	23.65	4.86	6.94	102.21	.09	.
100	100	99	99	16	25.03	0.00	25.03	36.505	24.49	4.96	7.06	101.61	.09	.

R V PALUMBO CRUISE STATION PMA-2B PRNC REFERENCE 28475

DATE 5/12/73 BARO 1016.5 WEATHER 02 WIND VELOC 04 WAVE PERIOD 5
 HOUR 0.5 TEMP DRY 25.0 VISIBILITY 7 WIND DIREC 08 TRANSPAR
 LAT 18-31.0 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 04 SONIC DEP 0146
 LONG 66-33.7 W REL HUMID 088 CLOUD AMT 4 WAVE HEIGHT 3 COLOR 10

CAST 1 MESS TIME 0.5 GMT, 2033 LOCAL MAX DEPTH 100 WIRE ANGLE 0
 OXYGEN TITER 1.054 METER WHEEL FACTOR .997

DEPTH (M)	WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	OXYGEN			PHOS	NITRA
										ML/L	MG/L	%SAT		
0	0	0	0	11	27.08	27.10	27.09	35.997	23.46	4.83	6.90	102.17	.08	.
25	25	27	27	12	26.93	0.00	26.93	36.006	23.52	4.85	6.93	102.36	.08	.
50	50	52	52	15	26.74	0.00	26.74	36.030	23.60	4.88	6.97	102.75	.07	.
100	100	103	103	16	24.99	0.00	24.99	36.423	24.44	5.01	7.15	96.64	.05	.

R V PALUMBO CRUISE STATION PMA-2C PRNC REFERENCE 28476

DATE 5/12/73 BARO 1017.0 WEATHER 02 WIND VELOC 04 WAVE PERIOD 5
 HOUR 0.9 TEMP DRY 25.0 VISIBILITY 7 WIND DIREC 08 TRANSPAR
 LAT 18-31.7 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 04 SONIC DEP 0365
 LONG 66-33.6 W REL HUMID 087 CLOUD AMT 5 WAVE HEIGHT 3 COLOR 10

CAST 1 MESS TIME 1.0 GMT, 2057 LOCAL MAX DEPTH 100 WIRE ANGLE 2
 OXYGEN TITER 1.054 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	OXYGEN			PHOS	NITRA
										ML/L	MG/L	XSAT		
0	0	0	0	11	27.04	27.04	27.04	35.996	23.48	4.79	6.84	101.19	.06	.
25	25	28	28	12	27.07	0.00	27.07	36.017	23.48	4.82	6.88	101.97	.05	.
50	50	56	56	15	26.72	0.00	26.72	36.038	23.61	4.83	6.90	101.62	.01	.
100	100	101	101	16	24.80	0.00	24.80	36.541	24.59	4.94	7.06	95.82	.05	.

CAST 2 MESS TIME 1.3 GMT, 2120 LOCAL MAX DEPTH 300 WIRE ANGLE 0
 OXYGEN TITER 1.054 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	OXYGEN			PHOS	NITRA
										ML/L	MG/L	XSAT		
150	150	0	0	11	23.03	23.00	23.02	36.832	25.34	4.57	6.52	86.37	.08	.
200	200	210	210	12	20.01	0.00	20.01	36.694	26.07	4.20	6.00	79.31	.16	.
250	250	255	255	15	18.68	0.00	18.68	36.597	26.34	4.31	6.16	76.40	.21	.
300	300	297	297	16	17.52	0.00	17.52	36.441	26.51	4.48	6.40	78.50	.27	.

R V PALUMBO CRUISE STATION ISL-1C PRNC REFERENCE 32511
 DATE 6/ 6/73 BARO 1016.5 WEATHER 03 WIND VELOC 02 WAVE PERIOD 4
 HOUR 10.1 TEMP DRY 25.0 VISIBILITY 7 WIND DIREC 04 TRANSPAR
 LAT 18-31.7 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 06 SONIC DEP 0350
 LONG 66-39.0 W REL HUMID 068 CLOUD AMT 1 WAVE HEIGHT 2 COLOR

CAST 1 MESS TIME 10.0 GMT, 0603 LOCAL MAX DEPTH 300 WIRE ANGLE 9
 OXYGEN TITER 1.113 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN				PHOS	NITRA			
	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T			ML/L	MG/L	XSAT
0	0	0.1	11	20.30	20.30	28.30	35.938	23.02	4.94	7.06	106.58	.06	.
25	25	2+2	12	20.20	0.00	28.28	35.905	23.00	4.93	7.05	106.18	.04	.
50	50	53.3	15	27.78	0.00	27.79	36.090	23.31	4.98	7.11	106.08	.04	.
100	99	97.4	16	23.22	0.00	25.22	36.619	24.52	5.19	7.41	106.62	.06	.
150	148	153.5	1	22.66	0.00	22.66	36.995	25.56	4.70	6.71	91.10	.06	.
200	197	197.6	2	19.45	0.00	19.45	36.637	26.17	4.44	6.35	79.22	.14	.
250	247	2+9.7	3	10.14	0.00	10.14	36.494	26.40	4.63	6.62	81.53	.26	.
300	296	295.8	4	17.08	0.00	17.08	36.334	26.53	4.01	6.87	83.89	.29	.

R V PALUMBO CRUISE STATION ISL-1A PRNC REFERENCE 32512
 DATE 6/ 6/73 BARO 1017.5 WEATHER 03 WIND VELOC 02 WAVE PERIOD 4
 HOUR 12.5 TEMP DRY 29.0 VISIBILITY 8 WIND DIREC 04 TRANSPAR
 LAT 18-29.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0018
 LONG 66-39.0 W REL HUMID 068 CLOUD AMT 1 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 12.5 GMT, 0830 LOCAL MAX DEPTH 10 WIRE ANGLE 2
 OXYGEN TITER 1.113 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN				PHOS	NITRA			
	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T			ML/L	MG/L	XSAT
0	0	0.9	11	28.27	28.27	28.27	35.973	23.06	4.98	7.11	107.38	.03	.
10	10	11.0	12	28.25	0.00	28.25	35.970	23.06	5.01	7.16	108.05	.04	.

R V PALUMBO CRUISE STATION ISL02A PRNC REFERENCE 32513

DATE 0/ 6/73 BARO 1017.5 WEATHER 02 WIND VELOC 02 WAVE PERIOD 4
 HOUR 13.0 TEMP DRY 29.0 VISIBILITY 8 WIND DIREC 04 TRANSPAR
 LAT 18-29.9 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0018
 LONG 66-37.0 W REL HUMID CLOUD AMT 1 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 13.0 GMT, 0900 LOCAL MAX DEPTH 10 WIRE ANGLE 2
 OXYGEN TITER 1.113 METER WHEEL FACTOR .997

DEPTH (M) TEMP TAVE SALIN SIG T ML/L MG/L XSAT PHOS NITRA
 WIRE CZ TZ BN TL TH TM OXYGEN
 0 0 0 11 20.29 28.29 28.29 35.956 23.04 4.94 7.06 106.63 .00 ;
 10 10 10 12 20.28 0.00 20.28 35.958 23.04 4.92 7.03 106.14 .00 ;

R V PALUMBO CRUISE STATION ISL03A PRNC REFERENCE 32514

DATE 0/ 6/73 BARO 1017.5 WEATHER 02 WIND VELOC 07 WAVE PERIOD 4
 HOUR 13.3 TEMP DRY 29.0 VISIBILITY 8 WIND DIREC 04 TRANSPAR
 LAT 18-30.1 N TEMP WET 0.0 CLOUD TYPE 3 WAVE DIREC 06 SONIC DEP 0018
 LONG 66-36.9 W REL HUMID 075 CLOUD AMT 1 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 13.3 GMT, 0920 LOCAL MAX DEPTH 10 WIRE ANGLE 2
 OXYGEN TITER 1.113 METER WHEEL FACTOR .997

DEPTH (M) TEMP TAVE SALIN SIG T ML/L MG/L XSAT PHOS NITRA
 WIRE CZ TZ BN TL TH TM OXYGEN
 0 0 0 11 20.29 28.30 28.30 35.939 23.02 4.93 7.05 106.33 .00 ;
 10 10 10 12 20.28 0.00 20.28 35.960 23.04 4.91 7.02 105.91 .05 ;

R V PALUMBO CRUISE STATION ISL-4A PRNC REFERENCE 32515

DATE 8/ 6/73 BARO 1017.5 WEATHER 02 WIND VELOC 53 WAVE PERIOD 4
 HOUR 13.6 TEMP DRY 29.0 VISIBILITY 8 WIND DIREC 04 TRANSPAR
 LAT 18-30.3 N TEMP WET 0.0 CLOUD TYPE 3 WAVE DIREC 06 SONIC DEP 0017
 LONG 66-35.8 W REL HUMID 075 CLOUD AMT 2 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 13.6 GMT, 0938 LOCAL MAX DEPTH 10 WIRE ANGLE 1
 OXYGEN TITER 1.113 METER WHEEL FACTOR ,997

DEPTH (M) TEMP OXYGEN PHOS NITRA

WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT
0	0	015	11	28.31	28.31	28.31	35.952	23.03	4.92	7.03	106.17
10	10	1116	12	28.31	0.00	28.31	35.955	23.03	4.90	7.00	105.70

R V PALUMBO CRUISE STATION ISL-4B PRNC REFERENCE 32516

DATE 8/ 6/73 BARO 1017.5 WEATHER 03 WIND VELOC 09 WAVE PERIOD 4
 HOUR 14.0 TEMP DRY 29.0 VISIBILITY 8 WIND DIREC 04 TRANSPAR
 LAT 18-31.3 N TEMP WET 0.0 CLOUD TYPE 3 WAVE DIREC 07 SONIC DEP 0150
 LONG 66-35.8 W REL HUMID 075 CLOUD AMT 2 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 14.0 GMT, 1001 LOCAL MAX DEPTH 100 WIRE ANGLE 7
 OXYGEN TITER 1.113 METER WHEEL FACTOR ,997

DEPTH (M) TEMP OXYGEN PHOS NITRA

WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT
0	0	017	11	28.31	28.32	28.32	35.908	22.99	4.89	6.98	105.29
25	25	2918	12	28.26	0.00	28.26	35.915	23.02	4.91	7.02	105.70
50	50	5419	15	27.89	0.00	27.89	36.081	23.26	5.02	7.17	108.02
100	99	9720	16	25.64	0.00	25.64	36.353	24.19	5.22	7.46	107.25

R V PALUMBO CRUISE STATION ISL-4C PRNC REFERENCE 32517

DATE 8/ 6/73 BARO 1017.5 WEATHER 02 WIND VELOC 11 WAVE PERIOD 4
 HOUR 14.5 TEMP DRY 29.5 VISIBILITY 8 WIND DIREC 04 TRANSPAR
 LAT 18-31.7 N TEMP WET 0.0 CLOUD TYPE 3 WAVE DIREC 07 SONIC DEP 0350
 LONG 66-35.8 W REL HUMID 075 CLOUD AMT 2 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 14.5 GMT, 1029 LOCAL, MAX DEPTH 300 WIRE ANGLE 6
 OXYGEN TITER 1.113 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CZ	TZ	BN	TL	TM	TEMP	TAVE	SALIN	SIG T	OXYGEN		XSAT	PHOS	NITRA
											ML/L	MG/L			
0	0	0	021	11	28.30	28.28	28.28	28.29	35.908	23.00	4.89	6.98	105.25	.06	.
25	24	22	0.00	12	28.28	0.00	28.28	28.28	35.903	23.00	4.91	7.02	105.69	.07	.
50	51	23	0.00	15	27.91	0.00	27.91	27.91	36.102	23.27	5.09	7.27	109.57	.00	.
100	98	24	0.00	16	25.75	0.00	25.75	25.75	36.305	24.12	5.21	7.44	107.00	.00	.
150	149	25	0.00	1	23.32	0.00	23.32	23.32	36.927	25.32	4.89	6.98	95.13	.	.
200	199	26	0.00	2	20.77	0.00	20.77	20.77	36.909	26.03	4.41	6.30	83.98	.07	.
250	248	27	0.00	3	18.62	0.00	18.62	18.62	36.607	26.36	4.51	6.44	79.90	.17	.
300	298	246	20	4	17.38	0.00	17.38	17.38	36.429	26.53	4.79	6.84	83.80	.31	.

R V PALUMBO CRUISE STATION ISL-3C PRNC REFERENCE 32518

DATE 8/ 6/73 BARO 1017.5 WEATHER WIND VELOC 10 WAVE PERIOD 4
 HOUR 15.3 TEMP DRY 29.0 VISIBILITY 8 WIND DIREC 04 TRANSPAR
 LAT 18-31.6 N TEMP WET 0.0 CLOUD TYPE 3 WAVE DIREC 07 SONIC DEP 0410
 LONG 66-36.8 W REL HUMID 074 CLOUD AMT 2 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 15.3 GMT, 1119 LOCAL MAX DEPTH 300 WIRE ANGLE 2
 OXYGEN TITER 1.113 METER WHEEL FACTOR .997

WIRE	DEPTH (M)		TEMP		TAVE	SALIN	SIG T	OXYGEN		%SAT	PHOS	NITRA
	CZ	TZ	TL	TM				ML/L	MG/L			
0	0	029	11	28.35	28.36	28.36	23.02	4.91	7.02	106.03	.05	.
25	25	2730	12	28.27	0.00	28.27	23.06	4.93	7.05	106.42	.05	.
50	50	5231	15	27.49	0.00	27.49	23.42	5.17	7.38	110.43	.03	.
100	100	9932	16	25.02	0.00	25.02	24.11	5.22	7.46	107.30	.05	.
150	150	15533	1	23.31	0.00	23.31	25.29	4.90	7.00	95.23	.07	.
200	200	19834	2	21.07	0.00	21.07	25.97	4.45	6.36	85.08	.08	.
250	250	25135	3	18.82	0.00	18.82	26.31	4.50	6.43	79.80	.14	.
300	299	29636	4	17.62	0.00	17.62	26.50	4.67	6.67	81.81	.33	.

R V PALUMBO CRUISE STATION ISL-38 PRNC REFERENCE 32519

DATE 8/ 6/73 BARO 1000.0 WEATHER 03 WIND VELOC 16 WAVE PERIOD 4
 HOUR 15.9 TEMP DRY 31.0 VISIBILITY 8 WIND DIREC 04 TRANSPAR
 LAT 18-30.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 06 SONIC DEP 0164
 LONG 66-36.8 W REL HUMID CLOUD AMT 2 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 15.7 GMT, 1145 LOCAL MAX DEPTH 50 WIRE ANGLE 8
 OXYGEN TITER 1.113 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			TAVE	SALIN	SIG T	OXYGEN ML/L	XSAT	PHOS	NITRA
	TZ	BN	TL							
0	0	11	28.40	28.40	35.985	23.02	4.98	7.11	107.67	.04
25	25	12	28.31	0.00	28.31	35.991	23.06	4.94	106.80	.04
50	50	15	27.94	0.00	27.94	36.137	23.29	5.04	103.92	.00

CAST 2 MESS TIME 16.1 GMT, 1206 LOCAL MAX DEPTH 100 WIRE ANGLE 20
 OXYGEN TITER 1.113 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			TAVE	SALIN	SIG T	OXYGEN ML/L	XSAT	PHOS	NITRA
	TZ	BN	TL							
100	94	1	25.84	0.00	25.84	36.356	24.11	5.21	7.44	107.09

R V PALUMBO CRUISE STATION ISL-2B PRNC REFERENCE 32520
 DATE 8/ 6/73 BARO 1016.5 WEATHER 03 WIND VELOC 18 WAVE PERIOD 4
 HOUR 16.6 TEMP DRY 31.0 VISIBILITY 8 WIND DIREC 06 TRANSPAR
 LAT 18-30.9 N TEMP WET 0.0 CLOUD TYPE 8 CLOUD AMT 5 WAVE DIREC 06 SONIC DEP 0180
 LONG 66-37.8 W REL HUMID 072 CLOUD AMT 5 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 16.6 GMT, 1238 LOCAL MAX DEPTH 100 WIRE ANGLE 26
 OXYGEN TITER 1.113 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CZ	TZ	BN	TL	TEMP			TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
						TM	TL	TH								
0	0	0	0.41	1	28.30	0.00	0.00	28.30	35.905	23.00	4.91	7.02	105.73	.05	.	.
25	23	29.42		2	28.27	0.00	0.00	28.27	35.963	23.05	4.93	7.05	106.38	.04	.	.
50	45	51.43		3	28.13	0.00	0.00	28.13	36.150	23.24	4.99	7.13	102.87	.05	.	.
100	90	86.44		4	25.76	0.00	0.00	25.76	36.389	24.18	5.21	7.44	107.13	.06	.	.

R V PALUMBO CRUISE STATION ISL-18 PRNC REFERENCE 32521
 DATE 8/ 6/73 BARO 1016.5 WEATHER 03 WIND VELOC 14 WAVE PERIOD 4
 HOUR 17.3 TEMP DRY 31.0 VISIBILITY 8 WIND DIREC 06 TRANSPAR
 LAT 18-31.1 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 06 SONIC DEP 0160
 LONG 66-39.1 W REL HUMID 074 CLOUD AMT 5 WAVE HEIGHT 4 COLOR

CAST 1 MESS TIME 17.3 GMT, 1315 LOCAL MAX DEPTH 100 WIRE ANGLE 4
 OXYGEN TITER 1.113 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA	
															TEMP
0	0	4.45		1	28.38	0.00	0.00	28.38	35.962	23.01	4.97	7.09	107.30	.04	.
25	25	30.46		2	28.28	0.00	0.00	28.28	35.987	23.06	4.98	7.11	107.45	.07	.
50	50	52.47		3	20.71	0.00	0.00	20.31	36.083	25.52	4.99	7.13	94.36	.03	.
100	100	106.46		4	25.58	0.00	0.00	25.58	36.421	24.26	5.26	7.51	107.99	.00	.

DISCARD TEMPERATURE

R V PALUMBO CRUISE STATION ISL-2C PRNC REFERENCE 32522

DATE 8/ 6/73 BARO 1016.5 WEATHER 01 WIND VELOC 14 WAVE PERIOD 4
 HOUR 17.8 TEMP DRY 31.0 VISIBILITY 8 WIND DIREC 04 TRANSPAR
 LAT 18-31.7 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 06 SONIC DEP 0365
 LONG 66-38.0 W REL HUMID 074 CLOUD AMT 2 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 17.8 GMT, 1347 LOCAL MAX DEPTH 100 WIRE ANGLE 7
 OXYGEN TITER 1.113 METER WHEEL FACTOR .997

WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA	TEMP	
														OXYGEN	
0	0	0.49	1	28.39	0.00	28.39	35.920	22.98	5.26	7.51	113.39	.00	.		
25	28.50		2	28.28	0.00	28.28	35.956	23.04	4.98	7.11	107.33	.00	.		
50	53.54		3	28.02	0.00	28.02	36.115	23.25	5.18	7.40	111.76	.03	.		
100	97.52		4	25.56	0.00	25.56	36.429	24.27	6.47	9.24	132.92	.05	.		

CAST 2 MESS TIME 18.6 GMT, 1435 LOCAL MAX DEPTH 300 WIRE ANGLE 17
 OXYGEN TITER 1.113 METER WHEEL FACTOR .997

WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA	TEMP	
														OXYGEN	
150	144.46	53	1	23.29	0.00	23.29	36.881	25.29	5.10	7.29	99.08	.04	.		
200	191.93	54	2	20.83	0.00	20.83	36.858	25.97	4.48	6.39	85.23	.09	.		
250	239.24	55	3	19.10	0.00	19.10	36.638	26.26	4.54	6.49	80.83	.17	.		
300	287.29	56	4	17.80	0.00	17.80	36.478	26.47	4.73	6.76	83.11	.29	.		

R V PALUMBO CRUISE STATION PMA-1A PRNC REFERENCE 32523

DATE 8/ 7/73 BARO 1018.5 WEATHER 02 WIND VELOC 02 WAVE PERIOD 4
 HOUR 11.8 TEMP DRY 27.0 VISIBILITY 8 WIND DIREC 07 TRANSPAR
 LAT 18-30.2 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0017
 LONG 66-34.7 W REL HUMID 084 CLOUD AMT 1 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 11.8 GMT, 0747 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.040 METER WHEEL FACTOR .997

DEPTH (M)	WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	0	0	11	28.29	28.30	28.30	35.981	23.06	4.56	6.51	98.38	.00	.
10	10	9	9	12	28.30	0.00	28.30	35.983	23.06	4.53	6.46	97.72	.03	.

R V PALUMBO CRUISE STATION PMA-2A PRNC REFERENCE 32524

DATE 8/ 7/73 BARO 1018.5 WEATHER 02 WIND VELOC 07 WAVE PERIOD 4
 HOUR 12.1 TEMP DRY 29.0 VISIBILITY 8 WIND DIREC 07 TRANSPAR
 LAT 18-29.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0022
 LONG 66-34.6 W REL HUMID CLOUD AMT 1 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 12.1 GMT, 0804 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.040 METER WHEEL FACTOR .997

DEPTH (M)	WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	0	0	11	28.32	28.32	28.32	35.985	23.05	4.58	6.54	98.88	.03	.
10	10	11	11	12	28.31	0.00	28.31	35.980	23.05	4.60	6.57	99.30	.03	.

R V PALUMBO CRUISE STATION PMA-3A PRNC REFERENCE 32525

DATE 07 7/73 BARO 1018.5 WEATHER 03 WIND VELOC 07 WAVE PERIOD 4
 HOUR 12.3 TEMP DRY 29.0 VISIBILITY 8 WIND DIREC 09 TRANSPAR
 LAT 18-29.6 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0019
 LONG 66-32.7 W REL HUMID 075 CLOUD AMT 1 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 12.3 GMT, 0820 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.040 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			TAVE	SALIN	SIG Y	ML/L	MG/L	XSAT	PHOS	NITRA
	WIRE	CZ	TZ								
0	0	0	0	28.28	35.126	22.42	4.64	6.63	97.15	.12	.
10	10	16	12	28.32	35.993	23.06	4.61	6.58	99.58	.00	.

R V PALUMBO CRUISE STATION PMA-4A PRNC REFERENCE 32526

DATE 08 7/73 BARO 1019.0 WEATHER 02 WIND VELOC 11 WAVE PERIOD 4
 HOUR 12.7 TEMP DRY 29.0 VISIBILITY 8 WIND DIREC 08 TRANSPAR
 LAT 18-29.5 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0020
 LONG 66-31.4 W REL HUMID 081 CLOUD AMT 1 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 12.7 GMT, 0840 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.040 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			TAVE	SALIN	SIG Y	ML/L	MG/L	XSAT	PHOS	NITRA
	WIRE	CZ	TZ								
0	0	0	0	28.31	35.968	23.04	4.62	6.60	99.70	.00	.
10	10	14	12	28.31	35.968	23.04	4.60	6.57	99.25	.04	.

R V PALUMBO CRUISE STATION PMA-5A PRNC REFERENCE 32527

DATE 8/ 7/73 BARO 1019.0 WEATHER 02 WIND VELOC 11 WAVE PERIOD 4
 HOUR 13.1 TEMP DRY 28.5 VISIBILITY 8 WIND DIREC 09 TRANSPAR
 LAT 18-29.3 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0020
 LONG 66-30.4 W REL HUMID 080 CLOUD AMT 1 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 13.0 GMT, 0903 LOCAL MAX DEPTH 10 WIRE ANGLE 2
 OXYGEN TITER 1.040 METER WHEEL FACTOR .997

DEPTH (M) OXYGEN PHOS NITRA

WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT
0	0	0	11	28.30	28.31	28.31	35.962	23.04	4.61	6.58	99.45
10	10	10	12	28.29	0.00	28.29	35.964	23.04	4.59	6.55	98.98

R V PALUMBO CRUISE STATION PMA-5B PRNC REFERENCE 32528

DATE 8/ 7/73 BARO 1019.2 WEATHER 03 WIND VELOC 12 WAVE PERIOD 5
 HOUR 13.5 TEMP DRY 29.0 VISIBILITY 8 WIND DIREC 09 TRANSPAR
 LAT 18-30.4 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0155
 LONG 66-30.5 W REL HUMID 077 CLOUD AMT 2 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 13.5 GMT, 0931 LOCAL MAX DEPTH 100 WIRE ANGLE 9
 OXYGEN TITER 1.040 METER WHEEL FACTOR .997

DEPTH (M) OXYGEN PHOS NITRA

WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT
0	0	0	11	28.30	28.31	28.31	35.964	23.04	4.64	6.63	100.13
25	25	26	12	28.30	0.00	28.30	35.977	23.05	4.63	6.61	99.94
50	50	69	15	27.76	0.00	27.76	36.136	23.35	4.89	6.98	100.68
100	99	99	16	26.93	0.00	26.93	36.145	23.62	4.86	6.94	99.85

R V PALUMBO CRUISE STATION PMA-SC PRNC REFERENCE 32529

DATE 8/ 7/73 BARO 1018.5 WEATHER 02 WIND VELOC 11 WAVE PERIOD 4
 HOUR 14.1 TEMP DRY 29.0 VISIBILITY 8 WIND DIREC 09 TRANSPAR
 LAT 18-31.6 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0360
 LONG 66-30.5 W REL HUMID 079 CLOUD AMT 2 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 14.1 GMT, 1004 LOCAL MAX DEPTH 300 WIRE ANGLE 7
 OXYGEN TITER 1.040 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CZ	TZ	BN	TL	TM	TEMP	TAVE	SALIN	SIG T	OXYGEN		XSAT	PHOS	NITRA
											ML/L	MG/L			
0	0	0	0	11	28.32	28.33	28.33	28.33	35.999	23.06	4.62	6.60	99.84	.00	.
25	25	27	27	12	28.25	0.00	28.25	28.25	35.975	23.07	4.65	6.64	100.30	.00	.
50	50	53	53	15	27.46	0.00	27.46	27.46	36.126	23.44	4.83	6.90	103.16	.04	.
100	99	99	99	16	25.45	0.00	25.45	25.45	36.501	24.36	4.86	6.94	99.85	.03	.
150	149	148	148	1	23.19	0.00	23.19	23.19	37.020	25.43	4.50	6.44	87.82	.05	.
200	198	196	196	2	20.41	0.00	20.41	20.41	36.853	26.08	4.24	6.06	80.55	.11	.
250	248	246	246	3	18.29	0.00	18.29	18.29	36.573	26.42	4.28	6.11	75.51	.23	.
300	297	296	296	4	17.22	0.00	17.22	17.22	36.414	26.56	4.43	6.33	77.48	.32	.

R V PALUMBO CRUISE STATION PMA-4C PRNC REFERENCE 32530 WAVE PERIOD 5
 DATE 8/ 7/73 BARO 1018.5 WEATHER 03 WIND VELOC 11 TRANSPAR
 HOUR 14.9 TEMP DRY 29.0 VISIBILITY 8 WIND DIREC 09 SONIC DEP 0360
 LAT 18-31.7 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07
 LONG 66-31.6 W REL HUMID 079 CLOUD AMT 3 WAVE HEIGHT 3 COLOR
 CAST 1 MESS TIME 14.9 GMT, 1052 LOCAL MAX DEPTH 300 WIRE ANGLE 8
 OXYGEN TITER 1.040 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CZ	TZ	BN	TL	TEMP			TAVE	SALIN	SIG T	OXYGEN			XSAT	PHOS	NITRA
						TM	TL	TL				ML/L	MG/L	MG/L			
0	0	0	0	11	28.35	28.09	28.22	35.968	23.07	4.72	6.75	101.79	.00	.	.	.	
25	25	27	27	12	28.29	0.00	28.29	35.958	23.04	4.70	6.72	101.43	.00	.	.	.	
50	50	52	52	15	27.66	0.00	27.66	36.123	23.37	4.93	7.04	105.76	.00	.	.	.	
100	99	101	101	16	25.41	0.00	25.41	36.515	24.38	4.88	6.97	100.27	.03	.	.	.	
150	149	148	148	1	23.00	0.00	23.00	37.048	25.50	4.44	6.35	86.53	.06	.	.	.	
200	198	0	0	2	20.94	0.00	20.94	36.838	25.93	4.20	6.00	80.08	.11	.	.	.	
250	247	249	249	3	18.51	0.00	18.51	36.527	26.33	4.32	6.17	76.23	.18	.	.	.	
300	297	0	0	4	17.37	0.00	17.37	36.326	26.46	4.59	6.55	80.08	.34	.	.	.	

R V PALUMBO CRUISE STATION PMA-3C PRNC REFERENCE 32551

DATE 8/ 7/73 BARO 1018.5 WEATHER 03 WIND VELOC 13 WAVE PERIOD
 HOUR 15.7 TEMP DRY 31.0 VISIBILITY 8 WIND DIREC 09 TRANSPAR
 LAT 18-30.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0365
 LONG 66-33.7 W REL HUMID 076 CLOUD AMT 5 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 15.7 GMT, 1141 LOCAL MAX DEPTH 300 WIRE ANGLE 8
 OXYGEN TITER 1.040 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CZ	TZ	BN	TL	TEMP		TAVE	SALIN	SIG T	OXYGEN		XSAT	PHOS	NITRA
						TM	TL				ML/L	MG/L			
0	0	0	0	11	28.36	28.38	28.37	35.881	22.96	4.64	6.63	99.93	.03	.	.
25	25	24	24	12	28.34	0.00	28.34	35.919	22.99	4.62	6.60	99.57	.04	.	.
50	50	51	51	15	27.94	0.00	27.94	36.070	23.24	4.66	6.66	100.30	.03	.	.
100	99	97	97	16	25.68	0.00	25.68	36.311	24.14	4.97	7.10	102.09	.00	.	.
150	149	154	154	1	23.38	0.00	23.38	36.829	25.23	4.60	6.57	89.25	.00	.	.
200	198	200	200	2	20.53	0.00	20.53	36.798	26.01	4.18	5.97	79.40	.06	.	.
250	247	0	0	3	25.13	0.00	25.13	36.484	24.44	4.30	6.14	88.14	.24	.	.
300	297	295	295	4	17.18	0.00	17.18	36.324	26.50	4.44	6.35	77.48	.32	.	.

PRELIMINARY TRIP

R V PALUMBO CRUISE STATION PMA-3B PRNC REFERENCE 32532

DATE 8/ 7/73 BARO 1018.5 WEATHER 01 WIND VELOC 11 WAVE PERIOD 4
 HOUR 16.6 TEMP DRY 31.0 VISIBILITY 8 WIND DIREC 10 TRANSPAR
 LAT 18-30.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0180
 LONG 66-35.8 W REL HUMID 074 CLOUD AMT 2 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 16.6 GMT, 1237 LOCAL MAX DEPTH 100 WIRE ANGLE 14
 OXYGEN TITER 1.040 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN				PHOS	NITRA		
	WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN			SIG T	ML/L	MG/L	XSAT
0	0	0	11	28.40	28.39	28.40	35.814	22.90	4.65	6.64	99.95	.04
25	25	26	12	28.29	0.00	28.29	35.885	22.99	4.62	6.60	99.37	.03
50	49	50	15	28.10	0.00	28.10	36.063	23.18	4.67	6.67	100.79	.07
100	97	97	16	26.10	0.00	26.10	36.166	23.92	4.69	6.98	100.35	.07

R V PALUMBO CRUISE STATION PMA-2B PRNC REFERENCE 32533

DATE 8/ 7/73 BARO 1018.5 WEATHER 01 WIND VELOC 11 WAVE PERIOD 5
 HOUR 17.0 TEMP DRY 31.0 VISIBILITY 8 WIND DIREC 09 TRANSPAR
 LAT 18-31.0 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0190
 LONG 66-33.6 W REL HUMID 074 CLOUD AMT 2 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 17.0 GMT, 1300 LOCAL MAX DEPTH 100 WIRE ANGLE 10
 OXYGEN TITER 1.040 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN				PHOS	NITRA		
	WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN			SIG T	ML/L	MG/L	XSAT
0	0	0	11	28.46	28.44	28.45	35.877	22.93	4.64	6.63	100.05	.04
25	25	25	12	28.29	0.00	28.29	35.889	22.99	4.61	6.58	99.16	.04
50	50	50	15	28.15	0.00	28.15	36.059	23.16	4.57	6.52	98.62	.00
100	99	96	16	26.11	0.00	26.11	36.183	23.91	4.91	7.01	100.77	.03

R V PALUMBO CRUISE STATION PMA-1B PRNC REFERENCE 32534

DATE 0/ 7/73 BARO 1018.0 WEATHER 03 WIND VELOC 14 WAVE PERIOD
 HOUR 17.4 TEMP DRY 31.0 VISIBILITY 8 WIND DIREC 09 TRANSPAR
 LAT 18-31.5 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 09 SONIC DEP 0182
 LONG 66-34.7 W REL HUMID 074 CLOUD AMT 2 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 17.4 GMT, 1323 LOCAL MAX DEPTH 100 WIRE ANGLE 11
 OXYGEN TITER 1.040 METER WHEEL FACTOR .997

WIRE	CZ	DEPTH (M)	TEMP			TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
			TZ	BN	TL									TM	OXYGEN
0	0	0	0	11	28.41	28.42	28.42	22.92	4.61	6.58	99.22	.00	.
25	25	24	12	12	28.34	0.00	28.34	22.99	4.62	6.60	99.56	.04	.
50	49	50	15	15	27.95	0.00	27.95	23.29	4.72	6.75	97.34	.00	.
100	98	0	16	16	28.07	0.00	28.07	23.25	4.80	6.85	98.87	.04	.

R V PALUMBO CRUISE STATION PMA-1C PRNC REFERENCE 32535

DATE 8/ 7/73 BARO 1017.5 WEATHER 02 WIND VELOC 16 WAVE PERIOD 4
 HOUR 17.9 TEMP DRY 31.0 VISIBILITY 8 WIND DIREC 09 TRANSPAR
 LAT 18-31.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0365
 LONG 66-34.8 W REL HUMID 074 CLOUD AMT 2 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 17.9 GMT, 1355 LOCAL MAX DEPTH 300 WIRE ANGLE 15
 OXYGEN TITER 1.040 METER WHEEL FACTOR .997

WIRE	CZ	DEPTH (M)	TEMP			TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
			TZ	BN	TL									TM	OXYGEN
0	0	0	0	11	28.39	28.38	28.39	22.40	4.67	6.67	97.96	.04	.
25	25	27	12	12	28.30	0.00	28.30	23.07	4.67	6.67	100.93	.04	.
50	49	52	15	15	27.69	0.00	27.69	23.38	4.82	6.88	99.20	.04	.
100	97	0	16	16	27.84	0.00	27.84	23.32	5.11	7.30	109.94	.04	.
150	145	147	1	1	23.92	0.00	23.92	25.09	4.72	6.75	92.16	.03	.
200	193	194	2	2	20.96	0.00	20.96	25.98	4.19	5.99	79.98	.09	.
250	241	0	3	3	19.16	0.00	19.16	26.21	4.30	6.14	76.31	.21	.
300	289	293	4	4	17.36	0.00	17.36	26.53	4.41	6.30	77.18	.31	.

LOW SALINITY

R V PALUMBO CRUISE STATION PMA-2C PRNC REFERENCE 32536
 DATE 8/ 7/73 BARO 1017.5 WEATHER 03 WIND VELOC 14 WAVE PERIOD
 HOUR 19.0 TEMP DRY 0.0 VISIBILITY 8 WIND DIREC 09 TRANSPAR
 LAT 18-31.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0370
 LONG 66-33.7 W REL HUMID 074 CLOUD AMT 4 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 19.0 GMT, 1500 LOCAL MAX DEPTH 300 WIRE ANGLE 17
 OXYGEN TITER 1.040 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
0	0	0	0	11	28.40	28.39	28.40	35.917	22.97	4.70	6.72	101.45	.06	.
25	24	22	22	12	28.35	0.00	28.35	36.006	23.06	4.62	6.60	99.91	.03	.
50	48	53	53	15	27.90	0.00	27.90	36.148	23.31	4.83	6.90	99.47	.05	.
100	96	0	0	16	27.71	0.00	27.71	36.121	23.35	4.94	7.06	106.08	.10	.
150	144	150	150	1	23.33	0.00	23.33	36.896	25.29	4.69	6.70	91.23	.05	.
200	191	185	185	2	21.36	0.00	21.36	36.991	25.93	4.22	6.03	80.94	.06	.
250	239	245	245	3	18.66	0.00	18.66	36.606	26.35	4.23	6.05	75.03	.16	.
300	287	286	286	4	17.39	0.00	17.39	36.435	26.54	4.48	6.41	78.49	.32	.

R V PALUMBO CRUISE STATION PMA-4B PRNC REFERENCE 32537
 DATE 8/ 7/73 BARO 1016.5 WEATHER 01 WIND VELOC 16 WAVE PERIOD 5
 HOUR 19.8 TEMP DRY 30.0 VISIBILITY 8 WIND DIREC 09 TRANSPAR
 LAT 18-31.7 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0180
 LONG 66-31.6 W REL HUMID 079 CLOUD AMT 3 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 19.8 GMT, 1548 LOCAL MAX DEPTH 100 WIRE ANGLE 19
 OXYGEN TITER 1.040 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
0	0	0	0	11	28.40	28.38	28.39	35.950	23.00	4.63	6.61	100.00	.00	.
25	24	30	30	12	28.33	0.00	28.33	35.965	23.03	4.61	6.58	99.50	.00	.
50	48	50	50	15	27.84	0.00	27.84	36.124	23.31	4.72	6.75	101.64	.05	.
100	95	98	98	16	25.75	0.00	25.75	36.368	24.16	4.89	6.98	100.48	.04	.

R V PALUMBO CRUISE

STATION TOR-1B

PRNC REFERENCE 32538

DATE 8/ 7/73 BARO 1016.5 WEATHER 03 WIND VELOC 14 WAVE PERIOD 4
 HOUR 20.4 TEMP DRY 30.0 VISIBILITY 8 WIND DIREC 09 TRANSPAR
 LAT 18-30.2 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0180
 LONG 66-29.5 W REL HUMID 080 CLOUD AMT 3 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 20.4 GMT, 1625 LOCAL MAX DEPTH 100 WIRE ANGLE 8
 OXYGEN TITER 1.040 METER WHEEL FACTOR .997

DEPTH (M)	WIRE	CZ	TZ	BN	TL	TEMP	TM	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
0	0	11	28.36	28.33	28.35	35.951	23.02	4.69	6.70	101.27	.00	.	.	.	.
25	25	12	28.36	0.00	28.36	35.949	23.01	4.70	6.72	101.51	.05	.	.	.	.
50	50	15	27.79	0.00	27.79	36.108	23.32	4.81	6.87	103.28	.05	.	.	.	.
100	99	16	25.81	0.00	25.81	36.309	24.10	4.88	6.97	100.22	.00	.	.	.	.

R V PALUMBO CRUISE

STATION TOR-2B

PRNC REFERENCE 32539

DATE 8/ 7/73 BARO 1016.5 WEATHER 03 WIND VELOC 14 WAVE PERIOD 4
 HOUR 21.0 TEMP DRY 29.0 VISIBILITY 8 WIND DIREC 09 TRANSPAR
 LAT 18-30.0 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0182
 LONG 66-28.3 W REL HUMID 080 CLOUD AMT 6 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 21.0 GMT, 1700 LOCAL MAX DEPTH 100 WIRE ANGLE 9
 OXYGEN TITER 1.040 METER WHEEL FACTOR .997

DEPTH (M)	WIRE	CZ	TZ	BN	TL	TEMP	TM	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
0	0	11	28.35	28.33	28.34	35.960	23.02	4.68	6.69	101.07	.08	.	.	.	.
25	25	12	28.37	0.00	28.37	35.954	23.01	4.68	6.69	101.10	.10	.	.	.	.
50	50	15	28.15	0.00	28.15	36.084	23.18	4.68	6.69	101.18	.09	.	.	.	.
100	99	103	25.65	0.00	25.65	36.355	24.18	4.88	6.97	100.21	.06	.	.	.	.

R V PALUMBO CRUISE STATION TOR=3A PRNC REFERENCE 32540

DATE 8/ 7/73 BARO 1016.5 WEATHER 01 WIND VELOC 12 WAVE PERIOD
 HOUR 21.5 TEMP DRY 30.0 VISIBILITY 8 WIND DIREC 09 TRANSPAR
 LAT 18-29.0 N TEMP WET 0.0 CLOUD TYPE 1 WAVE DIREC 07 SONIC DEP 0021
 LONG 66-27.4 W REL HUMID 079 CLOUD AMT 3 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 21.5 GMT, 1730 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.040 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA			
	CZ	TZ	BN								TL	TM	TAVE
0	0	0	11	28.32	28.29	28.31	35.948	23.03	4.69	6.70	101.19	.05	.
10	10	12	12	28.32	0.00	28.32	35.946	23.02	4.70	6.72	101.43	.05	.

R V PALUMBO CRUISE STATION TOR=2A PRNC REFERENCE 32541

DATE 8/ 7/73 BARO 1016.8 WEATHER 03 WIND VELOC 12 WAVE PERIOD 4
 HOUR 21.9 TEMP DRY 29.0 VISIBILITY 8 WIND DIREC 09 TRANSPAR
 LAT 18-28.9 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0026
 LONG 66-28.4 W REL HUMID 079 CLOUD AMT 4 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 21.9 GMT, 1752 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.040 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA			
	CZ	TZ	BN								TL	TM	TAVE
0	0	0	11	28.32	28.33	28.33	35.938	23.01	4.64	6.63	100.07	.10	.
10	10	11	12	28.34	0.00	28.34	35.950	23.02	4.63	6.61	99.91	.08	.

R V PALUMBO CRUISE STATION TOR-1A PRNC REFERENCE 32542

DATE 01 7/73 BARO 1016.7 WEATHER 01 WIND VELOC 12 WAVE PERIOD 4
 HOUR 22.0 TEMP DRY 29.0 VISIBILITY 8 WIND DIREC 09 TRANSPAR
 LAT 18-29.1 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0025
 LONG 66-20.5 W REL HUMID 080 CLOUD AMT 3 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 22.1 GMT, 1807 LOCAL MAX DEPTH 10 WIRE ANGLE 2
 OXYGEN TITER 1.040 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			OXYGEN			SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
	WIRE	CZ	TZ	BN	TL	TM						
0	0	0	11	28.32	28.33	28.33	35.940	23.01	4.64	6.63	100.07	.06
10	10	13	12	28.31	0.00	28.31	35.934	23.02	4.62	6.60	99.58	.09

R V PALUMBO CRUISE STATION TOR-3B PRNC REFERENCE 32543

DATE 01 7/73 BARO 1017.1 WEATHER 03 WIND VELOC 12 WAVE PERIOD 4
 HOUR 22.0 TEMP DRY 29.0 VISIBILITY 8 WIND DIREC 09 TRANSPAR
 LAT 18-30.9 N TEMP WET 0.0 CLOUD TYPE 1 WAVE DIREC 07 SONIC DEP 0160
 LONG 66-27.3 W REL HUMID 081 CLOUD AMT 4 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 22.8 GMT, 1847 LOCAL MAX DEPTH 100 WIRE ANGLE 13
 OXYGEN TITER 1.040 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			OXYGEN			SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
	WIRE	CZ	TZ	BN	TL	TM						
0	0	0	11	28.33	28.33	28.33	35.940	23.01	4.68	6.69	100.98	.07
25	25	22	12	28.37	0.00	28.37	35.952	23.01	4.65	6.64	100.42	.08
50	49	54	15	27.94	0.00	27.94	36.088	23.25	4.72	6.75	101.71	.11
100	98	97	16	25.64	0.00	25.64	36.360	24.19	4.93	7.04	101.20	.09

R V PALUMBO CRUISE STATION TOR-4A PRNC REFERENCE 32544

DATE 8/ 8/73 BARO 1016.5 WEATHER 02 WIND VELOC 02 WAVE PERIOD 5
 HOUR 10.5 TEMP DRY 24.0 VISIBILITY 8 WIND DIREC 10 TRANSPAR
 LAT 18-29.7 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0020
 LONG 66-26.3 W REL HUMID 089 CLOUD AMT 1 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 10.5 GMT, 0631 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.040 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN							
	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	11	20.19	28.17	28.16	36.029	23.13	4.60	6.57	99.24	.00	.
10	10	12	20.21	0.00	28.21	36.013	23.11	4.62	6.60	99.69	.05	.

R V PALUMBO CRUISE STATION TOR-5A PRNC REFERENCE 32545

DATE 8/ 8/73 BARO 1016.5 WEATHER 02 WIND VELOC 02 WAVE PERIOD 5
 HOUR 10.7 TEMP DRY 24.0 VISIBILITY 8 WIND DIREC 10 TRANSPAR
 LAT 18-29.9 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0019
 LONG 66-25.4 W REL HUMID 089 CLOUD AMT 1 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 10.7 GMT, 0644 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.040 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN							
	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	11	28.14	28.15	28.15	36.005	23.12	4.62	6.60	99.55	.04	.
10	10	14	28.19	0.00	28.19	36.008	23.11	4.64	6.63	100.09	.18	.

R V PALUMBO CRUISE STATION TOR-4B PRNC REFERENCE 32546

DATE 8/ 8/73 BARO 1018.5 WEATHER 03 WIND VELOC 13 WAVE PERIOD 5
 HOUR 14.1 TEMP DRY 24.0 VISIBILITY 8 WIND DIREC 10 TRANSPAR
 LAT 18-31.2 N TEMP WET 0.0 CLOUD TYPE WAVE DIREC 07 SONIC DEP 0182
 LONG 66-26.3 W REL HUMID 089 CLOUD AMT 1 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 11.0 GMT, 0703 LOCAL MAX DEPTH 100 WIRE ANGLE 2
 OXYGEN TITER 1.040 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN				PHOS	NITRA				
	WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN			SIG T	ML/L	MG/L	XSAT
0	0	0	0	11	28.26	28.25	28.26	35.966	23.06	4.62	6.60	99.60	.06	.
25	25	23	12	12	28.28	0.00	28.28	35.997	23.07	4.64	6.63	100.20	.08	.
50	50	53	15	15	27.59	0.00	27.59	36.120	23.39	4.81	6.87	102.94	.00	.
100	100	101	16	16	25.46	0.00	25.46	36.463	24.32	4.88	6.97	100.24	.00	.

R V PALUMBO CRUISE STATION TOR-5B PRNC REFERENCE 32547

DATE 8/ 8/73 BARO 1016.5 WEATHER 03 WIND VELOC 04 WAVE PERIOD 5
 HOUR 11.4 TEMP DRY 26.0 VISIBILITY 8 WIND DIREC 10 TRANSPAR
 LAT 18-31.2 N TEMP WET 0.0 CLOUD TYPE 08 SONIC DEP 0190
 LONG 66-25.4 W REL HUMID 088 CLOUD AMT 1 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 11.4 GMT, 0723 LOCAL MAX DEPTH 100 WIRE ANGLE 0
 OXYGEN TITER 1.040 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN				PHOS	NITRA				
	WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN			SIG T	ML/L	MG/L	XSAT
0	0	0	0	11	28.25	28.25	28.25	35.965	23.06	4.62	6.60	99.59	.07	.
25	25	25	12	12	28.29	0.00	28.29	35.969	23.05	4.65	6.64	100.34	.04	.
50	50	52	15	15	27.68	0.00	27.68	36.121	23.36	4.80	6.85	102.89	.05	.
100	100	98	16	16	25.59	0.00	25.59	36.405	24.24	4.92	7.03	101.10	.04	.

R V PALUMBO CRUISE STATION TOR-SC PRNC REFERENCE 32548
 DATE 8/ 6/73 BARO 1018.6 WEATHER 02 WIND VELOC 05 WAVE PERIOD 5
 HOUR 11.9 TEMP DRY 26.0 VISIBILITY 8 WIND DIREC 10 TRANSPAR
 LAT 18-31.7 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0365
 LONG 66-25.4 W REL HUMID 088 CLOUD AMT 1 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 11.9 GMT, 0753 LOCAL MAX DEPTH 300 WIRE ANGLE 0
 OXYGEN TITER 1.040 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	OXYGEN		XSAT	PHOS	NITRA
										ML/L	MG/L			
0	0	0	0	11	28.27	28.25	28.26	35.958	23.05	4.66	6.66	100.48	.00	.
25	25	28	28	12	28.28	0.00	28.28	35.965	23.05	4.62	6.60	99.64	.05	.
50	50	52	18	15	27.18	0.00	27.18	36.106	23.51	4.88	6.97	103.69	.04	.
100	100	97	48	16	25.48	0.00	25.48	36.503	24.35	4.93	7.04	101.37	.00	.
150	150	153	63	1	22.63	0.00	22.63	36.983	25.56	4.38	6.26	84.87	.12	.
200	200	194	14	2	20.14	0.00	20.14	36.792	26.11	4.13	5.90	78.18	.14	.
250	250	254	50	3	18.50	0.00	18.50	36.749	26.50	4.37	6.24	77.73	.21	.
300	300	296	35	4	17.35	0.00	17.35	36.395	26.52	4.49	6.42	78.58	.30	.

SALINITY TOO HIGH

R V PALUMBO CRUISE STATION TOR-4C PRNC REFERENCE 32549

DATE 8/ 8/73 BARO 1016.7 WEATHER 01 WIND VELOC WAVE PERIOD 5
 HOUR 12.4 TEMP DRY 27.0 VISIBILITY 8 WIND DIREC 10 TRANSPAR
 LAT 18-31.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0457
 LONG 66-25.4 W REL HUMID 073 CLOUD AMT 1 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 12.4 GMT, 0822 LOCAL MAX DEPTH 300 WIRE ANGLE 0
 OXYGEN TITER 1.040 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CZ	TZ	BN	TL	TEMP		TAVE	SALIN	SIG T	OXYGEN		XSAT	PHOS	NITRA
						TM	TM				ML/L	MG/L			
0	0	0	0	11	28.25	28.26	28.26	35.917	23.02	4.05	6.64	100.10	.04	.	.
25	25	25	25	12	28.27	0.00	28.27	35.926	23.02	4.62	6.60	99.48	.06	.	.
50	50	53	53	15	27.49	0.00	27.49	36.080	23.39	4.85	6.93	103.52	.04	.	.
100	100	98	98	16	25.42	0.00	25.42	36.503	24.37	4.97	7.10	102.19	.04	.	.
150	150	149	149	1	22.82	0.00	22.82	36.991	25.51	4.39	6.27	85.23	.09	.	.
200	200	199	199	2	19.96	0.00	19.96	36.715	26.10	4.14	5.92	74.34	.15	.	.
250	250	249	249	3	18.49	0.00	18.49	36.513	26.32	4.31	6.15	76.00	.23	.	.
300	300	297	297	4	17.55	0.00	17.55	36.389	26.46	4.50	6.44	78.82	.34	.	.

R V PALUMBO CRUISE STATION TOR-3C PRNC REFERENCE 32550

DATE 8/ 8/73 BARO 1019.1 WEATHER 02 WIND VELOC 07 WAVE PERIOD 5
 HOUR 12.9 TEMP DRY 28.0 VISIBILITY 8 WIND DIREC 10 TRANSPAR
 LAT 18=32.0 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0362
 LONG 66=27.5 W REL HUMID CLOUD AMT 1 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 12.9 GMT, 0852 LOCAL MAX DEPTH 300 WIRE ANGLE 0
 OXYGEN TITER 1.040 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	TEMP		TAVE	SALIN	SIG T	OXYGEN		%SAT	PHOS	NITRA
		TL	TM				ML/L	MG/L			
0	0	11 28.28	28.27	28.28	35.991	23.07	4.67	6.67	100.85	.08	.
25	25	12 28.27	0.00	28.27	35.918	23.02	4.67	6.67	100.57	.07	.
50	50	15 27.40	0.00	27.40	36.047	23.40	4.86	6.94	103.48	.08	.
100	100	16 25.39	0.00	25.39	36.511	24.38	4.89	6.98	100.47	.06	.
150	150	1 22.81	0.00	22.81	36.959	25.49	4.40	6.29	85.35	.09	.
200	200	2 20.32	0.00	20.32	36.755	26.03	4.13	5.90	78.26	.13	.
250	250	3 18.46	0.00	18.46	36.507	26.33	4.28	6.11	75.42	.24	.
300	300	4 17.34	0.00	17.34	36.353	26.49	4.52	6.45	78.86	.34	.

HIGH SALINITY

R V PALUMBO CRUISE STATION TOR-2C PRNC REFERENCE 32551

DATE 8/ 8/73 BARO 1019.6 WEATHER 03 WIND VELOC 09 WAVE PERIOD 5
 HOUR 13.5 TEMP DRY 29.0 VISIBILITY 8 WIND DIREC 10 TRANSPAR
 LAT 18-32.0 N TEMP WET 0.0 CLOUD TYPE 1 WAVE DIREC 08 SUNIC DEP 0402
 LONG 66-28.4 W REL HUMID 076 CLOUD AMT 1 WAVE HEIGHT 1 COLOR

CAST 1 MESS TIME 13.3 GMT, 0920 LOCAL MAX DEPTH 300 WIRE ANGLE 0
 OXYGEN TITER 1.040 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CZ	TZ	BN	TL	TEMP		TAVE	SALIN	SIG T	OXYGEN		XSAT	PHOS	NITRA
						TM	TL				ML/L	MG/L			
0	0	0	0	11	28.26	28.27	28.27	28.27	35.828	22.95	4.68	6.69	100.46	.05	.
25	25	28	28	12	28.27	0.00	28.27	28.27	35.886	22.99	4.67	6.67	100.46	.09	.
50	50	52	52	15	27.27	0.00	27.27	27.27	36.092	23.47	4.89	6.98	104.04	.07	.
100	100	99	99	16	25.27	0.00	25.27	25.27	36.640	24.52	4.89	6.98	100.52	.07	.
150	150	148	148	1	22.79	0.00	22.79	22.79	37.033	25.55	4.41	6.30	85.71	.07	.
200	200	197	197	2	20.37	0.00	20.37	20.37	36.848	26.09	4.15	5.93	78.75	.16	.
250	250	247	247	3	18.53	0.00	18.53	18.53	36.586	26.37	4.29	6.12	75.84	.23	.
300	300	291	291	4	17.33	0.00	17.33	17.33	36.422	26.54	4.53	6.46	79.17	.34	.

R V PALUMBO CRUISE STATION TOR-1C PRNC REFERENCE 32552

DATE 8/ 8/75 BARO 1019.6 WEATHER 02 WIND VELOC 12 WAVE PERIOD 5
 HOUR 13.8 TEMP DRY 29.0 VISIBILITY 8 WIND DIREC 10 TRANSPAR
 LAT 16-31.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0380
 LONG 66-29.5 W REL HUMID 073 CLOUD AMT 1 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 13.6 GMT, 0950 LOCAL MAX DEPTH 300 WIRE ANGLE 0
 OXYGEN TITER 1.040 METER WHEEL FACTOR .997

WIRE	CZ	TZ	BN	TL	TEMP		TAVE	SALIN	SIG T	OXYGEN		XSAT	PHOS	NITRA
					TM	TL				ML/L	MG/L			
0	0	0	11	28.25	28.24	28.25	35.881	23.00	4.69	6.70	100.85	.06	.	
25	25	26	12	28.27	0.00	28.27	35.914	23.01	4.62	6.60	99.44	.06	.	
50	50	54	15	26.96	0.00	26.96	36.090	23.57	4.92	7.03	104.12	.08	.	
100	100	99	16	25.34	0.00	25.34	36.594	24.46	4.90	7.00	100.73	.06	.	
150	150	155	1	22.71	0.00	22.71	37.036	25.58	4.39	6.27	85.25	.09	.	
200	200	194	2	20.51	0.00	20.51	36.868	26.07	4.15	5.93	78.85	.13	.	
250	250	249	3	18.47	0.00	18.47	36.500	26.38	4.29	6.12	75.79	.24	.	
300	300	297	4	17.32	0.00	17.32	36.416	26.54	3.46	4.95	60.60	.34	.	

R V PALUMBO CRUISE STATION ISL37A PRNC REFERENCE 34568

DATE 8/29/73 BARO 1017.5 WEATHER 03 WAVE VELOC 04 WAVE PERIOD 7
 HOUR 12.6 TEMP DRY 26.4 VISIBILITY 8 WIND DIREC 12 TRANSPAR 08
 LAT 18-29.8 N TEMP WET 0.0 CLOUD TYPE 3 WAVE DIREC 08 SONIC DEP 0012
 LONG 66-36.2 W REL HUMID 083 CLOUD AMT 2 WAVE HEIGHT 2 COLOR 10

CAST 1 MESS TIME 12.6 GMT, 0835 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.122 METER WHEEL FACTOR .997

DEPTH (M) TEMP OXYGEN

WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	+	2	28.39	28.39	28.39	35.708	22.82	4.78	6.83	102.37	.05	.
10	10	-	3	28.37	28.38	28.37	35.706	22.82	4.78	6.83	102.34	.08	.

R V PALUMBO CRUISE STATION ISL37A PRNC REFERENCE 34569

DATE 8/29/73 BARO 1018.2 WEATHER 03 WAVE VELOC 09 WAVE PERIOD 9
 HOUR 14.1 TEMP DRY 28.0 VISIBILITY 8 WIND DIREC 10 TRANSPAR 08
 LAT 18-29.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0012
 LONG 66-36.2 W REL HUMID 080 CLOUD AMT 5 WAVE HEIGHT 2 COLOR 10

CAST 1 MESS TIME 14.1 GMT, 1005 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.122 METER WHEEL FACTOR .997

DEPTH (M) TEMP OXYGEN

WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	+	2	28.48	28.48	28.48	35.712	22.79	4.87	6.96	104.45	.06	.
10	10	-	3	28.40	28.42	28.41	35.753	22.85	4.87	6.96	104.50	.06	.

R V PALUMBO CRUISE STATION ISL37A PRNC REFERENCE 34570

DATE 8/29/73 BARO 1018.3 WEATHER 02 WIND VELOC 16 WAVE PERIOD 5
 HOUR 16.1 TEMP DRY 30.3 VISIBILITY 8 WIND DIREC 09 TRANSPAR
 LAT 18-29.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 09 SONIC DEP 0012
 LONG 66-36.2 W REL HUMID 076 CLOUD AMT 7 WAVE HEIGHT 2 COLOR 10

CAST 1 MESS TIME 16.1 GMT, 1205 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.122 METER WHEEL FACTOR .997

DEPTH (M) TEMP OXYGEN
 WIRE CZ TZ BN TL TM TAVE SALIN SIG T ML/L MG/L XSAT PHOS NITRA
 0 0 2 28.50 28.53 28.52 35.712 22.78 5.01 7.15 107.39 .06 .
 10 10 3 28.53 28.51 28.52 35.724 22.79 5.14 7.34 110.33 .03 .

R V PALUMBO CRUISE STATION ISL37A PRNC REFERENCE 34571

DATE 8/29/73 BARO 1017.5 WEATHER 01 WIND VELOC 18 WAVE PERIOD 5
 HOUR 18.1 TEMP DRY 31.0 VISIBILITY 8 WIND DIREC 09 TRANSPAR
 LAT 18-29.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0012
 LONG 66-36.2 W REL HUMID 075 CLOUD AMT 7 WAVE HEIGHT 3 COLOR 10

CAST 1 MESS TIME 18.1 GMT, 1405 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.122 METER WHEEL FACTOR .997

DEPTH (M) TEMP OXYGEN
 WIRE CZ TZ BN TL TM TAVE SALIN SIG T ML/L MG/L XSAT PHOS NITRA
 0 0 2 28.66 28.66 28.66 35.727 22.74 5.04 7.20 108.41 .03 .
 10 10 4 28.64 28.62 28.63 35.716 22.75 5.03 7.18 108.07 .03 .

R V PALUMBO CRUISE STATION ISL37A PRNC REFERENCE 34572

DATE 8/29/73 BARD 1016.8 WEATHER 03 WIND VELOC 16 WAVE PERIOD 7
 HOUR 20.1 TEMP DRY 30.8 VISIBILITY 8 WIND DIREC 10 TRANSPAR
 LAT 18-29.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0012
 LONG 66-36.2 W REL HUMID 074 CLOUD AMT 3 WAVE HEIGHT 3 COLOR 10

CAST 1 MESS TIME 20.1 GMT, 1607 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1,122 METER WHEEL FACTOR .997

DEPTH (M) TEMP OXYGEN

WIRE	CZ	TZ	8N	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	17	2	28.65	28.65	28.65	35.722	22.74	5.08	7.26	109.33	.06	.
10	10	18	3	28.66	28.65	28.66	35.720	22.74	5.14	7.34	110.54	.06	.

R V PALUMBO CRUISE STATION ISL37A PRNC REFERENCE 34573

DATE 8/29/73 BAKU 1016.8 WEATHER 01 WIND VELOC 11 WAVE PERIOD 6
 HOUR 22.2 TEMP DRY 29.7 VISIBILITY 8 WIND DIREC 12 TRANSPAR
 LAT 18-29.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0012
 LONG 66-36.2 W REL HUMID 077 CLOUD AMT 4 WAVE HEIGHT 3 COLOR 10

CAST 1 MESS TIME 22.2 GMT, 1810 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1,122 METER WHEEL FACTOR .997

DEPTH (M) TEMP OXYGEN

WIRE	CZ	TZ	8N	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	19	2	0.00	0.00	0.00	35.718	0.00	5.12	7.31	*****	.06	.
10	10	20	3	0.00	0.00	0.00	35.726	0.00	5.12	7.31	*****	.04	.

R V PALUMBO CRUISE STATION ISL37A PRNC REFERENCE 34574

DATE 8/30/73 BARO 1017.6 WEATHER 00 WIND VELOC 07 WAVE PERIOD 5
 HOUR 0.1 TEMP DRY 27.9 VISIBILITY 7 WIND DIREC 13 TRANSPAR
 LAT 18-29.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0012
 LONG 66-36.2 W REL HUMID 081 CLOUD AMT 4 WAVE HEIGHT 2 COLOR 10

CAST 1 MESS TIME 0.1 GMT, 2005 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.122 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA	
	WIRE	CZ	TZ								
0	0	21	28.61	28.61	28.61	35.727	22.76	5.01	7.15	107.60	.04
10	10	22	28.58	28.55	28.57	35.739	22.78	4.96	7.09	106.61	.04

R V PALUMBO CRUISE STATION ISL37A PRNC REFERENCE 34575

DATE 8/30/73 BARO 1018.5 WEATHER 00 WIND VELOC 04 WAVE PERIOD 5
 HOUR 2.0 TEMP DRY 27.0 VISIBILITY 4 WIND DIREC 15 TRANSPAR
 LAT 18-29.8 N TEMP WET 0.0 CLOUD TYPE 08 WAVE DIREC 08 SONIC DEP 0012
 LONG 66-36.2 W REL HUMID 083 CLOUD AMT 2 WAVE HEIGHT 2 COLOR 10

CAST 1 MESS TIME 2.1 GMT, 2204 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.122 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA	
	WIRE	CZ	TZ								
0	0	23	28.55	28.55	28.55	35.722	22.78	4.94	7.06	106.04	.04
10	10	24	28.55	28.53	28.54	35.726	22.78	4.91	7.01	105.32	.06

R V PALUMBO CRUISE

STATION ISL37A

PRNC REFERENCE 34576

DATE 8/30/73 BARO 1017.6 WEATHER 00 WAVE PERIOD 5
 HOUR 4.1 TEMP DRY 25.9 VISIBILITY 7 TRANSPAR
 LAT 18-29.8 N TEMP WET 0.0 CLOUD TYPE SONIC DEP 0012
 LONG 66-36.2 W REL HUMID 085 CLOUD AMT COLOR 10

CAST 1 MESS TIME 4.1 GMT, 0005 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.122 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			SALIN			SIG T			OXYGEN		
	TZ	BN	TL	TAVE	TM	TS	ML/L	MG/L	XSAT	ML/L	MG/L	XSAT
0	25	2	28.52	28.53	28.53	35.725	22.79	4.95	7.07	106.25	.06	.06
10	24	3	28.54	28.54	28.54	35.730	22.79	4.93	7.04	105.81	.06	.06

R V PALUMBO CRUISE

STATION ISL37A

PRNC REFERENCE 34577

DATE 8/30/73 BARO 1017.6 WEATHER 00 WAVE PERIOD 5
 HOUR 6.1 TEMP DRY 25.3 VISIBILITY 7 TRANSPAR
 LAT 18-29.8 N TEMP WET 0.0 CLOUD TYPE SONIC DEP 0012
 LONG 66-36.2 W REL HUMID 087 CLOUD AMT COLOR 10

CAST 1 MESS TIME 6.1 GMT, 0208 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.122 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			SALIN			SIG T			OXYGEN		
	TZ	BN	TL	TAVE	TM	TS	ML/L	MG/L	XSAT	ML/L	MG/L	XSAT
0	27	2	28.42	28.44	28.44	35.697	22.80	4.88	6.98	104.55	.09	.09
10	24	3	28.46	28.47	28.47	35.730	22.81	4.84	6.91	103.77	.08	.08

R V PALUMBO CRUISE STATION ISL37A PRNC REFERENCE 34578

DATE 8/30/73 BARO 1017.5 WEATHER 00 WIND VELOC 00 WAVE PERIOD 5
 HOUR 8.1 TEMP DRY 25.0 VISIBILITY 6 WIND DIREC 12 TRANSPAR
 LAT 18-29.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 05 SONIC DEP 0012
 LONG 66-36.2 W REL HUMID 086 CLOUD AMT 9 WAVE HEIGHT 1 COLOR 10

CAST 1 MESS TIME 0.1 GMT, 0405 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.122 METER WHEEL FACTOR .997

DEPTH (M)	TEMP		OXYGEN		SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
	TL	TM	TAVE	SALIN						
0	28.39	28.39	28.39	35.694	22.81	4.89	6.99	104.72	.08	.
10	28.41	28.43	28.42	35.694	22.80	4.87	6.96	104.28	.06	.

R V PALUMBO CRUISE STATION ISL37A PRNC REFERENCE 34579

DATE 8/30/73 BARO 1017.6 WEATHER 00 WIND VELOC 10 WAVE PERIOD 9
 HOUR 10.1 TEMP DRY 25.9 VISIBILITY 7 WIND DIREC 13 TRANSPAR
 LAT 18-29.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0012
 LONG 66-36.2 W REL HUMID 084 CLOUD AMT 9 WAVE HEIGHT 3 COLOR 10

CAST 1 MESS TIME 10.1 GMT, 0605 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.122 METER WHEEL FACTOR .997

DEPTH (M)	TEMP		OXYGEN		SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
	TL	TM	TAVE	SALIN						
0	28.37	28.36	28.37	35.696	22.82	4.78	6.83	102.29	.06	.
10	28.41	28.39	28.40	35.691	22.80	4.87	6.96	104.24	.08	.

R V PALUMBO CRUISE STATION ISL37A PRNC REFERENCE 34580

DATE 8/30/73 BARO 1018.5 WEATHER 00 WIND VELOC 00 WAVE PERIOD 5
 HOUR 12.1 TEMP DRY 28.7 VISIBILITY 7 WIND DIREC 11 TRANSPAR
 LAT 18-29.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0012
 LONG 66-36.2 W REL HUMID 080 CLOUD AMT 2 WAVE HEIGHT 5 COLOR 10

CAST 1 MESS TIME 12.0 GMT, 0803 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.122 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				SIG T	MG/L	XSAT	PHOS	NITRA
	TZ	BN	TL	TM					
0	33	2	28.43	28.43	22.84	4.74	6.77	101.62	.20
10	34	3	28.42	28.41	22.89	4.56	6.51	97.96	.07

R V PALUMBO CRUISE STATION ISL37A PRNC REFERENCE 34581

DATE 8/30/73 BARO 1018.1 WEATHER 00 WIND VELOC 10 WAVE PERIOD 5
 HOUR 14.1 TEMP DRY 3.0 VISIBILITY 7 WIND DIREC 07 TRANSPAR
 LAT 18-29.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0012
 LONG 66-36.2 W REL HUMID 076 CLOUD AMT 2 WAVE HEIGHT 5 COLOR 10

CAST 1 MESS TIME 14.0 GMT, 1003 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.122 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				SIG T	MG/L	XSAT	PHOS	NITRA
	TZ	BN	TL	TM					
0	44	2	28.50	28.51	22.82	4.87	6.96	104.65	.10
10	45	3	28.46	28.44	22.85	4.86	6.94	104.41	.08

R V PALUMBO CRUISE STATION ISL37A PRNC REFERENCE 34582

DATE 8/30/73 BARO 1017.5 WEATHER 00 WIND VELOC 00 WAVE PERIOD 2
 HOUR 16.0 TEMP DRY 3.2 VISIBILITY 7 WIND DIREC 14 TRANSPAR
 LAT 0- 0.0 N TEMP WET 0.0 CLOUD TYPE 0 WAVE DIREC 21 SONIC DEP 0012
 LONG 0- 0.0 W REL HUMID 695 CLOUD AMT 1 WAVE HEIGHT 2 COLOR 10

CAST 1 MESS TIME 16.0 GMT, 1201 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.122 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			OXYGEN		XSAT	PHOS	NITRA				
	TZ	BN	TL	SIG T	ML/L				MG/L			
0	46	2	28.58	28.60	28.59	35.761	22.79	5.01	7.15	107.71	.08	.
10	47	3	28.59	28.60	28.60	35.762	22.79	5.12	7.31	110.14	.07	.

R V PALUMBO CRUISE STATION ISL-1A PRNC REFERENCE 38619

DATE 1/24/75 BARO 1019.5 WEATHER 02 WIND VELOC 06 WAVE PERIOD 6
 HOUR 12.01-12.17 TEMP DRY 0.0 VISIBILITY 6 WIND DIREC 09 TRANSPAR
 LAT 18-29.8 W TEMP WET 27.0 CLOUD TYPE 0 WAVE DIREC 09 SONIC DEP 0021
 LONG 66-39.0 W REL HUMID 89.0 CLOUD AMT 5 WAVE HEIGHT 4 COLOR

CAST 1 MESS TIME 12.0 GMF, 0057 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER .941 METER WHFEL FACTOR .997

DEPTH (M) WIRE C2 T2 SN TL TAVE SALIN SIG T ML/L MG/L %SAT PHOS NITRA

0 1 25.25 0.00 25.25 35.485 23.65 4.45 6.36 90.91 .06 .11
 10 10 152 2 25.26 0.00 25.28 35.429 23.60 4.39 6.27 89.55 .04 .01

OXYGEN

R V PALUMBO CRUISE STATION ISL-2A PRNC REFERENCE 38620

DATE 1/24/75 BARO 1020.5 WEATHER 02 WIND VELOC 04 WAVE PERIOD 6
 HOUR 12.21-12.37 TEMP DRY 0.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-29.8 W TEMP WET 21.2 CLOUD TYPE 0 WAVE DIREC 09 SONIC DEP 0018
 LONG 66-38.0 W REL HUMID 89.0 CLOUD AMT 5 WAVE HEIGHT 4 COLOR

CAST 1 MESS TIME 12.2 GMF, 0013 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER .941 METER WHFEL FACTOR .997

DEPTH (M) WIRE C2 T2 SN TL TAVE SALIN SIG T ML/L MG/L %SAT PHOS NITRA

0 1 25.19 0.00 25.19 35.180 23.44 4.28 6.12 87.16 .08 .00
 10 10 54 4 25.28 0.00 25.26 35.406 23.58 4.39 6.28 89.72 .06 .01

OXYGEN

R V PALUMBO CRUISE STATION ISL-3A PRNC REFERENCE 38621

DATE 1/24/74 BARO 1020.5 WEATHER 02 WIND VELOC 06 WAVE PERIOD 6
 HOUR 12.5 ~~14.3~~ TEMP DRY 0.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-30.0 N TEMP WET 22.0 CLOUD TYPE 8 WAVE DIREC 09 SONIC DEP 0017
 LONG 66-52.0 W REL HUMID 890 CLOUD AMT 6 WAVE HEIGHT 4 COLOR

CAST 1 MESS TIME 12.5 GMT, 0830 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER .941 METER WHEEL FACTOR .997

DEPTH (M)	TEMP		SALIN		SIG T		OXYGEN		PHOS	NITRA			
	WIRE	CF	TL	TM	TAVE	MG/L	%SAT	ML/L			MG/L		
0	0	10.8	1	25.08	0.00	25.08	35.451	23.68	4.45	6.36	90.70	.06	.00
10	10	12.7	2	25.24	0.00	25.24	35.489	23.66	4.29	6.13	87.63	.06	.02

R V PALUMBO CRUISE STATION ISL-4A PRNC REFERENCE 38622

DATE 1/24/74 BARO 1019.5 WEATHER 02 WIND VELOC 07 WAVE PERIOD 6
 HOUR 12.8 ~~14.4~~ TEMP DRY 0.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-30.1 N TEMP WET 21.0 CLOUD TYPE 8 WAVE DIREC 09 SONIC DEP 0022
 LONG 66-55.7 W REL HUMID 890 CLOUD AMT 6 WAVE HEIGHT 4 COLOR

CAST 1 MESS TIME 12.0 GMT, 0840 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER .941 METER WHEEL FACTOR .997

DEPTH (M)	TEMP		SALIN		SIG T		OXYGEN		PHOS	NITRA			
	WIRE	CF	TL	TM	TAVE	MG/L	%SAT	ML/L			MG/L		
0	0	5.7	3	25.25	0.00	25.25	35.489	23.65	4.29	6.13	87.64	.06	.02
10	10	9.6	4	25.33	0.00	25.33	35.529	23.65	4.30	6.14	87.90	.06	.05

R V PALUMBO CRUISE STATION ISL-4B PRNC REFERENCE 38623

DATE 1/24/74 BARO 1019.5 WEATHER 02 WIND VELOC 06 WAVE PERIOD 7
 HOUR 18.1 TEMP DRY 0.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 10-31.3 N TEMP WET 22.0 CLOUD TYPF 0 WAVE DIREC 08 SONIC DEP 0131
 LONG 67-35.6 W REL HUMID 780 CLOUD AMT 5 WAVE HEIGHT 4 COLOR

CAST 1 MESS TIME 13.1 GMT, 0909 LOCAL MAX DEPTH 100 WIRE ANGLE 10
 OXYGEN TITER .941 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				SIG T	ML/L	MG/L	XSAT	PHOS	NITRA				
	WIRE	CZ	TZ	TM										
0	0	3	4	1	25.28	0.00	25.28	35.488	23.64	4.44	6.35	90.75	.07	.18
25	25	27	27	2	25.31	0.00	25.31	35.475	23.63	4.68	6.68	95.58	.06	.00
50	50	55	55	3	25.76	0.00	25.76	35.627	23.75	4.39	6.28	90.72	.06	.00
100	99	99	99	4	25.57	0.00	25.57	36.304	24.17	4.54	6.20	89.02	.05	.10

R V PALUMBO CRUISE STATION ISL-4C PRNC REFERENCE 38624

DATE 1/24/74 BARO 1019.5 WEATHER 02 WIND VELOC 06 WAVE PERIOD 6
 HOUR 13.6 ~~15.4~~ TEMP DRY 0.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 10-32.1 N TEMP WET 22.0 CLOUD TYPF 6 WAVE DIREC 10 SONIC DEP 0384
 LONG 66-35.6 W REL HUMID 820 CLOUD AMT 6 WAVE HEIGHT 4 COLOR

CAST 1 MESS TIME 13.6 GMT, 0937 LOCAL MAX DEPTH 300 WIRE ANGLE 8
 OXYGEN TITER .941 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				SIG T	ML/L	MG/L	XSAT	PHOS	NITRA				
	WIRE	CZ	TZ	TM										
0	0	11	11	1	25.30	0.00	25.30	35.506	23.64	4.45	6.36	91.04	.04	.02
25	25	26	26	2	25.30	0.00	25.30	35.507	23.64	4.42	6.32	90.46	.03	.00
50	50	44	44	3	25.74	0.00	25.74	35.853	23.78	4.37	6.24	90.15	.04	.08
100	99	89	89	4	25.75	0.00	25.75	36.101	23.96	4.36	6.22	90.26	.06	1.72
150	149	138	138	1	22.91	0.00	22.91	36.769	25.32	4.23	6.04	81.57	.06	.00
200	199	175	175	2	19.97	0.00	19.97	36.913	25.77	3.75	5.35	71.45	.12	.00
250	247	242	242	3	18.77	0.00	18.77	36.695	26.39	3.75	5.35	66.65	.25	.00
300	272	280	280	4	17.69	0.00	17.69	36.482	26.50	3.76	5.30	66.08	.36	.00

R V PALUMBO CRUISE STATION ISL-3B PRNC REFERENCE 38625
 DATE 1/24/74 BARO 1019.5 WEATHER 02 WIND VELOC 07 WAVE PERIOD 7
 HOUR 14.6 ~~17.5~~ TEMP DRY 0.0 VISIBILITY 7 WIND DIREC 29 TRANSPAR
 LAT 19-31.1 N TEMP WET 28.0 CLOUD TYPE WAVE DIREC 03 SONIC DEP 0180
 LONG 66-36.4 W REL HUMID 74% CLOUD AMT 5 WAVE HEIGHT 4 COLOR

CAST 1 MESS TIME 14.6 GMT, 1235 LOCAL MAX DEPTH 100 WIRE ANGLE 22
 OXYGEN TITER ,941 METER WHEEL FACTOR ,997

DEPTH (M)		TEMP		TAVE		SALIN		SIG T		MG/L		%SAT		PHOS		NITRA	
WIRE	CF	TL	RM	TL	RM	TAVE	TAVE	SIG T	SIG T	ML/L	MG/L	%SAT	%SAT	PHOS	PHOS	NITRA	NITRA
0	621	25.20	1	25.20	25.26	35.448	23.62	4.39	6.28	89.74	1.07	1.03					
25	24 24 22	25.29	2	25.29	35.443	23.61	4.40	6.29	89.96	1.05	1.03						
50	47 49 20	25.74	3	25.74	35.748	23.70	4.38	6.25	90.22	1.07	1.05						
100	93 98 24	25.24	4	25.24	36.550	24.46	4.31	6.10	80.52	1.05	1.05						

R V PALUMBO CRUISE STATION ISL-3C PRNC REFERENCE 38626
 DATE 1/24/74 BARO 1019.5 WEATHER 02 WIND VELOC 08 WAVE PERIOD 7
 HOUR 15.1 ~~17.5~~ TEMP DRY 0.0 VISIBILITY 6 WIND DIREC 10 TRANSPAR
 LAT 18-31.6 N TEMP WET 28.0 CLOUD TYPE 0 WAVE DIREC 17 SONIC DEP 0472
 LONG 67-36.2 W REL HUMID 73% CLOUD AMT 6 WAVE HEIGHT 4 COLOR

CAST 1 MESS TIME 15.1 GMT, 1107 LOCAL MAX DEPTH 370 WIRE ANGLE 6
 OXYGEN TITER ,941 METER WHEEL FACTOR ,997

DEPTH (M)		TEMP		TAVE		SALIN		SIG T		MG/L		%SAT		PHOS		NITRA	
WIRE	CF	TL	RM	TL	RM	TAVE	TAVE	SIG T	SIG T	ML/L	MG/L	%SAT	%SAT	PHOS	PHOS	NITRA	NITRA
0	25	25.20	11	25.20	35.444	23.64	4.44	6.35	90.63	1.09	1.00						
25	25 27 20	25.25	12	25.25	35.441	23.62	4.40	6.29	89.91	1.11	1.00						
50	53 47 27	25.71	13	25.71	35.821	23.76	4.39	6.28	90.65	1.15	1.05						
100	102 20	25.37	16	25.37	35.667	23.75	4.63	6.61	94.89	1.07	1.03						
150	149 24	25.49	1	25.49	36.754	25.16	4.23	6.04	81.96	1.14	1.54						
200	199 20	25.67	2	25.67	36.815	25.08	3.75	5.35	71.20	1.22	3.08						
250	248 220 21	18.79	3	18.79	36.611	26.32	3.82	5.46	67.77	1.34	4.04						
300	298 277 22	17.67	4	17.67	36.429	26.49	3.93	5.62	69.00	1.35	4.63						

R V PALUMBO CRUISE STATION ISL-2B PRNC REFERENCE 38627

DATE 1/24/74 PARO 1020.5 WEATHER 02 WAVE PERIOD 7
 HOUR 16.0 ~~17.5~~ TEMP DRY 0.0 VISIBILITY 7 WIND VELOC 07 TRANSPAR
 LAT 18-31.4 N TEMP WET 27.0 CLOUD TYPE 6 WAVE DIREC 09 SONIC DEP 0182
 LONG 66-37.9 W REL HUMID 740 CLOUD AMT 4 WAVE HEIGHT 4 COLOR

CAST 1 MESS TIME 16.0 GMT, 1158 LOCAL MAX DEPTH 100 WIRE ANGLE 6
 OXYGEN TITER .941 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CE	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	330		1	25.34	0.00	25.34	35.422	23.58	4.42	6.32	90.37	.08	.00
25	25	28.84		2	25.32	0.00	25.32	35.432	23.59	4.44	6.35	90.75	.06	.00
50	50	54.30		3	25.71	0.00	25.71	35.911	23.76	4.39	6.20	90.64	.06	.00
100	100	99.36		4	24.92	0.00	24.92	36.675	24.65	4.28	6.12	83.53	.09	.00

R V PALUMBO CRUISE STATION ISL-2C PRNC REFERENCE 38628

DATE 1/24/74 PARO 1020.5 WEATHER 02 WAVE PERIOD 7
 HOUR 16.6 ~~18.5~~ TEMP DRY 0.0 VISIBILITY 7 WIND VELOC 09 TRANSPAR
 LAT 18-32.1 N TEMP WET 27.0 CLOUD TYPE 8 WAVE DIREC 10 SONIC DEP 0457
 LONG 66-38.4 W REL HUMID CLOUD AMT 5 WAVE HEIGHT 4 COLOR

CAST 1 MESS TIME 16.6 GMT, 1236 LOCAL MAX DEPTH 300 WIRE ANGLE 0
 OXYGEN TITER .941 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CE	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	037		1	25.32	0.00	25.35	35.443	23.59	4.50	6.43	91.94	.09	.00
25	25	25.36		2	25.30	0.00	25.32	35.450	23.61	4.41	6.31	90.10	.07	.00
50	50	39		3	25.72	0.00	25.72	35.942	23.78	4.41	6.31	91.08	.06	.00
100	100	40		4	25.72	0.00	25.72	35.918	23.76	4.51	6.44	92.99	.07	.00
150	150	148.41		1	22.07	0.00	22.07	37.336	25.76	3.91	5.59	75.57	.10	.94
200	200	42		2	20.98	0.00	20.98	36.819	25.90	3.73	5.32	71.01	.20	3.04
250	250	246.43		3	18.35	0.00	18.35	36.601	26.43	3.74	5.34	60.07	.33	5.74
300	300	289.44		4	17.40	0.00	17.40	36.454	26.55	3.97	5.67	69.26	.40	5.95

R V PALUMBO CRUISE STATION ISL-1B PRNC REFERENCE 38629

DATE 1/24/74 FASO 1020.5 WEATHER 02 WIND VELOC 07 WAVE PERIOD 0
 HOUR 17.5 ~~17.5~~ TEMP DRY 28.0 VISIBILITY 6 WIND DIREC 08 TRANSPAR
 LAT 10-31.0 TEMP WET 28.0 CLOUD TYPE 5 WAVE DIREC 09 SONIC DEP 0164
 LONG 66-39.3 REL HUMID 72% CLOUD AMT 5 WAVE HEIGHT 3 COLOR

CAST 1 MASS TIME 17.5 GMT, 153, LOCAL MAX DEPTH 100 WIRE ANGLE 0
 OXYGEN TITER .941 METER WHEEL FACTOR .997

DEPTH (M)		TEMP				OXYGEN		PHOS		NITRA		
WIRE	CTZ	TL	BN	TL	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
0	4.45	25.33	1	25.33	25.33	35.443	23.60	4.42	6.32	90.38	.07	.00
25	26.46	25.29	2	25.29	25.442		23.61	4.45	6.36	90.92	.07	.04
50	51.47	25.71	3	25.71	35.852		23.79	4.39	6.28	90.68	.08	.00
100	96.48	23.79	4	23.79	36.722		25.33	4.23	6.04	81.96	.10	.42

R V PALUMBO CRUISE STATION ISL-1C PRNC REFERENCE 38630

DATE 1/24/74 FASO 1019.5 WEATHER 02 WIND VELOC 09 WAVE PERIOD 7
 HOUR 18.2 ~~18.2~~ TEMP DRY 27.0 VISIBILITY 6 WIND DIREC 08 TRANSPAR
 LAT 10-32.1 TEMP WET 27.0 CLOUD TYPE 4 WAVE DIREC 09 SONIC DEP 0392
 LONG 67-39.3 REL HUMID 68% CLOUD AMT 3 WAVE HEIGHT 4 COLOR

CAST 1 MASS TIME 18.2 GMT, 1412 LOCAL MAX DEPTH 300 WIRE ANGLE 2
 OXYGEN TITER .941 METER WHEEL FACTOR .997

DEPTH (M)		TEMP				OXYGEN		PHOS		NITRA		
WIRE	CTZ	TL	BN	TL	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
0	0.121	25.55	11	25.55	25.35	35.354	23.52	4.45	6.36	90.90	.10	.00
25	28.122	25.36	12	25.36	25.78	35.481	23.61	4.49	6.41	91.82	.17	.00
50	46.123	25.69	14	25.69	35.782		23.74	4.39	6.27	90.38	.08	.01
100	108.124	24.69	16	24.69	36.597		24.66	4.31	6.16	83.67	.08	.18
150	150.125	22.14	17	22.14	36.893		25.63	3.92	5.61	75.56	.14	1.07
200	194.126	19.71	2	19.71	36.879		26.14	3.75	5.35	67.02	.10	2.92
250	243.127	18.23	3	18.23	36.433		26.38	3.82	5.46	67.09	.26	3.82
300	283.128	17.05	4	17.05	36.273		26.50	3.93	5.62	68.50	.35	6.51

R V PALUMBO CRUISE

STATION PMA-1A

PRNC REFERENCE 38631

DATE 1/24/74 BARO 1018.5 WEATHER 00 WIND VELOC 09 WAVE PERIOD 7
 HOUR 19.3 ~~21.2~~ TEMP DRY 0.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-30.2 N TEMP WET 27.0 CLOUD TYPE 8 WAVE DIREC 09 SONIC DEP 0021
 LONG 66-34.6 W REL HUMID 630 CLOUD AMT 3 WAVE HEIGHT 4 COLOR

CAST 1 MESS TIME 19.3 GMT, 1518 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.046 METER WHEEL FACTOR .997

DEPTH (M)

WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	5	1	25.51	0.00	25.51	35.495	23.58	4.90	7.00	100.33	.07	.01
10	10	9	2	25.52	0.00	25.52	35.585	23.64	4.91	7.01	100.66	.08	.00

R V PALUMBO CRUISE

STATION PMA-1B

PRNC REFERENCE 38632

DATE 1/24/74 BARO 1018.5 WEATHER 02 WIND VELOC 09 WAVE PERIOD 7
 HOUR 19.8 ~~21.5~~ TEMP DRY 0.0 VISIBILITY 8 WIND DIREC 09 TRANSPAR
 LAT 18-31.6 N TEMP WET 27.0 CLOUD TYPE 8 WAVE DIREC 09 SONIC DEP 0184
 LONG 66-35.7 W REL HUMID 620 CLOUD AMT 3 WAVE HEIGHT 4 COLOR

CAST 1 MESS TIME 19.8 GMT, 1548 LOCAL MAX DEPTH 100 WIRE ANGLE 20
 OXYGEN TITER 1.046 METER WHEEL FACTOR .997

DEPTH (M)

WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	2	1	25.49	0.00	25.49	35.573	23.64	4.90	7.00	100.39	.07	.00
25	24	0	2	25.52	0.00	25.52	35.589	23.65	4.90	7.00	100.45	.09	.00
50	47	46	3	25.78	0.00	25.78	35.835	23.75	4.87	6.95	100.48	.10	.00
100	94	95	4	24.64	0.00	24.64	36.687	24.74	4.75	6.79	92.54	.06	.26

R V PALUMBO CRUISE STATION PMA-1C PRNC REFERENCE 38633

DATE 1/24/74 BARO 1018.5 WEATHER 02 WIND VELOC 11 WAVE PERIOD 7
 HOUR 20.5 ~~22.3~~ TEMP DRY 0.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-32.0 N TEMP WET 27.0 CLOUD TYPE 8 WAVE DIREC 09 SONIC DEP 0438
 LONG 66-34.8 W REL HUMID 720 CLOUD AMT 2 WAVE HEIGHT 4 COLOR

CAST 1 MESS TIME 20.5 GMT, 1633 LOCAL MAX DEPTH 300 WIRE ANGLE 10
 OXYGEN TITER 1.046 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	TEMP				TAVE	SALIN	OXYGEN				PHOS	NITRA	
		CZ	TZ	BN	TL			TM	SIG	T	ML/L			MG/L	XSAT
0	0	0	0	11	25.43	0.00	25.43	35.579	23.67	4.93	7.04	100.96	.07	.00
25	25	26	25.45	12	25.45	0.00	25.45	36.259	24.17	4.90	7.00	100.38	.07	.00
50	50	46	25.75	10	25.75	0.00	25.75	35.890	23.80	4.92	7.03	101.59	.07	.04
100	99	0	25.89	16	25.89	0.00	25.89	35.872	23.75	5.11	7.29	105.68	.07	.05
150	148	141	22.32	1	22.32	0.00	22.32	37.050	25.70	4.35	6.22	84.25	.11	.75
200	197	0	20.30	2	20.30	0.00	20.30	36.902	26.15	4.14	5.92	78.60	.16	2.60
250	246	249	18.16	3	18.16	0.00	18.16	36.659	26.52	4.13	5.90	73.13	.35	4.90
300	295	285	17.03	4	17.03	0.00	17.03	36.447	26.63	4.14	5.92	72.43	.52	6.15

HIGH SALINITY

R V PALUMBO CRUISE STATION PMA-2A PRNC REFERENCE 38634

DATE 1/28/74 BARO 1023.5 WEATHER 00 WIND VELOC 04 WAVE PERIOD 5
 HOUR 18.7 TEMP DRY 0.0 VISIBILITY 6 WIND DIREC 09 TRANSPAR
 LAT 18-29.7 N TEMP WET 25.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0021
 LONG 66-33.8 W REL HUMID 830 CLOUD AMT 6 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 13.7 GMT, 0943 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.043 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	TEMP				TAVE	SALIN	OXYGEN				PHOS	NITRA	
		CZ	TZ	BN	TL			TM	SIG	T	ML/L			MG/L	XSAT
0	0	0	25.51	11	25.51	0.00	25.51	35.832	23.83	4.76	6.80	97.84	.10	.
10	10	10	25.51	12	25.51	0.00	25.51	35.749	23.77	4.84	6.92	99.47	.12	.

R V PALUMBO CRUISE

STATION PMA-3A

PRNC REFERENCE 38635

DATE 1/28/74 BARO 1023.5 WEATHER 02 WIND VELOC 04 WAVE PERIOD 5
 HOUR 14.0 ~~15.9~~ TEMP DRY 0.0 VISIBILITY 6 WIND DIREC 08 TRANSPAR
 LAT 18-29.6 N TEMP WET 25.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0020
 LONG 66-32.7 W REL HUMID 830 CLOUD AMT 6 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 14.0 GMT, 0958 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.043 METER WHEEL FACTOR .997

DEPTH (M)		TEMP		TAVE		SALIN		SIG T		OXYGEN	
WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT
0	0	0	10	25.44	0.00	25.44	35.742	23.79	4.86	6.95	99.79
10	10	14	16	25.49	0.00	25.49	35.778	23.80	4.92	7.03	101.19

PHOS NITRA .09 .11

R V PALUMBO CRUISE

STATION PMA-4A

PRNC REFERENCE 38636

DATE 1/28/74 BARO 1023.5 WEATHER 02 WIND VELOC 04 WAVE PERIOD 5
 HOUR 14.3 ~~16.3~~ TEMP DRY 0.0 VISIBILITY 6 WIND DIREC 09 TRANSPAR
 LAT 18-29.3 N TEMP WET 25.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0021
 LONG 66-31.6 W REL HUMID 830 CLOUD AMT 4 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 14.3 GMT, 1016 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.043 METER WHEEL FACTOR .997

DEPTH (M)		TEMP		TAVE		SALIN		SIG T		OXYGEN	
WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT
0	0	0	11	25.43	0.00	25.43	36.470	24.34	4.92	7.03	101.17
10	10	11	12	25.48	0.00	25.48	35.832	23.84	4.88	6.98	100.37

PHOS NITRA .16 .08

BAD SALINITY

R V PALUMBO CRUISE STATION PMA-5A PRNC REFERENCE 38657

DATE 1/28/74 BARO 1023.5 WEATHER 02 WIND VELOC 06 WAVE PERIOD 6
 HOUR 14.6 ~~16.5~~ TEMP DRY 0.0 VISIBILITY 6 WIND DIREC 08 TRANSPAR
 LAT 18-29.3 N TEMP WET 26.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0024
 LONG 66-30.5 W REL HUMID 830 CLOUD AMT 2 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 14.6 GMT, 1038⁸ LOCAL MAX DEPTH 10 WIRE ANGLE 9
 OXYGEN TITER 1.043 METER WHEEL FACTOR .997

DEPTH (M) TEMP OXYGEN PHOS NITRA

WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT
0	0	1	10	25.48	0.00	25.48	35.824	23.84	4.85	6.93	99.72
10	10	13	16	25.41	0.00	25.41	35.794	23.84	4.91	7.02	100.87

R V PALUMBO CRUISE STATION PMA-5B PRNC REFERENCE 38658

DATE 1/28/74 BARO 1022.5 WEATHER 02 WIND VELOC 07 WAVE PERIOD 5
 HOUR 15.0 ~~16.9~~ TEMP DRY 0.0 VISIBILITY 6 WIND DIREC 08 TRANSPAR
 LAT 18-30.6 N TEMP WET 26.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0182
 LONG 66-50.6 W REL HUMID 780 CLOUD AMT 1 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 15.0 GMT, 1058 LOCAL MAX DEPTH 10 WIRE ANGLE 10
 OXYGEN TITER 1.043 METER WHEEL FACTOR .997

DEPTH (M) TEMP OXYGEN PHOS NITRA

WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT
0	0	0	11	25.60	0.00	25.60	35.841	23.81	4.86	6.95	100.14
25	25	0	12	25.60	0.00	25.60	35.848	23.82	4.86	6.95	100.15
50	50	46	10	25.67	0.00	25.67	36.037	23.94	4.76	6.80	98.33
100	99	57	16	25.57	0.00	25.57	36.033	23.97	4.89	6.99	100.96

R V PALUMBO CRUISE STATION PMA-5C PRNC REFERENCE 38639

DATE 1/28/74 BARO 1022.5 WEATHER 02 WIND VELOC 08 WAVE PERIOD 6
 HOUR 17.5 TEMP DRY 0.0 VISIBILITY 7 WIND DIREC 08 TRANSPAR
 LAT 18-31.4 N TEMP WET 26.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0375
 LONG 66-30.6 W REL HUMID 760 CLOUD AMT 8 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 15.5 GMT, 1132 LOCAL MAX DEPTH 300 WIRE ANGLE 16
 OXYGEN TITER 1.043 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CZ	TEMP			TAVE	SALIN	SIG T	OXYGEN			PHOS	NITRA
			TZ	BN	TL				ML/L	MG/L	XSAT		
0	0	0	11	25.59	0.00	25.59	35.861	23.83	4.95	7.06	101.86	.09	.
25	24	27	12	25.57	0.00	25.57	35.871	23.84	4.87	6.96	100.34	.09	.
50	48	41	10	25.59	0.00	25.59	35.928	23.88	4.93	7.05	101.73	.10	.
100	96	0	16	25.78	0.00	25.78	36.116	23.96	4.81	6.87	99.70	.08	.
150	144	0	1	23.33	0.00	23.33	36.782	25.21	4.66	6.66	90.35	.10	.
200	192	192	2	21.47	0.00	21.47	36.998	25.90	4.20	6.01	80.66	.08	.
250	240	240	3	18.96	0.00	18.96	36.680	26.33	4.14	5.92	73.74	.29	.
300	288	285	4	17.67	0.00	17.67	36.475	26.50	4.25	6.07	74.52	.46	.

R V PALUMBO CRUISE STATION PMA-4B PRNC REFERENCE 38640

DATE 1/28/74 BARO 1022.5 WEATHER 02 WIND VELOC 11 WAVE PERIOD 6
 HOUR 18.2 TEMP DRY 0.0 VISIBILITY 6 WIND DIREC 08 TRANSPAR
 LAT 18-30.4 N TEMP WET 26.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0182
 LONG 66-31.7 W REL HUMID 760 CLOUD AMT 7 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 16.2 GMT, 1212 LOCAL MAX DEPTH 100 WIRE ANGLE 8
 OXYGEN TITER 1.043 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CZ	TEMP			TAVE	SALIN	SIG T	OXYGEN			PHOS	NITRA
			TZ	BN	TL				ML/L	MG/L	XSAT		
0	0	0	11	25.61	0.00	25.61	35.837	23.81	4.87	6.96	100.36	.07	.
25	25	25	12	25.60	0.00	25.60	35.846	23.82	4.84	6.92	99.71	.09	.
50	50	50	10	25.69	0.00	25.69	36.013	23.91	4.80	6.86	99.20	.10	.
100	99	71	16	25.67	0.00	25.67	36.071	23.96	4.75	6.78	98.16	.06	.

R V PALUMBU CRUISE STATION PMA-4C PRNC REFERENCE 38641
 DATE 1/26/74 BARO 1022.5 WEATHER 02 WIND VELOC 11 WAVE PERIOD 6
 HOUR 17.8 ~~18.8~~ TEMP DRY 0.0 VISIBILITY 7 WIND DIREC 08 TRANSPAR
 LAT 18-32.5 N TEMP WET 26.0 CLOUD TYPE 6 WAVE DIREC 08 SONIC DEP 0356
 LONG 66-31.8 W REL HUMID 730 CLOUD AMT 1 WAVE HEIGHT 4 COLOR

CAST 1 MESS TIME 16.9 GMT, 1255 LOCAL MAX DEPTH 300 WIRE ANGLE 2
 OXYGEN TITER 1.043 METER WHEEL FACTOR .997

DEPTH (M)	WIRE	CZ	TZ	BN	TL	TEMP		TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
						TM	TL								
0	0	0	11	25.53	0.00	25.53	35.802	23.80	4.93	7.05	101.49	.07	.	.	
25	25	30	12	25.52	0.00	25.52	35.802	23.81	5.08	7.26	104.47	.05	.	.	
50	50	0	10	25.57	0.00	25.57	35.804	23.79	5.10	7.29	104.98	.06	.	.	
100	100	0	16	25.73	0.00	25.73	35.998	23.89	4.82	6.89	99.68	.05	.	.	
150	150	0	1	23.43	0.00	23.43	36.766	25.17	4.66	6.66	90.36	.04	.	.	
200	200	0	2	21.55	0.00	21.55	36.972	25.86	4.27	6.10	81.88	.09	.	.	
250	250	233	3	19.28	0.00	19.28	36.787	26.33	4.15	5.93	74.41	.20	.	.	
300	299	271	4	18.03	0.00	18.03	36.562	26.48	4.14	5.92	73.01	.36	.	.	

R V PALUMBU CRUISE STATION PMA-3B PRNC REFERENCE 38642
 DATE 1/26/74 BARO 1021.5 WEATHER 02 WIND VELOC 11 WAVE PERIOD 6
 HOUR 17.8 ~~18.8~~ TEMP DRY 0.0 VISIBILITY 7 WIND DIREC 08 TRANSPAR
 LAT 18-30.6 N TEMP WET 26.0 CLOUD TYPE 6 WAVE DIREC 08 SONIC DEP 0182
 LONG 66-32.6 W REL HUMID 710 CLOUD AMT 2 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 17.8 GMT, 1348 LOCAL MAX DEPTH 100 WIRE ANGLE 0
 OXYGEN TITER 1.043 METER WHEEL FACTOR .997

DEPTH (M)	WIRE	CZ	TZ	BN	TL	TEMP		TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
						TM	TL								
0	0	0	11	25.54	0.00	25.54	35.777	23.78	4.92	7.03	101.26	.00	.	.	
25	25	29	12	25.52	0.00	25.52	35.789	23.80	4.87	6.96	100.17	.00	.	.	
50	50	42	10	25.68	0.00	25.68	35.998	23.91	4.74	6.77	97.87	.00	.	.	
100	100	0	16	25.66	0.00	25.66	35.966	23.89	4.81	6.87	99.51	.00	.	.	

R V PALUMBO CRUISE STATION PMA-3C PRNC REFERENCE 38643

DATE 1/28/74 BARO 1022.5 WEATHER 02 WIND VELOC 11 WAVE PERIOD 6
 HOUR 18.5 ~~20.5~~ TEMP DRY 0.0 VISIBILITY 7 WIND DIREC 08 TRANSPAR
 LAT 18-31.7 N TEMP WET 27.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0402
 LONG 66-32.7 W REL HUMID 68.0 CLOUD AMT 1 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 18.5 GMT, 1430³ LOCAL MAX DEPTH 300 WIRE ANGLE 0
 OXYGEN TITER 1.043 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	TEMP		BN	TL	TZ	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
		OXYGEN													
0	0	11	25.53	0.00	25.53	35.760	23.77	4.87	6.96	100.15	.03	.	.	.	.
25	25	12	25.50	0.00	25.50	35.759	23.78	4.86	6.95	99.89	.00	.	.	.	.
50	50	10	25.49	0.00	25.49	35.770	23.79	4.84	6.92	99.46	.03	.	.	.	.
100	100	16	25.15	0.00	25.15	36.610	24.53	4.71	6.72	96.63	.05	.	.	.	.
150	150	1	23.02	0.00	23.02	36.821	25.33	4.65	6.65	90.04	.06	.	.	.	.
200	200	2	20.12	0.00	20.12	36.834	26.14	4.14	5.92	78.42	.15	.	.	.	.
250	250	3	18.54	0.00	18.54	36.626	26.40	4.16	5.95	73.76	.28	.	.	.	.
300	300	4	17.16	0.00	17.16	36.416	26.58	4.17	5.96	72.94	.45	.	.	.	.

R V PALUMBO CRUISE STATION PMA-2B PRNC REFERENCE 38644

DATE 1/28/74 BARO 1020.5 WEATHER 02 WIND VELOC 11 WAVE PERIOD 6
 HOUR 19.3 ~~21.4~~ TEMP DRY 0.0 VISIBILITY 7 WIND DIREC 08 TRANSPAR
 LAT 18-31.3 N TEMP WET 28.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0182
 LONG 66-33.9 W REL HUMID 68.0 CLOUD AMT 8 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 19.3 GMT, 1520 LOCAL MAX DEPTH 100 WIRE ANGLE 0
 OXYGEN TITER 1.043 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	TEMP		BN	TL	TZ	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
		OXYGEN													
0	0	11	25.47	0.00	25.47	35.773	23.80	4.89	6.99	100.51	.05	.	.	.	.
25	25	12	25.46	0.00	25.46	35.758	23.79	4.85	6.93	99.62	.05	.	.	.	.
50	50	10	25.60	0.00	25.60	35.867	23.83	4.87	6.96	100.38	.04	.	.	.	.
100	100	16	25.46	0.00	25.46	35.788	23.82	5.19	7.41	106.51	.04	.	.	.	.

R V PALUMBO CRUISE STATION PMA-2C PRNC REFERENCE 38645
 DATE 1/28/74 BARU 1018.5 WEATHER 02 WIND VELOC 11 WAVE PERIOD 6
 HOUR 22.1 TEMP DRY 0.0 VISIBILITY 7 WIND DIREC 08 TRANSPAR
 LAT 18-31.7 N TEMP WET 29.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0384
 LONG 66-33.6 W REL HUMID 705 CLOUD AMT 2 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 20.1 GMT, 1605 LOCAL MAX DEPTH 300 WIRE ANGLE 0
 OXYGEN TITER 1.043 METER WHEEL FACTOR .997

DEPTH (M)	WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	0	11	25.49	0.00	25.49	35.659	23.71	4.88	6.98	100.20	.43	.	
25	25	27	12	25.48	0.00	25.48	35.707	23.75	4.85	6.93	99.59	.08	.	
50	50	0	10	25.27	0.00	25.27	35.708	23.81	5.26	7.51	107.63	.10	.	
100	100	94	16	25.20	0.00	25.20	35.578	23.74	4.68	6.69	95.69	.07	.	
150	150	0	1	0.00	0.00	0.00	36.733	0.00	4.69	6.71	*****	.04	.	
200	200	0	2	21.23	0.00	21.23	36.997	25.97	4.32	6.17	82.68	.04	.	
250	250	0	3	19.39	0.00	19.39	36.750	26.27	4.22	6.02	75.48	.15	.	
300	300	0	4	17.96	0.00	17.96	36.546	26.48	4.15	5.93	73.13	.29	.	

NO TEMPERATURE

LOW SALINITY

R V PALUMBO CRUISE STATION TOR-1A PRNC REFERENCE 38646
 DATE 1/29/74 BARU 1020.5 WEATHER 00 WIND VELOC 03 WAVE PERIOD 6
 HOUR 11.9 13.8 TEMP DRY 0.0 VISIBILITY 6 WIND DIREC 06 TRANSPAR
 LAT 18-29.0 N TEMP WET 23.0 CLOUD TYPE 8 WAVE DIREC 06 SONIC DEP 0025
 LONG 66-29.4 W REL HUMID 730 CLOUD AMT 2 WAVE HEIGHT 2 COLOR

CAST 1 MESS TIME 11.9 GMT, 0755 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.043 METER WHEEL FACTOR .997

DEPTH (M)	WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	0	11	25.37	0.00	25.37	35.848	23.89	4.82	6.89	98.94	.06	.	
10	10	13	12	25.39	0.00	25.39	35.859	23.89	4.91	7.02	100.91	.05	.	

R V PALUMBO CRUISE

STATION TOR-2A

PRNC REFERENCE 38647

DATE 1/29/74 BARO 1020.5 WEATHER 02 WIND VELOC 03 WAVE PERIOD 5
 HOUR 12.2 TEMP DRY 0.0 VISIBILITY 7 WIND DIREC 07 TRANSPAR
 LAT 18-28.7 N TEMP WET 23.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0018
 LONG 66-28.6 W REL HUMID 730 CLOUD AMT 2 WAVE HEIGHT 2 COLOR

CAST 1 MESS TIME 12.2 GMT, 0811 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.043 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN									
	WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	0	0	11	25.38	0.00	25.38	35.857	23.89	4.83	6.90	99.18	.06	.
10	10	14	12	25.41	0.00	25.41	35.879	23.90	4.85	6.93	99.67	.05	.	

R V PALUMBO CRUISE

STATION TOR-3A

PRNC REFERENCE 38648

DATE 1/29/74 BARO 1020.5 WEATHER 02 WIND VELOC 02 WAVE PERIOD 6
 HOUR 14.5 TEMP DRY 0.0 VISIBILITY 7 WIND DIREC 06 TRANSPAR
 LAT 18-29.1 N TEMP WET 23.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0019
 LONG 66-27.3 W REL HUMID 820 CLOUD AMT 2 WAVE HEIGHT 2 COLOR

CAST 1 MESS TIME 12.5 GMT, 0828 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.043 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN									
	WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	0	0	11	24.55	0.00	24.55	35.560	23.92	4.83	6.90	95.64	.08	.
10	10	13	12	24.99	0.00	24.99	35.748	23.93	4.78	6.83	95.96	.11	.	

R V PALUMBO CRUISE STATION TOR-4A PRNC REFERENCE 38649

DATE 1/29/74 BARO 1021.5 WEATHER 02 WIND VELOC 03 WAVE PERIOD 5
 HOUR 14.7 TEMP DRY 0.0 VISIBILITY 7 WIND DIREC 07 TRANSPAR
 LAT 18-24.7 N TEMP WET 23.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0021
 LONG 66-26.3 W REL HUMID 810 CLOUD AMT 2 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 12.7 GMT, 0845 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.043 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
	TZ	BN	TL								
0	0	10	25.00	0.00	25.00	35.736	23.92	4.77	6.81	97.24	.12
10	10	12	24.99	0.00	24.99	35.731	23.92	4.78	6.83	95.88	.08

R V PALUMBO CRUISE STATION TOR-5A PRNC REFERENCE 38650

DATE 1/29/74 BARO 1021.5 WEATHER 02 WIND VELOC 03 WAVE PERIOD 6
 HOUR 15.0 TEMP DRY 0.0 VISIBILITY 7 WIND DIREC 07 TRANSPAR
 LAT 18-29.6 N TEMP WET 23.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0023
 LONG 66-25.3 W REL HUMID 810 CLOUD AMT 2 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 13.0 GMT, 0900 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER 1.043 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
	TZ	BN	TL								
0	0	11	24.77	0.00	24.77	35.632	23.91	4.97	7.09	98.91	.15
10	10	9	25.05	0.00	25.05	35.766	23.92	4.80	6.86	97.97	.11

R V PALUMBO CRUISE

STATION TOR-5B

DATE 1/29/74 BARO 1021.5 WEATHER 02 PRNC REFERENCE 38651
 HOUR 18.4 TEMP DRY 0.0 VISIBILITY 7 WIND VELOC 03 WAVE PERIOD 6
 LAT 18-31.2 N TEMP WET 23.0 CLOUD TYPE 8 WIND DIREC 07 TRANSPAR
 LONG 66-25.3 W REL HUMID 800 CLOUD AMT 2 WAVE DIREC 07 SONIC DEP 0182
 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 13.4 GMT, 0925 LOCAL MAX DEPTH 100 WIRE ANGLE 19
 OXYGEN TITER 1.043 METER WHEEL FACTOR .997

DEPTH (M)	WIRE CZ	TZ	BN	TL	TEMP		TAVE	SALIN	SIG T	OXYGEN		XSAT	PHOS	NITRA
					TM	TM				ML/L	MG/L			
0	0	0	11	25.03	0.00	0.00	25.03	35.794	23.95	4.86	6.95	99.24	.06	.
25	24	32	12	25.03	0.00	0.00	25.03	35.793	23.95	4.87	6.96	99.45	.09	.
50	48	54	10	25.11	0.00	0.00	25.11	35.908	24.01	4.83	6.90	98.80	.07	.
100	95	0	16	25.10	0.00	0.00	25.10	35.839	23.96	4.92	7.03	100.66	.06	.

R V PALUMBO CRUISE

STATION TOR-5C

DATE 1/29/74 BARO 1022.5 WEATHER 02 PRNC REFERENCE 38652
 HOUR 14.0 ~~16.1~~ TEMP DRY 0.0 VISIBILITY 7 WIND VELOC 10 WAVE PERIOD 6
 LAT 18-31.7 N TEMP WET 24.0 CLOUD TYPE 8 WIND DIREC 08 TRANSPAR
 LONG 66-25.3 W REL HUMID 810 CLOUD AMT 5 WAVE DIREC 08 SONIC DEP 0375
 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 14.0 GMT, 1003 LOCAL MAX DEPTH 300 WIRE ANGLE 20
 OXYGEN TITER 1.043 METER WHEEL FACTOR .997

DEPTH (M)	WIRE CZ	TZ	BN	TL	TEMP		TAVE	SALIN	SIG T	OXYGEN		XSAT	PHOS	NITRA
					TM	TM				ML/L	MG/L			
0	0	0	1	25.10	0.00	0.00	25.10	35.871	23.99	4.97	7.09	101.53	.05	.
25	24	24	2	25.09	0.00	0.00	25.09	35.782	23.92	4.87	6.96	99.53	.05	.
50	47	50	3	25.10	0.00	0.00	25.10	35.803	23.94	4.87	6.96	99.56	.05	.
100	94	96	4	25.37	0.00	0.00	25.37	36.588	24.45	4.71	6.72	96.75	.07	.
150	141	0	11	25.06	0.00	0.00	25.06	38.780	23.93	4.99	7.12	101.83	.06	.
200	188	183	12	20.08	0.00	0.00	20.08	38.850	26.17	4.14	5.92	78.41	.17	.
250	235	0	10	27.47	0.00	0.00	27.47	36.747	23.90	4.72	6.74	98.71	.09	.
300	282	0	16	25.01	0.00	0.00	25.01	35.813	23.97	4.88	6.98	99.65	.05	.

PREMATUZE TRIP

R V PALUMBO CRUISE STATION TOR-4B PRNC REFERENCE 38653
 DATE 1/29/74 BARO 1021.5 WEATHER 02 WIND VELOC 11 WAVE PERIOD 6
 HOUR 14.9 16.8 TEMP DRY 0.0 VISIBILITY 7 WIND DIREC 08 TRANSPAR
 LAT 18-31.7 N TEMP WET 24.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0192
 LONG 66-26.3 W REL HUMID 690 CLOUD AMT 5 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 14.9 GMT, 1051 LOCAL MAX DEPTH 100 WIRE ANGLE 17
 OXYGEN TITER 1.043 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN				PHOS NITRA				
	WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN		SIG T	ML/L	MG/L	XSAT
0	0	0	0	11	25.32	0.00	25.32	35.810	23.88	4.83	6.90	99.04	.05
25	24	28	0	12	25.24	0.00	25.24	35.799	23.89	4.82	6.89	98.70	.10
50	48	0	10	25.26	0.00	25.26	35.843	23.92	4.83	6.90	98.98	.18	.
100	96	0	16	24.98	0.00	24.98	35.850	24.01	4.85	6.93	97.87	.06	.

R V PALUMBO CRUISE STATION TOR-4C PRNC REFERENCE 38654
 DATE 1/29/74 BARO 1020.5 WEATHER 02 WIND VELOC 11 WAVE PERIOD 6
 HOUR 17.8 TEMP DRY 0.0 VISIBILITY 6 WIND DIREC 08 TRANSPAR
 LAT 18-31.8 N TEMP WET 24.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0384
 LONG 66-25.3 W REL HUMID 880 CLOUD AMT 6 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 15.8 GMT, 1150 LOCAL MAX DEPTH 300 WIRE ANGLE 17
 OXYGEN TITER 1.043 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN				PHOS NITRA				
	WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN		SIG T	ML/L	MG/L	XSAT
0	0	0	0	1	25.14	0.00	25.14	35.804	23.93	4.33	6.19	88.53	.00
25	24	30	0	2	25.14	0.00	25.14	35.814	23.93	4.86	6.95	99.42	.04
50	48	49	0	3	25.11	0.00	25.11	35.813	23.94	4.85	6.93	99.16	.03
100	96	99	0	4	25.41	0.00	25.41	36.493	24.36	4.75	6.78	97.54	.04
150	144	0	11	25.32	0.00	25.32	36.628	24.49	4.10	5.86	84.32	.06	
200	191	203	12	19.97	0.00	19.97	36.800	26.16	4.11	5.87	74.11	.19	
250	239	247	10	18.06	0.00	18.06	36.525	26.44	4.10	5.86	72.21	.30	
300	283	283	16	20.95	0.00	20.95	36.914	25.98	4.54	6.46	86.56	.08	

PREMATURE TRIP

R V PALUMBO CRUISE STATION TOR-3B PRNC REFERENCE 38655
 DATE 1/29/74 BARO 1021.5 WEATHER 02 WIND VELOC 11 WAVE PERIOD 6
 HOUR 18.9 TEMP DRY 0.0 VISIBILITY 7 WIND DIREC 08 TRANSPAR
 LAT 18-30.7 N TEMP WET 24.0 CLOUD TYPE 0 WAVE DIREC 08 SONIC DEP 0185
 LONG 66-27.3 W REL HUMID 810 CLOUD AMT 2 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 16.9 GMT, 1255 LOCAL MAX DEPTH 100 WIRE ANGLE 11
 OXYGEN TITER 1.043 METER WHEEL FACTOR .997

DEPTH (M)	WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	OXYGEN			PHOS	NITRA
										ML/L	MG/L	XSAT		
0	0	0	0	11	25.55	0.00	25.55	35.900	23.87	4.43	6.33	91.32	.04	.
25	25	31	0	12	25.54	0.00	25.54	35.926	23.89	4.86	6.95	100.14	.04	.
50	49	0	0	10	25.51	0.00	25.51	35.941	23.92	5.06	7.23	104.19	.05	.
100	98	0	0	16	25.55	0.00	25.55	36.064	24.00	4.86	6.95	100.32	.00	.

R V PALUMBO CRUISE STATION TOR-3C PRNC REFERENCE 38656

DATE 1/29/74 BARO 1021.5 WEATHER 02 WIND VELOC 11 WAVE PERIOD 6
 HOUR 19.8 TEMP DRY 0.0 VISIBILITY 7 WIND DIREC 08 TRANSPAR
 LAT 18-31.9 N TEMP WET 24.0 CLOUD TYPE 0 WAVE DIREC 08 SONIC DEP 0365
 LONG 66-27.3 W REL HUMID 710 CLOUD AMT 2 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 17.8 GMT, 1349 LOCAL MAX DEPTH 300 WIRE ANGLE 8
 OXYGEN TITER 1.043 METER WHEEL FACTOR .997

DEPTH (M)	WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	OXYGEN			PHOS	NITRA
										ML/L	MG/L	XSAT		
0	0	0	0	1	25.53	0.00	25.53	35.698	23.73	4.86	6.95	99.87	.04	.
25	25	0	0	2	25.53	0.00	25.53	35.702	23.73	4.86	6.95	99.87	.08	.
50	50	0	0	3	25.57	0.00	25.57	35.759	23.76	4.87	6.96	100.21	.07	.
100	99	0	0	4	25.51	0.00	25.51	36.336	24.21	4.73	6.75	96.99	.07	.
150	149	0	0	11	25.73	0.00	25.73	35.967	23.87	5.35	7.65	110.63	.06	.
200	198	0	0	12	20.42	0.00	20.42	36.892	26.11	4.09	5.84	77.65	.15	.
250	247	0	0	10	24.08	0.00	24.08	35.682	24.15	4.92	7.03	97.40	.09	.
300	297	0	0	16	19.07	0.00	19.87	36.741	26.14	4.32	6.17	77.00	.00	.

PREMATURE TRIP

R V PALUMBO CRUISE STATION TOR=2C PRNC REFERENCE 38657
 DATE 1/29/74 BARO 1019.5 WEATHER 02 WIND VELOC 12 WAVE PERIOD 6
 HOUR 18.520.5 TEMP DRY 0.0 VISIBILITY 7 WIND DIREC 08 TRANSPAR
 LAT 18-32.0 N TEMP WET 25.0 CLOUD TYPE 6 WAVE DIREC 08 SONIC DEP 0375
 LONG 66-28.4 W REL HUMID 680 CLOUD AMT 2 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 18.5 GMT, 1432 LOCAL MAX DEPTH 300 WIRE ANGLE 24
 OXYGEN TITER 1.043 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			TAVE	SALIN	SIG T	OXYGEN			PHOS	NITRA		
	WIRE CZ	TZ	BN				TL	TM	ML/L			MG/L	XSAT
0	0	0	11	25.55	0.00	25.55	35.681	23.71	4.87	6.96	100.09	.04	.
25	23	23	12	25.54	0.00	25.54	35.728	23.75	4.83	6.90	99.27	.04	.
50	46	46	10	25.52	0.00	25.52	35.757	23.77	4.84	6.92	99.49	.07	.
100	92	57	16	25.46	0.00	25.46	35.756	23.79	4.89	6.99	100.48	.04	.
150	137	147	1	23.80	0.00	23.80	35.613	24.18	4.65	6.65	91.47	.06	.
200	183	0	2	23.78	0.00	23.78	36.926	25.18	4.30	6.14	83.98	.10	.
250	228	235	3	18.74	0.00	18.74	36.548	26.29	4.22	6.02	74.57	.27	.
300	274	277	4	17.34	0.00	17.34	36.343	26.48	4.10	5.86	71.60	.38	.

DISCARD HIGH TEMPERATURE

R V PALUMBO CRUISE STATION TOR=2B PRNC REFERENCE 38658
 DATE 1/29/74 BARO 1017.5 WEATHER 02 WIND VELOC 11 WAVE PERIOD 6
 HOUR 19.2 21.2 TEMP DRY 0.0 VISIBILITY 7 WIND DIREC 08 TRANSPAR
 LAT 18-30.3 N TEMP WET 28.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0182
 LONG 66-28.3 W REL HUMID 740 CLOUD AMT 2 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 19.2 GMT, 1511 LOCAL MAX DEPTH 100 WIRE ANGLE 11
 OXYGEN TITER 1.043 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			TAVE	SALIN	SIG T	OXYGEN			PHOS	NITRA		
	WIRE CZ	TZ	BN				TL	TM	ML/L			MG/L	XSAT
0	0	0	11	25.55	0.00	25.55	35.839	23.83	4.87	6.96	100.27	.04	.
25	25	0	12	25.56	0.00	25.56	35.878	23.85	4.93	7.05	101.62	.06	.
50	49	48	10	25.66	0.00	25.66	35.829	23.78	4.78	6.83	98.49	.04	.
100	98	53	16	25.59	0.00	25.59	35.824	23.80	4.91	7.02	101.18	.05	.

R V PALUMBO CRUISE

STATION TOR-1B

PRNC REFERENCE 38659

DATE 1/29/74 BARU 1016.5 WEATHER 02 WIND VELOC 10 WAVE PERIOD 6
 HOUR 19.7 ~~21.6~~ TEMP DRY 0.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-30.3 N TEMP WET 28.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0185
 LONG 66-29.5 W REL HUMID 730 CLOUD AMT 2 WAVE HEIGHT 4 COLOR

CAST 1 MESS TIME 19.7 GMT, 1539 LOCAL MAX DEPTH 100 WIRE ANGLE 19
 OXYGEN TITER 1.043 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	TEMP				TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
		TZ	BN	TL	TM								
0	0	0	11	0.00	0.00	0.00	35.653	0.00	4.82	6.89	*****	.00	
25	24	19	12	25.71	0.00	25.71	35.652	23.64	4.84	6.92	99.63	.07	
50	48	50	10	25.60	0.00	25.60	35.649	23.67	5.03	7.18	103.34	.00	
100	95	99	16	25.48	0.00	25.48	36.059	24.01	4.64	6.63	95.68	.00	

R V PALUMBO CRUISE

STATION TOR-1C

PRNC REFERENCE 38660

DATE 1/29/74 BARO 1017.5 WEATHER 02 WIND VELOC 11 WAVE PERIOD 6
 HOUR 20.8 TEMP DRY 0.0 VISIBILITY 7 WIND DIREC 08 TRANSPAR
 LAT 18-31.8 N TEMP WET 27.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0438
 LONG 66-29.4 W REL HUMID 720 CLOUD AMT 2 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 20.8 GMT, 1649 LOCAL MAX DEPTH 300 WIRE ANGLE 0
 OXYGEN TITER 1.043 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	TEMP				TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
		TZ	BN	TL	TM								
0	0	0	11	0.00	0.00	0.00	35.641	0.00	4.80	6.99	*****	.08	
25	25	29	12	25.59	0.00	25.59	35.626	23.65	4.83	6.90	99.23	.09	
50	50	0	10	25.93	0.00	25.93	35.640	23.56	5.48	7.82	113.05	.04	
100	100	0	16	25.61	0.00	25.61	35.637	23.66	4.93	7.05	101.41	.05	
150	150	0	1	23.06	0.00	23.06	36.569	25.12	4.43	6.33	85.19	.08	
200	200	0	2	20.57	0.00	20.57	36.634	25.87	4.09	5.84	77.53	.16	
250	250	247	3	18.40	0.00	18.40	36.329	26.21	4.08	5.83	71.51	.31	
300	300	285	4	17.18	0.00	17.18	36.134	26.36	4.02	5.74	69.75	.48	

HIGH TEMPERATURE

LOW SALINITIES

R V PALUMBO CRUISE STATION TOR-4G PRNC REFERENCE 43748
 DATE 5/22/74 BARO 1017.0 WEATHER 02 WIND VELOC 03 WAVE PERIOD 5
 HOUR 6.8 TEMP DRY 23.0 VISIBILITY 7 WIND DIREC 10 TRANSPAR
 LAT 18-32.0 N TEMP WET 20.2 CLOUD TYPE 0 WAVE DIREC 09 SONIC DEP 0402
 LONG 66-26.5 W REL HUMID 089 CLOUD AMT 2 WAVE HEIGHT 2 COLOR
 CAST 1 MESS TIME 6.9 GMT, 0252 LOCAL MAX DEPTH 520 WIRE ANGLE 5
 OXYGEN TITER .670 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				SIG T	OXYGEN		PHOS	NITRA					
	WIRE	CZ	TZ	BN		TL	TM			TAVE	SALIN	ML/L	MG/L	%SAT
0	0	0	0	10	26.30	0.00	26.30	35.904	23.64	4.81	6.88	100.36	.05	.
25	25	0	0	11	26.14	0.00	26.14	35.910	23.70	4.87	6.96	101.23	.09	.
50	50	52	0	12	25.99	0.00	25.99	35.966	23.79	4.86	6.95	100.93	.06	.
100	100	0	0	16	24.56	0.00	24.56	36.429	24.57	4.94	7.05	95.08	.28	.
150	149	154	0	1	22.10	0.00	22.10	36.859	25.62	4.50	6.43	86.55	.05	.
200	199	194	0	2	20.10	0.00	20.10	36.786	26.11	4.07	5.82	77.04	.14	.
250	249	246	0	3	18.23	0.00	18.23	36.543	26.41	4.06	5.81	71.69	.37	.
300	298	300	0	4	16.98	0.00	16.98	36.374	26.59	4.16	5.94	72.55	.50	.

R V PALUMBO CRUISE STATION TOR-4B PRNC REFERENCE 43749
 DATE 5/22/74 BARO 1016.5 WEATHER 02 WIND VELOC 02 WAVE PERIOD 4
 HOUR 7.4 TEMP DRY 24.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-31.1 N TEMP WET 20.2 CLOUD TYPE 0 WAVE DIREC 09 SONIC DEP 0180
 LONG 67-26.5 W REL HUMID 089 CLOUD AMT 2 WAVE HEIGHT 2 COLOR
 CAST 1 MESS TIME 7.4 GMT, 0324 LOCAL MAX DEPTH 100 WIRE ANGLE 0
 OXYGEN TITER .670 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				SIG T	OXYGEN		PHOS	NITRA					
	WIRE	CZ	TZ	BN		TL	TM			TAVE	SALIN	ML/L	MG/L	%SAT
0	0	0	0	1	26.57	0.00	26.57	35.923	23.57	4.87	6.96	101.95	.08	.
25	25	20	0	2	26.14	0.00	26.14	35.942	23.72	4.79	6.84	99.61	.05	.
50	50	52	0	3	26.02	0.00	26.02	35.991	23.79	4.82	6.89	100.19	.05	.
100	100	100	0	4	24.42	0.00	24.42	36.515	24.68	4.88	6.97	94.31	.06	.

R V PALUMBO CRUISE STATION TOR-4A PRNC REFERENCE 43750

DATE 5/22/74 BARO 1416.5 WEATHER P2 WIND VELOC 02 WAVE PERIOD 4
 HOUR 7.9 TEMP DRY 23.0 VISIBILITY 7 WIND DIREC 10 TRANSPAR
 LAT 18-29.6 N TEMP WET 0.0 CLOUD TYPE 0 WAVE DIREC 09 SONIC DEP 0025
 LONG 66-26.3 W REL HUMID 089 CLOUD AMT 2 WAVE HEIGHT 2 COLOR

CAST 1 MESS TIME 7.9 GMT, 0356 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER .670 METER WHEEL FACTOR .997

DEPTH (M) TEMP OXYGEN

WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
0	0	0	1	26.19	0.00	26.19	35.919	23.69	4.73	6.75	98.39	.06	;
10	10	5	2	26.21	0.00	26.21	35.945	23.70	4.69	6.71	97.77	.05	;

R V PALUMBO CRUISE STATION TOR-2A PRNC REFERENCE 43751

DATE 5/22/74 BARO 1016.6 WEATHER P2 WIND VELOC 02 WAVE PERIOD 4
 HOUR 8.4 TEMP DRY 23.0 VISIBILITY 7 WIND DIREC 10 TRANSPAR
 LAT 18-29.1 N TEMP WET 0.0 CLOUD TYPE 0 WAVE DIREC 09 SONIC DEP 0024
 LONG 66-28.5 W REL HUMID 088 CLOUD AMT 2 WAVE HEIGHT 1 COLOR

CAST 1 MESS TIME 8.4 GMT, 0426 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER .670 METER WHEEL FACTOR .997

DEPTH (M) TEMP OXYGEN

WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
0	0	4	1	26.22	0.00	26.22	35.900	23.66	4.77	6.82	99.39	.04	;
10	10	5	2	26.24	0.00	26.24	35.940	23.69	4.81	6.87	100.19	.03	;

R V PALUMBO CRUISE STATION TOR-2B PRNC REFERENCE 43752
 DATE 5/22/74 BARO 1016.5 WEATHER 02 WIND VELOC 02 WAVE PERIOD 4
 HOUR 8.8 TEMP DRY 23.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-30.3 N TEMP WET 0.0 CLOUD TYPE 0 WAVE DIREC 09 SONIC DEP 0182
 LONG 66-28.5 W REL HUMID 089 CLOUD AMT 2 WAVE HEIGHT 1 COLOR
 CAST 1 MESS TIME 8.9 GMT, 0453 LOCAL MAX DEPTH 100 WIRE ANGLE 5
 OXYGEN TITR ,670 METER WHEEL FACTOR ,997

DEPTH (M)	TEMP				OXYGEN			PHOS	NITRA				
	WIRE	CZ	TZ	BN	TL	TM	TAVE			SALIN	SIG T	ML/L	MG/L	%SAT
0	0	1	1	1	26.19	0.00	26.19	35.936	23.70	3.76	5.38	78.34	.03
25	25	18	2	26.06	0.00	26.06	35.963	23.76	4.81	6.88	100.07	.00	.00
50	50	49	3	26.00	0.00	26.00	36.002	23.81	4.81	6.87	99.89	.00	.00
100	100	99	4	24.15	0.00	24.15	36.580	24.81	4.83	6.90	93.37	.00	.00

R V PALUMBO CRUISE STATION TOR-2C PRNC REFERENCE 43753
 DATE 5/22/74 BARO 1016.6 WEATHER 02 WIND VELOC 02 WAVE PERIOD 4
 HOUR 9.7 TEMP DRY 23.0 VISIBILITY 7 WIND DIREC 10 TRANSPAR
 LAT 18-31.4 N TEMP WET 0.0 CLOUD TYPE 0 WAVE DIREC 09 SONIC DEP 0360
 LONG 67-28.5 W REL HUMID 089 CLOUD AMT 2 WAVE HEIGHT 1 COLOR
 CAST 1 MESS TIME 9.7 GMT, 0542 LOCAL MAX DEPTH 300 WIRE ANGLE 7
 OXYGEN TITR ,670 METER WHEEL FACTOR ,997

DEPTH (M)	TEMP				OXYGEN			PHOS	NITRA				
	WIRE	CZ	TZ	BN	TL	TM	TAVE			SALIN	SIG T	ML/L	MG/L	%SAT
0	0	0	10	26.27	0.00	26.27	35.881	23.63	4.77	6.82	99.43	.14	.14
25	25	0	11	26.11	0.00	26.11	35.915	23.71	4.82	6.89	100.21	.10	.10
50	50	52	12	25.80	0.00	25.80	36.015	23.88	4.84	6.91	100.13	.05	.05
100	99	0	16	23.88	0.00	23.88	36.649	24.94	4.87	6.96	94.24	.25	.25
150	149	149	1	21.58	0.00	21.58	36.888	25.79	4.35	6.21	83.28	.06	.06
200	198	195	2	19.59	0.00	19.59	36.766	26.23	3.87	5.53	69.46	.18	.18
250	248	244	3	18.24	0.00	18.24	36.580	26.44	4.07	5.71	70.59	.36	.36
300	297	295	4	17.09	0.00	17.09	36.393	26.58	4.21	6.01	75.44	.38	.38

R V PALUMBO CRUISE

STATION PMA-5C PRNC REFERENCE 43754

DATE 5/22/74 BARO 1017.0 WEATHER 02 WIND VELOC 04 WAVE PERIOD 4
 HOUR 10.4 TEMP DRY 20.0 VISIBILITY 7 WIND DIREC 10 TRANSPAR
 LAT 18-31.6 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 09 SONIC DEP 0430
 LONG 66-30.4 W REL HUMID 088 CLOUD AMT 1 WAVE HEIGHT 2 COLOR

CAST 1 MESS TIME 10.4 GMT, 0623 LOCAL MAX DEPTH 300 WIRE ANGLE 0
 OXYGEN TITER .670 METER WHEEL FACTOR .997

WIRE	CZ	TZ	RN	TL	TM	TAVE	SALIN	SIG T	OXYGEN			PHOS	NITRA
									ML/L	MG/L	%SAT		
0	0	0	10	26.36	0.00	26.36	35.847	23.58	4.77	6.81	99.37	.05	.
25	25	0	14	26.15	0.00	26.15	35.909	23.69	4.78	6.83	99.45	.09	.
50	50	57	12	25.79	0.00	25.79	36.716	23.69	4.82	6.89	99.84	.05	.
100	100	0	16	24.25	0.00	24.25	36.526	24.74	4.83	6.90	93.23	.09	.
150	150	152	1	21.94	0.00	21.94	36.848	25.66	4.41	6.30	84.74	.06	.
200	200	193	2	19.59	0.00	19.59	36.727	26.20	3.98	5.69	71.38	.24	.
250	250	246	3	17.99	0.00	17.99	36.547	26.48	4.14	5.91	72.90	.32	.
300	300	296	4	16.77	0.00	16.77	36.349	26.62	4.19	5.99	73.03	.33	.

R V PALUMBO CRUISE

STATION PMA-5B PRNC REFERENCE 43755

DATE 5/22/74 BARO 1017.5 WEATHER 02 WIND VELOC 02 WAVE PERIOD 4
 HOUR 10.9 TEMP DRY 24.0 VISIBILITY 7 WIND DIREC 10 TRANSPAR
 LAT 18-30.2 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 09 SONIC DEP 0190
 LONG 66-30.3 W REL HUMID 085 CLOUD AMT 1 WAVE HEIGHT 2 COLOR

CAST 1 MESS TIME 10.9 GMT, 0654 LOCAL MAX DEPTH 100 WIRE ANGLE 4
 OXYGEN TITER .670 METER WHEEL FACTOR .997

WIRE	CZ	TZ	RN	TL	TM	TAVE	SALIN	SIG T	OXYGEN			PHOS	NITRA
									ML/L	MG/L	%SAT		
0	0	0	1	26.20	0.00	26.20	35.891	23.64	4.79	6.85	99.88	.07	.
25	25	23	2	26.23	0.00	26.23	35.919	23.67	4.67	6.68	97.34	.08	.
50	50	52	3	25.90	0.00	25.90	36.021	23.65	4.83	6.90	100.17	.06	.
100	100	101	4	24.12	0.00	24.12	36.584	24.62	4.75	6.78	91.82	.13	.

R V PALUMBO CRUISE STATION PMA-5A PRNC REFERENCE 43756

DATE 5/22/74 BARO 1010.8 WEATHER 02 WIND VELOC 02 WAVE PERIOD 4
 HOUR 11.5 TEMP DRY 24.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-29.4 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 09 SONIC DEP 0022
 LONG 66-30.6 W REL HUMID 084 CLOUD AMT 1 WAVE HEIGHT 1 COLOR

CAST 1 MESS TIME 11.4 GMT, 0725 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER .670 METER WHEEL FACTOR .997

DEPTH (M) TEMP OXYGEN

WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	0	1	26.27	0.00	26.27	35.956	23.69	4.71	6.74	98.31	.10	;
10	10	7	2	26.18	0.00	26.18	35.945	23.71	4.69	6.70	97.59	.06	;

R V PALUMBO CRUISE STATION PMA-3A PRNC REFERENCE 43757

DATE 5/22/74 BARO 1018.0 WEATHER 00 WIND VELOC WAVE PERIOD 4
 HOUR 11.8 TEMP DRY 31.0 VISIBILITY 7 WIND DIREC TRANSPAR
 LAT 18-29.6 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 09 SONIC DEP 0023
 LONG 66-32.7 W REL HUMID 062 CLOUD AMT 1 WAVE HEIGHT 1 COLOR

CAST 1 MESS TIME 11.9 GMT, 0751 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER .670 METER WHEEL FACTOR .997

DEPTH (M) TEMP OXYGEN

WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	3	1	26.25	0.00	26.25	35.713	23.51	4.75	6.79	98.69	.09	;
10	10	0	2	26.35	0.00	26.35	35.847	23.58	4.69	6.71	97.82	.09	;

R V PALUMBO CRUISE STATION PMA-3B PRNC REFERENCE 43758

DATE 5/22/74 BARO 1018.4 WEATHER 02 WIND VELOC WAVE PERIOD 4
 HOUR 12:2 TEMP DRY 31.0 VISIBILITY 7 WIND DIREC TRANSPAR
 LAT 18-30.6 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC SONIC DEP 0175
 LONG 66-32.8 W REL HUMID 061 CLOUD AMT 1 WAVE HEIGHT 1 COLOR

CAST 1 MESS TIME 12.2 GMT, 0811 LOCAL MAX DEPTH 100 WIRE ANGLE 0
 OXYGEN TITER .670 METER WHEEL FACTOR .997

DEPTH (M)	WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
0	0	0	2	1	26.27	0.00	26.27	35.772	23.55	4.75	6.79	98.82	.04	.
25	25	22	2	2	26.21	0.00	26.21	35.892	23.66	4.68	6.69	97.40	.00	.
50	50	51	3	3	25.95	0.00	25.95	35.973	23.80	4.79	6.85	99.49	.00	.
100	100	104	4	4	24.75	0.00	24.75	36.355	24.46	4.77	6.82	91.77	.05	.

R V PALUMBO CRUISE STATION PMA-3C PRNC REFERENCE 43759

DATE 5/22/74 BARO 1010.5 WEATHER 02 WIND VELOC 03 WAVE PERIOD 4
 HOUR 12:6 TEMP DRY 32.0 VISIBILITY 7 WIND DIREC 10 TRANSPAR
 LAT 18-31.7 N TEMP WET 2.0 CLOUD TYPE 8 WAVE DIREC 09 SONIC DEP 0405
 LONG 66-32.5 W REL HUMID 067 CLOUD AMT 1 WAVE HEIGHT 2 COLOR

CAST 1 MESS TIME 12.6 GMT, 0835 LOCAL MAX DEPTH 300 WIRE ANGLE 3
 OXYGEN TITER .670 METER WHEEL FACTOR .997

DEPTH (M)	WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
0	0	0	0	10	26.40	0.00	26.40	35.847	23.57	4.79	6.84	99.85	.12	.
25	25	0	0	14	26.24	0.00	26.24	35.880	23.64	4.73	6.76	98.55	.19	.
50	50	55	0	12	25.90	0.00	25.98	35.944	23.77	4.81	6.88	99.91	1.03	.
100	100	0	0	10	24.44	0.00	24.44	36.465	24.64	4.76	6.80	91.80	.11	.
150	150	159	0	1	21.69	0.00	21.69	36.891	25.73	4.35	6.22	83.43	.10	.
200	200	193	0	2	19.77	0.00	19.77	36.754	26.18	4.01	5.73	72.04	.22	.
250	249	249	0	3	18.56	0.00	18.56	36.592	26.37	4.00	5.83	72.18	.29	.
300	299	297	0	4	16.80	0.00	16.80	36.315	26.59	4.26	6.08	74.16	.40	.

R V PALUMBO CRUISE STATION ISL-1A PRNC REFERENCE 43760

DATE 5/23/74 BARO 1018.5 WEATHER 00 WIND VELOC 02 WAVE PERIOD 4
 HOUR 14.4 TEMP DRY 23.0 VISIBILITY 7 WIND DIREC 10 TRANSPAR
 LAT 18-29.8 N TEMP WET 0.0 CLOUD TYPE 4 WAVE DIREC 10 SONIC DEP 0023
 LONG 66-39.0 W REL HUMID 000 CLOUD AMT 2 WAVE HEIGHT 1 COLOR

CAST 1 MESS TIME 2.4 GMT, 2225 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER .670 METER WHEEL FACTOR .997

DEPTH (M)	TEMP		SALIN		SIG T		OXYGEN		PHOS	NITRA
	TZ	TL	TAVE	TM	Y	MG/L	%SAT	ML/L		
0	1	26.57	26.57	35.835	23.50	4.68	6.69	97.85	.04	;
10	2	26.51	26.51	35.833	23.52	4.75	6.78	99.15	.05	;

R V PALUMBO CRUISE STATION ISL-2A PRNC REFERENCE 43761

DATE 5/22/74 BARO 1219.5 WEATHER 02 WIND VELOC 02 WAVE PERIOD 4
 HOUR 24.5 TEMP DRY 23.0 VISIBILITY 7 WIND DIREC 10 TRANSPAR
 LAT 18-29.9 N TEMP WET 0.0 CLOUD TYPE 4 WAVE DIREC 09 SONIC DEP 0021
 LONG 66-38.9 W REL HUMID 081 CLOUD AMT 2 WAVE HEIGHT 2 COLOR

CAST 1 MESS TIME 2.7 GMT, 2243 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER .670 METER WHEEL FACTOR .997

DEPTH (M)	TEMP		SALIN		SIG T		OXYGEN		PHOS	NITRA
	TZ	TL	TAVE	TM	Y	MG/L	%SAT	ML/L		
0	0	26.51	26.51	35.838	23.53	4.68	6.69	97.77	.06	;
10	6	26.43	26.43	35.865	23.57	4.79	6.84	99.93	.04	;

R V PALUMBO CRUISE

STATION ISL-3A

PRNC REFERENCE 43762

DATE 5/22/74 BARO 1019.5 WEATHER 02 WIND VELOC 02 WAVE PERIOD 4
 HOUR 24.9 TEMP DRY 23.0 VISIBILITY 7 WIND DIREC 10 TRANSPAR
 LAT 18-30.2 W TEMP WET 0.0 CLOUD TYPF 4 WAVE DIREC 10 SONIC DEP 0024
 LONG 66-37.0 W REL HUMID 083 CLOUD AMT 2 WAVE HEIGHT 1 COLOR

CAST 1 MESS TIME 3.0 GMT, 2259 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER .670 METER WHEEL FACTOR .997

DEPTH (M)		TEMP		SALIN		SIG T		MG/L		%SAT		PHOS		NITRA	
WIRE	CZ	TZ	RN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA	PHOS	NITRA
0	0	3	1	26.45	26.45	26.45	35.855	23.56	4.66	6.66	97.29	.06	.06	.06	.06
10	10	5	2	26.47	26.47	26.47	35.863	23.56	4.79	6.84	99.99	.04	.04	.04	.16

R V PALUMBO CRUISE

STATION ISL-4A

PRNC REFERENCE 43763

DATE 5/22/74 BARO 1000.0 WEATHER 02 WIND VELOC 03 WAVE PERIOD 4
 HOUR 35.4 TEMP DRY 23.0 VISIBILITY 7 WIND DIREC 10 TRANSPAR
 LAT 18-30.4 N TEMP WET 0.0 CLOUD TYPF 4 WAVE DIREC 09 SONIC DEP 0024
 LONG 66-35.8 W REL HUMID 085 CLOUD AMT 2 WAVE HEIGHT 1 COLOR

CAST 1 MESS TIME 3.5 GMT, 2319 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER .670 METER WHEEL FACTOR .997

DEPTH (M)		TEMP		SALIN		SIG T		MG/L		%SAT		PHOS		NITRA	
WIRE	CZ	TZ	RN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA	PHOS	NITRA
0	0	1	1	26.45	26.45	26.45	35.854	23.56	4.72	6.74	98.54	.06	.06	.06	.06
10	10	5	2	26.47	26.47	26.47	35.852	23.55	4.83	6.90	100.81	.06	.06	.06	.16

R V PALUMBO CRUISE
 DATE 5/23/74
 HOUR 06.4
 LAT 18-31.7 N
 LONG 66-33.7 W

BARO 1010.1
 TEMP DRY 24.0
 TEMP WET 20.0
 REL HUMID 69.2

WEATHER 02
 VISIBILITY 7
 CLOUD TYPE 4
 CLOUD AMT 2

STATION (ISL-5C)
 PMA-1C

PRNC REFERENCE 43766
 WIND VELOC 03
 WIND DIREC 10
 WAVE DIREC 09
 WAVE HEIGHT 3

WAVE PERIOD 4
 TRANSPAR
 SONIC DEP 0393
 COLOR

CAST 1 MESS TIME 4.4 GMT, 0027 LOCAL MAX DEPTH 300 WIRE ANGLE 7
 OXYGEN TITER .670 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CZ	TZ	RN	TL	TEMP		TAVE	SALIN	SIG T	OXYGEN		%SAT	PHOS	NITRA
						TM	TM				ML/L	MG/L			
0	0	0	0	10	26.50	26.50	26.50	26.50	35.815	23.51	4.76	6.80	99.38	.09	.
25	25	0	0	11	26.43	26.43	26.43	26.43	35.858	23.57	4.73	6.76	98.80	.08	.
50	50	52	52	12	25.79	0.00	25.79	25.79	36.039	23.90	4.75	6.78	98.34	.14	.
100	99	0	0	10	24.15	24.15	24.15	24.15	36.584	24.81	4.89	6.98	94.55	.16	.
150	149	156	156	1	21.76	21.76	21.76	21.76	36.868	25.74	4.34	6.20	83.28	.14	.
200	198	188	188	2	19.62	19.62	19.62	19.62	36.771	26.23	4.08	5.83	73.22	.24	.
250	248	247	247	3	17.96	17.96	17.96	17.96	36.516	25.69	4.01	5.73	71.47	.36	.
300	297	289	289	4	17.04	17.04	17.04	17.04	36.376	25.81	4.25	6.07	74.57	.51	.

R V PALUMBO CRUISE STATION ISL-4C PRNC REFERENCE 43767
 DATE 5/23/74 BARO 1017.5 WEATHER 02 WIND VELOC 05 WAVE PERIOD 5
 HOUR 07.0 TEMP DRY 24.2 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 15-31.0 N TEMP WET 0.0 CLOUD TYPE 4 WAVE DIREC 29 SONIC DEP 0420
 LONG 66-34.6 W REL HUMID 089 CLOUD AMT 2 WAVE HEIGHT 5 COLOR
 CAST 1 MESS TIME 5.6 GMT, 0147 LOCAL MAX DEPTH 320 WIRE ANGLE 10
 OXYGEN TITER .670 METER WHEEL FACTOR .997

WIRE	CZ	TZ	RN	TL	TM	TAVE	SALIN	SIG T	OXYGEN				
									ML/L	MG/L	%SAT	PHOS NITRA	
0	0	0	10	26.53	26.53	26.53	35.900	23.49	4.71	6.73	98.28	.15	.
25	25	0	11	26.18	26.18	26.16	35.877	23.66	4.87	6.96	101.23	.19	.
50	50	50	12	25.82	0.00	25.82	35.997	23.86	4.75	6.79	98.47	.19	.
100	99	0	10	24.16	24.16	24.16	36.584	24.81	4.86	6.95	94.04	.22	.
150	148	150	1	21.75	21.75	21.75	36.887	25.74	4.23	6.04	81.08	.14	.
200	197	199	2	19.58	19.58	19.58	36.777	26.24	4.11	5.87	73.82	.21	.
250	246	247	3	17.87	17.87	17.87	36.525	26.49	4.08	5.84	71.86	.40	.
300	295	295	4	16.93	16.93	16.93	36.376	26.60	4.38	6.26	76.40	.46	.

R V PALUMBO CRUISE STATION ISL-4B PRNC REFERENCE 43768
 DATE 5/23/74 BARO 1017.6 WEATHER 02 WIND VELOC 03 WAVE PERIOD 4
 HOUR 08.6 TEMP DRY 24.0 VISIBILITY 7 WIND DIREC 10 TRANSPAR
 LAT 15-31.3 N TEMP WET 0.0 CLOUD TYPE 4 WAVE DIREC 09 SONIC DEP 0240
 LONG 66-35.8 W REL HUMID 086 CLOUD AMT 1 WAVE HEIGHT 2 COLOR
 CAST 1 MESS TIME 6.6 GMT, 0239 LOCAL MAX DEPTH 100 WIRE ANGLE 5
 OXYGEN TITER .670 METER WHEEL FACTOR .997

WIRE	CZ	TZ	RN	TL	TM	TAVE	SALIN	SIG T	OXYGEN				
									ML/L	MG/L	%SAT	PHOS NITRA	
0	0	0	1	26.48	26.48	26.48	35.852	23.55	4.68	6.69	97.75	.06	.
25	25	20	2	26.24	0.00	26.24	35.895	23.65	4.80	6.86	99.97	.07	.
50	50	50	3	25.78	25.78	25.78	36.069	23.93	4.69	6.70	97.11	.07	.
100	100	101	4	24.07	24.07	24.07	36.611	24.86	4.87	6.96	94.22	.07	.

R V PALUMBO CRUISE STATION ISL-3B PRNC REFERENCE 43769

DATE 2/23/74 BARO 1018.5 WEATHER K2 WIND VELOC W2 WAVE PERIOD 4
 HOUR 7:16 TEMP DRY 23.0 VISIBILITY 7 WIND DIREC W8 TRANSPAR
 LAT 18-31.2 S TEMP WET 0.0 CLOUD TYPE 6 WAVE DIREC W9 SONIC DEP 0192
 LONG 66-36.8 W REL HUMID 088 CLOUD AMT 1 WAVE HEIGHT 1 COLOR

CAST 1 MESS TIME 7.1 GMT, 0306 LOCAL MAX DEPTH 100 WIRE ANGLE 9
 OXYGEN TITER .670 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	0	2	1	26.42	26.40	26.40	35.856	23.57	4.73	6.76	98.75	.07	
25	25	18	18	2	26.31	0.00	26.31	35.851	23.60	4.82	6.89	100.42	.05	.36
50	50	49	49	3	25.72	25.72	25.72	36.066	23.94	4.71	6.74	97.57	.07	.60
100	99	101	101	4	24.55	24.55	24.55	36.455	24.60	4.95	7.07	95.43	.06	.62

R V PALUMBO CRUISE STATION ISL-28 PRNC REFERENCE 43770

DATE 5/23/74 BARO 1018.5 WEATHER 02 WIND VELOC W2 WAVE PERIOD 4
 HOUR 7:16 TEMP DRY 23.0 VISIBILITY 7 WIND DIREC W9 TRANSPAR
 LAT 18-31.3 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC W9 SONIC DEP 0237
 LONG 66-38.1 W REL HUMID 089 CLOUD AMT 1 WAVE HEIGHT 1 COLOR

CAST 1 MESS TIME 7.6 GMT, 0336 LOCAL MAX DEPTH 100 WIRE ANGLE 3
 OXYGEN TITER .670 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	0	4	1	26.43	26.43	26.43	35.941	23.55	4.69	6.70	97.79	.05	
25	25	19	19	2	26.44	0.00	26.44	35.854	23.56	4.81	6.88	100.49	.06	
50	50	54	54	3	25.94	25.94	25.94	35.961	23.82	4.81	6.86	99.87	.10	
100	100	100	100	4	24.45	24.46	24.46	36.465	24.63	4.87	6.90	93.88	.09	

R V PALOMBO CRUISE STATION ISL-2C PRNC REFERENCE 43771
 DATE 2/23/74 PARO 1016.5 WEATHER 02 WIND VELOC 02 WAVE PERIOD 4
 HOUR 0847.2 TEMP DRY 25.0 VISIBILITY 7 WIND DIREC 10 TRANSPAR
 LAT 18-51.9 N TEMP WET 21.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0391
 LONG 66-57.8 W REL HUMID 88.6 CLOUD AMT 1 WAVE HEIGHT 1 COLOR

CAST 1 MESS TIME 0.1 GMT, 0409 LOCAL MAX DEPTH 300 WIRE ANGLE 12
 OXYGEN TITER .670 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN							
	TZ	UN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	10	26.51	26.51	26.51	35.829	23.52	4.75	6.78	99.15	.	.
25	0	11	26.52	26.52	26.52	35.842	23.53	4.84	6.91	101.01	.	.
50	49	12	25.87	0.00	25.87	35.972	23.83	4.69	6.71	97.27	.	.
100	98	0	24.20	24.20	24.20	36.541	24.77	4.91	7.01	94.81	.	.

CAST 2 MESS TIME 8.4 GMT, 0421 LOCAL MAX DEPTH 200 WIRE ANGLE 12
 OXYGEN TITER .670 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN							
	TZ	UN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
100	98	2	24.22	24.22	24.22	36.538	24.76	4.91	7.01	94.81	.	.
50	147	48	25.94	25.90	25.94	36.965	24.57	4.73	6.76	98.21	.	.
150	147	124	22.04	22.04	22.04	36.863	25.64	4.42	6.31	84.97	.	.
200	196	194	20.10	20.10	20.10	36.908	26.13	4.13	5.90	78.20	.	.

CAST 3 MESS TIME 10.1 GMT, 0604 LOCAL MAX DEPTH 300 WIRE ANGLE 17
 OXYGEN TITER .670 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN							
	TZ	UN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
250	239	246	18.29	18.29	18.29	36.548	26.40	4.08	5.83	71.96	.38	.
300	207	290	17.23	17.23	17.23	36.381	26.53	4.12	5.89	72.06	.31	.

R V PALUMBO CRUISE STATION ISL-1C PRNC REFERENCE 43772

DATE 5/23/74 BARO 1017.7 WEATHER 02 WAVE PERIOD 4
 HOUR 9:11.0 TEMP DRY 23.0 VISIBILITY 7 TRANSPAR
 LAT 16-31.9 N TEMP WET 0.0 CLOUD TYPE 08 SONIC DEP 0384
 LONG 66-39.0 W REL HUMID 088 CLOUD AMT 2 COLOR

CAST 1 MESS TIME 9.0 GMT, 0500 LOCAL MAX DEPTH 300 WIRE ANGLE 11
 OXYGEN TITER .670 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CZ	TEMP				SIG T	OXYGEN			PHOS	NITRA
			TZ	BN	TL	TM		TAVE	SALIN	ML/L			MG/L	%SAT
0	0	0	10	26.47	26.47	26.47	23.53	4.69	6.71	97.97	.08	.
25	25	0	11	26.52	26.52	26.52	23.52	4.80	6.86	100.28	.08	.
50	49	54	12	25.78	0.00	25.78	23.87	4.75	6.78	98.27	.09	.
100	98	0	16	24.36	24.36	24.36	24.69	4.91	7.01	94.76	.08	.
150	147	146	1	21.88	21.88	21.88	25.67	4.35	6.21	83.40	.07	.
200	196	193	2	19.94	0.00	19.94	26.15	4.14	5.91	74.50	.14	.
250	245	243	3	17.97	17.97	17.97	26.44	4.02	5.75	70.76	.36	.
300	294	296	4	17.19	17.19	17.19	26.53	4.15	5.93	72.48	.43	.

R V PALUMBO CRUISE STATION ISL-1B PRNC REFERENCE 43773

DATE 5/23/74 BARO 1017.8 WEATHER 02 WAVE PERIOD 4
 HOUR 9:11.6 TEMP DRY 23.0 VISIBILITY 7 TRANSPAR
 LAT 16-31.7 N TEMP WET 0.0 CLOUD TYPE 10 SONIC DEP 0201
 LONG 66-39.0 W REL HUMID 086 CLOUD AMT 2 COLOR

CAST 1 MESS TIME 9.0 GMT, 0533 LOCAL MAX DEPTH 170 WIRE ANGLE 4
 OXYGEN TITER .670 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	OXYGEN			PHOS	NITRA
										ML/L	MG/L	%SAT		
0	0	0	1	26.43	26.43	26.43	23.54	4.81	6.87	100.27	.07	.		
25	25	0	2	26.44	26.44	26.44	23.54	4.69	6.76	97.79	.06	.		
50	53	49	3	25.99	25.99	25.99	23.76	4.78	6.83	94.22	.05	.		
100	100	96	4	24.41	24.41	24.41	24.67	4.83	6.90	93.18	.05	.		

ISL-3C
STATION (DIS-PW)

R V PALUMBO CHUISE PRNC REFERENCE 43776

DATE 5/23/74 RARO 1019.5 WEATHER 00 WIND VELOC 02 WAVE PERIOD 4
 HOUR 20.2 TEMP DRY 28.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-32.2 N TEMP WET 0.0 CLOUD TYPE 4 WAVE DIREC 09 SONIC DEP 0475
 LONG 66-36.9 W REL HUMID 079 CLOUD AMT 6 WAVE HEIGHT 8 COLOR

CAST 1 MESS TIME 20.2 GMT, 1613 LOCAL MAX DEPTH 200 WIRE ANGLE 12
 OXYGEN TITER .070 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN				PHOS	NITRA				
	WIRE	CE	TZ	BN	TL	TM	TAVE	SALIN			SIG T	ML/L	MG/L	XSAT
0	0	0	0	1	26.60	0.00	26.60	35.847	23.50	4.72	6.74	98.76	.00	.00
25	25	0	10	10	26.37	0.00	26.37	35.654	23.58	4.79	6.84	99.82	.07	.00
50	49	41	2	25.76	0.00	25.76	36.091	23.95	4.88	6.97	101.13	.00	.00	.00
75	74	0	11	25.18	0.00	25.18	36.221	24.23	5.09	7.27	104.21	.05	.04	.00
100	98	100	3	24.38	0.00	24.38	36.503	24.68	4.88	6.97	94.24	.00	.00	.00
125	122	127	12	23.37	0.00	23.37	36.768	25.18	4.86	6.95	94.17	.06	.00	.00
150	147	145	4	22.34	0.00	22.34	36.879	25.57	4.55	6.51	87.79	.06	.00	.00
200	196	0	16	19.76	0.00	19.76	36.763	26.19	4.07	5.82	73.15	.06	.00	.00

CAST 2 MESS TIME 21.0 GMT, 1658 LOCAL MAX DEPTH 200 WIRE ANGLE 10
 OXYGEN TITER .070 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN				PHOS	NITRA			
	WIRE	CE	TZ	BN	TL	TM	TAVE	SALIN			SIG T	ML/L	MG/L	XSAT
250	246	235	2	18.47	0.00	18.47	36.592	26.39	4.01	5.73	70.96	.27	5.65
300	295	285	3	17.18	0.00	17.18	36.367	26.55	4.12	5.89	72.05	.30	7.39
500	491	476	4	13.46	0.00	13.46	35.758	26.90	3.66	5.22	60.45	.87	14.86

CAST 3 MESS TIME 21.4 GMT, 1723 LOCAL MAX DEPTH 200 WIRE ANGLE 7
 OXYGEN TITER .070 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN				PHOS	NITRA			
	WIRE	CE	TZ	BN	TL	TM	TAVE	SALIN			SIG T	ML/L	MG/L	XSAT
200	198	201	1	20.37	0.00	20.37	36.852	26.29	4.08	5.83	77.37	.08	2.78

R V PALUMBO CRUISE STATION 015-19 PRNC REFERENCE 43777
 DATE 5/23/74 BARO 1019.0 WEATHER 02 WIND VELOC 02 WAVE PERIOD 4
 HOUR 23.3 TEMP DRY 29.5 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-45.5 N TEMP WET 0.0 CLOUD TYPE 4 WAVE DIREC 09 SONIC DEP 2370
 LONG 66-36.7 W REL HUMID 087 CLOUD AMT 5 WAVE HEIGHT 1 COLOR

CAST 1 MESS TIME 23.3 GMT, 1919 LOCAL MAX DEPTH 200 WIRE ANGLE 11
 OXYGEN TITER .670 METER WHEEL FACTOR .997

DEPTH (M)	WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	OXYGEN		PHOS	NITRA
										ML/L	MG/L		
0	0	0	0	1	26.61	0.00	26.61	35.926	23.56	4.72	6.74	98.94	.06
25	25	0	0	10	26.41	0.00	26.41	35.940	23.63	4.71	6.73	98.36	.08
50	49	41	0	2	25.20	0.00	25.20	36.297	24.25	5.01	7.16	102.60	.05
75	74	0	0	11	24.71	0.00	24.71	36.045	24.24	5.02	7.17	101.67	.04
100	98	100	0	3	24.12	0.00	24.12	36.578	24.62	4.93	7.04	95.29	.04
125	123	124	0	12	23.72	0.00	23.72	36.663	25.00	4.88	6.97	94.45	.04
150	147	144	0	4	22.80	0.00	22.80	36.897	25.45	4.65	6.65	90.10	.04
200	196	0	0	16	20.19	0.00	20.19	36.726	26.04	4.39	6.26	83.14	.05

CAST 2 MESS TIME 6.0 GMT, 2002 LOCAL MAX DEPTH 1000 WIRE ANGLE 9
 OXYGEN TITER .670 METER WHEEL FACTOR .997

DEPTH (M)	WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	OXYGEN		PHOS	NITRA
										ML/L	MG/L		
200	197	196	0	1	20.47	0.00	20.47	36.748	25.99	4.29	6.13	81.41	.16
250	247	0	0	10	18.71	0.00	18.71	36.669	26.39	4.22	6.03	74.95	.26
300	296	286	0	2	17.44	0.00	17.44	36.440	26.53	4.48	6.40	78.45	.95
500	493	0	0	11	13.22	0.00	13.22	35.784	26.97	5.02	5.14	59.29	1.51
700	690	683	0	3	8.81	0.00	8.81	35.103	27.25	3.17	4.52	*****	1.63
1000	985	983	0	4	6.09	0.00	6.09	34.992	27.56	4.14	5.92	*****	1.63

R V PALUMBO CRUISE STATION OIS-30 PRNC REFERENCE 43778

DATE 5/28/74 BARO 1021.5 WEATHER 02 WIND VELOC 02 WAVE PERIOD 4
 HOUR 2.4 TEMP DRY 25.5 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 19- 1.0 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 09 SONIC DEP 6035
 LONG 66-36.7 W REL HUMID 007 CLOUD AMT 4 WAVE HEIGHT 1 COLOR

CAST 1 MESS TIME 2.4 GMT, 2222 LOCAL MAX DEPTH 200 WIRE ANGLE 12
 OXYGEN TITER .670 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	TEMP		BN	TL	TM	TAVE	SALIN	SIG T	OXYGEN		
		TL	TM							ML/L	MG/L	%SAT	PHOS	NITRA
0	0	1	26.39	0.00	26.39	35.952	23.65	4.72	6.74	98.63	.05	.
25	25	10	26.31	0.00	26.31	36.237	23.74	4.77	6.82	99.78	.04	.
50	49	12	25.27	0.00	25.27	36.330	24.28	4.95	7.07	101.46	.04	.
75	74	11	24.84	0.00	24.84	36.453	24.51	4.96	7.08	95.69	.04	.
100	90	3	24.18	0.00	24.18	36.657	24.86	4.88	6.97	94.71	.05	.
125	122	12	23.49	0.00	23.49	36.827	25.19	4.84	6.91	93.92	.03	.
150	147	4	22.53	0.00	22.53	36.880	25.51	4.61	6.59	89.09	.05	.
200	196	0	25.30	0.00	25.30	36.308	24.26	5.08	7.26	104.20	.13	.
200	196	0	25.79	0.00	25.79	36.308	24.11	5.08	7.26	104.40	.13	.

CAST 2 MESS TIME 3.3 GMT, 2320 LOCAL MAX DEPTH 1000 WIRE ANGLE 22
 OXYGEN TITER .070 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	TEMP		BN	TL	TM	TAVE	SALIN	SIG T	OXYGEN		
		TL	TM							ML/L	MG/L	%SAT	PHOS	NITRA
200	103	1	21.52	0.00	21.52	36.826	26.33	4.33	6.19	82.27	.06	.
250	235	10	18.97	0.00	18.97	36.653	26.31	4.15	5.93	73.84	.13	.
300	282	2	17.83	0.00	17.83	36.426	26.48	4.48	6.40	78.73	.18	.
500	469	11	20.20	0.00	20.20	36.792	26.09	4.37	6.25	82.81	.06	.
700	656	3	16.52	0.00	16.52	36.293	26.64	4.35	6.21	75.50	.31	.
1000	937	4	11.84	0.00	11.84	35.668	27.34	3.51	5.01	55.70	1.10	.

R V PALUMBO CRUISE

STATION OIS-45

PRNC REFERENCE 43779

DATE 5/24/74 BARO 1021.0 WEATHER P2 WIND VELOC 02 WAVE PERIOD
 HOUR 5.7 TEMP DRY 24.0 VISIBILITY 7 WIND DIREC 13 TRANSPAR
 LAT 18-15.2 N TEMP WET 0.0 CLOUD TYPE 6 WAVE DIREC 05 SONIC DEP 4000
 LONG 66-36.0 W REL HUMID 007 CLOUD AMT 6 WAVE HEIGHT 7 COLOR

CAST 1 MESS TIME 5.7 GMT, 0143 LOCAL MAX DEPTH 200 WIRE ANGLE 16
 OXYGEN TITER .670 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	O2	TE	BN	TL	TM	TAVE	SALIN	SIG T	OXYGEN		PHOS	NITRA
										ML/L	MG/L		
0	0	0	0	1	26.34	0.00	26.34	36.176	23.83	4.70	6.72	96.53	.07
25	24	0	0	10	26.00	0.00	26.00	36.251	24.00	4.79	6.84	98.34	.10
50	48	39	0	2	24.99	0.00	24.99	36.524	24.51	5.00	7.15	96.97	.00
75	72	0	0	11	24.53	0.00	24.53	36.589	24.70	5.04	7.19	97.64	.05
100	96	0	0	3	24.21	0.00	24.21	36.673	24.86	4.95	7.07	96.09	.11
125	122	122	0	12	23.63	0.00	23.63	36.737	25.08	4.89	6.98	94.77	.00
150	144	125	0	4	23.06	0.00	23.06	36.916	25.39	4.73	6.76	91.91	.13
200	192	0	0	10	20.83	0.00	20.83	36.847	25.96	4.33	6.19	82.49	.10

CAST 2 MESS TIME 6.7 GMT, 0240 LOCAL MAX DEPTH 1000 WIRE ANGLE 35
 OXYGEN TITER .670 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	O2	TE	BN	TL	TM	TAVE	SALIN	SIG T	OXYGEN		PHOS	NITRA
										ML/L	MG/L		
200	164	164	0	1	22.51	0.00	22.51	37.025	25.63	4.33	6.18	83.82	.38
250	205	0	0	10	21.86	0.00	21.86	36.867	25.69	4.47	6.38	85.75	.05
300	246	263	0	2	21.68	0.00	21.68	36.936	25.80	4.71	6.74	92.50	.00
500	409	0	0	11	17.90	0.00	17.90	36.607	26.53	4.21	6.01	74.20	.15
700	572	404	0	3	15.85	0.00	15.85	36.194	26.72	4.13	5.90	71.56	.53
1000	817	612	0	4	14.42	0.00	14.42	35.315	27.14	3.27	4.68	51.47	1.15

R V PALUMBO CRUISE STATION OIS-60 PRNC REFERENCE 43760

DATE 5/24/74 BARO 1020.2 WEATHER 02 WIND VELOC 02 WAVE PERIOD 5
 HOUR 8.7 TEMP DRY 25.0 VISIBILITY 7 WIND DIREC 10 TRANSPAR
 LAT. 19-30.0 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 12 SONIC DEP 7490
 LONG 66-38.0 W REL HUMID 088 CLOUD AMT 3 WAVE HEIGHT 1 COLOR

CAST 1 MESS TIME 0.7 GMT, 0444 LOCAL MAX DEPTH 200 WIRE ANGLE 14
 OXYGEN TITER .070 METER WHEEL FACTOR .997

DEPTH (M)		TEMP		SALIN		OXYGEN		PHOS		NITRA	
WIRE	CE	TL	TM	TAVE	SIG T	ML/L	XSAT	PHOS	NITRA		
0	0	26.16	0.00	26.16	23.94	4.76	97.83	.03	.00		
25	25	26.13	0.00	26.13	23.96	4.75	97.56	.00	.05		
50	42	25.58	0.00	25.58	24.20	4.90	100.51	.03	.04		
75	73	25.50	0.00	25.50	24.32	5.00	102.81	.03	.09		
100	97	24.57	0.00	24.57	24.67	4.92	95.23	.07	.15		
125	121	24.07	0.00	24.07	24.84	4.93	95.52	.04	.08		
150	149	23.66	0.00	23.66	25.14	4.78	93.01	.04	.08		
200	194	20.78	0.00	20.78	25.96	4.27	81.28	.04	.15		

CAST 2 MESS TIME 9.5 GMT, 0531 LOCAL MAX DEPTH 1000 WIRE ANGLE 18
 OXYGEN TITER .070 METER WHEEL FACTOR .997

DEPTH (M)		TEMP		SALIN		OXYGEN		PHOS		NITRA	
WIRE	CE	TL	TM	TAVE	SIG T	ML/L	XSAT	PHOS	NITRA		
200	190	21.29	0.00	21.29	25.86	4.28	81.80	.04	.94		
250	239	18.84	0.00	10.84	26.31	4.31	76.53	.06	.69		
300	265	17.86	0.00	17.86	26.47	4.48	78.74	.22	.77		
500	475	14.28	0.00	14.28	27.11	3.88	62.16	.49	.42		
700	664	10.93	0.00	10.03	27.16	3.14	49.12	1.52	24.42		
1000	949	6.26	0.00	6.26	27.55	3.72	5.31*****	1.70	27.87		

R V PALUMBO CRUISE

STATION TUR-9C

PRNC REFERENCE 45783

DATE 8/14/74 BARO 1019.5 WEATHER P2 WIND VELOC 24 WAVE PERIOD 2
 HOUR 6.4 TEMP DRY 26.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-31.5 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP #366
 LONG 66-25.3 W REL HUMID 092 CLOUD AMT 1 WAVE HEIGHT 2 COLOR

CAST 1 MESS TIME 6.4 GMT, 0221 LOCAL MAX DEPTH 300 WIRE ANGLE 3
 OXYGEN TITER .060 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	OXYGEN			PHOS	NITRA
										ML/L	MG/L	%SAT		
0	0	0	0	1	27.92	0.00	27.92	35.398	22.74	4.71	6.73	99.15	.07	.
25	25	0	0	2	27.83	0.00	27.83	35.717	23.01	4.74	6.76	100.78	.09	.
50	50	48	48	3	27.60	0.00	27.60	36.065	23.35	4.79	6.84	102.36	.19	.
100	100	98	98	4	23.61	0.00	23.61	36.674	25.24	4.98	7.11	96.28	.06	.
150	150	148	148	5	21.77	0.00	21.77	36.873	25.72	4.51	6.15	82.62	.05	.
200	200	200	200	6	19.74	0.00	19.74	36.714	26.15	4.23	6.04	75.83	.13	.
250	249	245	245	7	18.60	0.00	18.60	36.591	26.36	4.30	6.14	76.11	.18	.
300	299	295	295	8	17.59	0.00	17.59	36.438	26.49	4.33	6.19	75.94	.38	.

R V PALUMBO CRUISE

STATION TUR-9B

PRNC REFERENCE 45784

DATE 8/14/74 BARO 1026.5 WEATHER P2 WIND VELOC 24 WAVE PERIOD 2
 HOUR 7.1 TEMP DRY 26.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-31.2 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP #201
 LONG 66-25.3 W REL HUMID 092 CLOUD AMT 1 WAVE HEIGHT 2 COLOR

CAST 1 MESS TIME 7.1 GMT, 0303 LOCAL MAX DEPTH 100 WIRE ANGLE 5
 OXYGEN TITER .060 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	OXYGEN			PHOS	NITRA
										ML/L	MG/L	%SAT		
0	0	0	0	1	27.93	0.00	27.93	35.474	22.79	4.64	6.63	97.99	.05	.
25	25	0	0	2	27.93	0.00	27.93	35.597	22.89	4.71	6.73	99.81	.05	.
50	50	43	43	3	27.60	0.00	27.60	36.118	23.39	4.85	6.64	99.59	.08	.
100	100	98	98	4	24.11	0.00	24.11	36.593	24.83	4.94	7.05	95.50	.05	.

R V PALUMBO CRUISE STATION TOR-4B PRNC REFERENCE 45785
 DATE 8/14/74 BARO 1019.5 WEATHER 02 WIND VELOC 04 WAVE PERIOD 2
 HOUR 7.8 TEMP DRY 25.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 10-31.1 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0162
 LONG 66-26.3 W REL HUMID 092 CLOUD AMT 1 WAVE HEIGHT 2 COLOR

CAST 1 MESS TIME 7.7 GMT, 0344 LOCAL MAX DEPTH 100 WIRE ANGLE 3
 OXYGEN TITER .680 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN				PHOS	NITRA			
	WIRE	CZ	TZ	RN	TL	TM	TAVE	SALIN			SIG	T	ML/L	MG/L	XSAT
0	0	0	0	1	27.87	0.00	27.87	35.331	22.71	4.67	6.67	98.02	1.00
25	25	0	2	27.93	0.00	27.93	35.646	22.92	4.71	6.73	99.96	1.00	
50	50	52	5	27.65	0.00	27.65	36.120	23.37	4.63	6.61	99.24	1.00	
100	100	99	4	24.34	0.00	24.34	36.552	24.73	4.99	7.12	96.40	1.07	

R V PALUMBO CRUISE STATION TOR-4C PRNC REFERENCE 45786
 DATE 8/14/74 BARO 1019.0 WEATHER 02 WIND VELOC 04 WAVE PERIOD 2
 HOUR 6.4 TEMP DRY 25.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 10-31.5 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0365
 LONG 66-26.4 W REL HUMID 093 CLOUD AMT 1 WAVE HEIGHT 2 COLOR

CAST 1 MESS TIME 8.4 GMT, 0423 LOCAL MAX DEPTH 300 WIRE ANGLE 11
 OXYGEN TITER .680 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN				PHOS	NITRA		
	WIRE	CZ	TZ	RN	TL	TM	TAVE	SALIN			SIG	T
0	0	0	1	27.73	0.00	27.73	35.300	22.73	4.70	6.72	98.49	1.08
25	25	0	2	27.92	0.00	27.92	35.611	22.90	4.71	6.73	99.84	1.07
50	49	51	5	27.72	0.00	27.72	36.238	23.44	4.64	6.65	95.87	1.00
100	98	107	4	23.88	0.00	23.88	36.619	24.92	5.05	7.22	97.72	1.00
150	147	157	6	21.20	0.00	21.20	36.161	25.55	4.20	6.15	82.02	1.03
200	196	203	7	19.30	0.00	19.30	36.566	26.21	4.13	5.91	73.77	1.16
250	243	252	8	15.42	0.00	15.42	36.544	26.37	4.22	6.03	74.58	1.25
300	294	0	16	17.53	0.00	17.53	36.429	26.50	4.37	5.24	76.50	1.36

R V PALUMBO CRUISE STATION TOR-3C PRNC REFERENCE 45787
 DATE 8/14/74 BARO 1019.5 WEATHER 02 WIND VELOC 05 WAVE PERIOD 5
 HOUR 9:2 TEMP DRY 25.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 15-31.8 N TEMP WET 20.0 CLOUD TYPE 8 WAVE DIREC 09 SONIC DEP 0365
 LONG 66-27.4 W REL HUMID 093 CLOUD AMT 1 WAVE HEIGHT 2 COLOR

CAST 1 MESS TIME 9:2 GMT, 0511 LOCAL MAX DEPTH 300 WIRE ANGLE 3
 OXYGEN TITER .680 METER WHEEL FACTOR .997

DEPTH (M)	WIRE	CZ	TZ	RN	TL	TM	TAVE	SALIN	SIG T	OXYGEN			PHOS	NITRA
										ML/L	MG/L	XSAT		
0	0	0	0	1	27.76	0.00	27.76	35.289	22.71	4.72	6.74	98.78	.03	.
25	25	0	0	2	27.90	0.00	27.90	35.595	22.90	4.77	6.81	100.92	.03	.
50	50	53	0	5	27.69	0.00	27.69	36.420	23.58	4.66	6.65	96.67	.00	.
100	100	100	0	4	23.98	0.00	23.98	36.562	24.85	5.08	7.26	98.10	.00	.
150	150	149	0	6	21.61	0.00	21.61	36.822	25.73	4.43	6.33	84.80	.03	.
200	200	197	0	7	19.44	0.00	19.44	36.655	26.19	4.31	6.15	76.83	.12	.
250	249	247	0	8	18.26	0.00	18.26	36.518	26.40	4.29	6.12	75.51	.20	.
300	299	0	0	10	17.58	0.00	17.58	36.432	26.49	4.40	6.29	77.12	.36	.

R V PALUMBO CRUISE STATION TOR-3B PRNC REFERENCE 45788
 DATE 8/14/74 BARO 1019.5 WEATHER 02 WIND VELOC 06 WAVE PERIOD 5
 HOUR 10:1 TEMP DRY 25.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 15-30.8 N TEMP WET 20.0 CLOUD TYPE 8 WAVE DIREC 09 SONIC DEP 0185
 LONG 66-27.4 W REL HUMID 093 CLOUD AMT 2 WAVE HEIGHT 1 COLOR

CAST 1 MESS TIME 10:0 GMT, 0601 LOCAL MAX DEPTH 100 WIRE ANGLE 4
 OXYGEN TITER .665 METER WHEEL FACTOR .997

DEPTH (M)	WIRE	CZ	TZ	RN	TL	TM	TAVE	SALIN	SIG T	OXYGEN			PHOS	NITRA
										ML/L	MG/L	XSAT		
0	0	0	0	1	27.80	0.00	27.80	35.317	22.72	4.65	6.64	97.47	.00	.
25	25	0	0	2	27.99	0.00	27.99	35.599	22.87	4.71	6.73	94.89	.00	.
50	50	51	0	5	27.78	0.00	27.78	36.270	23.47	4.68	6.69	96.81	.00	.
100	100	0	0	4	24.33	0.00	24.33	36.562	24.75	5.04	7.20	97.48	.00	.

R V PALUMBO CRUISE STATION TUR-2C PRNC REFERENCE 45789

DATE 3/14/74 PARO 1019.5 WEATHER 02 WAVE PERIOD
 HOUR 10.9 TEMP DRY 25.0 VISIBILITY 7 WIND VELOC 06 TRANSPAR
 LAT 18-31.8 N TEMP WET 20.0 CLOUD TYPE 8 WAVE DIREC 09 SONIC DEP 0362
 LONG 66-28.5 W REL HUMID 095 CLOUD AMT 6 WAVE HEIGHT 1 COLOR

CAST 1 MESS TIME 11.0 GMT, 0659 LOCAL MAX DEPTH 300 WIRE ANGLE 8
 OXYGEN TITER .080 PETER WHEEL FACTOR .997

DEPTH (M)	WIRE	CE	TE	RN	TL	RV	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	0	0	1	27.95	0.20	27.95	0.20	27.95	35.583	22.07	4.63	6.61	98.04	1.00	1
25	25	0	0	2	27.69	0.20	27.69	0.20	27.69	35.2936	23.49	4.72	6.74	97.58	1.04	1
50	50	0	0	5	27.82	0.20	27.82	0.20	27.82	35.3420	22.74	4.66	6.62	97.69	1.06	1
100	99	0	0	4	24.26	0.20	24.26	0.20	24.26	36.568	24.76	5.07	7.24	98.02	1.07	1
150	149	0	0	6	21.49	0.20	21.49	0.20	21.49	36.753	25.71	4.55	6.50	86.98	1.03	1
200	198	125	0	7	19.71	0.20	19.71	0.20	19.71	36.706	26.16	4.24	6.05	75.91	1.15	1
250	247	0	0	8	18.00	0.20	18.00	0.20	18.00	36.553	26.00	4.20	6.00	60.00	1.22	1
300	297	0	0	10	16.44	0.20	16.44	0.20	16.44	36.551	26.07	4.24	6.05	74.84	1.23	1

TEMPERATURE TRIP

BOTTLE ORDER 71220-4P

R V PALUMBO CRUISE STATION TUR-2B PRNC REFERENCE 45790

DATE 3/14/74 PARO 1020.5 WEATHER 02 WAVE PERIOD 5
 HOUR 12.4 TEMP DRY 26.0 VISIBILITY 7 WIND VELOC 09 TRANSPAR
 LAT 18-30.3 N TEMP WET 20.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0201
 LONG 66-28.4 W REL HUMID 080 CLOUD AMT 6 WAVE HEIGHT 4 COLOR

CAST 1 MESS TIME 12.4 GMT, 0826 LOCAL MAX DEPTH 300 WIRE ANGLE 6
 OXYGEN TITER .080 METER WHEEL FACTOR .997

DEPTH (M)	WIRE	CE	TE	RN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	0	0	1	27.87	0.00	27.87	35.303	22.75	4.64	6.63	97.61	1.04	1
25	25	0	0	2	28.02	0.20	28.02	35.537	22.83	4.68	6.69	99.21	1.09	1
50	50	47	0	6	27.71	0.20	27.71	36.365	23.54	4.65	6.64	96.38	1.09	1
100	100	99	0	4	24.13	0.00	24.13	36.582	24.82	4.96	7.08	95.87	1.05	1

R V PALUMBO CRUISE STATION TOR-5A PRNC REFERENCE 45791

DATE 8/14/74 BARO 1021.0 WEATHER 02 WIND VELOC 04 WAVE PERIOD 2
 HOUR 13.1 TEMP DRY 27.90 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-29.9 N TEMP WET 27.90 CLOUD TYPE 0 WAVE DIREC 08 SONIC DEP 0024
 LONG 66-25.2 W REL HUMID 076 CLOUD AMT 6 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 13.1 GMT, 0907 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER .689 METER WHEEL FACTOR .997

DEPTH (M) TEMP OXYGEN

WIRE	CZ	TZ	BN	TL	TK	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	0	1	27.90	0.00	27.90	35.362	22.72	4.72	6.75	99.30	.00	.
10	10	0	2	27.89	0.00	27.89	35.402	22.75	4.64	6.65	97.09	.04	.

R V PALUMBO CRUISE STATION TOR-4A PRNC REFERENCE 45792

DATE 8/14/74 BARO 1021.0 WEATHER 02 WIND VELOC 04 WAVE PERIOD 2
 HOUR 13.6 TEMP DRY 26.00 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-29.7 N TEMP WET 26.00 CLOUD TYPE 0 WAVE DIREC 10 SONIC DEP 0024
 LONG 66-26.2 W REL HUMID 076 CLOUD AMT 4 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 13.5 GMT, 0927 LOCAL MAX DEPTH 10 WIRE ANGLE 4
 OXYGEN TITER .696 METER WHEEL FACTOR .997

DEPTH (M) TEMP OXYGEN

WIRE	CZ	TZ	BN	TL	TK	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	0	4	27.90	0.00	27.90	35.375	22.73	4.72	6.74	99.20	.04	.
10	10	0	6	27.94	0.00	27.94	35.376	22.72	4.64	6.62	97.52	.04	.

R V PALUMBO CRUISE STATION TOR-3A PRNC REFERENCE 45793

DATE 8/14/74 BARO 1021.3 WEATHER 02 WIND VELOC 05 WAVE PERIOD 5
 HOUR 13.7 TEMP DRY 29.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-29.1 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0023
 LONG 66-27.3 W REL HUMID 068 CLOUD AMT 3 WAVE HEIGHT 2 COLOR

CAST 1 PRESS TIME 13.8 GMT, 0948 LOCAL MAX DEPTH 10 WIRE ANGLE 3
 OXYGEN TITER .686 METER WHEEL FACTOR .997

DEPTH (M) OXYGEN

WIRE	GT	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
0	0	0	1	28.01	0.00	28.01	35.400	22.71	4.71	6.73	99.27	.04	;
10	10	0	2	27.95	0.00	27.95	35.481	22.79	4.64	6.63	98.01	.04	;

R V PALUMBO CRUISE STATION TOR-2A PRNC REFERENCE 45794

DATE 8/14/74 BARO 1021.5 WEATHER 02 WIND VELOC 05 WAVE PERIOD 5
 HOUR 14.2 TEMP DRY 29.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-29.9 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0026
 LONG 66-28.5 W REL HUMID 075 CLOUD AMT 3 WAVE HEIGHT 3 COLOR

CAST 1 PRESS TIME 14.2 GMT, 1010 LOCAL MAX DEPTH 10 WIRE ANGLE 3
 OXYGEN TITER .086 METER WHEEL FACTOR .997

DEPTH (M) OXYGEN

WIRE	GT	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
0	0	0	1	28.26	0.00	28.26	35.434	22.72	4.72	6.74	99.58	.04	;
10	10	0	2	27.99	0.00	27.99	35.435	22.75	4.61	6.58	97.19	.05	;

R V PALUMBO CRUISE STATION TOR-1A PRNC REFERENCE 45795

DATE 8/14/74 BARO 1020.5 WEATHER 02 WIND VELOC 04 WAVE PERIOD 5
 HOUR 14.6 TEMP DRY 29.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-29.4 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0027
 LONG 66-29.6 W REL HUMID 073 CLOUD AMT 2 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 14.5 GMT, 1028 LOCAL MAX DEPTH 10 WIRE ANGLE 3
 OXYGEN TITER .680 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN								
	WIRE	CE	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	0	1	28.09	0.00	28.09	35.422	22.70	4.70	6.72	99.29	.04	.
10	0	0	2	27.98	0.00	27.98	35.435	22.75	4.60	6.57	97.03	.04	.

R V PALUMBO CRUISE STATION TOR-1B PRNC REFERENCE 45796

DATE 8/14/74 BARO 1021.6 WEATHER 02 WIND VELOC 06 WAVE PERIOD 5
 HOUR 14.8 TEMP DRY 29.0 VISIBILITY 7 WIND DIREC 29 TRANSPAR
 LAT 18-30.4 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0186
 LONG 66-29.6 W REL HUMID 073 CLOUD AMT 2 WAVE HEIGHT 4 COLOR

CAST 1 MESS TIME 14.9 GMT, 1051 LOCAL MAX DEPTH 10 WIRE ANGLE 5
 OXYGEN TITER .680 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN								
	WIRE	CE	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	0	1	28.07	0.00	28.07	35.424	22.71	4.71	6.73	99.42	.04	.
25	0	0	2	27.95	0.00	27.95	35.660	22.93	4.61	6.59	98.00	.05	.
50	52	52	6	27.66	0.00	27.66	36.330	23.53	4.72	6.74	97.68	.05	.
100	101	101	4	24.46	0.00	24.46	36.549	24.69	4.92	7.02	95.13	.04	.

R V PALURBO CRUISE STATION TOR-1C PRNC REFERENCE 45797
 DATE 5/14/74 BARO 1022.0 WEATHER 02 WIND VELOC 03 WAVE PERIOD 5
 HOUR 15.6 TEMP DRY 30.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-31.9 N TEMP WET 20.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0402
 LONG 66-29.6 W REL HUMID 075 CLOUD AMT 5 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 15.5 GMT, 1131 LOCAL MAX DEPTH 300 WIRE ANGLE 3
 OXYGEN TITER .686 METER WHEEL FACTOR .997

WIRE	CZ	TZ	BX	TL	TM	TAVE	SALIN	SIG T	OXYGEN			
									ML/L	MG/L	%SAT	
0	0	0	1	27.96	0.00	27.96	35.377	22.71	4.72	6.75	99.42	.24
25	25	0	2	27.95	0.00	27.95	35.564	22.86	4.65	6.64	98.42	.06
50	50	53	6	27.71	0.20	27.71	36.358	23.53	4.66	6.65	98.20	.03
100	100	122	4	24.23	0.20	24.20	36.587	24.86	5.06	7.23	97.80	.06
150	150	0	5	21.72	0.20	21.72	36.774	25.66	4.53	6.47	86.76	.05
200	200	190	7	19.69	0.00	19.69	36.697	26.15	4.24	6.05	75.87	.10
250	249	240	0	18.28	0.20	18.28	36.510	26.38	4.09	5.84	72.03	.29
300	299	0	16	17.12	0.00	17.12	36.413	26.59	4.13	5.86	71.64	.49

R V PALUMBO CRUISE STATION ISL-10 PRNC REFERENCE 45798

DATE 8/15/74 BARO 1021.5 WEATHER 02 WIND VELOC 06 WAVE PERIOD 3
 HOUR 4:1 1471 TEMP DRY 26.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-32.9 N TEMP WET 0.0 CLOUD TYPF 8 WAVE DIREC 08 SONIC DEP 0365
 LONG 66-39.0 W REL HUMID 096 CLOUD AMT 1 WAVE HEIGHT 1 COLOR

CAST 1 MESS TIME 4.1 0004 LOCAL MAX DEPTH 300 WIRE ANGLE 12
 OXYGEN TITER .700 METER WHEEL FACTOR .997

WIRE	CE	TZ	BN	TL	TM	TAVE	SALIN	SIG T	OXYGEN		PHOS	NITRA
									ML/L	MG/L		
0	0	0	1	27.86	0.00	27.86	35.381	22.75	4.60	6.57	.05	.00
25	25	0	2	27.70	0.00	27.70	35.411	22.97	4.75	6.79	.00	.00
50	49	49	6	27.71	0.00	27.71	36.302	23.49	4.81	6.87	.03	.00
100	98	93	4	23.97	0.00	23.97	36.582	24.87	5.05	7.21	.03	.00
150	147	0	5	21.52	0.00	21.52	36.729	25.68	4.68	6.69	.05	.50
200	196	200	7	19.54	0.00	19.54	36.639	26.16	4.42	6.32	.10	2.36
250	244	249	8	18.57	0.00	18.57	36.566	26.34	4.44	6.34	.22	7.33
300	293	0	10	17.26	0.00	17.26	36.367	26.51	4.23	6.05	.45	10.56

R V PALUMBO CRUISE STATION ISL-2C PRNC REFERENCE 45799

DATE 8/15/74 BARO 1021.5 WEATHER 02 WIND VELOC 05 WAVE PERIOD 5
 HOUR 4.8 ~~1640~~ TEMP DRY 26.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR 0365
 LAT 18-31.9 N TEMP WET 0.0 CLOUD TYPE 0 CLOUD AMT 1 WAVE DIREC 09 SONIC DEP 0365
 LONG 66-38.0 W REL HUMID 095 CLOUD AMT 1 WAVE HEIGHT 1 COLOR

CAST 1 MESS TIME ~~1640~~ 4.8 0045 LOCAL MAX DEPTH 300 WIRE ANGLE 8
 OXYGEN TITER 1700 METER WHEEL FACTOR .997

WIRE	CZ	TZ	RN	TL	TM	TAVE	SALIN	SIG T	OXYGEN			PHOS	NITRA
									ML/L	MG/L	%SAT		
0	0	0	1	27.85	0.00	27.85	35.406	22.77	4.88	6.97	102.02	.05	.00
25	25	0	2	27.72	0.00	27.72	35.611	22.97	4.79	6.84	101.15	.05	.00
50	50	49	6	27.72	0.00	27.72	36.312	23.49	4.80	6.86	99.32	.05	.00
100	99	101	4	24.68	0.00	24.68	36.598	24.85	5.09	7.27	98.40	.05	.00
150	140	0	5	21.61	0.00	21.61	36.774	25.69	4.70	6.72	89.94	.00	.75
200	198	200	7	19.63	0.00	19.63	36.686	26.16	4.43	6.33	79.23	.06	2.21
250	247	241	8	18.49	0.00	18.49	36.571	26.37	4.37	6.24	77.19	.19	9.41

R V PALUNGO CRUISE STATION ISL-3C PRNC REFERENCE 45800
 DATE 07/15/74 BARU 1021.5 WEATHER 02 WIND VELOC 00 WAVE PERIOD 5
 HOUR 5.6 TEMP DRY 27.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-31.9 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 09 SONIC DEP 0501
 LONG 66-36.9 W REL HUMID 095 CLOUD AMT 1 WAVE HEIGHT 1 COLOR

CAST 1 MESS TIME 5.6 GMT, 0137 LOCAL MAX DEPTH 300 WIRE ANGLE 7
 OXYGEN TITER .700 METER WHEEL FACTOR .997

WIRE	CZ	TZ	RN	TL	TM	TAVE	SALIN	SIG T	OXYGEN			PHOS	NITRA
									ML/L	MG/L	XSAT		
25	25	0	1	27.86	0.00	27.86	35.385	22.75	4.79	6.85	100.77	.03	.16
50	50	0	2	27.71	0.00	27.71	35.595	22.96	4.76	6.80	100.50	.06	.00
100	99	100	4	23.75	0.00	27.71	36.386	23.55	4.74	6.77	98.26	.00	.00
150	149	0	5	21.59	0.00	23.75	36.654	24.99	5.09	7.27	98.40	.03	.00
200	198	198	7	19.94	0.00	21.59	36.765	25.69	4.79	6.84	91.52	.03	.39
250	240	251	6	18.44	0.00	19.94	36.765	26.14	4.37	6.24	78.56	.07	2.05
300	297	0	10	17.36	0.00	18.44	36.574	26.38	4.45	6.36	76.66	.10	12.52
						17.36	36.423	26.54	4.26	6.09	74.56	.40	

R V PALUMBO CRUISE STATION ISL-4C PRNC REFERENCE 45801

DATE 07/15/76 BARO 1021.5 WEATHER P2 WIND VELOC W6 WAVE PERIOD 5
 HOUR 6.5 TEMP DRY 27.0 VISIBILITY 7 WIND DIREC W9 TRANSPAR
 LAT 18-31.9 N TEMP WET 0.0 CLOUD TYPE 6 WAVE DIREC W9 SONIC DEP 0365
 LONG 66-35.8 W REL HUMID 095 CLOUD AMT 1 WAVE HEIGHT 1 COLOR

CAST 1 MESS TIME 0.3 GMT, 0217 LOCAL MAX DEPTH 300 WIRE ANGLE 4
 OXYGEN TITER .700 METER WHEEL FACTOR .997

WIRE	CZ	DEPTH (M)	TEMP			OXYGEN			SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
			TL	TM	TAVE	SALIN	SIG T	ML/L							MG/L	XSAT	PHOS	NITRA
0			27.87	0.00	27.87	35.421	22.77	4.81	6.87	121.20		.04	.22	
25	23	0	27.64	0.00	27.64	35.683	23.25	4.75	6.81	100.82		.04	.20	
50	50	54	27.65	0.00	27.65	36.276	23.49	4.67	6.86	99.22		.04	.30	
100	100	90	24.02	0.00	24.02	36.627	24.89	2.05	7.21	97.66		.03	.10	
150	150	0	21.62	0.00	21.62	36.766	25.64	4.94	7.06	94.38		.03	.70	
200	199	106	20.39	0.00	20.39	36.787	26.04	4.38	6.15	81.60		.18	3.49	
250	249	248	18.44	0.00	18.48	36.586	26.38	4.32	6.18	76.48		.21	6.81	
300	299	0	17.61	0.00	17.61	36.467	26.51	4.18	5.96	73.38		.38	12.26	

R V PALUMBO CRUISE STATION ISL-5C PRNC REFERENCE 45802

DATE 8/15/74 BARO 1021.5 WEATHER 02 WIND VELOC 05 WAVE PERIOD 2
 HOUR 6.8 TEMP DRY 27.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 16-31.8 N TEMP WET 0.0 CLOUD TYPE 0 WAVE DIREC KY SONIC DEP 0360
 LONG 66-34.8 W REL HUMID 094 CLOUD AMT 2 WAVE HEIGHT 1 COLOR

CAST 1 MESS TIME 6.9 GMT, 0254 LOCAL MAX DEPTH 300 WIRE ANGLE 10
 OXYGEN TITR ,700 METER WHEEL FACTOR ,997

WIRE	DEPTH (M)	CZ	TZ	RN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	1	27.86	0.00	27.86	35.400	22.77	4.70	6.72	98.93	0.00	7.33		
25	25	2	27.69	0.00	27.69	35.645	23.00	4.88	6.97	103.14	0.00	7.85		
50	50	6	27.65	0.00	27.65	36.270	23.48	4.66	6.66	96.31	0.04	1.83		
100	99	4	23.74	0.00	23.74	36.660	24.99	5.01	7.16	96.93	0.04	1.00		
150	148	2	21.73	0.00	21.73	36.756	25.64	4.72	6.75	90.59	0.04	4.57		
200	197	7	20.30	0.00	20.30	36.780	26.06	4.32	6.17	81.81	0.12	4.70		
250	246	8	18.57	0.00	18.57	36.588	26.16	4.22	6.23	74.67	0.25	9.25		
300	295	0	17.62	0.00	17.62	36.461	26.50	4.25	6.07	74.48	0.35			

R V PALUMBO CRUISE STATION ISL-5B PRNC REFERENCE 45803

DATE 8/15/74 BARO 1220.5 WEATHER 02 WIND VELOC 05 WAVE PERIOD 2
 HOUR 7.4 TEMP DRY 26.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 16-31.5 N TEMP WET 0.0 CLOUD TYPE 0 WAVE DIREC 09 SONIC DEP 0237
 LONG 66-34.8 W REL HUMID 094 CLOUD AMT 1 WAVE HEIGHT 1 COLOR

CAST 1 MESS TIME 7.4 GMT, 0324 LOCAL MAX DEPTH 130 WIRE ANGLE 9
 OXYGEN TITR ,700 METER WHEEL FACTOR ,997

WIRE	DEPTH (M)	CZ	TZ	RN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	1	27.84	0.00	27.84	35.397	22.77	4.74	6.77	99.61	0.04	1.00		
25	25	2	27.57	0.00	27.57	35.779	23.14	4.79	6.85	101.60	0.03	1.05		
50	50	6	27.55	0.00	27.55	36.160	23.43	4.70	6.72	96.84	0.03	1.00		
100	99	4	24.23	0.00	24.23	36.617	24.67	5.05	7.21	97.63	0.04	1.34		

R V PALUMBO CRUISE

STATION ISL-46

PRNC REFERENCE 45804

DATE 8/15/74 BARO 1020.5 WEATHER 02 WIND VELOC 06 WAVE PERIOD 4
 HOUR 8.2 TEMP DRY 26.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-31.4 N TEMP WET 0.0 CLOUD TYPE 0 WAVE DIREC 08 SONIC DEP 0219
 LONG 66-35.6 W REL HUMID 094 CLOUD AMT 3 WAVE HEIGHT 3 COLOR

CAST 1 PRESS TIME 8.2 GMT, 0412 LOCAL MAX DEPTH 100 WIRE ANGLE 12
 OXYGEN TITER .700 METER WHEEL FACTOR .997

WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	OXYGEN			
									ML/L	MG/L	%SAT	
0	0	0	1	27.80	0.00	27.80	35.437	22.81	4.68	6.69	98.51	PHOS NITRA
25	25	0	2	27.60	0.00	27.60	35.717	23.28	4.81	6.87	101.75	.03 .00
50	49	0	6	27.65	0.00	27.65	36.243	23.46	4.81	6.87	99.27	.03 .09
100	98	96	4	23.97	0.00	23.97	36.620	24.09	5.04	7.20	97.47	.03 .00

R V PALUMBO CRUISE

STATION ISL-38

PRNC REFERENCE 45805

DATE 8/15/74 BARO 1021.3 WEATHER 02 WIND VELOC 04 WAVE PERIOD 4
 HOUR 8.8 TEMP DRY 26.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-31.1 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0198
 LONG 66-36.5 W REL HUMID 094 CLOUD AMT 3 WAVE HEIGHT 3 COLOR

CAST 1 PRESS TIME 8.8 GMT, 0447 LOCAL MAX DEPTH 100 WIRE ANGLE 5
 OXYGEN TITER .700 METER WHEEL FACTOR .997

WIRE	CZ	TZ	BN	TL	TM	TAVE	SALIN	SIG T	OXYGEN			
									ML/L	MG/L	%SAT	
0	0	0	1	27.54	0.00	27.84	35.445	22.60	4.81	6.88	101.38	PHOS NITRA
25	25	0	2	27.52	0.00	27.62	35.683	23.15	4.79	6.85	101.30	.04 .01
50	50	53	6	27.65	0.00	27.65	36.269	23.48	4.81	6.87	99.35	.00 .21
100	100	90	4	23.51	0.00	23.91	36.616	24.01	5.03	7.19	97.29	.16 .33

R V PALUMBO CRUISE STATION ISL-2B PRNC REFERENCE 45806
 DATE 8/15/74 BARO 1421.5 WEATHER 02 WIND VELOC 04 WAVE PERIOD 4
 HOUR 9.3 TEMP DRY 25.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-31.6 N TEMP WET 0.0 CLOUD TYPE 0 WAVE DIREC 08 SONIC DEP 0207
 LONG 66-38.0 W REL HUMID 094 CLOUD AMT 3 WAVE HEIGHT 3 COLOR

CAST 1 WESS TIME 9.2 GMT, 0515 LOCAL MAX DEPTH 1M0 WIRE ANGLE 4
 OXYGEN TITER .700 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				SALIN				SIG T				OXYGEN			
	WIRE	CE	TZ	BN	TL	TM	TAVE	MG/L	XSAT	ML/L	MG/L	XSAT	PHOS	NITRA		
0	0	0	1	27.83	0.00	27.83	35.448	22.81	4.79	6.84	100.79	.11	.00			
25	25	0	2	27.73	0.00	27.70	35.691	23.00	4.79	6.84	101.25	.06	.05			
50	50	52	6	27.67	0.00	27.67	36.291	23.49	4.77	6.82	98.69	.11	.00			
100	100	95	4	24.05	0.00	24.05	36.606	24.86	5.05	7.22	97.74	.10	.26			

R V PALUMBO CRUISE STATION ISL-1B PRNC REFERENCE 45827
 DATE 8/15/74 BARO 1421.5 WEATHER 02 WIND VELOC 05 WAVE PERIOD 4
 HOUR 9.8 TEMP DRY 25.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-31.1 N TEMP WET 0.0 CLOUD TYPE 6 WAVE DIREC 08 SONIC DEP 0196
 LONG 66-39.0 W REL HUMID 094 CLOUD AMT 2 WAVE HEIGHT 3 COLOR

CAST 1 WESS TIME 9.8 GMT, 0547 LOCAL MAX DEPTH 1M0 WIRE ANGLE 7
 OXYGEN TITER .700 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				SALIN				SIG T				OXYGEN			
	WIRE	CE	TZ	BN	TL	TM	TAVE	MG/L	XSAT	ML/L	MG/L	XSAT	PHOS	NITRA		
0	0	0	1	27.77	0.00	27.77	35.417	22.50	4.81	6.97	101.00	.10	.00			
25	25	0	2	27.76	0.00	27.76	35.528	22.8	4.78	6.85	101.15	.13	.54			
50	50	53	6	27.62	0.00	27.62	36.260	23.0	4.81	7.17	99.37	.00	.01			
100	100	95	4	24.10	0.00	24.10	36.107	24.4	5.00	7.15	96.04	.14	.00			

R V PALUMBO CRUISE STATION ISL-1A PRNC REFERENCE 45808

DATE 8/15/74 BARO 1022.5 WEATHER 00 WIND VELOC 05 WAVE PERIOD 4
 HOUR 12:12 TEMP DRY 25.0 VISIBILITY 7 WIND DIREC 08 TRANSPAR
 LAT 18-29.7 N WIND WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0022
 LONG 66-59.1 W REL HUMID 093 CLOUD AMT 3 WAVE HEIGHT 3 COLOR

CAST 1 WESS TIME 10:2 G-T, 0612 LOCAL MAX DEPTH 10 WIRE ANGLE 3
 OXYGEN TITER ,700 METER WHEEL FACTOR ,997

DEPTH (M) OXYGEN

WIRE	02	T2	0N	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
0	0	0	1	27.76	0.20	27.76	35.471	22.95	4.64	6.63	97.68	.07	.00
10	0	0	2	27.73	0.00	27.73	35.594	22.95	4.73	6.76	99.93	.07	.00

R V PALUMBO CRUISE STATION ISL-2A PRNC REFERENCE 45809

DATE 8/15/74 BARO 1022.5 WEATHER 02 WIND VELOC 05 WAVE PERIOD 4
 HOUR 12:13 TEMP DRY 25.2 VISIBILITY 7 WIND DIREC 08 TRANSPAR
 LAT 18-29.9 N WIND WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0021
 LONG 66-58.7 W REL HUMID 094 CLOUD AMT 3 WAVE HEIGHT 4 COLOR

CAST 1 WESS TIME 10:2 G-T, 0629 LOCAL MAX DEPTH 10 WIRE ANGLE 2
 OXYGEN TITER ,700 METER WHEEL FACTOR ,997

DEPTH (M) OXYGEN

WIRE	02	T2	0N	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
0	0	3	0	27.62	0.00	27.62	35.471	22.93	4.59	5.50	95.72	.04	.00
12	0	4	0	27.73	0.00	27.73	35.626	22.97	4.60	6.86	101.51	.07	.00

R V PALUMBO CRUISE STATION 19L-3A PHNC REFERENCE 45810

DATE 8/12/74 BARO 1022.5 WEATHER 02 WIND VELOC 24 WAVE PERIOD 4
 HOUR 10.8 TEMP DRY 25.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 16-30.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0019
 LONG 66-36.7 W REL HUMID 093 CLOUD AMT 3 WAVE HEIGHT 3 COLOR

CAST 1 WESS TIME 10.8 GMT, 0645 LOCAL MAX DEPTH 10 WIRE ANGLE 5
 OXYGEN TITER ,700 METER WHEEL FACTOR ,997

DEPTH (M)	TEMP				SIG T	ML/L	MG/L	%SAT	PHOS	NITRA		
	TZ	RN	TL	TM								
0	0	1	27.80	0.00	27.80	35.459	22.83	4.74	6.77	99.76	.00	.00
10	0	2	27.74	0.00	27.74	35.608	22.96	4.73	6.76	99.99	.04	.00

R V PALUMBO CRUISE STATION 19L-4A PRNC REFERENCE 45811

DATE 8/15/74 BARO 1022.5 WEATHER 02 WIND VELOC 05 WAVE PERIOD 4
 HOUR 11.1 TEMP DRY 25.0 VISIBILITY 7 WIND DIREC 08 TRANSPAR
 LAT 18-51.1 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0022
 LONG 66-35.8 W REL HUMID 090 CLOUD AMT 3 WAVE HEIGHT 3 COLOR

CAST 1 WESS TIME 11.0 GMT, 0701 LOCAL MAX DEPTH 10 WIRE ANGLE 7
 OXYGEN TITER ,700 METER WHEEL FACTOR ,997

DEPTH (M)	TEMP				SIG T	ML/L	MG/L	%SAT	PHOS	NITRA		
	TZ	RN	TL	TM								
0	3	6	27.80	0.00	27.80	35.422	22.80	4.75	6.79	99.94	.03	.00
10	14	4	27.72	0.00	27.72	35.616	22.97	4.73	6.76	99.99	.03	.00

R V PALUMBO CRUISE STATION ISL-5A PRNC REFERENCE 45812

DATE 8/15/74 BARO 1000.0 WEATHER 02 WIND VELOC 09 WAVE PERIOD 4
 HOUR 11.4 TEMP DRY 25.0 VISIBILITY 6 WIND DIREC 08 TRANSPAR
 LAT 18-38.2 N TEMP WET 0.0 CLOUD TYPE 0 WAVE DIREC 07 SONIC DEP 0027
 LONG 66-34.7 W REL HUMID 006 CLOUD AMT 3 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 11.3 GMT, 0720 LOCAL MAX DEPTH 10 WIRE ANGLE 4
 OXYGEN TITER .700 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			SALIN			SIG T			OXYGEN				
	WIRE	CE	TE	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	0	0	1	27.82	0.00	27.82	35.331	22.72	4.65	6.65	97.62	1.12	1.35
10	10	0	0	2	27.86	0.00	27.86	35.483	22.82	4.66	6.66	98.28	1.04	1.00

R V PALUMBO CRUISE STATION PMA-2A PRNC REFERENCE 45813

DATE 8/15/74 BARO 1022.5 WEATHER 00 WIND VELOC 09 WAVE PERIOD 4
 HOUR 11.7 TEMP DRY 26.2 VISIBILITY 6 WIND DIREC 07 TRANSPAR
 LAT 18-29.8 N TEMP WET 0.0 CLOUD TYPE 0 WAVE DIREC 06 SONIC DEP 0025
 LONG 66-33.6 W REL HUMID 084 CLOUD AMT 3 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 11.6 GMT, 0730 LOCAL MAX DEPTH 10 WIRE ANGLE 4
 OXYGEN TITER .680 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			SALIN			SIG T			OXYGEN				
	WIRE	CE	TE	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	0	0	0	27.85	0.00	27.85	35.335	22.72	4.64	6.65	97.44	1.25	1.00
10	10	0	0	4	27.89	0.00	27.89	35.575	22.58	4.45	6.36	94.17	1.06	1.00

R V PALUMBO CRUISE
 STATION PMA-3A
 PRNC REFERENCE 45814

DATE 8/15/74 BARO 1022.5 WEATHER K2 WIND VELOC 02 WAVE PERIOD 4
 HOUR 11.8 TEMP DRY 26.0 VISIBILITY 6 WIND DIREC 07 TRANSPAR
 LAT 18-29.6 N TEMP WET 0.0 CLOUD TYPE 8 CLOUD AMT 4 WAVE DIREC 06 SONIC DEP 0021
 LONG 66-52.0 W REL HUMID 081 CLOUD AMT 4 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 11.9 GMT, 0754 LOCAL MAX DEPTH 10 WIRE ANGLE 7
 OXYGEN TITER .086 METER WHEEL FACTOR .997

DEPTH (M) TEMP OXYGEN PHOS NITRA

WIRE	CE	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT
0	0	0	1	27.65	0.00	27.65	34.887	22.45	4.68	6.68	96.65
10	10	0	2	27.78	0.00	27.78	35.637	22.97	4.58	6.54	96.97

R V PALUMBO CRUISE
 STATION PMA-4A
 PRNC REFERENCE 45815

DATE 8/15/74 BARO 1022.5 WEATHER 02 WIND VELOC 05 WAVE PERIOD 4
 HOUR 12.2 TEMP DRY 26.0 VISIBILITY 6 WIND DIREC 07 TRANSPAR
 LAT 18-29.4 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 06 SONIC DEP 0024
 LONG 66-51.3 W REL HUMID 080 CLOUD AMT 3 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 12.1 GMT, 0809 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER .686 METER WHEEL FACTOR .997

DEPTH (M) TEMP OXYGEN PHOS NITRA

WIRE	CE	TZ	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT
0	0	0	4	27.74	0.20	27.74	34.809	22.36	4.64	6.62	95.64
10	10	10	6	27.91	0.00	27.91	35.538	22.85	4.50	6.44	95.24

R V PALUMBO CRUISE STATION PMA-5A PRNC REFERENCE 45816
 DATE 8/15/74 BARD 1022.5 WEATHER 02 WIND VELOC 05 WAVE PERIOD 4
 HOUR 12.5 TEMP DRY 26.0 VISIBILITY 6 WIND DIREC 06 TRANSPAR
 LAT 18-29.3 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 05 SONIC DEP 0021
 LONG 66-50.6 W REL HUMID 079 CLOUD AMT 3 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 12.4 GMT, 0626 LOCAL MAX DEPTH 10 WIRE ANGLE 3
 OXYGEN TITER .000 METER WHEEL FACTOR .997

DEPTH (M)	TEMP		SALIN		SIG T		XSAT		PHOS NITRA
	TL	TM	TAVE	ML/L	MG/L	MG/L	MG/L		
0	1	27.81	0.00	27.81	35.474	22.83	4.54	6.48	95.65
10	2	27.86	0.20	27.88	35.555	22.87	4.48	6.41	94.82

R V PALUMBO CRUISE STATION PMA-2C PRNC REFERENCE 45817
 DATE 9/16/74 BARD 1022.5 WEATHER 02 WIND VELOC 05 WAVE PERIOD 6
 HOUR 24.0 TEMP DRY 28.0 VISIBILITY 7 WIND DIREC 08 TRANSPAR
 LAT 18-31.8 N TEMP WET 0.0 CLOUD TYPE 0 WAVE DIREC 05 SONIC DEP 0365
 LONG 66-33.7 W REL HUMID 086 CLOUD AMT 2 WAVE HEIGHT 2 COLOR

CAST 1 MESS TIME 0.8 GMT, 2049 LOCAL MAX DEPTH 300 WIRE ANGLE 0
 OXYGEN TITER .056 METER WHEEL FACTOR .997

DEPTH (M)	TEMP		SALIN		SIG T		XSAT		PHOS NITRA
	TL	TM	TAVE	ML/L	MG/L	MG/L	MG/L		
0	1	27.80	0.00	27.86	35.448	22.80	4.71	6.73	99.24
25	2	27.63	0.00	27.60	35.752	23.11	4.67	6.67	98.94
50	3	27.73	0.00	27.73	36.397	23.55	4.72	6.74	97.90
100	4	24.02	0.00	24.02	36.608	24.87	4.95	7.07	95.77
150	5	21.29	0.00	21.29	36.724	25.74	4.57	6.55	87.47
200	6	19.56	0.00	19.56	36.654	26.15	4.35	6.21	77.63
250	7	18.37	0.00	18.37	36.548	26.38	4.26	6.08	72.17
300	8	19.23	0.00	19.23	36.604	26.25	4.57	6.55	81.52

PREMATURE TRIP

R V PALUMBUC CHOISE STATION PHA-30 POND REFERENCE 45818

DATE 8/12/74 BARO 1021.5 WEATHER 02 WIND VELOC 00 WAVE PERIOD 2
 HOUR 1.8 TEMP DRY 27.0 VISIBILITY 7 WIND DIREC 00 TRANSPAR
 LAT 18-31.7 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 00 SONIC DEP 0475
 LONG 66-52.7 W REL HUMID 007 CLOUD AMT 2 WAVE HEIGHT 2 COLOR

CAST 1 PRESS TIME 1.7 GMT, 2143 LOCAL MAX DEPTH 300 WIRE ANGLE 13
 OXYGEN TITER .086 METRO WHEEL FACTOR .997

WIRE	DEPTH (M)	TEMP		TAVE	SALIN	SIG T	MG/L	XSAT	PHOS	NITRA
		TL	TM							
0	0	1 27.84	0.00	27.84	35.460	22.81	4.08	6.68	90.50	.00
25	25	2 27.64	0.00	27.64	35.721	23.27	4.73	6.85	101.24	.00
50	50	0 27.54	0.00	27.54	36.406	23.62	4.75	6.79	98.55	.00
100	95	4 23.99	0.00	23.99	36.579	24.86	4.93	7.04	95.25	.00
150	140	7 21.21	0.00	21.21	36.693	25.74	4.63	6.61	88.10	.03
200	195	7 19.57	0.00	19.57	36.657	26.15	4.34	6.20	77.49	.06
250	245	0 18.44	0.00	18.44	36.541	26.50	4.22	6.03	74.58	.25
300	295	0 19.26	0.00	19.26	36.382	26.23	4.79	6.85	84.48	.07

HIGH TEMPERATURE, 17.25 WORLD FIT

R V PALUMBO CRUISE
 16
 DATE 9/18/74 BARU 1021.5 WEATHER 02 STATION PMA-4C PRNC REFERENCE 45819
 HOUR 2.7 TEMP DRY 27.0 VISIBILITY 7 WIND VELOC 00 WAVE PERIOD 5
 LAT 16-31.8 N TEMP WET 0.0 CLOUD TYPE 8 WIND DIREC 09 TRANSPAR
 LONG 66-35.8 W REL HUMID 886 CLOUD AMT 2 WAVE DIREC 08 SONIC DEP 0347
 CAST 1 BESS TIME 2.6 GMT, 2237 LOCAL MAX DEPTH 330 WIRE ANGLE 10
 OXYGEN TITFR 1060 METER WHEEL FACTOR .997 WAVE HEIGHT 2 COLOR

WIRE #	DEPTH (M)	TZ	BN	TL	TM	TEMP	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
25	25	0	1	27.83	0.00	27.83	35.445	22.61	4.65	6.64	97.89	.00	.	
50	50	0	2	27.54	0.00	27.54	35.762	23.14	4.83	6.90	102.23	.00	.	
100	99	48	0	27.62	0.00	27.62	36.420	23.61	4.76	6.80	98.77	.00	.	
150	97	97	4	23.95	0.00	23.95	36.566	24.68	4.92	7.02	94.99	.00	.	
200	146	0	5	21.26	0.00	21.28	36.711	25.74	4.90	7.00	93.46	.03	.	
250	197	197	7	19.59	0.00	19.59	36.636	26.13	4.37	6.24	77.95	.08	.	
295	247	247	0	18.44	0.00	18.44	36.537	26.35	4.17	5.96	73.60	.26	.	
306	295	0	10	19.20	0.00	19.20	36.416	26.85	4.71	6.73	83.15	.06	.	

HIGH TEMPERATURE, 17.26 WOULD FIT

R V PALUMBO CRUISE STATION PMA-10 PRNG REFERENCE 45820
 DATE 8/15/74 BARO 1021.5 WEATHER 02 WIND VELOC 06 WAVE PERIOD 5
 HOUR 3.4 TEMP DRY 27.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 16-31.8 N TEMP WET 21.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0365
 LONG 66-30.5 W REL HUMID 006 CLOUD AMT 2 WAVE HEIGHT 2 COLOR

CAST 1 MESS TIME 3.3 GMT, 2319 LOCAL MAX DEPTH 300 WIRE ANGLE 25
 OXYGEN TITER .686 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN				PHOS	NITRA			
	WIRE	CE	TZ	RN	TL	TM	TAVE	SALIN			SIG T	ML/L	MG/L	%SAT
0	0	0	0	1	27.83	0.00	27.83	35.464	22.82	4.75	6.79	100.12	.06
25	23	0	0	2	27.59	0.00	27.59	35.765	23.12	4.72	6.74	99.99	.05
50	46	48	0	6	27.66	0.00	27.66	36.408	23.58	4.60	6.57	95.48	.00
100	91	90	4	23.97	0.00	23.97	36.574	24.86	4.96	7.08	95.75	.05	.04
150	136	0	5	21.47	0.00	21.47	36.697	25.67	4.72	6.74	90.02	.08	.04
200	181	187	7	20.05	0.00	20.05	36.703	26.06	4.36	6.23	82.45	.21	.08
250	226	239	8	18.85	0.00	18.85	36.579	26.28	4.24	6.06	75.22	.21	.08
300	272	0	16	17.84	0.00	17.84	36.470	26.45	4.42	6.32	77.66	.28	.08

R V PALUMBO CRUISE STATION PMA-5B PRNG REFERENCE 45821
 DATE 8/15/74 BARO 1022.0 WEATHER 02 WIND VELOC 06 WAVE PERIOD 5
 HOUR 3.9 TEMP DRY 27.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 16-30.7 N TEMP WET 21.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0201
 LONG 66-30.5 W REL HUMID 007 CLOUD AMT 2 WAVE HEIGHT 2 COLOR

CAST 1 MESS TIME 3.9 GMT, 2355 LOCAL MAX DEPTH 100 WIRE ANGLE 11
 OXYGEN TITER .686 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN				PHOS	NITRA			
	WIRE	CE	TZ	RN	TL	TM	TAVE	SALIN			SIG T	ML/L	MG/L	%SAT
0	0	0	0	1	27.83	0.00	27.83	35.600	22.91	4.64	6.63	98.32	.07
25	25	0	0	2	27.77	0.00	27.77	35.628	22.95	4.73	6.76	100.00	.03
50	49	49	6	27.70	0.00	27.70	36.423	23.58	4.84	6.92	100.00	.03	
100	98	97	4	23.71	0.00	23.71	36.641	24.09	5.06	7.23	97.82	.06	

R V PALUMBO CRUISE STATION PMA-4B PRNC REFERENCE 45822

DATE 8/16/74 BARO 1021.5 WEATHER 02 WIND VELOC 06 WAVE PERIOD 5
 HOUR 4.3 TEMP DRY 23.0 VISIBILITY 6 WIND DIREC 08 TRANSPAR
 LAT 18-30.9 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 06 SONIC DEP 0197
 LONG 06-31.6 W REL HUMID 000 CLOUD AMT 3 WAVE HEIGHT 4 COLOR

CAST 1 MESS TIME 4.5 GMT, 0029 LOCAL MAX DEPTH 100 WIRE ANGLE 15
 OXYGEN TITER .080 METER WHEEL FACTOR .997

DEPTH (M)		TEMP		SALIN		OXYGEN		PHOS NITRA		
WIRE	CE	TZ	BN	TL	TM	TAVE	SIG T	ML/L	MG/L	%SAT
0	0	0	1	27.77	0.00	27.77	22.89	4.70	6.72	99.23
25	25	0	2	27.61	0.00	27.61	23.07	4.71	6.73	99.68
50	49	51	0	27.40	0.00	27.40	23.63	4.65	6.64	96.22
100	97	96	4	23.66	0.00	23.66	24.99	4.85	6.94	93.78

R V PALUMBO CRUISE STATION PMA-3B PRNC REFERENCE 45823

DATE 8/16/74 BARO 1022.5 WEATHER 02 WIND VELOC 06 WAVE PERIOD 4
 HOUR 4.8 TEMP DRY 23.0 VISIBILITY 6 WIND DIREC 08 TRANSPAR
 LAT 18-30.9 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0198
 LONG 06-32.7 W REL HUMID 076 CLOUD AMT 3 WAVE HEIGHT 4 COLOR

CAST 1 MESS TIME 4.9 GMT, 0053 LOCAL MAX DEPTH 100 WIRE ANGLE 0
 OXYGEN TITER .080 METER WHEEL FACTOR .997

DEPTH (M)		TEMP		SALIN		OXYGEN		PHOS NITRA		
WIRE	CE	TZ	BN	TL	TM	TAVE	SIG T	ML/L	MG/L	%SAT
0	0	0	1	27.76	0.00	27.76	22.91	4.93	7.04	104.06
25	25	0	2	27.63	0.00	27.63	23.05	4.68	6.68	98.92
50	50	47	0	26.62	0.00	26.62	23.62	4.79	6.84	101.50
100	100	98	4	23.74	0.00	23.74	24.95	4.93	7.04	95.17

LOW TEMPERATURE

R V PALOMAR CRUISE STATION PMA-28 PRNG REFERENCE 45824

DATE 8/16/74 BARO 1021.5 WEATHR P2 WIND VELOC 26 WAVE PERIOD 4
 HOUR 5.3 TEMP DRY 25.0 VISIBILITY 6 WIND DIREC 08 TRANSPAR
 LAT 18-51.2 N TEMP WET 0.0 CLOUD TYPE B WAVE DIREC 27 SONIC DEP 0190
 LONG 66-33.6 W REL HUMID 078 CLOUD AMT 2 WAVE HEIGHT 3 COLOR

CAST 1 NESS TIME 5.3 GMT, 0116 LOCAL MAX DEPTH 100 WIRE ANGLE 4
 OXYGEN TITER .086 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN				PHOS	NITRA				
	W/PE	02	TZ	BN	TL	T4	TAVE	SALIN			SIG T	ML/L	MG/L	%SAT
0	0	0	0	1	27.76	0.00	27.76	35.531	22.39	4.72	6.75	99.60	.26	.
25	25	0	0	2	27.62	0.00	27.62	35.674	23.25	4.71	6.75	99.61	.25	.
50	50	40	0	0	26.92	0.00	26.92	36.273	23.72	4.74	6.78	97.81	.24	.
100	100	102	4	4	23.55	0.00	23.55	36.629	25.23	4.68	6.96	94.11	.25	.

LOW TEMPERATURE

R V PALUMBO CRUISE STATION TOR-1C PRNC REFERENCE 52897

DATE 11/30/74 BARO 1017.5 WEATHER 02 WIND VELOC 02 WAVE PERIOD 4
 HOUR 6.7 TEMP DRY 23.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 16-31.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0457
 LONG 66-29.6 W REL HUMID 096 CLOUD AMT 8 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 6.6 GMT, 0238 LOCAL MAX DEPTH 300 WIRE ANGLE 7
 OXYGEN TITER .710 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	TEMP		TAVE	SALIN	SIG T	OXYGEN		PHOS	NITRA
		TL	TM				ML/L	%SAT		
0	0	1	27.34	27.34	33.334	21.38	4.88	6.97	100.14	.05
25	0	2	27.70	27.76	35.826	23.11	4.78	6.85	101.76	.05
50	50	3	27.14	27.14	36.390	23.74	4.90	7.00	101.43	.07
100	90	4	23.65	23.65	36.710	25.36	4.93	7.04	95.51	.09
150	140	5	21.2	21.22	36.768	25.80	4.65	6.54	88.09	.09
200	190	6	19.14	19.14	36.630	26.25	4.35	6.21	77.37	.10
250	240	7	17.84	17.84	36.477	26.46	4.34	6.20	76.27	.20
300	290	8	16.92	16.92	36.339	26.58	4.35	6.21	75.81	.46

R V PALUMBO CRUISE STATION TOR-2C PRNC REFERENCE 50898

DATE 10/30/74 BARO 1017.5 WEATHER 02 WIND VELOC 02 WAVE PERIOD 4
 HOUR 7.4 TEMP DRY 23.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-31.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0402
 LONG 66-28.6 W REL HUMID 095 CLOUD AMT 8 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 7.5 GMT, 0319 LOCAL MAX DEPTH 300 WIRE ANGLE 2
 OXYGEN TITER .710 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	TZ	BN	TL	TM	TAVE	SALIN	SIG	T	OXYGEN			PHOS	NITRA
										ML/L	MG/L	%SAT		
0	0	0	1	27.31	0.00	27.31	33.882	21.80	4.67	6.95	101.24	.05	.	
25	25	0	2	27.78	0.00	27.78	35.798	23.09	4.72	6.75	100.48	.06	.	
50	50	52	3	27.25	0.00	27.25	36.386	23.70	4.92	7.03	101.92	.06	.	
100	100	100	4	23.77	0.00	23.77	36.703	25.02	4.92	7.03	99.42	.07	.	
150	152	152	5	21.34	0.00	21.34	36.774	25.77	4.49	6.42	85.77	.10	.	
200	198	198	6	19.00	0.00	19.00	36.601	26.26	4.39	6.26	77.85	.17	.	
250	252	252	7	17.85	0.00	17.85	36.478	26.46	4.34	6.20	76.27	.32	.	
300	299	294	8	16.94	0.00	16.94	36.343	26.58	4.34	6.20	75.69	.38	.	

R V PALUMBO CRUISE STATION TOR-3C PRNC REFERENCE 50899

DATE 10/30/74 BARO 1017.0 WEATHER 02 WIND VELOC M2 WAVE PERIOD 4
 HOUR 0811 TEMP DRY 23.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-31.7 N TEMP WET 010 CLOUD TYPE 8 WAVE DIREC SONIC DEP 0390
 LONG 66-27.2 W REL HUMID 092 CLOUD AMT 8 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 0.0 GMT, 0401 LOCAL MAX DEPTH 300 WIRE ANGLE 3
 OXYGEN TITER .210 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	CE	TE	BN	TL	TM	TEMP		TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
							OXYGEN									
0	0	0	0	1	27.56	0.00	27.56	34.402	22.11	4.67	6.95	99.14	1.06			
25	25	0	0	2	27.75	0.00	27.75	35.800	23.10	4.69	6.71	99.83	1.05			
50	50	51	0	3	26.87	0.00	26.87	36.351	23.80	4.79	6.84	98.84	1.06			
100	100	99	0	4	23.47	0.00	23.47	36.739	25.13	4.89	6.99	94.79	1.06			
150	150	149	0	5	21.46	0.00	21.46	36.771	25.73	4.37	6.24	83.52	1.10			
200	200	190	0	6	19.31	0.00	19.31	36.651	26.20	4.37	6.24	77.84	1.14			
250	240	255	0	7	18.01	0.00	18.01	36.501	26.43	4.35	6.21	70.51	1.32			
300	290	296	0	8	16.95	0.00	16.96	36.347	26.57	4.33	6.19	75.58	1.39			

R V PALUMBO CRUISE STATION TUR-4C PRNC REFERENCE 50900

DATE 13/31/74 RAPO 1016.7 WEATHER 02 WIND VELOC 02 WAVE PERIOD 4
 HOUR 9.1 TEMP DRY 23.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-31.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 05 SONIC DEP 0410
 LONG 66-26.1 W REL HUMID 089 CLOUD AMT 8 WAVE HEIGHT 3 COLOR

CAST 1 PRESS TIME 8.8 GMT, 0448 LOCAL MAX DEPTH 300 WIRE ANGLE 5
 OXYGEN TITER ,710 METER WHEEL FACTOR ,997

DEPTH (M)	TEMP		SALIN		SIG. T		OXYGEN		PHOS	NITRA
	TL	TM	TAVE	SALIN	SIG. T	ML/L	XSAT			
0	27.21	0.00	27.21	33.599	21.04	4.72	7.03	102.31	.12	.
25	27.75	0.00	27.75	35.732	23.04	4.02	6.88	102.23	.05	.
50	27.41	0.00	27.41	36.345	23.62	4.03	6.90	99.95	.04	.
100	23.47	0.00	23.47	36.714	25.11	4.85	6.93	93.88	.05	.
150	21.11	0.00	21.11	36.751	25.61	4.47	6.39	85.19	.07	.
200	19.51	0.00	19.51	36.683	26.19	4.42	6.32	79.01	.12	.
250	17.86	0.00	17.86	36.275	26.30	4.37	6.24	76.34	.31	.
300	17.01	0.00	17.01	36.445	26.64	4.41	6.30	77.62	.31	.

R V PALUMBO CRUISE STATION TOR-5C PRNC REFERENCE 50901
 DATE 10/30/74 BARO 1017.0 WEATHER 02 WIND VELOC K2 WAVE PERIOD 4
 HOUR 10.1 TEMP DRY 23.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-31.6 N TEMP WET 20.0 CLOUD TYPE 8 WAVE DIREC 06 SONIC DEP 0438
 LONG 66-25.4 W REL HUMID 092 CLOUD AMT 5 WAVE HEIGHT 4 COLOR

CAST 1 MESS TIME 9.7 GMT, 0545 LOCAL MAX DEPTH 300 WIRE ANGLE 0
 OXYGEN TITER .710 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	TEMP				TAVE	SALIN	SIG T	OXYGEN		XSAT	PHOS	NITRA
		TL	TM	TR	TS				ML/L	MG/L			
0	0	27.28	0.00	27.28	34.303	22.13	4.88	6.97	102.61		.07		
25	25	27.75	0.00	27.75	35.695	23.02	4.71	6.73	99.81		.04		
50	50	27.99	0.00	27.99	36.421	23.49	4.81	6.87	100.00		.05		
100	100	23.92	0.00	23.92	36.679	24.95	4.92	7.00	95.02		.03		
150	150	21.63	0.00	21.63	36.763	25.68	4.51	6.45	86.34		.10		
200	200	19.38	0.00	19.38	36.633	26.19	4.36	6.22	77.63		.07		
250	250	18.12	0.00	18.12	36.502	26.41	4.39	6.26	77.19		.25		
300	300	0.00	0.00	0.00	36.468	27.00	4.36	6.23	*****		.29		

R V PALUMBO CRUISE STATION TOR-5B PRNC REFERENCE 50902
 DATE 10/30/74 BARO 1017.5 WEATHER 02 WIND VELOC WAVE PERIOD 4
 HOUR 10.6 TEMP DRY 24.0 VISIBILITY 7 WIND DIREC TRANSPAR
 LAT 18-31.0 N TEMP WET 20.0 CLOUD TYPE 8 WAVE DIREC SONIC DEP 0169
 LONG 66-25.4 W REL HUMID 093 CLOUD AMT 3 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 10.5 GMT, 0629 LOCAL MAX DEPTH 120 WIRE ANGLE 2
 OXYGEN TITER .716 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	TEMP				TAVE	SALIN	SIG T	OXYGEN		XSAT	PHOS	NITRA
		TL	TM	TR	TS				ML/L	MG/L			
0	0	27.47	0.00	27.47	34.640	22.32	4.83	6.90	99.02		.04		
25	25	27.76	0.00	27.76	35.501	22.57	4.72	6.75	99.53		.04		
50	50	27.93	0.00	27.93	36.263	23.39	4.64	6.62	95.90		.04		
100	100	24.44	0.00	24.44	36.619	24.75	4.88	6.97	94.69		.03		

R V PALUMBO CRUISE STATION TOR-3B PRNC REFERENCE 50903
 DATE 10/30/74 BARO 1017.5 WEATHER 02 WIND VELOC 02 WAVE PERIOD 4
 HOUR 10.9 TEMP DRY 24.0 VISIBILITY 7 WIND DIREC TRANSPAR
 LAT 18-31.1 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC SONIC DEP 0160
 LONG 66-26.4 W REL HUMID 091. CLOUD AMT 3 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 11.0 GMT, 0659 LOCAL MAX DEPTH 102 WIRE ANGLE 0
 OXYGEN TITER .710 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN		SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
	CE	TE	BN	TL	TA	TA						
0	0	0	1	27.47	0.00	27.47	34.686	22.35	4.84	6.92	99.44	.05
25	0	0	2	27.77	0.00	27.77	35.549	22.90	4.73	6.76	99.84	.06
50	0	51	3	28.17	0.00	28.17	36.323	23.35	4.66	6.65	96.65	.08
100	0	97	4	24.72	0.00	24.72	36.599	24.65	4.91	7.01	95.35	.05

R V PALUMBO CRUISE STATION TOR-3B PRNC REFERENCE 50904
 DATE 10/30/74 BARO 1018.3 WEATHER 02 WIND VELOC 02 WAVE PERIOD 4
 HOUR 11.0 TEMP DRY 24.0 VISIBILITY 7 WIND DIREC 27 TRANSPAR
 LAT 18-30.6 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 01 SONIC DEP 0182
 LONG 66-27.7 W REL HUMID 084 CLOUD AMT 2 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 11.5 GMT, 0732 LOCAL MAX DEPTH 120 WIRE ANGLE 3
 OXYGEN TITER .710 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN		SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
	CE	TE	BN	TL	TA	TA						
0	0	0	1	27.05	0.00	27.05	34.181	22.11	4.84	6.92	101.14	.05
25	0	0	2	27.80	0.00	27.80	35.299	22.71	4.75	6.79	99.50	.05
50	0	50	3	28.13	0.00	28.13	36.191	23.27	4.67	6.67	96.48	.04
100	0	101	4	24.54	0.00	24.54	36.593	24.70	4.89	6.99	94.95	.06

R V PALUMBO CRUISE STATION TOR-25 PRNC REFERENCE 50905
 DATE 10/30/74 BARO 1018.0 WEATHER 02 WAVE PERIOD 02
 HOUR 12.2 TEMP DRY 29.0 VISIBILITY 7 WIND VELOC 02
 LAT 18-30.2 N TEMP WET 0.0 CLOUD TYPE 8 WIND DIREC 27 TRANSPAR
 LONG 66-28.5 W REL HUMID 081 CLOUD AMT 2 WAVE DIREC SONIC DEP 0175
 WAVE HEIGHT 3 COLOR
 CAST 1 MESS TIME 12.2 GMT, 0812 LOCAL MAX DEPTH 100 WIRE ANGLE 2
 OXYGEN TITER .718 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN				PHOS	NITRA
	WIRE	CO	TE	TM	SIG	T	ML/L	MG/L			%SAT
0	1	27.52	0.00	27.52	34.201	21.97	4.84	6.91	101.85	.05
25	2	27.84	0.00	27.84	35.058	22.51	4.74	6.78	98.71	.07
50	3	27.77	0.00	27.77	35.556	22.91	4.67	6.66	96.50	.06
100	4	25.18	0.00	25.18	36.514	24.45	4.84	6.92	99.43	.04

R V PALUMBO CRUISE STATION TOR-18 PRNC REFERENCE 50906
 DATE 10/30/74 BARO 1018.3 WEATHER 02 WAVE PERIOD 02
 HOUR 12.6 TEMP DRY 29.0 VISIBILITY 7 WIND VELOC 02
 LAT 18-30.3 N TEMP WET 0.2 CLOUD TYPE 8 WIND DIREC 08 TRANSPAR
 LONG 66-29.6 W REL HUMID 082 CLOUD AMT 5 WAVE DIREC SONIC DEP 0190
 WAVE HEIGHT 3 COLOR
 CAST 1 MESS TIME 12.6 GMT, 0839 LOCAL MAX DEPTH 100 WIRE ANGLE 1
 OXYGEN TITER .718 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN				PHOS	NITRA
	WIRE	CO	TE	TM	SIG	T	ML/L	MG/L			%SAT
0	1	27.42	0.00	27.42	33.457	21.44	4.81	6.87	99.05	.24
25	2	27.79	0.00	27.79	35.336	22.74	4.69	6.70	98.31	.04
50	3	28.30	0.00	28.30	36.366	23.34	4.69	6.70	97.42	.05
100	4	24.48	0.00	24.48	36.625	24.75	4.88	6.97	94.74	.04

R V PALUMBO CRUISE STATION TOR-1A PRNC REFERENCE 50908

DATE 10/30/74 BARO 1218.7 WEATHER 02 WAVE PERIOD 4
 HOUR 13.8 TEMP DRY 29.0 VISIBILITY 7 WIND VELOC 22 TRANSPAR
 LAT 18-29.0 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 09 SONIC DEP 0010
 LONG 66-29.6 W REL HUMID 87.1 CLOUD AMT 4 WAVE HEIGHT 4 COLOR

CAST 1 MESS TIME 13.8 GMT, 0949 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER .718 METER WHEEL FACTOR .997

DEPTH (M)	TEMP		SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
	TL	TM						
0	27.87	0.00	27.87	34.841	22.34	4.78	6.83	98.81
10	27.84	0.00	27.84	34.888	22.38	4.84	6.91	100.12

R V PALUMBO CRUISE STATION TUR-2A PRNC REFERENCE 50909

DATE 10/30/74 BARO 1200.0 WEATHER 02 WAVE PERIOD 4
 HOUR 14.4 TEMP DRY 28.2 VISIBILITY 7 WIND VELOC 02 TRANSPAR
 LAT 18-28.6 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 09 SONIC DEP 0012
 LONG 66-28.6 W REL HUMID 88.0 CLOUD AMT 5 WAVE HEIGHT 3 COLOR

CAST 1 MESS TIME 14.6 GMT, 1018 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER .718 METER WHEEL FACTOR .997

DEPTH (M)	TEMP		SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
	TL	TM						
0	27.81	0.00	27.81	34.829	22.35	4.77	6.81	98.44
10	27.84	0.00	27.84	34.979	22.45	4.77	6.92	99.20

R V PALUMBO CRUISE STATION TOR-3A PRNC REFERENCE 50910

DATE 10/30/74 BARO 1019.5 WEATHER 02 WIND VELOC 02 WAVE PERIOD 4
 HOUR 14.0 TEMP DRY 27.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-29.0 N TEMP WET 27.0 CLOUD TYPE 8 WAVE DIREC 06 SONIC DEP 0010
 LONG 66-27.0 W REL HUMID 87.0 CLOUD AMT 5 WAVE HEIGHT 4 COLOR

CAST 1 MESS TIME 14.0 GMT, 1046 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITR .710 METER WHEEL FACTOR .997

DEPTH (M) TEMP OXYGEN

WIRE	CS	TE	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
0	0	3	0	27.79	0.00	27.79	34.602	22.25	4.85	6.93	99.75	.04	.
10	10	4	0	27.72	0.00	27.72	34.937	22.46	4.73	6.76	97.95	.05	.

R V PALUMBO CRUISE STATION TOR-4A PRNC REFERENCE 50911

DATE 10/30/74 BARO 1019.6 WEATHER 02 WIND VELOC 02 WAVE PERIOD 4
 HOUR 15.2 TEMP DRY 27.0 VISIBILITY 2 WIND DIREC 09 TRANSPAR
 LAT 18-29.6 N TEMP WET 27.0 CLOUD TYPE 8 WAVE DIREC 06 SONIC DEP 0010
 LONG 66-26.1 W REL HUMID CLOUD AMT 0 WAVE HEIGHT 4 COLOR

CAST 1 MESS TIME 15.1 GMT, 1109 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITR .710 METER WHEEL FACTOR .997

DEPTH (M) TEMP OXYGEN

WIRE	CS	TE	BN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
0	0	1	0	27.53	0.00	27.53	34.649	22.31	4.79	5.85	98.34	.06	.
10	10	2	0	27.67	0.20	27.67	34.502	22.37	4.77	6.82	98.41	.04	.

R V PALUMBO CRUISE STATION TOR-5A PRNC REFERENCE 50912
 DATE 10/30/74 BARO 1019.5 WEATHER 02 WAVE PERIOD 4
 HOUR 15.5 TEMP DRY 27.0 VISIBILITY 6 WIND VELOC 09
 LAT 18-29.9 N TEMP WET 0.0 CLOUD TYPE 8 WIND DIREC 07
 LONG 66-25.4 W REL HUMID 080 CLOUD AMT 5 WAVE DIREC 07
 SONIC DEP 0017
 COLOR

CAST 1 MESS TIME 15.5 GMT, 1128 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER .710 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN		SIG T	ML/L	MG/L	XSAT	PHOS	NITRA	
	WIRE	CZ	TZ	BN	TL	TM							TAVE	SALIN	WEATHER	VISIBILITY	CLOUD TYPE	CLOUD AMT
0	0	0	2	4	27.82	0.00	27.82	34.668	22.23	4.82	6.89	99.14	.04
10	10	12	4	27.73	0.20	27.73	35.000	22.50	4.61	6.59	95.76	.03	

R V PALUMBO CRUISE STATION ISL-5C PRNC REFERENCE 50913
 DATE 10/30/74 BARO 1017.6 WEATHER 02 WAVE PERIOD 4
 HOUR 4.3 TEMP DRY 25.0 VISIBILITY 6 WIND VELOC 09
 LAT 18-31.8 N TEMP WET 0.0 CLOUD TYPE 8 WIND DIREC 09
 LONG 66-34.8 W REL HUMID 086 CLOUD AMT 6 WAVE DIREC 06
 SONIC DEP 0402
 COLOR

CAST 1 MESS TIME 4.2 GMT, 0013 LOCAL MAX DEPTH 300 WIRE ANGLE 0
 OXYGEN TITER .710 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN		SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
	WIRE	CZ	TZ	BN	TL	TM							TAVE	SALIN	WEATHER	VISIBILITY	CLOUD TYPE	CLOUD AMT
0	0	0	1	27.87	0.00	27.87	34.238	21.89	4.94	7.05	104.71	.07
25	25	0	2	27.81	0.00	27.81	35.396	22.78	4.87	6.95	102.29	.05
50	50	40	3	28.21	0.00	28.21	36.322	23.34	4.74	6.77	95.28	.04
100	100	100	4	23.33	0.00	23.33	36.714	25.15	4.78	6.83	92.40	.05
150	150	144	5	21.66	0.00	21.66	36.706	25.90	4.44	6.35	84.33	.11
200	200	197	6	19.22	0.00	19.22	36.591	26.25	4.40	6.29	78.09	.15
250	250	251	7	17.77	0.00	17.77	36.457	26.46	4.39	6.27	77.08	.30
300	300	293	8	16.95	0.00	16.95	36.324	26.56	4.41	6.30	76.79	.42

R V PALUMBO CRUISE STATION ISL-40 PRNG REFERENCE 50914

DATE 10/31/74 BARO 1017.6 WEATHER 92 WIND VELOC 25 WAVE PERIOD 4
 HOUR 4.0 TEMP DRY 25.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-31.8 N TEMP WET 0.0 CLOUD TYPE 6 WAVE DIREC 27
 LONG 66-35.7 W REL HUMID 886 CLOUD AMT 6 WAVE HEIGHT 5 COLOR

CAST 1 MESS TIME 4.9 GMT, 0057 LOCAL MAX DEPTH 300 WIRE ANGLE 4
 OXYGEN TITR .710 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	O2	T2	SN	TL	TM	TAVE	SALIN	SIG T	OXYGEN		PHOS	NITRA
										ML/L	%SAT		
0	0	0	0	1	27.79	0.00	27.79	34.400	22.78	4.92	7.42	1.26	1
25	25	0	0	2	27.78	0.00	27.78	35.311	22.72	4.79	6.85	1.24	1
50	50	51	51	3	28.14	2.00	28.14	36.324	23.46	4.74	6.78	1.24	1
100	100	101	101	4	23.31	0.00	23.31	36.686	25.14	4.78	6.83	1.25	1
150	150	0	0	5	20.32	0.00	20.32	36.702	25.99	4.39	6.26	1.12	1
200	199	195	195	6	18.90	0.00	18.90	36.575	26.27	4.36	6.22	1.19	1
250	249	249	249	7	17.81	0.00	17.81	36.461	26.45	4.35	6.21	1.32	1
300	299	299	299	8	17.02	0.00	17.02	36.339	26.55	4.39	6.127	1.37	1

R V PALMSEB CRUISE STATION ISL-3C PRNC REFERENCE 50915
 DATE 1/31/74 BARO 1017.5 WEATHER 02 WAVE PERIOD 4
 HOUR 00 TEMP SURF 25.2 VISIBILITY 7 WAVE VELOC 09 TRANSPAR
 LAT 10-31.7 TEMP WIND 0.2 CLOUD TYPE 4 WAVE DIREC 09
 LONG 66-55.2 REL HUMID 082 CLOUD AMT 5 WAVE HEIGHT 5
 COLOR

CAST 1 PRESS TIME 2.7 GMT, 0141 LOCAL MAX DEPTH 300 WIRE ANGLE 0
 OXYGEN TITER 0.716 METER WHEEL FACTOR .997

WIRE	DEPTH (M)	TEMP		TL	TM	TAVE	SALIN	SIG T	OXYGEN		XSAT	PHOS	NITRA
		TZ	TL						ML/L	MG/L			
0	0	1	27.65	0.00	27.65	34.449	22.12	4.89	6.98	99.74	.03	.	
25	25	2	27.79	0.00	27.79	35.323	22.73	4.78	6.83	100.23	.03	.	
50	50	3	28.10	0.00	28.10	36.301	23.39	4.77	6.82	99.21	.00	.	
100	100	4	23.94	0.26	23.94	36.663	24.94	4.89	6.99	94.84	.03	.	
150	150	5	22.69	0.00	22.69	36.714	25.90	4.44	6.35	84.36	.09	.	
200	200	6	19.96	0.00	19.96	36.607	26.28	4.35	6.21	77.22	.16	.	
250	250	7	17.81	0.00	17.81	36.000	0.00	4.41	6.30	77.60	.31	.	
300	300	8	16.76	0.00	16.76	36.306	26.59	4.39	6.26	76.55	.50	.	

R V PALUMBO CRUISE STATION ISL-2C PRNC REFERENCE 50916

DATE 10/31/74 RARO 1017.5 WEATHER 02 WIND VELOC 04 WAVE PERIOD 4
 HOUR 0.5 TEMP SURF 25.0 VISIBILITY 7 WIND DIRECTION 09 TRANSPAR
 LAT 10-31.8 N TEMP WET 21.0 CLOUD TYPE 8 WAVE DIRECTION 07 SONIC DEP 0420
 LONG 66-38.2 W REL HUMID 69% CLOUD AMT 6 WAVE HEIGHT 4 COLOR

CAST 1 MESS TIME 6.4 GMT, 0226 LOCAL MAX DEPTH 300 WIRE ANGLE 4
 OXYGEN TITR .718 METER WHEEL FACTOR .997

WIRE	DEPTH (M)		TEMP		SALIN		SIG T		OXYGEN		PHOS NITRA	
	CZ	TZ	TL	TM	TAVE	SALIN	SIG T	ML/L	%SAT	PHOS	NITRA	
0	0	0	27.70	0.00	27.70	34.327	22.01	4.91	7.01	99.84	.06	.
25	25	0	27.80	0.00	27.80	35.349	22.74	4.90	7.00	102.88	.05	.
50	50	51	27.75	0.00	27.73	36.387	23.55	4.83	6.90	100.21	.04	.
100	100	100	23.91	0.00	23.91	36.683	24.96	4.92	7.03	95.44	.06	.
150	150	150	20.71	0.00	20.71	36.707	25.89	4.42	6.32	83.95	.12	.
200	199	197	19.13	0.00	19.13	36.619	26.24	4.40	6.29	78.23	.14	.
250	249	250	17.69	0.00	17.69	36.447	26.47	4.33	6.18	75.89	.30	.
300	299	294	16.71	0.00	16.71	36.289	26.59	4.40	6.29	76.54	.50	.

R V PALUMBO CRUISE STATION ISL-1C PRNC REFERENCE 50917

DATE 10/31/74 BARO 1016.3 WEATHER 02 WIND VELOC 03 WAVE PERIOD 4

HOUR 7.3 TEMP DRY 25.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR

LAT 18-31.8 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0415

LONG 66-39.2 W REL HUMID 087 CLOUD AMT 6 WAVE HEIGHT 5 COLOR

CAST 1 MESS TIME 7.2 GMT, 0313 LOCAL MAX DEPTH 300 WIRE ANGLE 8

OXYGEN TITER .710 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN				PHOS	NITRA		
	WIRE	CE	TL	TM	SIG T	ML/L	MG/L	XSAT				
0	0	0	27.73	0.00	27.73	34.803	22.36	4.87	6.96	100.53	.06	.
25	25	0	27.72	0.00	27.72	35.293	22.73	4.73	6.76	99.01	.06	.
50	50	54	27.17	0.00	27.17	36.407	23.74	4.89	6.98	101.19	.05	.
100	99	37	24.52	0.00	24.52	36.624	24.73	4.98	7.12	96.71	.03	.
150	149	139	22.20	0.00	22.20	36.750	25.51	4.64	6.62	89.01	.09	.
200	198	183	19.71	0.00	19.71	36.643	26.11	4.42	6.32	78.98	.12	.
250	247	230	18.28	0.00	18.28	36.519	26.38	4.34	6.20	76.54	.26	.
300	297	283	17.12	0.00	17.10	36.352	26.54	4.35	6.21	73.88	.35	.

R V PALUMBO CRUISE STATION ISL-1B PRNC REFERENCE 50918

DATE 10/31/74 BARO 1016.5 WEATHER 02 WIND VELOC 03 WAVE PERIOD 4

HOUR 7.8 TEMP DRY 25.2 VISIBILITY 7 WIND DIREC 22 TRANSPAR

LAT 18-31.2 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 06 SONIC DEP 0170

LONG 66-39.1 W REL HUMID 092 CLOUD AMT 4 WAVE HEIGHT 5 COLOR

CAST 1 MESS TIME 7.8 GMT, 0349 LOCAL MAX DEPTH 100 WIRE ANGLE 6

OXYGEN TITER .710 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN				PHOS	NITRA		
	WIRE	CE	TL	TM	SIG T	ML/L	MG/L	XSAT				
0	0	0	27.62	0.00	27.62	34.097	21.86	4.82	6.88	101.26	.09	.
25	25	0	27.74	0.00	27.74	35.265	22.70	4.80	6.86	100.45	.05	.
50	50	51	27.42	0.00	27.42	36.405	23.66	4.83	6.90	100.12	.04	.
100	100	95	24.28	0.00	24.28	36.666	24.84	4.98	7.12	96.73	.04	.

R V PALUMBO CRUISE STATION ISL-28 PRNC REFERENCE 50919

DATE 10/31/74 BARO 1016.4 WEATHER 02 WIND VELOC 03 WAVE PERIOD 4
 HOUR 8.5 TEMP DRY 25.0 VISIBILITY 7 WIND DIREC 18 TRANSPAR
 LAT 16-31.4 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0174
 LONG 66-38.0 W REL HUMID 092 CLOUD AMT 6 WAVE HEIGHT 5 COLOR

CAST 1 MESS TIME 0.4 GMT, 0426 LOCAL MAX DEPTH 100 WIRE ANGLE 3
 OXYGEN TITER .710 METER WHEEL FACTOR .997

DEPTH (M)		TEMP				OXYGEN				PHOS NITRA			
WIRE	CZ	TZ	RN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
0	0	0	1	27.20	0.00	27.28	33.499	21.52	4.81	6.87	99.03	15	:
25	25	0	2	27.82	0.00	27.82	35.480	22.84	4.77	6.81	100.45	04	:
50	50	49	3	27.90	0.00	27.90	36.397	23.50	4.72	6.75	98.09	04	:
100	100	96	4	24.17	0.00	24.17	36.667	24.87	4.93	7.04	95.69	06	:

R V PALUMBO CRUISE STATION ISL-38 PRNC REFERENCE 50920

DATE 10/31/74 BARO 1016.3 WEATHER 02 WIND VELOC 03 WAVE PERIOD 4
 HOUR 8.9 TEMP DRY 25.0 VISIBILITY 7 WIND DIREC 08 TRANSPAR
 LAT 18-31.2 N TEMP WET 0.0 CLOUD TYPE 0 WAVE DIREC 07 SONIC DEP 0165
 LONG 66-36.8 W REL HUMID 092 CLOUD AMT 6 WAVE HEIGHT 5 COLOR

CAST 1 MESS TIME 9.0 GMT, 0458 LOCAL MAX DEPTH 100 WIRE ANGLE 4
 OXYGEN TITER .710 METER WHEEL FACTOR .997

DEPTH (M)		TEMP				OXYGEN				PHOS NITRA			
WIRE	CZ	TZ	RN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
0	0	0	1	27.34	0.00	27.34	33.204	21.34	4.82	6.88	98.69	14	:
25	25	0	2	27.87	0.00	27.87	35.560	22.38	4.72	6.75	99.86	06	:
50	50	51	3	28.14	0.00	28.14	36.393	23.42	4.73	6.76	98.33	04	:
100	100	100	4	24.10	0.00	24.10	36.659	24.89	4.92	7.02	95.34	06	:

R V PALUMBO CRUISE STATION ISL-48 PRNC REFERENCE 50921

DATE 10/31/74 BARO 1016.5 WEATHER P2 WIND VELOC W4 WAVE PERIOD 4
 HOUR 9.6 TEMP DRY 25.0 VISIBILITY 7 WIND DIREC W6 TRANSPAR
 LAT 10-31.1 TEMP WET 20.4 CLOUD TYPE 8 WAVE DIREC W6 SONIC DEP 0182
 LONG 66-35.8 REL HUMID 69% CLOUD AMT 6 WAVE HEIGHT 5 COLOR

CAST 1 MESS TIME 2.5 GMT, 0527 LOCAL MAX DEPTH 100 WIRE ANGLE 2
 OXYGEN TITER ,710 METER WHEEL FACTOR ,997

WIRE	CZ	TZ	RY	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	0	1	27.23	0.00	27.26	33.381	21.43	4.83	6.90	99.17	.11	.
25	25	0	2	27.94	0.00	27.92	35.615	22.91	4.68	6.69	99.16	.25	.
50	50	54	3	28.08	0.00	28.08	36.374	23.42	4.73	6.76	98.24	.00	.
100	100	195	4	23.62	0.00	23.62	36.704	25.06	4.85	6.93	93.94	.25	.

R V PALUMBO CRUISE STATION ISL-50 PRNC REFERENCE 50922

DATE 10/31/74 BARO 1016.5 WEATHER 02 WIND VELOC W4 WAVE PERIOD 4
 HOUR 10.1 TEMP DRY 25.0 VISIBILITY 7 WIND DIREC TRANSPAR
 LAT 10-31.2 TEMP WET 20.0 CLOUD TYPE 8 WAVE DIREC W7 SONIC DEP 0176
 LONG 66-34.5 REL HUMID 69% CLOUD AMT 8 WAVE HEIGHT 5 COLOR

CAST 1 MESS TIME 10.1 GMT, 0606 LOCAL MAX DEPTH 100 WIRE ANGLE 0
 OXYGEN TITER ,710 METER WHEEL FACTOR ,997

WIRE	CZ	TZ	RN	TL	TM	TAVE	SALIN	SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
0	0	0	1	27.32	0.00	27.32	34.183	22.02	4.84	6.91	101.45	.10	.
25	25	0	2	27.81	0.00	27.81	35.437	22.81	4.78	6.83	100.61	.07	.
50	50	50	3	27.56	0.00	27.56	36.263	23.51	4.60	6.71	96.96	.03	.
100	100	99	4	24.00	0.00	24.00	36.655	24.91	4.85	6.93	94.01	.05	.

R V PALUMBO CRUISE STATION ISL-5A PRNC REFERENCE 50923

DATE 10/31/74 PARO 1010.6 WEATHER 02 WAVE PERIOD 5
 HOUR 1518 TEMP DRY 26.0 VISIBILITY 7 TRANSPAR
 LAT 18-30.3 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 09
 LONG 66-35.7 W REL HUMID 091 CLOUD AMT 5 WAVE DIREC 06
 SONIC DEP 0017
 WAVE HEIGHT 7 WAVE HEIGHT 7

CAST 1 MESS TIME 10.9 GMT, 0652 LOCAL MAX DEPTH 10 WIRE ANGLE 2
 OXYGEN TITER ,710 METER WHEEL FACTOR ,997

DEPTH (M)	TEMP				SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
	CZ	TZ	TL	TM							YAVE	SALIN
0	0	1	27.24	0.00	27.24	34.152	22.03	4.76	6.80	99.58
10	10	2	27.97	0.00	27.97	34.643	22.31	4.85	6.93	100.37

R V PALUMBO CRUISE STATION ISL-4A PRNC REFERENCE 50924

DATE 10/31/74 PARO 1017.0 WEATHER 02 WAVE PERIOD 4
 HOUR 11.3 TEMP DRY 25.0 VISIBILITY 7 TRANSPAR
 LAT 18-30.1 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 18
 LONG 66-36.9 W REL HUMID 089 CLOUD AMT 6 WAVE DIREC 06
 SONIC DEP 0017
 WAVE HEIGHT 6 WAVE HEIGHT 6

CAST 1 MESS TIME 11.2 GMT, 0713 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER ,710 METER WHEEL FACTOR ,997

DEPTH (M)	TEMP				SIG T	ML/L	MG/L	XSAT	PHOS	NITRA
	CZ	TZ	TL	TM							YAVE	SALIN
0	0	3	27.76	0.00	27.76	34.674	22.25	4.76	6.80	97.80
10	10	4	27.83	0.00	27.83	35.279	22.60	4.72	6.75	98.93

R V PALUMBO CRUISE STATION ISL-3A PRNC REFERENCE 50925

DATE 10/31/74 RAPO 1015.8 WEATHER 02 WAVE PERIOD 4
 HOUR 11.6 TEMP DRY 25.0 VISIBILITY 7 WIND VELOC 02 TRANSPAR
 LAT 18-30.0 N TEMP WET 20.0 CLOUD TYPE 8 WAVE DIREC 12
 LONG 66-37.0 W REL HUMID 092 CLOUD AMT 7 WAVE HEIGHT 6 SONIC DEP 0010
 COLOR

CAST 1 MESS TIME 11.0 GMT, 0735 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER .710 METER WHEEL FACTOR .997

DEPTH (M)	TEMP		SALIN		SIG T		OXYGEN		PHOS NITRA	
	TZ	PN	TL	TAVE	TM	TW	ML/L	MG/L	XSAT	ML/L
0	0	1	27.66	27.66	34.690	22.29	4.78	6.83	98.24	.07
10	0	2	27.73	27.73	35.344	22.56	4.75	6.79	98.92	.05

R V PALUMBO CRUISE STATION ISL-2A PRNC REFERENCE 50926

DATE 10/31/74 RAPO 1016.0 WEATHER 02 WAVE PERIOD 4
 HOUR 11.8 TEMP DRY 20.0 VISIBILITY 7 WIND VELOC 02 TRANSPAR
 LAT 18-29.9 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 09
 LONG 66-38.1 W REL HUMID 091 CLOUD AMT 8 WAVE HEIGHT 07 SONIC DEP 0017
 COLOR

CAST 1 MESS TIME 11.9 GMT, 0751 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER .710 METER WHEEL FACTOR .997

DEPTH (M)	TEMP		SALIN		SIG T		OXYGEN		PHOS NITRA	
	TZ	BN	TL	TAVE	TM	TW	ML/L	MG/L	XSAT	ML/L
0	0	3	27.87	27.87	34.996	22.46	4.77	6.82	99.14	.04
10	9	4	27.82	27.82	35.114	22.56	4.73	6.76	98.56	.06

R V PALUMBO CRUISE STATION ISL-1A PRNC REFERENCE 50927

DATE 10/31/74 BARO 1016.8 WEATHER 00 WIND VELOC 02 WAVE PERIOD 4
 HOUR 12.2 TEMP DRY 26.0 VISIBILITY 7 WIND DIREC 10 TRANSPAR
 LAT 18-29.8 N TEMP WET 2.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0019
 LONG 66-39.2 W REL HUMID 289 CLOUD AMT 6 WAVE HEIGHT 0 COLOR

CAST 1 MESS TIME 12.1 GMT, 0809 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER .718 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN							
	CE	TZ	RN	TL	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
0	0	0	1	27.88	0.00	27.88	35.005	22.46	4.78	6.83	99.32	.04
10	10	0	2	27.86	0.00	27.86	35.076	22.52	4.72	6.75	98.33	.05

R V PALUMBO CRUISE STATION PMA-2A PRNC REFERENCE 50928

DATE 10/31/74 BARO 1017.7 WEATHER 00 WIND VELOC 02 WAVE PERIOD 4
 HOUR 12.9 TEMP DRY 26.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-29.6 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 04 SONIC DEP 0019
 LONG 66-33.8 W REL HUMID 086 CLOUD AMT 7 WAVE HEIGHT 0 COLOR

CAST 1 MESS TIME 13.0 GMT, 0859 LOCAL MAX DEPTH 10 WIRE ANGLE 2
 OXYGEN TITER .718 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN							
	CE	TZ	RN	TL	TAVE	SALIN	SIG T	ML/L	MG/L	%SAT	PHOS	NITRA
0	0	5	3	27.72	0.00	27.72	34.660	22.25	4.79	6.85	98.47	.08
10	10	11	4	27.86	0.00	27.86	35.233	22.64	4.65	6.93	101.52	.06

R V PALUMBO CRUISE STATION PMA-3A PRNC REFERENCE 50929

DATE 10/31/74 BARO 1017.7 WEATHER 02 WIND VELOC 02 WAVE PERIOD 4
 HOUR 13.3 TEMP DRY 27.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-29.5 N TEMP WET 0.2 CLOUD TYPE 8 WAVE DIREC 05 SONIC DEP 0010
 LONG 66-32.8 W REL HUMID 086 CLOUD AMT 7 WAVE HEIGHT 6 COLOR

CAST 1 MESS TIME 13.2 GMT, 0912 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER .710 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			OXYGEN			PHOS NITRA			
	WIRE	TL	TM	SIG T	ML/L	MG/L		%SAT		
0	0	27.44	0.00	27.44	32.957	21.06	4.92	7.02	99.96	.11
10	10	27.90	0.00	27.90	35.104	22.53	4.63	6.61	96.51	.26

R V PALUMBO CRUISE STATION PMA-4A PRNC REFERENCE 50930

DATE 10/31/74 BARO 1017.7 WEATHER 02 WIND VELOC 02 WAVE PERIOD 4
 HOUR 13.0 TEMP DRY 26.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-29.4 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 05 SONIC DEP 0010
 LONG 66-31.3 W REL HUMID 086 CLOUD AMT 7 WAVE HEIGHT 1 COLOR

CAST 1 MESS TIME 13.2 GMT, 0932 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER .710 METER WHEEL FACTOR .997

DEPTH (M)	TEMP			OXYGEN			PHOS NITRA			
	WIRE	TL	TM	SIG T	ML/L	MG/L		%SAT		
0	0	27.69	0.00	27.69	33.872	21.67	4.64	6.92	101.30	.18
10	10	27.89	0.00	27.89	35.150	22.57	4.70	6.83	99.81	.20

R V PALUMBO CRUISE STATION PMA-5A PRNC REFERENCE 50931
 DATE 10/31/74 BARO 1017.7 WEATHER 02 WIND VELOC 03 WAVE PERIOD 4
 HOUR 13.8 TEMP DRY 28.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 16-29.3 N TEMP WET 0.2 CLOUD TYPE 5 WAVE DIREC 05 SONIC DEP 0017
 LONG 60-30.3 W REL HUMID 078 CLOUD AMT 6 WAVE HEIGHT 6 COLOR

CAST 1 MESS TIME 13.9 GMT, 0954 LOCAL MAX DEPTH 10 WIRE ANGLE 0
 OXYGEN TITER .718 METER WHEEL FACTOR .997

DEPTH (M) TEMP OXYGEN
 WIRE CZ T2 BN TL TM TAVE SALIN SIG T ML/L MG/L XSAT PHOS NITRA
 0 0 0 1 27.76 0.00 27.76 34.823 22.38 4.85 6.93 100.25 .05
 10 10 0 2 27.85 0.00 27.86 35.156 22.58 4.76 6.80 99.33 .00

R V PALUMBO CRUISE STATION PMA-5B PRNC REFERENCE 50932
 DATE 10/31/74 BARO 1016.0 WEATHER 02 WIND VELOC 05 WAVE PERIOD 4
 HOUR 22.6 TEMP DRY 25.0 VISIBILITY 7 WIND DIREC 07 TRANSPAR
 LAT 18-30.3 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 05 SONIC DEP 0182
 LONG 60-30.5 W REL HUMID 082 CLOUD AMT 7 WAVE HEIGHT 5 COLOR

CAST 1 MESS TIME 22.9 GMT, 1827 LOCAL MAX DEPTH 100 WIRE ANGLE 6
 OXYGEN TITER .718 METER WHEEL FACTOR .997

DEPTH (M) TEMP OXYGEN
 WIRE CZ T2 BN TL TM TAVE SALIN SIG T ML/L MG/L XSAT PHOS NITRA
 0 0 0 1 27.74 0.00 27.74 35.019 22.51 4.78 6.83 99.25 .08
 25 25 0 2 27.79 0.00 27.79 35.003 22.94 4.70 6.72 99.43 .07
 50 50 49 3 26.93 0.00 26.93 36.361 23.79 4.87 6.96 100.67 .07
 100 100 99 4 22.81 0.00 22.81 36.745 25.33 4.78 6.83 92.15 .06

R V PALUMBO CRUISE STATION PMA-5C PRNC REFERENCE 50933

DATE 12/31/74 0400 1416.2 WEATHER 02 WAVE PERIOD 4
 HOUR 23.2 TEMP SURF 22.1 VISIBILITY 7 TRANSPAR
 LAT 18-31.4 N TEMP AT 2.2 CLOUD TYPE 8 SONIC DEP 0393
 LONG 66-33.5 W REL HUM ID 287 CLOUD AMT 7 COLOR

CAST 1 MESS TIME 23.1 GWT, 1907 LOCAL MAX DEPTH 300 WIRE ANGLE 2
 OXYGEN TITER .710 PETER WHEEL FACTOR .997

WIRE	DEPTH (m)	O2	T2	FA	TL	TEMP		TAVF	SALIN	SIG T	OXYGEN		XSAT	PHOS	NITRA
						TM	TL				ML/L	MG/L			
0	0	0	0	1	27.76	0.00	27.76	34.909	22.43	4.89	6.99	101.32	.05		
25	25	0	0	2	27.94	0.00	27.94	35.901	23.11	4.77	6.82	102.15	.04		
50	50	51	51	3	26.41	0.00	26.41	36.389	23.97	4.92	7.02	101.38	.03		
100	100	100	100	4	23.27	0.00	23.27	36.742	25.19	4.92	7.03	95.22	.04		
150	150	150	150	5	21.04	0.00	21.04	36.754	25.83	4.39	6.27	83.65	.09		
200	200	199	199	6	19.26	0.00	19.26	36.625	26.21	4.39	6.27	78.18	.13		
250	250	255	255	7	18.29	0.00	18.29	36.529	26.39	4.41	6.30	77.71	.27		
300	299	299	299	8	17.24	0.00	17.24	36.391	26.54	4.40	6.29	76.88	.41		

R V PALUMBO CRUISE STATION PMA-40 PRNC REFERENCE 50934

DATE 14/31/74 BARO 1017.5 WEATHER 02 WIND VELOC 05 WAVE PERIOD 4
 HOUR 23.3 TEMP DRY 25.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 14-31.6 S TEMP WET 20.0 CLOUD TYPE 8 WAVE DIREC 07 SONIC DEP 0402
 LONG 66-31.8 W REL HUMID 679 CLOUD AMT 6 WAVE HEIGHT 5 COLOR

CAST 1 MESS TIME 23.0 GMT, 1950 LOCAL MAX DEPTH 300 WIRE ANGLE 4
 OXYGEN WIRE 0.710 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN				PHOS	NITRA
	WIRE	CE	TL	TM	SIG T	ML/L	MG/L	XSAT		
0	1	27.75	0.00	27.75	34.549	22.16	4.95	7.06	101.25	.09
25	2	27.76	0.00	27.76	35.774	23.08	4.71	6.73	100.07	.04
50	3	27.04	0.00	27.34	36.374	23.76	4.92	7.02	101.64	.05
100	4	23.14	0.00	23.19	36.757	25.23	4.94	7.05	95.49	.05
150	5	21.13	0.00	21.13	36.796	25.84	4.46	6.37	84.99	.08
200	6	19.65	0.00	19.65	36.659	26.14	4.39	6.26	78.37	.11
250	7	18.11	0.00	18.11	36.516	26.42	4.38	6.25	77.10	.21
300	8	17.21	0.00	17.21	36.371	26.53	4.40	6.29	76.83	.38

R V PALUMBO CRUISE STATION PMA-40 PRNC REFERENCE 50935

DATE 14/31/74 BARO 1017.7 WEATHER 02 WIND VELOC 04 WAVE PERIOD 4
 HOUR 23.3 TEMP DRY 25.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 14-31.6 S TEMP WET 20.0 CLOUD TYPE 8 WAVE DIREC 06 SONIC DEP 0173
 LONG 66-31.7 W REL HUMID 685 CLOUD AMT 7 WAVE HEIGHT 5 COLOR

CAST 1 MESS TIME 23.4 GMT, 2023 LOCAL MAX DEPTH 100 WIRE ANGLE 4
 OXYGEN WIRE 0.710 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN				PHOS	NITRA
	WIRE	CE	TL	TM	SIG T	ML/L	MG/L	XSAT		
0	1	27.82	0.00	27.82	34.978	22.46	4.84	6.92	100.53	.03
25	2	27.78	0.00	27.78	35.589	22.93	4.67	6.67	98.77	.03
50	3	26.97	0.00	26.97	36.348	23.76	4.83	6.90	99.77	.04
100	4	23.25	0.00	23.25	36.713	25.18	4.74	6.78	91.65	.06

R V PAEUMBO CRUISE STATION PMA-88 PRNC REFERENCE 50936

DATE ~~10-31~~/74 BARO 1018.2 WEATHER 02 WIND VELOC 04 WAVE PERIOD 4
 HOUR 10-30.8 N TEMP SURF 25.0 VISIBILITY 7 WIND DIREC 08 TRANSPAR
 LAT 10-30.8 N TEMP DEW 0.0 CLOUD TYPE 8 WAVE DIREC 06 SONIC DEP 0173
 LONG 60-32.8 W REL HUMID 082 CLOUD AMT 7 WAVE HEIGHT 6 COLOR

CAST 1 MESS TIME 0.0 GMT, 2047 LOCAL MAX DEPTH 100 WIRE ANGLE 4
 OXYGEN TITER .710 METER WHEEL FACTOR .997

WIRE	CE	TZ	RN	TL	TEMP		TAVE	SALIN	SIG T	ML/L	XSAT	PHOS	NITRA
					TL	TM							
0	0	0	1	27.21	0.00	27.21	32.051	20.46	4.92	7.03	*****	.27	1
25	0	0	2	27.75	0.00	27.75	35.696	23.02	4.69	6.70	99.36	.04	1
50	49	49	3	25.96	0.00	25.96	36.412	24.13	5.00	7.14	102.83	.04	1
100	141	141	4	23.49	0.00	23.49	36.601	25.08	4.79	6.85	92.68	.05	1

R V PALUMBO CRUISE STATION PMA-3C PRNC REFERENCE 50937
 11/1
 DATE 11/1/74 DARK 1217.7 WEATHER 02 WIND VELOC 45 WAVE PERIOD 4
 HOUR 1.6 TEMP SURF 22.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 10-31.6 N TEMP AFT 21.2 CLOUD TYPE 8 WAVE DIREC 06 SONIC DEP 0390
 LONG 66-32.9 W REL HUMID 88.1 CLOUD AMT 5 WAVE HEIGHT 7 COLOR
 CAST 1 MESS TIME 1.4 GMT, 2123 LOCAL MAX DEPTH 100 WIRE ANGLE 2
 OXYGEN TITER .716 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN				PHOS	NITRA			
	C2	T2	HN	TL	TM	TAVE	SALIN	SIG T			ML/L	MG/L	%SAT
0	0	0	1	27.75	0.00	27.75	34.677	22.25	4.92	7.03	101.19	.05	.
25	25	0	2	27.73	0.00	27.73	35.820	23.12	4.72	6.75	100.47	.03	.
50	50	50	3	26.42	0.00	26.42	36.372	23.96	4.79	6.84	98.68	.04	.
100	100	100	4	23.27	0.00	23.27	36.746	25.20	4.85	6.93	95.84	.10	.

CAST 2 MESS TIME 1.6 GMT, 2137 LOCAL MAX DEPTH 300 WIRE ANGLE 0
 OXYGEN TITER .710 METER WHEEL FACTOR .997

DEPTH (M)	TEMP				OXYGEN				PHOS	NITRA			
	C2	T2	HN	TL	TM	TAVE	SALIN	SIG T			ML/L	MG/L	%SAT
150	150	149	5	21.52	0.00	21.52	36.757	25.70	4.50	6.43	85.99	.09	.
200	200	194	6	19.62	0.00	19.62	36.640	26.13	4.36	6.22	77.77	.09	.
250	250	248	7	18.04	0.00	18.04	36.497	26.42	4.38	6.25	77.02	.26	.
300	300	292	8	17.10	0.00	17.10	36.407	26.59	4.36	6.22	76.11	.42	.

R V PALUMBO CRUISE
 11/1
 STATION PMA-2C
 PRNC REFERENCE 50938
 DATE ~~10/31~~/74 BARO 1017.6 WEATHER 02 WIND VELOC 04 WAVE PERIOD 5
 HOUR 2.3 TEMP DRY 25.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-31.8 N TEMP WET 0.0 CLOUD TYPE 6 WAVE DIREC 08 SONIC DEP 0410
 LONG 66-33.8 W REL HUMID 076 CLOUD AMT 6 WAVE HEIGHT 5 COLOR
 CAST 1 MESS TIME 2.2 GMT, 2213 LOCAL MAX DEPTH 100 WIRE ANGLE 5
 OXYGEN TITER .710 METER WHEEL FACTOR .997

DEPTH (M)		TEMP		TAVE		SALIN		SIG T		OXYGEN		PHOS NITRA	
WIRE	CE	TL	TM	TL	TM	TAVE	SALIN	SIG T	ML/L	%SAT	PHOS	NITRA	
25	0	27.71	0.00	27.71	0.00	27.71	34.668	22.27	4.99	7.13	102.51	.10	
50	0	27.82	0.00	27.82	0.00	27.82	35.830	23.10	4.72	6.75	100.65	.00	
100	51	26.20	0.00	26.28	0.00	26.398	36.398	24.02	4.92	7.02	101.33	.04	
150	100	23.06	0.00	23.06	0.00	23.06	36.749	25.26	4.85	6.93	93.71	.04	
200	149	21.04	0.00	21.04	0.00	21.04	36.766	25.84	4.47	6.39	85.17	.07	
250	199	19.14	0.00	19.14	0.00	19.14	36.603	26.23	4.41	6.31	78.44	.15	
300	249	17.89	0.00	17.89	0.00	17.89	36.472	26.44	4.43	6.33	77.79	.25	
	298	17.10	0.00	17.10	0.00	17.10	36.358	26.55	4.38	6.25	76.40	.42	

R V PALUMBO CRUISE
 11/1
 STATION PMA-2B
 PRNC REFERENCE 50939
 DATE ~~10/31~~/74 BARO 1017.7 WEATHER 02 WIND VELOC 03 WAVE PERIOD 5
 HOUR 2.0 TEMP DRY 25.0 VISIBILITY 7 WIND DIREC 09 TRANSPAR
 LAT 18-30.9 N TEMP WET 0.0 CLOUD TYPE 8 WAVE DIREC 08 SONIC DEP 0165
 LONG 66-34.1 W REL HUMID 083 CLOUD AMT 6 WAVE HEIGHT 7 COLOR
 CAST 1 MESS TIME 2.7 GMT, 2245 LOCAL MAX DEPTH 100 WIRE ANGLE 0
 OXYGEN TITER .710 METER WHEEL FACTOR .997

DEPTH (M)		TEMP		TAVE		SALIN		SIG T		OXYGEN		PHOS NITRA	
WIRE	CE	TL	TM	TL	TM	TAVE	SALIN	SIG T	ML/L	%SAT	PHOS	NITRA	
0	0	27.31	0.00	27.31	0.00	27.31	33.796	21.74	4.87	6.90	101.16	.15	
25	0	27.75	0.00	27.75	0.00	27.75	35.797	23.10	4.68	6.69	99.52	.24	
50	54	26.36	0.00	26.36	0.00	26.36	36.362	23.97	4.72	6.75	97.31	.05	
100	100	22.83	0.00	22.83	0.00	22.83	36.742	25.32	4.79	6.04	92.50	.08	

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