FINAL DATA REPORT

for the

APPLICATION OF THE AIRBORNE OCEAN COLOR IMAGER FOR COMMERCIAL FISHING

Submitted by the

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to the

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1.0 INTRODUCTION

These data were collected as part of a three year, multiagency research project to develop a remote sensing system to provide near real time image products to fishermen in the Northern Gulf of Mexico. The data consist of environmental measurements acquired by boats and vessels, and fish catch information reported by sport fishermen and menhaden spotter pilots and vessel captains. The data were acquired concurrently with overflights of the Airborne Ocean Color Imager (AOCI). The AOCI is a multispectral scanner carried aboard a Learjet and developed to remotely sense water color in coastal and oceanic waters. The environmental and fisheries data were used to develop image processing algorithms required for the effort and experimental data products that were distributed to fishermen in near real time. Nearly all of the field data were earth located using Loran-C equipment onboard the vessels, boats, and aircraft and recorded in latitude and longitude coordinates in the data sets. The study area generally encompassed the area from southeast of the mouth of the Mississippi River westward to Marsh Island, Louisiana. A detailed overview of the entire project is given in Wrigley et al. (1991). The types of field data collected during the study and the dates of acquisition are shown in Table 1.

2.0 STRUCTURE OF THE AOCI DATA BASE

2.1 FISHERIES DATA FORMATS

2.1.1 SPORT FISHING VESSELS

ASCII Files: SFJUN90.DAT, SFJUL90.DAT, and SFJUL91.DAT.

COLUMN	FIELD DESCRIPTION		FORMAT
01-02	Year		I2
03-04	Month		I2
05-06	Day		I2
07-08	Wind Direction (x 10 Degrees)	I2	
09-10	Wind Speed (Knots)		I2
11-12	Wave Height (Feet)	I2	
13-13	Weather Conditions:		I1
	0 = Clear		
	: : : :		
	: : : :		
	: : : :		
	9 = Heavily Overcast		
14-19	Vessel Name Code (i.e., SFV001-SFV130)	A6	
20-23	Start Time (CDT)	I4	
	Total Fishing Time:		
24-25	Hours		I2
26-27	Minutes		I2
28-30	Fish Species Code:	I3	
	100 = swordfish, Xiphias gladius		
	101 = sailfish, Istiophorus platypterus		
	201 = blue marlin, Makaira nigricans		
	301 = white marlin, Tetrapturus albidus		
	303 = longbill spearfish, Tetrapturus pfluegeri		
	402 = yellowfin tuna, Thunnus albacares		
	405 = bluefin tuna, Thunnus thynnus		
	501 = Spanish mackerel, Scomberomorus maculatus		
	601 = king mackerel, Scomberomorus cavalla		
	701 = wahoo, Acanthocybium solandri		
	909 = unidentified billfish		
31-34	Time Fish Was Hooked (CDT)	I4	
35-38	Time Fish was Boated, Released,		

	Or Lost (CDT)		I4
	Area(s) Fished:		
39-40	Latitude (Degrees)	I2	
41-42	Latitude (Minutes)	I2	
43-44	Longitude (Degrees)		I2
45-46	Longitude (Minutes)		I2
47-48	Latitude (Degrees)	I2	
49-50	Latitude (Minutes)	I2	
51-52	Longitude (Degrees)		I2
53-54	Longitude (Minutes)		I2
55-56	Latitude (Degrees)	I2	

2.1.1 SPORT FISHING VESSELS, continued:

57-58	Latitude (Minutes)	I2	
59-60	Longitude (Degrees)		I2
61-62	Longitude (Minutes)		I2
63-64	Latitude (Degrees)	I2	
65-66	Latitude (Minutes)	I2	
67-68	Longitude (Degrees)		I2
69-70	Longitude (Minutes)		I2
71-82	Location Fished[1]	A12	

[1] a few of the fishermen (a total of 19 data records) reported fishing in Green Canyon during the Tournament held on July 26-28, 1990, but did not record the specific locations of the catches.

2.1.2 MENHADEN SPOTTER AIRCRAFT

ASCII Files: SAMAY89.DAT, SASEP89.DAT, SAJUN90.DAT, SAJUL90.DAT, and SAJUN91.DAT.

COLUMN	FIELD DESCRIPTION	FORMAT
01-04	Pilot identification code	A4
05-08	Year	I4
09-10	Month	I2
11-12	Day	I2
13-17	Observation number	I5
18-21	Time of observation (CDT)	I4
22-23	Latitude, degrees	I2
24-27	Latitude, minutes and decimal minutes	F4.2
28-29	Longitude, degrees	I2
30-33	Longitude, minutes and decimal minutes	F4.2
34	Species[2] "Y" = Menhaden	A1
	Number of fish schools observed[3]	
35	Minimum	I2
37	Maximum	I2

[2] Other species were occasionally sighted by the spotter pilots but were not included in the data set.

[3] The number of menhaden schools was reported as a range, e.g. "5-7 schools", or as a integer number, e.g., "10 schools". The records containing ranges have values recorded in the "minimum" and "maximum" fields; those reported as integer numbers only are recorded in the "maximum" field.

2.1.3 MENHADEN FISHING VESSELS

ASCII Files: FVMAY89.DAT, FVSEP89.DAT, FVJUN90.DAT, and FVJUL90.DAT.

COLUMN	FIELD DESCRIPTION				FORMAT
01-04	Platform code			A4	
05-08	Year				I4
09-10	Month			I2	
11-12	Day				I2
13-17	Observation number			I5	
18-21	Time of observation (CDT)	I4			
22-23	Latitude, degrees		I2		
24-27	Latitude, minutes and decimal minutes	F4.2			
28-29	Longitude, degrees		I2		
30-33	Longitude, minutes and decimal minutes	F4.2			
34	Species: "Y"=Menhaden "N"=Other				A1
35-37	Fish catch in thousands of fish	I3			

2.1.4 MENHADEN FISHING VESSELS WITH OBSERVERS

2.2 ENVIRONMENTAL DATA

2.2.1 MENHADEN FISHING VESSELS WITH OBSERVERS

ASCII Files: FOSEP89.DAT, FOJUN90.DAT and FOJUL90.DAT.

COLUMN	FIELD DESCRIPTION				FORMAT
01-03	Cruise identification code	A3			
04-07	Platform code			A4	
08-12	Observation number			I5	
13-17	Salinity sample number		I5		
18-22	Chlorophyll sample number	I5			
23-26	Year				I4
27-28	Month			I2	
29-30	Day				I2
31-34	Time of observation(CDT)		I4		
35-36	Latitude, degrees		I2		
37-40	Latitude, minutes and decimal minutes	F4.2			
41-42	Longitude, degrees		I2		
43-46	Longitude, minutes and decimal minutes	F4.2			
47-50	Surface water temperature (degrees C)	F4.1			
51-53	Secchi Depth (ft)		I3		
54-55	Forel-ule number		I2		
56-59	Water Depth (ft)		I4		
60-66	Surface chlorophyll (mg/cu. meter)	F7.4			
67-72	Surface salinity (ppt)		F6.3		
73	Species: "Y"=Menhaden "N"=Other				A1
74-76	Fish catch in thousands of fish	I3			
77-116	Comments 1			A40	
117-156	Comments 2			A40	

2.2 ENVIRONMENTAL DATA, continued:

2.2.1 CHARTER BOATS

ASCII Files: CBMAY89.DAT, CBSEP89.DAT, CBJUN90.DAT and CBJUL90.DAT.

COLUMN	FIELD DESCRIPTION	FORMAT
01-03	Cruise identification code	A3
04-07	Platform code	A4
08-12	Observation number	I5
13-17	Salinity sample number	I5
18-22	Chlorophyll sample number	I5
23-26	Year	I4
27-28	Month	I2
29-30	Day	I2
31-34	Time of observation(CDT)	I4
35-36	Latitude, degrees	I2
37-40	Latitude, minutes and decimal minutes	F4.2
41-42	Longitude, degrees	I2
43-46	Longitude, minutes and decimal minutes	F4.2
47-50	Surface water temperature (degrees C)	F4.1
51-53	Secchi Depth (ft)	I3
54-55	Forel-ule number	I2
56-59	Water Depth (ft)	I4
60-66	Surface chlorophyll (mg/cu. meter)	F7.4
67-72	Surface salinity (ppt)	F6.3
73-112	Comments 1	A40
113-152	Comments 2	A40

2.2.3 RESEARCH VESSELS

2.2.3.1 R.V. OREGON II

ASCII Files: ORAUG88.DAT, ORSEP89.DAT, and ORJUN90.DAT.

Card One: Environmental Data File

COLUMN	FIELD DESCRIPTION				FORMAT
01-01	"1"				C
02-03	Vessel code			I2	
04-08	Station number			I5	
09-11	Cruise number			I3	
12-17	Date, MMDDYY			I6	
18-21	Start time, Military, HHMM		I4		
22-22	Time zone code			I1	
23-23	Latitude hemisphere code		A1		
	(1=North or "N"=North)				
24-29	Latitude DDMMMM,2 implied decimals		I6		
30-30	Longitude Hemisphere code		A1		
	(1=West or "W"=West)				
31-37	Longitude DDMMMM,2 implied decimals		I7		
38-40	Gear size			I3	
41-42	Gear type code			I2	
43-44	Wind speed, KM/HR			I2	
45-47	Wind direction, compass degrees		I3		
48-49	Wave height, M, 1 implied decimal		I2		
50-54	Barometric pressure,MB,1 implied dec	I5			
55-57	% cloud cover			I3	
58-60	Secchi disk reading,M,1 implied decimal		I3		
61-62	Water color, forel-ule scale		I2		
63-66	Water depth, M			I4	
67-70	Midwater sample depth,M		I4		
71-74	Maximum sample depth,M		I4		
75-78	Seamap station # (only if seamap CR '85+)	A4			

Card Two: Environmental Data File

COLUMN	FIELD DESCRIPTION	FORMAT

01-01	'2'			C
02-22	Duplicate of card one			
23-23	XBT? (1=Y, 2=N)		I1	
24-24	STD or CTD? (1=Y, 2=N)		I1	
25-28	Surface water temperature, C,2 imp dec	I4		
29-32	Midwater temperature,C,2 imp decimals	I4		
33-36	Maximum depth water temperature,C,2 imp	I4		
37-41	Surface salinity,PPT,3 implied decimals	I5		
42-46	Midwater salinity,PPT,3 implied decimals	I5		
47-51	Maximum depth salinity,PPT,3 imp decimal	I5		
52-57	Surface chlorophyll,MG/M3,4 imp decimals	I6		

2.2.3.1 R.V. OREGON II, continued:

58-63	Midwater chlorophyll,MG/M3,4 imp decimals	I6
64-69	Maximum depth chlorophyll,MG/M3,4 imp dec	I6

Card Three: Environmental Data File

COLUMN	FIELD DESCRIPTION	FORMAT
01-01	'3'	C
02-22	Duplicate of card one	
23-25	Surface dissolved oxygen,PPM,1 imp decimal	I3
26-28	Midwater disolved oxygen,PPM,1 imp decimal	I3
29-31	Maximum depth disolved oxygen,PPM,1 imp dec	I3
32-35	Surface turbidity,2 imp dec (% light trans)	I4
36-39	Midwater turbidity,2 implied decimals	I4
40-43	Maximum depth turbidity,2 imp decimals	I4
44-47	Thermocline depth,M	I4

2.2.3.1 R.V. GYRE

ASCII file: GYJUL90.ASC

Field	Field Name	Type	Width	Dec	Description
1	NB	Character	2		Neil Brown CTD serial no.
2	CRUISE	Character	5		Gyre cruise number
3	STATION	Character	12		Gyre station number
4	G_DATE	Character	9		Gregorian date
5	NUM_DATE	Numeric	6		Date as YYMMDD
6	TIME	Numeric	4		Time of day (GMT)
7	LAT_DEG	Numeric	3		Latitude (degrees)
8	LAT_MIN	Numeric	6	2	Latitude (minutes)
9	LONG_DEG	Numeric	4		Longitude (degrees)
10	LONG_MIN	Numeric	6	2	Longitude (minutes)
11	SAM_DEPTH	Numeric	6	1	Sample depth (m)
12	PT_1	Numeric	7	3	Water Temperature (°C)
13	CHLOROPHYL	Numeric	8	3	Chlorophyll (µg/l)
14	UPT	Numeric	6	2	** Not used **
15	SALINITY	Numeric	8	3	Salinity (ppt)
16	OXYGEN	Numeric	7	3	Oxygen (ml/l)
17	AMMONIA	Numeric	7	3	Ammonia (µ moles/l)
18	PHOSPHATE	Numeric	7	3	Phosphate (µ moles/l)
19	SILICON	Numeric	6	3	Silicon (µ moles/l)
20	NITRATE	Numeric	5	2	Nitrate (µ moles/l)
21	NITRITE	Numeric	5	2	Nitrite (µ moles/l)
22	UREA	Numeric	5	2	Urea (µ moles/l)

3.0 DATA LISTINGS

3.1 FISHERIES DATA

3.1.1 SPORT FISHING VESSELS

OBS	YEAR	MONTH	WIND DAY	WIND DIRECTION	WAVE SPEED	WEATHER HEIGHT	VESSEL CONDITIONS	TIME START CODE	TIME FISHED (HRS)	FISHED (MINS)	SPECIES CODE	TIME HOOKED	TIME ENDED	LAT (DEG)
1	90	6	14	12	12	4	3	SFV005	700	8	0	201	1145	1445	28
2	90	6	14	12	12	4	3	SFV007	730	8	0	201	1430	1531	28
3	90	6	14	12	12	4	3	SFV007	730	8	0	201	900	901	28
4	90	6	14	12	12	4	3	SFV013	730	8	30	301	1300	1301	28
5	90	6	14	12	12	4	3	SFV017	800	8	0	201	1550	1553	28
6	90	6	14	12	12	4	3	SFV020	740	8	20	.	.	.	28
7	90	6	14	12	12	4	3	SFV021	800	8	0	201	1030	1145	28
8	90	6	14	12	12	4	3	SFV023	700	8	55	.	.	.	28
9	90	6	14	12	12	4	3	SFV025	700	9	0	.	.	.	28
10	90	6	14	12	12	4	3	SFV027	715	8	45	402	1440	1510	28
11	90	6	14	12	12	4	3	SFV028	700	8	0	.	.	.	28
12	90	6	14	12	12	4	3	SFV031	700	9	0	.	.	.	28
13	90	6	14	12	12	4	3	SFV034	1100	5	0	.	.	.	28
14	90	6	14	12	12	4	3	SFV035	700	8	45	.	.	.	28
15	90	6	14	12	12	4	3	SFV036	700	7	30	.	.	.	28
16	90	6	14	12	12	4	3	SFV037	900	7	0	402	905	910	28
17	90	6	14	12	12	4	3	SFV043	700	9	0	.	.	.	28
18	90	6	14	12	12	4	3	SFV044	730	8	30	.	.	.	28
19	90	6	14	12	12	4	3	SFV046	700	9	0	.	.	.	28
20	90	6	14	12	12	4	3	SFV048	700	9	0	402	1300	1325	28

OBS	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LOCATION FISHED
1	40	88	50	.	.	.	.	.	.	.	.	.	.	.	.	
2	40	88	50	.	.	.	.	.	.	.	.	.	.	.	.	
3	40	88	50	.	.	.	.	.	.	.	.	.	.	.	.	
4	20	89	10	28	10	89	10	28	30	89	0	28	40	89	0	
5	40	88	50	28	40	89	0	.	.	.	.	.	.	.	.	
6	40	88	50	28	30	88	40	28	20	88	50	28	20	89	0	
7	10	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
8	40	88	20	28	40	88	30	28	40	88	40	28	40	88	50	
9	40	89	0	28	40	88	50	28	30	88	50	.	.	.	.	
10	40	88	50	28	50	88	50	28	40	89	0	.	.	.	.	
11	40	89	0	28	40	88	50	28	50	88	40	.	.	.	.	
12	50	88	50	28	50	88	40	28	50	88	30	28	40	88	40	
13	40	88	40	28	30	88	50	28	30	89	0	.	.	.	.	
14	40	89	0	28	40	88	50	28	50	88	50	.	.	.	.	

15	20	88	40	28	20	88	30	28	30	88	40	.	.	.	.
16	20	88	50	28	20	89	0	28	20	88	40	28	20	89	10
17	40	88	40	.	.	.	.	.	.	.	.	.	.	.	.
18	20	88	50	28	30	88	50	28	40	88	50	28	40	89	0
19	30	88	40	28	30	88	50	28	30	89	0	28	40	89	0
20	40	88	40	28	40	88	50	.	.	.	.	.	.	.	.

3.1.1 SPORT FISHING VESSELS, continued:

OBS	YEAR	MONTH	WIND DAY	WIND DIRECTION	WAVE SPEED	WEATHER HEIGHT	VESSEL CONDITIONS	START CODE	TIME FISHED TIME	TIME FISHED (HRS)	SPECIES (MINS)	TIME CODE	TIME HOOKED	LAT ENDED	(DEG)
21	90	6	14	12	12	4	3	SFV049	700	9	0	.	.	.	28
22	90	6	14	12	12	4	3	SFV052	700	9	0	.	.	.	28
23	90	6	14	12	12	4	3	SFV054	700	9	0	201	930	935	28
24	90	6	14	12	12	4	3	SFV056	700	9	0	.	.	.	28
25	90	6	14	12	12	4	3	SFV057	700	9	0	.	.	.	28
26	90	6	14	12	12	4	3	SFV058	730	8	30	.	.	.	28
27	90	6	14	12	12	4	3	SFV059	1300	3	0	.	.	.	28
28	90	6	14	12	12	4	3	SFV061	730	8	30	.	.	.	28
29	90	6	14	12	12	4	3	SFV064	700	9	0	402	830	845	28
30	90	6	14	12	12	4	3	SFV066	710	8	50	201	1400	1410	28
31	90	6	14	12	12	4	3	SFV069	700	9	0	.	.	.	28
32	90	6	14	12	12	4	3	SFV072	730	8	30	.	.	.	28
33	90	6	14	12	12	4	3	SFV077	700	9	0	402	1330	1332	28
34	90	6	14	12	12	4	3	SFV080	700	9	0	201	930	1000	28
35	90	6	14	12	12	4	3	SFV084	730	8	30	.	.	.	28
36	90	6	14	12	12	4	3	SFV086	700	9	0	402	1000	1005	28
37	90	6	14	12	12	4	3	SFV086	700	9	0	201	1030	1035	28
38	90	6	14	12	12	4	3	SFV090	745	8	30	.	.	.	28
39	90	6	14	12	12	4	3	SFV094	700	9	0	.	.	.	28
40	90	6	14	12	12	4	3	SFV096	700	9	0	201	1430	1431	28

OBS	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LOCATION FISHED
21	40	89	0	28	40	88	50	28	50	88	50	.	.	.	.	
22	50	88	50	28	50	88	40	28	50	88	30	28	40	88	40	
23	50	88	20	28	50	88	30	28	50	88	40	.	.	.	.	
24	40	89	0	28	40	88	50	28	50	88	50	.	.	.	.	
25	50	88	0	28	50	88	10	28	40	88	20	28	40	88	30	
26	30	88	40	28	30	88	50	28	40	89	0	.	.	.	.	
27	40	89	0	28	40	88	50	28	50	88	40	.	.	.	.	
28	40	89	0	28	40	88	50	28	50	88	50	.	.	.	.	
29	30	89	0	28	40	89	0	28	40	88	50	28	30	88	40	
30	40	89	0	28	20	89	0	28	40	88	50	28	30	89	0	
31	40	89	0	28	40	88	50	28	50	88	50	.	.	.	.	
32	30	89	10	28	30	89	0	28	40	88	50	.	.	.	.	
33	30	89	10	28	40	89	10	.	.	.	.	.	.	.	.	
34	30	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
35	10	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
36	40	88	30	28	30	88	30	28	40	88	40	28	40	88	50	

37	40	88	30	.	.	.	.	.	.	.	.	.	.	.	.
38	40	89	0	28	40	88	50	28	50	88	50	.	.	.	.
39	50	88	30	.	.	.	.	.	.	.	.	.	.	.	.
40	30	89	10	28	30	89	0	28	40	89	0	.	.	.	.

3.1.1 SPORT FISHING VESSELS, continued:

OBS	YEAR	MONTH	WIND DAY	WIND DIRECTION	WAVE SPEED	WEATHER HEIGHT	VESSEL CONDITIONS	TIME START CODE	FISHED TIME	FISHED (HRS)	SPECIES (MINS)	TIME CODE	TIME HOOKED	LAT ENDED	(DEG)
41	90	6	14	12	12	4	3	SFV097	700	9	0	201	1000	1005	28
42	90	6	14	12	12	4	3	SFV098	700	8	45	.	.	.	28
43	90	6	14	12	12	4	3	SFV099	710	8	50	.	.	.	28
44	90	6	14	12	12	4	3	SFV101	700	7	0	301	715	735	28
45	90	6	14	12	12	4	3	SFV107	800	6	30	.	.	.	28
46	90	6	14	12	12	4	3	SFV108	715	8	5	402	1030	1040	28
47	90	6	14	12	12	4	3	SFV114	1100	5	0	.	.	.	28
48	90	6	14	12	12	4	3	SFV116	830	7	30	.	.	.	28
49	90	6	14	12	12	4	3	SFV119	730	8	30	.	.	.	28
50	90	6	14	12	12	4	3	SFV121	700	9	15	.	.	.	28
51	90	6	15	16	3	1	0	SFV005	700	9	0	.	.	.	28
52	90	6	15	16	3	1	0	SFV008	730	8	25	201	1500	1502	28
53	90	6	15	16	3	1	0	SFV013	700	9	0	201	842	906	28
54	90	6	15	16	3	1	0	SFV017	700	6	0	.	.	.	28
55	90	6	15	16	3	1	0	SFV023	730	7	30	.	.	.	28
56	90	6	15	16	3	1	0	SFV025	700	9	0	.	.	.	28
57	90	6	15	16	3	1	0	SFV026	700	9	0	201	830	900	28
58	90	6	15	16	3	1	0	SFV027	740	8	20	201	1330	1331	28
59	90	6	15	16	3	1	0	SFV031	700	9	0	201	1330	1400	28
60	90	6	15	16	3	1	0	SFV034	700	9	0	201	1245	1246	28

OBS	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LOCATION FISHED
41	20	89	0	28	30	89	0	.	.	.	.	.	.	.	.	
42	40	88	50	28	40	89	0	28	50	88	50	.	.	.	.	
43	10	88	40	28	10	88	50	28	10	88	30	28	20	88	40	
44	20	89	0	28	30	89	0	28	40	89	0	28	40	88	50	
45	20	88	50	28	30	88	50	28	30	89	0	.	.	.	.	
46	20	89	10	28	10	89	0	28	10	88	50	28	30	88	50	
47	40	89	0	28	40	88	50	28	50	88	50	.	.	.	.	
48	20	89	0	28	30	89	0	28	10	89	0	28	40	89	0	
49	40	89	0	28	40	88	50	28	50	88	50	.	.	.	.	
50	40	89	0	28	40	89	10	28	40	88	50	.	.	.	.	
51	40	89	0	28	30	89	10	28	40	88	50	.	.	.	.	
52	40	89	0	28	30	89	10	28	40	88	50	.	.	.	.	
53	20	89	10	28	20	89	20	28	10	89	20	.	.	.	.	
54	40	88	50	.	.	.	.	.	.	.	.	.	.	.	.	
55	40	89	0	28	40	88	50	28	40	88	40	.	.	.	.	
56	30	89	10	28	30	89	0	.	.	.	.	.	.	.	.	

57	40	89	0	28	40	88	50	28	40	88	40	.	.	.	.
58	40	88	50	28	30	88	10	28	40	88	50	28	40	89	0
59	30	89	10	.	.	.	.	.	.	.	.	.	.	.	.
60	40	88	40	.	.	.	.	.	.	.	.	.	.	.	.

3.1.1 SPORT FISHING VESSELS, continued:

OBS	YEAR	MONTH	WIND DAY	WIND DIRECTION	WAVE SPEED	WEATHER HEIGHT	VESSEL CONDITIONS	TIME START CODE	TIME FISHED TIME	FISHED (HRS)	SPECIES (MINS)	TIME CODE	TIME HOOKED	LAT ENDED	(DEG)
61	90	6	15	16	3	1	0	SFV036	700	8	30	201	1000	1001	28
62	90	6	15	16	3	1	0	SFV044	700	9	0	201	1430	1431	28
63	90	6	15	16	3	1	0	SFV046	715	7	15	.	.	.	29
64	90	6	15	16	3	1	0	SFV046	1435	1	25	.	.	.	29
65	90	6	15	16	3	1	0	SFV046	700	9	0	201	1300	1301	28
66	90	6	15	16	3	1	0	SFV048	710	8	50	402	1220	1228	28
67	90	6	15	16	3	1	0	SFV048	710	8	50	402	1220	1230	28
68	90	6	15	16	3	1	0	SFV048	710	8	50	402	1520	1525	28
69	90	6	15	16	3	1	0	SFV048	710	8	50	402	1525	1530	28
70	90	6	15	16	3	1	0	SFV049	700	9	0	201	1330	1430	28
71	90	6	15	16	3	1	0	SFV049	700	9	0	201	1500	1555	28
72	90	6	15	16	3	1	0	SFV052	700	9	0	.	.	.	28
73	90	6	15	16	3	1	0	SFV053	700	9	0	201	703	745	28
74	90	6	15	16	3	1	0	SFV054	700	9	0	.	.	.	28
75	90	6	15	16	3	1	0	SFV056	700	10	0	.	.	.	28
76	90	6	15	16	3	1	0	SFV057	700	9	0	.	.	.	28
77	90	6	15	16	3	1	0	SFV058	700	9	0	.	.	.	28
78	90	6	15	16	3	1	0	SFV059	700	9	0	.	.	.	28
79	90	6	15	16	3	1	0	SFV061	700	9	0	.	.	.	28
80	90	6	15	16	3	1	0	SFV066	700	8	0	201	940	1020	28

OBS	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LOCATION FISHED
61	40	89	0	28	30	89	10	28	40	88	50	.	.	.	.	
62	40	89	0	28	30	89	10	28	40	88	50	.	.	.	.	
63	0	88	50	29	0	88	40	29	0	88	30	.	.	.	.	
64	0	88	50	29	0	88	40	29	0	88	30	.	.	.	.	
65	50	88	30	.	.	.	.	.	.	.	.	.	.	.	.	
66	10	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
67	10	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
68	10	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
69	10	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
70	40	88	40	.	.	.	.	.	.	.	.	.	.	.	.	
71	54	88	35	.	.	.	.	.	.	.	.	.	.	.	.	
72	0	89	10	28	10	89	10	28	20	89	10	28	30	89	10	
73	40	89	0	28	40	88	50	28	40	88	40	.	.	.	.	
74	40	88	30	28	50	88	30	28	50	88	20	28	50	88	40	
75	40	89	0	28	40	88	50	28	40	88	40	.	.	.	.	
76	40	88	50	28	40	89	0	28	40	88	40	28	50	88	40	

77	40	88	40	28	50	88	30	28	50	88	20	.	.	.	.
78	40	88	40	28	50	88	30	29	50	88	20	29	0	88	10
79	30	89	10	28	40	89	0	28	40	88	50	.	.	.	.
80	40	88	50	28	40	89	0	.	.	.	.	.	.	.	.

3.1.1 SPORT FISHING VESSELS, continued:

OBS	YEAR	MONTH	WIND DAY	WIND DIRECTION	WAVE SPEED	WEATHER HEIGHT	TIME VESSEL CONDITIONS	TIME START CODE	FISHED TIME	FISHED (HRS)	SPECIES (MINS)	TIME CODE	TIME HOOKED	LAT ENDED	(DEG)
81	90	6	15	16	3	1	0	SFV066	700	8	0	201	1400	1402	28
82	90	6	15	16	3	1	0	SFV069	700	9	0	201	900	901	28
83	90	6	15	16	3	1	0	SFV069	700	9	0	201	1100	1120	28
84	90	6	15	16	3	1	0	SFV079	1000	7	0	.	.	.	28
85	90	6	15	16	3	1	0	SFV080	700	9	0	301	1300	1320	28
86	90	6	15	16	3	1	0	SFV084	700	9	0	.	.	.	28
87	90	6	15	16	3	1	0	SFV086	700	9	0	201	930	1130	28
88	90	6	15	16	3	1	0	SFV091	700	9	0	.	.	.	28
89	90	6	15	16	3	1	0	SFV096	700	9	0	201	1430	1445	28
90	90	6	15	16	3	1	0	SFV096	700	9	0	402	1220	1242	28
91	90	6	15	16	3	1	0	SFV097	700	9	0	201	1400	1402	28
92	90	6	15	16	3	1	0	SFV097	700	9	0	201	1430	1431	28
93	90	6	15	16	3	1	0	SFV097	700	9	0	201	1500	1502	28
94	90	6	15	16	3	1	0	SFV097	700	9	0	301	1445	1446	28
95	90	6	15	16	3	1	0	SFV097	700	9	0	101	1510	1512	28
96	90	6	15	16	3	1	0	SFV098	700	8	45	.	.	.	28
97	90	6	15	16	3	1	0	SFV099	700	9	0	201	1115	1116	28
98	90	6	15	16	3	1	0	SFV101	800	7	45	.	.	.	28
99	90	6	15	16	3	1	0	SFV104	1330	5	30	201	1400	1800	28
100	90	6	15	16	3	1	0	SFV108	700	9	0	201	1345	1445	28

OBS	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LOCATION FISHED
81	40	88	50	.	.	.	.	.	.	.	.	.	.	.	.	
82	50	88	30	28	50	88	40	.	.	.	.	.	.	.	.	
83	50	88	30	.	.	.	.	.	.	.	.	.	.	.	.	
84	30	89	10	28	40	89	0	.	.	.	.	.	.	.	.	
85	43	89	8	28	20	89	20	.	.	.	.	.	.	.	.	
86	30	89	10	28	40	89	0	28	50	88	50	.	.	.	.	
87	30	89	10	28	40	89	0	.	.	.	.	.	.	.	.	
88	40	88	30	28	40	88	40	28	40	88	50	.	.	.	.	
89	30	89	0	28	30	88	50	28	20	89	10	.	.	.	.	
90	30	89	0	.	.	.	.	.	.	.	.	.	.	.	.	
91	40	88	40	.	.	.	.	.	.	.	.	.	.	.	.	
92	40	88	40	.	.	.	.	.	.	.	.	.	.	.	.	
93	40	88	40	.	.	.	.	.	.	.	.	.	.	.	.	
94	40	88	40	.	.	.	.	.	.	.	.	.	.	.	.	
95	40	88	40	.	.	.	.	.	.	.	.	.	.	.	.	
96	50	88	40	28	50	88	30	28	50	88	20	29	0	88	20	

97	50	88	40	28	50	88	30	.	.	.	.	.	.	.	.
98	30	89	10	28	40	89	0	28	40	88	50	.	.	.	.
99	33	89	6	.	.	.	.	.	.	.	.	.	.	.	.
100	40	88	40	28	40	89	0	28	40	88	50	.	.	.	.

3.1.1 SPORT FISHING VESSELS, continued:

OBS	YEAR	MONTH	WIND DAY	WIND DIRECTION	WAVE SPEED	WEATHER HEIGHT	VESSEL CONDITIONS	TIME START CODE	FISHED TIME	FISHED (HRS)	SPECIES (MINS)	TIME CODE	TIME HOOKED	LAT ENDED	(DEG)
101	90	6	15	16	3	1	0	SFV108	700	9	0	201	1100	1101	28
102	90	6	15	16	3	1	0	SFV114	710	8	50	.	.	.	28
103	90	6	15	16	3	1	0	SFV116	703	8	52	.	.	.	28
104	90	6	15	16	3	1	0	SFV121	700	9	0	.	.	.	28
105	90	6	16	18	8	2	1	SFV003	700	8	0	.	.	.	28
106	90	6	16	18	8	2	1	SFV017	800	7	0	.	.	.	28
107	90	6	16	18	8	2	1	SFV020	700	8	0	201	1145	1205	28
108	90	6	16	18	8	2	1	SFV021	700	8	0	201	1240	1241	28
109	90	6	16	18	8	2	1	SFV023	730	7	30	.	.	.	28
110	90	6	16	18	8	2	1	SFV025	700	8	0	201	1025	1100	28
111	90	6	16	18	8	2	1	SFV027	700	8	0	201	1410	1515	28
112	90	6	16	18	8	2	1	SFV027	700	8	0	201	1215	1216	28
113	90	6	16	18	8	2	1	SFV027	700	8	0	301	1115	1116	28
114	90	6	16	18	8	2	1	SFV028	700	8	0	.	.	.	28
115	90	6	16	18	8	2	1	SFV031	700	8	0	.	.	.	28
116	90	6	16	18	8	2	1	SFV034	700	8	0	.	.	.	28
117	90	6	16	18	8	2	1	SFV035	700	7	15	.	.	.	28
118	90	6	16	18	8	2	1	SFV036	700	8	0	201	1000	1001	28
119	90	6	16	18	8	2	1	SFV042	700	14	45	301	930	931	28
120	90	6	16	18	8	2	1	SFV043	700	8	0	.	.	.	28

OBS	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LOCATION FISHED
101	40	88	40	.	.	.	.	.	.	.	.	.	.	.	.	
102	40	89	0	28	30	89	10	28	40	88	50	.	.	.	.	
103	40	89	0	28	40	88	50	28	40	88	30	.	.	.	.	
104	40	89	0	28	40	88	50	.	.	.	.	.	.	.	.	
105	40	88	40	28	40	88	50	.	.	.	.	.	.	.	.	
106	40	88	50	.	.	.	.	.	.	.	.	.	.	.	.	
107	40	88	40	.	.	.	.	.	.	.	.	.	.	.	.	
108	50	88	40	28	40	88	50	28	40	89	0	.	.	.	.	
109	40	88	50	28	40	88	40	28	50	88	30	29	0	88	20	
110	40	88	50	.	.	.	.	.	.	.	.	.	.	.	.	
111	40	88	50	28	50	88	40	28	50	89	0	28	50	88	30	
112	40	88	50	.	.	.	.	.	.	.	.	.	.	.	.	
113	40	88	50	.	.	.	.	.	.	.	.	.	.	.	.	
114	40	89	0	28	40	88	50	28	50	88	40	28	50	88	30	
115	10	89	10	28	20	89	10	28	30	89	10	28	30	89	0	
116	40	89	0	28	40	88	50	28	50	88	30	28	40	88	40	

117	40	88	50	28	40	88	40	28	50	88	30	.	.	.	.
118	20	89	0	28	30	89	0	28	40	89	0	28	40	88	50
119	30	89	10	28	30	89	20	28	30	89	30	.	.	.	.
120	40	88	50	.	.	.	.	.	.	.	.	.	.	.	.

3.1.1 SPORT FISHING VESSELS, continued:

OBS	YEAR	MONTH	WIND DAY	WIND DIRECTION	WAVE SPEED	WEATHER HEIGHT	VESSEL CONDITIONS	TIME START CODE	TIME FISHED TIME	TIME FISHED (HRS)	SPECIES (MINS)	TIME CODE	TIME HOOKED	LAT ENDED	(DEG)
121	90	6	16	18	8	2	1	SFV044	700	8	0	.	.	.	28
122	90	6	16	18	8	2	1	SFV046	700	8	0	201	745	830	28
123	90	6	16	18	8	2	1	SFV046	700	8	0	201	1300	1340	28
124	90	6	16	18	8	2	1	SFV046	700	8	0	201	1415	1440	28
125	90	6	16	18	8	2	1	SFV048	700	8	0	.	.	.	28
126	90	6	16	18	8	2	1	SFV049	700	8	0	.	.	.	29
127	90	6	16	18	8	2	1	SFV053	705	6	55	201	1430	1431	28
128	90	6	16	18	8	2	1	SFV054	700	8	0	201	900	945	28
129	90	6	16	18	8	2	1	SFV057	730	8	30	.	.	.	28
130	90	6	16	18	8	2	1	SFV064	700	8	0	301	1450	1455	28
131	90	6	16	18	8	2	1	SFV064	700	8	0	402	900	910	28
132	90	6	16	18	8	2	1	SFV066	700	8	0	.	.	.	28
133	90	6	16	18	8	2	1	SFV072	715	7	45	301	1315	1332	28
134	90	6	16	18	8	2	1	SFV075	710	7	50	.	.	.	28
135	90	6	16	18	8	2	1	SFV079	900	7	30	.	.	.	28
136	90	6	16	18	8	2	1	SFV080	700	8	0	.	.	.	28
137	90	6	16	18	8	2	1	SFV084	700	8	0	201	1200	1201	28
138	90	6	16	18	8	2	1	SFV090	730	7	38	402	1402	1422	28
139	90	6	16	18	8	2	1	SFV097	700	8	0	201	1300	1325	28
140	90	6	16	18	8	2	1	SFV098	745	7	15	402	1200	1205	28

OBS	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LOCATION FISHED
121	40	89	0	28	40	88	50	28	50	88	40	28	50	88	30	
122	40	88	50	28	50	88	40	28	50	88	30	.	.	.	.	
123	56	88	40	.	.	.	.	.	.	.	.	.	.	.	.	
124	55	88	26	.	.	.	.	.	.	.	.	.	.	.	.	
125	40	88	50	28	40	89	0	28	0	89	10	.	.	.	.	
126	0	88	10	28	50	88	20	28	50	88	30	29	0	88	20	
127	30	89	10	28	40	89	0	28	40	88	50	.	.	.	.	
128	40	88	50	.	.	.	.	.	.	.	.	.	.	.	.	
129	10	89	0	28	20	89	0	28	30	89	0	28	40	89	0	
130	40	88	50	28	30	88	40	28	40	88	40	.	.	.	.	
131	30	88	40	.	.	.	.	.	.	.	.	.	.	.	.	
132	40	89	0	28	40	88	50	28	40	88	40	28	50	88	30	
133	18	89	23	28	20	89	10	28	10	89	10	.	.	.	.	
134	40	88	40	28	50	88	30	29	0	88	20	29	0	88	10	
135	20	89	20	28	30	89	10	.	.	.	.	.	.	.	.	
136	30	89	10	28	20	89	10	.	.	.	.	.	.	.	.	

137	40	88	50	28	30	88	50	.	.	.	.	.	.	.	.
138	40	88	50	28	40	88	40	.	.	.	.	.	.	.	.
139	50	88	30	28	40	88	40	28	40	88	50	.	.	.	.
140	50	88	30	28	40	88	40	28	50	88	50	.	.	.	.

3.1.1 SPORT FISHING VESSELS, continued:

OBS	YEAR	MONTH	WIND DAY	WIND DIRECTION	WAVE SPEED	WEATHER HEIGHT	VESSEL CONDITIONS	TIME START CODE	FISHED TIME	FISHED (HRS)	SPECIES (MINS)	TIME CODE	TIME HOOKED	LAT ENDED	(DEG)
141	90	6	16	18	8	2	1	SFV099	700	8	0	402	1458	1505	28
142	90	6	16	18	8	2	1	SFV104	1145	7	15	201	1300	1301	28
143	90	6	16	18	8	2	1	SFV104	1145	4	15	201	1430	1431	28
144	90	6	16	18	8	2	1	SFV111	600	8	0	.	.	.	28
145	90	6	16	18	8	2	1	SFV114	713	7	47	.	.	.	28
146	90	7	26	4	12	3	0	SFV002	600	12	0	.	.	.	.
147	90	7	26	9	12	3	0	SFV003	1000	10	0	.	.	.	27
148	90	7	26	9	12	3	0	SFV011	720	9	40	201	1500	1502	28
149	90	7	26	4	12	3	0	SFV014	600	12	0	201	1020	1025	.
150	90	7	26	4	12	3	0	SFV019	600	9	0	.	.	.	28
151	90	7	26	4	12	3	0	SFV021	630	13	30	402	1005	1035	.
152	90	7	26	9	12	3	0	SFV025	750	8	10	.	.	.	28
153	90	7	26	9	12	3	0	SFV028	900	5	30	.	.	.	28
154	90	7	26	9	12	3	0	SFV029	1130	5	30	.	.	.	28
155	90	7	26	4	12	3	0	SFV030	630	8	0	402	845	900	.
156	90	7	26	4	12	3	0	SFV030	630	8	0	402	945	955	.
157	90	7	26	4	12	3	0	SFV030	630	8	0	402	1230	1245	.
158	90	7	26	9	12	3	0	SFV032	800	8	0	.	.	.	28
159	90	7	26	9	12	3	0	SFV047	710	7	25	201	1300	1305	28
160	90	7	26	4	12	3	0	SFV049	600	12	0	.	.	.	.

OBS	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LOCATION FISHED
141	40	88	30	.	.	.	.	.	.	.	.	.	.	.	.	
142	40	88	50	.	.	.	.	.	.	.	.	.	.	.	.	
143	40	88	50	.	.	.	.	.	.	.	.	.	.	.	.	
144	30	89	0	28	40	89	0	.	.	.	.	.	.	.	.	
145	40	89	0	28	40	88	50	28	40	88	40	28	50	88	30	
146	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	GREEN CANYON
147	50	90	30	.	.	.	.	.	.	.	.	.	.	.	.	
148	40	88	50	28	30	88	50	28	30	88	40	.	.	.	.	
149	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	GREEN CANYON
150	10	90	10	27	40	90	30	27	40	89	30	28	10	91	1	
151	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	GREEN CANYON
152	50	88	20	28	40	88	20	.	.	.	.	.	.	.	.	
153	30	89	20	.	.	.	.	.	.	.	.	.	.	.	.	
154	30	88	20	28	30	88	30	28	40	88	30	28	40	88	20	
155	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	GREEN CANYON
156	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	GREEN CANYON

157	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	GREEN CANYON
158	40	89	0	28	30	89	10	28	40	89	10	.	.	.	.	
159	40	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
160	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	GREEN CANYON

3.1.1 SPORT FISHING VESSELS, continued:

OBS	YEAR	MONTH	WIND DAY	WIND DIRECTION	WAVE SPEED	WEATHER HEIGHT	VESSEL CONDITIONS	TIME START CODE	FISHED TIME	FISHED (HRS)	SPECIES (MINS)	TIME CODE	TIME HOOKED	TIME ENDED	LAT (DEG)
161	90	7	26	4	12	3	0	SFV050	700	12	0	101	1000	1030	.
162	90	7	26	4	12	3	0	SFV055	545	10	30	201	830	850	28
163	90	7	26	9	12	3	0	SFV058	700	11	0	201	1100	1101	28
164	90	7	26	4	12	3	0	SFV071	1000	4	0	.	.	.	28
165	90	7	26	9	12	3	0	SFV074	930	4	30	.	.	.	28
166	90	7	26	9	12	3	0	SFV075	730	9	30	.	.	.	28
167	90	7	26	4	12	3	0	SFV076	730	8	30	.	.	.	28
168	90	7	26	4	12	3	0	SFV078	1000	2	0	.	.	.	28
169	90	7	26	4	12	3	0	SFV078	1200	4	0	.	.	.	28
170	90	7	26	4	12	3	0	SFV085	800	8	30	.	.	.	27
171	90	7	26	9	12	3	0	SFV086	855	9	35	.	.	.	28
172	90	7	26	4	12	3	0	SFV087	735	8	20	.	.	.	28
173	90	7	26	4	12	3	0	SFV087	1600	2	0	.	.	.	28
174	90	7	26	4	12	3	0	SFV088	700	9	0	.	.	.	28
175	90	7	26	9	12	3	0	SFV090	845	6	15	301	1430	1431	28
176	90	7	26	9	12	3	0	SFV091	700	10	0	.	.	.	28
177	90	7	26	9	12	3	0	SFV097	800	10	0	301	1230	1240	28
178	90	7	26	9	12	3	0	SFV098	845	6	15	.	.	.	28
179	90	7	26	9	12	3	0	SFV098	.	.	.	402	.	.	28
180	90	7	26	9	12	3	0	SFV099	805	9	55	.	.	.	28

OBS	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LOCATION FISHED
161	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	GREEN CANYON
162	10	89	30	28	10	89	50	.	.	.	.	.	.	.	.	
163	30	88	20	.	.	.	.	.	.	.	.	.	.	.	.	
164	30	88	50	.	.	.	.	.	.	.	.	.	.	.	.	
165	50	88	30	28	40	88	30	.	.	.	.	.	.	.	.	
166	20	89	10	28	10	89	10	28	10	89	0	28	10	88	50	
167	20	89	30	.	.	.	.	.	.	.	.	.	.	.	.	
168	47	89	6	.	.	.	.	.	.	.	.	.	.	.	.	
169	47	89	6	28	40	89	10	28	40	89	30	.	.	.	.	
170	50	89	50	.	.	.	.	.	.	.	.	.	.	.	.	
171	10	89	30	.	.	.	.	.	.	.	.	.	.	.	.	
172	40	90	10	27	30	89	30	28	30	89	30	.	.	.	.	
173	40	90	10	27	30	89	30	28	30	89	30	.	.	.	.	
174	20	89	40	28	0	89	30	28	0	89	10	28	20	89	10	
175	20	89	0	28	20	89	10	.	.	.	.	.	.	.	.	
176	30	89	10	28	20	89	20	28	20	89	30	28	10	89	30	

177	19	89	27	.	.	.	.	.	.	.	.	.	.	.	.
178	20	89	0	28	20	89	10	.	.	.	.	.	.	.	.
179	30	89	25	.	.	.	.	.	.	.	.	.	.	.	.
180	10	88	50	28	10	88	40	.	.	.	.	.	.	.	.

3.1.1 SPORT FISHING VESSELS, continued:

OBS	YEAR	MONTH	WIND DAY	WIND DIRECTION	WAVE SPEED	WEATHER HEIGHT	VESSEL CONDITIONS	TIME START CODE	FISHED TIME	FISHED (HRS)	SPECIES (MINS)	TIME CODE	TIME HOOKED	LAT ENDED	(DEG)
181	90	7	26	4	12	3	0	SFV106	730	5	30	201	1125	1155	28
182	90	7	26	4	12	3	0	SFV109	830	4	30	.	.	.	28
183	90	7	26	4	12	3	0	SFV113	900	3	0	.	.	.	28
184	90	7	26	4	12	3	0	SFV115	715	10	0	.	.	.	28
185	90	7	26	4	12	3	0	SFV126	700	12	30	201	1430	1530	.
186	90	7	26	9	12	3	0	SFV130	1115	5	45	.	.	.	28
187	90	7	27	4	8	2	0	SFV002	630	8	30	.	.	.	28
188	90	7	27	12	8	2	5	SFV003	700	7	0	201	735	830	28
189	90	7	27	12	8	2	5	SFV003	700	7	0	301	930	931	27
190	90	7	27	12	8	2	5	SFV011	800	7	30	301	1020	1030	28
191	90	7	27	4	8	2	0	SFV011	915	6	45	301	1030	1045	28
192	90	7	27	4	8	2	0	SFV014	600	12	0	301	900	903	.
193	90	7	27	4	8	2	0	SFV019	1000	7	0	.	.	.	28
194	90	7	27	12	8	2	5	SFV020	1230	4	30	301	1430	1435	28
195	90	7	27	4	8	2	0	SFV021	630	13	0	301	1200	1204	.
196	90	7	27	4	8	2	0	SFV021	630	13	0	301	1400	1401	.
197	90	7	27	12	8	2	5	SFV025	700	10	0	.	.	.	28
198	90	7	27	12	8	2	5	SFV028	1030	6	30	.	.	.	28
199	90	7	27	12	8	2	5	SFV029	730	9	30	.	.	.	28
200	90	7	27	4	8	2	0	SFV030	1000	10	0	402	1600	1605	28

OBS	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LOCATION FISHED
181	10	89	50	.	.	.	.	.	.	.	.	.	.	.	.	
182	10	89	40	28	10	89	30	.	.	.	.	.	.	.	.	
183	38	89	38	28	30	89	30	.	.	.	.	.	.	.	.	
184	10	90	10	.	.	.	.	.	.	.	.	.	.	.	.	
185	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	GREEN CANYON
186	40	89	0	28	40	88	50	.	.	.	.	.	.	.	.	
187	30	89	40	.	.	.	.	.	.	.	.	.	.	.	.	
188	0	90	45	.	.	.	.	.	.	.	.	.	.	.	.	
189	50	90	30	.	.	.	.	.	.	.	.	.	.	.	.	
190	43	88	26	.	.	.	.	.	.	.	.	.	.	.	.	
191	50	88	40	28	40	88	30	28	30	88	10	.	.	.	.	
192	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	GREEN CANYON
193	10	90	10	28	10	89	30	.	.	.	.	.	.	.	.	
194	30	88	20	.	.	.	.	.	.	.	.	.	.	.	.	
195	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	GREEN CANYON
196	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	GREEN CANYON

197	50	88	30	.	.	.	.	.	.	.	.	.	.	.	.
198	40	88	20	.	.	.	.	.	.	.	.	.	.	.	.
199	10	89	0	28	10	89	10	28	10	89	20	.	.	.	.
200	0	90	10	28	10	90	10	.	.	.	.	.	.	.	.

3.1.1 SPORT FISHING VESSELS, continued:

OBS	YEAR	MONTH	WIND DAY	WIND DIRECTION	WAVE SPEED	WEATHER HEIGHT	VESSEL CONDITIONS	START CODE	TIME FISHED TIME	TIME FISHED (HRS)	SPECIES (MINS)	TIME CODE	TIME HOOKED	LAT ENDED	(DEG)
201	90	7	27	12	8	2	5	SFV032	700	8	0	.	.	.	28
202	90	7	27	12	8	2	5	SFV033	810	9	50	.	.	.	28
203	90	7	27	12	8	2	5	SFV045	845	9	15	.	.	.	28
204	90	7	27	4	8	2	0	SFV046	730	9	0	402	1200	1202	28
205	90	7	27	4	8	2	0	SFV049	600	13	0	.	.	.	.
206	90	7	27	4	8	2	0	SFV050	700	12	0	301	1300	1315	.
207	90	7	27	4	8	2	0	SFV055	700	8	0	201	1130	1210	28
208	90	7	27	4	8	2	0	SFV055	700	8	0	402	1330	1350	28
209	90	7	27	12	8	2	5	SFV058	715	10	45	201	1630	1632	28
210	90	7	27	12	8	2	5	SFV068	930	8	30	.	.	.	28
211	90	7	27	4	8	2	0	SFV071	1000	5	0	.	.	.	28
212	90	7	27	12	8	2	5	SFV074	1005	3	55	.	.	.	28
213	90	7	27	12	8	2	5	SFV075	800	8	35	.	.	.	28
214	90	7	27	4	8	2	0	SFV076	900	10	0	402	1800	1805	28
215	90	7	27	4	8	2	0	SFV078	600	9	30	.	.	.	28
216	90	7	27	12	8	2	5	SFV086	725	9	5	.	.	.	28
217	90	7	27	12	8	2	5	SFV089	740	8	20	.	.	.	28
218	90	7	27	12	8	2	5	SFV090	830	8	30	.	.	.	28
219	90	7	27	12	8	2	5	SFV097	700	10	0	201	1530	1535	28
220	90	7	27	12	8	2	5	SFV097	700	10	0	301	1400	1401	28

OBS	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LOCATION FISHED
201	30	88	30	28	20	88	30	28	20	88	20	.	.	.	.	
202	10	89	10	28	10	89	20	.	.	.	.	.	.	.	.	
203	20	88	30	.	.	.	.	.	.	.	.	.	.	.	.	
204	20	88	30	28	20	88	10	28	20	89	10	28	10	88	10	
205	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	GREEN CANYON
206	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	GREEN CANYON
207	10	89	30	28	0	89	30	.	.	.	.	.	.	.	.	
208	10	89	30	28	0	89	30	.	.	.	.	.	.	.	.	
209	10	89	10	28	10	89	0	28	20	89	0	28	20	88	50	
210	40	89	0	28	30	89	0	28	20	89	10	28	20	89	20	
211	20	88	30	.	.	.	.	.	.	.	.	.	.	.	.	
212	50	88	30	28	40	88	30	.	.	.	.	.	.	.	.	
213	20	88	20	28	20	88	10	.	.	.	.	.	.	.	.	
214	20	89	40	.	.	.	.	.	.	.	.	.	.	.	.	
215	47	89	6	28	10	89	30	.	.	.	.	.	.	.	.	
216	20	89	30	28	20	89	40	.	.	.	.	.	.	.	.	

217	30	89	10	28	30	89	0	.	.	.	.	.	.	.	.
218	30	89	0	28	20	89	0	28	20	88	30	.	.	.	.
219	30	88	30	28	30	88	20	.	.	.	.	.	.	.	.
220	30	88	20	.	.	.	.	.	.	.	.	.	.	.	.

3.1.1 SPORT FISHING VESSELS, continued:

OBS	YEAR	MONTH	WIND DAY	WIND DIRECTION	WAVE SPEED	WEATHER HEIGHT	VESSEL CONDITIONS	START CODE	TIME FISHED	TIME FISHED (HRS)	SPECIES (MINS)	TIME CODE	TIME HOOKED	LAT ENDED	(DEG)
221	90	7	27	12	8	2	5	SFV098	740	9	20	.	.	.	28
222	90	7	27	12	8	2	5	SFV099	750	10	10	201	1630	1715	28
223	90	7	27	12	8	2	5	SFV099	.	.	.	201	1530	.	28
224	90	7	27	12	8	2	5	SFV099	.	.	.	701	.	.	28
225	90	7	27	12	8	2	5	SFV103	730	9	0	402	900	915	28
226	90	7	27	12	8	2	5	SFV103	.	.	.	601	.	.	29
227	90	7	27	12	8	2	5	SFV103	.	.	.	601	.	.	28
228	90	7	27	12	8	2	5	SFV103	.	.	.	402	.	.	28
229	90	7	27	12	8	2	5	SFV110	.	.	.	501	1000	.	28
230	90	7	27	12	8	2	5	SFV110	.	.	.	501	1000	.	28
231	90	7	27	12	8	2	5	SFV110	.	.	.	501	1000	.	28
232	90	7	27	12	8	2	5	SFV110	.	.	.	501	1000	.	28
233	90	7	27	12	8	2	5	SFV114	815	4	15	.	.	.	28
234	90	7	27	12	8	2	5	SFV120	800	9	0	301	1230	1235	28
235	90	7	27	4	8	2	0	SFV126	600	10	30	201	1030	1035	.
236	90	7	27	12	8	2	5	SFV127	950	9	10	.	.	.	28
237	90	7	27	12	8	2	5	SFV128	735	10	25	.	.	.	28
238	90	7	27	12	8	2	5	SFV128	800	10	0	.	.	.	28
239	90	7	27	12	8	2	5	SFV130	1030	5	30	.	.	.	28
240	90	7	28	9	10	2	0	SFV003	805	9	55	201	930	931	28

OBS	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LOCATION FISHED
221	20	88	30	28	20	88	20	.	.	.	.	.	.	.	.	
222	10	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
223	15	89	13	.	.	.	.	.	.	.	.	.	.	.	.	
224	15	89	13	.	.	.	.	.	.	.	.	.	.	.	.	
225	50	89	10	28	40	89	10	28	40	89	20	.	.	.	.	
226	5	89	47	.	.	.	.	.	.	.	.	.	.	.	.	
227	57	89	43	.	.	.	.	.	.	.	.	.	.	.	.	
228	54	89	45	.	.	.	.	.	.	.	.	.	.	.	.	
229	9	90	6	.	.	.	.	.	.	.	.	.	.	.	.	
230	9	90	6	.	.	.	.	.	.	.	.	.	.	.	.	
231	9	90	6	.	.	.	.	.	.	.	.	.	.	.	.	
232	9	90	6	.	.	.	.	.	.	.	.	.	.	.	.	
233	30	89	10	28	30	89	0	28	40	89	0	.	.	.	.	
234	10	89	20	.	.	.	.	.	.	.	.	.	.	.	.	
235	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	GREEN CANYON
236	20	88	30	28	20	88	20	.	.	.	.	.	.	.	.	

237	30	89	20	.	.	.	.	.	.	.	.	.	.	.	.
238	20	88	30	28	30	88	20	.	.	.	.	.	.	.	.
239	40	89	0	28	30	89	0	.	.	.	.	.	.	.	.
240	30	88	10	.	.	.	.	.	.	.	.	.	.	.	.

3.1.1 SPORT FISHING VESSELS, continued:

OBS	YEAR	MONTH	DAY	WIND DIRECTION	WIND SPEED	WAVE HEIGHT	WEATHER CONDITIONS	VESSEL CODE	TIME START FISHED	TIME FISHED (HRS)	SPECIES (MINS)	TIME CODE	TIME HOOKED	TIME ENDED	LAT (DEG)
241	90	7	28	4	12	2	0	SFV014	600	9	0	.	.	.	.
242	90	7	28	4	12	2	0	SFV019	920	6	0	301	1100	1120	28
243	90	7	28	4	12	2	0	SFV019	920	6	0	402	1200	1210	28
244	90	7	28	9	10	2	0	SFV020	900	7	0	.	.	.	28
245	90	7	28	4	12	2	0	SFV021	600	10	0	201	1500	1515	.
246	90	7	28	4	12	2	0	SFV024	900	5	0	.	.	.	28
247	90	7	28	9	10	2	0	SFV025	730	7	30	.	.	.	28
248	90	7	28	9	10	2	0	SFV028	1030	7	30	.	.	.	28
249	90	7	28	9	10	2	0	SFV029	800	9	0	301	930	931	28
250	90	7	28	9	10	2	0	SFV029	800	9	0	301	1100	1102	28
251	90	7	28	4	12	2	0	SFV030	700	8	0	402	900	915	28
252	90	7	28	9	10	2	0	SFV032	700	10	0	.	.	.	28
253	90	7	28	9	10	2	0	SFV041	940	1	20	201	1000	1100	28
254	90	7	28	4	12	2	0	SFV049	700	8	0	.	.	.	.
255	90	7	28	4	12	2	0	SFV050	700	8	0	.	.	.	.
256	90	7	28	9	10	2	0	SFV074	745	6	15	.	.	.	28
257	90	7	28	4	12	2	0	SFV076	700	9	30	201	705	707	28
258	90	7	28	9	10	2	0	SFV089	850	4	10	.	.	.	28
259	90	7	28	9	10	2	0	SFV091	800	8	0	.	.	.	28
260	90	7	28	9	10	2	0	SFV094	855	8	35	.	.	.	28

OBS	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LOCATION FISHED
241	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	GREEN CANYON
242	20	89	30	28	20	89	10	.	.	.	.	.	.	.	.	
243	20	89	30	28	20	89	10	.	.	.	.	.	.	.	.	
244	30	88	20	28	20	88	20	28	20	88	30	.	.	.	.	
245	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	GREEN CANYON
246	30	89	30	.	.	.	.	.	.	.	.	.	.	.	.	
247	20	88	30	28	30	88	20	.	.	.	.	.	.	.	.	
248	20	88	30	.	.	.	.	.	.	.	.	.	.	.	.	
249	30	88	20	28	20	88	20	.	.	.	.	.	.	.	.	
250	30	88	20	.	.	.	.	.	.	.	.	.	.	.	.	
251	0	90	10	28	10	90	10	.	.	.	.	.	.	.	.	
252	30	88	40	28	40	88	40	28	40	88	50	28	30	88	50	
253	30	88	20	.	.	.	.	.	.	.	.	.	.	.	.	
254	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	GREEN CANYON
255	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	GREEN CANYON
256	20	88	20	28	20	88	30	.	.	.	.	.	.	.	.	

257	20	89	40	.	.	.	.	.	.	.	.	.	.	.	.
258	40	89	10	28	30	89	10	.	.	.	.	.	.	.	.
259	30	88	20	28	30	88	10	28	40	88	10	.	.	.	.
260	20	89	0	28	20	89	10	28	10	89	10	28	10	89	0

3.1.1 SPORT FISHING VESSELS, continued:

OBS	YEAR	MONTH	WIND DAY	WIND DIRECTION	WAVE SPEED	WEATHER HEIGHT	TIME VESSEL CONDITIONS	TIME START CODE	FISHED TIME	FISHED (HRS)	SPECIES (MINS)	TIME CODE	TIME HOOKED	LAT ENDED	(DEG)
261	90	7	28	9	10	2	0	SFV097	710	9	50	.	.	.	28
262	90	7	28	9	10	2	0	SFV098	830	6	30	.	.	.	28
263	90	7	28	9	10	2	0	SFV099	830	8	30	.	.	.	28
264	90	7	28	9	10	2	0	SFV114	800	5	0	.	.	.	28
265	90	7	28	9	10	2	0	SFV120	815	8	45	201	1600	1602	28
266	90	7	28	4	12	2	0	SFV123	900	2	30	.	.	.	27
267	90	7	28	9	10	2	0	SFV127	748	9	12	.	.	.	28
268	90	7	28	4	12	2	0	SFV128	700	6	0	402	930	1000	28
269	90	7	28	4	12	2	0	SFV128	700	6	0	402	930	1030	28
270	90	7	28	4	12	2	0	SFV128	700	6	0	402	930	935	28
271	90	7	28	4	12	2	0	SFV128	700	6	0	301	1030	1050	28
272	91	6	20	21	8	2	2	SFV001	730	8	30	.	.	.	28
273	91	6	20	21	8	2	2	SFV003	720	8	40	301	1130	1131	28
274	91	6	20	21	8	2	2	SFV003	720	.	.	201	1130	1140	28
275	91	6	20	21	8	2	2	SFV003	700	9	0	201	1300	1302	28
276	91	6	20	21	8	2	2	SFV004	830	7	30	.	.	.	28
277	91	6	20	21	8	2	2	SFV006	800	8	0	.	.	.	28
278	91	6	20	21	8	2	2	SFV008	1130	2	30	.	.	.	28
279	91	6	20	21	8	2	2	SFV009	800	8	0	201	1330	1331	28
280	91	6	20	21	8	2	2	SFV010	740	8	20	.	.	.	28

OBS	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LOCATION FISHED
261	20	89	20	28	20	89	30	28	30	89	30	.	.	.	.	
262	10	89	10	28	10	89	20	.	.	.	.	.	.	.	.	
263	10	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
264	30	89	0	28	30	89	10	.	.	.	.	.	.	.	.	
265	30	88	10	.	.	.	.	.	.	.	.	.	.	.	.	
266	40	89	50	.	.	.	.	.	.	.	.	.	.	.	.	
267	20	88	30	28	30	88	20	.	.	.	.	.	.	.	.	
268	30	89	30	.	.	.	.	.	.	.	.	.	.	.	.	
269	30	89	30	.	.	.	.	.	.	.	.	.	.	.	.	
270	30	89	30	.	.	.	.	.	.	.	.	.	.	.	.	
271	30	89	30	.	.	.	.	.	.	.	.	.	.	.	.	
272	30	88	10	.	.	.	.	.	.	.	.	.	.	.	.	
273	30	88	20	28	30	88	20	.	.	.	.	.	.	.	.	
274	30	88	20	.	.	.	.	.	.	.	.	.	.	.	.	
275	10	89	0	28	10	89	10	.	.	.	.	.	.	.	.	
276	30	88	30	28	30	88	20	.	.	.	.	.	.	.	.	

277	30	88	20	28	30	88	30	.	.	.	.	.	.	.	.
278	40	88	40	.	.	.	.	.	.	.	.	.	.	.	.	.
279	30	88	20	28	30	88	30	.	.	.	.	.	.	.	.
280	30	88	30	28	30	88	30	.	.	.	.	.	.	.	.

3.1.1 SPORT FISHING VESSELS, continued:

OBS	YEAR	MONTH	WIND DAY	WIND DIRECTION	WAVE SPEED	WEATHER HEIGHT	TIME VESSEL CONDITIONS	TIME START CODE	FISHED TIME	FISHED (HRS)	SPECIES (MINS)	TIME CODE	TIME HOOKED	LAT ENDED	(DEG)
281	91	6	20	21	8	2	2 SFV012	745	8	15	.	.	.	28	
282	91	6	20	21	8	2	2 SFV013	730	8	30	.	.	.	28	
283	91	6	20	21	8	2	2 SFV015	800	8	0	.	.	.	28	
284	91	6	20	21	8	2	2 SFV016	830	8	0	201	1250	1315	28	
285	91	6	20	21	8	2	2 SFV017	730	8	30	402	1415	1445	28	
286	91	6	20	21	8	2	2 SFV022	830	7	30	.	.	.	28	
287	91	6	20	21	8	2	2 SFV025	715	6	45	.	.	.	28	
288	91	6	20	21	8	2	2 SFV025	715	.	.	.	.	.	28	
289	91	6	20	21	8	2	2 SFV034	1430	2	30	.	.	.	28	
290	91	6	20	21	8	2	2 SFV035	745	8	15	.	.	.	28	
291	91	6	20	21	8	2	2 SFV037	830	7	30	.	.	.	28	
292	91	6	20	21	8	2	2 SFV038	745	8	15	.	.	.	28	
293	91	6	20	21	8	2	2 SFV040	830	9	0	201	1200	1201	28	
294	91	6	20	21	8	2	2 SFV043	800	9	15	201	1625	1714	28	
295	91	6	20	21	8	2	2 SFV044	815	7	45	.	.	.	28	
296	91	6	20	21	8	2	2 SFV048	730	8	30	.	.	.	28	
297	91	6	20	21	8	2	2 SFV049	730	8	30	402	845	1245	28	
298	91	6	20	21	8	2	2 SFV051	815	7	45	303	1303	1330	28	
299	91	6	20	21	8	2	2 SFV052	720	8	40	.	.	.	28	
300	91	6	20	21	8	2	2 SFV054	900	6	55	201	1300	1304	28	

OBS	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LOCATION FISHED
281	30	88	30	28	30	88	20	.	.	.	.	.	.	.	.	
282	30	88	20	28	30	88	30	.	.	.	.	.	.	.	.	
283	30	89	10	28	30	88	30	.	.	.	.	.	.	.	.	
284	20	88	30	.	.	.	.	.	.	.	.	.	.	.	.	
285	30	88	20	.	.	.	.	.	.	.	.	.	.	.	.	
286	40	88	30	28	40	88	40	28	50	88	30	.	.	.	.	
287	30	88	20	28	30	88	30	.	.	.	.	.	.	.	.	
288	30	88	30	.	.	.	.	.	.	.	.	.	.	.	.	
289	30	88	20	.	.	.	.	.	.	.	.	.	.	.	.	
290	30	88	20	28	30	88	30	28	20	88	30	.	.	.	.	
291	10	89	10	28	10	89	0	.	.	.	.	.	.	.	.	
292	30	88	30	28	30	88	20	.	.	.	.	.	.	.	.	
293	20	88	30	28	30	88	20	28	30	88	30	.	.	.	.	
294	10	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
295	10	89	10	28	10	89	0	.	.	.	.	.	.	.	.	
296	30	88	30	28	30	88	20	28	30	88	10	.	.	.	.	

297	10	88	30	.	.	.	.	.	.	.	.	.	.	.	.
298	0	88	20	.	.	.	.	.	.	.	.	.	.	.	.
299	40	88	20	.	.	.	.	.	.	.	.	.	.	.	.
300	30	88	10	.	.	.	.	.	.	.	.	.	.	.	.

3.1.1 SPORT FISHING VESSELS, continued:

OBS	YEAR	MONTH	WIND DAY	WIND DIRECTION	WAVE SPEED	WEATHER HEIGHT	VESSEL CONDITIONS	TIME START CODE	FISHED TIME	FISHED (HRS)	SPECIES (MINS)	TIME CODE	TIME HOOKED	TIME ENDED	LAT (DEG)
301	91	6	20	21	8	2	2	SFV058	800	8	0	201	1000	1001	28
302	91	6	20	21	8	2	2	SFV059	820	7	40	.	.	.	28
303	91	6	20	21	8	2	2	SFV060	.	.	.	.	.	.	28
304	91	6	20	21	8	2	2	SFV063	830	2	15	.	.	.	28
305	91	6	20	21	8	2	2	SFV063	1100	2	5	.	.	.	28
306	91	6	20	21	8	2	2	SFV063	1330	2	30	.	.	.	28
307	91	6	20	21	8	2	2	SFV064	800	8	0	201	1100	1115	28
308	91	6	20	21	8	2	2	SFV064	800	.	.	201	1300	1305	28
309	91	6	20	21	8	2	2	SFV064	800	.	.	301	1415	1420	28
310	91	6	20	21	8	2	2	SFV065	830	7	30	201	1330	1340	28
311	91	6	20	21	8	2	2	SFV067	800	8	0	.	.	.	28
312	91	6	20	21	8	2	2	SFV070	700	9	0	201	900	901	28
313	91	6	20	21	8	2	2	SFV075	745	8	15	.	.	.	28
314	91	6	20	21	8	2	2	SFV080	715	8	45	301	1400	1401	28
315	91	6	20	21	8	2	2	SFV081	730	8	30	201	845	910	28
316	91	6	20	21	8	2	2	SFV081	730	.	.	201	1530	1545	28
317	91	6	20	21	8	2	2	SFV081	730	.	.	201	1300	1301	28
318	91	6	20	21	8	2	2	SFV083	800	8	0	.	.	.	28
319	91	6	20	21	8	2	2	SFV086	730	8	30	201	905	955	28
320	91	6	20	21	8	2	2	SFV086	730	.	.	201	1430	1515	28

OBS	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LOCATION FISHED
301	30	88	10	28	40	88	10	28	20	88	10	.	.	.	.	
302	30	88	30	28	30	88	20	.	.	.	.	.	.	.	.	
303	40	88	0	28	30	88	0	28	20	88	0	.	.	.	.	
304	10	89	0	28	10	89	10	.	.	.	.	.	.	.	.	
305	10	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
306	10	89	10	28	20	89	10	.	.	.	.	.	.	.	.	
307	20	88	30	28	20	88	20	28	30	88	20	.	.	.	.	
308	20	88	20	.	.	.	.	.	.	.	.	.	.	.	.	
309	30	88	20	.	.	.	.	.	.	.	.	.	.	.	.	
310	30	88	10	.	.	.	.	.	.	.	.	.	.	.	.	
311	30	88	30	28	30	88	20	.	.	.	.	.	.	.	.	
312	30	88	20	.	.	.	.	.	.	.	.	.	.	.	.	
313	30	88	30	28	30	88	20	.	.	.	.	.	.	.	.	
314	40	88	10	28	30	88	20	.	.	.	.	.	.	.	.	
315	10	88	30	.	.	.	.	.	.	.	.	.	.	.	.	
316	10	88	30	.	.	.	.	.	.	.	.	.	.	.	.	

317 10 88 30 . . . .
318 30 88 20 28 30 88 30 . . . .
319 10 88 30 28 10 88 40 . . . .
320 10 88 40 . . . .

3.1.1 SPORT FISHING VESSELS, continued:

OBS	YEAR	MONTH	WIND DAY	WIND DIRECTION	WAVE SPEED	WEATHER HEIGHT	VESSEL CONDITIONS	START CODE	TIME FISHED	TIME FISHED (HRS)	SPECIES (MINS)	TIME CODE	TIME HOOKED	TIME ENDED	LAT (DEG)
321	91	6	20	21	8	2	2	SFV089	830	7	30	201	1405	1420	28
322	91	6	20	21	8	2	2	SFV090	730	8	30	.	.	.	28
323	91	6	20	21	8	2	2	SFV091	700	9	0	301	1135	1155	28
324	91	6	20	21	8	2	2	SFV092	730	3	30	.	.	.	28
325	91	6	20	21	8	2	2	SFV092	1100	2	0	.	.	.	28
326	91	6	20	21	8	2	2	SFV092	1300	3	0	301	1520	1524	28
327	91	6	20	21	8	2	2	SFV092	1300	.	.	201	1530	1531	28
328	91	6	20	21	8	2	2	SFV097	700	9	0	201	1500	1535	28
329	91	6	20	21	8	2	2	SFV098	830	1	0	.	.	.	28
330	91	6	20	21	8	2	2	SFV099	830	7	30	.	.	.	28
331	91	6	20	21	8	2	2	SFV100	700	9	0	.	.	.	28
332	91	6	20	21	8	2	2	SFV102	800	8	0	.	.	.	28
333	91	6	20	21	8	2	2	SFV105	815	7	45	201	850	930	28
334	91	6	20	21	8	2	2	SFV112	910	6	35	402	930	1020	28
335	91	6	20	21	8	2	2	SFV116	715	8	45	.	.	.	.
336	91	6	20	21	8	2	2	SFV118	800	8	0	.	.	.	28
337	91	6	20	21	8	2	2	SFV121	715	8	45	.	.	.	28
338	91	6	20	21	8	2	2	SFV124	1230	4	0	.	.	.	28
339	91	6	20	21	8	2	2	SFV125	830	7	30	.	.	.	28
340	91	6	20	21	8	2	2	SFV129	730	8	30	.	.	.	28

OBS	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LOCATION FISHED
321	20	88	10	.	.	.	.	.	.	.	.	.	.	.	.	
322	30	88	20	28	30	88	30	.	.	.	.	.	.	.	.	
323	40	88	20	28	30	88	20	28	30	88	30	28	30	88	40	
324	10	89	20	28	10	89	10	.	.	.	.	.	.	.	.	
325	10	89	20	.	.	.	.	.	.	.	.	.	.	.	.	
326	10	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
327	10	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
328	30	88	10	28	30	88	20	28	40	88	10	.	.	.	.	
329	40	88	30	.	.	.	.	.	.	.	.	.	.	.	.	
330	30	88	20	28	30	88	30	.	.	.	.	.	.	.	.	
331	20	88	30	28	20	88	20	.	.	.	.	.	.	.	.	
332	30	88	10	.	.	.	.	.	.	.	.	.	.	.	.	
333	30	88	20	28	30	88	30	.	.	.	.	.	.	.	.	
334	10	89	20	.	.	.	.	.	.	.	.	.	.	.	.	
335	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
336	20	88	30	28	20	88	20	.	.	.	.	.	.	.	.	

337	30	88	10	28	40	88	10	.	.	.	.	.	.	.	.
338	10	89	0	.	.	.	.	.	.	.	.	.	.	.	.
339	10	88	30	.	.	.	.	.	.	.	.	.	.	.	.
340	30	88	20	28	30	88	10	.	.	.	.	.	.	.	.

3.1.1 SPORT FISHING VESSELS, continued:

OBS	YEAR	MONTH	WIND DAY	WIND DIRECTION	WAVE SPEED	WEATHER HEIGHT	TIME VESSEL CONDITIONS	TIME START CODE	FISHED TIME	FISHED (HRS)	SPECIES (MINS)	TIME CODE	TIME HOOKED	LAT ENDED	(DEG)
341	91	6	21	21	7	2	4	SFV001	700	9	0	402	1445	1520	28
342	91	6	21	21	7	2	4	SFV001	700	9	0	402	1445	1525	28
343	91	6	21	21	7	2	4	SFV003	745	8	15	.	.	.	28
344	91	6	21	21	7	2	4	SFV003	730	8	30	.	.	.	28
345	91	6	21	21	7	2	4	SFV004	720	7	10	.	.	.	28
346	91	6	21	21	7	2	4	SFV004	1430	1	30	.	.	.	28
347	91	6	21	21	7	2	4	SFV006	830	7	30	201	1412	1436	28
348	91	6	21	21	7	2	4	SFV006	830	7	30	201	1412	1435	28
349	91	6	21	21	7	2	4	SFV007	830	7	0	.	.	.	28
350	91	6	21	21	7	2	4	SFV009	726	8	30	.	.	.	28
351	91	6	21	21	7	2	4	SFV010	700	9	0	201	1300	1325	28
352	91	6	21	21	7	2	4	SFV013	730	8	30	.	.	.	28
353	91	6	21	21	7	2	4	SFV013	730	8	30	.	.	.	28
354	91	6	21	21	7	2	4	SFV015	800	8	0	.	.	.	28
355	91	6	21	21	7	2	4	SFV016	930	6	30	201	1300	1301	28
356	91	6	21	21	7	2	4	SFV017	815	7	45	.	.	.	28
357	91	6	21	21	7	2	4	SFV022	830	7	30	.	.	.	28
358	91	6	21	21	7	2	4	SFV025	700	9	0	201	915	935	28
359	91	6	21	21	7	2	4	SFV025	700	9	0	201	915	935	28
360	91	6	21	21	7	2	4	SFV034	800	8	0	.	.	.	28

OBS	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LOCATION FISHED
341	30	88	0	.	.	.	.	.	.	.	.	.	.	.	.	
342	30	88	0	.	.	.	.	.	.	.	.	.	.	.	.	
343	30	88	10	28	30	88	20	.	.	.	.	.	.	.	.	
344	10	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
345	20	88	20	.	.	.	.	.	.	.	.	.	.	.	.	
346	20	88	20	.	.	.	.	.	.	.	.	.	.	.	.	
347	30	88	20	28	30	88	10	.	.	.	.	.	.	.	.	
348	30	88	10	28	40	88	0	.	.	.	.	.	.	.	.	
349	30	88	20	28	30	88	10	.	.	.	.	.	.	.	.	
350	10	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
351	10	88	10	.	.	.	.	.	.	.	.	.	.	.	.	
352	10	88	20	.	.	.	.	.	.	.	.	.	.	.	.	
353	10	88	20	.	.	.	.	.	.	.	.	.	.	.	.	
354	30	88	10	28	30	88	20	.	.	.	.	.	.	.	.	
355	20	88	0	.	.	.	.	.	.	.	.	.	.	.	.	
356	30	88	10	28	30	88	20	.	.	.	.	.	.	.	.	

357	40	88	20	28	30	88	20	.	.	.	.	.	.	.	.
358	10	88	10	.	.	.	.	.	.	.	.	.	.	.	.
359	10	88	10	.	.	.	.	.	.	.	.	.	.	.	.
360	30	88	10	28	30	88	20	.	.	.	.	.	.	.	.

3.1.1 SPORT FISHING VESSELS, continued:

OBS	YEAR	MONTH	WIND DAY	WIND DIRECTION	WAVE SPEED	WEATHER HEIGHT	TIME VESSEL CONDITIONS	TIME START CODE	FISHED TIME	FISHED (HRS)	SPECIES (MINS)	TIME CODE	TIME HOOKED	LAT ENDED	(DEG)
361	91	6	21	21	7	2	4	SFV035	900	6	30	.	.	.	28
362	91	6	21	21	7	2	4	SFV037	800	8	0	.	.	.	28
363	91	6	21	21	7	2	4	SFV037	800	8	0	.	.	.	28
364	91	6	21	21	7	2	4	SFV038	830	7	30	.	.	.	28
365	91	6	21	21	7	2	4	SFV039	700	9	0	201	900	920	28
366	91	6	21	21	7	2	4	SFV040	800	5	30	201	900	905	28
367	91	6	21	21	7	2	4	SFV043	830	7	30	.	.	.	28
368	91	6	21	21	7	2	4	SFV044	730	8	30	201	1100	1101	28
369	91	6	21	21	7	2	4	SFV044	730	8	30	201	1100	1101	28
370	91	6	21	21	7	2	4	SFV048	718	8	32	402	1200	1225	28
371	91	6	21	21	7	2	4	SFV051	800	8	0	402	1000	1015	28
372	91	6	21	21	7	2	4	SFV051	800	.	.	201	1230	1300	28
373	91	6	21	21	7	2	4	SFV052	700	9	0	201	940	1000	28
374	91	6	21	21	7	2	4	SFV052	700	.	.	201	1400	1401	28
375	91	6	21	21	7	2	4	SFV052	700	.	.	201	1500	1501	28
376	91	6	21	21	7	2	4	SFV054	700	9	0	.	.	.	28
377	91	6	21	21	7	2	4	SFV058	900	7	0	.	.	.	28
378	91	6	21	21	7	2	4	SFV059	930	5	50	.	.	.	28
379	91	6	21	21	7	2	4	SFV060	800	8	0	201	1135	1200	28
380	91	6	21	21	7	2	4	SFV060	800	8	0	201	.	.	28

OBS	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LOCATION FISHED
361	20	88	0	.	.	.	.	.	.	.	.	.	.	.	.	
362	10	89	10	28	10	89	0	.	.	.	.	.	.	.	.	
363	10	89	10	28	30	88	20	.	.	.	.	.	.	.	.	
364	20	88	10	28	30	88	20	.	.	.	.	.	.	.	.	
365	30	88	0	28	20	88	0	28	10	88	0	.	.	.	.	
366	30	88	10	28	30	88	20	.	.	.	.	.	.	.	.	
367	30	88	10	28	20	88	0	.	.	.	.	.	.	.	.	
368	10	89	10	28	10	89	20	.	.	.	.	.	.	.	.	
369	10	89	10	28	10	89	20	.	.	.	.	.	.	.	.	
370	30	88	10	28	30	88	20	28	40	88	10	.	.	.	.	
371	10	88	10	.	.	.	.	.	.	.	.	.	.	.	.	
372	0	88	30	.	.	.	.	.	.	.	.	.	.	.	.	
373	10	88	20	.	.	.	.	.	.	.	.	.	.	.	.	
374	10	88	30	.	.	.	.	.	.	.	.	.	.	.	.	
375	10	88	30	.	.	.	.	.	.	.	.	.	.	.	.	
376	30	88	10	28	30	88	20	.	.	.	.	.	.	.	.	

377	30	88	0	28	20	88	0	28	10	88	0	.	.	.	.
378	30	88	20	28	30	88	10	.	.	.	.	.	.	.	.
379	30	88	20	28	30	88	10	.	.	.	.	.	.	.	.
380	20	88	0	28	10	88	0	.	.	.	.	.	.	.	.

3.1.1 SPORT FISHING VESSELS, continued:

OBS	YEAR	MONTH	WIND DAY	WIND DIRECTION	WAVE SPEED	WEATHER HEIGHT	TIME VESSEL CONDITIONS	TIME START CODE	FISHED TIME	FISHED (HRS)	SPECIES (MINS)	TIME CODE	TIME HOOKED	LAT ENDED	(DEG)
381	91	6	21	21	7	2	4	SFV062	910	2	20	.	.	.	28
382	91	6	21	21	7	2	4	SFV062	1235	3	25	201	1259	1307	28
383	91	6	21	21	7	2	4	SFV064	830	7	30	.	.	.	28
384	91	6	21	21	7	2	4	SFV064	830	7	30	.	.	.	28
385	91	6	21	21	7	2	4	SFV067	730	8	30	.	.	.	28
386	91	6	21	21	7	2	4	SFV070	745	7	45	201	1200	1225	28
387	91	6	21	21	7	2	4	SFV073	730	8	20	402	1412	1520	28
388	91	6	21	21	7	2	4	SFV075	800	7	30	.	.	.	28
389	91	6	21	21	7	2	4	SFV075	800	7	30	.	.	.	28
390	91	6	21	21	7	2	4	SFV077	800	7	30	201	1020	1530	28
391	91	6	21	21	7	2	4	SFV080	700	9	0	201	720	735	28
392	91	6	21	21	7	2	4	SFV080	700	.	.	201	1310	1331	28
393	91	6	21	21	7	2	4	SFV080	700	9	0	201	720	735	28
394	91	6	21	21	7	2	4	SFV080	700	.	.	201	1330	1331	28
395	91	6	21	21	7	2	4	SFV082	715	8	45	.	.	.	28
396	91	6	21	21	7	2	4	SFV082	715	8	45	.	.	.	28
397	91	6	21	21	7	2	4	SFV083	830	4	30	.	.	.	28
398	91	6	21	21	7	2	4	SFV083	1300	3	0	201	1430	1431	28
399	91	6	21	21	7	2	4	SFV086	730	8	30	.	.	.	28
400	91	6	21	21	7	2	4	SFV089	800	7	0	.	.	.	28

OBS	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LOCATION FISHED
381	10	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
382	10	89	0	28	10	88	50	28	10	88	40	.	.	.	.	
383	30	88	10	28	30	88	20	.	.	.	.	.	.	.	.	
384	30	88	10	28	30	88	20	.	.	.	.	.	.	.	.	
385	30	88	10	28	30	88	20	.	.	.	.	.	.	.	.	
386	30	88	10	28	30	88	20	.	.	.	.	.	.	.	.	
387	20	88	0	.	.	.	.	.	.	.	.	.	.	.	.	
388	30	88	10	28	30	88	20	.	.	.	.	.	.	.	.	
389	30	88	10	28	30	88	20	.	.	.	.	.	.	.	.	
390	10	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
391	30	88	0	.	.	.	.	.	.	.	.	.	.	.	.	
392	30	88	0	.	.	.	.	.	.	.	.	.	.	.	.	
393	30	88	0	.	.	.	.	.	.	.	.	.	.	.	.	
394	30	88	0	.	.	.	.	.	.	.	.	.	.	.	.	
395	50	88	10	28	50	88	0	.	.	.	.	.	.	.	.	
396	50	88	10	28	50	88	0	.	.	.	.	.	.	.	.	

397	30	88	20	28	30	88	10	.	.	.	.	.	.	.	.
398	30	88	10	.	.	.	.	.	.	.	.	.	.	.	.
399	30	88	0	.	.	.	.	.	.	.	.	.	.	.	.
400	30	88	10	.	.	.	.	.	.	.	.	.	.	.	.

3.1.1 SPORT FISHING VESSELS, continued:

OBS	YEAR	MONTH	WIND DAY	WIND DIRECTION	WAVE SPEED	WEATHER HEIGHT	TIME VESSEL CONDITIONS	TIME START CODE	FISHED TIME	FISHED (HRS)	SPECIES (MINS)	TIME CODE	TIME HOOKED	LAT ENDED	(DEG)
401	91	6	21	21	7	2	4	SFV090	830	7	0	.	.	.	28
402	91	6	21	21	7	2	4	SFV090	830	7	0	.	.	.	28
403	91	6	21	21	7	2	4	SFV091	830	7	30	201	1330	1332	28
404	91	6	21	21	7	2	4	SFV091	830	7	30	201	1330	1332	28
405	91	6	21	21	7	2	4	SFV092	730	8	30	.	.	.	28
406	91	6	21	21	7	2	4	SFV093	730	8	30	.	.	.	28
407	91	6	21	21	7	2	4	SFV095	710	8	50	.	.	.	28
408	91	6	21	21	7	2	4	SFV097	700	9	0	201	945	946	28
409	91	6	21	21	7	2	4	SFV098	720	8	10	.	.	.	28
410	91	6	21	21	7	2	4	SFV099	830	7	15	.	.	.	28
411	91	6	21	21	7	2	4	SFV105	700	8	0	.	.	.	28
412	91	6	21	21	7	2	4	SFV105	1330	1	0	.	.	.	28
413	91	6	21	21	7	2	4	SFV112	815	7	45	.	.	.	28
414	91	6	21	21	7	2	4	SFV116	800	7	50	.	.	.	28
415	91	6	21	21	7	2	4	SFV116	800	7	50	.	.	.	28
416	91	6	21	21	7	2	4	SFV117	700	9	0	.	.	.	28
417	91	6	21	21	7	2	4	SFV121	700	9	0	201	1300	1301	28
418	91	6	21	21	7	2	4	SFV122	900	6	0	.	.	.	28
419	91	6	21	21	7	2	4	SFV124	1030	5	30	.	.	.	28
420	91	6	21	21	7	2	4	SFV125	730	8	30	301	1100	1115	28

OBS	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LOCATION FISHED
401	30	88	10	28	30	88	20	.	.	.	.	.	.	.	.	
402	30	88	20	28	40	88	0	.	.	.	.	.	.	.	.	
403	10	88	0	28	10	88	10	.	.	.	.	.	.	.	.	
404	10	88	0	28	10	88	10	.	.	.	.	.	.	.	.	
405	10	89	10	28	10	89	20	.	.	.	.	.	.	.	.	
406	10	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
407	30	89	40	28	20	89	30	28	10	89	20	28	10	89	10	
408	20	88	0	28	30	88	10	28	30	88	20	.	.	.	.	
409	30	88	10	28	30	88	20	.	.	.	.	.	.	.	.	
410	30	88	10	28	30	88	20	.	.	.	.	.	.	.	.	
411	10	88	10	28	30	88	20	.	.	.	.	.	.	.	.	
412	30	88	20	.	.	.	.	.	.	.	.	.	.	.	.	
413	10	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
414	30	88	10	28	30	88	20	.	.	.	.	.	.	.	.	
415	30	88	10	28	30	88	20	.	.	.	.	.	.	.	.	
416	30	88	10	28	30	88	20	.	.	.	.	.	.	.	.	

417	20	88	10	28	20	88	10	28	30	88	0	.	.	.	.
418	30	88	20	28	30	88	10	.	.	.	.	.	.	.	.
419	20	88	10	.	.	.	.	.	.	.	.	.	.	.	.
420	0	89	10	.	.	.	.	.	.	.	.	.	.	.	.

3.1.1 SPORT FISHING VESSELS, continued:

OBS	YEAR	MONTH	WIND DAY	WIND DIRECTION	WAVE SPEED	WEATHER HEIGHT	VESSEL CONDITIONS	TIME START CODE	TIME FISHED (HRS)	FISHED (MINS)	SPECIES CODE	TIME HOOKED	TIME ENDED	LAT (DEG)
421	91	6	21	21	7	2	4	SFV125	730	.	.	301	1345	1400	28
422	91	6	21	21	7	2	4	SFV125	730	.	.	409	1430	1431	28
423	91	6	21	21	7	2	4	SFV129	700	9	0	.	.	.	28
424	91	6	22	18	5	1	2	SFV003	730	7	30	201	1445	1559	28
425	91	6	22	18	5	1	2	SFV004	815	8	35	201	1200	1420	28
426	91	6	22	18	5	1	2	SFV006	715	7	45	201	1100	1120	28
427	91	6	22	18	5	1	2	SFV008	800	5	0	.	.	.	28
428	91	6	22	18	5	1	2	SFV015	700	8	0	201	735	738	28
429	91	6	22	18	5	1	2	SFV015	700	.	.	201	1000	1001	28
430	91	6	22	18	5	1	2	SFV015	700	.	.	201	1215	1216	28
431	91	6	22	18	5	1	2	SFV018	715	7	45	402	800	830	28
432	91	6	22	18	5	1	2	SFV018	715	.	.	402	1000	1030	28
433	91	6	22	18	5	1	2	SFV018	715	.	.	402	1400	1430	28
434	91	6	22	18	5	1	2	SFV022	830	6	30	201	1245	1305	28
435	91	6	22	18	5	1	2	SFV025	700	6	30	.	.	.	28
436	91	6	22	18	5	1	2	SFV035	800	7	0	.	.	.	28
437	91	6	22	18	5	1	2	SFV037	700	8	0	.	.	.	28
438	91	6	22	18	5	1	2	SFV038	830	6	30	.	.	.	28
439	91	6	22	18	5	1	2	SFV039	700	8	0	.	.	.	28
440	91	6	22	18	5	1	2	SFV040	730	6	30	.	.	.	28

OBS	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LOCATION FISHED
421	10	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
422	10	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
423	30	88	30	28	30	88	40	.	.	.	.	.	.	.	.	
424	10	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
425	0	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
426	40	88	10	28	40	88	20	.	.	.	.	.	.	.	.	
427	30	88	10	28	20	88	10	.	.	.	.	.	.	.	.	
428	10	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
429	10	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
430	10	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
431	50	88	0	.	.	.	.	.	.	.	.	.	.	.	.	
432	50	88	0	.	.	.	.	.	.	.	.	.	.	.	.	
433	50	88	0	.	.	.	.	.	.	.	.	.	.	.	.	
434	10	89	10	28	10	89	20	28	0	89	10	.	.	.	.	
435	40	88	0	28	40	88	10	28	30	88	20	28	30	88	10	
436	30	88	10	28	30	88	20	.	.	.	.	.	.	.	.	

437	10	89	10	28	10	89	0	.	.	.	.	.	.	.	.
438	10	89	0	28	10	89	10	.	.	.	.	.	.	.	.
439	10	89	0	28	10	89	10	.	.	.	.	.	.	.	.
440	20	88	30	28	10	88	30	.	.	.	.	.	.	.	.

3.1.1 SPORT FISHING VESSELS, continued:

OBS	YEAR	MONTH	WIND DAY	WIND DIRECTION	WAVE SPEED	WEATHER HEIGHT	VESSEL CONDITIONS	START CODE	TIME FISHED TIME	TIME FISHED (HRS)	SPECIES (MINS)	TIME CODE	TIME HOOKED	LAT ENDED	(DEG)
441	91	6	22	18	5	1	2	SFV044	730	7	30	.	.	.	28
442	91	6	22	18	5	1	2	SFV048	745	6	45	.	.	.	28
443	91	6	22	18	5	1	2	SFV051	930	5	30	201	1015	1017	28
444	91	6	22	18	5	1	2	SFV054	700	6	30	201	1245	1330	28
445	91	6	22	18	5	1	2	SFV054	700	.	.	201	715	718	28
446	91	6	22	18	5	1	2	SFV054	700	.	.	402	900	925	28
447	91	6	22	18	5	1	2	SFV058	730	7	30	.	.	.	28
448	91	6	22	18	5	1	2	SFV059	800	5	30	.	.	.	28
449	91	6	22	18	5	1	2	SFV064	750	7	10	.	.	.	28
450	91	6	22	18	5	1	2	SFV065	730	7	30	201	1010	1035	28
451	91	6	22	18	5	1	2	SFV065	730	.	.	201	1000	1002	28
452	91	6	22	18	5	1	2	SFV065	730	.	.	201	1005	1006	28
453	91	6	22	18	5	1	2	SFV067	700	8	0	201	1450	1530	28
454	91	6	22	18	5	1	2	SFV073	700	6	30	.	.	.	28
455	91	6	22	18	5	1	2	SFV080	700	8	0	402	1250	1371	28
456	91	6	22	18	5	1	2	SFV086	730	7	25	201	1400	1450	28
457	91	6	22	18	5	1	2	SFV086	730	.	.	301	1200	1215	28
458	91	6	22	18	5	1	2	SFV086	730	.	.	402	1300	1330	28
459	91	6	22	18	5	1	2	SFV089	750	5	40	.	.	.	28
460	91	6	22	18	5	1	2	SFV090	700	8	0	201	715	720	28

OBS	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LOCATION FISHED
441	10	88	30	28	10	88	40	.	.	.	.	.	.	.	.	
442	40	88	0	.	.	.	.	.	.	.	.	.	.	.	.	
443	20	88	0	.	.	.	.	.	.	.	.	.	.	.	.	
444	40	88	10	.	.	.	.	.	.	.	.	.	.	.	.	
445	40	88	10	.	.	.	.	.	.	.	.	.	.	.	.	
446	40	88	10	.	.	.	.	.	.	.	.	.	.	.	.	
447	10	89	10	28	10	89	20	.	.	.	.	.	.	.	.	
448	30	88	20	28	30	88	10	28	30	88	20	.	.	.	.	
449	10	88	0	28	20	88	0	.	.	.	.	.	.	.	.	
450	10	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
451	10	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
452	10	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
453	10	89	0	.	.	.	.	.	.	.	.	.	.	.	.	
454	10	89	0	28	10	89	10	.	.	.	.	.	.	.	.	
455	10	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
456	0	89	10	.	.	.	.	.	.	.	.	.	.	.	.	

457	0	89	10	.	.	.	.	.	.	.	.	.	.	.	.
458	0	89	10	.	.	.	.	.	.	.	.	.	.	.	.
459	10	88	50	28	10	89	0	.	.	.	.	.	.	.	.
460	10	89	20	28	20	89	10	.	.	.	.	.	.	.	.

3.1.1 SPORT FISHING VESSELS, continued:

OBS	YEAR	MONTH	WIND DAY	WIND DIRECTION	WAVE SPEED	WEATHER HEIGHT	VESSEL CONDITIONS	TIME START CODE	FISHED TIME	FISHED (HRS)	SPECIES (MINS)	TIME CODE	TIME HOOKED	LAT ENDED	(DEG)
461	91	6	22	18	5	1	2	SFV091	730	6	0	.	.	.	28
462	91	6	22	18	5	1	2	SFV097	700	8	0	.	.	.	28
463	91	6	22	18	5	1	2	SFV098	700	8	0	201	830	840	28
464	91	6	22	18	5	1	2	SFV099	800	7	0	.	.	.	28
465	91	6	22	18	5	1	2	SFV112	700	6	55	201	1100	1120	28
466	91	6	22	18	5	1	2	SFV112	700	.	.	301	940	1040	28
467	91	6	22	18	5	1	2	SFV117	700	8	0	201	1145	1230	28
468	91	6	22	18	5	1	2	SFV117	700	.	.	101	1300	1305	28
469	91	6	22	18	5	1	2	SFV121	700	8	0	201	905	910	28
470	91	6	22	18	5	1	2	SFV121	700	.	.	201	1100	1102	28
471	91	6	22	18	5	1	2	SFV121	700	.	.	201	1400	1401	28
472	91	6	22	18	5	1	2	SFV124	1000	5	0	.	.	.	28

OBS	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LAT (DEG)	LAT (MIN)	LON (DEG)	LON (MIN)	LOCATION FISHED
461	0	88	30	28	0	88	20	28	10	88	20	.	.	.	.	
462	10	89	10	28	10	89	20	.	.	.	.	.	.	.	.	
463	10	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
464	30	88	20	28	30	88	10	.	.	.	.	.	.	.	.	
465	0	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
466	0	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
467	10	89	10	28	0	89	10	.	.	.	.	.	.	.	.	
468	0	89	10	.	.	.	.	.	.	.	.	.	.	.	.	
469	30	88	10	.	.	.	.	.	.	.	.	.	.	.	.	
470	30	88	10	.	.	.	.	.	.	.	.	.	.	.	.	
471	30	88	10	.	.	.	.	.	.	.	.	.	.	.	.	
472	0	89	10	.	.	.	.	.	.	.	.	.	.	.	.	

3.1.2 MENHADEN SPOTTER AIRCRAFT

OBS	PILOT ID CODE	YEAR	MONTH	DAY	OBS NUMBER	LATITUDE TIME	LATITUDE (DEGREES)	LONGITUDE (MINUTES)	LONGITUDE (DEGREES)	NO. OF LONGITUDE (MINUTES)	NO. OF SCHOOLS SPECIES	SCHOOLS (MINIMUM)	SCHOOLS (MAXIMUM)
1	SA01	1989	05	08	12801	1315	29	32.16	92	32.91	Y		02
2	SA01	1989	05	08	12802	1440	29	32.73	92	29.76	Y		04
3	SA01	1989	05	08	12803	1550	29	28.80	92	13.16	Y		05
4	SA01	1989	05	11	13101	1400	29	22.46	92	17.60	Y		08
5	SA01	1989	05	11	13102	1603	29	20.50	92	17.33	Y		05
6	SA01	1989	05	12	13201	1335	29	10.55	91	32.21	Y		06
7	SA02	1989	05	08	12801	909	29	35.60	92	42.40	Y		04
8	SA02	1989	05	08	12802	1718	29	23.65	92	9.25	Y		06
9	SA02	1989	05	10	13001	1630	29	26.98	92	17.86	Y		03
10	SA03	1989	05	08	12801	1345	29	32.16	92	32.91	Y		05
11	SA03	1989	05	08	12802	1425	29	32.56	92	34.00	Y		05
12	SA03	1989	05	08	12803	1505	29	28.80	92	13.16	Y		06
13	SA03	1989	05	11	13101	1345	29	22.92	92	18.00	Y		06
14	SA03	1989	05	11	13102	1415	29	25.92	92	16.37	Y		03
15	SA03	1989	05	11	13103	1445	29	26.52	92	15.30	Y	05	10
16	SA03	1989	05	11	13104	1610	29	21.49	92	17.38	Y	04	08
17	SA03	1989	05	12	13201	1715	29	23.93	92	1.42	Y	06	10
18	SA04	1989	05	08	12801	930	29	34.79	92	39.88	Y		07
19	SA04	1989	05	08	12802	1130	29	32.80	92	34.80	Y		01
20	SA04	1989	05	08	12803	.	29	27.28	92	12.14	Y		02
21	SA04	1989	05	08	12804	1900	29	26.34	92	14.70	Y		05
22	SA04	1989	05	10	13001	1700	29	26.14	92	15.38	Y		08
23	SA04	1989	05	10	13002	1745	29	29.73	92	27.78	Y		20
24	SA04	1989	05	11	13101	1610	29	4.66	91	18.07	Y	20	25
25	SA04	1989	05	11	13102	1620	29	21.08	91	57.57	Y	07	08
26	SA04	1989	05	11	13103	1900	29	19.14	92	11.51	Y		04
27	SA04	1989	05	11	13104	2000	29	12.29	91	39.78	Y		05
28	SA05	1989	05	08	12801	715	29	35.06	92	48.00	Y		02
29	SA05	1989	05	08	12802	800	29	35.06	92	48.00	Y		04
30	SA05	1989	05	08	12803	820	29	35.06	92	48.00	Y		04
31	SA05	1989	05	08	12804	1250	29	32.93	92	38.38	Y		04
32	SA05	1989	05	08	12805	1345	29	32.12	92	34.16	Y		05
33	SA05	1989	05	08	12806	1530	29	32.60	92	30.02	Y		03
34	SA05	1989	05	11	13101	1300	29	27.28	92	12.14	Y		10
35	SA05	1989	05	11	13102	1400	29	19.59	92	10.69	Y		15
36	SA05	1989	05	12	13201	1400	29	11.09	91	32.00	Y		06
37	SA05	1989	05	15	13501	1630	29	27.28	92	12.14	Y		12
38	SA06	1989	05	11	13101	1245	29	5.08	91	18.01	Y	08	10
39	SA06	1989	05	12	13202	1440	29	2.04	91	18.05	Y	03	04
40	SA06	1989	05	12	13203	1459	29	10.00	91	16.02	Y	08	10
41	SA07	1989	05	11	13101	1430	29	2.03	90	26.05	Y		08
42	SA07	1989	05	11	13102	1500	28	54.08	91	4.01	Y		03

43	SA07	1989	05	12	13201	1500	29	5.07	91	18.07	Y		04
44	SA08	1989	05	11	13101	1245	28	59.06	91	4.02	Y		04
45	SA08	1989	05	12	13201	1450	29	9.09	91	23.09	Y	20	30
46	SA08	1989	05	12	13202	1428	29	10.02	91	26.01	Y		02
47	SA09	1989	05	11	13101	1000	29	3.08	90	30.50	Y	07	08
48	SA09	1989	05	11	13102	1230	28	59.60	91	4.20	Y	06	08
49	SA09	1989	05	11	13103	1700	29	7.00	91	18.00	Y	15	20
50	SA10	1989	05	11	13101	930	29	4.01	90	1.82	Y		02

3.1.2 MENHADEN SPOTTER AIRCRAFT, continued:

OBS	PILOT ID CODE	YEAR	MONTH	DAY	OBS NUMBER	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	NO. OF SCHOOLS SPECIES	NO. OF SCHOOLS (MINIMUM)	(MAXIMUM)
51	SA10	1989	05	11	13102	940	29	3.08	90	3.05	Y	05	
52	SA10	1989	05	11	13103	1900	29	8.08	90	12.05	Y	10	
53	SA10	1989	05	15	13501	1320	29	4.06	90	1.34	Y	04	
54	SA11	1989	05	10	13001	1730	29	25.02	92	15.00	Y	03	
55	SA11	1989	05	10	13003	1812	29	27.08	92	31.07	Y	10	
56	SA11	1989	05	11	13101	1201	29	4.07	91	16.04	Y	20	
57	SA11	1989	05	11	13102	1310	28	59.06	91	4.02	Y	04	
58	SA11	1989	05	11	13103	1845	29	8.07	91	18.03	Y	04	
59	SA11	1989	05	11	13104	.	29	7.04	91	21.01	Y	07	
60	SA11	1989	05	12	13201	1046	29	13.01	91	14.07	Y	03	
61	SA11	1989	05	12	13202	1057	29	11.08	91	11.00	Y	13	
62	SA01	1989	08	28	24001	615	29	18.27	91	33.97	Y	08	
63	SA01	1989	08	28	24002	635	29	18.27	91	33.97	Y	02	
64	SA01	1989	08	28	24003	735	29	18.39	91	33.99	Y	02	
65	SA01	1989	08	28	24004	1316	29	21.42	91	36.12	Y	02	
66	SA01	1989	08	29	24101	1303	29	25.96	91	51.58	Y	03	
67	SA01	1989	08	29	24102	1342	29	25.96	91	51.58	Y	04	
68	SA01	1989	08	29	24103	1420	29	25.96	91	51.58	Y	03	
69	SA01	1989	08	29	24104	1501	29	25.96	91	51.58	Y	05	
70	SA01	1989	08	29	24105	1555	29	25.96	91	51.58	Y	02	
71	SA01	1989	08	30	24201	624	29	31.43	92	25.23	Y	00	
72	SA01	1989	08	30	24202	809	29	26.56	92	3.81	Y	00	
73	SA01	1989	08	30	24203	1349	29	25.65	91	51.64	Y	00	
74	SA01	1989	08	30	24204	1435	29	25.66	91	51.71	Y	00	
75	SA01	1989	08	30	24205	1625	29	25.52	91	51.79	Y	00	
76	SA01	1989	08	31	24301	.	29	25.96	91	50.85	Y	60	
77	SA01	1989	08	31	24302	.	29	25.96	91	50.85	Y	30	
78	SA01	1989	09	01	24401	722	29	20.24	91	48.96	Y	04	
79	SA01	1989	09	01	24402	735	29	21.96	91	47.14	Y	01	
80	SA01	1989	09	01	24403	1345	29	20.50	91	0.56	Y	04	
81	SA01	1989	09	01	24404	1425	29	19.44	92	1.62	Y	06	
82	SA01	1989	09	01	24405	1530	29	21.77	92	4.54	Y	08	
83	SA01	1989	09	01	24406	1611	29	19.73	92	4.49	Y	07	
84	SA01	1989	09	04	24701	1032	29	26.56	92	3.81	Y	01	
85	SA01	1989	09	04	24702	1204	29	26.15	92	3.59	Y	03	
86	SA01	1989	09	04	24703	1309	29	17.34	92	2.50	Y	06	
87	SA01	1989	09	04	24704	1352	29	16.56	92	1.00	Y	05	
88	SA01	1989	09	04	24705	1432	29	17.94	92	0.35	Y	04	
89	SA01	1989	09	04	24706	1515	29	20.41	92	2.68	Y	06	
90	SA01	1989	09	04	24707	1924	29	19.45	92	1.07	Y	08	
91	SA01	1989	09	05	24801	1800	29	16.52	91	47.39	Y	06	
92	SA01	1989	09	06	24901	1300	29	11.09	91	32.00	Y	04	

93	SA01	1989	09	06	24902	1558	29	12.94	91	39.03	Y	06
94	SA01	1989	09	06	24903	1625	29	15.08	91	48.04	Y	01
95	SA01	1989	09	06	24904	1703	29	16.55	91	49.93	Y	08
96	SA01	1989	09	06	24905	1950	29	15.16	91	50.82	Y	07
97	SA01	1989	09	07	25001	1415	29	11.09	91	32.00	Y	08
98	SA01	1989	09	07	25002	1510	29	9.65	91	41.28	Y	02
99	SA01	1989	09	07	25003	1550	29	14.52	91	40.87	Y	02
100	SA01	1989	09	07	25004	1635	29	15.45	91	40.46	Y	01

3.1.2 MENHADEN SPOTTER AIRCRAFT, continued:

OBS	PILOT ID CODE	YEAR	MONTH	DAY	OBS NUMBER	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	NO. OF LONGITUDE (MINUTES)	NO. OF SCHOOLS SPECIES	SCHOOLS (MINIMUM)	SCHOOLS (MAXIMUM)
101	SA01	1989	09	07	25005	1725	29	14.10	91	45.97	Y		03
102	SA01	1989	09	08	25101	1015	29	25.96	91	51.58	Y		02
103	SA02	1989	08	28	24001	1719	29	22.05	91	46.75	Y		08
104	SA02	1989	08	28	24002	1740	29	19.88	91	52.67	Y		06
105	SA02	1989	08	29	24101	845	29	22.96	92	57.01	Y		20
106	SA02	1989	08	29	24102	1714	29	35.16	92	50.50	Y		15
107	SA02	1989	08	30	24201	930	29	32.60	92	30.02	Y		08
108	SA02	1989	09	01	24401	1015	29	25.09	91	58.31	Y		07
109	SA03	1989	08	28	24001	630	29	20.30	91	30.06	Y	10	30
110	SA03	1989	08	29	24101	630	29	0.00	92	20.30	Y		06
111	SA03	1989	08	29	24102	1415	29	35.30	92	38.74	Y		05
112	SA03	1989	08	29	24103	1500	29	34.52	92	34.07	Y		05
113	SA03	1989	08	29	24104	1530	29	38.45	92	46.12	Y		05
114	SA03	1989	08	30	24201	700	29	36.20	92	46.36	Y		05
115	SA03	1989	08	30	24203	1515	29	28.60	92	20.00	Y		03
116	SA03	1989	08	31	24301	700	29	28.90	92	14.98	Y	06	10
117	SA03	1989	08	31	24302	1310	29	25.60	91	57.49	Y	06	20
118	SA03	1989	08	31	24303	1410	29	29.70	92	13.40	Y	01	03
119	SA03	1989	09	01	24401	645	29	20.93	91	45.00	Y	10	12
120	SA03	1989	09	01	24402	730	29	23.12	91	48.62	Y	10	20
121	SA03	1989	09	01	24403	1330	29	20.48	92	0.70	Y	05	10
122	SA03	1989	09	01	24404	1415	29	18.47	92	29.81	Y	03	04
123	SA03	1989	09	01	24405	1530	29	18.47	92	29.81	Y	03	04
124	SA03	1989	09	04	24701	1000	29	35.10	92	40.27	Y	04	06
125	SA03	1989	09	04	24702	1030	29	33.70	92	38.20	Y		05
126	SA03	1989	09	04	24703	1145	29	32.49	92	33.37	Y		03
127	SA03	1989	09	04	24704	1630	29	34.43	92	38.65	Y		03
128	SA03	1989	09	05	24801	645	29	15.68	91	50.97	Y	07	10
129	SA03	1989	09	06	24901	1700	29	19.17	92	0.75	Y	04	08
130	SA03	1989	09	06	24902	1800	29	18.74	91	59.69	Y	03	06
131	SA03	1989	09	06	24903	1845	29	16.36	91	57.25	Y	05	12
132	SA03	1989	09	07	25001	1000	29	17.78	91	48.06	Y	04	08
133	SA03	1989	09	07	25002	1700	29	22.88	92	19.53	Y	04	08
134	SA03	1989	09	07	25003	1745	29	22.49	92	16.43	Y	04	08
135	SA03	1989	09	07	25004	1800	29	22.49	92	16.43	Y	04	08
136	SA03	1989	09	08	25101	1045	29	23.37	92	14.30	Y	03	12
137	SA04	1989	08	29	24101	1600	29	24.68	91	55.99	Y	15	20
138	SA04	1989	08	29	24102	1610	29	24.42	92	2.94	Y	15	20
139	SA04	1989	08	29	24103	1620	29	25.96	91	51.58	Y		30
140	SA04	1989	08	30	24201	900	29	29.81	91	51.27	Y		10
141	SA04	1989	08	30	24202	1830	29	21.47	91	52.81	Y		10
142	SA04	1989	08	31	24301	715	29	29.96	91	42.09	Y		04

143	SA04	1989	08	31	24302	1630	29	22.05	91	46.75	Y	15	20
144	SA04	1989	09	01	24401	915	29	24.35	91	44.71	Y	08	10
145	SA04	1989	09	01	24402	1600	29	20.52	92	4.80	Y	15	20
146	SA04	1989	09	0┤	24701	630	29	25.96	91	51.58	Y	05	08
147	SA04	1989	09	04	24702	1300	29	24.67	92	2.77	Y	20	30
148	SA04	1989	09	05	24801	1330	29	18.82	91	50.45	Y	08	10
149	SA05	1989	08	28	24001	645	29	29.73	92	27.78	Y		06
150	SA05	1989	08	28	24002	730	29	32.93	92	38.38	Y		03

3.1.2 MENHADEN SPOTTER AIRCRAFT, continued:

OBS	PILOT ID CODE	YEAR	MONTH	DAY	OBS NUMBER	LATITUDE TIME	LATITUDE (DEGREES)	LONGITUDE (MINUTES)	LONGITUDE (DEGREES)	NO. OF LONGITUDE (MINUTES)	NO. OF SCHOOLS SPECIES	SCHOOLS (MINIMUM)	SCHOOLS (MAXIMUM)
151	SA05	1989	08	29	24101	700	29	35.06	92	48.00	Y		05
152	SA05	1989	08	29	24102	715	29	44.73	93	13.00	Y		03
153	SA05	1989	08	29	24103	1300	29	43.94	93	21.36	Y		15
154	SA05	1989	08	30	24201	700	29	48.73	93	27.77	Y		07
155	SA05	1989	08	30	24202	.	29	35.06	92	48.00	Y		03
156	SA05	1989	08	31	24301	645	29	27.93	92	22.87	Y		05
157	SA05	1989	08	31	24302	1315	29	27.28	92	12.14	Y		10
158	SA05	1989	08	31	24303	1400	29	20.81	92	0.86	Y		08
159	SA05	1989	09	01	24401	715	29	20.81	92	0.86	Y		08
160	SA05	1989	09	01	24402	800	29	20.53	92	52.60	Y		06
161	SA05	1989	09	01	24403	1330	29	27.93	92	22.87	Y		10
162	SA05	1989	09	04	24701	930	29	20.81	92	0.86	Y		07
163	SA05	1989	09	04	24702	945	29	20.53	92	52.60	Y		06
164	SA05	1989	09	04	24703	1645	29	19.59	92	10.69	Y		05
165	SA05	1989	09	05	24801	930	29	19.59	92	10.69	Y		05
166	SA05	1989	09	05	24802	1645	29	27.28	92	12.14	Y		06
167	SA05	1989	09	05	24803	1800	29	26.56	92	3.81	Y		05
168	SA05	1989	09	06	24902	1600	29	35.06	92	48.00	Y		04
169	SA05	1989	09	06	24903	1800	29	27.28	92	12.14	Y		06
170	SA05	1989	09	07	25001	945	29	20.81	92	0.86	Y		07
171	SA05	1989	09	07	25002	1600	29	27.93	92	22.07	Y		10
172	SA05	1989	09	08	25101	1115	29	32.12	93	34.10	Y		02
173	SA05	1989	09	08	25102	1145	29	20.81	92	0.86	Y		10
174	SA06	1989	08	28	24001	620	29	16.00	91	29.10	Y	10	15
175	SA06	1989	08	28	24002	745	29	17.50	91	29.00	Y	03	05
176	SA06	1989	08	29	24101	1730	29	24.20	91	39.40	Y	04	06
177	SA06	1989	08	30	24201	945	29	20.60	91	30.60	Y	04	06
178	SA06	1989	08	30	24202	1025	29	23.10	91	34.60	Y	10	15
179	SA06	1989	08	30	24203	1150	29	18.60	91	28.20	Y	10	15
180	SA06	1989	08	30	24204	1700	29	25.10	91	37.70	Y	03	04
181	SA06	1989	08	30	24205	1715	29	26.70	91	40.70	Y	05	07
182	SA06	1989	08	30	24206	1800	29	17.40	91	31.70	Y	06	08
183	SA06	1989	08	31	24301	1345	29	26.30	91	39.80	Y	03	05
184	SA06	1989	09	01	24401	715	29	22.20	91	40.20	Y	04	06
185	SA06	1989	09	01	24402	1400	29	11.00	91	19.60	Y	06	08
186	SA06	1989	09	04	24701	845	29	10.80	91	13.40	Y	03	05
187	SA06	1989	09	04	24702	945	29	11.10	91	32.00	Y	03	05
188	SA06	1989	09	04	24703	1150	29	9.60	91	27.60	Y	03	05
189	SA06	1989	09	04	24704	1800	29	13.00	91	25.90	Y	08	10
190	SA06	1989	09	06	24901	1045	29	13.00	91	18.30	Y	04	06
191	SA06	1989	09	06	24902	1845	29	9.90	91	28.30	Y	03	05
192	SA06	1989	09	07	25001	1700	29	8.20	91	28.70	Y	05	07

193	SA06	1989	09	07	25002	1800	29	15.20	91	38.60	Y	08	10
194	SA06	1989	09	08	25101	1000	29	11.50	91	21.00	Y	03	05
195	SA07	1989	08	28	24001	630	29	16.00	91	29.80	Y	10	15
196	SA07	1989	08	29	24101	730	29	12.10	91	11.80	Y		03
197	SA07	1989	08	29	24102	1420	29	21.40	91	46.10	Y	15	20
198	SA07	1989	08	29	24103	1500	29	25.50	91	35.90	Y		20
199	SA07	1989	08	29	24104	1630	29	25.50	91	35.90	Y		04
200	SA07	1989	08	30	24201	630	29	18.30	91	31.90	Y		06

3.1.2 MENHADEN SPOTTER AIRCRAFT, continued:

OBS	PILOT ID CODE	YEAR	MONTH	DAY	OBS NUMBER	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	NO. OF SCHOOLS SPECIES	NO. OF SCHOOLS (MINIMUM)	(MAXIMUM)
201	SA07	1989	08	30	24202	1300	29	18.5	91	27.90	Y		20
202	SA07	1989	08	30	24203	1500	29	23.1	91	31.60	Y		05
203	SA07	1989	08	31	24301	1300	29	2.9	90	57.80	Y		03
204	SA07	1989	08	31	24302	1630	29	14.4	91	23.10	Y	08	12
205	SA07	1989	09	01	24401	700	29	8.6	91	23.20	Y	05	10
206	SA07	1989	09	01	24402	1300	29	8.5	90	59.30	Y		05
207	SA07	1989	09	04	24701	900	29	8.6	91	23.20	Y	15	20
208	SA07	1989	09	04	24702	1630	29	14.9	91	34.60	Y	08	10
209	SA07	1989	09	05	24801	1600	29	6.7	91	10.50	Y		10
210	SA07	1989	09	05	24802	1830	29	9.9	91	28.30	Y	05	06
211	SA07	1989	09	06	24901	1100	29	14.4	91	23.10	Y	30	40
212	SA07	1989	09	07	25001	900	29	14.3	91	23.30	Y	15	20
213	SA07	1989	09	07	25002	1900	29	9.8	91	28.20	Y		05
214	SA08	1989	08	28	24001	620	29	16.0	91	29.80	Y		10
215	SA08	1989	08	28	24002	800	29	17.5	91	29.90	Y		05
216	SA08	1989	08	29	24101	700	29	15.5	91	18.00	Y		03
217	SA08	1989	08	29	24102	720	29	12.3	91	12.40	Y		04
218	SA08	1989	08	30	24201	700	29	7.3	90	56.00	Y		02
219	SA08	1989	08	30	24202	710	29	8.8	91	0.10	Y		03
220	SA08	1989	08	31	24301	1300	29	25.2	91	39.30	Y		20
221	SA08	1989	09	04	24701	1025	29	13.4	91	28.80	Y		02
222	SA08	1989	09	04	24702	1100	29	9.8	91	26.50	Y		03
223	SA08	1989	09	04	24703	1800	29	20.9	91	40.70	Y		04
224	SA08	1989	09	05	24801	1215	29	9.6	91	17.50	Y		05
225	SA08	1989	09	05	24802	1645	29	11.5	91	12.30	Y		03
226	SA08	1989	09	05	24803	1730	29	11.0	91	15.20	Y		02
227	SA08	1989	09	06	24901	1055	29	12.2	91	14.70	Y		02
228	SA08	1989	09	06	24902	1105	29	13.6	91	21.10	Y		40
229	SA08	1989	09	06	24903	1210	29	12.4	91	34.00	Y		50
230	SA08	1989	09	06	24904	1710	29	9.9	91	28.30	Y		05
231	SA08	1989	09	07	25001	1125	29	13.4	91	17.10	Y		04
232	SA08	1989	09	07	25002	1650	29	9.7	91	29.10	Y		04
233	SA08	1989	09	08	25101	855	29	12.0	91	24.00	Y		01
234	SA08	1989	09	08	25102	1018	29	11.5	91	19.90	Y		05
235	SA09	1989	08	28	24001	920	29	18.2	91	32.00	Y	08	12
236	SA09	1989	08	28	24002	930	29	14.3	91	23.40	Y	08	10
237	SA09	1989	08	29	24101	900	29	13.2	91	13.20	Y	06	10
238	SA09	1989	08	29	24102	1705	29	24.0	91	39.30	Y	08	14
239	SA09	1989	08	30	24201	950	29	18.2	91	32.00	Y	10	12
240	SA09	1989	08	30	24202	1740	29	26.0	91	37.30	Y	06	10
241	SA09	1989	08	31	24301	1135	29	4.1	90	59.30	Y	03	07
242	SA09	1989	09	01	24401	950	29	12.6	91	15.20	Y	03	07

243	SA09	1989	09	04	24701	640	29	10.2	91	26.40	Y	10	20
244	SA09	1989	09	04	24702	750	29	10.7	91	13.20	Y	06	10
245	SA09	1989	09	06	24901	1340	29	10.0	91	25.40	Y	10	20
246	SA09	1989	09	07	25001	1320	29	10.0	91	31.30	Y	10	20
247	SA09	1989	09	07	25002	1520	29	14.8	91	13.20	Y	08	14
248	SA09	1989	09	08	25101	735	29	14.0	91	23.00	Y	08	10
249	SA10	1989	08	28	24001	900	29	18.3	91	32.10	Y		10
250	SA10	1989	08	28	24002	900	29	14.5	91	23.50	Y		15

3.1.2 MENHADEN SPOTTER AIRCRAFT, continued:

OBS	PILOT ID CODE	YEAR	MONTH	DAY	OBS NUMBER	LATITUDE TIME	LATITUDE (DEGREES)	LONGITUDE (MINUTES)	LONGITUDE (DEGREES)	NO. OF LONGITUDE (MINUTES)	NO. OF SCHOOLS SPECIES	SCHOOLS (MINIMUM)	SCHOOLS (MAXIMUM)
251	SA10	1989	08	29	24101	830	29	13.3	91	11.33	Y		05
252	SA10	1989	08	29	24102	1720	29	24.2	91	13.94	Y		10
253	SA10	1989	08	30	24201	1000	29	18.3	91	13.21	Y		15
254	SA10	1989	08	30	24202	1800	29	26.1	91	13.95	Y		08
255	SA10	1989	08	31	24301	1130	29	4.2	91	5.95	Y		06
256	SA10	1989	09	01	24401	1000	29	12.8	91	11.51	Y		06
257	SA10	1989	09	04	24701	630	29	10.1	91	12.66	Y		15
258	SA10	1989	09	04	24702	800	29	10.8	91	11.34	Y		06
259	SA10	1989	09	06	24901	1330	29	10.1	91	12.55	Y		15
260	SA10	1989	09	07	25001	1330	29	10.1	91	13.15	Y		20
261	SA10	1989	09	07	25002	1500	29	14.8	91	13.42	Y		10
262	SA10	1989	09	08	25101	730	29	13.8	91	12.26	Y		08
263	SA11	1989	08	28	24001	845	29	18.7	91	34.50	Y		11
264	SA11	1989	08	28	24002	954	29	15.3	91	17.90	Y		16
265	SA11	1989	08	28	24003	959	29	12.7	91	12.60	Y		08
266	SA11	1989	08	28	24004	1723	29	14.0	91	25.60	Y		30
267	SA11	1989	08	28	24005	1800	29	10.9	91	29.40	Y		02
268	SA11	1989	08	29	24101	725	29	12.3	91	12.40	Y		03
269	SA11	1989	08	29	24103	1515	29	8.1	90	59.70	Y		04
270	SA11	1989	08	29	24104	1611	29	18.1	91	23.40	Y		05
271	SA11	1989	08	30	24201	710	29	24.8	91	52.10	Y		04
272	SA11	1989	08	30	24202	746	29	18.1	91	31.90	Y		17
273	SA11	1989	08	30	24203	1255	29	26.1	91	39.00	Y		07
274	SA11	1989	08	31	24301	901	29	25.1	91	58.50	Y	25	35
275	SA11	1989	08	31	24302	1310	29	25.2	91	39.30	Y	15	25
276	SA11	1989	08	31	24303	1648	29	21.5	91	48.30	Y	40	50
277	SA11	1989	08	31	24304	1945	29	18.3	91	49.40	Y	40	75
278	SA11	1989	08	31	24305	1950	29	24.8	91	42.00	Y	10	15
279	SA11	1989	08	31	24306	1955	29	18.1	91	37.80	Y	10	15
280	SA11	1989	09	01	24401	845	29	20.0	92	0.80	Y	10	15
281	SA11	1989	09	01	24402	855	29	24.3	91	44.60	Y	03	06
282	SA11	1989	09	01	24403	909	29	18.1	91	37.80	Y	05	07
283	SA11	1989	09	01	24404	948	28	54.5	91	16.10	Y		03
284	SA11	1989	09	01	24405	1004	28	51.9	90	56.60	Y		04
285	SA11	1989	09	01	24406	1100	29	13.6	91	13.90	Y		06
286	SA11	1989	09	01	24407	1133	29	8.0	91	0.60	Y		03
287	SA11	1989	09	04	24701	631	29	10.7	91	28.10	Y	20	25
288	SA11	1989	09	04	24702	825	29	10.3	91	19.90	Y		03
289	SA11	1989	09	04	24703	840	29	10.8	91	13.40	Y	05	07
290	SA11	1989	09	04	24704	1310	29	8.7	91	23.20	Y		04
291	SA11	1989	09	04	24705	1420	29	14.5	91	22.90	Y	15	20
292	SA11	1989	09	04	24706	1430	29	18.1	91	31.90	Y	20	30

293	SA11	1989	09	04	24707	1528	29	21.9	91	55.90	Y	10	15
294	SA11	1989	09	04	24708	1637	29	24.6	92	0.70	Y	02	04
295	SA11	1989	09	05	24801	821	29	14.5	91	22.90	Y		06
296	SA11	1989	09	05	24802	1401	29	11.0	91	27.80	Y	30	40
297	SA11	1989	09	05	24803	1515	29	14.5	91	33.60	Y	10	15
298	SA11	1989	09	06	24901	1411	29	10.4	91	17.10	Y	02	05
299	SA11	1989	09	06	24902	1421	29	9.9	91	23.20	Y	10	15
300	SA11	1989	09	06	24903	1603	29	8.7	91	28.10	Y	10	20

3.1.2 MENHADEN SPOTTER AIRCRAFT, continued:

OBS	PILOT ID CODE	YEAR	MONTH	DAY	OBS NUMBER	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	NO. OF LONGITUDE (MINUTES)	NO. OF SCHOOLS SPECIES	SCHOOLS (MINIMUM)	SCHOOLS (MAXIMUM)
301	SA11	1989	09	06	24904	1715	29	10.40	91	31.80	Y	15	25
302	SA11	1989	09	07	25001	718	29	11.80	91	27.60	Y	04	06
303	SA11	1989	09	07	25002	1319	29	8.70	91	23.20	Y	08	10
304	SA11	1989	09	07	25003	1330	29	13.30	91	34.10	Y	75	99
305	SA11	1989	09	07	25004	1659	29	10.40	91	31.80	Y	08	10
306	SA11	1989	09	08	25101	746	29	11.70	91	23.80	Y	06	08
307	SA11	1989	09	08	25102	840	29	12.00	91	24.00	Y		04
308	SA11	1989	09	08	25103	1412	29	11.50	91	19.80	Y	12	18
309	SA12	1989	08	28	24001	900	29	30.07	92	26.87	Y	25	30
310	SA12	1989	08	28	24002	1630	29	31.17	92	29.23	Y	20	25
311	SA12	1989	08	28	24003	1930	29	30.74	92	27.99	Y	10	15
312	SA12	1989	08	29	24101	900	29	41.74	92	57.97	Y	25	30
313	SA12	1989	08	29	24102	1000	29	46.54	93	11.89	Y	75	99
314	SA12	1989	08	29	24103	1100	29	45.85	93	29.69	Y	10	15
315	SA12	1989	08	29	24104	1103	29	45.54	93	33.26	Y	25	30
316	SA12	1989	08	29	24105	1600	29	46.41	93	38.03	Y	25	30
317	SA12	1989	08	30	24201	845	29	46.11	93	21.39	Y	25	30
318	SA12	1989	08	30	24202	1115	29	32.08	92	28.62	Y	10	20
319	SA12	1989	08	30	24203	1600	29	25.90	92	6.99	Y	10	20
320	SA12	1989	08	30	24204	1700	29	23.86	92	5.66	Y	25	30
321	SA12	1989	08	30	24205	1750	29	24.32	91	58.91	Y	40	50
322	SA12	1989	08	31	24301	900	29	19.44	91	58.98	Y	40	50
323	SA12	1989	08	31	24302	1630	29	30.16	92	13.76	Y	02	99
324	SA12	1989	08	31	24303	1635	29	20.97	92	6.94	Y	75	99
325	SA12	1989	08	31	24304	1640	29	21.60	92	2.96	Y	02	99
326	SA12	1989	08	31	24305	1900	29	21.55	91	58.02	Y	04	05
327	SA12	1989	09	01	24402	1200	29	29.46	92	21.08	Y	20	30
328	SA12	1989	09	01	24403	1630	29	29.38	92	13.32	Y	10	20
329	SA12	1989	09	01	24404	1745	29	27.15	92	21.93	Y	25	30
330	SA12	1989	09	04	24701	710	29	26.66	92	0.53	Y	10	15
331	SA12	1989	09	04	24702	730	29	32.12	92	29.07	Y	04	05
332	SA12	1989	09	04	24703	745	29	34.77	92	34.37	Y	10	15
333	SA12	1989	09	04	24704	815	29	37.01	92	45.28	Y	25	30
334	SA12	1989	09	04	24705	1300	29	36.56	92	47.01	Y	15	20
335	SA12	1989	09	04	24706	1400	29	15.29	91	39.15	Y	10	15
336	SA12	1989	09	05	24801	1400	29	40.18	92	56.83	Y	20	25
337	SA12	1989	09	05	24802	1500	29	39.71	92	54.91	Y	25	30
338	SA12	1989	09	05	24803	1550	29	37.93	92	50.59	Y	40	50
339	SA12	1989	09	06	24901	1330	29	36.56	92	47.01	Y	15	20
340	SA12	1989	09	06	24902	1500	29	32.51	92	36.13	Y	04	05
341	SA12	1989	09	10	25301	730	29	27.07	92	13.64	Y	40	50
342	SA12	1989	09	10	25302	745	29	22.16	91	59.90	Y	75	99

343	SA12	1989	09	10	25303	800	29	26.13	91	47.31	Y	25	30
344	SA12	1989	09	10	25304	1530	29	32.23	92	36.08	Y	15	20
345	SA12	1989	09	10	25305	1535	29	29.50	92	27.38	Y	30	40
346	SA12	1989	09	10	25306	1540	29	27.00	92	18.08	Y	15	20
347	SA12	1989	09	10	25307	1547	29	24.09	92	2.71	Y	02	99
348	SA12	1989	09	10	25308	1600	29	18.79	91	43.98	Y	30	40
349	SA12	1989	09	11	25401	830	29	36.56	92	47.01	Y	10	15
350	SA12	1989	09	11	25402	930	29	32.82	92	34.67	Y	10	15

3.1.2 MENHADEN SPOTTER AIRCRAFT, continued:

OBS	PILOT ID CODE	YEAR	MONTH	DAY	OBS NUMBER	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	NO. OF SCHOOLS SPECIES	NO. OF SCHOOLS (MINIMUM)	(MAXIMUM)
351	SA12	1989	09	11	25403	948	29	30.88	92	23.94	Y	25	30
352	SA12	1989	09	11	25404	1000	29	30.17	92	20.70	Y	10	20
353	SA12	1989	09	11	25405	1530	29	43.14	93	4.42	Y	10	15
354	SA01	1990	06	11	16201	.	29	12.65	91	19.02	Y		04
355	SA03	1990	06	11	16201	530	29	31.05	92	29.09	Y	03	04
356	SA13	1990	06	11	16201	800	29	3.20	90	57.70	Y		10
357	SA08	1990	06	11	16201	845	29	2.00	90	49.80	Y		04
358	SA10	1990	06	11	16201	850	29	2.00	90	49.30	Y		04
359	SA14	1990	06	11	16201	858	29	12.30	91	20.10	Y		15
360	SA05	1990	06	11	16201	930	29	44.73	93	13.00	Y		05
361	SA01	1990	06	11	16202	.	29	14.43	91	22.31	Y		02
362	SA03	1990	06	11	16202	700	29	27.37	92	27.16	Y	04	06
363	SA11	1990	06	11	16202	703	29	13.30	91	17.50	Y	06	10
364	SA06	1990	06	11	16202	730	29	1.07	90	49.01	Y	03	06
365	SA05	1990	06	11	16202	2000	29	35.06	92	48.00	Y		04
366	SA03	1990	06	11	16203	730	29	26.77	92	21.01	Y	04	05
367	SA10	1990	06	11	16204	1900	29	2.80	90	36.40	Y		01
368	SA02	1990	06	12	16301	700	29	30.10	92	24.74	Y		03
369	SA05	1990	06	12	16301	800	29	35.06	92	48.00	Y		04
370	SA03	1990	06	12	16301	1200	29	20.65	92	26.34	Y	05	06
371	SA12	1990	06	12	16301	1500	29	31.41	92	25.68	Y	05	25
372	SA02	1990	06	12	16302	1445	29	30.65	92	24.03	Y		04
373	SA01	1990	06	12	16302	1814	29	30.62	92	10.21	Y		03
374	SA03	1990	06	12	16302	2000	29	26.02	92	11.71	Y	01	02
375	SA10	1990	06	12	16303	1910	29	1.80	90	11.18	Y		10
376	SA01	1990	06	12	16304	2009	29	23.66	92	13.13	Y		03
377	SA03	1990	06	13	16401	700	29	19.98	92	1.13	Y	10	20
378	SA05	1990	06	13	16401	745	29	35.06	92	48.00	Y		05
379	SA14	1990	06	13	16401	958	29	36.20	92	45.00	Y		04
380	SA10	1990	06	13	16401	1130	29	1.50	90	11.29	Y		02
381	SA12	1990	06	13	16401	1300	29	37.77	92	48.81	Y	25	30
382	SA02	1990	06	13	16401	1400	29	26.04	92	10.04	Y		08
383	SA01	1990	06	13	16401	1817	29	22.12	91	57.40	Y		01
384	SA03	1990	06	13	16402	730	29	19.85	92	52.66	Y	10	15
385	SA14	1990	06	13	16402	1039	29	39.10	92	51.90	Y		05
386	SA08	1990	06	13	16402	1125	29	10.60	91	4.30	Y		03
387	SA10	1990	06	13	16402	1135	29	1.60	90	10.43	Y		05
388	SA11	1990	06	13	16402	1420	29	21.00	91	54.40	Y		02
389	SA05	1990	06	13	16402	1800	29	32.93	92	38.38	Y		03
390	SA01	1990	06	13	16402	1822	29	22.70	91	58.57	Y		01
391	SA14	1990	06	13	16403	1649	29	38.60	92	51.60	Y		03
392	SA08	1990	06	13	16403	1730	29	11.70	91	9.60	Y		05

393	SA11	1990	06	13	16403	1735	29	19.20	91	55.60	Y	07	08
394	SA10	1990	06	13	16403	1800	29	6.90	90	11.67	Y		20
395	SA01	1990	06	13	16403	1835	29	30.99	91	59.38	Y		01
396	SA11	1990	06	13	16404	1815	29	11.70	91	9.60	Y	05	07
397	SA01	1990	06	13	16404	2002	29	21.46	92	13.32	Y		01
398	SA12	1990	06	14	16501	600	29	23.67	92	2.34	Y	10	15
399	SA05	1990	06	14	16501	700	29	32.12	92	34.16	Y		04
400	SA08	1990	06	14	16501	930	29	8.20	91	18.50	Y		03

3.1.2 MENHADEN SPOTTER AIRCRAFT, continued:

OBS	PILOT ID CODE	YEAR	MONTH	DAY	OBS NUMBER	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	NO. OF LONGITUDE (MINUTES)	NO. OF SCHOOLS SPECIES	SCHOOLS (MINIMUM)	SCHOOLS (MAXIMUM)
401	SA14	1990	06	14	16501	2020	29	13.30	91	45.20	Y		05
402	SA05	1990	06	14	16502	1730	29	29.73	92	27.18	Y		03
403	SA05	1990	06	15	16601	715	29	27.93	92	22.87	Y		06
404	SA12	1990	06	15	16601	1230	29	37.76	92	47.94	Y	15	20
405	SA01	1990	06	15	16601	1729	29	20.71	92	18.37	Y		04
406	SA01	1990	06	15	16602	1740	29	16.44	92	17.42	Y		03
407	SA05	1990	06	15	16602	1950	29	27.28	92	12.14	Y		04
408	SA11	1990	07	23	20401	601	29	14.20	91	36.40	Y	10	15
409	SA06	1990	07	23	20401	615	29	11.08	91	22.04	Y	06	08
410	SA04	1990	07	23	20401	615	29	27.93	92	22.87	Y	30	40
411	SA05	1990	07	23	20401	850	29	37.43	92	52.83	Y		05
412	SA03	1990	07	23	20401	900	29	31.81	92	18.65	Y		05
413	SA01	1990	07	23	20401	902	29	29.14	92	18.32	Y		07
414	SA10	1990	07	23	20401	1000	29	10.70	91	26.00	Y		10
415	SA14	1990	07	23	20401	1700	29	13.90	91	42.50	Y		05
416	SA08	1990	07	23	20401	1730	29	13.50	91	38.80	Y		04
417	SA11	1990	07	23	20402	609	29	13.50	91	31.70	Y	10	15
418	SA03	1990	07	23	20402	1030	29	34.04	92	34.59	Y	04	06
419	SA05	1990	07	23	20402	1030	29	35.06	92	48.00	Y		04
420	SA01	1990	07	23	20402	1127	29	28.62	92	18.83	Y		02
421	SA10	1990	07	23	20402	1750	29	7.10	91	24.60	Y		04
422	SA14	1990	07	23	20402	1920	29	13.60	91	38.00	Y		11
423	SA11	1990	07	23	20403	615	29	12.20	91	27.10	Y	10	15
424	SA05	1990	07	23	20403	1800	29	29.73	92	27.73	Y		05
425	SA03	1990	07	23	20403	1800	29	30.77	92	28.35	Y	05	08
426	SA01	1990	07	23	20403	1948	29	25.34	92	13.24	Y		04
427	SA11	1990	07	23	20404	618	29	11.50	91	24.40	Y	10	15
428	SA03	1990	07	23	20404	1900	29	29.91	92	28.06	Y	03	06
429	SA01	1990	07	23	20404	2010	29	25.34	92	13.24	Y		10
430	SA11	1990	07	23	20405	701	29	19.90	92	0.80	Y	30	40
431	SA03	1990	07	23	20405	2000	29	25.73	92	20.45	Y	10	15
432	SA11	1990	07	23	20406	1914	29	19.10	92	6.00	Y	25	30
433	SA03	1990	07	23	20406	2020	29	24.28	92	14.74	Y	03	06
434	SA11	1990	07	23	20407	1918	29	18.80	91	58.30	Y		02
435	SA11	1990	07	23	20408	1920	29	18.00	91	53.90	Y		12
436	SA11	1990	07	23	20409	1941	29	13.60	91	38.00	Y		03
437	SA12	1990	07	24	20501	600	29	32.66	92	27.24	Y		01
438	SA11	1990	07	24	20501	601	29	21.50	92	1.20	Y	35	45
439	SA06	1990	07	24	20501	630	29	17.05	91	40.04	Y	03	06
440	SA04	1990	07	24	20501	630	29	27.28	92	12.14	Y	15	20
441	SA02	1990	07	24	20501	645	29	23.66	92	8.01	Y		05
442	SA01	1990	07	24	20501	836	29	22.19	91	50.79	Y		04

443	SA03	1990	07	24	20501	900	29	19.85	91	52.66	Y	03	08
444	SA10	1990	07	24	20501	900	29	22.20	91	51.00	Y		05
445	SA14	1990	07	24	20501	900	29	22.20	91	53.60	Y		10
446	SA05	1990	07	24	20501	900	29	32.12	92	34.16	Y		06
447	SA08	1990	07	24	20501	1000	29	22.20	91	51.00	Y		04
448	SA11	1990	07	24	20502	603	29	19.50	91	55.50	Y	35	45
449	SA04	1990	07	24	20502	700	29	20.53	91	52.60	Y		01
450	SA01	1990	07	24	20502	942	29	23.21	91	51.89	Y		02

3.1.2 MENHADEN SPOTTER AIRCRAFT, continued:

OBS	PILOT ID CODE	YEAR	MONTH	DAY	OBS NUMBER	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	NO. OF SCHOOLS SPECIES	NO. OF SCHOOLS (MINIMUM)	(MAXIMUM)
451	SA08	1990	07	24	20502	1015	29	23.30	91	52.00	Y		01
452	SA10	1990	07	24	20502	1100	29	8.60	91	23.00	Y		06
453	SA05	1990	07	24	20502	1115	29	29.77	92	27.78	Y		05
454	SA12	1990	07	24	20502	1300	29	31.07	92	24.06	Y	25	30
455	SA02	1990	07	24	20502	1305	29	23.80	92	0.37	Y		08
456	SA06	1990	07	24	20502	1530	29	11.05	91	18.09	Y	03	06
457	SA03	1990	07	24	20502	1700	29	30.01	92	23.65	Y	04	08
458	SA14	1990	07	24	20502	1800	29	19.60	91	58.10	Y		04
459	SA05	1990	07	24	20503	.	29	27.93	92	22.87	Y		08
460	SA11	1990	07	24	20503	635	29	19.20	91	52.80	Y	35	45
461	SA01	1990	07	24	20503	1132	29	24.47	92	0.41	Y		01
462	SA12	1990	07	24	20503	1500	29	32.69	92	26.50	Y	15	20
463	SA06	1990	07	24	20503	1600	29	11.03	91	11.00	Y	06	10
464	SA10	1990	07	24	20503	1700	29	11.50	91	18.50	Y		10
465	SA08	1990	07	24	20503	1700	29	17.40	91	54.20	Y		03
466	SA03	1990	07	24	20503	1815	29	31.94	92	30.75	Y	04	08
467	SA14	1990	07	24	20503	1930	29	17.40	91	56.40	Y		07
468	SA11	1990	07	24	20504	651	29	18.40	91	42.40	Y	35	45
469	SA01	1990	07	24	20504	1650	29	28.30	92	3.53	Y		02
470	SA08	1990	07	24	20504	1815	29	8.90	91	18.40	Y		04
471	SA03	1990	07	24	20504	1925	29	24.76	92	8.65	Y	06	10
472	SA14	1990	07	24	20504	2000	29	17.00	91	55.50	Y		20
473	SA11	1990	07	24	20505	1424	29	24.00	91	58.60	Y	35	45
474	SA08	1990	07	24	20505	1830	29	6.90	91	16.20	Y		04
475	SA01	1990	07	24	20505	1949	29	24.73	92	8.48	Y		02
476	SA03	1990	07	24	20505	2000	29	27.41	92	18.51	Y	04	12
477	SA11	1990	07	24	20506	1716	29	10.70	91	18.90	Y	08	12
478	SA01	1990	07	24	20506	2001	29	25.84	92	8.55	Y		04
479	SA11	1990	07	24	20507	1731	29	18.10	91	42.40	Y	75	80
480	SA11	1990	07	24	20508	1759	29	19.90	92	0.80	Y	02	04
481	SA12	1990	07	25	20601	530	29	33.06	92	33.43	Y		01
482	SA06	1990	07	25	20601	615	29	9.03	91	10.07	Y	03	05
483	SA11	1990	07	25	20601	623	29	19.10	91	46.40	Y	30	40
484	SA02	1990	07	25	20601	630	29	29.04	92	12.84	Y		10
485	SA10	1990	07	25	20601	900	29	11.40	91	9.10	Y		06
486	SA05	1990	07	25	20601	945	29	35.06	92	48.00	Y		05
487	SA14	1990	07	25	20601	956	29	19.70	91	41.00	Y		10
488	SA03	1990	07	25	20601	1000	29	34.95	92	38.39	Y	04	06
489	SA08	1990	07	25	20601	1200	29	8.50	90	58.90	Y		04
490	SA13	1990	07	25	20601	1300	29	14.70	91	41.03	Y		05
491	SA01	1990	07	25	20601	1700	29	31.35	92	26.60	Y		02
492	SA11	1990	07	25	20602	712	29	20.20	91	49.50	Y	80	99

493	SA03	1990	07	25	20602	1130	29	31.81	92	18.65	Y	10	15
494	SA05	1990	07	25	20602	1200	29	32.93	92	38.38	Y		04
495	SA14	1990	07	25	20602	1212	29	18.30	91	40.10	Y		03
496	SA06	1990	07	25	20602	1300	29	8.06	91	0.07	Y	03	05
497	SA12	1990	07	25	20602	1400	29	30.74	92	31.35	Y	30	40
498	SA02	1990	07	25	20602	1430	29	31.68	92	31.26	Y		06
499	SA08	1990	07	25	20602	1645	29	6.90	90	58.70	Y		05
500	SA01	1990	07	25	20602	1724	29	30.47	92	26.28	Y		01

3.1.2 MENHADEN SPOTTER AIRCRAFT, continued:

OBS	PILOT ID CODE	YEAR	MONTH	DAY	OBS NUMBER	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	NO. OF LONGITUDE (MINUTES)	NO. OF SCHOOLS SPECIES	SCHOOLS (MINIMUM)	SCHOOLS (MAXIMUM)
501	SA06	1990	07	25	20603	1400	29	12.01	91	15.03	Y	04	06
502	SA11	1990	07	25	20603	1510	29	12.70	91	11.00	Y	10	15
503	SA03	1990	07	25	20603	1630	29	31.01	92	28.96	Y	03	06
504	SA08	1990	07	25	20603	1815	29	11.10	91	15.20	Y		03
505	SA05	1990	07	25	20603	1945	29	29.73	92	27.78	Y		05
506	SA14	1990	07	25	20603	2000	29	11.00	91	6.10	Y		01
507	SA11	1990	07	25	20604	1525	29	11.90	91	13.90	Y	10	15
508	SA06	1990	07	25	20604	1545	29	9.04	91	0.06	Y	08	10
509	SA03	1990	07	25	20604	1745	29	29.91	92	28.06	Y	03	08
510	SA11	1990	07	25	20605	1545	29	0.90	91	0.80	Y	08	10
511	SA03	1990	07	25	20605	2000	29	26.02	92	11.71	Y	10	15
512	SA11	1990	07	25	20606	1710	29	10.10	91	17.00	Y	06	08
513	SA02	1990	07	26	20701	605	29	30.26	92	22.18	Y		01
514	SA06	1990	07	26	20701	630	29	10.04	91	10.06	Y	04	06
515	SA11	1990	07	26	20701	650	29	11.60	91	6.60	Y	08	10
516	SA12	1990	07	26	20701	800	29	36.56	92	47.01	Y	25	30
517	SA08	1990	07	26	20701	900	29	10.30	91	3.80	Y		03
518	SA01	1990	07	26	20701	903	29	11.86	91	8.06	Y		03
519	SA13	1990	07	26	20701	910	29	10.04	91	8.00	Y		10
520	SA03	1990	07	26	20701	930	29	36.52	92	46.26	Y	05	15
521	SA10	1990	07	26	20701	1000	29	10.10	91	3.90	Y		10
522	SA14	1990	07	26	20701	1100	29	8.60	91	12.90	Y		04
523	SA05	1990	07	26	20701	1115	29	37.47	92	52.83	Y		04
524	SA01	1990	07	26	20702	1010	29	11.79	91	7.93	Y		01
525	SA03	1990	07	26	20702	1100	29	34.95	92	38.39	Y	04	08
526	SA08	1990	07	26	20702	1120	29	9.10	91	13.70	Y		03
527	SA05	1990	07	26	20702	1215	29	32.93	92	38.38	Y		05
528	SA12	1990	07	26	20702	1330	29	32.17	92	35.11	Y	25	30
529	SA11	1990	07	26	20702	1331	29	12.50	91	12.60	Y	05	07
530	SA02	1990	07	26	20702	1405	29	32.12	92	34.16	Y		10
531	SA10	1990	07	26	20702	1700	29	10.40	91	3.80	Y		06
532	SA01	1990	07	26	20703	1241	29	11.82	91	7.98	Y		04
533	SA12	1990	07	26	20703	1500	29	36.50	92	47.00	Y	10	15
534	SA03	1990	07	26	20703	1700	29	36.52	92	46.26	Y	05	12
535	SA11	1990	07	26	20703	1735	29	10.30	91	2.30	Y	05	06
536	SA08	1990	07	26	20703	1745	29	11.70	91	22.40	Y		02
537	SA10	1990	07	26	20703	1800	29	11.50	91	9.60	Y		04
538	SA05	1990	07	26	20704	.	29	32.60	92	30.02	Y		03
539	SA01	1990	07	26	20704	1750	29	13.71	91	23.04	Y		03
540	SA11	1990	07	26	20704	1758	29	12.70	91	21.70	Y	07	08
541	SA03	1990	07	26	20704	1830	29	29.24	92	16.61	Y	04	08
542	SA01	1990	07	26	20705	1818	29	13.67	91	23.28	Y		01

543	SA03	1990	07	26	20705	2000	29	31.81	92	18.65	Y	05	09
544	SA01	1990	07	26	20706	2005	29	13.43	91	22.39	Y		02
545	SA04	1990	07	27	20801	615	29	20.81	92	0.86	Y		06
546	SA12	1990	07	27	20801	830	29	38.84	92	55.28	Y	04	05
547	SA03	1990	07	27	20801	1030	29	32.40	92	10.72	Y	10	25
548	SA10	1990	07	27	20801	1045	29	13.40	91	17.00	Y		06
549	SA05	1990	07	27	20801	1130	29	32.93	92	38.38	Y		04
550	SA01	1990	07	27	20801	1659	29	30.22	92	29.15	Y		03

3.1.2 MENHADEN SPOTTER AIRCRAFT, continued:

OBS	PILOT ID CODE	YEAR	MONTH	DAY	OBS NUMBER	LATITUDE TIME	LATITUDE (DEGREES)	LONGITUDE (MINUTES)	LONGITUDE (DEGREES)	NO. OF LONGITUDE (MINUTES)	NO. OF SCHOOLS SPECIES	SCHOOLS (MINIMUM)	SCHOOLS (MAXIMUM)
551	SA05	1990	07	27	20802	.	29	31.43	92	25.23	Y		05
552	SA11	1990	07	27	20802	645	29	11.70	91	5.10	Y	04	06
553	SA12	1990	07	27	20802	845	29	32.17	92	35.11	Y		01
554	SA04	1990	07	27	20802	1400	29	31.08	92	20.15	Y	10	15
555	SA03	1990	07	27	20802	1630	29	33.00	92	30.74	Y	15	25
556	SA01	1990	07	27	20802	1715	29	29.91	92	28.06	Y		03
557	SA12	1990	07	27	20803	1600	29	32.24	92	27.53	Y	05	06
558	SA01	1990	07	27	20803	1750	29	29.72	92	29.91	Y		04
559	SA03	1990	07	27	20803	1830	29	31.77	92	28.56	Y	10	20
560	SA03	1990	07	27	20804	2000	29	31.77	92	28.56	Y	10	20
561	SA02	1991	06	17	16801	810	29	35.11	92	37.25	Y	08	10
562	SA02	1991	06	17	16802	1530	29	48.73	93	22.00	Y	10	15
563	SA03	1991	06	17	16801	910	29	33.60	92	36.40	Y		03
564	SA03	1991	06	17	16802	940	29	35.90	92	40.30	Y		05
565	SA03	1991	06	17	16803	1210	29	38.70	92	48.90	Y	03	05
566	SA03	1991	06	17	16804	1700	29	46.50	93	19.51	Y	06	10
567	SA03	1991	06	17	16805	1730	29	44.30	93	14.00	Y	02	04
568	SA03	1991	06	17	16806	1910	29	43.62	93	16.30	Y	02	03
569	SA04	1991	06	17	16802	800	29	32.93	92	38.38	Y	06	07
570	SA05	1991	06	17	16801	900	29	42.91	93	25.30	Y	08	09
571	SA05	1991	06	17	16802	1215	29	42.20	93	42.60	Y	10	15
572	SA05	1991	06	17	16803	1230	29	40.70	93	45.60	Y		10
573	SA05	1991	06	17	16804	1645	29	38.40	93	43.00	Y	20	25
574	SA05	1991	06	17	16805	1800	29	38.10	93	38.70	Y	10	15
575	SA05	1991	06	17	16806	1830	29	40.80	93	36.20	Y	07	08
576	SA08	1991	06	17	16801	830	29	11.60	91	10.50	Y		02
577	SA08	1991	06	17	16802	1710	29	28.90	92	26.40	Y		05
578	SA08	1991	06	17	16803	1815	29	26.40	92	14.90	Y		03
579	SA10	1991	06	17	16801	700	29	11.80	91	12.80	Y		
580	SA11	1991	06	17	16801	830	29	43.20	93	0.00	Y	06	08
581	SA11	1991	06	17	16802	900	29	42.90	93	25.30	Y	15	25
582	SA11	1991	06	17	16803	1208	29	42.80	93	23.30	Y	08	12
583	SA11	1991	06	17	16804	1221	29	42.20	93	42.60	Y	10	12
584	SA11	1991	06	17	16805	1233	29	40.70	93	45.60	Y	08	10
585	SA11	1991	06	17	16806	1242	29	42.40	93	35.70	Y	08	10
586	SA11	1991	06	17	16807	1650	29	38.40	93	43.00	Y	15	25
587	SA11	1991	06	17	16808	1801	29	38.10	93	38.70	Y	08	10
588	SA11	1991	06	17	16809	1805	29	40.80	93	36.20	Y	04	06
589	SA02	1991	06	18	16901	800	29	43.94	93	14.70	Y		04
590	SA03	1991	06	18	16901	900	29	45.11	93	15.00	Y	07	15
591	SA03	1991	06	18	16902	1000	29	45.88	93	12.70	Y	07	15
592	SA03	1991	06	18	16903	1110	29	43.00	93	3.98	Y	10	15

593	SA03	1991	06	18	16904	1120	29	42.73	92	59.44	Y	05	10
594	SA03	1991	06	18	16905	1210	29	44.51	93	5.81	Y	05	10
595	SA04	1991	06	18	16901	1300	29	41.66	93	1.12	Y		10
596	SA05	1991	06	18	16901	1015	29	43.20	93	0.30	Y	07	10
597	SA05	1991	06	18	16902	1100	29	41.60	93	11.10	Y	20	30
598	SA05	1991	06	18	16903	1130	29	40.80	93	12.80	Y	15	20
599	SA05	1991	06	18	16904	1150	29	40.40	93	11.40	Y	10	15
600	SA08	1991	06	18	16901	915	29	36.50	92	44.80	Y		05

3.1.2 MENHADEN SPOTTER AIRCRAFT, continued:

OBS	PILOT ID CODE	YEAR	MONTH	DAY	OBS NUMBER	TIME	LATITUDE (DEGREES)	LONGITUDE (MINUTES)	LONGITUDE (DEGREES)	NO. OF LONGITUDE (MINUTES)	NO. OF SCHOOLS SPECIES	SCHOOLS (MINIMUM)	SCHOOLS (MAXIMUM)
601	SA08	1991	06	18	16902	1000	29	41.60	93	11.20	Y		10
602	SA10	1991	06	18	16901	1310	29	37.90	92	51.90	Y	06	10
603	SA10	1991	06	18	16902	1350	29	40.80	92	55.70	Y	10	12
604	SA10	1991	06	18	16903	1430	29	41.60	93	6.40	Y	10	20
605	SA11	1991	06	18	16901	1032	29	43.20	93	0.30	Y	06	08
606	SA11	1991	06	18	16902	1045	29	41.60	93	11.20	Y	10	25
607	SA01	1991	06	19	17004	1801	29	29.50	92	26.90	Y		08
608	SA01	1991	06	19	17005	1850	29	30.01	92	27.82	Y		05
609	SA01	1991	06	19	17006	1930	29	29.02	92	26.98	Y		05
610	SA01	1991	06	19	17007	1955	29	29.61	92	26.73	Y		04
611	SA01	1991	06	19	17008	2025	29	29.73	92	27.78	Y		03
612	SA03	1991	06	19	17001	1030	29	46.90	93	29.41	Y	15	20
613	SA03	1991	06	19	17002	1730	29	40.90	92	59.12	Y	05	10
614	SA03	1991	06	19	17003	1800	29	39.50	92	54.90	Y	05	10
615	SA03	1991	06	19	17004	2000	29	34.00	92	41.34	Y	02	05
616	SA04	1991	06	19	17001	800	29	32.93	92	38.38	Y	10	15
617	SA08	1991	06	19	17001	930	29	36.60	92	48.30	Y		10
618	SA08	1991	06	19	17002	945	29	34.30	92	39.50	Y		05
619	SA08	1991	06	19	17003	1015	29	29.10	92	22.70	Y		04
620	SA08	1991	06	19	17004	1045	29	27.40	92	17.50	Y		02
621	SA08	1991	06	19	17005	1700	29	40.70	93	46.80	Y		04
622	SA10	1991	06	19	17001	1320	29	43.10	93	39.00	Y	04	08
623	SA10	1991	06	19	17002	1500	29	40.30	93	41.00	Y	10	15
624	SA11	1991	06	19	17005	1115	29	15.20	91	17.60	Y	04	06
625	SA11	1991	06	19	17013	2036	29	26.80	92	11.00	Y	25	30
626	SA10	1991	06	20	17101	650	29	40.20	93	47.30	Y	10	15
627	SA10	1991	06	20	17102	1300	29	40.10	93	42.30	Y	10	12
628	SA11	1991	06	20	17101	846	29	39.20	93	48.00	Y	15	30
629	SA11	1991	06	20	17102	1957	29	26.80	92	11.00	Y		04
630	SA11	1991	06	20	17103	2016	29	27.90	92	22.90	Y	08	10
631	SA00	1991	06	20	17101	915	29	38.40	93	53.70	Y		
632	SA00	1991	06	20	17102	930	30	40.00	93	50.00	Y		
633	SA00	1991	06	20	17103	930	30	45.00	93	30.00	Y		
634	SA00	1991	06	20	17104	940	29	38.40	93	56.90	Y		
635	SA00	1991	06	20	17105	1000	30	40.00	93	50.00	Y		
636	SA00	1991	06	20	17106	1000	30	40.00	94	2.00	Y		
637	SA00	1991	06	20	17107	1030	29	38.60	93	51.20	Y		
638	SA00	1991	06	20	17108	1030	29	38.00	93	51.20	Y		
639	SA00	1991	06	20	17109	1030	29	38.00	93	51.20	Y		
640	SA00	1991	06	20	17110	1115	29	38.50	93	51.50	Y		
641	SA00	1991	06	20	17111	1340	29	38.20	93	53.00	Y		
642	SA00	1991	06	20	17112	1350	29	38.20	93	53.00	Y		

643	SA00	1991	06	20	17113	1405	29	38.20	93	53.00	Y
644	SA00	1991	06	20	17114	1440	29	36.00	93	50.50	Y
645	SA00	1991	06	20	17115	1515	29	37.10	93	50.40	Y
646	SA00	1991	06	20	17116	1600	29	36.00	93	50.80	Y
647	SA00	1991	06	20	17117	1715	29	36.50	93	50.30	Y
648	SA00	1991	06	20	17118	1745	29	35.00	93	50.80	Y
649	SA00	1991	06	20	17119	1800	29	35.30	93	50.40	Y
650	SA00	1991	06	20	17120	1945	29	34.60	93	54.10	Y

3.1.2 MENHADEN SPOTTER AIRCRAFT, continued:

OBS	PILOT ID CODE	YEAR	MONTH	DAY	OBS NUMBER	LATITUDE TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	NO. OF LONGITUDE (MINUTES)	NO. OF SCHOOLS SPECIES	SCHOOLS (MINIMUM)	SCHOOLS (MAXIMUM)
651	SA15	1991	06	20	17101	1400	29	39.00	93	56.40	Y		
652	SA15	1991	06	20	17102	1418	29	37.30	93	55.70	Y		
653	SA00	1991	06	21	17201	710	29	38.80	93	54.00	Y		
654	SA00	1991	06	21	17202	810	29	38.00	93	53.00	Y		
655	SA00	1991	06	21	17203	845	29	38.20	93	53.20	Y		
656	SA05	1991	06	21	17201	.	29	44.73	93	13.00	Y		
657	SA05	1991	06	21	17202	.	29	48.73	93	21.77	Y		

3.1.3 MENHADEN FISHING VESSELS

OBS	PLATFORM CODE	YEAR	MONTH	OBS DAY	TIME NUMBER	LATITUDE OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
1	FV01	1989	5	8	12801	1025	29	35.06	92	48.00	Y	100
2	FV01	1989	5	8	12802	1140	29	35.06	92	48.00	Y	50
3	FV01	1989	5	8	12803	1320	29	35.06	92	48.00	Y	50
4	FV01	1989	5	8	12804	1730	29	27.28	92	12.14	Y	100
5	FV01	1989	5	8	12805	2000	29	19.59	92	10.69	Y	50
6	FV01	1989	5	10	13001	1700	29	28.66	92	20.10	Y	35
7	FV01	1989	5	10	13002	1800	29	27.28	92	12.14	Y	50
8	FV01	1989	5	10	13003	1915	29	28.66	92	20.10	Y	120
9	FV01	1989	5	11	13101	.	29	27.28	92	12.14	Y	40
10	FV01	1989	5	11	13102	1633	29	28.66	92	20.10	Y	100
11	FV01	1989	5	11	13103	1745	29	28.66	92	20.10	Y	35
12	FV02	1989	5	8	12801	900	29	36.06	92	44.19	Y	70
13	FV02	1989	5	8	12802	1000	29	34.94	92	40.53	Y	180
14	FV02	1989	5	8	12803	1105	29	34.74	92	39.58	Y	5
15	FV02	1989	5	8	12804	1410	29	32.60	92	34.11	Y	140
16	FV02	1989	5	8	12805	1745	29	23.68	92	9.02	Y	125
17	FV02	1989	5	8	12806	1940	29	23.89	92	14.77	Y	30
18	FV02	1989	5	10	13001	1150	29	32.48	92	33.59	Y	30
19	FV02	1989	5	11	13101	1835	29	28.49	92	29.44	Y	50
20	FV02	1989	5	11	13102	1920	29	28.60	92	29.20	Y	45
21	FV02	1989	5	12	13202	1515	29	9.10	91	29.15	Y	40
22	FV02	1989	5	12	13203	1610	29	12.24	91	28.49	Y	85
23	FV03	1989	5	8	12801	900	29	36.44	92	47.89	Y	30
24	FV03	1989	5	8	12802	1000	29	35.31	92	44.30	Y	160
25	FV03	1989	5	8	12803	1115	29	33.82	92	42.13	Y	125
26	FV03	1989	5	8	12804	1250	29	32.99	92	43.26	Y	125
27	FV03	1989	5	8	12805	1455	29	31.68	92	33.71	Y	65
28	FV03	1989	5	8	12806	1930	29	25.08	92	19.28	Y	150
29	FV03	1989	5	10	13001	1105	29	32.48	92	39.25	Y	75
30	FV03	1989	5	10	13002	1605	29	31.31	92	36.67	Y	75
31	FV03	1989	5	10	13003	1720	29	29.23	92	30.74	Y	30
32	FV03	1989	5	10	13004	1810	29	29.17	92	32.22	Y	115
33	FV03	1989	5	10	13005	1910	29	28.36	92	32.78	Y	110
34	FV03	1989	5	10	13006	2010	29	26.70	92	32.76	Y	50
35	FV03	1989	5	11	13101	1425	29	23.30	92	19.54	Y	45
36	FV03	1989	5	11	13102	1610	29	21.11	92	19.42	Y	100
37	FV03	1989	5	11	13103	1710	29	21.06	92	19.57	Y	100
38	FV03	1989	5	11	13104	1810	29	21.04	92	19.80	Y	65

39	FV04	1989	5	8	12801	918	29	20.31	92	0.31	Y	125
40	FV04	1989	5	8	12802	948	29	10.05	92	10.20	Y	50
41	FV04	1989	5	8	12803	1451	29	30.66	92	29.53	Y	40
42	FV04	1989	5	8	12804	1733	29	27.28	92	12.14	Y	175
43	FV04	1989	5	8	12805	1928	29	27.28	92	12.14	Y	100
44	FV04	1989	5	10	13001	1652	29	27.93	92	22.87	Y	45
45	FV04	1989	5	10	13002	1755	29	27.93	92	22.87	Y	110

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	OBS DAY	TIME NUMBER	LATITUDE OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
46	FV04	1989	5	10	13003	1910	29	27.93	92	22.87	Y	100
47	FV04	1898	5	10	13004	2016	29	27.93	92	22.87	Y	40
48	FV04	1989	5	11	13101	1410	29	27.93	92	22.87	Y	50
49	FV04	1989	5	11	13102	1518	29	27.28	92	12.14	Y	25
50	FV04	1989	5	11	13103	1640	29	27.28	92	12.14	Y	60
51	FV04	1989	5	11	13104	1834	29	19.59	92	10.69	Y	20
52	FV04	1989	5	11	13105	1924	29	19.59	92	10.69	Y	50
53	FV05	1989	5	8	12801	855	29	30.33	92	49.67	Y	125
54	FV05	1989	5	8	12802	1055	29	32.39	92	40.15	Y	125
55	FV05	1989	5	8	12803	1500	29	30.02	92	20.40	Y	75
56	FV05	1989	5	10	13001	1700	29	30.45	92	19.79	Y	70
57	FV05	1989	5	10	13002	1750	29	29.17	92	17.62	Y	50
58	FV05	1989	5	10	13003	1835	29	28.58	92	16.30	Y	40
59	FV05	1989	5	10	13004	1918	29	28.67	92	17.57	Y	40
60	FV05	1989	5	10	13005	2020	29	28.29	92	22.08	Y	.
61	FV05	1989	5	11	13101	1415	29	25.86	92	18.72	Y	40
62	FV05	1989	5	11	13102	1510	29	27.99	92	18.12	Y	40
63	FV05	1989	5	11	13103	1655	29	23.89	92	18.89	Y	75
64	FV05	1989	5	11	13104	1740	29	28.88	92	19.39	Y	35
65	FV05	1989	5	11	13105	1830	29	22.14	92	19.59	Y	20
66	FV05	1989	5	11	13106	2010	29	23.13	92	11.59	Y	15
67	FV06	1989	5	8	12801	1050	29	33.02	92	28.26	Y	40
68	FV06	1989	5	8	12802	1520	29	25.52	92	12.87	Y	300
69	FV06	1989	5	8	12803	1740	29	23.12	92	8.90	Y	100
70	FV06	1989	5	10	13001	1656	29	28.82	92	28.30	Y	40
71	FV06	1989	5	10	13002	1830	29	24.59	92	16.55	Y	100
72	FV06	1989	5	10	13003	1943	29	23.27	92	15.03	Y	40
73	FV06	1989	5	11	13101	1355	29	22.48	92	17.53	Y	40
74	FV06	1989	5	11	13102	1500	29	24.14	92	15.66	Y	60
75	FV06	1989	5	11	13103	1645	29	19.73	92	18.43	Y	75
76	FV06	1989	5	11	13104	1745	29	19.07	92	17.94	Y	40
77	FV06	1989	5	11	13105	1905	29	18.85	92	11.55	Y	40
78	FV06	1989	5	12	13201	1140	29	14.04	91	35.93	Y	.
79	FV06	1989	5	12	13202	1400	29	12.55	91	33.49	Y	.
80	FV06	1989	5	12	13203	1440	29	13.24	91	33.87	Y	.
81	FV06	1989	5	12	13204	1555	29	10.44	91	30.48	Y	.
82	FV06	1989	5	12	13205	1700	29	10.92	91	28.51	Y	.
83	FV07	1989	5	8	12801	940	29	35.05	92	39.18	Y	50

84	FV07	1989	5	8	12802	1025	29	35.12	92	39.00	Y	75
85	FV07	1989	5	8	12803	1130	29	34.14	92	38.48	Y	35
86	FV07	1989	5	8	12804	1410	29	34.47	92	37.41	Y	30
87	FV07	1989	5	8	12805	1820	29	27.49	92	23.13	Y	200
88	FV07	1989	5	10	13001	1605	29	31.95	92	35.05	Y	50
89	FV07	1989	5	10	13002	1725	29	29.90	92	27.17	Y	50
90	FV07	1989	5	10	13003	1830	29	29.85	92	30.02	Y	35

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	OBS DAY	TIME NUMBER	LATITUDE OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
91	FV07	1989	5	10	13004	1900	29	28.96	92	30.34	Y	100
92	FV07	1989	5	11	13101	1445	29	25.23	92	16.29	Y	70
93	FV07	1989	5	11	13102	1640	29	20.34	92	18.94	Y	150
94	FV07	1989	5	11	13103	1745	29	20.44	92	21.58	Y	50
95	FV07	1989	5	11	13104	1850	29	18.12	92	18.96	Y	50
96	FV08	1989	5	8	12801	905	29	37.10	92	46.73	Y	95
97	FV08	1989	5	8	12802	1027	29	35.36	92	41.60	Y	25
98	FV08	1989	5	8	12803	1129	29	33.60	92	39.79	Y	130
99	FV08	1989	5	8	12804	1416	29	32.49	92	34.88	Y	125
100	FV08	1989	5	8	12805	1815	29	24.11	92	8.67	Y	125
101	FV08	1989	5	8	12806	2000	29	22.31	92	13.81	Y	60
102	FV08	1989	5	9	12901	1115	29	32.05	92	31.97	Y	30
103	FV08	1989	5	9	12902	1543	29	32.06	92	31.97	Y	25
104	FV08	1989	5	9	12903	1709	29	29.76	92	27.13	Y	65
105	FV08	1989	5	9	12904	1819	29	29.79	92	30.18	Y	125
106	FV08	1989	5	9	12905	1924	29	27.87	92	30.51	Y	150
107	FV08	1989	5	10	13001	1406	29	23.93	92	17.82	Y	30
108	FV08	1989	5	10	13002	1525	29	27.06	92	17.04	Y	20
109	FV08	1989	5	10	13003	1637	29	27.46	92	22.38	Y	50
110	FV08	1989	5	11	13101	1545	29	26.20	92	18.06	Y	30
111	FV09	1989	5	8	12801	1030	29	34.63	92	40.83	Y	190
112	FV09	1989	5	8	12802	1135	29	33.32	92	39.86	Y	110
113	FV09	1989	5	8	12803	1305	29	33.46	92	40.74	Y	100
114	FV09	1989	5	8	12804	1430	29	32.11	92	32.48	Y	60
115	FV09	1989	5	8	12805	1745	29	26.29	92	12.55	Y	135
116	FV09	1989	5	8	12806	1905	29	25.65	92	15.10	Y	200
117	FV09	1989	5	10	13001	1630	29	28.01	92	18.60	Y	15
118	FV09	1989	5	10	13002	1740	29	25.23	92	15.09	Y	50
119	FV09	1989	5	10	13003	1830	29	25.68	92	16.71	Y	70
120	FV09	1989	5	10	13004	1935	29	25.31	92	20.49	Y	20
121	FV09	1989	5	11	13101	1325	29	24.47	92	18.26	Y	40
122	FV09	1989	5	11	13102	1425	29	25.51	92	16.79	Y	65
123	FV09	1989	5	11	13103	1615	29	20.74	92	18.12	Y	125
124	FV09	1989	5	11	13104	1720	29	19.69	92	18.77	Y	45
125	FV09	1989	5	11	13105	1815	29	18.83	92	18.40	Y	50
126	FV09	1989	5	11	13106	1910	29	18.49	92	20.04	Y	70
127	FV09	1989	5	12	13201	1615	29	23.12	92	15.07	Y	30
128	FV10	1989	5	8	12801	800	29	10.10	91	20.75	Y	25

129	FV10	1989	5	8	12802	1700	29	3.24	91	9.85	Y	50
130	FV10	1989	5	11	13101	1150	29	3.63	90	31.77	Y	25
131	FV10	1989	5	11	13102	1505	28	59.77	91	4.00	Y	100
132	FV10	1989	5	11	13103	1735	29	8.30	91	18.50	Y	150
133	FV10	1989	5	11	13104	1845	29	8.53	91	20.15	Y	60
134	FV10	1989	5	11	13105	1955	29	7.00	91	23.15	Y	40
135	FV10	1989	5	12	13201	1430	29	1.10	91	17.90	Y	45

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	OBS DAY	TIME NUMBER	LATITUDE OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
136	FV11	1989	5	8	12801	1700	29	4.85	91	8.61	Y	10
137	FV11	1989	5	11	13101	1145	29	3.51	90	31.41	Y	25
138	FV11	1989	5	11	13102	1315	29	2.40	90	27.51	Y	250
139	FV11	1989	5	11	13103	1440	29	2.46	90	27.52	Y	200
140	FV11	1989	5	11	13104	1615	29	3.14	90	30.40	Y	150
141	FV11	1989	5	11	13105	1730	29	3.36	90	30.38	Y	65
142	FV12	1989	5	8	12801	1000	29	4.32	91	9.10	Y	55
143	FV12	1989	5	8	12802	1620	29	5.12	91	8.11	Y	35
144	FV12	1989	5	11	13101	1230	29	5.09	91	17.10	Y	150
145	FV12	1989	5	11	13102	1405	29	5.25	91	17.20	Y	90
146	FV12	1989	5	11	13103	1525	29	6.12	91	18.03	Y	40
147	FV12	1989	5	11	13104	1700	29	5.14	91	18.20	Y	50
148	FV12	1989	5	11	13105	1800	29	5.16	91	18.23	Y	35
149	FV12	1989	5	11	13106	1900	29	5.16	91	18.23	Y	125
150	FV12	1989	5	12	13201	1450	29	0.56	91	17.48	Y	25
151	FV12	1989	5	22	14201	1450	29	6.27	91	2.01	Y	30
152	FV12	1989	5	22	14202	1635	29	5.55	91	4.89	Y	70
153	FV12	1989	5	22	14203	1800	29	5.34	91	8.12	Y	50
154	FV12	1989	5	22	14204	1905	29	4.56	91	8.79	Y	55
155	FV12	1989	5	23	14301	1835	29	1.01	90	53.90	Y	5
156	FV13	1989	5	8	12801	750	29	9.83	91	20.02	Y	10
157	FV13	1989	5	8	12802	955	29	4.38	91	5.26	Y	60
158	FV13	1989	5	8	12803	1033	29	4.27	91	4.48	Y	30
159	FV13	1989	5	8	12804	1217	29	5.63	91	12.34	Y	60
160	FV13	1989	5	8	12805	1530	29	5.35	91	10.71	Y	80
161	FV13	1989	5	8	12806	1747	29	0.79	91	3.67	Y	40
162	FV13	1989	5	11	13101	1210	29	4.59	91	16.77	Y	100
163	FV13	1989	5	11	13102	1340	29	5.04	91	16.30	Y	50
164	FV13	1989	5	11	13104	1525	29	5.91	91	17.70	Y	75
165	FV13	1989	5	11	13105	1610	29	6.74	91	18.16	Y	80
166	FV13	1989	5	11	13106	1700	29	7.89	91	19.10	Y	35
167	FV13	1989	5	11	13107	1750	29	8.19	91	19.18	Y	60
168	FV13	1989	5	11	13108	1840	29	8.41	91	20.01	Y	20
169	FV13	1989	5	11	13109	1945	29	6.42	91	21.73	Y	70
170	FV13	1989	5	12	13201	1430	29	0.98	91	18.02	Y	20
171	FV13	1989	5	22	14201	1530	29	6.33	91	4.24	Y	40
172	FV13	1989	5	22	14202	1620	29	5.30	91	4.83	Y	250
173	FV14	1989	5	8	12801	830	29	10.00	91	6.42	Y	10

174	FV14	1989	5	8	12802	1115	29	4.90	91	6.42	Y	30
175	FV14	1989	5	11	13101	815	29	0.15	90	53.34	Y	10
176	FV14	1989	5	11	13102	1115	29	4.59	90	32.58	Y	10
177	FV14	1989	5	11	13103	1305	29	3.05	90	27.03	Y	100
178	FV14	1989	5	11	13104	1415	29	2.53	90	27.08	Y	200
179	FV14	1989	5	11	13105	1535	29	2.30	90	28.43	Y	200
180	FV14	1989	5	11	13106	1700	29	3.68	90	30.87	Y	35

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	OBS DAY	TIME NUMBER	LATITUDE OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
181	FV15	1989	5	8	12801	810	29	10.77	91	20.22	Y	18
182	FV15	1989	5	8	12802	1300	29	10.20	91	22.17	Y	99
183	FV15	1989	5	8	12803	1650	29	3.79	91	9.57	Y	54
184	FV15	1989	5	11	13101	1210	29	5.07	91	18.47	Y	54
185	FV15	1989	5	11	13102	1300	29	4.86	91	17.75	Y	117
186	FV15	1989	5	11	13103	1350	29	5.34	91	18.48	Y	81
187	FV15	1989	5	11	13104	1510	29	6.55	91	17.25	Y	108
188	FV15	1989	5	11	13105	1620	29	7.84	91	17.26	Y	63
189	FV15	1989	5	11	13106	1650	29	7.95	91	16.79	Y	72
190	FV15	1989	5	11	13107	1740	29	8.01	91	16.14	Y	54
191	FV15	1989	5	11	13108	1820	29	8.90	91	15.31	Y	36
192	FV15	1989	5	11	13109	1920	29	7.44	91	22.71	Y	36
193	FV16	1989	5	8	12801	1030	29	7.73	91	19.45	Y	20
194	FV16	1989	5	8	12802	1450	29	7.73	91	19.42	Y	50
195	FV16	1989	5	8	12803	1525	29	3.16	91	4.78	Y	100
196	FV16	1989	5	11	13101	1205	29	4.06	91	17.82	Y	100
197	FV16	1989	5	11	13102	1320	29	4.81	91	15.96	Y	100
198	FV16	1989	5	11	13103	1425	29	5.62	91	17.14	Y	50
199	FV16	1989	5	11	13104	1525	29	5.69	91	17.73	Y	100
200	FV16	1989	5	11	13105	1630	29	6.99	91	18.68	Y	50
201	FV16	1989	5	11	13106	1730	29	7.99	91	18.81	Y	100
202	FV16	1989	5	11	13107	1830	29	8.57	91	18.64	Y	25
203	FV17	1989	5	8	12801	1115	29	5.74	91	3.75	Y	30
204	FV17	1989	5	11	13101	815	29	0.25	90	53.92	Y	35
205	FV17	1989	5	11	13102	1120	29	3.51	90	30.98	Y	5
206	FV17	1989	5	11	13103	1203	29	3.65	90	31.47	Y	8
207	FV17	1989	5	11	13104	1517	28	59.89	91	3.71	Y	35
208	FV17	1989	5	11	13105	1740	29	8.07	91	15.72	Y	65
209	FV17	1989	5	11	13106	1920	29	7.43	91	22.02	Y	150
210	FV17	1989	5	12	13201	1410	29	1.07	91	17.59	Y	20
211	FV18	1989	5	8	12801	1710	29	9.30	91	8.39	Y	90
212	FV18	1989	5	11	13101	1213	29	4.53	91	17.58	Y	75
213	FV18	1989	5	11	13102	1315	29	5.16	91	17.64	Y	50
214	FV18	1989	5	11	13103	1405	29	5.60	91	17.05	Y	150
215	FV18	1989	5	11	13104	1505	29	5.65	91	17.88	Y	100
216	FV18	1989	5	11	13105	1620	29	7.14	91	17.65	Y	125
217	FV18	1989	5	11	13106	1720	29	8.31	91	17.94	Y	75
218	FV18	1989	5	11	13108	1930	29	7.29	91	22.16	Y	75

219	FV18	1989	5	22	14201	1435	29	6.56	91	2.10	Y	50
220	FV18	1989	5	22	14202	1545	29	6.34	91	4.45	Y	50
221	FV18	1989	5	22	14203	1810	29	5.04	91	9.53	Y	40
222	FV18	1989	5	22	14204	1915	29	4.52	91	9.05	Y	250
223	FV18	1989	5	23	14301	1240	29	1.72	91	1.41	Y	50
224	FV18	1989	5	23	14302	1340	29	1.94	91	0.07	Y	50
225	FV18	1989	5	23	14303	1800	29	1.43	90	54.38	Y	30

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	OBS DAY	TIME NUMBER	LATITUDE OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
226	FV01	1989	8	28	24001	730	29	15.73	91	32.03	Y	75
227	FV01	1989	8	28	24002	855	29	18.48	91	33.70	Y	60
228	FV01	1989	8	28	24003	1010	29	18.96	91	34.13	Y	40
229	FV01	1989	8	28	24004	1105	29	17.98	91	34.47	Y	65
230	FV01	1989	8	28	24005	1510	29	16.80	91	22.71	Y	5
231	FV01	1989	8	29	24101	740	29	24.01	92	4.88	Y	5
232	FV01	1989	8	29	24102	1145	29	27.54	91	46.65	Y	400
233	FV01	1989	8	29	24103	1445	29	26.40	91	48.21	Y	35
234	FV01	1989	8	29	24104	1550	29	25.98	91	49.18	Y	200
235	FV01	1989	8	29	24105	1730	29	23.81	91	49.38	Y	95
236	FV01	1989	8	29	24106	1830	29	22.48	91	50.03	Y	40
237	FV01	1989	8	30	24201	1715	29	27.32	92	8.67	Y	180
238	FV01	1989	8	30	24202	1815	29	27.33	92	8.15	Y	0
239	FV01	1989	8	31	24301	755	29	24.02	91	50.64	Y	225
240	FV01	1989	8	31	24302	950	29	27.11	91	48.47	Y	75
241	FV01	1989	8	31	24303	1820	29	20.09	91	47.16	Y	45
242	FV01	1989	8	31	24304	1925	29	18.82	91	50.50	Y	45
243	FV01	1989	9	1	24401	720	29	22.45	91	44.46	Y	30
244	FV01	1989	9	1	24402	1135	29	20.18	92	4.03	Y	30
245	FV01	1989	9	1	24403	1315	29	22.24	92	4.00	Y	20
246	FV01	1989	9	1	24404	1445	29	19.93	92	0.65	Y	65
247	FV01	1989	9	1	24405	1605	29	21.93	92	4.84	Y	110
248	FV01	1989	9	1	24406	1650	29	22.13	92	4.45	Y	110
249	FV01	1989	9	1	24407	1755	29	19.24	92	4.47	Y	40
250	FV01	1989	9	4	24701	715	29	26.96	91	57.40	Y	200
251	FV01	1989	9	4	24702	910	29	26.99	91	59.16	Y	40
252	FV01	1989	9	4	24703	1255	29	33.43	92	33.32	Y	25
253	FV01	1989	9	4	24704	1405	29	33.00	92	33.62	Y	20
254	FV01	1989	9	4	24705	1515	29	34.74	92	38.62	Y	60
255	FV01	1989	9	4	24706	1620	29	34.00	92	39.19	Y	10
256	FV01	1989	9	5	24801	1515	29	40.42	92	55.55	Y	20
257	FV01	1989	9	5	24802	1615	29	40.51	92	56.86	Y	20
258	FV01	1989	9	5	24803	1745	29	41.57	93	2.15	Y	65
259	FV01	1989	9	5	24804	1925	29	40.57	93	3.67	Y	40
260	FV01	1989	9	6	24901	1550	29	18.35	92	1.13	Y	30
261	FV01	1989	9	6	24902	1820	29	16.76	92	1.79	Y	100
262	FV01	1989	9	7	25001	1505	29	20.90	92	11.83	Y	60
263	FV01	1989	9	7	25002	1550	29	21.46	92	12.24	Y	25

264	FV01	1989	9	7	25003	1725	29	23.38	92	19.88	Y	25
265	FV01	1989	9	7	25004	1900	29	21.24	92	16.48	Y	25
266	FV01	1989	9	7	25005	1955	29	19.79	92	15.54	Y	25
267	FV02	1989	8	28	24001	720	29	21.59	91	44.63	Y	300
268	FV02	1989	8	28	24002	950	29	19.52	91	33.66	Y	50
269	FV02	1989	8	28	24003	1135	29	20.00	91	33.86	Y	55
270	FV02	1989	8	28	24004	1305	29	20.74	91	31.20	Y	120

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	OBS DAY	TIME NUMBER	LATITUDE OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
271	FV02	1989	8	28	24005	1520	29	18.46	91	36.67	Y	15
272	FV02	1989	8	28	24006	1755	29	14.97	91	32.80	Y	30
273	FV02	1989	8	28	24007	1945	29	9.28	91	31.26	Y	15
274	FV02	1989	8	29	24101	1340	29	33.73	92	37.62	Y	50
275	FV02	1989	8	29	24102	1445	29	33.33	92	36.82	Y	35
276	FV02	1989	8	29	24103	1645	29	38.57	92	50.85	Y	70
277	FV02	1989	8	29	24104	1900	29	32.78	92	36.81	Y	15
278	FV02	1989	8	29	24105	1940	29	32.46	92	36.05	Y	200
279	FV02	1989	8	30	24201	940	29	32.47	92	33.51	Y	275
280	FV02	1989	8	30	24202	1045	29	32.48	92	30.64	Y	425
281	FV02	1989	8	30	24203	1210	29	31.95	92	29.46	Y	30
282	FV02	1989	8	30	24204	1310	29	33.07	92	30.70	Y	10
283	FV02	1989	8	30	24205	1505	29	29.16	92	20.67	Y	35
284	FV02	1989	8	30	24206	1545	29	28.98	92	20.42	Y	35
285	FV02	1989	8	31	24301	915	29	24.55	91	59.88	Y	25
286	FV02	1989	8	31	24302	1630	29	29.93	91	52.88	Y	35
287	FV02	1989	8	31	24303	1810	29	25.57	91	43.74	Y	10
288	FV02	1989	9	1	24401	720	29	22.51	91	41.12	Y	5
289	FV02	1989	9	1	24402	1040	29	20.34	92	3.77	Y	75
290	FV02	1989	9	1	24403	1125	29	19.98	92	3.02	Y	10
291	FV02	1989	9	1	24404	1345	29	29.56	92	18.61	Y	30
292	FV02	1989	9	1	24405	1430	29	29.72	92	17.84	Y	80
293	FV02	1989	9	1	24406	1520	29	29.55	92	16.97	Y	70
294	FV02	1989	9	1	24407	1605	29	29.77	92	15.09	Y	80
295	FV02	1989	9	1	24408	1700	29	30.37	92	13.59	Y	65
296	FV02	1989	9	4	24701	905	29	35.15	92	40.44	Y	260
297	FV02	1989	9	4	24702	1035	29	36.52	92	44.45	Y	70
298	FV02	1989	9	4	24703	1115	29	36.79	92	45.06	Y	50
299	FV02	1989	9	4	24704	1205	29	37.02	92	46.89	Y	35
300	FV02	1989	9	4	24705	1240	29	37.42	92	47.77	Y	50
301	FV02	1989	9	4	24706	1315	29	37.68	92	48.32	Y	50
302	FV02	1989	9	4	24707	1435	29	35.77	92	42.44	Y	35
303	FV02	1989	9	4	24708	1520	29	35.96	92	42.05	Y	155
304	FV02	1989	9	4	24709	1620	29	36.07	92	42.39	Y	15
305	FV02	1989	9	4	24710	1740	29	37.75	92	46.92	Y	25
306	FV02	1989	9	5	24801	1030	29	34.10	92	34.86	Y	35
307	FV02	1989	9	5	24802	1445	29	40.43	92	57.58	Y	5
308	FV02	1989	9	6	24901	1300	29	13.74	91	35.35	Y	85

309	FV02	1989	9	6	24902	1455	29	10.30	91	23.74	Y	40
310	FV02	1989	9	6	24903	1655	29	10.16	91	27.97	Y	60
311	FV02	1989	9	6	24904	1800	29	11.88	91	33.78	Y	20
312	FV02	1989	9	6	24905	1900	29	11.57	91	34.11	Y	80
313	FV02	1989	9	7	25001	1540	29	17.31	91	50.82	Y	45
314	FV02	1989	9	7	25002	1715	29	16.62	91	43.13	Y	60
315	FV02	1989	9	7	25003	1805	29	15.39	91	41.50	Y	30

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	OBS DAY	TIME NUMBER	LATITUDE OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
316	FV02	1989	9	7	25004	1910	29	15.74	91	44.58	Y	125
317	FV02	1989	9	8	25101	1030	29	24.36	92	15.22	Y	6
318	FV03	1989	8	28	24001	625	29	16.96	91	38.28	Y	900
319	FV03	1989	8	28	24002	925	29	17.58	91	36.86	Y	65
320	FV03	1989	8	29	24101	930	29	24.40	91	56.94	Y	50
321	FV03	1989	8	29	24102	1415	29	31.66	92	38.85	Y	100
322	FV03	1989	8	29	24103	1510	29	31.73	92	38.15	Y	150
323	FV03	1989	8	29	24104	1605	29	31.27	92	37.68	Y	75
324	FV03	1989	8	29	24105	1700	29	31.20	92	36.69	Y	100
325	FV03	1989	8	29	24106	1740	29	31.04	92	36.18	Y	65
326	FV03	1989	8	29	24107	1840	29	31.43	92	39.94	Y	325
327	FV03	1989	8	29	24108	2000	29	30.17	92	37.75	Y	110
328	FV03	1989	8	30	24201	1145	29	30.31	92	30.38	Y	85
329	FV03	1989	8	30	24202	1305	29	31.65	92	32.00	Y	20
330	FV03	1989	8	30	24203	1620	29	26.16	92	9.86	Y	90
331	FV03	1989	8	30	24204	1720	29	24.25	92	9.17	Y	10
332	FV03	1989	8	30	24205	1845	29	23.25	92	1.72	Y	90
333	FV03	1989	8	30	24206	1940	29	22.23	92	2.90	Y	125
334	FV03	1989	8	31	24301	925	29	25.76	92	4.21	Y	50
335	FV03	1989	8	31	24302	1040	29	25.24	92	1.92	Y	50
336	FV03	1989	8	31	24303	1635	29	21.84	91	55.48	Y	65
337	FV03	1989	8	31	24304	1735	29	20.56	91	52.84	Y	5
338	FV03	1989	8	31	24305	1825	29	19.69	91	50.79	Y	75
339	FV03	1989	8	31	24306	1935	29	17.84	91	53.25	Y	50
340	FV03	1989	9	1	24401	730	29	22.22	91	46.91	Y	50
341	FV03	1989	9	1	24402	915	29	23.90	91	47.01	Y	65
342	FV03	1989	9	1	24403	1220	29	20.66	92	6.29	Y	25
343	FV03	1989	9	1	24404	1500	29	18.47	92	2.23	Y	20
344	FV03	1989	9	4	24701	900	29	26.00	92	3.75	Y	50
345	FV03	1989	9	4	24702	1100	29	26.11	92	1.53	Y	160
346	FV03	1989	9	4	24703	1205	29	25.45	91	59.76	Y	175
347	FV03	1989	9	4	24704	1310	29	25.76	92	0.42	Y	50
348	FV03	1989	9	4	24705	1420	29	23.77	91	56.59	Y	275
349	FV03	1989	9	4	24706	1700	29	24.60	91	59.00	Y	235
350	FV03	1989	9	4	24707	1845	29	21.28	91	56.96	Y	90
351	FV03	1989	9	5	24801	1600	29	28.31	92	19.44	Y	45
352	FV03	1989	9	6	24901	1425	29	16.63	91	54.38	Y	175
353	FV03	1989	9	6	24902	1540	29	17.38	91	57.90	Y	75

354	FV03	1989	9	6	24903	1720	29	16.29	91	52.82	Y	150
355	FV03	1989	9	6	24904	1830	29	14.89	91	53.74	Y	250
356	FV03	1989	9	6	24905	1940	29	14.15	91	53.23	Y	150
357	FV03	1989	9	7	25001	1515	29	21.81	91	56.08	Y	20
358	FV03	1989	9	7	25002	1815	29	21.33	92	12.07	Y	115
359	FV03	1989	9	7	25003	1915	29	21.14	92	13.27	Y	85
360	FV04	1989	8	28	24001	622	29	14.71	91	41.27	Y	150

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	OBS DAY	TIME NUMBER	LATITUDE OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
361	FV04	1989	8	28	24002	938	29	14.27	91	41.27	Y	75
362	FV04	1989	8	28	24003	1328	29	14.27	91	41.27	Y	450
363	FV04	1989	8	28	24004	1755	29	14.71	91	41.27	Y	150
364	FV04	1989	8	28	24005	1859	29	20.81	92	0.86	Y	150
365	FV04	1989	8	30	24201	723	29	35.06	92	48.00	Y	30
366	FV04	1989	8	30	24202	823	29	35.06	92	48.00	Y	20
367	FV04	1989	8	30	24203	904	29	35.06	92	48.00	Y	10
368	FV04	1989	8	30	24204	1106	29	12.73	92	27.78	Y	20
369	FV04	1989	8	30	24205	1249	29	29.73	92	27.78	Y	20
370	FV04	1989	8	30	24206	1603	29	29.73	92	27.78	Y	200
371	FV04	1989	8	30	24207	1708	29	27.28	92	12.14	Y	75
372	FV04	1989	8	30	24208	1826	29	23.56	92	3.81	Y	100
373	FV04	1989	8	30	24209	1909	29	25.56	92	3.81	Y	300
374	FV04	1989	8	31	24301	1653	29	25.56	92	3.87	Y	10
375	FV04	1989	8	31	24302	1831	29	25.56	92	3.81	Y	10
376	FV04	1989	8	31	24303	1953	29	25.56	92	3.81	Y	2
377	FV04	1989	9	1	24401	631	29	25.56	92	3.81	Y	50
378	FV04	1989	9	1	24402	757	29	25.56	92	3.81	Y	75
379	FV04	1989	9	1	24403	1025	29	25.56	92	3.81	Y	50
380	FV04	1989	9	1	24404	1122	29	25.56	92	3.81	Y	100
381	FV04	1989	9	1	24405	1221	29	20.81	92	0.86	Y	70
382	FV04	1989	9	1	24406	1446	29	20.81	92	0.86	Y	50
383	FV04	1989	9	4	24701	838	29	25.56	92	3.81	Y	2
384	FV04	1989	9	4	24702	1259	29	35.06	92	48.00	Y	20
385	FV04	1989	9	4	24703	1416	29	35.06	92	48.00	Y	125
386	FV04	1989	9	4	24704	1528	29	35.06	92	48.00	Y	60
387	FV04	1989	9	4	24705	1631	29	35.06	92	48.00	Y	45
388	FV04	1989	9	4	24706	1851	29	29.73	92	27.78	Y	40
389	FV04	1989	9	4	24707	1910	29	29.73	92	27.78	Y	20
390	FV04	1989	9	6	24901	1355	29	20.81	92	0.86	Y	50
391	FV04	1989	9	6	24902	1515	29	20.81	92	0.86	Y	40
392	FV04	1989	9	6	24903	1619	29	20.81	92	0.86	Y	100
393	FV04	1989	9	6	24904	1715	29	20.81	92	0.86	Y	100
394	FV04	1989	9	6	24905	1837	29	20.81	92	0.86	Y	10
395	FV04	1989	9	6	24906	1934	29	20.81	92	0.86	Y	200
396	FV04	1989	9	7	25001	1453	29	20.81	92	0.86	Y	10
397	FV04	1989	9	7	25002	1515	29	27.93	92	22.87	Y	40
398	FV04	1989	9	7	25003	1815	29	25.56	92	3.81	Y	50

399	FV04	1989	9	7	25004	1909	29	25.56	92	3.81	Y	25
400	FV04	1989	9	8	25101	1054	29	27.92	92	22.87	Y	10
401	FV05	1989	8	28	24001	715	29	13.35	91	18.66	Y	325
402	FV05	1989	8	28	24002	928	29	14.21	91	19.77	Y	40
403	FV05	1989	8	28	24003	1012	29	19.04	91	33.66	Y	50
404	FV05	1989	8	28	24004	1052	29	18.71	91	33.60	Y	300
405	FV05	1989	8	28	24005	1520	29	16.20	91	22.11	Y	30

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	OBS DAY	TIME NUMBER	LATITUDE OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
406	FV05	1989	8	29	24101	1222	29	28.18	91	47.08	Y	125
407	FV05	1989	8	29	24102	1310	29	27.77	91	46.72	Y	175
408	FV05	1989	8	29	24103	1444	29	26.50	91	48.41	Y	275
409	FV05	1989	8	29	24104	1700	29	26.81	91	48.56	Y	150
410	FV05	1989	8	29	24105	1810	29	26.29	91	49.34	Y	40
411	FV05	1989	8	30	24201	841	29	26.76	92	1.30	Y	5
412	FV05	1989	8	30	24202	1142	29	28.24	91	43.27	Y	100
413	FV05	1989	8	30	24203	1347	29	28.02	91	40.78	Y	45
414	FV05	1989	8	30	24204	1508	29	26.39	91	39.55	Y	225
415	FV05	1989	8	30	24205	1639	29	26.69	91	40.27	Y	100
416	FV05	1989	8	30	24206	1806	29	25.86	91	40.68	Y	200
417	FV05	1989	8	30	24207	1930	29	23.63	91	43.20	Y	0
418	FV05	1989	8	31	24301	910	29	27.88	91	47.00	Y	50
419	FV05	1989	8	31	24302	1650	29	22.54	91	53.64	Y	5
420	FV05	1989	8	31	24303	1830	29	22.00	92	0.95	Y	50
421	FV05	1989	9	1	24401	825	29	20.76	92	22.86	Y	30
422	FV05	1989	9	1	24402	925	29	25.76	92	30.86	Y	20
423	FV05	1989	9	1	24403	1100	29	30.70	92	40.86	Y	10
424	FV05	1989	9	4	24701	650	29	26.58	92	1.47	Y	100
425	FV05	1989	9	4	24702	805	29	26.58	92	0.43	Y	50
426	FV05	1989	9	4	24703	1348	29	33.46	92	36.14	Y	25
427	FV05	1989	9	4	24704	1520	29	33.91	92	34.14	Y	75
428	FV05	1989	9	5	24801	1406	29	40.07	92	57.55	Y	35
429	FV05	1989	9	5	24802	1609	29	44.23	93	2.69	Y	40
430	FV05	1989	9	5	24803	1818	29	45.15	93	18.45	Y	35
431	FV05	1989	9	6	24901	1400	29	29.74	92	25.26	Y	65
432	FV05	1989	9	6	24902	1600	29	19.31	92	4.62	Y	50
433	FV05	1989	9	6	24903	1818	29	18.87	92	4.89	Y	25
434	FV05	1989	9	7	25001	1622	29	22.34	92	17.17	Y	40
435	FV05	1989	9	7	25002	1539	29	21.22	92	12.60	Y	50
436	FV05	1989	9	7	25003	1652	29	24.00	92	19.80	Y	40
437	FV05	1989	9	7	25004	1758	29	21.88	92	16.48	Y	30
438	FV05	1989	9	7	25005	1900	29	20.45	92	14.38	Y	75
439	FV06	1989	8	28	24001	653	29	29.83	92	25.19	Y	200
440	FV06	1989	8	28	24002	743	29	29.91	92	25.09	Y	100
441	FV06	1989	8	28	24003	849	29	29.86	92	24.55	Y	60
442	FV06	1989	8	28	24004	925	29	29.90	92	24.27	Y	50
443	FV06	1989	8	28	24005	1018	29	30.59	92	25.90	Y	40

444	FV06	1989	8	28	24006	1112	29	28.59	92	27.95	Y	50
445	FV06	1989	8	28	24007	1155	29	30.33	92	27.69	Y	50
446	FV06	1989	8	28	24008	1238	29	30.56	92	27.21	Y	75
447	FV06	1989	8	28	24009	1604	29	29.82	92	22.42	Y	40
448	FV06	1989	8	28	24010	1714	29	29.85	92	29.23	Y	200
449	FV06	1989	8	28	24011	1810	29	30.17	92	29.99	Y	150
450	FV06	1989	8	28	24012	1907	29	30.20	92	28.13	Y	150

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	OBS DAY	TIME NUMBER	LATITUDE OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
451	FV06	1989	8	29	24101	1020	29	40.12	92	55.64	Y	125
452	FV06	1989	8	29	24102	1440	29	44.42	93	33.93	Y	200
453	FV06	1989	8	29	24103	1600	29	44.26	93	35.34	Y	75
454	FV06	1989	8	29	24104	1930	29	40.95	93	1.91	Y	75
455	FV06	1989	8	30	24201	715	29	31.00	92	28.92	Y	100
456	FV06	1989	8	30	24202	935	29	31.44	92	30.56	Y	125
457	FV06	1989	8	30	24203	1030	29	31.27	92	30.16	Y	125
458	FV06	1989	8	30	24204	1125	29	31.18	92	27.20	Y	150
459	FV06	1989	8	30	24205	1245	29	30.93	92	27.39	Y	50
460	FV06	1989	8	30	24206	1445	29	28.11	92	19.48	Y	50
461	FV06	1989	8	30	24207	1555	29	28.18	92	19.59	Y	75
462	FV06	1989	8	30	24208	1840	29	27.76	92	15.53	Y	25
463	FV06	1989	8	30	24209	1930	29	26.91	92	15.35	Y	40
464	FV06	1989	8	30	24210	2005	29	26.47	92	15.60	Y	80
465	FV06	1989	8	31	24301	956	29	24.67	91	58.09	Y	40
466	FV06	1989	8	31	24302	1430	29	28.54	92	12.26	Y	30
467	FV06	1989	8	31	24303	1800	29	21.88	92	2.24	Y	40
468	FV06	1989	8	31	24304	1859	29	19.26	92	2.28	Y	40
469	FV06	1989	8	31	24305	1950	29	19.06	91	58.29	Y	225
470	FV06	1989	9	1	24401	905	29	19.52	92	2.94	Y	50
471	FV06	1989	9	1	24402	953	29	19.28	92	3.21	Y	50
472	FV06	1989	9	1	24403	1041	29	18.55	92	3.48	Y	50
473	FV06	1989	9	1	24404	1325	29	28.92	92	19.37	Y	40
474	FV06	1989	9	1	24405	1420	29	29.22	92	18.47	Y	60
475	FV06	1989	9	1	24406	1522	29	28.97	92	16.56	Y	70
476	FV06	1989	9	1	24407	1628	29	28.75	92	13.50	Y	125
477	FV06	1989	9	4	24701	1145	29	33.20	92	36.81	Y	175
478	FV06	1989	9	4	24702	1313	29	32.52	92	34.15	Y	40
479	FV06	1989	9	4	24703	1438	29	34.48	92	39.19	Y	30
480	FV06	1989	9	4	24704	1616	29	35.12	92	40.39	Y	10
481	FV06	1989	9	4	24705	1740	29	34.69	92	45.22	Y	40
482	FV06	1989	9	4	24706	1901	29	33.03	92	40.32	Y	60
483	FV06	1989	9	5	24801	1408	29	38.66	92	56.00	Y	75
484	FV06	1989	9	5	24802	1704	29	41.59	93	6.60	Y	40
485	FV06	1989	9	5	24803	1815	29	43.50	93	12.48	Y	350
486	FV06	1989	9	6	24901	919	29	41.51	93	22.58	Y	100
487	FV06	1989	9	6	24902	1115	29	44.39	93	11.01	Y	50
488	FV06	1989	9	6	24903	1535	29	32.35	92	36.62	Y	50

489	FV06	1989	9	6	24904	1835	29	21.10	92	12.22	Y	50
490	FV06	1989	9	6	24905	1947	29	20.10	92	12.41	Y	50
491	FV06	1989	9	7	25001	1510	29	17.19	91	45.32	Y	40
492	FV06	1989	9	7	25002	1727	29	11.28	91	31.23	Y	150
493	FV06	1989	9	7	25003	1846	29	13.30	91	36.28	Y	125
494	FV07	1989	8	28	24001	725	29	20.63	91	53.85	Y	30
495	FV07	1989	8	28	24002	1005	29	19.07	91	53.41	Y	350

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	OBS DAY	TIME NUMBER	LATITUDE OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
496	FV07	1989	8	28	24003	1025	29	22.27	91	59.82	Y	75
497	FV07	1989	8	28	24004	1315	29	19.69	91	35.86	Y	150
498	FV07	1989	8	28	24005	1825	29	18.72	91	35.54	Y	30
499	FV07	1989	8	29	24101	729	29	23.36	92	5.48	Y	5
500	FV07	1989	8	29	24102	1245	29	27.10	91	48.22	Y	350
501	FV07	1989	8	29	24103	1636	29	25.77	91	49.77	Y	400
502	FV07	1989	8	29	24104	1907	29	21.28	91	53.62	Y	20
503	FV07	1989	8	30	24201	1146	29	24.20	91	51.95	Y	75
504	FV07	1989	8	30	24202	1350	29	25.96	91	51.58	Y	50
505	FV07	1989	8	30	24203	1520	29	24.12	91	55.23	Y	75
506	FV07	1989	8	30	24204	1630	29	24.41	91	54.27	Y	75
507	FV07	1989	8	30	24205	1730	29	24.21	91	54.27	Y	30
508	FV07	1989	8	30	24206	1945	29	21.46	91	57.56	Y	20
509	FV07	1989	8	31	24301	740	29	23.52	91	50.86	Y	20
510	FV07	1989	8	31	24302	905	29	26.85	91	47.99	Y	40
511	FV07	1989	8	31	24303	1005	29	27.44	91	49.13	Y	40
512	FV07	1989	8	31	24304	1614	29	26.41	92	11.29	Y	25
513	FV07	1989	8	31	24305	1745	29	22.28	92	3.86	Y	75
514	FV07	1989	8	31	24306	1840	29	20.93	92	2.65	Y	140
515	FV07	1989	8	31	24307	1945	29	19.03	91	58.89	Y	35
516	FV07	1989	9	1	24401	916	29	20.04	92	4.57	Y	50
517	FV07	1989	9	1	24402	1000	29	20.12	92	4.96	Y	50
518	FV07	1989	9	1	24403	1050	29	19.91	92	5.31	Y	80
519	FV07	1989	9	1	24404	1201	29	20.40	92	5.07	Y	0
520	FV07	1989	9	1	24405	1440	29	22.38	92	6.95	Y	150
521	FV07	1989	9	1	24406	1545	29	21.35	92	7.08	Y	50
522	FV07	1989	9	1	24407	1645	29	21.19	92	5.98	Y	200
523	FV07	1989	9	1	24408	1754	29	20.74	92	6.07	Y	0
524	FV07	1989	9	4	24701	740	29	26.31	92	1.13	Y	140
525	FV07	1989	9	4	24702	918	29	26.26	92	1.93	Y	30
526	FV07	1989	9	4	24703	1225	29	31.42	92	23.52	Y	140
527	FV07	1989	9	4	24704	1335	29	31.36	92	32.85	Y	130
528	FV07	1989	9	4	24705	1430	29	31.47	92	35.10	Y	30
529	FV07	1989	9	4	24706	1614	29	32.89	92	38.82	Y	50
530	FV07	1989	9	5	24801	1755	29	16.19	91	50.37	Y	200
531	FV07	1989	9	5	24802	1915	29	14.93	91	52.77	Y	350
532	FV07	1989	9	6	24901	1430	29	16.69	91	57.53	Y	50
533	FV07	1989	9	6	24902	1515	29	18.12	92	2.62	Y	75

534	FV07	1989	9	6	24903	1715	29	15.90	91	58.05	Y	150
535	FV07	1989	9	6	24904	1920	29	14.44	91	55.40	Y	0
536	FV07	1989	9	7	25001	1455	29	20.92	91	59.70	Y	10
537	FV07	1989	9	7	25002	1800	29	14.56	91	40.41	Y	200
538	FV07	1989	9	8	25101	955	29	18.72	91	46.87	Y	50
539	FV08	1989	8	28	24001	715	29	16.17	91	33.13	Y	105
540	FV08	1989	8	28	24002	825	29	17.43	91	33.35	Y	65

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	OBS DAY	TIME NUMBER	LATITUDE OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
541	FV08	1989	8	28	24003	950	29	19.12	91	33.15	Y	70
542	FV08	1989	8	28	24004	1056	29	18.51	91	33.76	Y	15
543	FV08	1989	8	28	24005	1200	29	18.74	91	35.13	Y	175
544	FV08	1989	8	28	24006	1740	29	18.97	91	50.56	Y	55
545	FV08	1989	8	28	24007	1835	29	18.06	91	51.84	Y	65
546	FV08	1989	8	28	24008	1937	29	16.83	91	54.22	Y	300
547	FV08	1989	8	29	24101	748	29	24.10	92	4.43	Y	20
548	FV08	1989	8	29	24102	1135	29	27.05	91	47.04	Y	165
549	FV08	1989	8	29	24103	1220	29	27.50	91	47.36	Y	175
550	FV08	1989	8	29	24104	1404	29	25.81	91	48.32	Y	175
551	FV08	1989	8	29	24105	1503	29	26.00	91	47.91	Y	50
552	FV08	1989	8	29	24106	1750	29	23.41	91	57.29	Y	20
553	FV08	1989	8	30	24201	1119	29	31.86	92	27.70	Y	140
554	FV08	1989	8	30	24202	1215	29	31.29	92	27.34	Y	25
555	FV08	1989	8	30	24203	1555	29	26.08	92	6.71	Y	165
556	FV08	1989	8	30	24204	1655	29	25.98	92	6.16	Y	110
557	FV08	1989	8	30	24205	1725	29	23.45	92	0.42	Y	65
558	FV08	1989	8	30	24206	1920	29	22.62	92	0.40	Y	50
559	FV08	1989	8	31	24301	815	29	25.22	91	49.41	Y	55
560	FV08	1989	8	31	24302	940	29	27.22	91	46.49	Y	65
561	FV08	1989	8	31	24303	1222	29	22.57	91	53.25	Y	25
562	FV08	1989	8	31	24304	1650	29	22.68	91	48.08	Y	30
563	FV08	1989	8	31	24305	1725	29	22.59	91	48.51	Y	25
564	FV08	1989	8	31	24306	1915	29	19.44	91	49.41	Y	15
565	FV08	1989	9	1	24401	855	29	20.56	92	2.97	Y	20
566	FV08	1989	9	1	24402	930	29	20.30	92	2.41	Y	30
567	FV08	1989	9	1	24403	1015	29	19.98	92	1.68	Y	55
568	FV08	1989	9	1	24404	1120	29	20.32	92	3.86	Y	55
569	FV08	1989	9	1	24405	1240	29	21.48	92	4.13	Y	50
570	FV08	1989	9	1	24406	1405	29	22.21	92	4.23	Y	35
571	FV08	1989	9	1	24407	1520	29	19.62	92	0.09	Y	45
572	FV08	1989	9	1	24408	1705	29	21.35	92	4.62	Y	45
573	FV08	1989	9	1	24409	1800	29	19.73	92	4.71	Y	0
574	FV08	1989	9	4	24701	700	29	26.69	91	58.32	Y	30
575	FV08	1989	9	4	24702	820	29	26.49	92	0.05	Y	40
576	FV08	1989	9	4	24703	1230	29	35.57	92	41.28	Y	15
577	FV08	1989	9	4	24704	1325	29	34.63	92	39.49	Y	80
578	FV08	1989	9	4	24705	1425	29	35.37	92	40.92	Y	45

579	FV08	1989	9	4	24706	1527	29	35.01	92	39.45	Y	15
580	FV08	1989	9	4	24707	1620	29	35.31	92	39.28	Y	65
581	FV08	1989	9	4	24708	1805	29	31.73	92	34.96	Y	85
582	FV08	1989	9	4	24709	1900	29	31.93	92	36.22	Y	40
583	FV08	1989	9	6	24901	1450	29	17.46	91	57.58	Y	75
584	FV08	1989	9	6	24902	1550	29	18.94	92	1.65	Y	45
585	FV08	1989	9	6	24903	1815	29	16.04	91	57.43	Y	60

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	OBS DAY	TIME NUMBER	LATITUDE OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
586	FV08	1989	9	6	24904	1910	29	15.36	91	56.78	Y	250
587	FV08	1989	9	7	25001	1449	29	21.48	91	59.30	Y	1
588	FV08	1989	9	7	25002	1713	29	25.13	92	20.11	Y	34
589	FV08	1989	9	7	25003	1840	29	21.60	92	15.54	Y	135
590	FV08	1989	9	7	25004	1943	29	19.93	92	15.66	Y	65
591	FV09	1989	8	28	24001	715	29	16.00	91	32.77	Y	325
592	FV09	1989	8	28	24002	900	29	18.42	91	33.84	Y	375
593	FV09	1989	8	28	24003	1030	29	18.19	91	34.23	Y	325
594	FV09	1989	8	28	24004	1730	29	31.13	92	29.87	Y	70
595	FV09	1989	8	28	24005	1815	29	31.52	92	30.82	Y	55
596	FV09	1989	8	28	24006	1920	29	30.44	92	27.84	Y	0
597	FV09	1989	8	29	24101	1025	29	40.66	92	55.62	Y	50
598	FV09	1989	8	29	24102	1410	29	47.27	93	34.52	Y	100
599	FV09	1989	8	29	24103	1510	29	46.84	93	36.95	Y	65
600	FV09	1989	8	29	24104	1600	29	46.81	93	37.66	Y	65
601	FV09	1989	8	29	24105	1645	29	46.78	93	38.85	Y	30
602	FV09	1989	8	29	24106	1820	29	45.90	93	40.75	Y	100
603	FV09	1989	8	29	24107	1945	29	45.40	93	42.52	Y	50
604	FV09	1989	8	30	24201	740	29	44.11	93	21.81	Y	85
605	FV09	1989	8	30	24202	830	29	45.08	93	21.95	Y	25
606	FV09	1989	8	30	24203	930	29	42.08	93	21.06	Y	75
607	FV09	1989	8	30	24204	1250	29	37.98	92	50.23	Y	25
608	FV09	1989	8	30	24205	1630	29	28.92	92	20.59	Y	15
609	FV09	1989	8	30	24206	1955	29	27.33	92	19.41	Y	30
610	FV09	1989	8	31	24301	625	29	29.07	92	16.06	Y	35
611	FV09	1989	8	31	24302	900	29	25.95	92	1.18	Y	30
612	FV09	1989	8	31	24303	1000	29	25.18	91	58.04	Y	70
613	FV09	1989	8	31	24304	1625	29	22.70	91	52.82	Y	110
614	FV09	1989	8	31	24305	1755	29	20.25	91	48.33	Y	25
615	FV09	1989	8	31	24306	1900	29	19.21	91	50.28	Y	80
616	FV09	1989	8	31	24307	1950	29	17.96	91	50.84	Y	60
617	FV09	1989	9	1	24401	630	29	21.75	91	49.19	Y	135
618	FV09	1989	9	1	24402	700	29	20.00	92	3.81	Y	45
619	FV09	1989	9	1	24403	1105	29	20.61	92	3.84	Y	25
620	FV09	1989	9	1	24404	1425	29	30.10	92	18.14	Y	45
621	FV09	1989	9	1	24405	1510	29	29.45	92	17.10	Y	35
622	FV09	1989	9	1	24406	1600	29	28.97	92	15.60	Y	20
623	FV09	1989	9	1	24407	1650	29	30.15	92	13.75	Y	35

624	FV09	1989	9	4	24701	830	29	27.23	92	3.23	Y	50
625	FV09	1989	9	4	24702	1250	29	28.03	92	5.66	Y	80
626	FV09	1989	9	4	24703	1425	29	24.22	91	58.84	Y	450
627	FV09	1989	9	4	24704	1430	29	25.03	92	1.52	Y	85
628	FV09	1989	9	4	24705	1800	29	21.58	91	57.50	Y	105
629	FV09	1989	9	4	24706	1930	29	18.69	91	54.29	Y	225
630	FV09	1989	9	5	24801	1820	29	16.69	91	48.67	Y	350

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	OBS DAY	TIME NUMBER	LATITUDE OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
631	FV09	1989	9	6	24901	1410	29	17.39	91	59.93	Y	95
632	FV09	1989	9	6	24902	1455	29	17.86	91	58.17	Y	60
633	FV09	1989	9	6	24903	1625	29	17.29	91	56.76	Y	50
634	FV09	1989	9	6	24904	1740	29	16.67	92	0.33	Y	100
635	FV09	1989	9	6	24905	1835	29	16.15	92	0.94	Y	70
636	FV09	1989	9	6	24906	1935	29	14.65	91	56.13	Y	125
637	FV09	1989	9	7	25001	1500	29	22.40	91	59.27	Y	10
638	FV09	1989	9	7	25002	1730	29	20.65	92	11.36	Y	70
639	FV09	1989	9	7	25003	1830	29	20.32	92	13.45	Y	80
640	FV09	1989	9	7	25004	1930	29	19.66	92	13.42	Y	60
641	FV09	1989	9	8	25101	725	29	23.80	92	10.45	Y	10
642	FV10	1989	8	28	24001	805	29	13.26	91	38.57	Y	650
643	FV10	1989	8	28	24002	1550	29	8.10	91	36.19	Y	60
644	FV10	1989	8	29	24101	1930	28	54.37	91	2.01	Y	35
645	FV10	1989	8	30	24201	1015	29	19.55	91	30.14	Y	150
646	FV10	1989	8	30	24202	1125	29	20.52	91	30.10	Y	25
647	FV10	1989	8	30	24203	1325	29	24.30	91	35.16	Y	135
648	FV10	1989	8	30	24204	1420	29	23.61	91	34.24	Y	75
649	FV10	1989	8	30	24205	1525	29	23.37	91	33.77	Y	75
650	FV10	1989	8	30	24206	1610	29	23.70	91	34.51	Y	120
651	FV10	1989	8	30	24207	1745	29	24.95	91	38.61	Y	0
652	FV10	1989	8	31	24301	1030	29	22.80	91	50.96	Y	40
653	FV10	1989	8	31	24302	1330	29	26.80	91	40.37	Y	120
654	FV10	1989	8	31	24303	1425	29	27.16	91	40.17	Y	65
655	FV10	1989	8	31	24304	1535	29	26.83	91	39.73	Y	45
656	FV10	1989	8	31	24305	1645	29	23.84	91	38.15	Y	150
657	FV10	1989	8	31	24306	1810	29	25.30	91	40.44	Y	50
658	FV10	1989	8	31	24307	1900	29	25.25	91	40.60	Y	120
659	FV10	1989	9	4	24701	645	29	11.74	91	24.34	Y	425
660	FV10	1989	9	4	24702	940	29	10.92	91	14.22	Y	85
661	FV10	1989	9	4	24703	1105	29	7.64	91	20.62	Y	90
662	FV10	1989	9	4	24704	1245	29	10.73	91	27.01	Y	25
663	FV10	1989	9	4	24705	1350	29	11.34	91	25.21	Y	60
664	FV10	1989	9	4	24706	1440	29	11.50	91	25.83	Y	50
665	FV10	1989	9	4	24707	1730	29	13.64	91	26.34	Y	125
666	FV10	1989	9	4	24708	1830	29	13.90	91	26.87	Y	530
667	FV10	1989	9	5	24801	1800	29	10.74	91	13.16	Y	100
668	FV10	1989	9	6	24901	1235	29	11.67	91	19.49	Y	45

669	FV10	1989	9	6	24902	1325	29	12.27	91	19.98	Y	70
670	FV10	1989	9	6	24903	1450	29	10.73	91	17.62	Y	70
671	FV10	1989	9	6	24904	1550	29	11.00	91	16.23	Y	300
672	FV10	1989	9	6	24905	1835	29	10.61	91	22.14	Y	65
673	FV10	1989	9	6	24906	1940	29	8.86	91	19.65	Y	125
674	FV10	1989	9	7	25001	1410	29	10.86	91	27.52	Y	55
675	FV10	1989	9	7	25002	1520	29	12.18	91	31.78	Y	80

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	OBS DAY	TIME NUMBER	LATITUDE OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
676	FV10	1989	9	7	25003	1615	29	11.71	91	32.97	Y	80
677	FV10	1989	9	7	25004	1915	29	11.64	91	18.71	Y	110
678	FV10	1989	9	8	25101	1150	29	11.63	1	23.05	Y	25
679	FV12	1989	8	28	24001	730	29	16.92	91	29.41	Y	205
680	FV12	1989	8	29	24101	825	29	14.87	91	23.52	Y	140
681	FV12	1989	8	29	24102	925	29	12.84	91	21.49	Y	100
682	FV12	1989	8	29	24103	1105	29	11.84	91	20.49	Y	315
683	FV12	1989	8	29	24104	1840	29	19.69	91	30.69	Y	115
684	FV12	1989	8	29	24105	1940	29	19.68	91	30.79	Y	10
685	FV12	1989	8	30	24201	1040	29	18.75	91	33.78	Y	180
686	FV12	1989	8	30	24202	1225	29	17.74	91	31.76	Y	100
687	FV12	1989	8	30	24203	1345	29	17.74	91	31.76	Y	100
688	FV12	1989	8	30	24204	1530	29	20.72	91	31.68	Y	105
689	FV12	1989	8	31	24301	1340	29	26.40	91	34.49	Y	170
690	FV12	1989	8	31	24302	1505	29	26.42	91	36.53	Y	90
691	FV12	1989	8	31	24303	1605	29	26.67	91	37.72	Y	65
692	FV12	1989	8	31	24304	1720	29	24.31	91	39.00	Y	165
693	FV12	1989	8	31	24305	1905	29	25.61	91	39.44	Y	110
694	FV12	1989	9	1	24401	1045	29	13.76	91	14.86	Y	20
695	FV12	1989	9	1	24402	1425	29	2.10	91	4.30	Y	60
696	FV12	1989	9	4	24701	653	29	14.43	91	18.43	Y	60
697	FV12	1989	9	4	24702	840	29	12.63	91	23.42	Y	35
698	FV12	1989	9	4	24703	1000	29	7.39	91	10.49	Y	60
699	FV12	1989	9	4	24704	1133	29	4.66	91	18.06	Y	120
700	FV12	1989	9	4	24705	1237	29	8.75	91	23.19	Y	80
701	FV12	1989	9	5	24801	850	29	12.78	91	16.89	Y	40
702	FV12	1989	9	5	24802	1330	29	16.36	91	23.91	Y	25
703	FV12	1989	9	5	24803	1812	29	12.10	91	11.42	Y	130
704	FV12	1989	9	6	24901	1400	29	12.99	91	20.06	Y	45
705	FV12	1989	9	6	24902	1600	29	10.42	91	19.73	Y	90
706	FV12	1989	9	6	24903	1735	29	11.11	91	18.05	Y	10
707	FV12	1989	9	6	24904	1840	29	10.55	91	18.10	Y	150
708	FV12	1989	9	7	25001	807	29	12.46	91	29.40	Y	40
709	FV12	1989	9	7	25002	1510	29	13.84	91	16.43	Y	50
710	FV12	1989	9	7	25003	1645	29	13.83	91	16.07	Y	100
711	FV12	1989	9	7	25004	1750	29	14.14	91	16.13	Y	40
712	FV12	1989	9	7	25005	1830	29	13.93	91	16.43	Y	100
713	FV12	1989	9	7	25006	1940	29	13.22	91	15.04	Y	30

714	FV12	1989	9	8	25101	735	29	14.01	91	20.88	Y	105
715	FV13	1989	8	28	24001	705	29	15.33	91	30.32	Y	0
716	FV13	1989	8	29	24101	805	29	12.18	91	12.52	Y	80
717	FV13	1989	8	29	24102	845	29	12.24	91	12.28	Y	80
718	FV13	1989	8	29	24103	935	29	12.64	91	10.78	Y	10
719	FV13	1989	8	29	24104	1325	29	13.19	91	20.59	Y	50
720	FV13	1989	8	29	24105	1705	29	23.37	91	38.44	Y	100

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	OBS DAY	TIME NUMBER	LATITUDE OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
721	FV13	1989	8	29	24106	1748	29	22.48	91	38.71	Y	200
722	FV13	1989	8	30	24201	900	29	17.18	91	32.18	Y	20
723	FV13	1989	8	30	24202	1030	29	19.51	91	29.81	Y	100
724	FV13	1989	8	30	24203	1125	29	20.15	91	29.64	Y	60
725	FV13	1989	8	30	24204	1215	29	19.92	91	29.02	Y	30
726	FV13	1989	8	30	24205	1325	29	21.92	91	31.49	Y	190
727	FV13	1989	8	30	24206	1415	29	22.08	91	31.67	Y	190
728	FV13	1989	8	31	24301	1750	29	11.84	91	22.69	Y	30
729	FV13	1989	9	1	24401	1015	29	13.82	91	15.78	Y	10
730	FV13	1989	9	1	24402	1050	29	13.47	91	15.74	Y	40
731	FV13	1989	9	1	24403	1352	29	8.62	91	0.88	Y	20
732	FV13	1989	9	4	24701	635	29	10.14	91	24.65	Y	120
733	FV13	1989	9	4	24702	720	29	9.43	91	25.94	Y	170
734	FV13	1989	9	4	24703	1045	29	7.34	91	20.60	Y	210
735	FV13	1989	9	4	24704	1208	29	9.53	91	27.74	Y	270
736	FV13	1989	9	4	24705	1330	29	11.12	91	25.65	Y	80
737	FV13	1989	9	4	24706	1412	29	11.59	91	25.39	Y	60
738	FV13	1989	9	4	24707	1720	29	8.50	91	20.78	Y	40
739	FV13	1989	9	5	24801	1740	29	9.38	91	17.11	Y	60
740	FV13	1989	9	6	24901	1200	29	12.39	91	14.81	Y	50
741	FV13	1989	9	6	24902	1303	29	13.07	91	19.04	Y	50
742	FV13	1989	9	6	24903	1345	29	12.90	91	19.59	Y	70
743	FV13	1989	9	6	24904	1455	29	8.92	91	22.97	Y	50
744	FV13	1989	9	6	24905	1705	29	10.58	91	29.09	Y	50
745	FV13	1989	9	6	24906	1910	29	9.77	91	15.80	Y	120
746	FV13	1989	9	7	25001	1500	29	12.97	91	17.46	Y	30
747	FV13	1989	9	7	25002	1622	29	10.85	91	23.67	Y	40
748	FV13	1989	9	7	25003	1735	29	9.38	91	21.25	Y	30
749	FV13	1989	9	7	25004	1910	29	11.94	91	18.40	Y	20
750	FV13	1989	9	8	25101	725	29	13.60	91	22.03	Y	90
751	FV13	1989	9	8	25102	1130	29	11.09	91	23.12	Y	30
752	FV13	1989	9	8	25103	1210	29	11.94	91	23.31	Y	50
753	FV13	1989	9	8	25104	1303	29	11.57	91	24.98	Y	10
754	FV14	1989	8	28	24001	720	29	15.34	91	22.80	Y	100
755	FV14	1989	8	28	24002	830	29	16.70	91	31.64	Y	25
756	FV14	1989	8	28	24003	930	29	18.29	91	31.98	Y	125
757	FV14	1989	8	28	24004	1110	29	18.57	91	31.68	Y	125
758	FV14	1989	8	28	24005	1215	29	19.99	91	31.02	Y	500

759	FV14	1989	8	28	24006	1655	29	11.58	91	23.87	Y	25
760	FV14	1989	8	30	24201	645	29	16.30	91	28.32	Y	150
761	FV14	1989	8	30	24202	930	29	19.22	91	30.90	Y	100
762	FV14	1989	8	30	24203	1030	29	19.97	91	30.44	Y	300
763	FV14	1989	8	30	24204	1135	29	19.81	91	29.20	Y	10
764	FV14	1989	8	30	24205	1315	29	20.75	91	32.82	Y	100
765	FV14	1989	8	30	24206	1405	29	20.80	91	34.82	Y	75

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	OBS DAY	TIME NUMBER	LATITUDE OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
766	FV14	1989	8	30	24207	1510	29	20.84	91	33.80	Y	200
767	FV14	1989	8	30	24208	1625	29	23.81	91	34.24	Y	140
768	FV14	1989	8	31	24301	1845	29	2.98	90	57.99	Y	108
769	FV14	1989	9	1	24401	730	29	11.62	91	15.76	Y	45
770	FV14	1989	9	1	24402	810	29	11.31	91	16.00	Y	35
771	FV14	1989	9	1	24403	955	29	14.36	91	15.34	Y	45
772	FV14	1989	9	1	24404	1305	29	14.36	91	15.34	Y	25
773	FV14	1989	9	4	24701	700	29	9.60	91	20.80	Y	0
774	FV14	1989	9	4	24702	820	29	9.20	91	20.60	Y	200
775	FV14	1989	9	4	24703	940	29	8.90	91	21.06	Y	175
776	FV14	1989	9	4	24704	1045	29	7.82	91	21.04	Y	75
777	FV14	1989	9	4	24705	1210	29	9.65	91	22.88	Y	175
778	FV14	1989	9	4	24706	1425	29	9.56	91	19.45	Y	40
779	FV14	1989	9	4	24707	1750	29	12.65	91	12.68	Y	125
780	FV14	1989	9	4	24708	1902	29	13.83	91	28.45	Y	300
781	FV14	1989	9	5	24801	1350	29	11.24	91	17.23	Y	50
782	FV14	1989	9	5	24802	1720	29	10.56	91	16.01	Y	50
783	FV14	1989	9	6	24901	1140	29	11.31	91	24.52	Y	50
784	FV14	1989	9	6	24902	1240	29	11.11	91	25.12	Y	75
785	FV14	1989	9	6	24903	1335	29	10.29	91	26.41	Y	75
786	FV14	1989	9	6	24904	1425	29	11.01	91	26.33	Y	100
787	FV14	1989	9	6	24905	1740	29	11.23	91	27.33	Y	100
788	FV14	1989	9	6	24906	1845	29	11.06	91	33.43	Y	5
789	FV14	1989	9	7	25001	1445	29	12.78	91	31.09	Y	60
790	FV14	1989	9	7	25002	1540	29	14.20	91	32.82	Y	60
791	FV14	1989	9	7	25003	1630	29	13.51	91	32.89	Y	125
792	FV15	1989	8	28	24001	735	29	15.60	91	31.40	Y	450
793	FV15	1989	8	28	24002	930	29	17.30	91	32.50	Y	540
794	FV15	1989	8	28	24003	1100	29	16.41	91	33.40	Y	225
795	FV15	1989	8	29	24101	935	29	20.30	91	35.30	Y	40
796	FV15	1989	8	29	24102	1530	29	25.40	91	36.10	Y	390
797	FV15	1989	8	29	24103	1635	29	24.35	91	41.30	Y	320
798	FV15	1989	8	29	24104	1735	29	21.39	91	40.31	Y	90
799	FV15	1989	8	29	24105	1840	29	20.38	91	36.30	Y	54
800	FV15	1989	8	30	24201	1005	29	18.40	91	30.17	Y	90
801	FV15	1989	8	30	24202	1055	29	19.30	91	30.21	Y	90
802	FV15	1989	8	30	24203	1215	29	17.42	91	40.32	Y	54
803	FV15	1989	8	31	24301	1125	29	20.48	91	35.00	Y	17

804	FV15	1989	8	31	24302	1420	29	21.32	91	37.00	Y	72
805	FV15	1989	8	31	24303	1500	29	22.41	91	48.00	Y	63
806	FV15	1989	8	31	24304	1650	29	23.46	91	36.00	Y	72
807	FV15	1989	8	31	24305	1805	29	29.34	91	49.00	Y	27
808	FV15	1989	8	31	24306	1850	29	26.36	91	53.00	Y	153
809	FV15	1989	8	31	24307	1930	29	31.40	91	58.00	Y	54
810	FV15	1989	9	1	24401	1255	29	9.20	91	2.30	Y	60

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	OBS DAY	TIME NUMBER	LATITUDE OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
811	FV15	1989	9	4	24701	735	29	10.32	91	25.70	Y	195
812	FV15	1989	9	4	24702	915	29	10.15	91	15.65	Y	20
813	FV15	1989	9	4	24703	1030	29	8.17	91	20.02	Y	110
814	FV15	1989	9	4	24704	1100	29	7.75	91	20.52	Y	63
815	FV15	1989	9	4	24705	1200	29	8.08	91	20.64	Y	20
816	FV15	1989	9	4	24706	1305	29	9.92	91	27.17	Y	90
817	FV15	1989	9	4	24707	1740	29	21.58	91	44.51	Y	90
818	FV15	1989	9	4	24708	1840	29	20.74	91	44.37	Y	126
819	FV15	1989	9	4	24709	1940	29	19.61	91	45.39	Y	54
820	FV15	1989	9	5	24801	1450	29	12.41	91	18.90	Y	2
821	FV15	1989	9	6	24901	1230	29	13.10	91	16.44	Y	63
822	FV15	1989	9	6	24902	1325	29	13.13	91	19.52	Y	36
823	FV15	1989	9	6	24903	1440	29	10.83	91	23.43	Y	108
824	FV15	1989	9	6	24904	1605	29	10.58	91	24.97	Y	72
825	FV15	1989	9	6	24905	1655	29	10.44	91	26.89	Y	140
826	FV15	1989	9	6	24906	1810	29	10.18	91	27.64	Y	54
827	FV15	1989	9	6	24907	1935	29	9.54	91	20.20	Y	306
828	FV15	1989	9	7	25001	735	29	12.22	91	25.72	Y	17
829	FV15	1989	9	7	25002	1405	29	11.40	91	27.78	Y	54
830	FV15	1989	9	7	25003	1505	29	12.85	91	30.87	Y	54
831	FV15	1989	9	7	25004	1600	29	14.24	91	33.08	Y	100
832	FV15	1989	9	7	25005	1730	29	9.63	91	28.45	Y	54
833	FV15	1989	9	7	25006	1820	29	9.62	91	29.43	Y	108
834	FV17	1989	8	28	24001	750	29	16.64	91	30.88	Y	600
835	FV17	1989	8	28	24002	1130	29	20.03	91	30.63	Y	225
836	FV17	1989	8	28	24003	1607	29	14.68	91	22.63	Y	65
837	FV17	1989	8	28	24004	1915	29	25.06	91	39.12	Y	0
838	FV17	1989	8	30	24201	800	29	18.07	91	28.23	Y	125
839	FV17	1989	8	30	24202	955	29	19.40	91	30.46	Y	125
840	FV17	1989	8	30	24203	1052	29	19.75	91	31.51	Y	50
841	FV17	1989	8	30	24204	1220	29	19.50	91	28.44	Y	45
842	FV17	1989	8	30	24205	1345	29	22.16	91	32.36	Y	150
843	FV17	1989	8	30	24206	1610	29	22.63	91	30.92	Y	100
844	FV17	1989	8	30	24207	1710	29	22.63	91	30.92	Y	30
845	FV17	1989	8	30	24208	1808	29	25.98	91	39.60	Y	60
846	FV17	1989	8	30	24209	1915	29	24.62	91	39.35	Y	265
847	FV17	1989	8	31	24301	1050	29	22.43	91	51.12	Y	5
848	FV17	1989	8	31	24302	1800	29	1.83	90	58.04	Y	30

849	FV17	1989	8	31	24303	1905	29	2.72	90	57.42	Y	50
850	FV17	1989	9	1	24401	1030	29	13.85	91	15.19	Y	40
851	FV17	1989	9	1	24402	1120	29	13.52	91	14.00	Y	20
852	FV17	1989	9	1	24403	1945	29	11.48	91	19.99	Y	15
853	FV17	1989	9	4	24701	650	29	10.73	91	25.60	Y	20
854	FV17	1989	9	4	24702	915	29	10.91	91	14.63	Y	365
855	FV17	1989	9	4	24703	1130	29	9.44	91	20.94	Y	375

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	DAY	OBS TIME NUMBER	LATITUDE OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
856	FV17	1989	9	4	24704	1343	29	8.98	91	19.05	Y	65
857	FV17	1989	9	4	24705	1437	29	9.01	91	19.37	Y	45
858	FV17	1989	9	4	24706	1753	29	15.93	91	35.45	Y	60
859	FV17	1989	9	5	24801	1820	29	10.97	91	12.39	Y	50
860	FV17	1989	9	6	24901	1413	29	11.06	91	24.29	Y	65
861	FV17	1989	9	6	24902	1525	29	9.78	91	22.13	Y	35
862	FV17	1989	9	6	24903	1641	29	10.62	91	26.68	Y	105
863	FV17	1989	9	6	24904	1821	29	10.76	91	32.13	Y	50
864	FV17	1989	9	7	25001	728	29	12.31	91	24.68	Y	45
865	FV17	1989	9	7	25002	1515	29	11.44	91	17.73	Y	65
866	FV17	1989	9	7	25003	1645	29	11.50	91	23.33	Y	75
867	FV17	1989	9	7	25004	1920	29	12.26	91	17.91	Y	60
868	FV17	1989	9	8	25101	725	29	13.15	91	22.90	Y	30
869	FV17	1989	9	8	25102	1255	29	13.02	91	29.50	Y	50
870	FV18	1989	8	28	24001	720	.	.	.	.	Y	500
871	FV18	1989	8	28	24002	930	.	.	.	.	Y	500
872	FV18	1989	8	29	24101	910	29	12.39	91	13.41	Y	75
873	FV18	1989	8	29	24102	1005	29	11.45	91	14.20	Y	55
874	FV18	1989	8	29	24103	1700	29	23.54	91	37.42	Y	700
875	FV18	1989	8	29	24104	1910	29	22.80	91	37.68	Y	170
876	FV18	1989	8	30	24201	730	29	17.94	91	31.39	Y	75
877	FV18	1989	8	30	24202	945	29	19.86	91	31.22	Y	150
878	FV18	1989	8	30	24203	1045	29	20.46	91	30.65	Y	50
879	FV18	1989	8	30	24204	1215	29	20.18	91	28.78	Y	75
880	FV18	1989	8	30	24205	1350	29	18.55	91	27.29	Y	75
881	FV18	1989	8	31	24301	1230	29	19.36	91	29.99	Y	0
882	FV18	1989	8	31	24302	1430	29	24.76	91	37.28	Y	150
883	FV18	1989	8	31	24303	1540	29	24.40	91	36.40	Y	70
884	FV18	1989	8	31	24304	1710	29	24.58	91	39.48	Y	60
885	FV18	1989	9	1	24401	1240	29	8.47	91	0.05	Y	50
886	FV18	1989	9	4	24701	730	29	9.76	91	24.05	Y	125
887	FV18	1989	9	4	24702	930	29	10.69	91	16.28	Y	75
888	FV18	1989	9	4	24703	1130	29	9.25	91	21.17	Y	30
889	FV18	1989	9	4	24704	1250	29	10.28	91	29.01	Y	240
890	FV18	1989	9	4	24705	1745	29	18.18	91	36.66	Y	50
891	FV18	1989	9	5	24801	1430	29	10.20	91	20.41	Y	90
892	FV18	1989	9	6	24901	1250	29	12.06	91	17.78	Y	50
893	FV18	1989	9	6	24902	1400	29	12.98	91	19.24	Y	300

894	FV18	1989	9	6	24903	1520	29	10.17	91	19.03	Y	200
895	FV18	1989	9	6	24904	1745	29	11.28	91	33.52	Y	120
896	FV18	1989	9	7	25001	730	29	12.21	91	26.18	Y	50
897	FV18	1989	9	7	25002	1425	29	12.29	91	30.23	Y	75
898	FV18	1989	9	7	25003	1535	29	14.13	91	33.24	Y	100
899	FV18	1989	9	7	25004	1700	29	11.24	91	30.97	Y	60
900	FV18	1989	9	8	25101	1150	29	11.81	91	21.24	Y	50

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	DAY	OBS NUMBER	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
901	FV18	1989	9	8	25102	1330	29	9.83	91	24.90	Y	0
902	FV19	1989	8	28	24001	732	.	.	.	.	Y	300
903	FV19	1989	8	28	24002	859	.	.	.	.	Y	240
904	FV19	1989	8	28	24003	1220	.	.	.	.	Y	25
905	FV19	1989	8	28	24004	1603	.	.	.	.	Y	15
906	FV19	1989	8	30	24201	735	.	.	.	.	Y	65
907	FV19	1989	8	30	24202	825	.	.	.	.	Y	50
908	FV19	1989	8	30	24203	1356	.	.	.	.	Y	70
909	FV19	1989	8	30	24204	1445	.	.	.	.	Y	130
910	FV19	1989	8	30	24205	1603	.	.	.	.	Y	150
911	FV19	1989	8	30	24206	1732	.	.	.	.	Y	250
912	FV19	1989	8	30	24207	1912	.	.	.	.	Y	175
913	FV19	1989	8	31	24301	1159	.	.	.	.	Y	25
914	FV19	1989	8	31	24302	1740	.	.	.	.	Y	45
915	FV19	1989	8	31	24303	1854	.	.	.	.	Y	75
916	FV19	1989	9	1	24401	848	.	.	.	.	Y	70
917	FV19	1989	9	1	24402	1004	.	.	.	.	Y	105
918	FV19	1989	9	1	24403	1053	.	.	.	.	Y	90
919	FV19	1989	9	1	24404	1355	.	.	.	.	Y	30
920	FV19	1989	9	4	24701	715	.	.	.	.	Y	80
921	FV19	1989	9	4	24702	915	.	.	.	.	Y	90
922	FV19	1989	9	4	24703	1102	.	.	.	.	Y	60
923	FV19	1989	9	4	24704	1225	.	.	.	.	Y	120
924	FV19	1989	9	4	24705	1420	.	.	.	.	Y	60
925	FV19	1989	9	4	24706	1648	.	.	.	.	Y	80
926	FV19	1989	9	4	24707	1855	.	.	.	.	Y	195
927	FV19	1989	9	6	24901	1115	.	.	.	.	Y	30
928	FV19	1989	9	6	24902	1210	.	.	.	.	Y	20
929	FV19	1989	9	6	24903	1350	.	.	.	.	Y	100
930	FV19	1989	9	6	24904	1455	.	.	.	.	Y	40
931	FV19	1989	9	6	24905	1612	.	.	.	.	Y	50
932	FV19	1989	9	6	24906	1815	.	.	.	.	Y	60
933	FV19	1989	9	7	25001	1429	.	.	.	.	Y	30
934	FV19	1989	9	7	25002	1548	.	.	.	.	Y	20
935	FV19	1989	9	7	25003	1649	.	.	.	.	Y	40
936	FV19	1989	9	7	25004	1820	.	.	.	.	Y	200
937	FV19	1989	9	7	25005	1930	.	.	.	.	Y	60
938	FV19	1989	9	8	25101	715	.	.	.	.	Y	60

939	FV19	1989	9	8	25102	1302	.	.	.	.	Y	30	
940	FV01	1990	6	11	16201	600	29	28.33	92	22.03	Y	100	
941	FV09	1990	6	11	16201	630	29	39.60	92	51.12	Y	30	
942	FV07	1990	6	11	16201	630	29	39.88	92	52.33	Y	15	
943	FV02	1990	6	11	16201	634	29	45.16	93	6.96	Y	60	
944	FV05	1990	6	11	16201	643	29	11.10	93	44.16	Y	10	
945	FV04	1990	6	11	16201	700	29	30.97	92	24.31	Y	100	

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	OBS DAY	TIME NUMBER	LATITUDE OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
946	FV15	1990	6	11	16201	745	29	13.30	91	18.11	Y	25
947	FV16	1990	6	11	16201	830	28	59.88	90	53.35	Y	35
948	FV11	1990	6	11	16201	830	29	2.14	90	49.56	Y	20
949	FV17	1990	6	11	16201	840	29	1.74	90	48.42	Y	50
950	FV14	1990	6	11	16201	854	29	2.30	90	49.77	Y	15
951	FV10	1990	6	11	16201	925	29	11.11	91	17.52	Y	15
952	FV06	1990	6	11	16201	1341	29	9.83	91	16.99	Y	30
953	FV03	1990	6	11	16201	1345	29	31.92	92	24.75	Y	30
954	FV08	1990	6	11	16201	1500	29	35.37	92	44.23	Y	40
955	FV01	1990	6	11	16202	702	29	28.33	92	22.03	Y	40
956	FV09	1990	6	11	16202	730	29	39.40	92	50.91	Y	35
957	FV18	1990	6	11	16202	840	29	2.33	90	49.83	Y	45
958	FV02	1990	6	11	16202	843	29	40.70	92	54.41	Y	85
959	FV07	1990	6	11	16202	915	29	41.41	92	56.41	Y	10
960	FV17	1990	6	11	16202	925	29	2.03	90	49.13	Y	50
961	FV15	1990	6	11	16202	1000	29	12.92	91	19.62	Y	2
962	FV10	1990	6	11	16202	1005	29	12.26	91	18.56	Y	15
963	FV14	1990	6	11	16202	1155	28	50.38	91	15.17	Y	150
964	FV05	1990	6	11	16202	1300	29	37.56	92	47.59	Y	30
965	FV04	1990	6	11	16202	1400	29	28.68	92	21.77	Y	200
966	FV03	1990	6	11	16202	1420	29	31.61	92	23.26	Y	35
967	FV06	1990	6	11	16202	1510	29	10.39	91	17.27	Y	50
968	FV08	1990	6	11	16202	1745	29	34.57	92	45.13	Y	30
969	FV01	1990	6	11	16203	804	29	27.33	92	22.26	Y	40
970	FV18	1990	6	11	16203	930	29	2.48	90	48.95	Y	2
971	FV17	1990	6	11	16203	1015	29	1.93	90	49.87	Y	30
972	FV02	1990	6	11	16203	1055	29	41.43	92	55.23	Y	30
973	FV07	1990	6	11	16203	1110	29	44.27	93	3.20	Y	30
974	FV14	1990	6	11	16203	1300	28	50.21	91	14.85	Y	5
975	FV05	1990	6	11	16203	1342	29	37.01	92	47.48	Y	40
976	FV09	1990	6	11	16203	1440	29	35.76	92	44.68	Y	35
977	FV03	1990	6	11	16203	1610	29	30.26	92	23.96	Y	125
978	FV06	1990	6	11	16203	1615	29	12.64	91	13.59	Y	30
979	FV04	1990	6	11	16203	1830	29	27.91	92	19.95	Y	100
980	FV08	1990	6	11	16203	1945	29	31.16	92	38.25	Y	50
981	FV02	1990	6	11	16204	1135	29	41.03	92	55.08	Y	18
982	FV01	1990	6	11	16204	1309	29	29.02	92	21.03	Y	20
983	FV14	1990	6	11	16204	1353	28	51.17	91	16.46	Y	5

984	FV05	1990	6	11	16204	1533	29	36.07	92	47.95	Y	40
985	FV09	1990	6	11	16204	1540	29	36.03	92	44.22	Y	55
986	FV06	1990	6	11	16204	1700	29	12.65	91	14.04	Y	30
987	FV07	1990	6	11	16204	1740	29	33.97	92	38.60	Y	50
988	FV03	1990	6	11	16204	1745	29	30.44	92	23.77	Y	75
989	FV04	1990	6	11	16204	2025	29	25.26	92	18.24	Y	75
990	FV08	1990	6	11	16204	2035	29	30.61	92	36.17	Y	5

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	OBS DAY	TIME NUMBER	LATITUDE OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
991	FV02	1990	6	11	16205	1225	29	41.02	92	54.07	Y	20
992	FV14	1990	6	11	16205	1443	28	50.82	91	15.72	Y	125
993	FV01	1990	6	11	16205	1444	29	30.62	92	23.91	Y	120
994	FV09	1990	6	11	16205	1630	29	35.97	92	44.03	Y	60
995	FV05	1990	6	11	16205	1728	29	33.13	92	38.72	Y	50
996	FV07	1990	6	11	16205	1910	29	31.19	92	34.46	Y	75
997	FV03	1990	6	11	16205	1914	29	29.85	92	29.93	Y	200
998	FV02	1990	6	11	16206	1530	29	38.01	92	49.40	Y	25
999	FV01	1990	6	11	16206	1549	29	30.41	92	25.16	Y	50
1000	FV14	1990	6	11	16206	1603	28	48.94	91	13.64	Y	20
1001	FV09	1990	6	11	16206	1900	29	30.98	92	33.88	Y	100
1002	FV05	1990	6	11	16206	1902	29	30.44	92	34.23	Y	50
1003	FV07	1990	6	11	16206	2020	29	30.66	92	35.00	Y	25
1004	FV03	1990	6	11	16206	2025	29	29.16	92	29.53	Y	150
1005	FV02	1990	6	11	16207	1652	29	35.43	92	42.74	Y	65
1006	FV14	1990	6	11	16207	1703	28	48.71	91	13.40	Y	200
1007	FV01	1990	6	11	16207	1748	29	28.40	92	22.72	Y	40
1008	FV05	1990	6	11	16207	2005	29	29.68	92	33.11	Y	80
1009	FV09	1990	6	11	16207	2020	29	29.49	92	31.53	Y	125
1010	FV02	1990	6	11	16208	1805	29	33.85	92	38.44	Y	65
1011	FV14	1990	6	11	16208	1807	28	48.83	91	13.90	Y	125
1012	FV01	1990	6	11	16208	1820	29	28.39	92	22.28	Y	40
1013	FV05	1990	6	11	16208	2046	29	29.57	92	33.16	Y	30
1014	FV02	1990	6	11	16209	2000	29	31.56	92	37.42	Y	60
1015	FV01	1990	6	12	16301	628	29	29.72	92	22.39	Y	0
1016	FV08	1990	6	12	16301	710	29	34.25	92	33.18	Y	5
1017	FV07	1990	6	12	16301	725	29	33.61	92	32.02	Y	5
1018	FV02	1990	6	12	16301	858	29	31.99	92	30.78	Y	30
1019	FV14	1990	6	12	16301	916	28	59.93	91	32.33	Y	35
1020	FV06	1990	6	12	16301	948	29	29.02	92	21.53	Y	30
1021	FV03	1990	6	12	16301	1000	29	31.78	92	28.97	Y	40
1022	FV09	1990	6	12	16301	1040	29	28.59	92	19.21	Y	0
1023	FV05	1990	6	12	16301	1045	29	27.84	92	19.47	Y	40
1024	FV08	1990	6	12	16302	925	29	33.10	92	32.79	Y	15
1025	FV01	1990	6	12	16302	1042	29	29.74	92	21.96	Y	100
1026	FV14	1990	6	12	16302	1050	29	0.51	91	30.26	Y	5
1027	FV06	1990	6	12	16302	1123	29	28.29	92	22.13	Y	75
1028	FV09	1990	6	12	16302	1135	29	28.62	92	20.62	Y	65

1029	FV05	1990	6	12	16302	1136	29	27.29	92	19.71	Y	25
1030	FV03	1990	6	12	16302	1150	29	30.49	92	22.75	Y	40
1031	FV02	1990	6	12	16302	1258	29	29.03	92	21.67	Y	40
1032	FV07	1990	6	12	16302	1500	29	31.22	92	22.93	Y	20
1033	FV14	1990	6	12	16303	1132	29	0.77	91	31.07	Y	65
1034	FV09	1990	6	12	16303	1150	29	29.27	92	21.70	Y	50
1035	FV05	1990	6	12	16303	1203	29	27.77	92	19.52	Y	20

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	DAY	OBS NUMBER	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
1036	FV01	1990	6	12	16303	1206	29	28.81	92	21.13	Y	25
1037	FV06	1990	6	12	16303	1234	29	28.76	92	23.03	Y	125
1038	FV03	1990	6	12	16303	1315	29	29.92	92	22.64	Y	30
1039	FV02	1990	6	12	16303	1449	29	30.44	92	22.21	Y	40
1040	FV07	1990	6	12	16303	1735	29	28.34	92	22.80	Y	30
1041	FV01	1990	6	12	16304	1309	29	29.08	92	21.27	Y	0
1042	FV06	1990	6	12	16304	1334	29	28.96	92	23.59	Y	130
1043	FV03	1990	6	12	16304	1415	29	31.16	92	24.99	Y	75
1044	FV09	1990	6	12	16304	1440	29	30.40	92	23.29	Y	110
1045	FV05	1990	6	12	16304	1526	29	30.45	92	25.35	Y	0
1046	FV02	1990	6	12	16304	1800	29	28.80	92	22.62	Y	35
1047	FV18	1990	6	12	16304	1930	29	11.50	91	12.59	Y	400
1048	FV17	1990	6	12	16304	1945	29	11.34	91	12.82	Y	100
1049	FV03	1990	6	12	16305	1500	29	31.12	92	25.27	Y	100
1050	FV06	1990	6	12	16305	1516	29	31.41	92	25.68	Y	130
1051	FV09	1990	6	12	16305	1550	29	31.56	92	26.75	Y	60
1052	FV10	1990	6	12	16305	1920	29	11.21	91	11.98	Y	200
1053	FV03	1990	6	12	16306	1645	29	28.80	92	22.22	Y	50
1054	FV06	1990	6	12	16306	2028	29	24.82	92	13.74	Y	120
1055	FV08	1990	6	12	16307	1925	29	34.32	92	40.20	Y	175
1056	FV04	1990	6	13	16401	700	29	18.53	91	56.09	Y	45
1057	FV02	1990	6	13	16401	820	29	30.32	92	22.62	Y	25
1058	FV17	1990	6	13	16401	1230	29	9.50	91	24.45	Y	35
1059	FV16	1990	6	13	16401	1230	29	10.64	91	12.22	Y	20
1060	FV11	1990	6	13	16401	1245	29	10.08	91	12.38	Y	15
1061	FV14	1990	6	13	16401	1247	29	10.41	91	4.73	Y	1
1062	FV10	1990	6	13	16401	1300	29	10.00	91	13.28	Y	25
1063	FV13	1990	6	13	16401	1333	29	10.02	91	13.58	Y	20
1064	FV15	1990	6	13	16401	1345	29	27.82	92	13.81	Y	3
1065	FV18	1990	6	13	16401	1350	29	10.36	91	11.79	Y	20
1066	FV07	1990	6	13	16401	1500	29	24.02	92	12.61	Y	30
1067	FV01	1990	6	13	16401	1504	29	23.90	92	12.35	Y	30
1068	FV09	1990	6	13	16401	1515	29	23.82	92	11.37	Y	40
1069	FV05	1990	6	13	16401	1536	29	35.85	92	51.01	Y	100
1070	FV03	1990	6	13	16401	1550	29	37.27	92	52.24	Y	80
1071	FV06	1990	6	13	16401	2022	29	20.72	92	14.75	Y	120
1072	FV07	1990	6	13	16402	.	29	17.67	91	55.17	Y	25
1073	FV04	1990	6	13	16402	800	29	17.70	91	55.67	Y	60

1074	FV17	1990	6	13	16402	1320	29	9.62	91	12.50	Y	25
1075	FV16	1990	6	13	16402	1330	29	10.64	91	12.22	Y	25
1076	FV11	1990	6	13	16402	1350	29	10.00	91	12.05	Y	30
1077	FV10	1990	6	13	16402	1410	29	10.85	91	12.00	Y	25
1078	FV13	1990	6	13	16402	1421	29	10.02	91	13.58	Y	30
1079	FV02	1990	6	13	16402	1422	29	35.97	92	42.72	Y	15
1080	FV15	1990	6	13	16402	1505	29	23.17	92	11.98	Y	25

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	OBS DAY	TIME NUMBER	LATITUDE OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
1081	FV18	1990	6	13	16402	1600	29	11.09	91	15.06	Y	65
1082	FV14	1990	6	13	16402	1600	29	12.45	91	13.49	Y	65
1083	FV01	1990	6	13	16402	1635	29	24.12	92	13.90	Y	10
1084	FV03	1990	6	13	16402	1855	29	35.54	92	41.41	Y	175
1085	FV09	1990	6	13	16402	1900	29	17.52	91	55.84	Y	225
1086	FV17	1990	6	13	16403	1400	29	9.65	91	13.20	Y	20
1087	FV11	1990	6	13	16403	1530	29	10.30	91	14.96	Y	100
1088	FV02	1990	6	13	16403	1605	29	36.98	92	51.25	Y	35
1089	FV15	1990	6	13	16403	1645	29	22.99	92	10.51	Y	70
1090	FV18	1990	6	13	16403	1710	29	10.05	91	16.64	Y	75
1091	FV10	1990	6	13	16403	1730	29	9.46	91	6.76	Y	20
1092	FV13	1990	6	13	16403	1730	29	10.29	91	7.38	Y	100
1093	FV14	1990	6	13	16403	1747	29	11.00	91	14.04	Y	65
1094	FV16	1990	6	13	16403	1845	29	9.37	91	8.08	Y	100
1095	FV01	1990	6	13	16403	1931	29	17.75	91	54.44	Y	175
1096	FV17	1990	6	13	16404	1635	29	9.62	91	14.38	Y	180
1097	FV11	1990	6	13	16404	1700	29	10.01	91	15.55	Y	125
1098	FV13	1990	6	13	16404	1831	29	9.76	91	6.59	Y	40
1099	FV18	1990	6	13	16404	1835	29	9.75	91	17.56	Y	105
1100	FV14	1990	6	13	16404	1846	29	11.34	91	15.33	Y	5
1101	FV10	1990	6	13	16404	1855	29	9.46	91	6.76	Y	80
1102	FV16	1990	6	13	16404	1900	29	9.37	91	8.08	Y	150
1103	FV15	1990	6	13	16404	1920	29	17.63	91	53.65	Y	250
1104	FV02	1990	6	13	16404	2029	29	20.78	92	14.76	Y	30
1105	FV11	1990	6	13	16405	1800	29	11.09	91	14.60	Y	100
1106	FV17	1990	6	13	16405	1805	29	9.36	91	14.81	Y	20
1107	FV13	1990	6	13	16405	1923	29	9.48	91	6.02	Y	80
1108	FV14	1990	6	13	16405	2002	29	10.07	91	14.52	Y	150
1109	FV18	1990	6	13	16405	2005	29	8.54	91	17.00	Y	90
1110	FV15	1990	6	13	16405	2030	29	18.13	91	54.12	Y	30
1111	FV11	1990	6	13	16406	1950	29	9.13	91	16.81	Y	35
1112	FV17	1990	6	13	16406	2020	29	7.47	91	16.39	Y	120
1113	FV05	1990	6	14	16501	717	29	23.60	92	2.57	Y	35
1114	FV10	1990	6	14	16501	740	29	12.57	91	11.19	Y	8
1115	FV04	1990	6	14	16501	740	29	33.17	92	35.67	Y	75
1116	FV14	1990	6	14	16501	843	29	8.88	91	18.58	Y	15
1117	FV17	1990	6	14	16501	900	29	8.03	91	18.17	Y	30
1118	FV18	1990	6	14	16501	935	29	8.02	91	18.24	Y	25

1119	FV08	1990	6	14	16501	1050	29	26.48	92	9.19	Y	5
1120	FV01	1990	6	14	16501	1121	29	26.27	92	10.57	Y	30
1121	FV03	1990	6	14	16501	1800	29	22.29	92	2.59	Y	40
1122	FV06	1990	6	14	16501	1810	29	28.77	92	25.99	Y	50
1123	FV15	1990	6	14	16501	1940	29	11.89	91	40.11	Y	5
1124	FV14	1990	6	14	16502	1103	29	0.34	91	30.61	Y	300
1125	FV05	1990	6	14	16502	1740	29	26.09	92	15.58	Y	25

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	OBS DAY	TIME NUMBER	LATITUDE OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
1126	FV16	1990	6	14	16502	1800	29	10.94	91	10.51	Y	2
1127	FV08	1990	6	14	16502	1815	29	28.96	92	26.33	Y	25
1128	FV06	1990	6	14	16502	1855	29	29.46	92	26.58	Y	30
1129	FV03	1990	6	14	16502	1900	29	23.79	92	3.04	Y	40
1130	FV11	1990	6	14	16503	1900	29	10.06	91	10.96	Y	25
1131	FV17	1990	6	14	16504	1820	29	10.15	91	3.38	Y	10
1132	FV17	1990	6	14	16505	1940	29	9.36	91	10.55	Y	55
1133	FV06	1990	6	15	16601	650	29	37.68	92	46.03	Y	30
1134	FV02	1990	6	15	16601	958	29	27.17	92	23.97	Y	0
1135	FV01	1990	6	15	16601	1000	29	27.60	92	24.53	Y	0
1136	FV03	1990	6	15	16601	1030	29	28.57	92	26.68	Y	30
1137	FV04	1990	6	15	16601	1100	29	27.11	92	25.62	Y	75
1138	FV05	1990	6	15	16601	1304	29	32.44	92	50.18	Y	1
1139	FV07	1990	6	15	16601	1955	29	23.67	92	17.85	Y	85
1140	FV08	1990	6	15	16601	1955	29	24.38	92	17.88	Y	0
1141	FV06	1990	6	15	16602	1051	29	36.82	92	48.08	Y	40
1142	FV04	1990	6	15	16602	1740	29	28.82	92	25.52	Y	100
1143	FV09	1990	6	15	16602	1815	29	29.32	92	26.18	Y	40
1144	FV05	1990	6	15	16602	1910	29	26.44	92	22.44	Y	0
1145	FV06	1990	6	15	16603	1154	29	37.37	92	49.48	Y	30
1146	FV04	1990	6	15	16603	1930	29	26.07	92	22.01	Y	80
1147	FV09	1990	6	15	16603	2000	29	24.04	92	18.75	Y	80
1148	FV06	1990	6	15	16604	1238	29	38.07	92	50.24	Y	30
1149	FV06	1990	6	15	16605	1822	29	34.55	92	38.97	Y	60
1150	FV04	1990	7	23	20401	700	29	32.12	92	34.16	Y	150
1151	FV07	1990	7	23	20401	705	29	30.20	92	23.14	Y	10
1152	FV03	1990	7	23	20401	718	29	29.36	92	20.79	Y	40
1153	FV18	1990	7	23	20401	735	29	12.17	91	25.55	Y	66
1154	FV10	1990	7	23	20401	740	29	12.12	91	24.73	Y	50
1155	FV15	1990	7	23	20401	740	29	12.53	91	23.34	Y	35
1156	FV08	1990	7	23	20401	745	29	36.40	92	41.60	Y	35
1157	FV05	1990	7	23	20401	750	29	29.27	92	21.41	Y	40
1158	FV14	1990	7	23	20401	754	29	12.42	91	27.99	Y	100
1159	FV09	1990	7	23	20401	815	29	36.77	92	44.80	Y	35
1160	FV13	1990	7	23	20401	829	29	13.08	91	28.18	Y	100
1161	FV17	1990	7	23	20401	830	29	13.71	91	15.82	Y	25
1162	FV02	1990	7	23	20401	835	29	30.20	92	17.68	Y	80
1163	FV06	1990	7	23	20401	840	29	36.47	92	43.83	Y	40

1164	FV19	1990	7	23	20401	845	29	12.49	91	24.51	Y	50
1165	FV01	1990	7	23	20401	1100	29	33.33	92	36.66	Y	50
1166	FV08	1990	7	23	20402	830	29	36.22	92	41.56	Y	75
1167	FV09	1990	7	23	20402	900	29	36.84	92	44.15	Y	10
1168	FV18	1990	7	23	20402	922	29	12.62	91	30.15	Y	30
1169	FV15	1990	7	23	20402	925	29	12.85	91	29.27	Y	8
1170	FV05	1990	7	23	20402	930	29	30.27	92	23.62	Y	30

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	OBS DAY	TIME NUMBER	LATITUDE OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
1171	FV04	1990	7	23	20402	940	29	32.93	92	38.38	Y	200
1172	FV02	1990	7	23	20402	1015	29	31.02	92	22.80	Y	20
1173	FV17	1990	7	23	20402	1035	29	14.20	91	18.26	Y	30
1174	FV03	1990	7	23	20402	1050	29	31.63	92	25.29	Y	75
1175	FV14	1990	7	23	20402	1108	29	10.73	91	26.04	Y	60
1176	FV01	1990	7	23	20402	1201	29	33.27	92	36.55	Y	10
1177	FV13	1990	7	23	20402	1205	29	10.54	91	25.77	Y	80
1178	FV19	1990	7	23	20402	1300	29	22.00	91	56.37	Y	10
1179	FV10	1990	7	23	20402	1630	29	10.26	91	19.66	Y	60
1180	FV07	1990	7	23	20402	1730	29	30.47	92	25.37	Y	80
1181	FV06	1990	7	23	20402	1911	29	30.61	92	27.13	Y	50
1182	FV05	1990	7	23	20403	1029	29	29.92	92	24.08	Y	70
1183	FV09	1990	7	23	20403	1030	29	36.08	92	43.79	Y	100
1184	FV17	1990	7	23	20403	1125	29	14.29	91	17.85	Y	35
1185	FV08	1990	7	23	20403	1145	29	31.00	92	27.02	Y	75
1186	FV02	1990	7	23	20403	1150	29	30.72	92	17.46	Y	50
1187	FV14	1990	7	23	20403	1200	29	10.21	91	25.52	Y	125
1188	FV03	1990	7	23	20403	1230	29	32.84	92	31.02	Y	100
1189	FV04	1990	7	23	20403	1300	29	31.43	92	25.23	Y	75
1190	FV13	1990	7	23	20403	1319	29	10.54	91	25.77	Y	80
1191	FV15	1990	7	23	20403	1410	29	21.77	91	57.01	Y	9
1192	FV19	1990	7	23	20403	1545	29	17.13	91	41.60	Y	30
1193	FV01	1990	7	23	20403	1821	29	31.29	92	28.47	Y	1
1194	FV07	1990	7	23	20403	1910	29	29.31	92	23.42	Y	10
1195	FV18	1990	7	23	20403	1948	29	13.16	91	38.63	Y	150
1196	FV09	1990	7	23	20404	1140	29	37.26	92	45.93	Y	25
1197	FV05	1990	7	23	20404	1218	29	30.95	92	28.83	Y	80
1198	FV02	1990	7	23	20404	1245	29	30.87	92	17.55	Y	20
1199	FV08	1990	7	23	20404	1300	29	32.49	92	29.80	Y	10
1200	FV14	1990	7	23	20404	1348	29	11.13	91	22.45	Y	50
1201	FV03	1990	7	23	20404	1350	29	33.56	92	32.27	Y	70
1202	FV04	1990	7	23	20404	1400	29	27.93	92	22.87	Y	50
1203	FV13	1990	7	23	20404	1510	29	10.54	91	20.49	Y	30
1204	FV15	1990	7	23	20404	1550	29	17.66	91	41.85	Y	90
1205	FV19	1990	7	23	20404	1845	29	14.18	91	42.19	Y	100
1206	FV01	1990	7	23	20404	1915	29	30.76	92	27.62	Y	25
1207	FV09	1990	7	23	20405	1220	29	37.82	92	46.82	Y	90
1208	FV05	1990	7	23	20405	1358	29	32.89	92	32.68	Y	40

1209	FV02	1990	7	23	20405	1535	29	32.19	92	30.66	Y	80
1210	FV14	1990	7	23	20405	1543	29	10.14	91	20.38	Y	150
1211	FV03	1990	7	23	20405	1710	29	30.20	92	24.61	Y	60
1212	FV08	1990	7	23	20405	1820	29	31.69	92	30.09	Y	0
1213	FV19	1990	7	23	20405	2000	29	12.70	91	39.76	Y	30
1214	FV13	1990	7	23	20405	2002	29	13.21	91	39.61	Y	150
1215	FV09	1990	7	23	20406	1345	29	35.76	92	43.13	Y	60

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	DAY	OBS TIME NUMBER	LATITUDE OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
1216	FV02	1990	7	23	20406 1725	29	31.98	92	30.95	Y	200	
1217	FV05	1990	7	23	20406 1759	29	31.80	92	31.39	Y	70	
1218	FV03	1990	7	23	20406 1825	29	31.34	92	28.74	Y	60	
1219	FV08	1990	7	23	20406 1900	29	31.71	92	28.89	Y	10	
1220	FV14	1990	7	23	20406 2003	29	5.67	91	26.07	Y	5	
1221	FV09	1990	7	23	20407 1710	29	34.33	92	41.52	Y	85	
1222	FV05	1990	7	23	20407 1848	29	31.40	92	31.40	Y	35	
1223	FV02	1990	7	23	20407 1954	29	31.50	92	30.71	Y	105	
1224	FV03	1990	7	23	20407 2015	29	25.01	92	16.84	Y	100	
1225	FV05	1990	7	23	20408 1920	29	31.21	92	30.45	Y	40	
1226	FV09	1990	7	23	20408 2005	29	25.37	92	16.75	Y	225	
1227	FV08	1990	7	24	20501 610	29	28.22	92	14.69	Y	20	
1228	FV05	1990	7	24	20501 612	29	27.76	92	14.70	Y	1	
1229	FV01	1990	7	24	20501 625	29	26.19	92	9.00	Y	6	
1230	FV02	1990	7	24	20501 625	29	27.73	92	12.60	Y	1	
1231	FV19	1990	7	24	20501 630	29	15.96	91	35.64	Y	75	
1232	FV14	1990	7	24	20501 635	29	20.07	91	56.81	Y	65	
1233	FV10	1990	7	24	20501 645	29	20.34	91	57.21	Y	100	
1234	FV15	1990	7	24	20501 650	29	14.37	91	33.37	Y	150	
1235	FV07	1990	7	24	20501 700	29	23.41	92	8.80	Y	100	
1236	FV03	1990	7	24	20501 700	29	24.39	92	8.57	Y	100	
1237	FV13	1990	7	24	20501 703	29	17.81	91	41.89	Y	120	
1238	FV17	1990	7	24	20501 750	29	12.17	91	24.95	Y	30	
1239	FV18	1990	7	24	20501 756	29	16.68	91	32.97	Y	82	
1240	FV04	1990	7	24	20501 800	29	27.28	92	12.14	Y	100	
1241	FV09	1990	7	24	20501 905	29	23.54	91	55.09	Y	15	
1242	FV06	1990	7	24	20501 1341	29	30.10	92	22.39	Y	60	
1243	FV05	1990	7	24	20502 720	29	23.17	92	8.15	Y	40	
1244	FV02	1990	7	24	20502 735	29	24.87	92	8.08	Y	30	
1245	FV08	1990	7	24	20502 745	29	24.26	92	7.42	Y	200	
1246	FV10	1990	7	24	20502 800	29	20.34	91	57.21	Y	140	
1247	FV14	1990	7	24	20502 802	29	21.63	91	53.14	Y	140	
1248	FV13	1990	7	24	20502 904	29	22.66	91	51.81	Y	225	
1249	FV04	1990	7	24	20502 930	29	29.73	92	27.78	Y	150	
1250	FV01	1990	7	24	20502 947	29	21.23	91	52.21	Y	5	
1251	FV19	1990	7	24	20502 1015	29	21.13	91	48.71	Y	50	
1252	FV15	1990	7	24	20502 1025	29	21.53	91	49.00	Y	45	
1253	FV17	1990	7	24	20502 1030	29	16.29	91	41.13	Y	75	

1254	FV03	1990	7	24	20502	1310	29	21.62	91	57.51	Y	50
1255	FV06	1990	7	24	20502	1428	29	30.52	92	22.21	Y	50
1256	FV09	1990	7	24	20502	1655	29	29.65	92	23.27	Y	50
1257	FV18	1990	7	24	20502	1857	29	8.70	91	18.71	Y	83
1258	FV07	1990	7	24	20502	1935	29	24.40	92	9.07	Y	275
1259	FV05	1990	7	24	20503	858	29	22.58	91	56.09	Y	40
1260	FV10	1990	7	24	20503	910	29	22.63	91	53.82	Y	160

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	DAY	OBS NUMBER	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
1261	FV14	1990	7	24	20503	931	29	22.06	91	50.36	Y	10
1262	FV13	1990	7	24	20503	1020	29	22.86	91	51.81	Y	50
1263	FV04	1990	7	24	20503	1100	29	35.06	92	48.00	Y	60
1264	FV02	1990	7	24	20503	1130	29	24.61	91	58.97	Y	0
1265	FV06	1990	7	24	20503	1525	29	31.21	92	24.69	Y	100
1266	FV03	1990	7	24	20503	1700	29	29.56	92	22.81	Y	75
1267	FV08	1990	7	24	20503	1745	29	20.55	92	0.96	Y	20
1268	FV01	1990	7	24	20503	1750	29	30.89	92	28.12	Y	3
1269	FV09	1990	7	24	20503	1820	29	31.64	92	31.54	Y	125
1270	FV15	1990	7	24	20503	1845	29	9.14	91	21.91	Y	180
1271	FV19	1990	7	24	20503	1848	29	19.19	92	11.58	Y	125
1272	FV17	1990	7	24	20503	1850	29	15.29	91	43.49	Y	50
1273	FV05	1990	7	24	20504	950	29	23.62	91	56.06	Y	1
1274	FV14	1990	7	24	20504	1037	29	21.91	91	48.93	Y	75
1275	FV10	1990	7	24	20504	1140	29	22.60	91	53.80	Y	45
1276	FV17	1990	7	24	20504	1415	29	13.15	91	38.38	Y	35
1277	FV06	1990	7	24	20504	1624	29	30.71	92	24.62	Y	50
1278	FV03	1990	7	24	20504	1750	29	30.11	92	22.61	Y	75
1279	FV02	1990	7	24	20504	1810	29	31.81	92	30.36	Y	50
1280	FV13	1990	7	24	20504	1840	29	9.70	91	21.93	Y	160
1281	FV01	1990	7	24	20504	1945	29	28.55	92	20.88	Y	25
1282	FV08	1990	7	24	20504	1955	29	29.28	92	8.25	Y	30
1283	FV19	1990	7	24	20504	2000	29	17.30	91	57.26	Y	100
1284	FV15	1990	7	24	20504	2005	29	6.72	91	16.35	Y	75
1285	FV09	1990	7	24	20504	2015	29	28.04	92	21.71	Y	60
1286	FV14	1990	7	24	20505	1201	29	22.46	91	51.58	Y	5
1287	FV17	1990	7	24	20505	1630	29	18.39	91	50.31	Y	60
1288	FV06	1990	7	24	20505	1659	29	30.04	92	24.18	Y	100
1289	FV10	1990	7	24	20505	1730	29	19.03	91	56.48	Y	20
1290	FV03	1990	7	24	20505	1920	29	28.27	92	18.49	Y	40
1291	FV13	1990	7	24	20505	1945	29	7.92	91	18.10	Y	450
1292	FV05	1990	7	24	20505	1948	29	23.93	92	9.88	Y	35
1293	FV02	1990	7	24	20505	1958	29	28.53	92	21.36	Y	40
1294	FV01	1990	7	24	20505	2036	29	27.03	92	21.03	Y	35
1295	FV14	1990	7	24	20506	1734	29	18.95	91	54.84	Y	35
1296	FV06	1990	7	24	20506	1821	29	31.90	92	31.20	Y	125
1297	FV10	1990	7	24	20506	1830	29	19.10	91	57.35	Y	125
1298	FV03	1990	7	24	20506	2010	29	27.01	92	17.92	Y	125

1299	FV05	1990	7	24	20506	2026	29	23.55	92	9.50	Y	0
1300	FV14	1990	7	24	20507	1903	29	18.21	91	56.36	Y	125
1301	FV10	1990	7	24	20507	1955	29	19.12	91	57.38	Y	115
1302	FV06	1990	7	24	20507	2014	29	32.33	92	35.66	Y	60
1303	FV14	1990	7	24	20508	2029	29	16.19	91	55.75	Y	125
1304	FV01	1990	7	25	20601	600	29	29.16	92	17.00	Y	0
1305	FV19	1990	7	25	20601	615	29	15.81	91	18.26	Y	75

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	OBS DAY	TIME NUMBER	LATITUDE OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
1306	FV06	1990	7	25	20601	628	29	33.40	92	35.31	Y	100
1307	FV17	1990	7	25	20601	630	29	17.00	91	41.13	Y	75
1308	FV07	1990	7	25	20601	655	29	29.81	92	13.34	Y	65
1309	FV04	1990	7	25	20601	700	29	20.81	92	0.86	Y	85
1310	FV10	1990	7	25	20601	730	29	20.27	91	40.16	Y	40
1311	FV18	1990	7	25	20601	905	29	11.04	91	8.39	Y	15
1312	FV09	1990	7	25	20601	905	29	34.18	92	37.87	Y	20
1313	FV15	1990	7	25	20601	913	29	11.52	91	9.36	Y	35
1314	FV02	1990	7	25	20601	923	29	33.80	92	32.25	Y	25
1315	FV03	1990	7	25	20601	1150	29	30.32	92	20.64	Y	40
1316	FV13	1990	7	25	20601	1220	29	8.64	91	0.28	Y	40
1317	FV05	1990	7	25	20601	1412	29	30.61	92	11.64	Y	0
1318	FV14	1990	7	25	20601	1548	29	9.97	91	0.67	Y	130
1319	FV08	1990	7	25	20601	1605	29	31.15	92	31.51	Y	125
1320	FV01	1990	7	25	20602	710	29	30.59	92	14.30	Y	10
1321	FV06	1990	7	25	20602	719	29	34.16	92	35.21	Y	30
1322	FV04	1990	7	25	20602	830	29	31.43	92	25.23	Y	75
1323	FV17	1990	7	25	20602	845	29	21.79	91	51.14	Y	75
1324	FV09	1990	7	25	20602	1010	29	34.13	92	37.40	Y	25
1325	FV02	1990	7	25	20602	1035	29	34.70	92	38.27	Y	15
1326	FV10	1990	7	25	20602	1105	29	20.33	91	42.61	Y	50
1327	FV13	1990	7	25	20602	1259	29	8.64	91	0.28	Y	75
1328	FV19	1990	7	25	20602	1300	29	15.23	91	18.26	Y	15
1329	FV18	1990	7	25	20602	1455	29	12.47	91	13.85	Y	66
1330	FV15	1990	7	25	20602	1515	29	12.41	91	13.21	Y	50
1331	FV03	1990	7	25	20602	1530	29	31.09	92	30.76	Y	50
1332	FV07	1990	7	25	20602	1655	29	30.90	92	27.24	Y	10
1333	FV14	1990	7	25	20602	1709	29	7.16	90	58.99	Y	145
1334	FV08	1990	7	25	20602	1730	29	30.04	92	26.27	Y	5
1335	FV06	1990	7	25	20603	855	29	33.00	92	33.46	Y	50
1336	FV04	1990	7	25	20603	940	29	32.93	92	38.38	Y	60
1337	FV17	1990	7	25	20603	950	29	20.51	91	50.64	Y	125
1338	FV01	1990	7	25	20603	1035	29	31.72	92	32.09	Y	2
1339	FV10	1990	7	25	20603	1205	29	20.33	91	42.61	Y	40
1340	FV09	1990	7	25	20603	1320	29	34.85	92	36.34	Y	5
1341	FV13	1990	7	25	20603	1352	29	9.62	91	1.16	Y	100
1342	FV02	1990	7	25	20603	1455	29	32.28	92	29.18	Y	30
1343	FV18	1990	7	25	20603	1539	29	12.36	91	13.93	Y	20

1344	FV15	1990	7	25	20603	1640	29	12.91	91	15.48	Y	160
1345	FV03	1990	7	25	20603	1705	29	30.91	92	27.96	Y	20
1346	FV14	1990	7	25	20603	1952	29	11.67	91	10.22	Y	5
1347	FV07	1990	7	25	20603	2015	29	26.93	92	10.87	Y	25
1348	FV08	1990	7	25	20603	2030	29	27.04	92	9.92	Y	5
1349	FV06	1990	7	25	20604	956	29	34.24	92	33.27	Y	100
1350	FV17	1990	7	25	20604	1125	29	22.53	91	52.80	Y	60

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	DAY	OBS NUMBER	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
1351	FV10	1990	7	25	20604	1345	29	19.29	91	42.59	Y	10
1352	FV09	1990	7	25	20604	1450	29	33.40	92	38.26	Y	60
1353	FV13	1990	7	25	20604	1452	29	9.62	91	1.16	Y	40
1354	FV02	1990	7	25	20604	1555	29	32.21	92	31.14	Y	55
1355	FV18	1990	7	25	20604	1704	29	12.89	91	14.72	Y	180
1356	FV15	1990	7	25	20604	1740	29	12.24	91	15.00	Y	70
1357	FV03	1990	7	25	20604	1805	29	30.40	92	28.63	Y	50
1358	FV01	1990	7	25	20604	1855	29	28.82	92	14.00	Y	1
1359	FV06	1990	7	25	20605	1056	29	33.97	92	35.86	Y	30
1360	FV13	1990	7	25	20605	1533	29	9.62	91	1.16	Y	175
1361	FV02	1990	7	25	20605	1716	29	30.37	92	26.86	Y	25
1362	FV18	1990	7	25	20605	1813	29	12.10	91	15.77	Y	60
1363	FV17	1990	7	25	20605	1825	29	19.19	91	57.48	Y	75
1364	FV15	1990	7	25	20605	1843	29	11.70	91	16.03	Y	18
1365	FV03	1990	7	25	20605	2000	29	31.32	92	31.93	Y	125
1366	FV01	1990	7	25	20605	2022	29	26.93	92	10.41	Y	0
1367	FV06	1990	7	25	20606	1141	29	33.78	92	33.75	Y	30
1368	FV13	1990	7	25	20606	1758	29	7.48	90	59.28	Y	75
1369	FV02	1990	7	25	20606	1908	29	31.23	92	31.21	Y	175
1370	FV17	1990	7	25	20606	1930	29	17.38	91	56.44	Y	150
1371	FV18	1990	7	25	20606	1936	29	9.22	91	15.92	Y	25
1372	FV06	1990	7	25	20607	1309	29	34.67	92	36.16	Y	30
1373	FV13	1990	7	25	20607	1803	29	7.48	90	59.28	Y	125
1374	FV02	1990	7	25	20607	2024	29	31.56	92	32.34	Y	35
1375	FV06	1990	7	25	20608	1420	29	34.91	92	40.00	Y	20
1376	FV06	1990	7	25	20609	1527	29	33.45	92	37.86	Y	50
1377	FV06	1990	7	25	20610	1653	29	30.84	92	27.72	Y	40
1378	FV06	1990	7	25	20611	1947	29	29.56	92	24.70	Y	60
1379	FV06	1990	7	25	20612	2029	29	28.93	92	24.14	Y	100
1380	FV04	1990	7	26	20701	600	29	31.43	92	25.23	Y	100
1381	FV08	1990	7	26	20701	605	29	30.76	92	21.86	Y	30
1382	FV14	1990	7	26	20701	640	29	10.80	91	9.83	Y	300
1383	FV17	1990	7	26	20701	645	29	18.94	91	53.64	Y	40
1384	FV15	1990	7	26	20701	650	29	10.77	91	10.67	Y	500
1385	FV18	1990	7	26	20701	700	29	10.81	91	10.40	Y	75
1386	FV13	1990	7	26	20701	701	29	10.18	91	10.32	Y	100
1387	FV19	1990	7	26	20701	830	29	6.06	91	49.05	Y	25
1388	FV03	1990	7	26	20701	850	29	36.82	92	43.57	Y	5

1389	FV05	1990	7	26	20701	905	29	10.82	91	6.28	Y	15
1390	FV01	1990	7	26	20701	922	29	35.22	92	41.92	Y	0
1391	FV02	1990	7	26	20701	925	29	36.36	92	43.17	Y	30
1392	FV10	1990	7	26	20701	1015	29	10.77	91	4.68	Y	70
1393	FV07	1990	7	26	20701	1100	29	37.89	92	49.01	Y	35
1394	FV09	1990	7	26	20701	1210	29	9.62	91	14.60	Y	65
1395	FV06	1990	7	26	20701	1830	29	28.92	92	15.42	Y	30

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	OBS DAY	TIME NUMBER	LATITUDE OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
1396	FV04	1990	7	26	20702	700	29	32.22	92	34.16	Y	45
1397	FV18	1990	7	26	20702	740	29	10.58	91	9.29	Y	50
1398	FV13	1990	7	26	20702	747	29	10.18	91	10.32	Y	60
1399	FV17	1990	7	26	20702	800	29	18.91	91	47.12	Y	20
1400	FV14	1990	7	26	20702	807	29	10.58	91	8.51	Y	10
1401	FV03	1990	7	26	20702	945	29	37.13	92	44.09	Y	20
1402	FV19	1990	7	26	20702	1000	29	19.05	91	40.52	Y	40
1403	FV05	1990	7	26	20702	1026	29	11.52	91	7.97	Y	40
1404	FV02	1990	7	26	20702	1045	29	37.64	92	48.17	Y	30
1405	FV01	1990	7	26	20702	1122	29	34.49	92	37.61	Y	26
1406	FV08	1990	7	26	20702	1225	29	37.73	92	46.46	Y	20
1407	FV07	1990	7	26	20702	1320	29	34.66	92	41.04	Y	15
1408	FV10	1990	7	26	20702	1620	29	12.35	91	8.88	Y	50
1409	FV09	1990	7	26	20702	1800	29	11.83	91	23.83	Y	65
1410	FV06	1990	7	26	20702	2001	29	28.89	92	20.89	Y	40
1411	FV04	1990	7	26	20703	740	29	27.28	92	12.14	Y	75
1412	FV18	1990	7	26	20703	844	29	9.84	91	9.65	Y	25
1413	FV03	1990	7	26	20703	1000	29	37.20	92	46.50	Y	30
1414	FV17	1990	7	26	20703	1015	29	19.64	91	40.90	Y	125
1415	FV02	1990	7	26	20703	1140	29	38.69	92	49.56	Y	55
1416	FV19	1990	7	26	20703	1145	29	18.50	91	44.11	Y	25
1417	FV14	1990	7	26	20703	1150	29	9.15	91	14.06	Y	80
1418	FV13	1990	7	26	20703	1210	29	8.69	91	14.07	Y	40
1419	FV05	1990	7	26	20703	1238	29	9.44	91	15.02	Y	20
1420	FV08	1990	7	26	20703	1310	29	37.97	92	46.05	Y	15
1421	FV07	1990	7	26	20703	1625	29	33.80	92	44.57	Y	100
1422	FV01	1990	7	26	20703	1710	29	34.29	92	44.13	Y	65
1423	FV09	1990	7	26	20703	1915	29	10.62	91	26.46	Y	20
1424	FV06	1990	7	26	20703	2032	29	27.96	92	19.95	Y	30
1425	FV17	1990	7	26	20704	1120	29	19.67	91	40.98	Y	25
1426	FV03	1990	7	26	20704	1140	29	37.32	92	45.77	Y	50
1427	FV14	1990	7	26	20704	1300	29	8.44	91	13.06	Y	50
1428	FV19	1990	7	26	20704	1300	29	18.21	91	39.32	Y	40
1429	FV02	1990	7	26	20704	1330	29	34.77	92	41.31	Y	40
1430	FV08	1990	7	26	20704	1420	29	37.84	92	45.57	Y	75
1431	FV07	1990	7	26	20704	1755	29	33.91	92	45.33	Y	300
1432	FV05	1990	7	26	20704	1818	29	10.92	91	24.80	Y	35
1433	FV09	1990	7	26	20704	2000	29	10.74	91	27.40	Y	75

1434	FV01	1990	7	26	20704	2010	29	34.89	92	42.70	Y	75
1435	FV17	1990	7	26	20705	1240	29	18.28	91	40.00	Y	50
1436	FV03	1990	7	26	20705	1305	29	34.45	92	40.70	Y	100
1437	FV19	1990	7	26	20705	1415	29	16.21	91	41.75	Y	50
1438	FV02	1990	7	26	20705	1438	29	34.79	92	36.84	Y	55
1439	FV05	1990	7	26	20705	2025	29	9.80	91	25.80	Y	0
1440	FV17	1990	7	26	20706	1345	29	17.13	91	40.02	Y	25

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	OBS DAY	TIME NUMBER	LATITUDE OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
1441	FV03	1990	7	26	20706	1415	29	34.49	92	39.06	Y	50
1442	FV19	1990	7	26	20706	1600	29	16.57	91	29.49	Y	30
1443	FV02	1990	7	26	20706	1834	29	28.90	92	19.04	Y	60
1444	FV17	1990	7	26	20707	1600	29	15.91	91	39.96	Y	30
1445	FV03	1990	7	26	20707	1740	29	33.28	92	46.20	Y	10
1446	FV02	1990	7	26	20707	2010	29	28.21	92	18.94	Y	70
1447	FV08	1990	7	26	20707	2025	29	32.97	92	34.90	Y	40
1448	FV03	1990	7	26	20708	2005	29	33.09	92	35.35	Y	25
1449	FV01	1990	7	27	20801	542	29	31.44	92	25.59	Y	10
1450	FV04	1990	7	27	20801	630	29	27.28	92	12.14	Y	10
1451	FV15	1990	7	27	20801	645	29	12.19	91	13.42	Y	70
1452	FV09	1990	7	27	20801	700	29	26.00	92	0.04	Y	200
1453	FV02	1990	7	27	20801	710	29	26.28	92	0.82	Y	100
1454	FV07	1990	7	27	20801	750	29	41.92	92	58.01	Y	15
1455	FV08	1990	7	27	20801	805	29	34.38	92	32.54	Y	25
1456	FV10	1990	7	27	20801	820	29	11.02	91	6.91	Y	4
1457	FV18	1990	7	27	20801	820	29	11.74	91	12.74	Y	30
1458	FV03	1990	7	27	20801	820	29	33.96	92	35.33	Y	20
1459	FV06	1990	7	27	20801	822	29	26.21	91	58.05	Y	0
1460	FV19	1990	7	27	20801	830	29	13.40	91	16.91	Y	5
1461	FV17	1990	7	27	20801	1000	29	10.14	91	4.40	Y	40
1462	FV14	1990	7	27	20801	1008	29	11.13	91	6.16	Y	25
1463	FV04	1990	7	27	20802	810	29	32.60	92	30.02	Y	35
1464	FV15	1990	7	27	20802	910	29	13.99	91	18.02	Y	35
1465	FV08	1990	7	27	20802	910	29	34.42	92	33.17	Y	0
1466	FV18	1990	7	27	20802	934	29	14.36	91	18.72	Y	15
1467	FV03	1990	7	27	20802	1005	29	32.95	92	29.05	Y	10
1468	FV06	1990	7	27	20802	1035	29	30.66	92	6.90	Y	40
1469	FV14	1990	7	27	20802	1112	29	10.88	91	5.44	Y	25
1470	FV07	1990	7	27	20802	1120	29	39.81	92	51.85	Y	15
1471	FV17	1990	7	27	20802	1600	29	11.41	91	9.01	Y	30
1472	FV02	1990	7	27	20802	1730	29	31.75	92	24.51	Y	60
1473	FV18	1990	7	27	20803	1025	29	14.52	91	18.77	Y	60
1474	FV03	1990	7	27	20803	1045	29	33.18	92	29.58	Y	20
1475	FV06	1990	7	27	20803	1208	29	30.39	92	8.47	Y	40
1476	FV08	1990	7	27	20803	1235	29	39.62	92	50.58	Y	40
1477	FV07	1990	7	27	20803	1400	29	39.51	92	50.35	Y	15
1478	FV02	1990	7	27	20803	1855	29	31.49	92	28.51	Y	30

1479	FV17	1990	7	27	20803	1905	29	11.61	91	10.32	Y	50
1480	FV18	1990	7	27	20804	1119	29	15.35	91	19.38	Y	18
1481	FV03	1990	7	27	20804	1305	29	31.85	92	27.19	Y	40
1482	FV08	1990	7	27	20804	1335	29	39.00	92	50.88	Y	10
1483	FV06	1990	7	27	20804	1414	29	32.35	92	13.29	Y	20
1484	FV02	1990	7	27	20804	1440	29	31.49	92	27.48	Y	450
1485	FV07	1990	7	27	20804	1725	29	32.97	92	31.47	Y	25

3.1.3 MENHADEN FISHING VESSELS, continued:

OBS	PLATFORM CODE	YEAR	MONTH	DAY	OBS NUMBER	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	FISH SPECIES	CATCH
1486	FV06	1990	7	27	20805	1526	29	31.48	92	17.34	Y	30
1487	FV03	1990	7	27	20805	1700	29	32.82	92	28.79	Y	188
1488	FV06	1990	7	27	20806	1703	29	31.17	92	22.97	Y	175
1489	FV03	1990	7	27	20806	1810	29	32.20	92	29.51	Y	80
1490	FV06	1990	7	27	20807	1822	29	31.65	92	27.45	Y	60
1491	FV03	1990	7	27	20807	1900	29	32.21	92	29.48	Y	35

3.1.4 MENHADEN FISHING VESSELS WITH OBSERVERS

3.2 ENVIRONMENTAL DATA

3.2.1 MENHADEN FISHING VESSELS WITH OBSERVERS

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)
1	FAL	FV03	1	1	1	1989	8	28	645	29	16.93	91	38.29
2	FAL	FV03	2	2	2	1989	8	28	926	29	17.58	91	36.89
3	FAL	FV03	3	3	3	1989	8	29	943	29	24.42	91	57.05
4	FAL	FV03	4	4	4	1989	8	29	1430	29	31.67	92	38.63
5	FAL	FV03	5	5	5	1989	8	29	1515	29	31.62	92	37.95
6	FAL	FV03	6	6	6	1989	8	29	1605	29	31.32	92	37.61
7	FAL	FV03	7	7	7	1989	8	29	1700	29	31.13	92	36.54
8	FAL	FV03	8	8	8	1989	8	29	1740	29	30.99	92	36.24
9	FAL	FV03	9	9	9	1989	8	29	1840	29	31.28	92	39.87
10	FAL	FV03	10	10	10	1989	8	29	2000	29	30.25	92	37.61
11	FAL	FV03	11	11	11	1989	8	30	1145	29	30.31	92	30.38
12	FAL	FV03	12	12	12	1989	8	30	1305	29	31.63	92	31.91
13	FAL	FV03	13	13	13	1989	8	30	1620	29	26.08	92	9.66
14	FAL	FV03	14	14	14	1989	8	30	1720	29	24.07	92	9.24
15	FAL	FV03	15	15	15	1989	8	30	1845	29	23.28	92	1.90
16	FAL	FV03	16	16	16	1989	8	30	1940	29	22.23	92	2.90
17	FAL	FV03	17	17	17	1989	8	31	925	29	25.74	92	4.32
18	FAL	FV03	18	18	18	1989	8	31	1040	29	25.37	92	1.81

OBS	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	FISH SPECIES	CATCH	COMMENTS
1	31.5	2	15	15	8.0741	11.317	Y	900	
2	30.5	2	10	17	13.4568	7.489	Y	65	
3	30.6	2	10	8	11.4383	6.600	Y	50	
4	31.9	3	7	21	2.4671	16.726	Y	100	
5	31.6	3	8	21	2.6914	16.475	Y	150	
6	31.6	3	10	22	3.3642	16.277	Y	75	
7	31.8	3	10	22	2.0185	16.411	Y	100	
8	31.8	2	10	22	2.6914	15.838	Y	65	
9	31.1	2	8	24	2.8836	17.092	Y	325	
10	30.8	2	.	28	2.2428	16.608	Y	110	TOO DARK FOR FOREL ULE
11	31.9	2	10	17	2.6914	14.334	Y	85	
12	32.2	1	10	13	2.9156	14.883	Y	20	
13	32.2	2	8	12	3.8128	12.769	Y	90	MUD DUE TO NEAR BY VESSELS

14	32.0	1	10	14	5.3827	12.132	Y	10	
15	31.7	2	8	11	6.9527	9.524	Y	90	
16	31.8	.	.	16	5.1584	16.376	Y	125	
17	30.8	.	.	9	6.5041	10.858	Y	50	WATER TOO MUDY FOR DISC
18	30.1	2	10	10	6.7284	10.133	Y	50	MUD PATCHES AROUND VESSEL

3.1.4 AND 3.2.1 MENHADEN FISHING VESSELS WITH OBSERVERS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)
19	FAL	FV03	19	19	19	1989	8	31	1635	29	21.80	91	55.59
20	FAL	FV03	20	20	20	1989	8	31	1735	29	20.55	91	52.83
21	FAL	FV03	21	21	21	1989	8	31	1825	29	19.72	91	46.75
22	FAL	FV03	22	22	22	1989	8	31	1955	29	17.93	91	53.32
23	FAL	FV03	23	23	23	1989	9	1	730	29	22.42	91	46.58
24	FAL	FV03	24	24	24	1989	9	1	920	29	23.94	91	46.98
25	FAL	FV03	25	25	25	1989	9	1	1220	29	20.58	92	6.15
26	FAL	FV03	26	26	26	1989	9	1	1615	29	18.25	92	6.16
27	FAL	FV03	27	27	27	1989	9	4	900	29	52.87	92	4.05
28	FAL	FV03	28	28	28	1989	9	4	1100	29	26.14	92	1.69
29	FAL	FV03	29	29	29	1989	9	4	1205	29	25.38	91	59.78
30	FAL	FV03	30	30	30	1989	9	4	1255	29	25.01	92	0.46
31	FAL	FV03	31	31	31	1989	9	4	1420	29	23.86	91	56.59
32	FAL	FV03	32	32	32	1989	9	4	1700	29	24.81	91	59.21
33	FAL	FV03	33	33	33	1989	9	4	1846	29	21.52	91	57.30
34	FAL	FV03	34	34	34	1989	9	5	1600	29	28.45	92	19.73
35	FAL	FV03	35	35	35	1989	9	6	1425	29	16.59	91	55.14
36	FAL	FV03	36	36	36	1989	9	6	1540	29	17.87	91	58.31

OBS	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	FISH SPECIES	CATCH	COMMENTS
19	32.4	1	10	12	7.4012	11.959	Y	65	MUD PATCHES ARROUND VESSEL
20	32.3	2	8	14	8.5226	14.105	Y	5	MUD PATCHES AROUND VESSEL
21	31.5	1	6	14	5.3827	17.614	Y	75	
22	31.5	.	.	21	1.7942	19.378	Y	50	TOO DARK FOR DISC
23	30.6	2	8	12	5.1584	12.982	Y	50	
24	31.1	.	.	10	4.9342	9.265	Y	65	MUDDY AROUND VESSEL
25	32.3	3	7	18	1.7942	16.223	Y	25	
26	32.3	2	10	22	3.5885	14.503	Y	20	
27	30.4	1	10	10	6.5041	16.045	Y	50	MUDDY WATER
28	30.7	1	10	14	5.3827	16.471	Y	160	MUDDY WATER
29	31.2	.	.	12	4.4856	15.859	Y	175	MUDDY WATER
30	31.5	1	8	12	0.0000	16.497	Y	50	MUDDY WATER
31	31.7	.	.	12	7.8498	12.563	Y	275	MUDDY WATER
32	31.5	1	8	13	0.0000	13.687	Y	235	MUDDY WATER

33	30.7	4	7	19	3.5885	14.836	Y	90	MUDDY WATER
34	30.6	2	10	0	5.3827	16.356	Y	45	STRONG CURRENT NOT ABLE TO LOWER DISC
35	30.7	2	8	26	4.0370	23.968	Y	175	
36	30.8	2	8	21	8.5226	23.689	Y	75	

3.1.4 AND 3.2.1 MENHADEN FISHING VESSELS WITH OBSERVERS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)
37	FAL	FV03	37	37	37	1989	9	6	1700	29	16.47	91	52.92
38	FAL	FV03	38	38	38	1989	9	6	1830	29	15.44	91	53.76
39	FAL	FV03	39	39	39	1989	9	6	1940	29	14.35	91	53.31
40	FAL	FV03	40	40	40	1989	9	7	1515	29	21.99	91	56.44
41	FAL	FV03	41	41	41	1989	9	7	1815	29	21.32	92	12.19
42	FAL	FV03	42	42	42	1989	9	7	1935	29	20.84	92	13.31
43	FAL	FV09	1	1	1	1989	8	28	715	29	15.49	91	32.28
44	FAL	FV09	2	2	2	1989	8	28	900	29	18.74	91	33.67
45	FAL	FV09	3	3	3	1989	8	28	1045	29	18.51	91	34.08
46	FAL	FV09	4	4	4	1989	8	28	1745	29	31.10	92	29.72
47	FAL	FV09	5	5	5	1989	8	28	1830	29	31.37	92	30.75
48	FAL	FV09	6	6	6	1989	8	28	1930	29	30.26	92	27.79
49	FAL	FV09	7	7	7	1989	8	29	1045	29	41.51	92	55.00
50	FAL	FV09	8	8	8	1989	8	29	1415	29	47.11	93	34.41
51	FAL	FV09	9	9	9	1989	8	29	1515	29	46.80	93	37.00
52	FAL	FV09	10	10	10	1989	8	29	1615	29	46.81	93	37.66
53	FAL	FV09	11	11	11	1989	8	29	1700	29	46.82	93	38.66
54	FAL	FV09	12	12	12	1989	8	29	1830	29	45.80	93	40.79

OBS	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	FISH SPECIES	CATCH	COMMENTS
37	30.6	1	7	26	4.7099	24.225	Y	150	
38	30.4	1	4	26	4.9342	24.914	Y	250	
39	30.2	.	.	28	5.3827	25.005	Y	150	TOO DARK FOR DISC
40	30.3	.	.	13	8.2984	20.007	Y	20	MUDDY WATER
41	30.2	2	6	25	13.0082	19.839	Y	115	
42	30.3	.	.	24	13.4568	22.471	Y	80	TOO DARK FOR DISC
43	30.5	3	16	12	5.3827	17.237	Y	305	ORDINARY
44	30.8	3	16	12	19.2881	5.640	Y	375	ORDINARY
45	31.2	2	19	12	4.7099	7.861	Y	325	ORDINARY
46	31.5	3	14	22	3.1399	15.808	Y	70	ORDINARY
47	31.4	3	15	22	4.2613	16.005	Y	55	ORDINARY
48	31.4	3	15	22	2.6914	15.154	Y	50	ORDINARY
49	30.4	3	15	15	4.7099	18.787	Y	50	PORPOISES
50	31.9	3	16	14	3.8128	22.066	Y	100	SEA WEEDS

51	32.0	3	14	14	0.0000	22.192	Y	65	SEA WEEDS
52	31.9	4	14	14	4.2613	22.224	Y	65	SEA WEEDS
53	32.0	3	19	14	4.0370	22.363	Y	30	SEAWEEDS
54	31.4	6	12	17	1.7942	22.509	Y	100	SEAWEEDS AND PROPOISES

3.1.4 AND 3.2.1 MENHADEN FISHING VESSELS WITH OBSERVERS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
55	FAL	FV09	13	13	13	1989	8	29	1945	29	45.46
56	FAL	FV09	14	14	14	1989	8	30	745	29	44.00
57	FAL	FV09	15	15	15	1989	8	30	900	29	44.92
58	FAL	FV09	16	16	16	1989	8	30	945	29	41.95
59	FAL	FV09	17	17	17	1989	8	30	1300	29	38.01
60	FAL	FV09	18	18	18	1989	8	30	1630	29	28.92
61	FAL	FV09	19	19	19	1989	8	30	2000	29	27.37
62	FAL	FV09	20	20	20	1989	8	31	600	29	28.99
63	FAL	FV09	21	21	21	1989	8	31	915	29	25.92
64	FAL	FV09	22	22	22	1989	8	31	1015	29	25.24

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	FISH SPECIES	CATCH
55	93	42.60	31.0	4	19	15	0.9612	22.723	Y	50
56	93	21.65	30.4	4	12	13	2.6914	20.959	Y	80
57	93	21.95	30.8	4	12	13	2.9156	20.727	Y	25
58	93	20.98	31.0	4	12	29	2.4671	20.935	Y	75
59	92	50.47	31.9	4	14	25	2.0185	18.055	Y	25
60	92	20.63	32.3	5	10	16	1.2816	16.708	Y	15
61	92	19.32	31.8	2	.	20	1.3457	16.224	Y	30
62	92	16.02	30.4	5	10	15	0.8971	17.084	Y	35
63	92	0.94	30.9	4	14	14	5.6070	10.060	Y	30
64	91	58.06	31.3	3	16	14	8.0741	9.723	Y	70

OBS	COMMENTS
55	
56	ORDINARY
57	PORPOISES
58	WATER COLOR CHANGE
59	
60	WATER COLOR CHANGE
61	NO FORELULE NO DAY LIGHT

62
63
64

3.1.4 AND 3.2.1 MENHADEN FISHING VESSELS WITH OBSERVERS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
65	FAL	FV09	23	23	23	1989	8	31	1645	29	22.71
66	FAL	FV09	24	24	24	1989	8	31	1800	29	20.22
67	FAL	FV09	25	25	25	1989	8	31	1930	29	19.21
68	FAL	FV09	26	26	26	1989	8	31	2015	29	17.93
69	FAL	FV09	27	27	27	1989	9	1	645	29	21.75
70	FAL	FV09	28	28	28	1989	9	1	1010	29	19.83
71	FAL	FV09	29	29	29	1989	9	1	1130	29	20.56
72	FAL	FV09	30	30	30	1989	9	1	1440	29	30.10
73	FAL	FV09	31	31	31	1989	9	1	1515	29	29.57
74	FAL	FV09	32	32	32	1989	9	1	1605	29	29.13

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	FISH SPECIES	CATCH
65	91	52.64	32.4	4	16	13	8.9712	11.429	Y	110
66	91	48.44	32.5	5	16	13	5.3827	16.029	Y	25
67	91	50.28	32.2	6	12	20	2.0185	18.693	Y	90
68	91	50.91	31.5	4	.	20	2.2428	18.971	Y	60
69	91	49.19	31.0	6	12	14	1.7942	18.308	Y	135
70	92	3.89	31.3	4	12	21	2.9156	15.673	Y	45
71	92	3.89	31.5	4	12	21	1.5700	16.411	Y	25
72	92	18.09	32.4	3	16	16	4.2613	16.084	Y	45
73	92	17.05	32.8	3	16	16	3.3642	16.446	Y	35
74	92	15.57	32.5	2	19	16	3.5885	17.114	Y	20

OBS	COMMENTS
65	
66	PORPOISES
67	WATER COLOR CHANGE (CLEAR)
68	NO FORELULE DARKNESS
69	CLEAR WATER
70	
71	

72
73 PORPOISES
74 WATER COLOR CHANGE

3.1.4 AND 3.2.1 MENHADEN FISHING VESSELS WITH OBSERVERS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
75	FAL	FV09	33	33	33	1989	9	1	1700	29	30.08
76	FAL	FV09	34	34	34	1989	9	4	845	29	26.99
77	FAL	FV09	35	35	35	1989	9	4	1315	29	27.98
78	FAL	FV09	36	36	36	1989	9	4	1445	29	24.36
79	FAL	FV09	37	37	37	1989	9	4	1645	29	25.14
80	FAL	FV09	38	38	38	1989	9	4	1800	29	21.61
81	FAL	FV09	39	39	39	1989	9	4	1940	29	18.68
82	FAL	FV09	40	40	40	1989	9	5	1825	29	16.72
83	FAL	FV09	41	41	41	1989	9	6	1415	29	17.26
84	FAL	FV09	42	42	42	1989	9	6	1505	29	18.23

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	FISH SPECIES	CATCH
75	92	13.68	32.4	3	17	16	4.0370	16.839	Y	35
76	92	3.83	30.5	3	21	11	4.9342	17.377	Y	50
77	92	5.72	31.5	3	17	12	5.1584	17.038	Y	75
78	91	58.92	32.2	2	18	11	5.6070	11.760	Y	400
79	92	1.54	31.6	3	17	11	4.9342	13.234	Y	85
80	91	57.49	31.1	4	14	16	3.5885	14.451	Y	100
81	91	54.37	30.9	5	12	22	2.0185	14.727	Y	225
82	91	48.75	30.4	3	17	23	6.9527	23.895	Y	350
83	91	57.97	30.8	3	19	22	8.7469	23.616	Y	95
84	91	58.30	30.8	3	16	23	5.6070	23.599	Y	60

OBS	COMMENTS
75	
76	WATER COLOR DIRTY
77	DITRY WATER AND PROPISES
78	DIRTY WATER
79	STRONG WINDS AND DIRTY WATER
80	CHOPPY WATERS
81	

82
83
84

3.1.4 AND 3.2.1 MENHADEN FISHING VESSELS WITH OBSERVERS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
85	FAL	FV09	43	43	43	1989	9	6	1630	29	17.51
86	FAL	FV09	44	44	44	1989	9	6	1745	29	16.70
87	FAL	FV09	45	45	45	1989	9	6	1845	29	16.08
88	FAL	FV09	46	46	46	1989	9	6	2000	29	14.76
89	FAL	FV09	47	47	47	1989	9	7	1530	29	22.40
90	FAL	FV09	48	48	48	1989	9	7	1745	29	20.57
91	FAL	FV09	49	49	49	1989	9	7	1845	29	20.41
92	FAL	FV09	50	50	50	1989	9	7	2010	29	19.93
93	FAL	FV09	51	51	51	1989	9	8	800	29	23.69
94	FAL	FV10	1	2401	2401	1989	8	28	750	29	13.26

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	FISH SPECIES	CATCH
85	91	56.89	30.8	3	16	22	7.1770	23.959	Y	50
86	91	0.30	30.6	5	14	26	5.6070	24.598	Y	100
87	92	1.02	30.6	4	14	26	3.1399	25.301	Y	70
88	91	56.16	30.5	.	.	26	4.0370	25.564	Y	125
89	91	59.69	30.5	2	17	15	11.4383	18.279	Y	10
90	92	11.62	30.7	2	18	20	10.7654	23.047	Y	70
91	92	13.64	30.9	3	16	20	9.4198	24.026	Y	80
92	92	13.43	30.5	.	.	20	5.6070	24.590	Y	60
93	92	10.39	29.5	3	16	15	5.1584	16.066	Y	10
94	91	38.57	29.9	2	19	10	6.2798	.	Y	650

OBS	COMMENTS
85	
86	
87	
88	NO DISC & ULE DARKNESS
89	GREEN MOSS ON SURFACES
90	GREEN MOSS ON SURFACE
91	

92 NO DISC OR ULE DARKNESS
93 PROPOISES
94 VESSEL WAS APPROX 15.3 NA MILES NE OF CORDINATES GIVEN :GOOD TIDE DROP

3.1.4 AND 3.2.1 MENHADEN FISHING VESSELS WITH OBSERVERS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
95	FAL	FV10	2	2402	2402	1989	8	28	1545	29	8.10
96	FAL	FV10	3	2403	2403	1989	8	28	1832	29	4.03
97	FAL	FV10	1	2411	2411	1989	8	29	1945	28	54.51
98	FAL	FV10	1	2421	2421	1989	8	30	1010	29	19.57
99	FAL	FV10	2	2422	2422	1989	8	30	1315	29	24.16
100	FAL	FV10	3	2423	2423	1989	8	30	1420	29	23.61
101	FAL	FV10	4	2424	2424	1989	8	30	1518	29	23.26
102	FAL	FV10	5	2425	2425	1989	8	30	1612	29	23.53
103	FAL	FV10	6	2426	2426	1989	8	30	1740	29	24.95
104	FAL	FV10	1	2431	2431	1989	8	31	1021	29	22.71

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	FISH SPECIES	CATCH
95	91	36.19	30.4	3	18	12	4.2613	.	Y	60
96	91	54.04	30.2	2	19	11	16.1482	.	N	0
97	91	2.46	31.5	3	16	10	4.2613	.	Y	35
98	91	30.10	31.2	2	18	10	10.0926	.	Y	150
99	91	34.96	32.4	2	19	10	8.2984	.	Y	135
100	91	34.24	32.4	2	18	10	10.9897	.	Y	75
101	91	33.76	32.9	2	17	10	17.9424	.	Y	75
102	91	34.53	33.1	2	16	8	17.2696	.	Y	120
103	91	38.61	32.8	2	19	9	15.4753	.	Y	0
104	91	50.99	31.1	2	16	14	8.7469	.	Y	40

OBS	COMMENTS
95	VESSEL WAS APPROX 15.3 NA MILES NE OF CORDINATES GIVEN --> LORAN MESSED UP
96	VESSEL WAS APPROX 15.3 NAT MILES NE OF CORDINATES GIVEN -->LORAN WAS MESSED UP
97	VESSEL WAS APPROX 15.3 NA MILES NE OF CORDINATES GIVEN --> LORAN WAS MESSED UP
98	SMALL POGY :THIS DAY MADE LOT SETS AREA WATER TOO TURNED UP TO SAMPLE EVERY SET
99	POGY MUCH BETTER SIZE
100	POGY MUCH BETTER SIZE
101	

NET RIPPED

3.1.4 AND 3.2.1 MENHADEN FISHING VESSELS WITH OBSERVERS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE
105	FAL	FV10	2	2432	2432	1989	8	31	1340	29	26.73	91	40.47	32.7
106	FAL	FV10	3	2433	2433	1989	8	31	1435	29	27.16	91	40.17	32.5
107	FAL	FV10	4	2434	2434	1989	8	31	1520	29	26.69	91	39.96	32.9
108	FAL	FV10	5	2435	2435	1989	8	31	1650	29	23.90	91	38.28	35.6
109	FAL	FV10	6	2436	2436	1989	8	31	1805	29	25.13	91	40.42	33.0
110	FAL	FV10	7	2437	2437	1989	8	31	1855	29	25.18	91	40.62	32.5
111	FAL	FV10	1	2471	2471	1989	9	4	930	29	10.96	91	14.16	30.5
112	FAL	FV10	2	2472	2472	1989	9	4	1105	29	10.66	91	26.97	31.4
113	FAL	FV10	3	2473	2473	1989	9	4	1250	29	7.64	91	20.62	31.2
114	FAL	FV10	4	2474	2474	1989	9	4	1340	29	11.36	91	25.21	31.4
115	FAL	FV10	5	2475	2475	1989	9	4	1455	29	11.50	91	25.83	31.4
116	FAL	FV10	6	2476	2476	1989	9	4	1720	29	13.64	91	26.34	30.9
117	FAL	FV10	7	2477	2477	1989	9	4	1830	29	13.84	91	26.95	30.9
118	FAL	FV10	1	2481	2481	1989	9	5	1750	29	10.63	91	13.21	29.8
119	FAL	FV10	1	2491	2491	1989	9	6	1300	29	11.66	91	19.41	29.9
120	FAL	FV10	2	2492	2492	1989	9	6	1330	29	12.27	91	19.95	31.8
121	FAL	FV10	3	2493	2493	1989	9	6	1600	29	10.96	91	16.12	31.9
122	FAL	FV10	4	2494	2494	1989	9	6	1830	29	10.48	91	22.12	31.0

OBS	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	FISH SPECIES	CATCH	COMMENTS
105	2	18	11	7.8498	.	Y	120	
106	1	16	11	13.4568	.	Y	65	NUMERUS SHRIMP TRAWLERS IN AREA
107	1	17	12	13.4568	.	Y	45	MOST SHRIMPERS GONE FROM AREA
108	1	17	12	17.4938	.	Y	150	LOTS OF ALGE IN FISHING NETS
109	2	18	12	9.4198	.	Y	50	
110	1	19	10	8.7469	.	Y	120	
111	2	17	14	9.8683	.	Y	85	WATER ROUGHER THAN REST WEEK
112	2	17	12	3.5885	.	Y	25	
113	2	17	13	2.6914	.	Y	90	
114	2	17	12	3.3642	.	Y	60	
115	2	16	13	4.0370	.	Y	50	
116	1	19	11	5.8313	.	Y	125	
117	1	17	11	6.9270	.	Y	600	
118	4	15	11	6.2798	.	Y	100	

119	2	16	13	5.6070	.	Y	45
120	2	16	11	9.1955	.	Y	70
121	1	18	12	8.2984	.	Y	300
122	1	18	10	4.7099	.	Y	65

3.1.4 AND 3.2.1 MENHADEN FISHING VESSELS WITH OBSERVERS, continued:

OBS ID	CRUISE CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE
123	FAL	FV10	1	2501	2501	1989	9	7	1420	29	10.69	91	27.59	33.8
124	FAL	FV10	2	2502	2502	1989	9	7	1520	29	12.15	91	31.88	33.7
125	FAL	FV10	3	2503	2503	1989	9	7	1620	29	11.71	91	32.97	32.4
126	FAL	FV10	4	2504	2504	1989	9	7	1915	29	11.63	91	18.76	31.8
127	FAL	FV10	1	2511	2511	1989	9	8	735	29	13.21	91	23.26	31.5
128	FAL	FV10	2	2512	2512	1989	9	8	805	29	13.45	91	21.25	31.6
129	FAL	FV13	1	1	1	1989	8	28	710	29	15.40	91	30.38	30.4
130	FAL	FV13	2	2	2	1989	8	29	720	29	13.87	91	17.15	29.0
131	FAL	FV13	3	3	3	1989	8	29	810	29	12.12	91	12.51	29.2
132	FAL	FV13	4	4	4	1989	8	29	937	29	12.64	91	10.78	30.0
133	FAL	FV13	5	5	5	1989	8	29	1325	29	13.19	91	20.59	33.0
134	FAL	FV13	6	6	6	1989	8	29	1707	29	23.37	91	38.44	31.8
135	FAL	FV13	7	7	7	1989	8	30	905	29	17.18	91	32.18	30.4
136	FAL	FV13	8	8	8	1989	8	30	1035	29	19.51	91	29.81	30.8
137	FAL	FV13	9	9	9	1989	8	30	1215	29	19.92	91	29.02	30.7
138	FAL	FV13	10	10	10	1989	8	30	1325	29	21.92	91	31.49	31.5
139	FAL	FV13	11	11	11	1989	8	30	1430	29	22.08	91	31.67	31.9
140	FAL	FV13	12	12	12	1989	8	31	1752	29	11.84	91	22.69	32.4

OBS	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	FISH SPECIES	CATCH	COMMENTS
123	2	16	17	3.1399	.	Y	55	
124	2	19	15	5.3827	.	Y	80	
125	2	17	13	6.2798	.	Y	80	
126	1	18	13	4.4856	.	Y	110	
127	2	17	13	4.4856	.	N	0	
128	2	17	11	3.3642	.	N	0	
129	9	5	15	4.5817	.	Y	900	CUT NETS LOST ALL FISH RETURNED TO ZAPATA FOR NEW NETS
130	6	5	10	2.2428	.	Y	0	TOO SHALLOW
131	5	5	10	4.2613	.	Y	80	
132	4	4	11	5.1584	.	Y	10	
133	4	5	12	3.3642	.	Y	50	
134	3	7	11	12.3354	.	Y	100	
135	3	12	10	9.1955	.	Y	20	
136	2	10	8	13.0082	.	Y	100	

137	2	10	8	11.2140	.	Y	30
138	2	12	10	10.7654	.	Y	190
139	3	16	9	31.1749	.	Y	190
140	2	15	8	13.2325	.	Y	30

3.1.4 AND 3.2.1 MENHADEN FISHING VESSELS WITH OBSERVERS, continued:

OBS	CRUISE ID	PLATFORM CODE	OBS CODE	SALINITY SAMPLE NUMBER	CHLOROPHYLL SAMPLE NO.	TIME SAMPLE NO.	YEAR	MONTH	DAY	OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE
141	FAL	FV13	13	13	13	1989	9	1	1020	29	13.82	91	15.78	30.5	
142	FAL	FV13	14	14	14	1989	9	1	1055	29	13.47	91	15.74	31.0	
143	FAL	FV13	15	15	15	1989	9	1	1355	29	8.62	91	0.88	32.2	
144	FAL	FV13	16	16	16	1989	9	1	1530	29	10.89	91	8.21	33.4	
145	FAL	FV13	17	17	17	1989	9	4	635	29	10.14	91	24.65	31.0	
146	FAL	FV13	18	18	18	1989	9	4	720	29	9.43	91	25.94	30.8	
147	FAL	FV13	19	19	19	1989	9	4	1045	29	7.34	91	20.60	31.1	
148	FAL	FV13	20	20	20	1989	9	4	1210	29	9.53	91	27.74	31.4	
149	FAL	FV13	21	21	21	1989	9	4	1330	29	11.12	91	25.65	31.4	
150	FAL	FV13	22	22	22	1989	9	4	1710	29	8.50	91	20.78	31.4	
151	FAL	FV13	23	23	23	1989	9	5	1425	29	13.79	91	22.71	30.7	
152	FAL	FV13	24	24	24	1989	9	5	1745	29	9.38	91	17.11	29.8	
153	FAL	FV13	25	25	25	1989	9	6	1155	29	12.39	91	14.81	29.8	
154	FAL	FV13	26	26	26	1989	9	6	1305	29	13.07	91	19.04	30.0	
155	FAL	FV13	27	27	27	1989	9	6	1500	29	9.92	91	22.97	30.4	
156	FAL	FV13	28	28	28	1989	9	6	1710	29	10.58	91	29.09	30.7	
157	FAL	FV13	29	29	29	1989	9	6	1900	29	9.77	91	15.80	30.4	
158	FAL	FV13	30	30	30	1989	9	7	1505	29	12.97	91	17.46	30.5	

OBS	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	FISH SPECIES	CATCH	COMMENTS
141	4	14	9	5.1584	.	Y	10	
142	2	16	9	4.7099	.	Y	40	
143	4	12	8	2.6914	.	Y	20	
144	3	14	9	8.2984	.	N	0	
145	3	14	12	2.6914	.	Y	120	
146	3	14	12	2.0185	.	Y	170	
147	4	12	13	2.4671	.	Y	210	
148	2	16	11	2.4671	.	Y	270	
149	3	15	12	3.5885	.	Y	80	
150	6	12	18	3.8128	.	Y	40	
151	2	14	12	5.3827	.	N	0	TOO CLOSE TO WELL
152	4	10	10	4.4856	.	Y	60	
153	3	12	11	8.7469	.	Y	50	

154	2	16	10	8.0741	.	Y	50
155	2	16	10	5.6070	.	Y	50
156	3	12	11	5.8313	.	Y	50
157	4	10	13	4.2613	.	Y	120
158	2	15	9	7.4012	.	Y	30

3.1.4 AND 3.2.1 MENHADEN FISHING VESSELS WITH OBSERVERS, continued:

OBS	CRUISE ID	PLATFORM CODE	OBS CODE	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE
159	FAL	FV13	31	31	31	1989	9	7	1625	29	10.85	91	23.67	30.7
160	FAL	FV13	32	32	32	1989	9	7	1740	29	9.38	91	28.25	30.8
161	FAL	FV13	33	33	33	1989	9	7	1910	29	11.94	91	18.40	30.4
162	FAL	FV13	34	34	34	1989	9	8	925	29	13.60	91	22.03	29.9
163	FAL	FV13	35	35	35	1989	9	8	1130	29	11.09	91	23.12	30.4
164	FAL	FV13	36	36	36	1989	9	8	1210	29	11.94	91	23.31	30.3
165	FAL	FV13	37	37	37	1989	9	8	1305	29	11.57	91	24.98	30.6
166	690	FV05	16201	1	1	1990	6	11	645	29	45.42	93	7.34	29.6
167	690	FV05	16202	2	2	1990	6	11	1300	29	37.52	92	47.64	30.9
168	690	FV05	16203	3	3	1990	6	11	1340	29	37.02	92	47.59	32.1
169	690	FV05	16206	6	6	1990	6	11	1525	29	36.04	92	48.06	31.4
170	690	FV05	16208	8	8	1990	6	11	1720	29	33.13	92	38.74	31.9
171	690	FV05	16209	9	9	1990	6	11	1900	29	30.32	92	33.34	31.7
172	690	FV05	16210	10	10	1990	6	11	2000	29	29.68	92	33.11	31.3
173	690	FV05	16311	11	11	1990	6	12	1030	29	27.87	92	19.47	30.6
174	690	FV05	16312	12	12	1990	6	12	1130	29	27.90	92	19.71	30.9
175	690	FV05	16313	13	13	1990	6	12	1210	29	28.10	92	19.52	31.1
176	690	FV05	16315	15	15	1990	6	12	1530	29	31.25	92	25.78	32.4

OBS	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	FISH SPECIES	CATCH	COMMENTS
159	3	12	10	5.1584	.	Y	40	
160	3	12	11	4.9342	.	Y	30	
161	1	16	10	3.8128	.	Y	20	
162	2	14	12	4.2613	.	Y	90	
163	3	12	10	5.8313	.	Y	30	
164	2	14	10	7.1770	.	Y	50	
165	3	12	10	4.9342	.	Y	10	
166	2	14	16	33.0813	13.919	Y	10	1 SHRIMP BOAT
167	2	15	11	24.6708	10.555	Y	30	SET NEAR COAST
168	2	15	11	65.0412	9.528	Y	40	1 SHRIMP BOAT
169	2	15	16	58.8735	8.935	Y	40	1 SHRIMP BOAT
170	2	16	20	59.9949	6.200	Y	50	1 SHRIMP BOAT
171	2	16	30	44.2953	7.201	Y	50	2 SHRIMPERS

172	2	16	29	44.8560	10.941	Y	110	
173	2	16	17	30.8385	5.518	Y	40	4 SHRIMPS
174	2	17	16	48.7809	7.472	Y	25	8 SHRIMP
175	3	17	16	45.4167	7.397	Y	20	6 SHRIMPS
176	3	16	16	86.3478	7.570	Y	100	

3.1.4 AND 3.2.1 MENHADEN FISHING VESSELS WITH OBSERVERS, continued:

OBS ID	CRUISE CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE
177	690	FV05	16416	16	16	1990	6	13	1545	29	35.86	92	51.02	31.4
178	690	FV05	16517	17	17	1990	6	14	720	29	24.26	92	2.90	29.2
179	690	FV05	16518	18	18	1990	6	14	1730	29	26.11	92	15.69	31.6
180	690	FV05	16619	19	19	1990	6	15	1300	29	37.33	92	45.10	31.5
181	690	FV05	16620	20	20	1990	6	15	1915	29	26.52	92	22.59	31.1
182	690	FV09	16201	1	1	1990	6	11	730	29	39.88	92	51.16	27.0
183	690	FV09	16202	2	2	1990	6	11	1440	29	36.02	92	44.68	27.0
184	690	FV09	16203	3	3	1990	6	11	1545	29	35.99	92	44.36	27.4
185	690	FV09	16204	4	4	1990	6	11	1625	29	36.26	92	44.56	26.0
186	690	FV09	16206	6	6	1990	6	11	1900	29	31.05	92	33.93	29.0
187	690	FV09	16207	7	7	1990	6	11	2020	29	29.52	92	31.58	29.0
188	690	FV09	16309	9	9	1990	6	12	1138	29	28.73	92	20.62	28.0
189	690	FV09	16310	10	10	1990	6	12	1255	29	29.35	92	21.63	29.0
190	690	FV09	16311	11	11	1990	6	12	1440	29	30.45	92	23.39	28.0
191	690	FV09	16312	12	12	1990	6	12	1545	29	31.29	92	26.56	29.0
192	690	FV09	16413	13	13	1990	6	13	1515	29	23.90	92	11.48	29.0
193	690	FV09	16414	14	14	1990	6	13	1900	29	17.52	91	55.85	30.0
194	690	FV09	16616	16	16	1990	6	15	1810	29	29.09	92	26.19	27.0

OBS	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	FISH SPECIES	CATCH	COMMENTS
177	2	17	27	54.9486	9.004	Y	100	
178	1	19	16	10.3169	4.610	Y	35	1 SHRIMPER
179	1	17	20	15.6996	4.862	Y	25	
180	1	19	12	25.2315	7.554	Y	1	1 SHRIMPER FILTERED 150 ML ONLY
181	1	17	16	81.8622	3.645	Y	101	
182	14	16	14	28.5957	11.328	Y	35	4 MENHADEN
183	20	17	20	18.5031	6.983	Y	35	4 MENHADEN 2 SHRIMP
184	21	16	21	49.9023	7.060	Y	60	3 MENHADEN 1 SHRIMP
185	19	18	19	50.4630	7.253	Y	60	4 MENHADEN 2 SHRIMP
186	26	21	26	45.9774	10.092	Y	100	10 MENHADEN 3 SHRIMP
187	30	21	30	42.0525	12.727	Y	125	3 MENHADEN
188	18	16	18	41.4918	7.731	Y	65	20 MENHADEN 3 SHRIMP
189	17	18	17	45.9774	7.480	Y	50	20 MENHADEN 3 SHRIMP

190	14	17	14	65.6019	7.354	Y	110	14 MENHADEN	
191	19	17	19	61.1163	7.734	Y	60	19 MENHADEN	
192	14	19	14	63.3591	7.634	Y	40	13 MENHADEN	2 SHRIMP
193	30	18	30	18.5031	18.011	Y	325	10 MENHADEN	
194	25	17	25	47.6595	5.257	Y	40	4 MENHADEN	

3.1.4 AND 3.2.1 MENHADEN FISHING VESSELS WITH OBSERVERS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)
195	690	FV09	16617	17	17	1990	6	15	2000	29	24.05	92	18.73
196	690	FV17	16201	1	1	1990	6	11	900	29	1.78	90	49.28
197	690	FV17	16202	2	2	1990	6	11	920	29	2.07	90	49.03
198	690	FV17	16203	3	3	1990	6	11	1000	29	1.92	90	49.97
199	690	FV17	16310	10	10	1990	6	12	1930	29	10.87	91	13.66
200	690	FV17	16411	11	11	1990	6	13	1230	29	9.47	91	12.43
201	690	FV17	16412	12	12	1990	6	13	1330	29	9.48	91	13.10
202	690	FV17	16413	13	13	1990	6	13	1400	29	9.75	91	13.22
203	690	FV17	16414	14	14	1990	6	13	1630	29	6.62	91	14.30
204	690	FV17	16415	15	15	1990	6	13	1800	29	9.45	91	14.86
205	690	FV17	16416	16	16	1990	6	13	2030	29	7.72	91	17.01
206	690	FV17	16517	17	17	1990	6	14	930	29	8.04	91	18.04
207	690	FV17	16520	20	20	1990	6	14	1830	29	10.30	91	10.43
208	690	FV17	16521	21	21	1990	6	14	1930	29	9.39	91	10.57
209	690	FV18	16202	2	2	1990	6	11	845	29	2.33	90	49.83
210	690	FV18	16203	3	3	1990	6	11	930	29	2.48	90	48.95
211	690	FV18	16204	4	4	1990	6	11	1234	28	50.16	91	14.78
212	690	FV18	16413	13	13	1990	6	13	1345	29	10.36	91	11.79

OBS	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	FISH SPECIES	CATCH	COMMENTS
195	28.0	20	18	20	62.7984	3.703	Y	80	8 MENHADEN
196	28.7	4	17	12	11.2140	19.859	Y	50	
197	29.0	3	17	10	12.8961	19.444	Y	50	
198	30.0	2	21	10	8.9712	18.974	Y	30	
199	31.0	2	17	14	41.4918	9.648	Y	120	POKEY BOAT
200	29.0	2	21	14	24.6708	9.411	Y	35	POKEY BOAT
201	31.0	2	16	16	25.7922	9.901	Y	35	POKEY BOAT
202	30.0	2	15	16	46.5381	9.925	Y	20	POKEY BOAT
203	31.0	2	18	17	36.4455	9.443	Y	180	POKEY BOAT
204	31.2	2	16	16	53.8272	10.311	Y	20	POKEY BOAT
205	31.0	5	21	21	9.5319	9.673	Y	120	POKEY BOAT
206	30.0	6	21	20	8.5226	17.139	Y	30	POKEY BOAT
207	31.5	2	15	14	13.9054	11.207	Y	15	POKEY BOAT
208	31.0	3	21	12	9.8683	11.601	Y	50	

209	29.0	3	16	10	.	19.373	Y	45	NEAR BEACH/MARS
210	29.0	13	16	10	11.2140	19.426	Y	2	NEAR BEACH/MARSH
211	31.1	23	10	29	2.4030	25.723	Y	5	FLOATING SEAWEED
212	30.8	2	17	14	36.4455	9.950	Y	20	CHOPPY SEAS WINDS

3.1.4 AND 3.2.1 MENHADEN FISHING VESSELS WITH OBSERVERS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE
213	690	FV18	16414	14	14	1990	6	13	1552	29	11.06	91	15.11	30.5
214	690	FV18	16415	15	15	1990	6	13	1705	29	10.03	91	16.63	30.2
215	690	FV18	16416	16	16	1990	6	13	1820	29	9.70	91	17.68	30.2
216	690	FV18	16417	17	17	1990	6	13	2005	29	8.21	91	16.95	30.4
217	690	FV18	16518	18	18	1990	6	14	923	29	8.05	91	18.28	30.0
218	690	FV18	16521	21	21	1990	6	14	1904	29	10.36	91	7.43	31.9
219	790	FV05	20401	1	1	1990	7	23	740	29	29.27	92	21.41	29.5
220	790	FV05	20402	2	2	1990	7	23	830	29	29.61	92	20.83	29.5
221	790	FV05	20403	3	3	1990	7	23	920	29	30.27	92	23.62	30.0
222	790	FV05	20404	4	4	1990	7	23	1015	29	29.92	92	24.08	30.0
223	790	FV05	20405	5	5	1990	7	23	1210	29	30.95	92	28.83	30.0
224	790	FV05	20406	6	6	1990	7	23	1350	29	32.89	92	32.68	29.5
225	790	FV05	20408	8	8	1990	7	23	1750	29	31.80	92	31.39	29.5
226	790	FV05	20409	9	9	1990	7	23	1845	29	31.40	92	31.40	29.5
227	790	FV05	20410	10	10	1990	7	23	1920	29	31.21	92	31.45	29.1
228	790	FV05	20511	11	11	1990	7	24	600	29	27.76	92	14.70	29.3
229	790	FV05	20512	12	12	1990	7	24	720	29	23.17	92	8.15	29.3
230	790	FV05	20513	13	13	1990	7	24	850	29	22.58	91	56.09	29.3

OBS	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	FISH SPECIES	CATCH	COMMENTS
213	1	17	15	25.2315	7.990	Y	65	WINDY CHOPPY
214	2	16	18	30.2778	8.921	Y	75	SINDY CHOPPY
215	2	16	18	37.0062	9.890	Y	105	WINDY CHOPPY
216	3	15	19	30.8385	13.574	Y	90	WINDY CHOPPY
217	3	16	20	8.2984	17.331	Y	25	SHRIMP TRAWLES
218	2	17	11	13.0082	6.940	Y	25	RAINING WINDY
219	1	14	16	14.5782	11.362	Y	40	OTHER FISHING BOATS
220	1	14	18	16.6341	11.495	Y	80	OTHER ZAPATA BOATS
221	2	14	11	15.8865	11.171	Y	30	WATER CHANGE COLOR
222	2	15	15	14.7651	11.781	Y	70	OTHER ZAPATA BOATS
223	2	15	16	12.7092	13.537	Y	80	OTHER ZAPATA BOATS AROUND
224	2	15	15	6.5415	16.815	Y	40	OTHER ZAPATA BOATS AROUND
225	2	15	18	.	17.120	Y	70	OTHER ZAPATA BOATS AROUND

226	2	15	19	13.8306	13.983	Y	35	ONE ZAPATA BOAT AROUND
227	2	15	18	10.0926	13.985	Y	40	ONE ZAPATA BOAT AROUND
228	2	15	17	11.4009	13.343	Y	1	FOUR ZAPATA BOATS AROUND
229	2	15	25	9.5319	12.809	Y	40	SEVEN ZAPATA FISHING BOATS
230	2	15	18	12.7092	6.451	Y	40	TEN ZAPATA FISHING BOATS

3.1.4 AND 3.2.1 MENHADEN FISHING VESSELS WITH OBSERVERS, continued:

OBS	CRUISE ID	PLATFORM CODE	OBS CODE	SALINITY SAMPLE NUMBER	CHLOROPHYLL SAMPLE NO.	TIME SAMPLE NO.	YEAR	MONTH	DAY	OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE
231	790	FV05	20514	14	14	1990	7	24	950	29	23.62	91	56.06	29.7	
232	790	FV05	20515	15	15	1990	7	24	1935	29	24.21	92	10.36	30.5	
233	790	FV05	20516	16	16	1990	7	24	2030	29	23.52	92	9.45	30.5	
234	790	FV05	20617	17	17	1990	7	25	1400	29	30.18	92	11.24	32.5	
235	790	FV05	20718	18	18	1990	7	26	900	29	10.37	91	6.52	30.0	
236	790	FV05	20719	19	19	1990	7	26	950	29	10.81	91	6.35	30.2	
237	790	FV05	20721	21	21	1990	7	26	1230	29	9.19	91	14.90	30.6	
238	790	FV05	20724	24	24	1990	7	26	2015	29	8.78	91	24.86	31.8	
239	790	FV05	20723	23	23	1990	7	26	1810	29	10.93	91	24.56	32.0	
240	790	FV05	20825	25	25	1990	7	27	715	29	24.93	91	59.26	30.5	
241	790	FV09	20401	1	1	1990	7	23	820	29	36.72	92	44.81	27.0	
242	790	FV09	20402	2	2	1990	7	23	900	29	36.84	92	44.14	27.0	
243	790	FV09	20403	3	3	1990	7	23	1020	29	36.12	92	43.54	27.5	
244	790	FV09	20404	4	4	1990	7	23	1140	29	37.17	92	45.66	27.0	
245	790	FV09	20405	5	5	1990	7	23	1215	29	37.84	92	46.64	28.0	
246	790	FV09	20406	6	6	1990	7	23	1340	29	35.45	92	43.13	27.0	
247	790	FV09	20407	7	7	1990	7	23	1710	29	34.62	92	41.37	28.0	
248	790	FV09	20408	8	8	1990	7	23	2005	29	25.38	92	16.78	28.0	

OBS	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	FISH SPECIES	CATCH	COMMENTS
231	2	15	19	6.3546	5.954	Y	1	FOUR ZAPATA FISHING BOATS
232	2	15	18	7.4760	14.374	Y	100	TWO ZAPATA FISHING BOATS
233	2	15	18	8.0367	14.378	Y	35	TWO ZAPATA FISHING BOATS
234	1	14	13	12.3354	10.994	Y	35	TWO ZAPATA BOATS AROUND
235	1	14	9	27.4743	16.411	Y	15	ZAPATA FISHING BOATS
236	1	14	8	30.6516	15.917	Y	40	
237	1	14	16	12.7092	17.937	Y	20	
238	1	14	21	21.6804	3.503	Y	135	
239	1	14	27	11.2140	2.903	Y	35	TWO ZAPATA FISHING BOATS
240	1	14	12	24.2970	7.404	Y	75	ZAPATA FISHING BOATS
241	16	17	16	9.1581	12.420	Y	35	4 MENHADEN
242	14	16	14	11.4009	11.980	Y	10	3 MENHADEN
243	17	17	17	4.6725	15.781	Y	100	2 MENHADEN

244	14	16	14	8.2236	12.359	Y	25	1 MENHADEN	
245	18	18	18	9.3450	12.614	Y	90	2 SHRIMPERS	1 MENHADEN
246	20	17	20	5.4201	16.323	Y	60	2 MENHADEN	1 SHRIMPER
247	19	16	19	6.5415	16.024	Y	85	1 MENHADEN	3 SHRIMPERS
248	20	19	20	8.2236	15.245	Y	225	2 MENHADEN	

3.1.4 AND 3.2.1 MENHADEN FISHING VESSELS WITH OBSERVERS, continued:

OBS ID	CRUISE CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE
249	790	FV09	20509	9	9	1990	7	24	900	29	23.55	91	55.12	27.0
250	790	FV09	20510	10	10	1990	7	24	1652	29	29.68	92	23.28	27.0
251	790	FV09	20511	11	11	1990	7	24	1820	29	31.77	92	31.32	27.0
252	790	FV09	20512	12	12	1990	7	24	2010	29	28.00	92	22.00	27.0
253	790	FV09	20613	13	13	1990	7	25	905	29	34.07	92	34.05	26.5
254	790	FV09	20614	14	14	1990	7	25	1015	29	34.12	92	37.40	27.0
255	790	FV09	20615	15	15	1990	7	25	1415	29	34.84	92	36.33	27.0
256	790	FV09	20616	16	16	1990	7	25	1540	29	33.47	92	38.17	26.0
257	790	FV09	20717	17	17	1990	7	26	1220	29	9.59	91	14.61	29.2
258	790	FV09	20718	18	18	1990	7	26	1800	29	11.80	91	23.83	29.1
259	790	FV09	20719	19	19	1990	7	26	1920	29	10.66	91	26.49	29.0
260	790	FV09	20720	20	20	1990	7	26	2005	29	10.64	91	27.27	29.0
261	790	FV09	20821	21	21	1990	7	27	725	29	25.80	92	0.17	31.0
262	790	FV11	20401	1	1	1990	7	23	823	29	13.30	91	28.58	29.2
263	790	FV11	20502	2	2	1990	7	24	651	29	15.34	91	32.57	31.8
264	790	FV11	20503	3	3	1990	7	24	810	29	14.13	91	31.37	29.2
265	790	FV11	20504	4	4	1990	7	24	1125	29	11.10	91	27.44	30.9
266	790	FV11	20505	5	5	1990	7	24	1645	29	10.50	91	18.00	32.9

OBS	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	FISH SPECIES	CATCH	COMMENTS
249	13	17	13	9.1581	6.137	Y	15	4 MENHADEN	2 SHRIMPERS
250	17	16	17	3.5511	18.330	Y	50	8 MENHADEN	
251	20	18	20	3.3642	18.936	Y	125	4 MENHADEN	3 SHRIMPERS
252	19	19	19	2.4297	18.681	Y	60	3 MENHADEN	
253	13	16	13	2.6166	17.775	Y	20	4 SHRIMPERS	1 MENHADEN
254	18	17	18	2.6166	17.918	Y	25	4 MENHADEN	3 SHRIMPERS
255	14	18	14	2.6166	17.466	Y	5	4 MENHADEN	4 SHRIMPERS
256	20	17	20	1.8690	19.973	Y	60	5 MENHADEN	4 SHRIMPERS
257	17	18	17	9.9057	19.013	Y	65	8 MENHADEN	1 SHRIMPERS
258	14	17	14	14.2044	8.157	Y	65	6 SHRIMPERS	5 MENHADEN
259	21	18	21	28.0350	3.004	Y	20	2 MENHADEN	2 SHRIMPERS
260	16	19	16	19.0638	5.650	Y	75	2 MENHADEN	
261	14	18	14	22.0542	7.592	Y	175	4 SHRIMPERS	3 MENHADEN

262	3	17	12	6.1677	13.798	Y	40	WINDY
263	3	16	13	6.1677	9.101	Y	40	CALM
264	3	16	13	10.2795	5.511	Y	175	
265	3	17	16	7.2891	6.041	Y	50	
266	2	17	15	7.8498	2.395	Y	400	

3.1.4 AND 3.2.1 MENHADEN FISHING VESSELS WITH OBSERVERS, continued:

OBS	CRUISE ID	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE
267	790	FV11	20506	6	6	1990	7	24	1845	29	9.29	91	19.03	31.9
268	790	FV11	20607	7	7	1990	7	25	1040	29	10.39	91	18.34	29.8
269	790	FV11	20608	8	8	1990	7	25	1242	29	11.49	91	19.71	30.9
270	790	FV11	20709	9	9	1990	7	26	658	29	9.97	91	9.11	29.7
271	790	FV11	20710	10	10	1990	7	26	830	29	10.95	91	7.36	29.6
272	790	FV11	20711	11	11	1990	7	26	946	29	10.59	91	4.93	29.9
273	790	FV11	20712	12	12	1990	7	26	1207	29	8.29	91	12.80	30.4
274	790	FV11	20813	13	13	1990	7	27	950	29	15.28	91	18.58	30.8
275	790	FV11	20814	14	14	1990	7	27	1125	29	14.26	91	20.73	31.0
276	790	FV15	20401	1	1	1990	7	23	740	29	12.53	91	23.34	28.5
277	790	FV15	20403	3	3	1990	7	23	925	29	12.85	91	29.27	29.3
278	790	FV15	20405	5	5	1990	7	23	1410	29	21.77	91	57.01	31.1
279	790	FV15	20406	6	6	1990	7	23	1550	29	17.66	91	41.85	30.9
280	790	FV15	20507	7	7	1990	7	24	650	29	14.37	91	33.37	28.8
281	790	FV15	20508	8	8	1990	7	24	1025	29	21.53	91	49.00	29.5
282	790	FV15	20509	9	9	1990	7	24	1945	29	9.14	91	21.91	31.6
283	790	FV15	20510	10	10	1990	7	24	2005	29	6.72	91	16.35	31.1
284	790	FV15	20612	12	12	1990	7	25	913	29	11.52	91	9.36	29.4

OBS	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	FISH SPECIES	CATCH	COMMENTS
267	2	17	18	17.7555	2.795	Y	150	
268	1	17	16	8.5974	1.943	Y	50	CALM LIGHT BREEZE
269	2	17	14	13.4568	1.372	Y	30	6 SHRIMP TRAWLERS
270	3	17	12	13.0830	14.253	Y	40	WINDY
271	3	16	9	14.0175	16.942	Y	30	WINDY
272	3	16	8	12.3354	12.863	Y	75	NEAR BEACH
273	4	16	14	10.2795	17.595	Y	10	
274	3	16	8	24.2970	16.029	Y	75	
275	3	17	10	22.6149	13.616	Y	35	
276	2	18	20	9.1581	10.547	Y	35	WINDS SW 12
277	.	18	15	12.5223	16.315	Y	8	
278	1	19	18	10.6533	8.943	Y	9	
279	2	19	14	15.8865	7.064	Y	90	

280	2	17	11	8.4105	25.167	Y	150	
281	2	18	10	7.4760	5.158	Y	45	OVER CAST
282	1	16	8	24.1101	3.410	Y	180	CLEAR
283	2	19	10	.	2.972	Y	75	SUNSET
284	1	17	8	5.2332	16.668	Y	35	

3.1.4 AND 3.2.1 MENHADEN FISHING VESSELS WITH OBSERVERS, continued:

OBS	CRUISE ID	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE
285	790	FV15	20617	17	17	1990	7	25	1515	29	12.41	91	13.21	32.0
286	790	FV15	20619	19	19	1990	7	25	1640	29	12.91	91	15.48	31.3
287	790	FV15	20620	20	20	1990	7	25	1740	29	12.24	91	15.00	31.5
288	790	FV15	20621	21	21	1990	7	25	1843	29	11.70	91	16.03	31.4
289	790	FV15	20723	23	23	1990	7	26	649	29	10.77	91	10.67	29.3
290	790	FV15	20824	24	24	1990	7	27	648	29	12.19	91	13.42	30.9
291	790	FV15	20825	25	25	1990	7	27	910	29	13.99	91	18.02	30.6

OBS	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	FISH SPECIES	CATCH	COMMENTS
285	2	17	11	6.7284	17.038	Y	50	CLOSE TO BEACH
286	2	17	10	13.4568	15.800	Y	160	
287	2	17	11	7.6629	18.035	Y	70	
288	2	17	9	20.1852	12.171	Y	18	
289	1	17	9	13.8306	14.094	Y	500	
290	1	18	9	9.1581	16.059	Y	70	
291	2	17	10	8.9712	17.057	Y	35	

3.2 ENVIRONMENTAL DATA, continued:

3.2.2 CHARTER BOATS

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
1	SPR	CB01	13531	31	31	1989	5	15	715	29	3.01	90
2	SPR	CB01	13532	32	32	1989	5	15	726	29	0.95	90
3	SPR	CB01	13533	33	33	1989	5	15	735	28	58.94	90
4	SPR	CB01	13534	34	34	1989	5	15	745	28	56.93	90
5	SPR	CB01	13535	35	35	1989	5	15	755	28	54.95	90
6	SPR	CB01	13536	36	36	1989	5	15	804	28	52.88	90
7	SPR	CB01	13537	37	37	1989	5	15	814	28	50.89	90
8	SPR	CB01	13538	38	38	1989	5	15	822	28	48.92	90
9	SPR	CB01	13539	39	39	1989	5	15	830	28	46.97	90
10	SPR	CB01	13540	40	40	1989	5	15	840	28	44.94	90
11	SPR	CB01	13541	41	41	1989	5	15	850	28	42.88	90
12	SPR	CB01	13542	42	42	1989	5	15	857	28	40.93	90
13	SPR	CB01	13543	43	43	1989	5	15	906	28	38.96	90
14	SPR	CB01	13544	44	44	1989	5	15	915	28	36.93	90
15	SPR	CB01	13545	45	45	1989	5	15	924	28	34.95	90
16	SPR	CB01	13646	46	46	1989	5	16	711	29	2.98	90
17	SPR	CB01	13647	47	47	1989	5	16	721	29	0.95	90
18	SPR	CB01	13648	48	48	1989	5	16	731	28	58.93	90

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE		SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL		SURFACE SALINITY	COMMENTS
1	40.06	24.5	.	12	11	3.8128	25.552	N	0	PLENTY OF SHRIMP BOATS
2	40.01	24.5	.	12	24	2.2428	25.785	N	0	MENHADEN BOAT
3	40.00	24.5	.	3	31	1.5700	25.929	N	0	
4	39.99	24.5	.	4	36	0.6728	26.324	N	0	
5	40.01	24.6	.	5	24	0.8971	26.624	N	0	
6	40.04	24.6	.	5	48	0.9612	27.125	N	0	
7	39.98	24.7	.	5	57	.	28.253	N	0	
8	39.99	24.8	.	5	60	1.7942	28.094	N	0	1 SHRIMP BOAT
9	40.02	25.0	.	8	62	1.7942	28.158	N	0	2 SHRIMP BOATS
10	40.01	25.0	.	8	57	.	28.702	N	0	
11	39.99	25.1	.	8	56	1.2816	28.491	N	0	GETTING CLOUDY
12	40.04	25.1	.	8	54	0.9612	28.139	N	0	
13	39.98	25.1	.	8	60	.	27.877	N	0	
14	40.00	25.1	.	8	61	1.2816	27.996	N	0	
15	39.99	25.1	.	8	68	.	27.846	N	0	
16	40.06	24.5	.	3	12	3.2040	25.355	N	0	12 SHRIMP BOATS

17	40.01	24.6	.	3	25	2.6914	25.184	N	0
18	40.02	24.6	.	4	30	.	23.711	N	0

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
19	SPR	CB01	13649	49	49	1989	5	16	743	28	56.98	90
20	SPR	CB01	13650	50	50	1989	5	16	752	28	54.93	90
21	SPR	CB01	13651	51	51	1989	5	16	802	28	52.91	90
22	SPR	CB01	13652	52	52	1989	5	16	813	28	50.94	90
23	SPR	CB01	13653	53	53	1989	5	16	824	28	48.96	90
24	SPR	CB01	13654	54	54	1989	5	16	835	28	46.94	90
25	SPR	CB01	13655	55	55	1989	5	16	847	28	44.95	90
26	SPR	CB01	13656	56	56	1989	5	16	901	28	42.96	90
27	SPR	CB01	13657	57	57	1989	5	16	913	28	40.98	90
28	SPR	CB01	13658	58	58	1989	5	16	925	28	38.96	90
29	SPR	CB01	13659	59	59	1989	5	16	936	28	36.96	90
30	SPR	CB01	13660	60	60	1989	5	16	946	28	34.96	90
31	SPR	CB02	13101	1	1	1989	5	11	650	29	2.94	90
32	SPR	CB02	13102	2	2	1989	5	11	709	29	1.00	90
33	SPR	CB02	13103	3	3	1989	5	11	724	28	59.07	90
34	SPR	CB02	13104	4	4	1989	5	11	741	28	57.10	90
35	SPR	CB02	13105	5	5	1989	5	11	754	28	55.07	90
36	SPR	CB02	13106	6	6	1989	5	11	806	28	53.07	90

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE		SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL		SURFACE SALINITY	COMMENTS
19	40.01	24.6	.	4	36	1.6020	25.570	N	0	GETTING ROUGH
20	40.02	24.7	.	5	25	.	26.575	N	04' - 6' SEAS	
21	40.00	24.7	.	4	48	1.2816	27.028	N	0	
22	40.00	24.9	.	5	57	0.6408	28.216	N	0	
23	39.99	25.0	.	5	61	0.9612	28.298	N	0	
24	40.00	25.0	.	5	62	1.2816	28.387	N	0	
25	40.00	25.2	.	5	58	0.9612	28.066	N	0	
26	39.98	25.2	.	8	56	1.2816	28.288	N	0	CLEAR SKYS
27	40.01	25.4	.	8	55	.	29.387	N	0	CLEAR SKYS
28	40.02	25.5	.	8	58	.	29.924	N	0	
29	40.00	25.2	.	8	60	.	30.313	N	0	
30	39.99	25.0	.	8	66	.	31.950	N	0	
31	40.03	23.7	.	4	11	4.0370	30.108	N	0	
32	40.10	23.2	.	4	22	3.1399	24.513	N	0	
33	39.95	24.0	.	8	31	2.4671	28.529	N	0	
34	39.97	24.2	.	14	35	8.9712	25.914	N	0	

35	39.92	24.4	.	5	24	2.2428	26.237	N	0
36	39.94	24.2	.	6	45	1.3457	26.356	N	0

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)
37	SPR	CB02	13107	7	7	1989	5	11	821	28	50.89	90	40.03
38	SPR	CB02	13108	8	8	1989	5	11	833	28	49.03	90	39.93
39	SPR	CB02	13109	9	9	1989	5	11	846	28	47.01	90	40.13
40	SPR	CB02	13110	10	10	1989	5	11	857	28	44.93	90	40.08
41	SPR	CB02	13111	11	11	1989	5	11	909	28	43.00	90	40.18
42	SPR	CB02	13112	12	12	1989	5	11	921	28	41.07	90	40.04
43	SPR	CB02	13113	13	13	1989	5	11	935	28	39.00	90	40.08
44	SPR	CB02	13114	14	14	1989	5	11	946	28	37.00	90	40.11
45	SPR	CB02	13115	15	15	1989	5	11	958	28	35.00	90	40.09
46	SPR	CB02	13216	16	16	1989	5	12	657	29	2.99	90	40.00
47	SPR	CB02	13217	17	17	1989	5	12	705	29	1.02	90	40.05
48	SPR	CB02	13218	18	18	1989	5	12	713	28	58.96	90	39.98
49	SPR	CB02	13219	19	19	1989	5	12	722	28	57.01	90	40.00
50	SPR	CB02	13220	20	20	1989	5	12	731	28	55.01	90	39.99
51	SPR	CB02	13221	21	21	1989	5	12	740	28	53.01	90	40.02
52	SPR	CB02	13222	22	22	1989	5	12	748	28	51.01	90	40.02
53	SPR	CB02	13223	23	23	1989	5	12	756	28	49.01	90	40.01
54	SPR	CB02	13224	24	24	1989	5	12	804	28	47.02	90	40.00

OBS	SURFACE WATER TEMPERATURE	SECCHI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
37	24.5	.	12	56	3.8128	25.984	N 0
38	24.6	.	6	61	1.6020	26.262	N 0
39	24.6	.	7	61	1.2816	26.969	N 0
40	24.5	.	6	56	0.9612	27.568	N 0
41	24.7	.	4	56	1.6020	26.623	N 0
42	24.7	.	6	53	1.7942	28.123	N 0
43	24.6	.	7	62	1.1214	28.979	N 0
44	24.5	.	7	59	1.3457	28.867	N 0
45	24.6	.	8	65	.	28.300	N 0
46	23.4	.	4	11	5.1584	25.030	N 0
47	23.9	.	5	23	3.5885	27.995	N 0
48	23.5	.	5	30	3.5885	28.033	N 0
49	23.4	.	8	34	2.2428	28.746	N 0
50	24.0	.	5	24	1.5700	26.474	N 0
51	24.2	.	5	46	1.7942	26.405	N 0
52	24.2	.	5	56	0.9612	25.973	N 0

53	24.4	.	5	59	1.5700	26.400	N	0
54	24.5	.	8	61	1.2816	27.040	N	0

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)
55	SPR	CB02	13225	25	25	1989	5	12	812	28	44.99	90	39.98
56	SPR	CB02	13226	26	26	1989	5	12	820	28	43.00	90	40.02
57	SPR	CB02	13227	27	27	1989	5	12	827	28	41.00	90	40.03
58	SPR	CB02	13228	28	28	1989	5	12	835	28	39.01	90	40.00
59	SPR	CB02	13229	29	29	1989	5	12	843	28	37.02	90	39.94
60	SPR	CB02	13230	30	30	1989	5	12	850	28	35.00	90	40.00
61	SPR	CB03	12904	1	1	1989	5	9	910	29	7.04	91	15.00
62	SPR	CB03	12905	2	2	1989	5	9	940	29	5.99	91	14.99
63	SPR	CB03	12906	3	3	1989	5	9	1003	29	3.00	91	14.99
64	SPR	CB03	12907	4	4	1989	5	9	1025	29	1.04	91	14.97
65	SPR	CB03	12908	5	5	1989	5	9	1045	28	58.99	91	14.99
66	SPR	CB03	13501	1	1	1989	5	15	745	29	13.00	91	15.00
67	SPR	CB03	13502	2	2	1989	5	15	758	29	11.00	91	15.00
68	SPR	CB03	13503	3	3	1989	5	15	806	29	9.00	91	15.00
69	SPR	CB03	13504	4	4	1989	5	15	813	29	7.00	91	14.00
70	SPR	CB03	13505	5	5	1989	5	15	823	29	4.95	91	15.04
71	SPR	CB03	13506	6	6	1989	5	15	838	29	2.83	91	15.00
72	SPR	CB03	13507	7	7	1989	5	15	850	29	0.96	91	14.97

OBS	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
55	24.6	.	6	56	0.8971	27.711	N 0
56	25.0	.	6	55	0.8971	28.479	N 0
57	25.0	.	8	53	1.3457	28.950	N 0
58	24.9	.	8	58	1.1214	28.755	N 0
59	24.7	.	8	58	1.3457	28.910	N 0
60	24.7	.	8	66	1.3457	28.340	N 0
61	25.5	1	21	16	7.8498	20.753	N 0
62	24.9	1	.	14	8.9712	21.220	N 0
63	24.8	1	15	14	8.0741	22.268	N 0
64	24.7	2	14	14	7.8498	23.597	N 0
65	26.0	2	14	14	4.9342	23.965	N 0SEAS JUMPED TO 10' AND WERE BREAKING
66	24.6	2	.	3	8.2984	18.368	N 0
67	24.5	2	.	5	11.6626	16.897	N 0
68	24.3	2	.	8	9.4198	21.998	N 0
69	24.5	1	.	11	10.0926	26.079	N 0
70	24.5	2	.	15	4.9342	26.457	N 0

71	24.7	2	.	15	4.7099	26.786	N	0
72	24.8	2	.	13	4.0370	27.361	N	0

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
73	SPR	CB03	13508	8	8	1989	5	15	905	28	58.92
74	SPR	CB03	13509	9	9	1989	5	15	915	28	56.90
75	SPR	CB03	13510	10	10	1989	5	15	927	28	54.98
76	SPR	CB03	13511	11	11	1989	5	15	940	28	52.93
77	SPR	CB03	13512	12	12	1989	5	15	950	28	50.96
78	SPR	CB03	13513	13	13	1989	5	15	1002	28	48.99
79	SPR	CB03	13514	14	14	1989	5	15	1014	28	46.99
80	SPR	CB03	13515	15	15	1989	5	15	1026	28	45.00
81	SPR	CB03	13516	16	16	1989	5	15	1038	28	42.99
82	SPR	CB03	13517	17	17	1989	5	15	1055	28	40.99
83	SPR	CB03	13601	1	1	1989	5	16	712	29	13.00
84	SPR	CB03	13602	2	2	1989	5	16	720	29	11.04
85	SPR	CB03	13603	3	3	1989	5	16	730	29	8.57
86	SPR	CB03	13604	4	4	1989	5	16	742	29	7.00
87	SPR	CB03	13605	5	5	1989	5	16	800	29	4.95
88	SPR	CB03	13606	6	6	1989	5	16	813	29	3.00
89	SPR	CB03	13607	7	7	1989	5	16	825	29	0.97
90	SPR	CB03	13608	8	8	1989	5	16	837	28	58.97

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
73	91	15.00	24.5	3	.	13	2.6914	27.713	N 0
74	91	14.98	24.5	4	.	20	2.9156	27.833	N 0
75	91	14.98	24.5	4	.	22	2.6914	28.337	N 0
76	91	15.02	24.8	6	.	25	2.0185	29.544	N 0
77	91	15.00	25.0	6	.	28	1.6020	29.757	N 0
78	91	15.01	25.0	10	.	35	0.8971	30.936	N 0
79	91	14.96	25.0	11	.	41	0.8971	31.436	N 0
80	91	15.00	24.8	11	.	47	0.9612	31.996	N 0
81	91	15.00	25.0	18	.	55	0.9612	32.788	N 0
82	91	14.98	25.0	22	.	65	0.9612	33.162	N 0
83	91	15.00	24.5	2	7	3	10.5412	19.551	N 0
84	91	15.07	24.5	2	5	5	8.0741	25.402	N 0
85	91	15.00	24.7	2	5	8	5.8313	26.166	N 0
86	91	15.00	24.5	2	5	12	3.3642	26.591	N 0
87	91	15.02	24.7	3	5	16	3.5885	27.150	N 0
88	91	15.00	24.5	3	5	16	3.3642	27.473	N 0

89	91	14.98	24.5	3	5	14	3.3642	27.774	N	0
90	91	14.99	24.5	3	5	15	2.2428	27.687	N	0

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
91	SPR	CB03	13609	9	9	1989	5	16	850	28	56.99
92	SPR	CB03	13610	10	10	1989	5	16	907	28	54.96
93	SPR	CB03	13611	11	11	1989	5	16	920	28	53.01
94	SPR	CB03	13612	12	12	1989	5	16	934	28	51.00
95	SPR	CB03	13613	13	13	1989	5	16	950	28	48.99
96	SPR	CB03	13614	14	14	1989	5	16	1005	28	46.90
97	SPR	CB03	13615	15	15	1989	5	16	1017	28	44.95
98	SPR	CB03	13616	16	16	1989	5	16	1030	28	43.00
99	SPR	CB03	13617	17	17	1989	5	16	1047	28	41.00
100	SPR	CB04	13101	1	1	1989	5	11	800	29	13.00
101	SPR	CB04	13102	2	2	1989	5	11	830	29	11.00
102	SPR	CB04	13103	3	3	1989	5	11	900	29	9.00
103	SPR	CB04	13104	4	4	1989	5	11	940	29	7.00
104	SPR	CB04	13201	1	1	1989	5	12	745	29	13.00
105	SPR	CB04	13202	2	2	1989	5	12	830	29	11.00
106	SPR	CB04	13203	3	3	1989	5	12	900	29	9.00
107	SPR	CB04	13204	4	4	1989	5	12	920	29	7.00
108	SPR	CB04	13205	5	5	1989	5	12	935	29	5.00

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
91	91	15.00	24.5	3	4	19	4.0370	27.646	N 0
92	91	15.01	25.0	4	3	21	2.5632	29.082	N 0
93	91	15.00	24.8	5	3	24	1.7942	29.210	N 0
94	91	15.00	24.8	6	3	29	1.7942	30.352	N 0
95	91	15.00	25.0	11	3	35	1.9224	30.590	N 0
96	91	15.00	25.0	14	3	42	0.9612	31.972	N 0
97	91	15.00	25.0	16	3	48	0.6408	33.073	N 0
98	91	15.00	25.0	21	3	56	0.6408	32.938	N 0
99	91	15.00	25.0	23	1	65	.	33.718	N 0
100	91	15.00	22.4	.	21	6	17.4938	8.843	N 0
101	91	15.00	22.3	.	21	6	9.4198	10.830	N 0
102	91	15.00	22.4	2	21	10	12.3354	11.018	N 0
103	91	15.00	22.4	2	21	12	8.9712	10.826	N 0
104	91	15.00	22.2	1	15	3	.	8.068	N 0
105	91	15.00	22.4	2	12	9	6.2798	10.918	N 0
106	91	15.00	22.4	2	3	12	4.9342	10.925	N 0

107	91	15.00	24.0	3	3	15	6.9527	13.495	N	0
108	91	15.00	24.5	3	4	12	9.1955	16.423	N	0

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
109	SPR	CB04	13206	6	6	1989	5	12	952	29	3.00
110	SPR	CB04	13207	7	7	1989	5	12	1010	29	1.00
111	SPR	CB04	13208	8	8	1989	5	12	1030	28	59.00
112	SPR	CB04	13209	9	9	1989	5	12	1045	28	57.00
113	SPR	CB04	13210	10	10	1989	5	12	1100	28	55.00
114	SPR	CB04	13211	11	11	1989	5	12	1115	28	53.00
115	SPR	CB04	13212	12	12	1989	5	12	1135	28	51.00
116	SPR	CB04	13213	13	13	1989	5	12	1150	28	49.00
117	SPR	CB04	13214	14	14	1989	5	12	1210	28	47.00
118	SPR	CB04	13215	15	15	1989	5	12	1220	28	45.00
119	SPR	CB04	13216	16	16	1989	5	12	1240	28	43.00
120	SPR	CB04	13217	17	17	1989	5	12	1255	28	41.00
121	SPR	CB05	13101	1	1	1989	5	11	745	29	33.56
122	SPR	CB05	13102	2	2	1989	5	11	815	29	31.58
123	SPR	CB05	13103	3	3	1989	5	11	838	29	29.58
124	SPR	CB05	13104	4	4	1989	5	11	855	29	27.56
125	SPR	CB05	13205	5	5	1989	5	12	730	29	33.58
126	SPR	CB05	13206	6	6	1989	5	12	750	29	31.57

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
109	91	15.00	24.4	3	4	15	10.5412	21.233	N 0
110	91	15.00	24.4	3	4	13	10.0926	22.853	N 0
111	91	15.00	25.0	3	3	15	7.8498	25.069	N 0
112	91	15.00	24.5	3	1	19	4.4856	26.074	N 0
113	91	15.00	24.4	4	1	21	5.6070	26.387	N 0
114	91	15.00	24.4	4	1	24	2.9156	27.253	N 0
115	91	15.00	25.0	5	1	29	.	28.713	N 0
116	91	15.00	24.4	7	1	35	2.0185	30.062	N 0
117	91	.	24.5	9	1	42	.	29.521	N 0
118	91	15.00	25.0	11	1	48	1.3457	29.536	N 0
119	91	15.00	25.0	11	1	56	1.1214	30.086	N 0
120	91	15.00	25.0	11	1	65	0.8971	30.108	N 0
121	92	3.25	23.8	1	18	9	18.5031	2.679	N 0100ML
122	92	3.11	23.8	1	18	9	17.9424	5.640	N 0100ML
123	92	3.56	24.0	1	18	10	14.0175	11.154	N 0100ML
124	92	3.28	24.3	1	18	13	11.2140	12.526	N 0100ML

125	92	3.04	23.1	1	18	9	9.1955	2.300	N	0100ML
126	92	3.04	23.1	1	18	10	8.9712	4.542	N	0250ML

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
127	SPR	CB05	13207	7	7	1989	5	12	808	29	29.59
128	SPR	CB05	13208	8	8	1989	5	12	820	29	27.58
129	SPR	CB05	13209	9	9	1989	5	12	850	29	25.58
130	SPR	CB05	13210	10	10	1989	5	12	917	29	23.57
131	SPR	CB05	13211	11	11	1989	5	12	930	29	21.58
132	SPR	CB05	13212	12	12	1989	5	12	956	29	19.57
133	SPR	CB05	13213	13	13	1989	5	12	1025	29	17.58
134	SPR	CB05	13214	14	14	1989	5	12	1054	29	15.15
135	SPR	CB05	13215	15	15	1989	5	12	1120	29	13.13
136	SPR	CB05	13216	16	16	1989	5	12	1152	29	11.11
137	SPR	CB05	13217	17	17	1989	5	12	1213	29	9.09
138	SPR	CB05	13218	18	18	1989	5	12	1232	29	7.07
139	SPR	CB05	13219	19	19	1989	5	12	1247	29	5.05
140	SPR	CB05	13220	20	20	1989	5	12	3104	29	3.04
141	SPR	CB05	13521	21	21	1989	5	15	800	29	33.02
142	SPR	CB05	13522	22	22	1989	5	15	817	29	31.09
143	SPR	CB05	13523	23	23	1989	5	15	836	29	29.04
144	SPR	CB05	13524	24	24	1989	5	15	849	29	27.08

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
127	92	3.02	23.2	1	18	11	5.3827	7.842	N 0250ML
128	92	3.02	23.4	1	18	13	4.2613	7.798	N 0250ML
129	92	3.06	23.7	2	17	14	4.2613	25.609	N 0250ML
130	92	3.07	23.9	2	17	17	3.5885	1.542	N 0250 ML
131	92	3.01	24.2	3	16	17	4.7099	16.334	N 0250ML
132	92	3.07	24.5	4	16	22	4.2613	16.271	N 0250ML
133	92	3.01	24.5	4	16	30	4.9342	16.366	N 0250ML
134	92	3.08	24.5	5	16	30	5.3827	19.815	N 0250ML
135	92	3.04	24.5	5	16	32	6.0556	.	N 0250 ML
136	92	3.09	24.6	5	15	34	5.1584	19.915	N 0250 ML
137	92	3.14	24.7	5	15	39	4.7099	19.889	N 0250 ML
138	92	3.02	24.9	5	15	39	5.1584	20.014	N 0250ML
139	92	3.04	24.9	5	15	40	4.7099	20.039	N 0250ML
140	92	3.09	24.9	5	15	45	5.3827	20.086	N 0CLEAR WATER
141	92	3.02	23.7	1	18	10	20.7459	1.541	N 0100ML
142	92	3.09	23.7	1	18	11	21.8673	1.492	N 0100ML

143	92	3.03	23.8	1	18	11	24.6708	4.023	N	0100ML
144	92	3.01	23.8	1	18	13	21.3066	1.499	N	0100ML

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
145	SPR	CB05	13525	25	25	1989	5	15	807	29	25.03
146	SPR	CB05	13526	26	26	1989	5	15	922	29	23.14
147	SPR	CB05	13527	27	27	1989	5	15	937	29	21.10
148	SPR	CB05	13528	28	28	1989	5	15	953	29	19.01
149	SPR	CB05	13529	29	29	1989	5	15	1011	29	17.02
150	SPR	CB05	13530	30	30	1989	5	15	1027	29	15.06
151	SPR	CB05	13631	31	31	1989	5	16	740	29	33.03
152	SPR	CB05	13632	32	32	1989	5	16	754	29	31.05
153	SPR	CB05	13633	33	33	1989	5	16	812	29	29.03
154	SPR	CB05	13634	34	34	1989	5	16	830	29	27.03
155	SPR	CB05	13635	35	35	1989	5	16	847	29	25.04
156	SPR	CB05	13636	36	36	1989	5	16	901	29	23.02
157	SPR	CB05	13637	37	37	1989	5	16	922	29	21.04
158	SPR	CB05	13638	38	38	1989	5	16	938	29	19.04
159	SPR	CB05	13639	39	39	1989	5	16	953	29	17.03
160	SPR	CB05	13640	40	40	1989	5	16	1007	29	15.09
161	SPR	CB05	13641	41	41	1989	5	16	1022	29	13.03
162	SPR	CB05	13642	42	42	1989	5	16	1039	29	11.04

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER		WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
145	92	3.02	23.8	1	17	14	7.2891	5.000	N	0250ML
146	92	3.08	23.8	2	17	14	2.4671	4.988	N	0250ML
147	92	3.15	23.9	16	19	93	2.9156	5.010	N	0250ML
148	92	3.04	24.7	3	16	21	7.4012	17.891	N	0250ML
149	92	3.00	24.7	3	16	22	8.2984	17.917	N	0250ML
150	92	3.07	24.8	4	16	24	8.2984	17.900	N	0250ML
151	92	3.00	24.3	1	18	10	2.4671	4.046	N	0250ML
152	92	3.04	24.2	1	18	11	3.3642	25.008	N	0250ML
153	92	3.07	24.3	1	18	13	2.6914	4.053	N	0250ML
154	92	3.04	24.3	1	18	14	4.0370	5.342	N	0250ML
155	92	3.01	24.3	1	17	17	4.4856	5.311	N	0250ML
156	92	3.01	24.4	1	17	17	3.5885	5.321	N	0250ML
157	92	3.09	24.8	2	17	18	3.5885	19.641	N	0250ML
158	92	3.09	24.8	2	16	22	4.2613	19.652	N	0
159	92	3.02	24.9	3	16	30	4.9342	19.658	N	0
160	92	3.01	25.0	3	16	32	3.1399	6.126	N	0

161	92	3.05	25.1	4	15	34	3.3642	24.952	N	0
162	92	3.05	25.2	4	15	35	2.2428	25.011	N	0

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
163	FAL	CB06	1	1	1	1989	8	28	928	29	33.07	92
164	FAL	CB06	2	2	2	1989	8	28	945	29	31.03	92
165	FAL	CB06	3	3	3	1989	8	28	1010	29	29.04	92
166	FAL	CB06	4	4	4	1989	8	28	1033	29	26.98	92
167	FAL	CB06	5	5	5	1989	8	28	1050	29	25.02	92
168	FAL	CB06	6	6	6	1989	8	28	1113	29	23.03	92
169	FAL	CB06	7	7	7	1989	8	28	1136	29	21.01	92
170	FAL	CB06	8	8	8	1989	8	28	1150	29	18.97	92
171	FAL	CB06	9	9	9	1989	8	28	1207	29	17.02	92
172	FAL	CB06	10	10	10	1989	8	28	1221	29	15.03	92
173	FAL	CB06	11	11	11	1989	8	28	1232	29	13.05	92
174	FAL	CB06	12	12	12	1989	8	28	1246	29	11.02	92
175	FAL	CB06	13	13	13	1989	8	29	915	29	33.01	92
176	FAL	CB06	14	14	14	1989	8	29	932	29	31.04	92
177	FAL	CB06	15	15	15	1989	8	29	949	29	29.02	92
178	FAL	CB06	16	16	16	1989	8	29	1003	29	27.01	92
179	FAL	CB06	17	17	17	1989	8	29	1017	29	24.98	92
180	FAL	CB06	18	18	18	1989	8	29	1032	29	23.03	92

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
163	3.01	32.0	2	14	13	6.2798	9.136	N 0
164	3.00	32.0	2	14	9	4.9342	10.200	N 0
165	3.01	32.0	2	14	12	3.8128	9.801	N 0
166	3.01	33.0	2	12	14	6.7284	10.068	N 0
167	3.00	32.0	3	12	13	5.6070	10.152	N 0
168	3.01	33.0	3	12	15	5.1584	11.163	N 0
169	3.02	33.0	4	12	14	4.4856	10.851	N 0
170	3.00	33.0	4	12	18	5.6070	10.844	N 0
171	3.01	33.0	4	12	15	5.6070	10.848	N 0
172	3.01	33.0	5	12	20	5.6070	10.853	N 0
173	3.01	33.0	5	12	25	4.7099	10.853	N 0
174	3.00	33.0	6	7	27	5.8313	10.845	N 0
175	3.01	33.0	2	17	13	4.9342	9.732	N 0
176	3.00	33.0	2	17	10	5.6070	9.708	N 0
177	3.01	32.5	3	17	11	7.1770	8.665	N 0
178	3.02	32.5	4	17	14	4.9342	11.866	N 0

179	2.99	32.5	4	14	14	4.0370	11.848	N	0
180	3.02	33.0	7	14	15	4.2613	11.868	N	0

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
181	FAL	CB06	19	19	19	1989	8	29	1047	29	21.01	92
182	FAL	CB06	20	20	20	1989	8	29	1101	29	18.99	92
183	FAL	CB06	21	21	21	1989	8	29	1114	29	17.01	92
184	FAL	CB06	22	22	22	1989	8	29	1130	29	15.01	92
185	FAL	CB06	23	23	23	1989	8	29	1148	29	13.02	92
186	FAL	CB06	24	24	24	1989	8	29	1203	29	10.99	92
187	FAL	CB06	25	25	25	1989	8	29	1218	29	9.01	92
188	FAL	CB06	26	26	26	1989	8	29	1223	29	7.02	92
189	FAL	CB06	27	27	27	1989	8	29	1247	29	5.01	92
190	FAL	CB06	28	28	28	1989	8	29	1259	29	2.99	92
191	FAL	CB06	29	29	29	1989	8	29	1315	29	1.03	92
192	FAL	CB06	30	30	30	1989	8	30	607	29	33.01	92
193	FAL	CB06	31	31	31	1989	8	30	620	29	31.03	92
194	FAL	CB06	32	32	32	1989	8	30	639	29	28.99	92
195	FAL	CB06	33	33	33	1989	8	30	654	29	27.03	92
196	FAL	CB06	34	34	34	1989	8	30	711	29	24.98	92
197	FAL	CB06	35	35	35	1989	8	30	728	29	23.01	92
198	FAL	CB06	36	36	36	1989	8	30	741	29	21.02	92

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
181	3.02	32.5	10	14	14	4.2613	11.855	N 0
182	3.00	32.0	13	15	18	4.7099	24.552	N 0
183	3.03	32.0	14	15	15	2.2428	24.519	N 0
184	3.03	32.0	17	13	20	4.0370	24.649	N 0
185	2.99	31.5	21	12	25	2.4671	24.670	N 0
186	3.02	31.5	26	12	28	4.4856	24.643	N 0
187	3.02	32.0	29	5	31	.	19.102	N 0
188	3.00	31.5	31	5	37	2.2428	19.079	N 0
189	3.02	31.5	36	5	44	3.8128	19.067	N 0
190	3.01	31.0	36	5	51	2.2428	19.075	N 0
191	3.00	31.0	36	5	57	.	19.098	N 0
192	3.02	32.5	2	14	13	4.7099	9.744	N 0
193	2.98	32.5	2	14	10	6.0556	9.737	N 0
194	2.99	33.0	3	14	11	.	8.656	N 0
195	3.03	33.0	3	15	14	3.5885	11.891	N 0
196	3.02	32.5	4	15	14	4.2613	11.860	N 0

197	3.00	32.5	4	15	15	3.5885	11.842	N	0
198	3.01	32.0	7	12	14	4.4856	11.847	N	0

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
199	FAL	CB06	37	37	37	1989	8	30	756	29	19.03	92
200	FAL	CB06	38	38	38	1989	8	30	812	29	17.02	92
201	FAL	CB06	39	39	39	1989	8	30	827	29	15.00	92
202	FAL	CB06	40	40	40	1989	8	30	841	29	13.01	92
203	FAL	CB06	41	41	41	1989	8	30	856	29	11.03	92
204	FAL	CB06	42	42	42	1989	8	30	910	29	9.01	92
205	FAL	CB06	43	43	43	1989	8	30	928	29	7.00	92
206	FAL	CB06	44	44	44	1989	8	30	944	29	5.01	92
207	FAL	CB06	45	45	45	1989	8	30	959	29	3.01	92
208	FAL	CB06	46	46	46	1989	8	30	1016	29	1.03	92
209	FAL	CB06	47	47	47	1989	8	31	705	29	33.03	92
210	FAL	CB06	48	48	48	1989	8	31	723	29	31.01	92
211	FAL	CB06	49	49	49	1989	8	31	740	29	28.98	92
212	FAL	CB06	50	50	50	1989	8	31	756	29	27.01	92
213	FAL	CB06	51	51	51	1989	8	31	812	29	24.99	92
214	FAL	CB06	52	52	52	1989	8	31	828	29	23.02	92
215	FAL	CB06	53	53	53	1989	8	31	845	29	20.99	92
216	FAL	CB06	54	54	54	1989	8	31	901	29	19.03	92

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL		SURFACE SALINITY	COMMENTS
199	3.03	32.0	9	12	18	3.5885	24.511	N 0	NO CHLOROPHYLL SAMPLE TAKEN
200	3.00	31.5	13	10	16	2.2428	24.684	N 0	NO CHLOROPHYLL SAMPLE TAKEN
201	2.99	32.0	14	10	20	1.7942	24.697	N 0	
202	3.02	32.0	17	7	25	2.2428	24.644	N 0	
203	3.01	31.5	21	8	28	1.5700	24.646	N 0	
204	3.02	31.5	26	8	31	2.8836	24.513	N 0	
205	3.02	31.0	29	5	37	3.8128	19.096	N 0	
206	3.03	31.5	31	5	44	2.2428	19.086	N 0	
207	3.00	31.0	36	5	51	1.6020	19.082	N 0	
208	2.99	31.0	36	5	57	3.8128	19.102	N 0	
209	3.01	33.0	2	14	13	4.9342	9.724	N 0	
210	3.00	33.0	2	14	10	5.6070	9.718	N 0	
211	3.01	32.5	2	14	11	5.1584	8.675	N 0	
212	2.98	33.0	3	15	14	4.0370	11.849	N 0	
213	3.03	32.5	3	15	14	.	11.808	N 0	MISSING SAMPLES PER GRACY
214	3.01	32.5	4	12	15	3.3642	11.861	N 0	

215	3.02	32.5	4	12	14	4.0370	11.807	N	0
216	2.99	32.0	8	10	18	4.2613	24.649	N	0

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
217	FAL	CB06	55	55	55	1989	8	31	917	29	16.99	92
218	FAL	CB06	56	56	56	1989	8	31	932	29	15.03	92
219	FAL	CB06	57	57	57	1989	8	31	948	29	13.01	92
220	FAL	CB06	58	58	58	1989	8	31	1006	29	11.00	92
221	FAL	CB06	59	59	59	1989	8	31	1022	29	8.98	92
222	FAL	CB06	60	60	60	1989	8	31	1038	29	7.00	92
223	FAL	CB06	61	61	61	1989	8	31	1054	29	5.02	92
224	FAL	CB06	62	62	62	1989	8	31	1111	29	3.01	92
225	FAL	CB06	63	63	63	1989	8	31	1128	29	1.03	92
226	FAL	CB06	64	64	64	1989	9	1	733	29	33.01	92
227	FAL	CB06	65	65	65	1989	9	1	750	29	31.02	92
228	FAL	CB06	66	66	66	1989	9	1	807	29	29.01	92
229	FAL	CB06	67	67	67	1989	9	1	822	29	26.99	92
230	FAL	CB06	68	68	68	1989	9	1	837	29	25.00	92
231	FAL	CB06	69	69	69	1989	9	4	915	29	33.05	92
232	FAL	CB06	70	70	70	1989	9	4	932	29	31.01	92
233	FAL	CB06	71	71	71	1989	9	4	948	29	29.00	92
234	FAL	CB06	72	72	72	1989	9	4	1005	29	26.98	92

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
217	3.01	32.0	9	10	15	6.2798	24.647	N 0
218	3.00	32.0	14	7	20	2.0185	24.653	N 0
219	3.00	31.5	19	8	25	4.0370	.	N 0
220	3.01	31.5	21	8	28	3.8128	24.713	N 0
221	3.02	31.5	27	8	31	4.7099	19.066	N 0
222	2.99	31.5	30	5	37	2.4671	.	N 0
223	3.03	31.0	31	5	44	4.0370	19.101	N 0
224	3.01	31.0	35	5	51	.	19.143	N 0MISSING SAMPLES PER GRACY
225	3.02	31.0	36	3	57	4.2613	19.287	N 0
226	3.01	32.0	2	17	13	11.2140	9.694	N 0
227	3.01	32.0	2	17	10	4.4856	9.727	N 0
228	2.99	31.5	3	14	11	3.8128	8.661	N 0
229	3.00	31.5	5	15	14	5.3827	.	N 0
230	3.02	31.5	6	15	15	4.4856	7.945	N 0
231	3.01	32.5	3	14	13	6.9527	.	N 0
232	3.02	32.0	3	15	9	5.6070	15.978	N 0

233	3.01	32.0	3	16	12	5.6070	16.087	N	0
234	3.01	32.5	5	14	14	.	13.339	N	0MISSING

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	TIME DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
235	FAL	CB06	73	73	73	1989	9	4	1021	29	25.01
236	FAL	CB06	74	74	74	1989	9	4	1040	29	23.01
237	FAL	CB06	75	75	75	1989	9	5	714	29	33.00
238	FAL	CB06	76	76	76	1989	9	5	730	29	31.01
239	FAL	CB06	77	77	77	1989	9	5	747	29	29.03
240	FAL	CB06	78	78	78	1989	9	5	804	29	27.01
241	FAL	CB06	79	79	79	1989	9	5	821	29	24.99
242	FAL	CB06	80	80	80	1989	9	5	838	29	23.01
243	FAL	CB06	81	81	81	1989	9	6	633	29	32.98
244	FAL	CB06	82	82	82	1989	9	6	648	29	31.02
245	FAL	CB06	83	83	83	1989	9	6	707	29	28.98
246	FAL	CB06	84	84	84	1989	9	6	725	29	27.00
247	FAL	CB06	85	85	85	1989	9	6	739	29	25.01
248	FAL	CB06	86	86	86	1989	9	6	758	29	22.99
249	FAL	CB06	87	87	87	1989	9	7	732	29	32.98
250	FAL	CB06	88	88	88	1989	9	7	748	29	31.01
251	FAL	CB06	89	89	89	1989	9	7	808	29	29.01
252	FAL	CB06	90	90	90	1989	9	7	827	29	27.01

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
235	92	3.00	32.5	5	14	13	4.0370	16.810	N 0
236	92	3.01	32.0	8	12	15	2.0185	18.572	N 0
237	92	3.02	33.0	2	14	13	0.6728	14.414	N 0
238	92	3.00	33.0	2	15	10	0.6728	15.887	N 0
239	92	2.98	32.0	3	16	11	0.6728	8.295	N 0
240	92	2.99	32.5	4	14	14	1.1214	13.237	N 0
241	92	3.01	32.0	5	14	13	0.8971	16.769	N 0
242	92	3.00	32.0	8	12	15	2.2428	18.481	N 0
243	92	3.01	33.0	2	14	12	0.4486	14.489	N 0
244	92	3.00	32.5	2	15	9	0.6728	15.939	N 0
245	92	3.01	32.5	3	16	12	0.8971	16.113	N 0
246	92	3.02	32.0	5	14	15	0.6728	13.325	N 0
247	92	3.00	32.0	6	14	13	0.8971	16.536	N 0
248	92	3.01	31.5	8	12	15	2.0185	18.516	N 0
249	92	3.02	31.0	1	16	13	3.1399	9.751	N 0
250	92	3.00	31.0	2	16	10	4.0370	8.950	N 0

251	92	3.00	31.0	2	14	12	3.3642	10.932	N	0
252	92	2.99	31.0	4	14	14	1.3457	10.896	N	0

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
253	FAL	CB06	91	91	91	1989	9	7	844	29	25.03
254	FAL	CB06	92	92	92	1989	9	7	902	29	23.01
255	FAL	CB06	93	93	93	1989	9	7	923	29	21.00
256	FAL	CB06	94	94	94	1989	9	7	946	29	18.98
257	FAL	CB06	95	95	95	1989	9	7	959	29	17.01
258	FAL	CB06	96	96	96	1989	9	7	1018	29	15.02
259	FAL	CB06	97	97	97	1989	9	7	1039	29	13.01
260	FAL	CB06	98	98	98	1989	9	7	1056	29	11.03
261	FAL	CB06	99	99	99	1989	9	7	1112	29	8.98
262	FAL	CB06	100	100	100	1989	9	7	1128	29	7.00
263	FAL	CB06	101	101	101	1989	9	7	1147	29	5.01
264	FAL	CB06	102	102	102	1989	9	7	1203	29	3.02
265	FAL	CB06	103	103	103	1989	9	7	1224	29	1.01
266	FAL	CB06	104	104	104	1989	9	8	927	29	23.01
267	FAL	CB06	105	105	105	1989	9	8	945	29	21.02
268	FAL	CB06	106	106	106	1989	9	8	1002	29	19.01
269	FAL	CB06	107	107	107	1989	9	8	1020	29	17.02
270	FAL	CB06	108	108	108	1989	9	8	1041	29	15.01

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
253	92	2.98	30.5	5	15	13	1.6020	29.257	N 0
254	92	3.00	31.0	7	15	15	2.6914	11.058	N 0
255	92	3.02	30.5	9	15	14	1.9224	15.089	N 0
256	92	3.00	30.5	12	15	18	2.2428	15.107	N 0
257	92	3.00	30.5	14	12	17	4.0370	16.782	N 0
258	92	3.00	30.0	17	12	21	4.0370	16.825	N 0
259	92	2.99	30.0	21	12	26	4.7099	25.088	N 0
260	92	3.01	30.0	26	12	29	6.2798	24.771	N 0
261	92	3.00	29.5	29	5	32	4.4856	26.005	N 0
262	92	3.02	29.5	31	5	37	5.1584	26.000	N 0
263	92	3.02	29.5	35	5	45	1.6020	23.226	N 0
264	92	3.00	29.5	36	5	53	1.3457	23.234	N 0
265	92	3.00	29.0	36	5	57	1.2816	23.590	N 0
266	92	3.02	31.0	6	14	15	4.9342	27.800	N 0
267	92	2.99	31.0	7	15	14	7.8498	10.361	N 0
268	92	3.00	30.5	8	15	17	6.2798	12.843	N 0

269	92	3.01	30.5	12	15	18	7.6255	17.360	N	0
270	92	3.02	30.5	14	15	21	6.0556	22.810	N	0

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)
271	FAL	CB06	109	109	109	1989	9	8	1059	29	13.02	92	3.01
272	FAL	CB06	110	110	110	1989	9	8	1117	29	11.02	92	2.99
273	FAL	CB06	111	111	111	1989	9	8	1135	29	9.03	92	3.00
274	FAL	CB06	112	112	112	1989	9	8	1152	29	7.01	92	2.99
275	FAL	CB06	113	113	113	1989	9	8	1212	29	5.02	92	3.00
276	FAL	CB06	114	114	114	1989	9	8	1232	29	2.99	92	3.02
277	FAL	CB06	115	115	115	1989	9	8	1249	29	1.01	92	3.01
278	FAL	CB06	116	116	116	1989	9	8	1324	29	32.98	92	3.01
279	FAL	CB06	117	117	117	1989	9	8	1430	29	31.01	92	2.99
280	FAL	CB06	118	118	118	1989	9	8	1425	29	29.00	92	3.02
281	FAL	CB06	119	119	119	1989	9	8	1443	29	26.99	92	3.01
282	FAL	CB06	120	120	120	1989	9	8	1501	29	25.03	92	3.01
283	FAL	CB03	1	24001	24001	1989	8	28	822	29	13.00	91	15.00
284	FAL	CB03	2	24002	24002	1989	8	28	836	29	12.78	91	15.02
285	FAL	CB03	3	24003	24003	1989	8	28	843	29	11.00	91	14.98
286	FAL	CB03	4	24004	24004	1989	8	28	856	29	6.78	91	14.11
287	FAL	CB03	5	24005	24005	1989	8	28	904	29	4.89	91	14.11
288	FAL	CB03	6	24006	24006	1989	8	28	911	29	2.80	91	14.13

OBS	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL		SURFACE SALINITY	COMMENTS
271	30.5	17	12	26	6.7284	23.565	N	0
272	30.5	21	10	28	14.8025	25.099	N	0
273	30.0	26	10	32	7.6255	26.032	N	0
274	30.0	29	7	37	5.8313	24.639	N	0
275	29.5	31	7	43	8.0741	25.241	N	0
276	29.5	36	8	51	1.5700	25.077	N	0
277	30.0	36	8	58	1.5700	24.803	N	0
278	31.5	2	16	13	8.7469	5.978	N	0
279	31.5	2	16	10	9.1955	5.981	N	0
280	31.0	3	14	11	8.2984	7.718	N	0
281	31.0	4	14	14	6.5041	7.747	N	0
282	31.5	4	14	15	6.2798	9.771	N	0
283	31.5	5	3	7	3.0118	22.286	N	0
284	31.0	7	3	12	2.3389	23.337	N	0
285	31.2	7	3	14	2.6914	25.224	N	0
286	31.0	8	3	15	2.1146	25.680	N	0

287	31.1	8	3	15	1.3457	26.307	N	0
288	31.3	9	1	14	0.9612	26.231	N	0

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)
289	FAL	CB03	7	24007	24007	1989	8	28	920	29	0.86	91	14.12
290	FAL	CB03	8	24008	24008	1989	8	28	928	28	56.92	91	14.11
291	FAL	CB03	9	24009	24009	1989	8	28	934	28	56.80	91	14.11
292	FAL	CB03	10	24010	24010	1989	8	28	944	28	54.83	91	14.07
293	FAL	CB03	11	24011	24011	1989	8	28	951	28	52.84	91	14.14
294	FAL	CB03	12	24012	24012	1989	8	28	959	28	50.75	91	14.12
295	FAL	CB03	13	24013	24013	1989	8	28	1006	28	48.84	91	14.14
296	FAL	CB03	14	24014	24014	1989	8	28	1013	28	45.74	91	14.18
297	FAL	CB03	15	24015	24015	1989	8	28	1023	28	43.66	91	14.81
298	FAL	CB03	16	24016	24016	1989	8	28	1035	28	40.88	91	15.01
299	FAL	CB04	1	24101	24101	1989	8	29	1119	29	13.00	91	15.02
300	FAL	CB04	2	24102	24102	1989	8	29	1112	29	11.12	91	14.96
301	FAL	CB04	3	24103	24103	1989	8	29	1105	29	9.05	91	15.00
302	FAL	CB04	4	24104	24104	1989	8	29	1057	29	7.07	91	15.00
303	FAL	CB04	5	24105	24105	1989	8	29	1050	29	5.05	91	15.09
304	FAL	CB04	6	24106	24106	1989	8	29	1043	29	3.06	91	15.07
305	FAL	CB04	7	24107	24107	1989	8	29	1037	29	1.14	91	15.11
306	FAL	CB04	8	24108	24108	1989	8	29	1024	28	59.00	91	15.04

OBS	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL		SURFACE SALINITY	COMMENTS
289	31.1	10	1	14	0.6728	25.871	N	0
290	31.0	13	1	15	0.6408	25.555	N	0
291	30.9	21	1	21	0.6408	25.925	N	0
292	30.8	21	1	22	0.6408	26.127	N	0
293	30.5	22	1	24	0.3204	26.934	N	0
294	30.5	28	1	28	0.3204	27.235	N	0
295	30.2	35	1	35	0.3204	27.779	N	0
296	30.0	31	1	42	0.6408	27.939	N	0
297	30.2	36	1	53	0.3204	27.473	N	0
298	30.3	36	1	65	0.3204	27.636	N	0
299	31.1	6	3	8	0.8971	.	N	0
300	30.9	9	3	12	1.1214	.	N	0
301	30.9	8	4	14	1.1214	.	N	06 POGY BOATS IN AREA (CARL BURTON)
302	30.9	6	3	15	1.1214	.	N	0
303	31.0	7	3	15	1.1214	.	N	0
304	30.9	12	3	15	0.6728	.	N	0

305	30.7	14	3	14	0.4486	.	N	0
306	30.5	14	3	14	0.4486	.	N	0

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
307	FAL	CB04	9	24109	24109	1989	8	29	1017	28	57.12	91
308	FAL	CB04	10	24110	24110	1989	8	29	1010	28	55.00	91
309	FAL	CB04	11	24111	24111	1989	8	29	1002	28	53.00	91
310	FAL	CB04	12	24112	24112	1989	8	29	956	28	51.10	91
311	FAL	CB04	13	24113	24113	1989	8	29	950	28	49.15	91
312	FAL	CB04	14	24114	24114	1989	8	29	942	28	47.15	91
313	FAL	CB04	15	24115	24115	1989	8	29	931	28	45.03	91
314	FAL	CB04	16	24116	24116	1989	8	29	923	28	43.15	91
315	FAL	CB04	17	24117	24117	1989	8	29	900	28	41.00	91
316	FAL	CB03	1	24201	24201	1989	8	30	1006	29	13.08	91
317	FAL	CB03	2	24202	24202	1989	8	30	959	29	11.08	91
318	FAL	CB03	3	24203	24203	1989	8	30	953	29	9.04	91
319	FAL	CB03	4	24204	24204	1989	8	30	947	29	7.04	91
320	FAL	CB03	5	24205	24205	1989	8	30	940	29	5.05	91
321	FAL	CB03	6	24206	24206	1989	8	30	932	29	3.03	91
322	FAL	CB03	7	24207	24207	1989	8	30	925	29	1.02	91
323	FAL	CB03	8	24208	24208	1989	8	30	917	28	59.09	91
324	FAL	CB03	9	24209	24209	1989	8	30	907	28	57.07	91

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL		SURFACE SALINITY	COMMENTS
307	15.00	30.5	17	3	18	0.8971	.	N 0	
308	15.03	30.4	20	1	20	0.4486	.	N 0	
309	15.03	30.2	23	1	23	0.6728	.	N 0	
310	15.00	30.2	27	1	27	0.3204	.	N 0	
311	15.00	30.0	35	1	35	0.2243	.	N 0	NO SHRIMP BOATS OR POGY BOATS
312	15.00	30.0	40	1	40	0.7690	.	N 0	
313	15.15	30.0	47	1	48	0.4486	.	N 0	
314	14.87	30.0	49	1	53	0.2243	.	N 0	
315	15.00	30.0	50	1	63	0.4486	.	N 0	
316	15.00	30.5	6	3	8	3.3642	.	N 0	
317	14.99	30.4	10	3	12	2.9156	.	N 0	
318	14.98	30.5	10	3	14	2.2428	.	N 0	
319	14.97	30.4	12	3	15	2.4671	.	N 0	
320	14.99	30.4	12	3	15	1.7942	.	N 0	
321	14.97	30.4	12	3	15	0.6728	.	N 0	
322	14.99	30.6	14	1	14	0.4486	.	N 0	

323	14.99	30.5	14	1	14	0.6728	.	N	0
324	15.01	30.4	18	1	19	0.6728	.	N	0

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)
325	FAL	CB03	10	24210	24210	1989	8	30	904	28	55.05	91	14.90
326	FAL	CB03	11	24211	24211	1989	8	30	858	28	53.06	91	15.03
327	FAL	CB03	12	24212	24212	1989	8	30	850	28	51.01	91	15.00
328	FAL	CB03	13	24213	24213	1989	8	30	843	28	49.01	91	15.03
329	FAL	CB03	14	24214	24214	1989	8	30	834	28	47.04	91	15.00
330	FAL	CB03	15	24215	24215	1989	8	30	824	28	45.03	91	14.93
331	FAL	CB03	16	24216	24216	1989	8	30	814	28	43.11	91	15.00
332	FAL	CB03	17	24217	24217	1989	8	30	805	28	40.98	91	15.02
333	FAL	CB03	1	24301	24301	1989	8	31	800	29	13.00	91	15.00
334	FAL	CB03	2	24302	24302	1989	8	31	809	29	10.93	91	15.04
335	FAL	CB03	3	24303	24303	1989	8	31	820	29	8.85	91	14.98
336	FAL	CB03	4	24304	24304	1989	8	31	828	29	6.89	91	14.99
337	FAL	CB03	5	24305	24305	1989	8	31	837	29	4.92	91	14.97
338	FAL	CB03	6	24306	24306	1989	8	31	844	29	2.93	91	14.99
339	FAL	CB03	7	24307	24307	1989	8	31	852	29	0.92	91	15.02
340	FAL	CB03	8	24308	24308	1989	8	31	859	28	58.92	91	14.99
341	FAL	CB03	9	24309	24309	1989	8	31	906	28	56.88	91	14.99
342	FAL	CB03	10	24310	24310	1989	8	31	916	28	54.96	91	15.01

OBS	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
325	30.4	21	1	21	0.2243	.	N 0
326	30.3	22	1	23	0.2243	.	N 0
327	30.3	28	1	28	0.3204	.	N 0
328	30.2	37	1	37	0.3204	.	N 0
329	30.2	41	1	41	0.2243	.	N 0
330	30.1	46	1	48	.	.	N 0
331	29.9	46	1	54	0.2243	.	N 0
332	29.8	58	1	64	0.9932	.	N 0
333	30.3	5	4	6	3.5885	.	N 0
334	30.4	7	4	12	1.7942	.	N 0
335	30.4	7	4	14	1.3457	.	N 0
336	30.4	8	4	15	1.6020	.	N 0
337	30.5	12	3	15	1.3457	.	N 0
338	30.5	15	1	15	1.1214	.	N 0
339	30.5	14	1	14	0.4486	.	N 0
340	30.3	13	1	14	0.6408	.	N 0

341	30.3	18	1	20	0.4486	.	N	0
342	30.3	21	1	21	0.3204	.	N	0

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)
343	FAL	CB03	11	24311	24311	1989	8	31	925	28	52.91	91	14.98
344	FAL	CB03	12	24312	24312	1989	8	31	933	28	50.95	91	14.98
345	FAL	CB03	13	24313	24313	1989	8	31	940	28	48.97	91	15.00
346	FAL	CB03	14	24314	24314	1989	8	31	949	28	46.97	91	15.01
347	FAL	CB03	15	24315	24315	1989	8	31	951	28	44.95	91	14.99
348	FAL	CB03	16	24316	24316	1989	8	31	1005	28	42.92	91	14.99
349	FAL	CB03	17	24317	24317	1989	8	31	1014	28	41.01	91	15.00
350	FAL	CB04	1	24401	24401	1989	9	1	1151	29	13.04	91	15.00
351	FAL	CB04	2	24402	24402	1989	9	1	1138	29	11.00	91	15.01
352	FAL	CB04	3	24403	24403	1989	9	1	1126	29	9.17	91	15.03
353	FAL	CB04	4	24404	24404	1989	9	1	1116	29	7.00	91	14.98
354	FAL	CB04	5	24405	24405	1989	9	1	1105	29	5.05	91	15.05
355	FAL	CB04	6	24406	24406	1989	9	1	1053	29	3.00	91	14.97
356	FAL	CB04	7	24407	24407	1989	9	1	1042	29	1.05	91	14.96
357	FAL	CB04	8	24408	24408	1989	9	1	1032	28	59.10	91	15.10
358	FAL	CB04	9	24409	24409	1989	9	1	1020	28	57.06	91	15.00
359	FAL	CB04	10	24410	24410	1989	9	1	1011	28	55.00	91	15.05
360	FAL	CB04	11	24411	24411	1989	9	1	1000	28	53.05	91	15.00

OBS	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
343	30.2	23	1	24	0.3204	.	N 0
344	30.3	28	1	28	0.3204	.	N 0
345	30.3	34	1	36	0.3204	.	N 0
346	30.3	40	1	42	0.7690	.	N 0
347	30.3	48	1	48	.	.	N 0
348	30.2	56	1	56	0.3204	.	N 0
349	30.3	60	1	64	0.3204	.	N 0
350	31.8	5	5	5	3.3642	.	N 0
351	32.0	5	5	11	3.3642	.	N 0LOOKS LIKE POGY BOATS HEADED EAST
352	31.8	6	4	13	7.4012	.	N 0SEVERAL POGY BOATS IN AREA
353	31.9	8	4	14	2.0185	.	N 0
354	31.8	8	4	15	1.4418	.	N 0
355	31.8	10	3	13	1.4418	.	N 0
356	31.8	12	3	13	0.6728	.	N 0
357	31.8	12	3	13	0.6728	.	N 0
358	31.6	18	1	18	0.3204	.	N 0

359	31.6	20	1	20	0.7690	.	N	0
360	30.5	22	1	22	0.7690	.	N	0

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH
361	FAL	CB04	12	24412	24412	1989	9	1	947	28	51.00	91	15.02	30.3	26
362	FAL	CB04	13	24413	24413	1989	9	1	937	28	49.10	91	14.93	30.3	33
363	FAL	CB04	14	24414	24414	1989	9	1	923	28	47.00	91	14.95	30.3	38
364	FAL	CB04	15	24415	24415	1989	9	1	911	28	45.05	91	15.05	30.3	42
365	FAL	CB04	16	24416	24416	1989	9	1	900	28	43.00	91	15.10	30.3	51
366	FAL	CB04	17	24417	24417	1989	9	1	845	28	41.11	91	15.00	30.3	58
367	FAL	CB04	1	24501	24501	1989	9	2	1204	29	13.12	91	15.03	32.0	4
368	FAL	CB04	2	24502	24502	1989	9	2	1156	29	11.00	91	15.00	31.6	5
369	FAL	CB04	3	24503	24503	1989	9	2	1145	29	9.04	91	15.03	31.5	5
370	FAL	CB04	4	24504	24504	1989	9	2	1134	29	7.01	91	15.02	31.5	5
371	FAL	CB04	5	24505	24505	1989	9	2	1120	29	5.00	91	15.00	31.2	7
372	FAL	CB04	6	24506	24506	1989	9	2	1110	29	3.02	91	15.00	31.0	10
373	FAL	CB04	7	24507	24507	1989	9	2	1057	29	1.01	91	15.05	31.5	13
374	FAL	CB04	8	24508	24508	1989	9	2	1047	28	59.02	91	15.01	31.5	13
375	FAL	CB04	9	24509	24509	1989	9	2	1036	28	57.01	91	15.00	31.0	17
376	FAL	CB04	10	24510	24510	1989	9	2	1023	28	55.00	91	15.02	30.5	20
377	FAL	CB04	11	24511	24511	1989	9	2	1013	28	53.11	91	14.98	30.5	22
378	FAL	CB04	12	24512	24512	1989	9	2	1001	28	51.01	91	15.00	30.5	25

OBS	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL		SURFACE SALINITY	COMMENTS
361	1	26	0.7690	.	N	0
362	1	33	0.4486	.	N	0
363	1	39	0.3204	.	N	0
364	1	48	0.3204	.	N	0
365	1	54	0.5447	.	N	0
366	1	62	0.3204	.	N	0
367	4	7	4.2613	.	N	0
368	4	10	4.4856	.	N	0
369	4	13	3.3642	.	N	0
370	4	14	5.9274	.	N	0
371	4	15	4.2613	.	N	0
372	3	14	3.4603	.	N	0
373	1	13	1.1214	.	N	0
374	1	13	0.8971	.	N	0
375	1	17	0.6728	.	N	0

376	1	20	0.7690	.	N	0
377	1	22	0.4486	.	N	0
378	1	26	0.2243	.	N	0

3.2.2 CHARTER BOATS, continued:

OBS ID	CRUISE CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH
379	FAL	CB04	13	24513	24513	1989	9	2	951	28	49.00	91	14.98	30.6	33
380	FAL	CB04	14	24514	24514	1989	9	2	940	28	47.03	91	15.01	30.8	40
381	FAL	CB04	15	24515	24515	1989	9	2	928	28	45.00	91	14.95	30.8	46
382	FAL	CB04	16	24516	24516	1989	9	2	918	28	43.03	91	15.05	30.8	48
383	FAL	CB04	17	24517	24517	1989	9	2	904	28	41.00	91	15.02	30.8	50
384	FAL	CB03	1	24601	24601	1989	9	3	1120	29	13.01	91	15.00	31.5	6
385	FAL	CB03	2	24602	24602	1989	9	3	1116	29	11.10	91	14.99	31.4	6
386	FAL	CB03	3	24603	24603	1989	9	3	1110	29	9.07	91	15.01	31.5	6
387	FAL	CB03	4	24604	24604	1989	9	3	1102	29	6.96	91	15.00	31.5	10
388	FAL	CB03	5	24605	24605	1989	9	3	1054	29	5.98	91	14.99	31.7	10
389	FAL	CB03	6	24606	24606	1989	9	3	1045	29	3.09	91	14.99	31.6	10
390	FAL	CB03	7	24607	24607	1989	9	3	1035	29	1.07	91	14.98	31.5	10
391	FAL	CB03	8	24608	24608	1989	9	3	1019	28	59.03	91	15.00	31.2	8
392	FAL	CB03	9	24609	24609	1989	9	3	1012	28	56.96	91	14.99	31.2	10
393	FAL	CB03	10	24610	24610	1989	9	3	1003	28	55.00	91	14.97	31.0	19
394	FAL	CB03	11	24611	24611	1989	9	3	950	28	53.07	91	14.99	30.8	24
395	FAL	CB03	12	24612	24612	1989	9	3	940	28	51.07	91	15.01	30.5	26
396	FAL	CB03	13	24613	24613	1989	9	3	928	28	49.00	91	15.01	30.7	28

OBS	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
379	1	34	0.4486	.	N 0
380	1	40	0.2243	.	N 0
381	1	46	0.3204	.	N 0
382	1	53	0.7690	.	N 0
383	1	62	0.2243	.	N 0
384	4	8	3.3642	.	N 0
385	4	11	5.1584	.	N 0
386	3	13	4.0370	.	N 0
387	3	14	3.5885	.	N 0
388	3	14	2.5632	.	N 0
389	3	15	2.2428	.	N 0
390	3	14	1.7942	.	N 0
391	3	14	2.0185	.	N 0
392	3	20	1.3457	.	N 0
393	3	20	1.2816	.	N 0

394	1	24	1.2816	.	N	0
395	1	28	0.3204	.	N	0
396	1	36	0.3204	.	N	0

3.2.2 CHARTER BOATS, continued:

OBS ID	CRUISE CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH
397	FAL	CB03	14	24614	24614	1989	9	3	913	28	47.08	91	15.01	30.8	29
398	FAL	CB03	15	24615	24615	1989	9	3	902	28	44.96	91	15.01	31.0	36
399	FAL	CB03	16	24616	24616	1989	9	3	848	28	42.94	91	14.97	30.6	36
400	FAL	CB03	17	24617	24617	1989	9	3	836	28	41.00	91	14.99	30.7	38
401	FAL	CB03	1	24701	24701	1989	9	4	.	29	13.00	91	15.00	31.0	5
402	FAL	CB03	2	24702	24702	1989	9	4	.	29	11.08	91	14.98	31.0	5
403	FAL	CB03	3	24703	24703	1989	9	4	907	29	9.05	91	14.99	30.8	5
404	FAL	CB03	4	24704	24704	1989	9	4	915	29	7.44	91	15.09	30.8	5
405	FAL	CB03	5	24705	24705	1989	9	4	926	29	4.89	91	15.00	31.0	6
406	FAL	CB03	6	24706	24706	1989	9	4	935	29	3.87	91	15.00	31.0	6
407	FAL	CB03	1	25001	25001	1989	9	7	1053	29	13.03	91	15.00	30.3	2
408	FAL	CB03	2	25002	25002	1989	9	7	1042	29	11.00	91	15.01	30.2	5
409	FAL	CB03	3	25003	25003	1989	9	7	1036	29	9.04	91	14.99	30.3	8
410	FAL	CB03	4	25004	25004	1989	9	7	1030	29	7.06	91	15.01	30.4	8
411	FAL	CB03	5	25005	25005	1989	9	7	1023	29	5.03	91	14.99	30.4	12
412	FAL	CB03	6	25006	25006	1989	9	7	1015	29	3.18	91	14.96	30.5	12
413	FAL	CB03	7	25007	25007	1989	9	7	1008	29	1.00	91	15.00	30.5	12
414	FAL	CB03	8	25008	25008	1989	9	7	959	28	59.08	91	14.97	30.4	12

OBS	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
397	1	40	0.3204	. N	0
398	1	47	0.2243	. N	0
399	1	55	0.3204	. N	0
400	1	60	0.3204	. N	0
401	5	8	6.5041	. N	0WINDS N/E 15 MPH LORAN READING WAS OFF 2MI TO N AND OFF TO WEST 24701-24706
402	5	11	6.2798	. N	0LORAN READING WAS OFF 2 MI TO N AND OFF TO WEST
403	5	11	4.0370	. N	0LORAN READING WAS OFF 2 MI TO N AND OFF TO WEST
404	4	12	7.4012	. N	09 POGIE BOATS MAKING SET ON THEIR LOCALENET SET ON TOP OF DESIGNATED WAY POI
405	3	14	3.3642	. N	0LORAN READING WAS OFF 2 MI TO N AND TO WEST
406	3	16	3.8128	. N	0LORAN READING OFF 2 MILES TO N & OFF TO WEST
407	5	8	5.1584	. N	0
408	5	11	7.4012	. N	0
409	4	14	4.7099	. N	09 POGIE BOATS SITED ALONG AN E/W TIME HEAD
410	4	15	3.5885	. N	0
411	4	15	2.9156	. N	0

412	3	14	2.0185	.	N	0
413	3	14	2.0185	.	N	0
414	3	14	2.0185	.	N	0

3.2.2 CHARTER BOATS, continued:

OBS ID	CRUISE CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH
415	FAL	CB03	9	25009	25009	1989	9	7	948	28	57.11	91	14.99	30.3	16
416	FAL	CB03	10	25010	25010	1989	9	7	940	28	55.12	91	15.00	30.3	18
417	FAL	CB03	11	25011	25011	1989	9	7	933	28	53.00	91	14.98	30.4	23
418	FAL	CB03	12	25012	25012	1989	9	7	923	28	51.08	91	15.00	30.5	26
419	FAL	CB03	13	25013	25013	1989	9	7	916	28	49.13	91	14.89	30.5	35
420	FAL	CB03	14	25014	25014	1989	9	7	907	28	47.10	91	15.01	30.5	41
421	FAL	CB03	15	25015	25015	1989	9	7	858	28	45.09	91	15.01	30.5	48
422	FAL	CB03	16	25016	25016	1989	9	7	850	28	43.00	91	14.99	30.3	56
423	FAL	CB03	17	25017	25017	1989	9	7	842	28	41.04	91	15.00	30.3	60
424	FAL	CB04	1	25101	25101	1989	9	8	1132	29	12.88	91	15.08	30.4	2
425	FAL	CB04	2	25102	25102	1989	9	8	1121	29	10.97	91	14.94	30.3	4
426	FAL	CB04	3	25103	25103	1989	9	8	1110	29	8.98	91	15.00	30.4	6
427	FAL	CB04	4	25104	25104	1989	9	8	1101	29	7.05	91	15.06	30.3	8
428	FAL	CB04	5	25105	25105	1989	9	8	1050	29	5.05	91	15.00	30.4	11
429	FAL	CB04	6	25106	25106	1989	9	8	1040	29	3.08	91	15.07	30.5	12
430	FAL	CB04	7	25107	25107	1989	9	8	1030	29	1.09	91	14.95	30.5	13
431	FAL	CB04	8	25108	25108	1989	9	8	1020	28	59.08	91	14.98	30.7	13
432	FAL	CB04	9	25109	25109	1989	9	8	1012	28	56.98	91	15.07	30.5	13

OBS	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
415	3	18	1.3457	.	N 0
416	3	21	1.1214	.	N 0LABEL CAME OFF
417	1	23	0.6728	.	N 0
418	1	28	0.6728	.	N 0
419	1	36	0.3204	.	N 0
420	1	41	0.4486	.	N 0LABEL CAME OFF
421	1	48	0.4486	.	N 0
422	1	56	.	.	N 0
423	1	61	0.2243	.	N 0LABEL CAME OFF
424	7	8	8.5226	.	N 0
425	5	9	4.0370	.	N 0
426	5	10	3.8448	.	N 0
427	4	12	3.5885	.	N 0
428	4	13	3.5885	.	N 03 MORE POGY BOATS E WORKING SOUTH
429	4	15	2.2428	.	N 0

430	3	15	1.7942	.	N	0
431	3	14	1.6020	.	N	03 POGIE BOATS HEADING EAST
432	3	13	1.5700	.	N	0

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCHI DEPTH
433	FAL	CB04	10	25110	25110	1989	9	8	1004	28	55.03	91	15.03	30.4	13
434	FAL	CB04	11	25111	25111	1989	9	8	957	28	53.09	91	15.00	30.4	19
435	FAL	CB04	12	25112	25112	1989	9	8	950	28	51.00	91	14.99	30.5	21
436	FAL	CB04	13	25113	25113	1989	9	8	942	28	49.05	91	15.00	30.5	24
437	FAL	CB04	14	25114	25114	1989	9	8	931	28	47.07	91	14.92	30.5	30
438	FAL	CB04	15	25115	25115	1989	9	8	924	28	44.96	91	15.02	30.4	36
439	FAL	CB04	16	25116	25116	1989	9	8	916	28	43.00	91	14.96	30.4	42
440	FAL	CB04	17	25117	25117	1989	9	8	907	28	41.05	91	15.04	30.3	42
441	FAL	CB08	1	1	1	1989	8	28	745	29	2.93	90	40.03	31.0	6
442	FAL	CB08	2	2	2	1989	8	28	750	29	0.93	90	39.93	31.0	5
443	FAL	CB08	3	3	3	1989	8	28	800	28	58.96	90	40.01	30.6	13
444	FAL	CB08	4	4	4	1989	8	28	807	28	56.89	90	39.97	30.5	22
445	FAL	CB08	5	5	5	1989	8	28	814	28	55.00	90	39.98	30.5	21
446	FAL	CB08	6	6	6	1989	8	28	820	28	52.83	90	39.98	30.5	28
447	FAL	CB08	7	7	7	1989	8	28	825	28	50.99	90	40.01	30.6	37
448	FAL	CB08	8	8	8	1989	8	28	830	28	48.97	90	40.05	30.4	40
449	FAL	CB08	9	9	9	1989	8	28	836	28	46.91	90	39.99	30.0	42
450	FAL	CB08	16	16	16	1989	8	29	726	29	2.96	90	39.99	30.4	6

OBS	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
433	3	15	0.6728	. N	0
434	1	19	0.6728	. N	0
435	1	22	0.4486	. N	0
436	1	25	1.1214	. N	0
437	1	33	0.8971	. N	0
438	1	38	0.6408	. N	0
439	1	44	0.6728	. N	0
440	1	50	0.8971	. N	0
441	15	12	3.3642	23.407 N	0CLOUDY SKIES
442	8	23	2.6914	23.400 N	0CLOUDY SKIES
443	10	30	1.3457	24.133 N	0CLOUDY SKIES
444	4	35	0.4486	24.413 N	0SEAWEED AND LIVE CURRENT-RIP GRASS
445	4	24	0.6728	24.528 N	0SEAWEED/LIVE CURRENT-RIP GRASS
446	4	47	0.4486	24.424 N	0
447	4	56	0.6408	24.737 N	0

448	4	60	0.6408	25.536	N	0SQUALLS
449	3	61	0.6408	26.671	N	0AFTER SAMPLE CAME BIG SQUALLS;TIED 2 RIGST 72;"LIGHTING";THEN BIG BAD SQUALL
450	19	11	6.2798	23.614	N	0CALM NICE DAY SCHOOLS SMALL SPANISH MACKEREL

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE
451	FAL	CB08	17	17	17	1989	8	29	735	29	0.96	90	39.98	30.3
452	FAL	CB08	18	18	18	1989	8	29	742	28	58.96	90	40.01	30.3
453	FAL	CB08	19	19	19	1989	8	29	750	28	56.95	90	40.00	30.0
454	FAL	CB08	20	20	20	1989	8	29	755	28	54.99	90	39.99	30.0
455	FAL	CB08	21	21	21	1989	8	29	802	28	52.93	90	40.03	30.0
456	FAL	CB08	22	22	22	1989	8	29	810	28	50.99	90	40.02	29.9
457	FAL	CB08	23	23	23	1989	8	29	816	28	49.00	90	40.01	29.5
458	FAL	CB08	24	24	24	1989	8	29	827	28	47.01	90	40.03	29.6
459	FAL	CB08	25	25	25	1989	8	29	830	28	44.98	90	40.01	29.7
460	FAL	CB08	26	26	26	1989	8	29	836	28	42.98	90	40.01	29.6
461	FAL	CB08	27	27	27	1989	8	29	845	28	40.96	90	39.96	29.7
462	FAL	CB08	28	28	28	1989	8	29	854	28	38.99	90	40.01	29.7
463	FAL	CB08	29	29	29	1989	8	29	900	28	36.96	90	39.98	29.5
464	FAL	CB08	30	30	30	1989	8	29	907	28	34.98	90	39.97	29.5
465	FAL	CB08	31	31	31	1989	8	30	737	29	2.93	90	39.98	30.5
466	FAL	CB08	32	32	32	1989	8	30	745	29	0.96	90	39.99	30.5
467	FAL	CB08	33	33	33	1989	8	30	751	28	59.99	90	40.00	30.2
468	FAL	CB08	34	34	34	1989	8	30	757	28	57.01	90	39.99	30.3

OBS	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL		SURFACE SALINITY	COMMENTS
451	6	19	23	4.4856	23.716	N	0
452	14	12	30	1.3457	24.275	N	0
453	22	6	34	0.6408	24.629	N	0
454	24	8	24	0.6408	24.603	N	0
455	28	5	47	0.8971	24.621	N	0PATCHES OF SEEDWEED
456	27	5	56	0.4486	25.104	N	0
457	38	4	60	0.7690	25.542	N	0
458	48	4	61	.	28.192	N	0SEAWEED AND CURRENT LINE
459	43	5	57	.	27.793	N	0
460	50	5	55	0.3204	27.971	N	0
461	50	5	54	0.3204	29.671	N	0LARGE PATCHES SEAWEED
462	45	4	59	.	29.812	N	030TO40FT COMMERICAL FISHING VESSEL
463	45	4	59	.	30.407	N	0
464	46	3	66	0.8651	30.740	N	0
465	5	16	12	4.2613	23.642	N	0NICE DAY PATCHES OF SEAWEED

466	12	12	23	1.1214	24.232	N	0
467	11	15	30	2.4671	24.333	N	0HARD TAILS
468	19	12	39	0.8971	24.643	N	0SCHOOLS BAIT FISH

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
469	FAL	CB08	35	35	35	1989	8	30	803	28	55.05	90
470	FAL	CB08	36	36	36	1989	8	30	810	28	52.98	90
471	FAL	CB08	37	37	37	1989	8	30	816	28	50.99	90
472	FAL	CB08	38	38	38	1989	8	30	823	28	48.98	90
473	FAL	CB08	39	39	39	1989	8	30	830	28	46.99	90
474	FAL	CB08	40	40	40	1989	8	30	836	28	44.98	90
475	FAL	CB08	41	41	41	1989	8	30	844	28	43.01	90
476	FAL	CB08	42	42	42	1989	8	30	850	28	41.01	90
477	FAL	CB08	43	43	43	1989	8	30	858	28	38.99	90
478	FAL	CB08	44	44	44	1989	8	30	906	28	37.00	90
479	FAL	CB08	45	45	45	1989	8	30	912	28	35.06	90
480	FAL	CB08	46	46	46	1989	8	31	730	29	3.02	90
481	FAL	CB08	47	47	47	1989	8	31	740	29	0.99	90
482	FAL	CB08	48	48	48	1989	8	31	750	28	59.05	90
483	FAL	CB08	49	49	49	1989	8	31	800	28	57.03	90
484	FAL	CB08	50	50	50	1989	8	31	809	28	54.99	90
485	FAL	CB08	51	51	51	1989	8	31	817	28	52.99	90
486	FAL	CB08	52	52	52	1989	8	31	825	28	50.96	90

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
469	40.01	30.2	26	4	24	0.8971	24.536	N 0
470	40.05	30.2	22	7	45	1.2816	24.736	N 0LIGHT RAIN
471	40.02	30.0	24	7	56	0.4486	24.605	N 0PARTLY CLOUDY
472	39.98	29.9	23	4	61	0.6728	24.374	N 0
473	40.04	29.7	32	4	61	.	25.552	N 0
474	40.01	29.6	42	4	57	.	28.286	N 0PATCHES OF GRASS
475	39.98	29.5	49	4	56	1.9224	29.099	N 0
476	39.99	29.6	51	4	54	0.3204	28.818	N 0
477	40.03	29.7	42	4	59	.	28.738	N 0PATCHES OF GRASS
478	40.04	29.6	46	3	61	.	29.360	N 0
479	40.00	29.5	51	3	65	.	32.209	N 01 SHRIMP VESSELS
480	40.00	30.1	4	12	11	4.9342	23.977	N 0
481	40.00	30.5	14	10	24	1.3457	24.818	N 0
482	40.01	30.3	22	10	31	0.6728	24.459	N 0
483	40.00	30.5	22	10	35	0.8971	24.576	N 0
484	40.01	30.5	23	8	25	1.2175	24.575	N 0

485	40.00	30.5	27	8	47	0.6728	24.371	N	0BAIT FISH
486	40.02	30.5	30	5	56	0.4486	24.613	N	0

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
487	FAL	CB08	53	53	53	1989	8	31	834	28	49.00	90
488	FAL	CB08	54	54	54	1989	8	31	844	28	47.01	90
489	FAL	CB08	55	55	55	1989	8	31	852	28	45.00	90
490	FAL	CB08	56	56	56	1989	8	31	900	28	43.00	90
491	FAL	CB08	57	57	57	1989	8	31	908	28	40.95	90
492	FAL	CB08	58	58	58	1989	8	31	918	28	38.96	90
493	FAL	CB08	59	59	59	1989	8	31	925	28	36.97	90
494	FAL	CB08	60	60	60	1989	8	31	935	28	34.96	90
495	FAL	CB01	61	61	61	1989	9	1	720	29	3.01	90
496	FAL	CB01	62	62	62	1989	9	1	727	29	1.00	90
497	FAL	CB01	63	63	63	1989	9	1	735	28	59.02	90
498	FAL	CB01	64	64	64	1989	9	1	742	28	56.99	90
499	FAL	CB01	65	65	65	1989	9	1	749	28	54.98	90
500	FAL	CB01	66	66	66	1989	9	1	756	28	53.01	90
501	FAL	CB01	67	67	67	1989	9	1	802	28	51.01	90
502	FAL	CB01	68	68	68	1989	9	1	810	28	48.97	90
503	FAL	CB01	69	69	69	1989	9	1	816	28	46.99	90
504	FAL	CB01	70	70	70	1989	9	1	823	28	45.01	90

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL		SURFACE SALINITY	COMMENTS
487	40.01	30.4	32	5	61	0.6728	24.683	N	0BAIT FISH
488	40.03	30.4	33	5	61	0.3204	24.725	N	0
489	40.04	30.0	50	5	57	0.7690	28.291	N	0
490	40.00	30.0	55	5	56	0.5447	28.306	N	0
491	40.01	30.0	52	4	53	0.5447	27.672	N	0
492	40.02	29.0	49	4	58	0.6408	27.769	N	0
493	40.04	30.0	57	4	60	.	28.327	N	0
494	40.04	30.0	59	4	66	.	29.838	N	0
495	40.05	31.2	6	14	12	2.9156	.	N	0
496	40.00	31.1	8	6	24	2.2428	.	N	0
497	40.02	30.5	15	7	30	1.1214	.	N	0
498	39.99	30.6	23	7	36	0.6408	.	N	0
499	39.99	30.6	23	7	24	0.6408	.	N	0
500	39.98	30.5	24	7	47	0.3204	.	N	0
501	39.99	30.6	24	8	56	0.6408	.	N	0
502	40.01	30.6	21	5	60	0.3204	.	N	0

503	40.02	30.5	29	8	61	0.3204	.	N	0
504	40.03	30.3	44	8	56	.	.	N	0

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
505	FAL	CB01	71	71	71	1989	9	1	830	28	42.98	90
506	FAL	CB01	72	72	72	1989	9	1	836	28	40.99	90
507	FAL	CB01	73	73	73	1989	9	1	844	28	38.94	90
508	FAL	CB01	74	74	74	1989	9	1	850	28	36.98	90
509	FAL	CB01	75	75	75	1989	9	1	900	28	34.96	90
510	FAL	CB08	76	76	76	1989	9	2	645	29	2.99	90
511	FAL	CB08	77	77	77	1989	9	2	657	29	0.98	90
512	FAL	CB08	78	78	78	1989	9	2	704	28	58.99	90
513	FAL	CB08	79	79	79	1989	9	2	710	28	56.94	90
514	FAL	CB08	80	80	80	1989	9	2	716	28	54.94	90
515	FAL	CB08	81	81	81	1989	9	2	726	28	53.02	90
516	FAL	CB08	82	82	82	1989	9	2	734	28	50.96	90
517	FAL	CB08	83	83	83	1989	9	2	740	28	48.97	90
518	FAL	CB08	84	84	84	1989	9	2	745	28	46.97	90
519	FAL	CB08	85	85	85	1989	9	2	756	28	44.95	90
520	FAL	CB08	86	86	86	1989	9	2	800	28	42.93	90
521	FAL	CB08	87	87	87	1989	9	2	805	28	41.01	90
522	FAL	CB08	88	88	88	1989	9	2	811	28	38.93	90

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL		SURFACE SALINITY	COMMENTS
505	40.00	30.1	5	56	0.3204	.	N	0	
506	40.01	30.2	5	54	0.3204	.	N	0	1 SHRIMP BOAT
507	40.03	30.3	4	58	0.3204	.	N	0	PATCHES SEAWEED
508	39.97	30.4	4	58	0.3204	.	N	0	
509	40.02	30.2	4	66	0.3204	.	N	0	
510	40.00	31.2	14	11	3.2040	24.214	N	0	
511	40.03	30.4	10	23	1.2816	24.646	N	0	
512	40.03	30.3	8	29	1.2816	24.652	N	0	
513	40.03	30.4	8	34	0.3204	24.942	N	0	
514	40.03	30.6	8	24	0.3204	24.942	N	0	
515	40.03	30.2	8	46	0.6408	24.803	N	0	
516	40.02	30.6	5	56	0.6408	24.785	N	0	
517	40.01	30.6	5	60	0.6408	24.701	N	0	
518	40.04	30.7	5	62	0.9612	24.780	N	0	
519	40.02	30.5	5	57	0.6408	24.893	N	0	
520	40.00	30.5	4	55	0.6408	25.035	N	0	

521	40.02	30.5	46	4	54	0.3204	24.548	N	0
522	40.03	30.5	50	4	58	0.6408	26.217	N	0

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
523	FAL	CB08	89	89	89	1989	9	2	818	28	36.97	90
524	FAL	CB08	90	90	90	1989	9	2	825	28	34.97	90
525	FAL	CB08	91	91	91	1989	9	3	825	29	2.99	90
526	FAL	CB08	92	92	92	1989	9	3	832	29	0.99	90
527	FAL	CB08	93	93	93	1989	9	3	842	28	59.05	90
528	FAL	CB08	94	94	94	1989	9	3	850	28	56.98	90
529	FAL	CB08	95	95	95	1989	9	3	857	28	54.96	90
530	FAL	CB08	96	96	96	1989	9	3	905	28	53.02	90
531	FAL	CB01	106	106	106	1989	9	4	731	29	2.96	90
532	FAL	CB01	107	107	107	1989	9	4	740	29	0.99	90
533	FAL	CB01	108	108	108	1989	9	4	748	28	58.99	90
534	FAL	CB01	109	109	109	1989	9	4	755	28	56.99	90
535	FAL	CB01	110	110	110	1989	9	4	804	28	54.97	90
536	FAL	CB01	111	111	111	1989	9	4	811	28	53.00	90
537	FAL	CB01	112	112	112	1989	9	4	820	28	50.99	90
538	FAL	CB01	113	113	113	1989	9	4	827	28	48.98	90
539	FAL	CB01	114	114	114	1989	9	4	836	28	47.00	90
540	FAL	CB01	115	115	115	1989	9	4	844	28	44.95	90

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
523	40.04	30.4	56	4	59	0.6408	28.657	N 0
524	40.01	30.4	57	4	66	0.9612	28.452	N 0
525	40.03	30.2	5	15	11	8.6508	25.770	N 0
526	40.02	30.5	15	7	23	1.6020	25.601	N 0
527	40.01	30.5	23	7	30	0.9612	25.071	N 0SEAWEED
528	40.00	30.7	28	7	34	0.6408	24.925	N 0
529	40.03	30.7	23	7	24	0.4486	24.904	N 0
530	40.02	30.7	28	8	44	0.4486	.	N 0
531	40.02	30.0	9	15	12	2.4671	.	N 0
532	40.01	30.2	19	7	24	0.6728	.	N 0
533	40.04	30.6	15	7	30	0.6728	.	N 0
534	40.01	30.6	20	7	35	0.4486	.	N 0
535	40.00	30.7	24	7	24	0.4486	.	N 0BAIT FISH
536	39.97	30.5	26	7	46	0.4486	.	N 0
537	39.99	30.3	39	7	56	0.7690	.	N 0
538	40.00	30.5	39	7	60	0.4486	.	N 0

539	40.01	30.6	39	6	61	0.6408	.	N	0
540	40.01	30.7	32	7	57	1.3136	.	N	0

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE
541	FAL	CB01	116	116	116	1989	9	4	851	28	42.98	90	40.00	30.8
542	FAL	CB01	117	117	117	1989	9	4	859	28	40.98	90	39.98	30.9
543	FAL	CB01	118	118	118	1989	9	4	906	28	39.02	90	39.99	30.9
544	FAL	CB01	119	119	119	1989	9	4	913	28	36.99	90	39.99	31.0
545	FAL	CB01	120	120	120	1989	9	4	920	28	35.01	90	39.99	31.0
546	FAL	CB08	121	121	121	1989	9	7	814	29	2.94	90	40.08	29.8
547	FAL	CB08	122	122	122	1989	9	7	823	29	0.99	90	40.01	30.0
548	FAL	CB08	123	123	123	1989	9	7	831	28	58.97	90	39.99	30.2
549	FAL	CB08	124	124	124	1989	9	7	840	28	57.01	90	39.97	30.1
550	FAL	CB08	125	125	125	1989	9	7	848	28	54.99	90	39.99	30.2
551	FAL	CB08	126	126	126	1989	9	7	857	28	52.96	90	40.04	30.2
552	FAL	CB08	127	127	127	1989	9	7	905	28	50.96	90	40.02	30.1
553	FAL	CB08	128	128	128	1989	9	7	916	28	48.98	90	40.00	30.1
554	FAL	CB08	129	129	129	1989	9	7	927	28	46.97	90	40.01	30.2
555	FAL	CB08	130	130	130	1989	9	7	935	28	44.99	90	39.98	30.1
556	FAL	CB08	131	131	131	1989	9	7	948	28	42.96	90	39.97	30.2
557	FAL	CB02	136	136	136	1989	9	8	749	29	3.08	90	40.01	30.0
558	FAL	CB02	137	137	137	1989	9	8	802	29	1.09	90	39.91	30.2

OBS	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
541	34	7	56	0.4486	.	N 0
542	38	6	53	0.3204	.	N 0
543	35	7	58	0.3204	.	N 0
544	33	6	58	0.6728	.	N 0
545	26	6	66	0.6728	.	N 0
546	4	12	12	3.1399	24.829	N 0
547	3	14	23	1.3457	24.499	N 0
548	5	12	29	1.1214	24.787	N 0
549	12	12	35	.	25.002	N 0
550	26	7	24	0.8971	25.381	N 0
551	31	8	45	0.4486	.	N 0SCHOOLS BAITFISH (HARTAILS)
552	24	8	56	0.4486	25.062	N 0
553	27	13	61	0.6408	25.181	N 0
554	30	6	61	0.6728	24.962	N 0
555	27	6	51	0.8971	25.256	N 0BAD SQUALLS

556	31	6	56	0.4486	25.260	N	0WATER SPOUTS AND WINDS
557	12	12	12	3.3642	.	N	0
558	5	12	24	2.4671	.	N	0

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID	PLATFORM CODE	OBS CODE	SALINITY NUMBER	CHLOROPHYLL SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE
559	FAL	CB02	138	138	138	1989	9	8	810	28	59.09	90	40.03	30.3	
560	FAL	CB02	139	139	139	1989	9	8	817	28	57.10	90	39.91	30.4	
561	FAL	CB02	140	140	140	1989	9	8	827	28	55.12	90	39.98	30.4	
562	FAL	CB02	141	141	141	1989	9	8	836	28	53.09	90	39.99	30.2	
563	FAL	CB02	142	142	142	1989	9	8	844	28	51.06	90	39.99	30.2	
564	FAL	CB02	143	143	143	1989	9	8	853	28	49.07	90	39.99	30.2	
565	FAL	CB02	144	144	144	1989	9	8	902	28	47.09	90	39.97	30.1	
566	FAL	CB02	145	145	145	1989	9	8	911	28	45.08	90	39.98	30.3	
567	FAL	CB02	146	146	146	1989	9	8	920	28	43.05	90	39.93	30.2	
568	FAL	CB02	147	147	147	1989	9	8	928	28	41.07	90	39.93	30.1	
569	FAL	CB02	148	148	148	1989	9	8	937	28	39.00	90	40.15	30.0	
570	FAL	CB02	149	149	149	1989	9	8	945	28	37.07	90	40.11	30.5	
571	FAL	CB02	150	150	150	1989	9	8	955	28	35.09	90	40.09	30.4	
572	FAL	CB09	1	1	1	1989	8	28	655	29	10.01	90	3.03	30.7	
573	FAL	CB09	2	2	2	1989	8	28	715	29	8.01	90	3.00	30.8	
574	FAL	CB09	3	3	3	1989	8	28	729	29	6.02	90	3.01	30.3	
575	FAL	CB09	4	4	4	1989	8	28	742	29	4.00	90	3.00	30.3	
576	FAL	CB09	5	5	5	1989	8	28	755	29	2.00	90	3.03	30.4	

OBS	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
559	5	12	31	1.5700	.	N 0
560	27	7	34	1.5700	.	N 0
561	24	7	24	1.1214	.	N 0
562	34	7	45	0.9612	.	N 0
563	37	7	56	1.2816	.	N 0
564	36	7	61	0.8971	.	N 0
565	39	6	61	1.1214	.	N 0
566	38	6	56	0.6728	.	N 0
567	43	6	55	1.1214	.	N 0
568	45	6	53	0.3204	.	N 0
569	47	6	58	0.6728	.	N 0
570	52	6	59	0.2243	.	N 0
571	55	6	66	0.3204	.	N 0
572	6	12	29	.	20.265	N 0NO FISH: DAY HAD CLOUD COVER AND RAINED ON AND OFF ALL DAY LONG
573	10	12	36	2.4671	22.114	N 0NO FISH

574	17	10	51	0.6728	22.365	N	0NO FISH
575	19	10	62	0.6728	21.900	N	0NO FISH
576	18	10	70	0.6728	21.777	N	0NO FISH

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
577	FAL	CB09	6	6	6	1989	8	28	809	29	0.00	90
578	FAL	CB09	7	7	7	1989	8	28	855	28	55.00	90
579	FAL	CB09	8	8	8	1989	8	28	928	28	50.01	90
580	FAL	CB09	9	9	9	1989	8	28	1001	28	45.03	90
581	FAL	CB09	10	10	10	1989	8	28	1025	28	40.00	90
582	FAL	CB09	11	11	11	1989	8	28	1047	28	35.00	90
583	FAL	CB09	12	12	12	1989	8	28	1112	28	30.01	90
584	FAL	CB09	13	13	13	1989	8	28	1137	28	25.00	90
585	FAL	CB09	14	14	14	1989	8	28	1210	28	20.01	90
586	FAL	CB09	15	15	15	1989	8	28	1247	28	15.02	90
587	FAL	CB09	16	16	16	1989	8	29	638	29	10.02	90
588	FAL	CB09	17	17	17	1989	8	29	655	29	8.00	90
589	FAL	CB09	18	18	18	1989	8	29	712	29	6.00	90
590	FAL	CB09	19	19	19	1989	8	29	725	29	4.00	90
591	FAL	CB09	20	20	20	1989	8	29	740	29	2.01	90
592	FAL	CB09	21	21	21	1989	8	29	814	29	0.00	90
593	FAL	CB09	22	22	22	1989	8	29	832	28	55.00	90
594	FAL	CB09	23	23	23	1989	8	29	850	28	50.02	90

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL		SURFACE SALINITY	COMMENTS
577	3.03	30.5	18	10	80	0.6728	21.575	N	0NO FISH
578	3.01	30.0	19	10	90	1.2816	21.435	N	0NO FISH
579	3.04	30.0	23	10	110	9.9612	24.906	N	0NO FISH
580	3.08	30.0	22	10	145	0.3204	25.896	N	0FISH
581	3.00	30.0	24	6	160	0.3204	26.490	N	0NO FISH
582	3.03	29.7	40	5	300	0.3204	27.960	N	0BAIT FISH
583	3.01	29.5	38	5	600	0.3204	30.971	N	0
584	3.00	29.2	45	4	600	0.3204	31.563	N	0SEE NO FISH WORKS
585	3.08	29.1	71	1	600	0.3204	32.271	N	0GRASS BEDS
586	3.02	29.5	-1	1	600	0.3204	36.396	N	0BLUE WATER
587	3.00	31.0	7	12	27	4.9342	21.855	N	0SEE NO FISH: DAY WAS SUNNY
588	3.03	30.3	28	5	28	0.6728	22.459	N	0SEE NO FISH
589	3.05	30.3	22	5	40	0.6408	21.554	N	0SEE NO FISH
590	3.05	30.0	15	10	38	0.9612	21.387	N	0SEE NO FISH
591	3.01	30.2	22	10	38	1.2816	22.421	N	0SEE NO FISH
592	3.00	30.1	18	7	65	1.6020	20.455	N	0SEE NO FISH

593	3.00	30.2	15	8	70	1.2816	20.352	N	0SEE NO FISH
594	3.02	30.2	17	10	78	1.7942	19.657	N	0BAIT FISH

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
595	FAL	CB09	24	24	24	1989	8	29	918	28	45.01
596	FAL	CB09	25	25	25	1989	8	29	947	28	40.00
597	FAL	CB09	26	26	26	1989	8	29	1017	28	35.01
598	FAL	CB09	27	27	27	1989	8	29	1049	28	30.03
599	FAL	CB09	28	28	28	1989	8	29	1114	28	25.01
600	FAL	CB09	29	29	29	1989	8	29	1136	28	20.00
601	FAL	CB09	30	30	30	1989	8	29	1200	28	15.00
602	FAL	CB09	31	31	31	1989	8	30	630	28	15.02
603	FAL	CB09	32	32	32	1989	8	30	700	28	20.01
604	FAL	CB09	33	33	33	1989	8	30	730	28	25.01
605	FAL	CB09	34	34	34	1989	8	30	757	28	30.00
606	FAL	CB09	35	35	35	1989	8	30	823	28	35.00
607	FAL	CB09	36	36	36	1989	8	30	848	28	40.03
608	FAL	CB09	37	37	37	1989	8	30	912	28	45.01
609	FAL	CB09	38	38	38	1989	8	30	938	28	50.00
610	FAL	CB09	39	39	39	1989	8	30	1002	28	55.03
611	FAL	CB09	40	40	40	1989	8	30	1020	29	0.00
612	FAL	CB09	41	41	41	1989	8	30	1037	29	2.04

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
595	90	3.01	29.7	10	15	90	5.3827	18.985	N 0SEE NO FISH
596	90	3.00	30.0	12	14	150	4.0370	18.888	N 0BAITFISH
597	90	3.03	30.0	33	5	300	1.2816	27.172	N 0BAIT FISH
598	90	3.05	29.9	34	5	600	0.6408	25.796	N 0SEE NO FISH
599	90	3.02	30.0	40	5	600	0.3204	29.071	N 0SEE NO FISH
600	90	3.01	29.8	78	1	600	0.3204	32.827	N 0SEE NO FISH
601	90	3.01	30.3	-1	1	600	0.4486	.	N 0SEE NO FISH
602	90	3.01	29.9	-1	1	600	.	32.098	N 0
603	90	3.01	29.6	45	5	600	0.2243	30.261	N 0
604	90	3.00	30.0	37	4	600	0.4486	26.802	N 0
605	90	3.03	29.5	40	5	600	.	31.767	N 0BAITFISH
606	90	3.01	30.6	35	5	300	0.6408	26.743	N 0BAITFISH
607	90	3.00	30.4	12	16	145	3.1399	.	N 0
608	90	3.02	30.5	28	5	95	0.8971	22.711	N 0
609	90	3.00	30.6	24	4	80	0.9612	22.044	N 0
610	90	3.00	30.5	22	8	76	0.6728	22.311	N 0

611	90	3.00	30.7	18	8	70	0.8971	19.514	N	0
612	90	3.01	30.7	17	8	40	1.1214	20.125	N	0

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
613	FAL	CB09	42	42	42	1989	8	30	1045	29	4.02
614	FAL	CB09	43	43	43	1989	8	30	1054	29	6.03
615	FAL	CB09	44	44	44	1989	8	30	1107	29	8.02
616	FAL	CB09	45	45	45	1989	8	30	1117	29	10.01
617	FAL	CB09	46	46	46	1989	8	31	645	29	10.04
618	FAL	CB09	47	47	47	1989	8	31	700	29	8.02
619	FAL	CB09	48	48	48	1989	8	31	715	29	6.03
620	FAL	CB09	49	49	49	1989	8	31	730	29	4.02
621	FAL	CB09	50	50	50	1989	8	31	745	29	2.04
622	FAL	CB09	51	51	51	1989	8	31	802	29	0.00
623	FAL	CB09	52	52	52	1989	8	31	830	28	55.01
624	FAL	CB09	53	53	53	1989	8	31	856	28	50.00
625	FAL	CB09	54	54	54	1989	8	31	925	28	45.00
626	FAL	CB09	55	55	55	1989	8	31	948	28	40.01
627	FAL	CB09	56	56	56	1989	8	31	1013	28	35.04
628	FAL	CB09	57	57	57	1989	8	31	1038	28	30.01
629	FAL	CB09	58	58	58	1989	8	31	1100	28	25.02
630	FAL	CB09	59	59	59	1989	8	31	1125	28	20.01

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
613	90	3.03	30.6	19	8	30	0.4486	20.804	N 0
614	90	3.04	30.3	15	10	38	0.9612	21.051	N 0
615	90	3.04	30.2	13	10	30	0.6408	21.209	N 0
616	90	3.03	30.1	10	12	27	0.6408	22.100	N 0
617	90	3.00	31.5	9	12	26	1.6020	20.538	N 0
618	90	3.01	30.7	19	12	30	0.3204	22.604	N 0
619	90	3.01	30.3	20	12	38	0.6408	23.418	N 0BAITFISH
620	90	3.02	30.3	20	12	40	0.6408	.	N 0BAITFISH
621	90	3.03	30.1	21	12	42	0.4486	.	N 07
622	90	3.03	30.5	22	12	51	0.6408	.	N 0
623	90	3.04	30.6	26	4	70	0.3204	.	N 0BAITFISH
624	90	3.00	30.5	9	15	75	1.9224	.	N 0
625	90	3.00	30.6	19	12	90	0.4486	.	N 0RAIN
626	90	3.00	31.0	29	4	165	1.2816	.	N 0BAITFISH
627	90	3.08	30.7	31	3	300	0.3204	.	N 0
628	90	3.06	30.4	53	3	600	.	.	N 0

629	90	3.00	30.5	34	4	600	0.3204	.	N	0
630	90	3.02	31.3	40	3	600	0.3204	.	N	0

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
631	FAL	CB09	60	60	60	1989	8	31	1150	28	15.00
632	FAL	CB09	61	61	61	1989	9	1	644	29	10.01
633	FAL	CB09	62	62	62	1989	9	1	650	29	8.01
634	FAL	CB09	63	63	63	1989	9	1	701	29	6.01
635	FAL	CB09	64	64	64	1989	9	1	716	29	4.00
636	FAL	CB09	65	65	65	1989	9	1	726	29	2.00
637	FAL	CB09	66	66	66	1989	9	1	743	29	0.00
638	FAL	CB09	67	67	67	1989	9	1	822	28	55.00
639	FAL	CB09	68	68	68	1989	9	1	839	28	50.00
640	FAL	CB09	69	69	69	1989	9	1	903	28	45.00
641	FAL	CB09	70	70	70	1989	9	1	935	28	40.01
642	FAL	CB09	71	71	71	1989	9	1	955	28	35.02
643	FAL	CB09	72	72	72	1989	9	1	1020	28	30.01
644	FAL	CB09	73	73	73	1989	9	1	1045	28	25.02
645	FAL	CB09	74	74	74	1989	9	1	1110	28	20.00
646	FAL	CB09	75	75	75	1989	9	1	1138	28	15.00
647	FAL	CB09	76	76	76	1989	9	2	635	28	15.01
648	FAL	CB09	77	77	77	1989	9	2	705	28	20.03

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
631	90	3.04	31.5	100	1	600	0.3204	.	N 0
632	90	3.07	31.6	9	15	23	1.2816	21.079	N 0
633	90	3.00	30.7	21	12	27	.	22.496	N 0
634	90	3.02	30.4	42	5	33	.	23.792	N 0BAITFISH
635	90	3.00	30.4	35	5	40	0.3204	23.369	N 0
636	90	3.01	30.6	28	8	38	0.6408	22.523	N 0
637	90	3.01	31.0	21	12	49	0.9612	22.099	N 0
638	90	3.05	30.8	19	12	79	0.9612	20.725	N 0BAITFISH
639	90	3.00	30.9	18	10	80	2.2428	21.640	N 0
640	90	3.01	31.0	46	5	79	0.6408	26.595	N 0BAITFISH
641	90	3.01	31.0	70	4	180	0.3204	28.765	N 0
642	90	3.03	30.8	100	1	300	0.9612	31.853	N 0
643	90	3.00	30.9	-1	3	600	0.6408	28.551	N 0
644	90	3.02	30.7	-1	3	600	0.6408	28.528	N 0
645	90	3.03	30.8	75	3	600	0.9612	25.490	N 0
646	90	3.05	31.6	70	3	600	0.6728	28.711	N 0

647	90	3.05	30.5	75	4	600	0.6408	28.706	N	0
648	90	3.04	30.4	70	3	600	0.6408	25.534	N	0

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID	PLATFORM CODE	OBS CODE	SALINITY SAMPLE NUMBER	CHLOROPHYLL SAMPLE NO.	TIME SAMPLE NO.	YEAR	MONTH	DAY	OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE
649	FAL	CB09	78	78	78	1989	9	2	740	28	25.02	90	3.00		30.6
650	FAL	CB09	79	79	79	1989	9	2	806	28	30.03	90	3.01		30.8
651	FAL	CB09	80	80	80	1989	9	2	830	28	35.02	90	3.04		30.6
652	FAL	CB09	81	81	81	1989	9	2	852	28	40.00	90	3.03		30.4
653	FAL	CB09	82	82	82	1989	9	2	916	28	45.04	90	3.02		30.4
654	FAL	CB09	83	83	83	1989	9	2	937	28	50.00	90	3.02		31.1
655	FAL	CB09	84	84	84	1989	9	2	1005	28	55.01	90	3.05		31.0
656	FAL	CB09	85	85	85	1989	9	2	1035	29	0.00	90	3.00		31.0
657	FAL	CB09	86	86	86	1989	9	2	1050	29	2.00	90	3.01		31.2
658	FAL	CB09	87	87	87	1989	9	2	1101	29	4.00	90	3.00		31.2
659	FAL	CB09	88	88	88	1989	9	2	1115	29	6.01	90	3.02		31.2
660	FAL	CB09	89	89	89	1989	9	2	1128	29	8.00	90	3.00		31.7
661	FAL	CB09	90	90	90	1989	9	2	1140	29	10.03	90	3.04		31.8
662	FAL	CB09	91	91	91	1989	9	3	635	29	10.01	90	3.02		31.0
663	FAL	CB09	92	92	92	1989	9	3	648	29	8.01	90	3.04		30.2
664	FAL	CB09	93	93	93	1989	9	3	700	29	6.02	90	3.03		30.3
665	FAL	CB09	94	94	94	1989	9	3	714	29	4.01	90	3.02		30.5
666	FAL	CB09	95	95	95	1989	9	3	726	29	2.02	90	3.01		30.4

OBS	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY		COMMENTS
649	-1	3	600	0.3204	28.500	N	0
650	-1	3	600	0.3204	26.194	N	0
651	-1	1	300	0.9612	32.049	N	0
652	100	1	351	.	31.943	N	0
653	35	4	82	0.2243	23.917	N	0BAITFISH
654	27	5	75	1.2816	22.121	N	0BAITFISH
655	19	12	78	0.6408	21.744	N	0
656	18	12	55	0.3204	24.913	N	0BAITFISH
657	20	10	39	0.3204	24.955	N	0
658	22	10	38	0.3204	23.660	N	0
659	20	10	35	0.6408	23.696	N	0
660	21	12	28	0.6408	22.390	N	0
661	9	15	28	1.1214	23.125	N	0BAITFISH
662	9	12	26	1.3457	23.716	N	0
663	13	10	30	0.6408	24.990	N	0

664	14	10	38	0.4486	25.703	N	0
665	17	8	42	0.6408	25.778	N	0
666	19	8	40	0.6408	25.286	N	0

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID	PLATFORM CODE	OBS CODE	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE
667	FAL	CB09	96	96	96	1989	9	3	738	29	0.00	90	3.02	30.4
668	FAL	CB09	97	97	97	1989	9	3	800	28	55.01	90	3.01	30.5
669	FAL	CB09	98	98	98	1989	9	3	825	28	50.01	90	3.02	30.7
670	FAL	CB09	99	99	99	1989	9	3	855	28	45.00	90	3.03	29.9
671	FAL	CB09	100	100	100	1989	9	3	918	28	40.01	90	3.02	30.1
672	FAL	CB09	101	101	101	1989	9	3	940	28	35.02	90	3.04	30.6
673	FAL	CB09	102	102	102	1989	9	3	1002	28	30.03	90	3.05	29.5
674	FAL	CB09	103	103	103	1989	9	3	1032	28	25.04	90	3.00	29.7
675	FAL	CB09	104	104	104	1989	9	3	1109	28	20.00	90	3.00	29.6
676	FAL	CB09	105	105	105	1989	9	3	1140	28	15.00	90	30.04	29.9
677	FAL	CB09	106	106	106	1989	9	4	630	28	15.02	90	3.01	29.5
678	FAL	CB09	107	107	107	1989	9	4	655	28	20.03	90	3.00	29.7
679	FAL	CB09	108	108	108	1989	9	4	718	28	25.00	90	3.02	29.8
680	FAL	CB09	109	109	109	1989	9	4	740	28	30.00	90	3.04	29.9
681	FAL	CB09	110	110	110	1989	9	4	807	28	35.05	90	3.01	30.1
682	FAL	CB09	111	111	111	1989	9	4	836	28	40.01	90	3.02	30.0
683	FAL	CB09	112	112	112	1989	9	4	855	28	45.00	90	3.00	31.0
684	FAL	CB09	113	113	113	1989	9	4	919	28	50.05	90	3.08	30.6

OBS	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY		COMMENTS
667	18	8	70	0.3204	23.663	N	0
668	22	4	75	0.4486	22.670	N	0
669	26	4	82	0.3204	23.159	N	0
670	28	5	95	0.8971	22.724	N	0BAITFISH
671	22	5	145	0.8971	23.199	N	0
672	37	5	300	0.3204	27.976	N	0
673	45	4	600	.	30.239	N	0
674	100	3	600	.	32.777	N	0
675	100	3	600	.	32.845	N	0
676	100	1	600	0.2243	33.007	N	0
677	-1	1	600	1.2816	32.974	N	0BAIT
678	-1	1	600	0.3204	33.025	N	0
679	100	3	600	0.7690	32.438	N	0
680	70	3	600	0.7690	30.382	N	0
681	45	5	300	0.2243	30.919	N	0BIG GRASS BED
682	40	5	175	0.2243	27.260	N	0

683	45	4	83	0.4486	24.832	N	0BAIT
684	19	8	80	1.7942	23.298	N	0

3.2.2 CHARTER BOATS, continued:

OBS ID	CRUISE CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH
685	FAL	CB09	114	114	114	1989	9	4	940	28	55.03	90	3.03	30.6	18
686	FAL	CB09	115	115	115	1989	9	4	1005	29	0.04	90	3.00	30.9	16
687	FAL	CB09	116	116	116	1989	9	4	1020	29	2.00	90	3.08	31.1	20
688	FAL	CB09	117	117	117	1989	9	4	1035	29	4.00	90	3.00	31.0	22
689	FAL	CB09	118	118	118	1989	9	4	1048	29	6.00	90	3.01	31.0	27
690	FAL	CB09	119	119	119	1989	9	4	1102	29	8.04	90	3.05	30.9	17
691	FAL	CB09	120	120	120	1989	9	4	1116	29	10.01	90	3.02	31.0	3
692	FAL	CB10	1	1	1	1989	8	28	900	29	15.00	89	57.00	31.0	5
693	FAL	CB10	2	2	2	1989	8	28	920	29	13.00	89	56.01	31.4	9
694	FAL	CB10	3	3	3	1989	8	28	937	29	11.00	89	55.50	31.0	19
695	FAL	CB10	4	4	4	1989	8	28	948	29	9.00	89	55.00	30.2	17
696	FAL	CB10	5	5	5	1989	8	28	1000	29	7.00	89	54.50	31.0	20
697	FAL	CB10	6	6	6	1989	8	28	1035	29	2.00	89	52.50	29.9	17
698	FAL	CB10	7	7	7	1989	8	28	1115	28	57.00	89	51.50	30.1	22
699	FAL	CB10	8	8	8	1989	8	28	1147	28	52.00	89	49.50	31.1	23
700	FAL	CB10	9	9	9	1989	8	28	1222	28	47.00	89	48.00	31.1	20
701	FAL	CB10	10	10	10	1989	8	28	1250	28	42.00	89	46.50	31.1	10
702	FAL	CB10	11	11	11	1989	8	28	1318	28	37.00	89	45.00	30.3	19

OBS	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY		COMMENTS
685	10	75	0.8971	21.035	N	0
686	10	60	0.8971	21.595	N	0
687	10	40	0.6728	22.998	N	0
688	8	40	0.6728	23.164	N	0
689	5	37	0.6728	23.895	N	0
690	8	25	1.1214	24.850	N	0
691	14	23	8.5226	22.088	N	0BAITFISH
692	15	15	4.9342	20.571	N	0CLOUDY -> FEW FISH SITED AND SEA CALM AND IT WAS HAZEY ALL DAY
693	12	21	3.8128	20.003	N	0CLOUDY
694	10	38	0.4486	23.408	N	0CLOUDY
695	10	50	1.1214	22.358	N	0RAIN
696	10	60	1.2816	21.388	N	0CLOUDY
697	8	94	1.4418	21.361	N	0RAIN
698	5	125	1.2175	22.119	N	0CLOUDY
699	6	160	1.1214	21.998	N	0SUNNY

700	7	215	1.3457	21.387	N	0SUNNY
701	8	290	3.8128	19.120	N	0SUNNY
702	7	714	3.8128	22.233	N	0HAZEY

3.2.2 CHARTER BOATS, continued:

OBS ID	CRUISE CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	TIME OF OBS. YEAR	MONTH	DAY	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH
703	FAL	CB10	12	12	12	1989	8	28	1351	28	32	89	43.5	30.3	73
704	FAL	CB10	13	13	13	1989	8	28	1431	28	27	89	42.0	31.2	85
705	FAL	CB10	14	14	14	1989	8	28	1451	28	22	89	40.5	30.0	77
706	FAL	CB10	15	15	15	1989	8	28	1522	28	17	89	39.0	29.1	86
707	FAL	CB10	16	16	16	1989	8	29	635	28	17	89	39.0	31.0	70
708	FAL	CB10	17	17	17	1989	8	29	710	28	22	89	40.5	31.4	65
709	FAL	CB10	18	18	18	1989	8	29	745	28	27	89	42.0	30.9	69
710	FAL	CB10	19	19	19	1989	8	29	817	28	32	89	43.5	29.1	70
711	FAL	CB10	20	20	20	1989	8	29	848	28	37	89	45.0	30.1	23
712	FAL	CB10	21	21	21	1989	8	29	916	28	42	89	46.5	31.0	13
713	FAL	CB10	22	22	22	1989	8	29	952	28	47	89	48.0	30.4	16
714	FAL	CB10	23	23	23	1989	8	29	1024	28	52	89	49.5	31.2	23
715	FAL	CB10	24	24	24	1989	8	29	1058	28	57	89	51.5	31.2	25
716	FAL	CB10	25	25	25	1989	8	29	1130	29	2	89	52.5	32.0	30
717	FAL	CB10	26	26	26	1989	8	29	1204	29	7	89	54.5	31.3	19
718	FAL	CB10	27	27	27	1989	8	29	1234	29	9	89	55.5	31.1	15
719	FAL	CB10	28	28	28	1989	8	29	1250	29	11	89	55.0	31.3	19
720	FAL	CB10	29	29	29	1989	8	29	1310	29	13	89	55.0	32.7	10

OBS	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
703	1	906	0.6728	36.480 N	0HAZEY
704	1	1608	0.8971	36.496 N	0HAZEY
705	1	1770	.	36.437 N	0HAZEY
706	1	2286	2.5632	36.089 N	0HAZEY
707	1	2364	0.5447	36.341 N	0SUNNY : DAY WAS HAZEY SEA CALM & SPOTTEDSCHOOLS OF BANLTNA AND HARDTAILS
708	1	1770	0.4486	36.340 N	0SUNNY
709	1	1716	0.0961	36.360 N	0SUNNY
710	1	906	.	0.012 N	0HAZEY
711	3	714	1.2816	29.648 N	0SCHOOL FISH
712	10	282	3.8128	18.427 N	0SUNNY
713	5	213	1.5700	21.895 N	0SCHOOL FISH
714	4	160	0.6728	22.696 N	0SCHOOL FISH
715	4	122	0.6408	22.968 N	0SUNNY
716	4	92	0.4486	22.266 N	0SUNNY
717	4	60	0.6408	21.692 N	0SCHOOL POGIES

718	4	38	0.6728	21.437	N	0SUNNY
719	4	22	0.4486	21.172	N	0SUNNY
720	7	0	3.5885	20.093	N	0HAZEY

3.2.2 CHARTER BOATS, continued:

OBS ID	CRUISE CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH
721	FAL	CB10	30	30	30	1989	8	29	1331	29	15	89	57.0	32.1	5
722	FAL	CB10	31	31	31	1989	8	30	730	29	15	89	57.0	31.0	6
723	FAL	CB10	32	32	32	1989	8	30	753	29	13	89	56.0	31.2	6
724	FAL	CB10	33	33	33	1989	8	30	808	29	11	89	55.5	30.4	23
725	FAL	CB10	34	34	34	1989	8	30	823	29	9	89	55.0	30.4	29
726	FAL	CB10	35	35	35	1989	8	30	839	29	7	89	54.5	30.5	30
727	FAL	CB10	36	36	36	1989	8	30	913	29	2	89	52.5	30.8	32
728	FAL	CB10	37	37	37	1989	8	30	948	28	57	89	51.5	30.6	38
729	FAL	CB10	38	38	38	1989	8	30	1023	28	52	89	49.5	30.6	13
730	FAL	CB10	39	39	39	1989	8	30	1101	28	47	89	48.0	31.0	35
731	FAL	CB10	40	40	40	1989	8	30	1143	28	42	89	46.5	30.8	67
732	FAL	CB10	41	41	41	1989	8	30	1216	28	37	89	45.0	30.7	90
733	FAL	CB10	42	42	42	1989	8	30	1248	28	32	89	43.5	30.5	-1
734	FAL	CB10	43	43	43	1989	8	30	1321	28	27	89	42.0	31.1	-1
735	FAL	CB10	44	44	44	1989	8	30	1353	28	22	89	40.5	31.6	-1
736	FAL	CB10	45	45	45	1989	8	30	1430	28	17	89	39.0	32.5	-1
737	FAL	CB10	46	46	46	1989	8	31	642	28	17	89	39.0	30.1	10
738	FAL	CB10	47	47	47	1989	8	31	714	28	22	89	40.5	30.3	-1

OBS	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL		SURFACE SALINITY	COMMENTS
721	12	8	6.7284	19.838	N	0HAZEY
722	16	10	8.7469	19.631	N	0CLEAR SUNNY: DAY CLEAR,SEA CALM & CAUGHTFEW DOLPHINS, NO BIG SCHOOLS FISH SI
723	16	22	2.9156	19.477	N	0OIL SLICK
724	6	38	0.9612	21.794	N	0WATER CLEAR
725	6	50	0.9612	21.992	N	0CLEAR
726	6	92	0.6408	21.942	N	0CLEAR
727	5	128	1.2816	23.009	N	0SCHOOL OF HARD TAILS
728	5	160	0.6408	22.157	N	0CLEAR
729	10	220	4.2613	18.170	N	0CLEAR
730	3	285	1.6020	25.718	N	0CLEAR
731	1	690	0.6408	32.651	N	0CLEAR
732	1	906	0.6408	33.467	N	0WATER CLEAR
733	1	1716	0.3204	33.351	N	0CLEAR
734	1	1770	.	36.466	N	0CLEAR
735	1	2304	.	36.476	N	0WATER CLEAR

736	1	2370	.	35.640	N	0CLEAR
737	1	2304	0.3204	36.419	N	0CLEAR SUNNY :DAY HAD CALM SEA AND CLEAR WATER, SPOTTED NO SCHOOLS OF FISH
738	1	1770	.	36.372	N	0SUNNY

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID	PLATFORM CODE	OBS CODE	SALINITY SAMPLE NUMBER	CHLOROPHYLL SAMPLE NO.	TIME OF OBS.	YEAR	MONTH	DAY	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE
739	FAL	CB10	48	48	48	1989	8	31	746	28	27.0	89	42.0	30.3
740	FAL	CB10	49	49	49	1989	8	31	820	28	32.0	89	43.5	30.4
741	FAL	CB10	50	50	50	1989	8	31	854	28	37.0	89	45.0	30.2
742	FAL	CB10	51	51	51	1989	8	31	933	28	42.0	89	46.5	31.2
743	FAL	CB10	52	52	52	1989	8	31	1007	28	47.0	89	48.0	31.2
744	FAL	CB10	53	53	53	1989	8	31	1048	28	52.0	89	49.5	31.7
745	FAL	CB10	54	54	54	1989	8	31	1117	28	57.0	89	51.5	31.8
746	FAL	CB10	55	55	55	1989	8	31	1150	29	2.0	89	52.5	32.0
747	FAL	CB10	56	56	56	1989	8	31	1224	29	7.0	89	54.0	31.7
748	FAL	CB10	57	57	57	1989	8	31	1240	29	9.0	89	55.0	32.1
749	FAL	CB10	58	58	58	1989	8	31	1255	29	11.0	89	55.5	33.3
750	FAL	CB10	59	59	59	1989	8	31	1310	29	13.0	89	56.0	32.9
751	FAL	CB10	60	60	60	1989	8	31	1326	29	15.0	89	57.0	33.1
752	FAL	CB10	61	61	61	1989	9	1	808	29	15.0	89	57.0	31.8
753	FAL	CB10	62	62	62	1989	9	1	825	29	13.0	89	56.0	31.6
754	FAL	CB10	63	63	63	1989	9	1	839	29	11.0	89	55.5	31.2
755	FAL	CB10	64	64	64	1989	9	1	854	29	9.0	89	55.6	30.6
756	FAL	CB10	65	65	65	1989	9	1	913	29	7.0	89	54.5	30.5

OBS	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
739	-1	1	1716	0.3204	36.439	N 0CLEAR
740	-1	1	906	.	.	N 0WATER CLEAR
741	-1	1	714	0.3204	.	N 0
742	80	1	283	0.4486	.	N 0
743	47	1	213	2.4671	.	N 0SHRIMP BOATS
744	13	10	160	2.2428	.	N 0CLEAR
745	17	10	122	0.6408	.	N 0CLEAR
746	22	10	92	0.6408	.	N 0CLEAR
747	18	10	60	0.6408	.	N 0CLEAR
748	16	10	50	0.4486	.	N 0CLEAR
749	17	10	39	1.3457	.	N 0RAIN SIGHTED
750	8	16	22	3.2040	.	N 0CLEAR
751	5	16	7	3.5885	.	N 0CLEAR
752	6	16	8	5.1584	19.826	N 0CLEAR
753	6	16	22	5.6070	19.518	N 0SUNNY

754	14	10	37	1.7942	20.712	N	0WATISCLEGR?????
755	26	7	50	0.3204	23.619	N	0SUNNY
756	31	7	60	0.6408	23.003	N	0SUNNY

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID	PLATFORM CODE	OBS CODE	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE
757	FAL	CB10	66	66	66	1989	9	1	942	29	2.0	89	52.5	31.8
758	FAL	CB10	67	67	67	1989	9	1	1017	28	57.0	89	51.5	31.2
759	FAL	CB10	68	68	68	1989	9	1	1050	28	52.0	89	49.5	31.5
760	FAL	CB10	69	69	69	1989	9	1	1124	28	47.0	89	48.0	31.7
761	FAL	CB10	70	70	70	1989	9	1	1156	28	42.0	89	46.5	31.4
762	FAL	CB10	71	71	71	1989	9	1	1230	28	37.0	89	45.0	32.1
763	FAL	CB10	72	72	72	1989	9	1	1302	28	32.0	89	43.5	32.1
764	FAL	CB10	73	73	73	1989	9	1	1331	28	27.0	89	42.0	32.6
765	FAL	CB10	74	74	74	1989	9	1	1405	28	22.0	89	40.5	31.9
766	FAL	CB10	75	75	75	1989	9	1	1436	28	17.0	89	39.0	31.7
767	FAL	CB10	76	76	76	1989	9	2	645	28	17.0	89	39.0	31.7
768	FAL	CB10	77	77	77	1989	9	2	715	28	22.0	89	40.5	31.6
769	FAL	CB10	78	78	78	1989	9	2	746	28	27.0	89	42.0	32.2
770	FAL	CB10	79	79	79	1989	9	2	818	28	32.0	89	43.5	32.0
771	FAL	CB10	80	80	80	1989	9	2	850	28	37.0	89	45.0	31.8
772	FAL	CB10	81	81	81	1989	9	2	922	28	42.6	89	46.5	31.5
773	FAL	CB10	82	82	82	1989	9	2	945	28	47.0	89	48.0	31.5
774	FAL	CB10	83	83	83	1989	9	2	1016	28	52.0	89	49.5	31.8

OBS	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY		COMMENTS
757	28	6	96	0.6728	22.083	N	0WATER CLEAR
758	33	4	126	0.6728	22.306	N	0SCHOOLS OF BINTA
759	27	4	160	0.6728	22.217	N	0CLEAR
760	25	4	220	2.9156	22.771	N	0SUNNY
761	90	1	290	0.2243	28.526	N	0SUNNY
762	90	1	714	0.5447	29.377	N	0CLEAR
763	90	1	906	0.3204	31.274	N	0WATER CLEAR
764	95	1	1716	0.6728	31.280	N	0SAW 2 TUNA
765	100	1	1770	0.9932	31.277	N	0CLEAR
766	100	1	2304	0.4486	31.271	N	0SUNNY
767	100	1	2304	0.2243	31.280	N	0CLOUDY : OIL SLICK TOP WATER FROM 55 SQ MILES POSITION 84-85
768	100	1	1770	0.3204	31.271	N	02-4' SEAS
769	95	1	1716	0.3204	29.264	N	0CLOUDY
770	83	1	906	0.4486	29.223	N	0SUNNY
771	76	7	714	0.6408	29.265	N	0SUNNY

772	65	7	290	0.3204	30.838	N	0CLOUDY
773	73	7	220	0.3204	22.403	N	0CLOUDY
774	40	7	160	0.6408	22.528	N	0CLOUDY

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID	PLATFORM CODE	OBS CODE	SALINITY SAMPLE NUMBER	CHLOROPHYLL SAMPLE NO.	TIME SAMPLE NO.	YEAR	MONTH	DAY	OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE
775	FAL	CB10	84	84	84	1989	9	2	1045	28	57.00	89	51.50		31.0
776	FAL	CB10	85	85	85	1989	9	2	1117	29	2.00	89	52.50		31.5
777	FAL	CB10	86	86	86	1989	9	2	1205	29	7.00	89	54.50		32.0
778	FAL	CB10	87	87	87	1989	9	2	1221	29	9.00	89	55.00		32.1
779	FAL	CB10	88	88	88	1989	9	2	1237	29	11.00	89	55.50		32.5
780	FAL	CB10	89	89	89	1989	9	2	1257	29	13.00	89	56.00		32.4
781	FAL	CB10	90	90	90	1989	9	2	1318	29	15.00	89	57.00		33.0
782	FAL	CB10	91	91	91	1989	9	3	735	29	15.00	89	57.00		31.6
783	FAL	CB10	92	92	92	1989	9	3	755	29	13.00	89	56.00		31.4
784	FAL	CB10	93	93	93	1989	9	3	810	29	11.00	89	55.50		31.2
785	FAL	CB10	94	94	94	1989	9	3	825	29	9.00	89	55.00		31.0
786	FAL	CB10	95	95	95	1989	9	3	900	29	7.00	89	54.50		31.0
787	FAL	CB10	96	96	96	1989	9	3	931	29	2.00	89	52.50		32.0
788	FAL	CB10	97	97	97	1989	9	3	1002	28	57.00	89	51.50		30.1
789	FAL	CB10	98	98	98	1989	9	3	1033	28	52.00	89	49.50		30.3
790	FAL	CB10	99	99	99	1989	9	3	1105	28	47.00	89	48.00		32.0
791	FAL	CB10	100	100	100	1989	9	3	1135	28	40.00	89	46.50		32.2
792	FAL	CB10	101	101	101	1989	9	3	1206	28	37.00	89	45.00		32.1

OBS	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY		COMMENTS
775	20	7	120	0.4486	22.209	N	0OIL SLICK ON WATER
776	10	7	96	0.4486	23.217	N	0CHOPPY 1-3
777	8	10	58	2.0185	21.543	N	0SUNNY
778	5	10	50	4.4856	20.592	N	01 3 SEAS
779	3	15	38	5.1584	20.659	N	0SUNNY
780	3	15	22	4.4856	21.453	N	02 - 4 SEAS
781	3	15	7	8.5226	19.825	N	0SUNNY
782	1	17	8	10.3169	20.387	N	0
783	3	12	21	4.7099	21.632	N	0
784	3	10	38	1.1214	23.158	N	0
785	9	10	49	0.3204	25.965	N	0
786	20	4	58	0.6728	22.874	N	0
787	25	3	96	0.6728	22.560	N	0
788	25	3	120	0.6408	22.910	N	0
789	30	4	160	0.6728	23.046	N	0

790	30	4	220	0.6408	19.968	N	0
791	27	4	290	1.1214	22.042	N	0
792	25	4	714	1.5700	21.500	N	0

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID	PLATFORM CODE	OBS CODE	SALINITY SAMPLE NUMBER	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE
793	FAL	CB10	102	102	102	1989	9	3	1240	28	32.00	89	43.50	32.0
794	FAL	CB10	103	103	103	1989	9	3	1311	28	27.00	89	42.00	32.2
795	FAL	CB10	106	106	106	1989	9	4	732	29	15.00	89	57.00	31.5
796	FAL	CB10	107	107	107	1989	9	4	752	29	13.00	89	56.00	31.2
797	FAL	CB10	108	108	108	1989	9	4	812	29	11.00	89	55.50	30.8
798	FAL	CB10	109	109	109	1989	9	4	823	29	9.00	89	55.00	30.7
799	FAL	CB10	110	110	110	1989	9	4	842	29	7.00	89	54.50	30.9
800	FAL	CB10	111	111	111	1989	9	4	915	29	2.00	89	52.50	31.3
801	FAL	CB10	112	112	112	1989	9	4	946	28	57.00	89	51.50	31.1
802	FAL	CB07	1	24001	24001	1989	8	28	1015	29	3.01	89	6.21	30.0
803	FAL	CB07	2	24002	24002	1989	8	28	1049	29	0.20	89	6.28	31.0
804	FAL	CB07	3	24003	24003	1989	8	28	1120	28	57.17	89	6.25	32.0
805	FAL	CB07	4	24004	24004	1989	8	28	1146	28	54.06	89	6.13	32.0
806	FAL	CB07	5	24005	24005	1989	8	28	1207	28	51.02	89	6.10	32.0
807	FAL	CB07	6	24006	24006	1989	8	28	1230	28	48.11	89	6.12	32.0
808	FAL	CB07	7	24007	24007	1989	8	28	1255	28	45.00	89	6.04	32.0
809	FAL	CB07	8	24008	24008	1989	8	28	1321	28	42.00	89	6.03	32.0
810	FAL	CB07	9	24009	24009	1989	8	28	1350	28	39.03	89	6.00	32.0

OBS	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY		COMMENTS
793	30	4	906	0.8971	23.310	N	0
794	30	4	1716	1.3457	23.325	N	0
795	3	15	7	9.6440	20.777	N	0CLEAR :WEATHER WAS TOO ROUGH TO CONTINUEAFTER OBSERVATION NUMBER 00112
796	6	12	21	4.2613	23.189	N	0SUNNY
797	21	5	40	0.6728	24.697	N	0SUNNY
798	30	5	51	0.4486	23.364	N	0CLOUDY
799	30	5	59	0.4486	22.987	N	0SEA ROUGH
800	30	5	96	0.6728	21.644	N	0RAIN
801	30	5	120	2.2428	21.277	N	0RAIN
802	2	15	9	4.0370	12.156	N	0DOUBLE RIGGER TRAWLING IN THIS AREA
803	4	15	19	6.2798	.	N	0DOUBLE RIGGER TRAWLING IN THIS AREA
804	10	15	-1	7.1770	15.039	N	0
805	14	15	-1	3.1399	19.124	N	0
806	18	15	-1	2.2428	20.223	N	0
807	18	14	-1	2.4671	22.171	N	0

808	28	8	-1	0.4486	26.876	N	0
809	48	5	-1	0.6408	27.194	N	0
810	50	5	-1	0.6408	28.544	N	0

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
811	FAL	CB07	10	24010	24010	1989	8	28	1413	28	36.00	89
812	FAL	CB07	11	24011	24011	1989	8	28	1439	28	33.01	89
813	FAL	CB07	12	24012	24012	1989	8	28	1505	28	30.00	89
814	FAL	CB07	13	24013	24013	1989	8	28	1530	28	27.03	89
815	FAL	CB07	14	24014	24014	1989	8	28	1601	28	24.07	89
816	FAL	CB07	15	24015	24015	1989	8	28	1625	28	21.00	89
817	FAL	CB07	1	24101	24101	1989	8	29	932	29	3.00	89
818	FAL	CB07	2	24102	24102	1989	8	29	955	29	0.01	89
819	FAL	CB07	3	24103	24103	1989	8	29	1021	28	57.04	89
820	FAL	CB07	4	24104	24104	1989	8	29	1042	28	54.07	89
821	FAL	CB07	5	24105	24105	1989	8	29	1059	28	51.01	89
822	FAL	CB07	6	24106	24106	1989	8	29	1117	28	48.00	89
823	FAL	CB07	7	24107	24107	1989	8	29	1135	28	45.06	89
824	FAL	CB07	8	24108	24108	1989	8	29	1152	28	42.01	89
825	FAL	CB07	9	24109	24109	1989	8	29	1211	28	39.00	89
826	FAL	CB07	10	24110	24110	1989	8	29	1235	28	36.01	89
827	FAL	CB07	11	24111	24111	1989	8	29	1258	28	33.04	89
828	FAL	CB07	12	24112	24112	1989	8	29	1315	28	30.00	89

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL		SURFACE SALINITY	COMMENTS
811	6.01	31	-1	3	-1	1.1214	36.504	N	0500ML
812	6.11	31	-1	3	-1	0.4806	36.145	N	0500ML
813	6.04	31	-1	2	-1	1.6821	36.444	N	0500ML
814	6.04	31	-1	2	-1	0.4486	36.360	N	0500ML
815	6.06	30	-1	2	-1	0.3204	36.316	N	0500ML
816	6.02	30	-1	2	-1	0.5607	36.391	N	0500ML
817	6.04	32	3	15	10	10.0926	13.583	N	0HIGH TIDES
818	6.02	32	9	14	20	2.6914	22.667	N	0
819	6.00	31	22	11	-1	0.6728	25.002	N	0
820	6.01	31	43	9	-1	0.3204	25.669	N	0TUNA FEEDING IN THIS AREA
821	6.04	31	45	7	-1	0.2243	25.939	N	0TUNA FEEDING IN THIS AREA
822	6.00	31	46	7	-1	0.3204	26.168	N	0
823	6.13	31	50	7	-1	0.2243	27.449	N	0
824	6.12	31	55	6	-1	0.6408	29.308	N	0
825	6.02	31	70	4	-1	1.2335	31.031	N	0
826	6.01	31	-1	3	-1	0.3204	36.259	N	0

827	6.02	32	-1	2	-1	4.3735	36.476	N	0
828	6.11	31	-1	2	-1	0.3364	36.384	N	0SAW A WHLE CALF GOING NORTH

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)
829	FAL	CB07	13	24113	24113	1989	8	29	1343	28	27.01	89	6.00
830	FAL	CB07	14	24114	24114	1989	8	29	1420	28	24.06	89	6.04
831	FAL	CB07	15	24115	24115	1989	8	29	1445	28	21.07	89	6.03
832	FAL	CB07	1	24201	24201	1989	8	30	605	29	3.04	89	6.01
833	FAL	CB07	2	24202	24202	1989	8	30	626	29	0.01	89	6.00
834	FAL	CB07	3	24203	24203	1989	8	30	645	28	57.04	89	6.02
835	FAL	CB07	4	24204	24204	1989	8	30	710	28	54.03	89	6.02
836	FAL	CB07	5	24205	24205	1989	8	30	733	28	51.01	89	6.07
837	FAL	CB07	6	24206	24206	1989	8	30	759	28	48.00	89	6.11
838	FAL	CB07	7	24207	24207	1989	8	30	822	28	45.07	89	6.13
839	FAL	CB07	8	24208	24208	1989	8	30	845	28	42.04	89	6.08
840	FAL	CB07	9	24209	24209	1989	8	30	910	28	39.08	89	6.07
841	FAL	CB07	10	24210	24210	1989	8	30	936	28	36.04	89	6.00
842	FAL	CB07	11	24211	24211	1989	8	30	1014	28	33.01	89	6.04
843	FAL	CB07	12	24212	24212	1989	8	30	1047	28	30.03	89	6.05
844	FAL	CB07	13	24213	24213	1989	8	30	1120	28	27.05	89	6.00
845	FAL	CB07	14	24214	24214	1989	8	30	1148	28	24.00	89	6.01
846	FAL	CB07	15	24215	24215	1989	8	30	1216	28	21.04	89	6.00

OBS	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL		SURFACE SALINITY	COMMENTS
829	31	-1	2	-1	0.4806	36.528	N	0SAW 2 NIRE WHALES GOING NORTH
830	31	-1	2	-1	0.4806	36.527	N	0
831	32	-1	2	-1	0.9612	36.536	N	0
832	32	2	15	8	9.1955	13.406	N	0
833	32	9	14	18	3.3642	22.608	N	0
834	31	12	11	-1	1.2816	25.027	N	0
835	31	15	9	-1	0.9612	25.645	N	0
836	32	25	14	-1	0.2243	25.928	N	0TUNA JUMPING IN THIS AREA
837	32	60	7	-1	0.6408	26.171	N	0
838	32	-1	5	-1	0.6408	27.353	N	0
839	32	-1	4	-1	0.5447	29.355	N	0
840	31	-1	3	-1	1.2335	30.922	N	0
841	31	-1	3	-1	0.4486	36.455	N	0
842	31	-1	3	-1	.	36.514	N	0
843	31	-1	2	-1	2.8035	36.379	N	0
844	31	-1	2	-1	0.4486	36.450	N	0

845	30	-1	2	-1	33.2255	36.519	N	0
846	30	-1	2	-1	2.6914	36.476	N	0

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)
847	FAL	CB07	1	24301	24301	1989	8	31	833	29	3.04	89	6.01
848	FAL	CB07	2	24302	24302	1989	8	31	852	29	0.07	89	6.04
849	FAL	CB07	3	24303	24303	1989	8	31	950	28	57.01	89	6.06
850	FAL	CB07	4	24304	24304	1989	8	31	1013	28	54.01	89	6.04
851	FAL	CB07	5	24305	24305	1989	8	31	1031	28	51.00	89	6.00
852	FAL	CB07	6	24306	24306	1989	8	31	1052	28	48.01	89	6.09
853	FAL	CB07	7	24307	24307	1989	8	31	1107	28	45.01	89	6.19
854	FAL	CB07	8	24308	24308	1989	8	31	1124	28	42.06	89	6.14
855	FAL	CB07	9	24309	24309	1989	8	31	1155	28	39.25	89	6.16
856	FAL	CB07	10	24310	24310	1989	8	31	1219	28	36.02	89	6.00
857	FAL	CB07	11	24311	24311	1989	8	31	1235	28	33.01	89	6.01
858	FAL	CB07	12	24312	24312	1989	8	31	1252	28	30.02	89	6.01
859	FAL	CB07	13	24313	24313	1989	8	31	1310	28	27.00	89	6.01
860	FAL	CB07	14	24314	24314	1989	8	31	1329	28	24.09	89	6.24
861	FAL	CB07	15	24315	24315	1989	8	31	1355	28	21.24	89	6.00
862	FAL	CB07	1	24401	24401	1989	9	1	636	29	3.02	89	6.01
863	FAL	CB07	2	24402	24402	1989	9	1	654	29	0.01	89	6.07
864	FAL	CB07	3	24403	24403	1989	9	1	715	28	57.06	89	6.04

OBS	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL		SURFACE SALINITY	COMMENTS
847	31	4	18	8	9.6440	9.559	N	0
848	31	10	15	19	8.0741	13.999	N	0
849	31	10	15	-1	7.1770	12.239	N	0
850	32	15	14	-1	1.3457	20.399	N	0
851	32	25	14	-1	0.6728	21.916	N	0
852	32	66	7	-1	0.6408	27.120	N	0
853	32	-1	5	-1	0.6408	28.719	N	0
854	32	-1	4	-1	0.6408	30.562	N	0
855	31	-1	3	-1	4.5977	36.315	N	0SPOTTED 24 WHALES/DOLPHIN FEED OFF GRASS LINE
856	31	-1	3	-1	1.2335	36.424	N	0
857	31	-1	3	-1	1.3457	36.571	N	0
858	31	-1	2	-1	0.9612	36.369	N	0
859	31	-1	2	-1	1.1214	36.407	N	0
860	31	-1	2	-1	2.5792	36.429	N	0
861	31	-1	2	-1	0.8971	36.401	N	0
862	31	4	18	8	6.2798	9.192	N	0

863	31	9	15	20	8.7469	14.054	N	0
864	31	10	15	-1	4.4856	14.008	N	0DOUBLE RIGGER TRAWLIN IN THE AREA/WEST

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)
865	FAL	CB07	4	24404	24404	1989	9	1	738	28	54.03	89	6.00
866	FAL	CB07	5	24405	24405	1989	9	1	800	28	51.03	89	6.07
867	FAL	CB07	6	24406	24406	1989	9	1	825	28	48.04	89	6.04
868	FAL	CB07	7	24407	24407	1989	9	1	847	28	45.06	89	6.00
869	FAL	CB07	8	24408	24408	1989	9	1	910	28	42.00	89	6.01
870	FAL	CB07	9	24409	24409	1989	9	1	935	28	39.06	89	6.07
871	FAL	CB07	10	24410	24410	1989	9	1	1000	28	36.04	89	6.01
872	FAL	CB07	11	24411	24411	1989	9	1	1028	28	33.05	89	6.04
873	FAL	CB07	12	24412	24412	1989	9	1	1057	28	30.03	89	6.00
874	FAL	CB07	13	24413	24413	1989	9	1	1125	28	27.08	89	6.09
875	FAL	CB07	14	24414	24414	1989	9	1	1215	28	24.09	89	6.10
876	FAL	CB07	15	24415	24415	1989	9	1	1240	28	21.04	89	6.09
877	FAL	CB07	1	24501	24501	1989	9	2	830	29	3.04	89	6.01
878	FAL	CB07	2	24502	24502	1989	9	2	856	29	0.01	89	6.00
879	FAL	CB07	3	24503	24503	1989	9	2	920	28	57.03	89	6.02
880	FAL	CB07	4	24504	24504	1989	9	2	945	28	54.01	89	6.05
881	FAL	CB07	5	24505	24505	1989	9	2	1000	28	51.02	89	6.09
882	FAL	CB07	6	24506	24506	1989	9	2	1015	28	48.00	89	6.05

OBS	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
865	32	15	14	-1	1.7942	20.356	N 0DOUBLE RIGGER TRAWLING IN THE AREA/WEST
866	32	25	14	-1	0.4486	21.921	N 0
867	32	60	7	-1	1.5700	27.132	N 0TUNA FEEDING IN AREA
868	31	-1	5	-1	.	28.712	N 0
869	31	-1	4	-1	0.2243	30.600	N 0
870	31	-1	3	-1	3.5885	36.312	N 0
871	31	-1	3	-1	1.4578	36.398	N 0
872	31	-1	3	-1	0.4486	36.499	N 0
873	31	-1	3	-1	0.8971	36.343	N 0
874	31	-1	2	-1	0.2243	36.399	N 0
875	32	-1	2	-1	0.7850	36.421	N 0
876	32	-1	2	-1	0.4486	36.363	N 0
877	31	5	18	8	5.8313	10.222	N 0
878	31	9	15	19	11.2140	8.322	N 0TRAWL BOATS WORKING IN THIS AREA
879	32	8	14	-1	7.4012	17.940	N 0TRAWL BOATS WORKING IN THIS AREA
880	32	20	13	-1	0.6408	22.413	N 0SCHOOLS OF TUNA 20-50 LB FEEDING IN AREA

881	32	40	13	-1	0.4486	23.791	N	0SCHOOLS OF TUNA 20-50 LB FEEDIN IN THIS AREA
882	31	66	6	-1	0.4486	28.639	N	0

3.2.2 CHARTER BOATS, continued:

OBS ID	CRUISE CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH
883	FAL	CB07	7	24507	24507	1989	9	2	1025	28	45.07	89	6.00	31.0	-1
884	FAL	CB07	8	24508	24508	1989	9	2	1047	28	42.05	89	6.00	31.0	-1
885	FAL	CB07	9	24509	24509	1989	9	2	1110	28	39.09	89	6.00	31.0	-1
886	FAL	CB07	10	24510	24510	1989	9	2	1134	28	36.04	89	6.01	31.0	-1
887	FAL	CB07	11	24511	24511	1989	9	2	1150	28	33.07	89	6.00	31.0	-1
888	FAL	CB07	12	24512	24512	1989	9	2	1210	28	30.03	89	6.02	31.0	-1
889	FAL	CB07	13	24513	24513	1989	9	2	1225	28	27.09	89	6.04	32.0	-1
890	FAL	CB07	14	24514	24514	1989	9	2	1310	28	24.10	89	6.07	32.0	-1
891	FAL	CB07	15	24515	24515	1989	9	2	1350	28	21.06	89	6.04	32.0	-1
892	FAL	CB07	1	24601	24601	1989	9	3	625	29	3.03	89	6.02	31.0	5
893	FAL	CB07	2	24602	24602	1989	9	3	645	29	0.02	89	6.02	31.0	9
894	FAL	CB07	3	24603	24603	1989	9	3	706	28	57.00	89	6.01	32.0	9
895	FAL	CB07	4	24604	24604	1989	9	3	730	28	54.01	89	6.05	32.0	20
896	FAL	CB07	5	24605	24605	1989	9	3	750	28	51.01	89	6.00	31.0	41
897	FAL	CB07	6	24606	24606	1989	9	3	817	28	48.00	89	6.00	32.0	65
898	FAL	CB07	7	24607	24607	1989	9	3	840	28	45.00	89	6.04	31.0	-1
899	FAL	CB07	8	24608	24608	1989	9	3	905	28	42.05	89	6.04	31.0	-1
900	FAL	CB07	9	24609	24609	1989	9	3	927	28	39.07	89	6.01	31.0	-1

OBS	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
883	5	-1	.	30.710	N 0
884	3	-1	4.9342	36.225	N 0SAMPLES TAKEN NEAR GRASSLINE
885	3	-1	6.0556	36.528	N 0
886	3	-1	5.8313	36.523	N 0
887	3	-1	0.3204	36.414	N 0
888	2	-1	2.5792	36.420	N 0
889	2	-1	4.1492	36.426	N 0
890	2	-1	0.6728	36.364	N 0
891	2	-1	0.1602	36.376	N 0
892	18	9	5.8313	10.066	N 0
893	15	20	.	8.293	N 0
894	14	-1	6.0556	18.356	N 0TRAWL BOATS WORKING THIS AREA
895	13	-1	0.6408	22.428	N 0
896	13	-1	0.6408	23.767	N 0TUNA FEEDING THIS AREA: WHALE SHARK
897	6	-1	0.9612	28.678	N 0

898	5	-1	0.6408	30.705	N	0
899	3	-1	0.8971	36.385	N	0
900	3	-1	0.6408	36.512	N	0

3.2.2 CHARTER BOATS, continued:

OBS ID	CRUISE CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH
901	FAL	CB07	10	24610	24610	1989	9	3	954	28	36.01	89	6.06	31.0	-1
902	FAL	CB07	11	24611	24611	1989	9	3	1015	28	33.00	89	6.01	31.0	-1
903	FAL	CB07	12	24612	24612	1989	9	3	1050	28	30.04	89	6.00	31.0	-1
904	FAL	CB07	13	24613	24613	1989	9	3	1120	28	27.00	89	6.01	32.0	-1
905	FAL	CB07	14	24614	24614	1989	9	3	1149	28	24.01	89	6.04	32.0	-1
906	FAL	CB07	15	24615	24615	1989	9	3	1220	28	21.00	89	6.00	32.0	-1
907	FAL	CB07	1	24701	24701	1989	9	4	730	29	3.01	89	6.16	31.0	4
908	FAL	CB07	2	24702	24702	1989	9	4	755	29	0.00	89	6.04	31.0	9
909	FAL	CB07	3	24703	24703	1989	9	4	817	28	57.03	89	6.05	32.0	10
910	FAL	CB07	4	24704	24704	1989	9	4	845	28	54.07	89	6.01	31.0	20
911	FAL	CB07	5	24705	24705	1989	9	4	920	28	51.01	89	6.07	31.0	69
912	FAL	CB07	6	24706	24706	1989	9	4	942	28	48.06	89	6.00	31.0	-1
913	FAL	CB07	7	24707	24707	1989	9	4	1015	28	45.01	89	6.04	31.0	-1
914	FAL	CB07	8	24708	24708	1989	9	4	1050	28	42.04	89	6.01	31.0	-1
915	FAL	CB07	9	24709	24709	1989	9	4	1125	28	39.02	89	6.02	31.0	-1
916	FAL	CB07	10	24710	24710	1989	9	4	1200	28	36.02	89	6.01	31.0	-1
917	FAL	CB07	11	24711	24711	1989	9	4	1235	28	33.01	89	6.04	31.0	-1
918	FAL	CB07	12	24712	24712	1989	9	4	1310	28	30.04	89	6.02	32.0	-1

OBS	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
901	3	-1	0.3204	36.512	N 0
902	3	-1	3.5885	36.375	N 0
903	3	-1	0.1602	.	N 0
904	2	-1	0.6408	.	N 0
905	2	-1	0.1602	36.350	N 0
906	2	-1	1.1214	36.368	N 0
907	18	9	9.8683	13.375	N 09
908	15	20	2.4671	22.650	N 0
909	14	-1	0.6408	25.070	N 0DOUBLE RIGGER TRAWLING IN AREA
910	13	-1	0.3204	25.661	N 0LONG LINERS WORKING THIS AREA : FISHING BOATS TROLLING FOR TUNA IN THIS AREA
911	6	-1	0.3204	25.975	N 0LONG LINERS WORKING THIS AREA : FISHING BOATS TROLLING FOR TUNA IN THIS AREA
912	5	-1	2.6914	22.123	N 0LONG LINERS WORKING THIS AREA : FISHING BOATS TROLLING FOR TUNA IN THIS AREA
913	3	-1	0.6408	25.727	N 0
914	3	-1	0.2243	27.318	N 0
915	3	-1	0.6728	28.781	N 0

916	3	-1	0.6728	36.452	N	0
917	3	-1	0.3204	36.381	N	0
918	2	-1	1.2816	36.363	N	0

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
919	FAL	CB07	13	24713	24713	1989	9	4	1350	28	27.02
920	FAL	CB07	14	24714	24714	1989	9	4	1440	28	24.00
921	FAL	CB07	15	24715	24715	1989	9	4	1535	28	21.02
922	690	CB06	16201	1	1	1990	6	11	1055	29	33.72
923	690	CB06	16202	2	2	1990	6	11	1130	29	31.85
924	690	CB06	16203	3	3	1990	6	11	1145	29	29.89
925	690	CB06	16204	4	4	1990	6	11	1207	29	27.94
926	690	CB06	16205	5	5	1990	6	11	1230	29	25.93
927	690	CB06	16206	6	6	1990	6	11	1255	29	23.98
928	690	CB06	16207	7	7	1990	6	11	1325	29	21.96
929	690	CB06	16208	8	8	1990	6	11	1345	29	19.94
930	690	CB06	16209	9	9	1990	6	11	1407	29	17.94
931	690	CB06	16210	10	10	1990	6	11	1430	29	15.98
932	690	CB06	16211	11	11	1990	6	11	1452	29	13.93
933	690	CB06	16212	12	12	1990	6	11	1515	29	11.93
934	690	CB06	16213	13	13	1990	6	11	1535	29	9.91
935	690	CB06	16214	14	14	1990	6	11	1600	29	7.94
936	690	CB06	16215	15	15	1990	6	11	1620	29	5.93

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
919	89	6.00	32.0	-1	2	-1	6.9527	36.338	N 0
920	89	6.01	32.0	-1	2	-1	0.9612	36.330	N 0
921	89	6.04	32.0	-1	2	-1	2.5632	36.336	N 0
922	92	3.03	30.7	1	18	7	31.3992	1.995	ONLY 100 ML
923	92	3.07	30.7	1	18	8	25.2315	1.511	
924	92	3.21	30.8	1	18	11	8.9712	2.020	
925	92	3.31	31.5	2	18	13	8.4105	4.864	
926	92	3.47	32.5	2	17	13	6.7284	4.641	
927	92	3.13	32.0	2	17	17	7.2891	4.034	
928	92	3.17	32.1	3	12	17	15.6996	9.180	
929	92	3.43	32.5	4	12	15	19.0638	14.374	
930	92	3.07	33.0	4	12	20	12.3354	16.724	
931	92	3.38	33.0	12	12	21	6.1677	21.990	
932	92	3.45	32.0	17	12	24	1.6821	24.437	
933	92	3.44	32.0	15	12	26	2.4030	23.979	
934	92	3.28	32.2	15	12	34	3.3642	22.589	

935	92	3.02	31.5	15	12	40	3.2040	22.288
936	92	3.17	31.5	15	12	42	3.9249	21.589

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
937	690	CB06	16216	16	16	1990	6	11	1645	29	3.80
938	690	CB06	16217	17	17	1990	6	11	1705	29	1.96
939	690	CB06	16318	18	18	1990	6	12	554	29	33.75
940	690	CB06	16319	19	19	1990	6	12	625	29	31.64
941	690	CB06	16320	20	20	1990	6	12	657	29	29.77
942	690	CB06	16321	21	21	1990	6	12	725	29	27.88
943	690	CB06	16322	22	22	1990	6	12	750	29	25.95
944	690	CB06	16323	23	23	1990	6	12	815	29	23.82
945	690	CB06	16324	24	24	1990	6	12	840	29	21.93
946	690	CB06	16325	25	25	1990	6	12	905	29	19.91
947	690	CB06	16326	26	26	1990	6	12	930	29	17.94
948	690	CB06	16327	27	27	1990	6	12	1000	29	15.94
949	690	CB06	16328	28	28	1990	6	12	1025	29	13.94
950	690	CB06	16329	29	29	1990	6	12	1050	29	11.92
951	690	CB06	16330	30	30	1990	6	12	1115	29	9.91
952	690	CB06	16331	31	31	1990	6	12	1135	29	7.94
953	690	CB06	16332	32	32	1990	6	12	1208	29	5.91
954	690	CB06	16333	33	33	1990	6	12	1235	29	3.97

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
937	92	3.10	31.5	15	12	46	2.2428	21.538	
938	92	3.33	31.5	15	12	49	3.2040	21.363	
939	92	3.75	30.0	1	18	7	43.7346	3.645	ONLY 100 ML
940	92	3.71	30.0	1	18	8	53.2665	3.638	
941	92	3.54	30.0	1	18	11	44.8560	3.634	
942	92	3.03	30.0	1	18	13	18.5031	3.996	
943	92	3.63	29.5	1	18	13	9.5319	1.503	
944	92	3.47	29.0	1	18	17	17.9424	1.006	
945	92	3.62	29.5	2	18	17	.	2.467	
946	92	3.10	29.6	3	14	16	33.0813	7.511	
947	92	3.50	29.6	7	14	20	10.6533	19.337	
948	92	3.65	29.6	17	12	21	2.4030	23.461	
949	92	3.75	30.5	15	12	24	1.6020	22.276	
950	92	3.75	31.0	15	12	26	1.6821	22.253	
951	92	3.07	31.0	15	12	39	2.4030	22.396	
952	92	3.27	31.0	15	12	41	1.1214	23.888	

953	92	3.20	31.3	15	12	43	.	24.614
954	92	3.41	31.3	15	12	46	1.6821	25.142

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
955	690	CB06	16334	34	34	1990	6	12	1303	29	1.81	92
956	690	CB06	16435	35	35	1990	6	13	537	29	33.35	92
957	690	CB06	16436	36	36	1990	6	13	605	29	31.75	92
958	690	CB06	16437	37	37	1990	6	13	645	29	29.43	92
959	690	CB06	16438	38	38	1990	6	13	700	29	27.07	92
960	690	CB06	16439	39	39	1990	6	13	735	29	25.35	92
961	690	CB06	16440	40	40	1990	6	13	800	29	23.51	92
962	690	CB06	16541	41	41	1990	6	14	830	29	33.92	92
963	690	CB06	16542	42	42	1990	6	14	855	29	31.88	92
964	690	CB06	16543	43	43	1990	6	14	929	29	29.86	92
965	690	CB06	16544	44	44	1990	6	14	942	29	27.74	92
966	690	CB06	16545	45	45	1990	6	14	1005	29	25.78	92
967	690	CB06	16546	46	46	1990	6	14	1030	29	23.75	92
968	690	CB06	16547	47	47	1990	6	14	1050	29	21.91	92
969	690	CB06	16548	48	48	1990	6	14	1120	29	19.83	92
970	690	CB06	16549	49	49	1990	6	14	1150	29	17.90	92
971	690	CB06	16550	50	50	1990	6	14	1230	29	15.04	92
972	690	CB06	16551	51	51	1990	6	14	1300	29	13.15	92

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
955	3.38	31.5	15	12	50	2.4030	24.504	
956	3.28	29.7	1	18	7	19.0638	2.785	ONLY 100 ML
957	3.31	29.7	1	18	9	22.4280	2.780	
958	3.47	29.8	1	18	11	30.2778	2.784	
959	3.20	29.8	2	18	13	21.3066	3.460	
960	3.18	29.8	2	17	17	34.2027	3.699	
961	3.35	29.8	2	17	17	21.3066	3.680	
962	3.15	30.0	1	18	7	29.7171	1.831	ONLY 100 ML
963	3.95	30.0	1	18	9	10.6533	0.784	ONLY 100 ML
964	3.16	30.1	1	18	11	8.9712	0.831	ONLY 100 ML
965	3.21	30.1	1	18	13	19.0638	1.009	MENHADEN BOATS
966	3.76	30.7	2	17	13	31.3992	1.487	MENHADEN BOATS
967	3.20	30.7	2	17	17	21.3066	5.977	MENHADEN BOATS
968	3.10	31.0	3	14	17	39.2490	9.483	
969	3.40	31.0	9	12	18	7.2891	20.506	
970	3.39	31.1	13	12	20	3.3642	20.435	

971	3.35	31.2	15	12	21	10.0926	19.633
972	3.88	31.3	15	22	24	11.7747	19.740

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)
973	690	CB06	16552	52	52	1990	6	14	1338	29	11.25	92	3.74
974	690	CB06	16553	53	53	1990	6	14	1409	29	9.47	92	3.67
975	690	CB06	16554	54	54	1990	6	14	1440	29	7.54	92	3.86
976	690	CB06	16555	55	55	1990	6	14	1505	29	5.72	92	3.47
977	690	CB06	16556	56	56	1990	6	14	1537	29	3.47	92	3.39
978	690	CB06	16557	57	57	1990	6	14	1557	29	1.16	92	3.25
979	690	CB06	16658	58	58	1990	6	15	500	29	33.47	92	3.43
980	690	CB06	16659	59	59	1990	6	15	525	29	31.83	92	3.27
981	690	CB06	16660	60	60	1990	6	15	543	29	29.39	92	3.25
982	690	CB06	16661	61	61	1990	6	15	607	29	27.74	92	3.47
983	690	CB06	16662	62	62	1990	6	15	631	29	25.75	92	3.53
984	690	CB06	16663	63	63	1990	6	15	655	29	23.87	92	3.67
985	690	CB06	16664	64	64	1990	6	15	720	29	21.44	92	3.74
986	690	CB06	16665	65	65	1990	6	15	750	29	19.59	92	3.88
987	690	CB06	16666	66	66	1990	6	15	822	29	17.98	92	3.75
988	690	CB06	16667	67	67	1990	6	15	848	29	15.45	92	3.47
989	690	CB06	16668	68	68	1990	6	15	907	29	13.39	92	3.10
990	690	CB06	16669	69	69	1990	6	15	929	29	11.25	92	3.14

OBS	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
973	31.5	15	12	26	11.2140	19.798	
974	31.5	15	12	34	10.0926	19.738	
975	31.5	15	12	39	3.3642	20.905	
976	31.7	15	12	43	3.9249	20.770	
977	31.7	15	12	46	3.9249	20.808	
978	31.8	15	12	50	3.3642	20.809	
979	29.7	1	18	7	19.6245	2.466	
980	29.7	1	18	9	23.5494	2.469	
981	29.7	1	18	11	20.1852	2.466	
982	29.8	2	18	13	20.1852	2.464	
983	29.9	2	17	13	24.6708	10.597	
984	30.0	2	17	17	22.4280	10.598	
985	30.0	3	14	17	23.5494	10.651	MENHADEN BOATS
986	30.0	4	14	16	23.5494	10.675	
987	30.0	12	12	20	8.8110	10.713	
988	30.0	17	12	21	8.9712	20.927	

989	30.1	15	12	24	7.2891	20.928
990	30.1	15	12	26	7.2891	20.973

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)
991	690	CB06	16670	70	70	1990	6	15	957	29	9.26	92	3.97
992	690	CB06	16671	71	71	1990	6	15	1030	29	7.22	92	3.97
993	690	CB06	16672	72	72	1990	6	15	1056	29	5.31	92	3.88
994	690	CB03	16201	1	1	1990	6	11	1009	29	13.00	91	15.00
995	690	CB03	16202	2	2	1990	6	11	1022	29	11.00	91	15.00
996	690	CB03	16203	3	3	1990	6	11	1032	29	9.00	91	15.00
997	690	CB03	16204	4	4	1990	6	11	1040	29	6.94	91	15.00
998	690	CB03	16205	5	5	1990	6	11	1048	29	5.03	91	15.01
999	690	CB03	16206	6	6	1990	6	11	1057	29	3.03	91	15.03
1000	690	CB03	16207	7	7	1990	6	11	1106	29	1.01	91	15.00
1001	690	CB03	16208	8	8	1990	6	11	1114	28	58.81	91	15.01
1002	690	CB03	16209	9	9	1990	6	11	1122	28	57.90	91	15.04
1003	690	CB03	16210	10	10	1990	6	11	1130	28	55.12	91	15.02
1004	690	CB03	16211	11	11	1990	6	11	1138	28	53.10	91	15.03
1005	690	CB03	16212	12	12	1990	6	11	1148	28	50.96	91	15.03
1006	690	CB03	16213	13	13	1990	6	11	1202	28	49.00	91	15.10
1007	690	CB03	16214	14	14	1990	6	11	1211	28	47.04	91	15.06
1008	690	CB03	16215	15	15	1990	6	11	1217	28	45.03	91	15.02

OBS	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
991	30.1	15	12	34	7.8498	20.930	
992	30.1	15	12	40	8.4105	20.947	
993	30.1	15	12	42	7.8498	20.916	OUT OF ALU. FOIL
994	29.6	3	12	9	12.3354	10.838	LT N WIND 3-5 MP
995	29.6	3	15	12	16.8210	11.917	2 SHRIMP BOATS DRAGGIN
996	30.0	2	15	14	11.7747	12.320	1 MI RADIUS
997	29.6	4	15	15	15.6996	13.151	6 SHRIMP BOATS
998	29.7	5	15	16	10.6533	14.846	
999	29.7	7	15	15	7.8498	16.630	
1000	29.4	8	15	15	7.8498	16.955	
1001	29.5	8	15	15	6.7284	19.693	
1002	29.6	9	15	20	5.0463	20.373	
1003	30.0	22	15	22	2.2428	21.432	
1004	29.6	24	12	24	3.3642	23.004	8 POGIE BOATS IN SIGHT
1005	30.3	24	12	28	.	27.407	
1006	29.3	33	12	36	1.1214	28.415	7 POGIE BOATS SETTING BETWEEN 12 AND 13

1007	29.2	33	12	42	1.1214	28.826
1008	28.9	48	12	48	0.8010	30.470

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
1009	690	CB03	16216	16	16	1990	6	11	1227	28	43.03	91
1010	690	CB03	16217	17	17	1990	6	11	1236	28	41.00	91
1011	690	CB12	16318	18	18	1990	6	12	757	29	13.00	91
1012	690	CB12	16319	19	19	1990	6	12	820	29	11.00	91
1013	690	CB12	16320	20	20	1990	6	12	826	29	9.00	91
1014	690	CB12	16321	21	21	1990	6	12	835	29	6.94	91
1015	690	CB12	16322	22	22	1990	6	12	850	29	5.03	91
1016	690	CB12	16323	23	23	1990	6	12	901	29	3.03	91
1017	690	CB12	16324	24	24	1990	6	12	1007	29	1.04	91
1018	690	CB12	16325	25	25	1990	6	12	1015	28	58.81	91
1019	690	CB12	16326	26	26	1990	6	12	1021	28	57.90	91
1020	690	CB12	16327	27	27	1990	6	12	1027	28	55.12	91
1021	690	CB12	16328	28	28	1990	6	12	1035	28	53.10	91
1022	690	CB12	16329	29	29	1990	6	12	1043	28	50.96	91
1023	690	CB12	16330	30	30	1990	6	12	1050	28	49.00	91
1024	690	CB12	16331	31	31	1990	6	12	1056	28	47.04	91
1025	690	CB12	16332	32	32	1990	6	12	1102	28	45.03	91
1026	690	CB12	16333	33	33	1990	6	12	1110	28	43.03	91

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE		SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1009	15.03	28.8	47	12	55	.	31.340		
1010	15.00	28.3	52	12	60	.	33.728		
1011	15.00	29.4	.	12	9	53.2665	7.936		1 POGY BOAT
1012	15.00	26.6	.	12	12	35.3241	7.595		2 SHRIMPERS
1013	15.00	30.7	.	15	14	31.3992	6.785		
1014	15.00	.	.	15	15	26.9136	10.848		
1015	15.01	.	.	15	16	16.8210	14.200		
1016	15.03	.	.	12	15	11.7747	15.138		
1017	15.00	.	.	12	15	4.8060	16.647		
1018	15.01	.	.	12	15	5.6070	17.237		
1019	15.04	.	.	12	20	4.0050	18.064		
1020	15.02	.	.	12	22	4.8060	18.214		
1021	15.03	.	.	12	24	5.6070	18.795		
1022	15.03	.	.	12	28	1.6020	21.662		
1023	15.10	.	.	8	36	1.6821	26.785		
1024	15.06	.	.	7	42	0.8010	29.823		1 POGIE 1 SHRIMP

1025	15.02	.	.	7	48	.	29.572
1026	15.03	.	.	5	55	.	30.678

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
1027	690	CB12	16334	34	34	1990	6	12	1120	28	41.00	91
1028	690	CB03	16435	35	35	1990	6	13	830	29	13.00	91
1029	690	CB03	16436	36	36	1990	6	13	845	29	11.00	91
1030	690	CB03	16437	37	37	1990	6	13	858	29	9.03	91
1031	690	CB03	16438	38	38	1990	6	13	922	29	7.27	91
1032	690	CB12	16539	39	39	1990	6	14	821	29	13.00	91
1033	690	CB12	16540	40	40	1990	6	14	835	29	11.00	91
1034	690	CB12	16541	41	41	1990	6	14	851	29	9.00	91
1035	690	CB12	16542	42	42	1990	6	14	902	29	6.94	91
1036	690	CB12	16543	43	43	1990	6	14	914	29	5.03	91
1037	690	CB12	16544	44	44	1990	6	14	928	29	3.03	91
1038	690	CB12	16545	45	45	1990	6	14	930	29	1.01	91
1039	690	CB12	16546	46	46	1990	6	14	941	28	59.00	91
1040	690	CB12	16547	47	47	1990	6	14	949	28	57.00	91
1041	690	CB12	16548	48	48	1990	6	14	958	28	55.02	91
1042	690	CB12	16549	49	49	1990	6	14	1005	28	53.06	91
1043	690	CB12	16550	50	50	1990	6	14	1014	28	51.00	91
1044	690	CB12	16551	51	51	1990	6	14	1023	28	49.01	91

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1027	15.00	.	6	60	.	32.054		
1028	15.00	1	12	9	35.8848	7.980		5 POGIE BOATS SEEN
1029	15.04	1	12	12	.	7.359		STEAMING WEST AT 911500
1030	15.03	1	8	14	14.0175	10.419		
1031	15.11	3	15	15	31.3992	15.221		
1032	15.00	1	21	9	41.4918	8.346		12 SHRIMP BOATS
1033	15.00	2	21	12	40.9311	14.021		
1034	15.00	3	12	14	21.3066	16.782		
1035	15.00	3	14	15	8.9712	17.665		2 SHRIMP
1036	15.01	5	14	6	6.7284	15.644		
1037	15.03	7	15	15	5.0463	17.116		
1038	15.00	9	14	15	4.0050	19.613		
1039	15.01	10	12	15	4.8060	22.533		
1040	15.02	16	12	20	1.6020	24.427		
1041	15.00	19	12	22	.	24.769		
1042	15.06	15	12	24	2.4030	26.259		

1043	15.00	.	15	12	28	3.2040	16.882
1044	15.03	.	27	12	36	.	28.753

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
1045	690	CB12	16552	52	52	1990	6	14	1032	28	47.00	91
1046	690	CB12	16553	53	53	1990	6	14	1044	28	45.03	91
1047	690	CB12	16554	54	54	1990	6	14	1053	28	43.00	91
1048	690	CB12	16555	55	55	1990	6	14	1103	28	41.06	91
1049	690	CB03	16656	56	56	1990	6	15	915	29	13.01	91
1050	690	CB03	16657	57	57	1990	6	15	925	29	11.02	91
1051	690	CB03	16658	58	58	1990	6	15	935	29	9.04	91
1052	690	CB03	16659	59	59	1990	6	15	949	29	6.96	91
1053	690	CB03	16660	60	60	1990	6	15	959	29	5.00	91
1054	690	CB03	16661	61	61	1990	6	15	1010	29	3.02	91
1055	690	CB03	16762	62	62	1990	6	16	805	29	13.00	91
1056	690	CB03	16763	63	63	1990	6	16	816	29	11.00	91
1057	690	CB03	16764	64	64	1990	6	16	826	29	9.00	91
1058	690	CB03	16765	65	65	1990	6	16	838	29	6.84	91
1059	690	CB03	16766	66	66	1990	6	16	846	29	5.03	91
1060	690	CB03	16767	67	67	1990	6	16	859	29	3.01	91
1061	690	CB03	16768	68	68	1990	6	16	910	29	1.00	91
1062	690	CB03	16769	69	69	1990	6	16	920	28	59.00	91

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1045	15.00	.	27	12	42	.	29.208	
1046	15.04	.	30	12	48	.	32.915	
1047	15.00	.	34	12	55	.	29.144	
1048	15.00	.	30	12	60	.	29.944	
1049	15.00	29.5	1	12	9	24.1101	9.947	1 POGIE BOAT
1050	15.02	30.1	1	12	12	18.5031	13.752	
1051	15.03	29.9	1	12	14	13.4568	16.923	HAD TO WAIT FOR STORM TO PASS
1052	14.99	29.6	2	12	16	16.2603	16.564	WIND S
1053	15.00	30.0	3	12	15	12.3354	17.391	
1054	15.00	30.0	1	12	15	9.5319	18.590	
1055	15.00	29.6	1	12	9	.	7.302	
1056	15.00	29.6	1	12	12	35.8848	13.878	
1057	15.00	29.6	1	12	14	18.5031	22.349	
1058	15.01	29.6	3	12	15	.	17.876	
1059	15.02	29.7	3	12	16	7.8498	15.613	
1060	15.01	29.5	5	12	15	8.4105	16.944	

1061	15.00	29.7	7	12	15	5.6070	19.681
1062	15.04	29.6	8	15	15	5.6070	22.311

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
1063	690	CB03	16770	70	70	1990	6	16	932	28	57.90	91
1064	690	CB03	16771	71	71	1990	6	16	945	28	55.14	91
1065	690	CB03	16772	72	72	1990	6	16	1000	28	53.01	91
1066	690	CB03	16773	73	73	1990	6	16	1010	28	50.95	91
1067	690	CB03	16774	74	74	1990	6	16	1023	28	49.00	91
1068	690	CB03	16775	75	75	1990	6	16	1035	28	47.02	91
1069	690	CB03	16776	76	76	1990	6	16	1042	28	45.03	91
1070	690	CB03	16777	77	77	1990	6	16	1051	28	43.03	91
1071	690	CB03	16778	78	78	1990	6	16	1102	28	41.00	91
1072	690	CB01	16201	1	1	1990	6	11	740	29	3.06	90
1073	690	CB01	16202	2	2	1990	6	11	750	29	0.93	90
1074	690	CB01	16203	3	3	1990	6	11	800	28	58.91	90
1075	690	CB01	16204	4	4	1990	6	11	810	28	56.94	90
1076	690	CB01	16205	5	5	1990	6	11	820	28	54.96	90
1077	690	CB01	16206	6	6	1990	6	11	830	28	52.98	90
1078	690	CB01	16207	7	7	1990	6	11	840	28	50.99	90
1079	690	CB01	16208	8	8	1990	6	11	850	28	48.99	90
1080	690	CB01	16209	9	9	1990	6	11	900	28	47.03	90

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1063	15.06	29.6	10	15	20	2.2428	24.304	
1064	15.02	29.8	14	15	22	2.2428	24.154	
1065	15.00	29.7	14	12	24	2.8035	26.552	
1066	15.03	30.0	14	12	28	2.8035	27.205	
1067	15.00	30.0	22	12	36	2.2428	28.951	
1068	15.03	29.7	25	12	42	.	28.877	
1069	15.03	29.6	25	12	48	.	29.317	
1070	15.02	29.6	30	12	55	.	0.114	
1071	15.00	29.4	30	12	60	.	29.968	
1072	40.01	29.5	4	4	12	6.1677	21.280	35 SHRIMPERS IN SIGHT
1073	40.00	29.2	12	6	25	8.0100	20.656	
1074	40.02	29.2	20	3	31	7.2090	21.016	
1075	40.02	28.7	22	6	25	7.2090	21.038	
1076	40.00	27.9	29	3	46	.	27.488	
1077	40.02	27.9	49	3	48	.	28.505	
1078	39.95	27.0	57	3	57	.	27.213	SCHOOLS OF FISH

1079	40.01	28.0	60	3	60	.	26.941
1080	40.03	28.2	59	3	61	.	25.844

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
1081	690	CB01	16210	10	10	1990	6	11	908	28	45.03	90
1082	690	CB01	16211	11	11	1990	6	11	917	28	43.02	90
1083	690	CB01	16212	12	12	1990	6	11	927	28	41.05	90
1084	690	CB01	16213	13	13	1990	6	11	935	28	39.06	90
1085	690	CB01	16214	14	14	1990	6	11	945	28	37.00	90
1086	690	CB01	16215	15	15	1990	6	11	955	28	35.02	90
1087	690	CB08	16316	16	16	1990	6	12	705	29	3.46	90
1088	690	CB08	16317	17	17	1990	6	12	720	29	0.78	90
1089	690	CB08	16318	18	18	1990	6	12	730	28	58.92	90
1090	690	CB08	16319	19	19	1990	6	12	740	28	57.00	90
1091	690	CB08	16320	20	20	1990	6	12	750	28	55.00	90
1092	690	CB08	16321	21	21	1990	6	12	800	28	53.01	90
1093	690	CB08	16322	22	22	1990	6	12	810	28	51.03	90
1094	690	CB08	16323	23	23	1990	6	12	823	28	49.04	90
1095	690	CB08	16324	24	24	1990	6	12	838	28	47.00	90
1096	690	CB08	16325	25	25	1990	6	12	845	28	45.03	90
1097	690	CB08	16326	26	26	1990	6	12	852	28	42.05	90
1098	690	CB08	16327	27	27	1990	6	12	900	28	41.03	90

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1081	40.01	28.1	57	3	57	.	25.422	
1082	40.02	28.7	56	3	56	3.9249	25.364	
1083	40.03	28.0	55	3	54	1.6020	25.416	
1084	40.01	27.9	60	3	60	.	25.105	
1085	40.00	28.0	49	3	60	1.6020	24.597	
1086	40.00	28.2	41	3	67	1.1214	24.785	
1087	40.00	30.0	5	5	10	8.9712	21.094	10 SHRIMP BOATS
1088	40.00	29.7	11	6	25	14.5782	21.289	MACKERAL ON WATER
1089	40.00	29.4	15	6	30	4.4856	20.373	
1090	40.00	29.3	22	6	35	6.7284	20.306	
1091	40.00	29.0	25	6	35	3.2040	22.300	
1092	40.00	28.5	53	3	47	.	31.172	
1093	40.00	28.4	60	3	57	.	31.171	
1094	40.00	29.1	41	3	60	0.8010	26.048	
1095	40.00	28.7	47	3	61	1.6020	24.578	
1096	40.02	28.7	45	3	56	0.8010	24.161	

1097	40.00	28.8	40	3	56	1.6020	23.799
1098	40.00	28.7	45	3	54	2.8035	23.426

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
1099	690	CB08	16328	28	28	1990	6	12	907	28	43.90	90
1100	690	CB08	16329	29	29	1990	6	12	915	28	37.02	90
1101	690	CB08	16330	30	30	1990	6	12	925	28	35.03	90
1102	690	CB01	16431	31	31	1990	6	13	735	29	2.93	90
1103	690	CB01	16432	32	32	1990	6	13	750	29	1.01	90
1104	690	CB01	16433	33	33	1990	6	13	800	28	58.97	90
1105	690	CB01	16434	34	34	1990	6	13	810	28	56.98	90
1106	690	CB01	16435	35	35	1990	6	13	820	28	55.00	90
1107	690	CB01	16436	36	36	1990	6	13	830	28	52.92	90
1108	690	CB01	16437	37	37	1990	6	13	840	28	51.02	90
1109	690	CB01	16438	38	38	1990	6	13	850	28	49.01	90
1110	690	CB01	16439	39	39	1990	6	13	900	28	46.99	90
1111	690	CB01	16440	40	40	1990	6	13	908	28	44.99	90
1112	690	CB01	16441	41	41	1990	6	13	916	28	42.99	90
1113	690	CB01	16442	42	42	1990	6	13	925	28	40.97	90
1114	690	CB01	16443	43	43	1990	6	13	935	28	38.99	90
1115	690	CB01	16444	44	44	1990	6	13	943	28	37.01	90
1116	690	CB01	16445	45	45	1990	6	13	952	28	35.01	90

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1099	40.04	29.0	30	3	59	4.8060	22.083	
1100	40.03	29.0	25	3	60	6.7284	20.956	
1101	40.01	28.9	16	3	66	11.2140	20.245	
1102	40.02	30.0	7	5	12	15.1389	21.802	
1103	40.01	29.9	12	8	24	5.6070	22.256	
1104	40.02	29.5	22	3	30	.	21.914	
1105	40.01	29.1	29	3	36	2.4030	23.825	
1106	40.02	29.1	24	3	24	1.6821	24.112	
1107	40.00	29.0	25	3	47	1.6821	30.513	CROSSED RIP AND TISK LINE
1108	39.99	28.6	18	6	56	5.6070	23.088	WATER SPOUT 3 MILES WEST OF US
1109	39.98	28.8	15	4	60	6.1677	21.984	
1110	40.03	28.8	15	5	61	7.2891	21.703	
1111	40.01	28.8	11	4	57	6.1677	21.551	
1112	39.97	28.6	9	6	56	10.0926	20.835	
1113	40.00	28.7	9	6	54	8.9712	20.135	
1114	40.01	28.7	9	6	59	9.5319	20.172	

1115	40.02	28.7	10	8	60	11.2140	20.519
1116	40.01	28.7	10	5	67	8.9712	22.035

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
1117	690	CB02	16546	46	46	1990	6	14	722	29	2.96	90
1118	690	CB02	16547	47	47	1990	6	14	746	29	1.08	90
1119	690	CB02	16548	48	48	1990	6	14	754	28	59.00	90
1120	690	CB02	16549	49	49	1990	6	14	804	28	57.00	90
1121	690	CB02	16550	50	50	1990	6	14	813	28	54.99	90
1122	690	CB02	16551	51	51	1990	6	14	823	28	53.00	90
1123	690	CB02	16552	52	52	1990	6	14	833	28	51.00	90
1124	690	CB02	16553	53	53	1990	6	14	842	28	48.98	90
1125	690	CB02	16554	54	54	1990	6	14	853	28	47.00	90
1126	690	CB02	16555	55	55	1990	6	14	902	28	45.00	90
1127	690	CB02	16556	56	56	1990	6	14	911	28	42.99	90
1128	690	CB02	16557	57	57	1990	6	14	920	28	40.98	90
1129	690	CB02	16558	58	58	1990	6	14	928	28	38.97	90
1130	690	CB02	16559	59	59	1990	6	14	938	28	36.98	90
1131	690	CB02	16560	60	60	1990	6	14	947	28	34.98	90
1132	690	CB02	16661	61	61	1990	6	15	722	29	3.05	90
1133	690	CB02	16662	62	62	1990	6	15	735	29	1.01	90
1134	690	CB02	16663	63	63	1990	6	15	745	28	59.01	90

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1117	39.86	30.1	5	10	12	24.6708	21.502	12 SHRIMP BOATS
1118	39.89	30.2	12	5	23	10.6533	22.696	
1119	39.97	29.5	10	5	30	27.4743	22.907	
1120	39.93	29.1	34	3	34	.	24.890	SMALL RIP TIDE
1121	40.04	28.5	15	6	26	5.6070	22.737	SAMPLE JUST SOUTH OF SMALL RIP
1122	40.00	28.5	8	7	46	12.8961	18.638	
1123	40.01	28.5	6	7	56	17.9424	16.797	
1124	39.38	28.6	6	7	61	18.5031	16.618	
1125	39.98	28.9	6	7	61	21.8673	16.371	
1126	40.04	28.7	6	7	57	17.9424	16.173	
1127	39.98	28.7	6	7	55	19.0638	16.532	
1128	39.90	28.4	6	7	55	15.6996	17.472	
1129	40.04	28.5	7	7	59	10.4130	19.791	
1130	40.00	28.6	9	5	60	11.7747	21.486	
1131	40.03	29.0	21	6	67	5.6070	24.721	
1132	40.04	30.4	3	15	11	24.6708	22.084	28 SHRIMP BOATS

1133	40.01	30.4	6	4	24	17.9424	22.483
1134	40.01	29.0	10	4	30	16.8210	23.539

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
1135	690	CB02	16664	64	64	1990	6	15	756	28	56.98	90
1136	690	CB02	16665	65	65	1990	6	15	806	28	54.97	90
1137	690	CB02	16666	66	66	1990	6	15	816	28	52.97	90
1138	690	CB02	16667	67	67	1990	6	15	826	28	50.95	90
1139	690	CB02	16668	68	68	1990	6	15	836	28	48.97	90
1140	690	CB02	16669	69	69	1990	6	15	845	28	46.98	90
1141	690	CB02	16670	70	70	1990	6	15	854	28	45.00	90
1142	690	CB02	16671	71	71	1990	6	15	903	28	43.00	90
1143	690	CB02	16672	72	72	1990	6	15	912	28	41.01	90
1144	690	CB02	16673	73	73	1990	6	15	921	28	39.07	90
1145	690	CB02	16674	74	74	1990	6	15	938	28	36.95	90
1146	690	CB02	16675	75	75	1990	6	15	948	28	34.98	90
1147	690	CB02	16776	76	76	1990	6	16	658	29	2.99	90
1148	690	CB02	16777	77	77	1990	6	16	710	29	1.00	90
1149	690	CB02	16778	78	78	1990	6	16	720	28	59.00	90
1150	690	CB02	16779	79	79	1990	6	16	731	28	57.00	90
1151	690	CB02	16780	80	80	1990	6	16	740	28	55.01	90
1152	690	CB02	16781	81	81	1990	6	16	751	28	53.00	90

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1135	40.00	28.7	11	4	35	7.2891	24.155	
1136	39.98	28.4	10	4	24	11.2140	22.662	
1137	39.94	28.4	11	4	48	9.5319	22.307	
1138	39.99	28.3	10	4	58	8.4105	21.700	
1139	39.99	28.3	11	4	61	9.5319	21.270	
1140	39.99	28.4	12	4	61	7.8498	21.208	
1141	40.02	28.4	14	4	57	8.9712	21.349	
1142	39.98	28.2	13	4	56	13.6170	21.863	
1143	39.96	28.5	13	4	55	8.9712	22.706	
1144	39.95	28.1	15	4	58	5.6070	23.715	HARD TAIL FISH ON SURFACE
1145	39.98	28.0	17	4	59	4.4856	25.333	
1146	39.97	28.4	20	4	66	4.8060	28.677	
1147	40.01	30.0	3	14	11	18.5031	21.847	SURROUNDED BY SHRIMP BOATS
1148	40.03	29.2	6	6	23	11.2140	22.454	
1149	40.03	28.9	11	4	30	7.8498	22.710	
1150	40.06	28.5	24	4	34	7.2090	23.485	

1151	39.98	28.5	21	4	24	7.2891	22.986
1152	40.01	28.4	18	4	46	8.4105	22.346

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
1153	690	CB02	16782	82	82	1990	6	16	801	28	51.00	90
1154	690	CB02	16783	83	83	1990	6	16	810	28	49.05	90
1155	690	CB02	16784	84	84	1990	6	16	819	28	47.03	90
1156	690	CB02	16785	85	85	1990	6	16	828	28	45.00	90
1157	690	CB02	16786	86	86	1990	6	16	836	28	43.01	90
1158	690	CB02	16787	87	87	1990	6	16	846	28	41.01	90
1159	690	CB02	16788	88	88	1990	6	16	855	28	38.99	90
1160	690	CB02	16789	89	89	1990	6	16	903	28	36.96	90
1161	690	CB02	16790	90	90	1990	6	16	912	28	35.10	90
1162	690	CB09	16201	1	1	1990	6	11	800	29	10.00	90
1163	690	CB09	16202	2	2	1990	6	11	820	29	8.00	90
1164	690	CB09	16203	3	3	1990	6	11	835	29	6.00	90
1165	690	CB09	16204	4	4	1990	6	11	840	29	4.00	90
1166	690	CB09	16205	5	5	1990	6	11	850	29	2.00	90
1167	690	CB09	16206	6	6	1990	6	11	903	29	0.00	90
1168	690	CB09	16207	7	7	1990	6	11	931	28	55.00	90
1169	690	CB09	16208	8	8	1990	6	11	1002	28	50.00	90
1170	690	CB09	16209	9	9	1990	6	11	1030	28	45.00	90

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1153	40.00	28.4	19	4	56	6.7284	22.137	
1154	40.00	28.7	18	4	61	7.8498	22.445	
1155	40.02	28.5	19	4	61	7.8498	21.555	
1156	39.98	28.5	18	4	56	5.6070	22.122	
1157	39.98	28.6	17	4	57	6.7284	22.958	
1158	39.98	28.8	14	4	55	4.4856	23.388	
1159	39.97	29.2	14	4	58	5.0463	24.570	
1160	39.95	28.8	17	4	60	5.6070	24.893	
1161	40.01	28.2	22	4	66	4.4856	26.239	
1162	3.00	29.0	3	17	6	21.8673	12.850	8 SHRIMP BOATS
1163	3.00	29.0	4	15	12	10.6533	12.663	2 SHRIMP BOATS
1164	3.00	28.5	12	17	30	13.4568	15.192	RIGGS
1165	3.00	28.3	13	15	42	6.4080	20.295	RIGGS
1166	3.00	28.3	14	15	48	8.4105	18.871	FISH BOAT
1167	3.00	29.0	12	14	60	5.6070	19.655	RIGGS
1168	3.00	28.3	25	12	84	4.4856	23.047	SUPER PORT TANKERS

1169	3.00	28.8	5	12	-1	15.6996	19.532	SHRIMP BOAT
1170	3.00	28.5	4	16	-1	15.1389	15.199	1 RIG

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
1171	690	CB09	16210	10	10	1990	6	11	1100	28	40	90
1172	690	CB09	16211	11	11	1990	6	11	1131	28	35	90
1173	690	CB09	16212	12	12	1990	6	11	1200	28	30	90
1174	690	CB09	16213	13	13	1990	6	11	1230	28	25	90
1175	690	CB09	16214	14	14	1990	6	11	1300	28	20	90
1176	690	CB09	16215	15	15	1990	6	11	1331	28	15	90
1177	690	CB09	16316	16	16	1990	6	12	745	29	10	90
1178	690	CB09	16317	17	17	1990	6	12	800	29	8	90
1179	690	CB09	16318	18	18	1990	6	12	810	29	6	90
1180	690	CB09	16319	19	19	1990	6	12	820	29	4	90
1181	690	CB09	16320	20	20	1990	6	12	829	29	2	90
1182	690	CB09	16321	21	21	1990	6	12	838	29	0	90
1183	690	CB09	16322	22	22	1990	6	12	902	28	55	90
1184	690	CB09	16323	23	23	1990	6	12	924	28	50	90
1185	690	CB09	16324	24	24	1990	6	12	946	28	45	90
1186	690	CB09	16325	25	25	1990	6	12	1006	28	40	90
1187	690	CB09	16326	26	26	1990	6	12	1030	28	35	90
1188	690	CB09	16327	27	27	1990	6	12	1052	28	30	90

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1171	3	29.0	3	15	-1	34.2027	13.363	3 RIGS
1172	3	29.5	4	16	-1	13.4568	12.431	2 SHIPS 1 RIG
1173	3	29.8	5	12	-1	1.1214	17.939	1 RIG
1174	3	30.0	29	6	-1	8.4105	29.483	1 RIG
1175	3	30.0	52	3	-1	.	32.589	BLUE WATER
1176	3	30.0	60	2	-1	.	32.842	BLUE WATER
1177	3	29.0	4	15	6	20.1852	17.179	SHRIMP BOAT
1178	3	29.2	5	13	12	28.0350	16.894	RIGGS
1179	3	29.3	10	15	30	16.2603	16.856	SHRIMP BOAT
1180	3	29.5	12	14	42	16.2603	17.121	RIGGS
1181	3	29.0	12	14	48	25.7922	16.942	RIGGS
1182	3	28.8	11	13	60	17.9424	16.834	GRASS FOAM
1183	3	29.1	16	12	84	5.6070	21.839	SUPER PORT TANKERS
1184	3	28.9	12	15	-1	3.3642	21.387	TANKERS
1185	3	28.9	5	15	-1	17.3817	16.594	RIG 1/4 MILE
1186	3	29.0	4	17	-1	35.3241	14.316	SHRIMP BOAT

1187	3	29.2	5	15	-1	14.5782	14.391	RIG
1188	3	29.5	4	17	-1	16.8210	13.639	F/RIG

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
1189	690	CB09	16328	28	28	1990	6	12	1110	28	25	90
1190	690	CB09	16329	29	29	1990	6	12	1130	28	20	90
1191	690	CB09	16330	30	30	1990	6	12	1151	28	15	90
1192	690	CB09	16431	31	31	1990	6	13	819	29	10	90
1193	690	CB09	16432	32	32	1990	6	13	830	29	8	90
1194	690	CB09	16433	33	33	1990	6	13	841	29	6	90
1195	690	CB09	16434	34	34	1990	6	13	851	29	4	90
1196	690	CB09	16435	35	35	1990	6	13	901	29	2	90
1197	690	CB09	16436	36	36	1990	6	13	912	29	0	90
1198	690	CB09	16437	37	37	1990	6	13	930	28	55	90
1199	690	CB09	16438	38	38	1990	6	13	949	28	50	90
1200	690	CB09	16439	39	39	1990	6	13	1018	28	45	90
1201	690	CB09	16440	40	40	1990	6	13	1039	28	40	90
1202	690	CB09	16441	41	41	1990	6	13	1102	28	35	90
1203	690	CB09	16442	42	42	1990	6	13	1122	28	30	90
1204	690	CB09	16443	43	43	1990	6	13	1146	28	25	90
1205	690	CB09	16444	44	44	1990	6	13	1205	28	20	90
1206	690	CB09	16445	45	45	1990	6	13	1230	28	15	90

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1189	3	28.5	3	17	-1	11.7747	11.736	F/RIG
1190	3	30.0	3	17	-1	24.6708	10.776	F/RIG
1191	3	28.5	2	17	-1	42.0525	9.433	F/RIG
1192	3	30.2	6	15	6	17.3817	19.171	1 SHRIMP BOAT
1193	3	29.5	9	15	12	.	19.354	1 RIG
1194	3	29.5	10	12	30	5.6070	19.501	RIGGS
1195	3	29.5	8	15	42	5.0463	20.321	RIGGS
1196	3	29.8	6	15	48	5.6070	20.234	SHRIMP BOAT
1197	3	29.8	6	15	60	9.5319	19.928	RIGGS
1198	3	29.0	11	15	84	4.4856	20.935	SUPER PORT TANKERS
1199	3	29.5	14	12	-1	3.2040	22.960	SHRIMP BOAT
1200	3	29.4	6	15	-1	12.8961	15.867	RIG
1201	3	29.6	6	16	-1	10.6533	15.065	RIGGS
1202	3	30.1	8	15	-1	6.7284	16.239	1 SHIP
1203	3	29.5	8	12	-1	6.7284	17.774	1 RIG
1204	3	30.1	6	15	-1	14.5782	16.640	1 RIG

1205	3	29.8	4	14	-1	19.0638	14.601	F/RIG
1206	3	29.2	6	15	-1	30.2778	20.786	F/RIG

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	TIME DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
1207	690	CB09	16546	46	46	1990	6	14	730	29	10
1208	690	CB09	16547	47	47	1990	6	14	742	29	8
1209	690	CB09	16548	48	48	1990	6	14	756	29	6
1210	690	CB09	16549	49	49	1990	6	14	807	29	4
1211	690	CB09	16550	50	50	1990	6	14	817	29	2
1212	690	CB09	16551	51	51	1990	6	14	828	29	0
1213	690	CB09	16552	52	52	1990	6	14	852	28	55
1214	690	CB09	16553	53	53	1990	6	14	913	28	50
1215	690	CB09	16554	54	54	1990	6	14	935	28	45
1216	690	CB09	16555	55	55	1990	6	14	958	28	40
1217	690	CB09	16556	56	56	1990	6	14	1023	28	35
1218	690	CB09	16557	57	57	1990	6	14	1044	28	30
1219	690	CB09	16558	58	58	1990	6	14	1112	28	25
1220	690	CB09	16559	59	59	1990	6	14	1132	28	20
1221	690	CB09	16560	60	60	1990	6	14	1153	28	15
1222	690	CB09	16661	61	61	1990	6	15	742	29	10
1223	690	CB09	16662	62	62	1990	6	15	755	29	8
1224	690	CB09	16663	63	63	1990	6	15	805	29	6

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1207	90	3	30.1	4	17	6	23.5494	15.512	SHRIMP BOAT
1208	90	3	30.1	5	16	12	22.9887	15.598	OIL BOAT
1209	90	3	29.5	6	12	30	5.6070	19.651	RIGGS
1210	90	3	29.1	12	12	42	5.0463	21.057	RIGGS
1211	90	3	29.2	16	12	48	6.7284	0.086	SPORT BOAT
1212	90	3	29.1	13	12	60	7.2891	22.619	RIGGS
1213	90	3	29.1	27	8	84	1.1214	24.841	SUPER PORT
1214	90	3	29.8	6	14	-1	15.1389	0.075	4 SHRIMP BOAT
1215	90	3	29.9	5	17	-1	17.3817	15.481	1 RIG
1216	90	3	29.5	9	15	-1	7.8498	16.905	3 RIGS
1217	90	3	29.1	10	15	-1	9.5319	16.827	RIG
1218	90	3	29.4	6	17	-1	23.5494	16.233	RIG
1219	90	3	29.0	6	16	-1	43.1739	15.318	RIG
1220	90	3	29.0	4	17	-1	40.3704	15.393	F/RIG
1221	90	3	29.0	4	17	-1	44.8560	15.407	F/RIG
1222	90	3	29.5	2	15	6	44.2953	8.633	

1223	90	3	29.7	2	17	12	45.9774	9.095
1224	90	3	29.4	4	15	30	31.9922	9.208

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
1225	690	CB09	16664	64	64	1990	6	15	815	29	4
1226	690	CB09	16665	65	65	1990	6	15	822	29	2
1227	690	CB09	16666	66	66	1990	6	15	830	29	0
1228	690	CB09	16667	67	67	1990	6	15	850	28	55
1229	690	CB09	16668	68	68	1990	6	15	910	28	50
1230	690	CB09	16669	69	69	1990	6	15	933	28	45
1231	690	CB09	16670	70	70	1990	6	15	956	28	40
1232	690	CB09	16671	71	71	1990	6	15	1021	28	35
1233	690	CB09	16672	72	72	1990	6	15	1045	28	30
1234	690	CB09	16673	73	73	1990	6	15	1102	28	25
1235	690	CB09	16674	74	74	1990	6	15	1125	28	20
1236	690	CB09	16675	75	75	1990	6	15	1147	28	15
1237	690	CB09	16776	76	76	1990	6	16	745	29	10
1238	690	CB09	16777	77	77	1990	6	16	756	29	8
1239	690	CB09	16778	78	78	1990	6	16	804	29	6
1240	690	CB09	16779	79	79	1990	6	16	814	29	4
1241	690	CB09	16780	80	80	1990	6	16	821	29	2
1242	690	CB09	16781	81	81	1990	6	16	831	29	0

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1225	90	3.0	28.6	5	15	42	6.9136	11.363	
1226	90	3.0	28.8	11	12	48	12.3354	16.624	
1227	90	3.0	28.6	7	17	60	11.7747	19.051	
1228	90	3.0	29.5	6	15	84	9.5319	18.049	
1229	90	3.0	29.9	6	15	-1	12.3354	17.367	
1230	90	3.0	29.5	7	15	-1	7.2891	17.284	
1231	90	3.0	29.9	6	15	-1	7.2891	17.292	
1232	90	3.0	30.0	7	15	-1	6.1677	17.166	
1233	90	3.0	29.4	10	12	-1	5.6070	17.125	
1234	90	3.0	29.8	7	15	-1	7.8498	18.732	
1235	90	3.0	30.0	9	17	-1	6.1677	18.700	
1236	90	3.0	29.4	5	17	-1	11.2140	18.713	
1237	90	3.0	29.7	4	17	6	46.5381	8.680	
1238	90	3.0	29.8	3	15	12	.	9.047	
1239	90	3.0	29.5	5	15	30	30.8385	9.172	
1240	90	3.0	28.9	5	17	42	22.9887	11.385	

1241	90	3.0	28.6	10	14	48	7.2891	16.586
1242	90	3.0	28.5	8	15	60	12.3354	19.007

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
1243	690	CB09	16782	82	82	1990	6	16	848	28	55
1244	690	CB09	16783	83	83	1990	6	16	908	28	50
1245	690	CB09	16784	84	84	1990	6	16	935	28	45
1246	690	CB09	16785	85	85	1990	6	16	958	28	40
1247	690	CB09	16786	86	86	1990	6	16	1024	28	35
1248	690	CB09	16787	87	87	1990	6	16	1047	28	30
1249	690	CB09	16788	88	88	1990	6	16	1105	28	25
1250	690	CB09	16789	89	89	1990	6	16	1127	28	20
1251	690	CB09	16790	90	90	1990	6	16	1150	28	15
1252	690	CB11	16201	1	1	1990	6	11	845	29	15
1253	690	CB11	16202	2	2	1990	6	11	850	29	13
1254	690	CB11	16203	3	3	1990	6	11	910	29	11
1255	690	CB11	16204	4	4	1990	6	11	925	29	9
1256	690	CB11	16205	5	5	1990	6	11	935	29	7
1257	690	CB11	16206	6	6	1990	6	11	1000	29	2
1258	690	CB11	16207	7	7	1990	6	11	1025	28	57
1259	690	CB11	16208	8	8	1990	6	11	1050	28	52
1260	690	CB11	16209	9	9	1990	6	11	1115	28	47

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1243	90	3.0	29.2	7	15	84	7.2891	18.012	
1244	90	3.0	29.5	7	15	-1	8.9712	17.407	
1245	90	3.0	29.7	6	17	-1	7.8498	17.309	
1246	90	3.0	30.0	8	15	-1	4.8060	17.354	
1247	90	3.0	30.3	10	12	-1	2.4030	17.125	
1248	90	3.0	29.8	8	15	-1	6.1677	18.719	
1249	90	3.0	29.6	10	15	-1	7.8498	18.753	
1250	90	3.0	29.4	14	12	-1	6.1677	18.754	
1251	90	3.0	29.0	12	12	-1	.	18.383	
1252	89	57.0	30.0	2	16	10	21.3066	13.830	
1253	89	56.0	30.0	3	18	28	.	11.792	
1254	89	55.5	30.0	3	14	43	16.8210	11.371	
1255	89	55.0	29.0	4	15	55	21.8673	12.424	
1256	89	54.5	29.0	14	12	65	11.7747	14.795	
1257	89	52.5	30.0	16	12	97	3.3642	17.564	
1258	89	51.5	29.0	17	14	-1	3.9249	16.763	

1259	89	49.5	30.0	18	12	-1	2.2428	16.717
1260	89	48.0	29.0	18	12	-1	2.8035	16.865

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
1261	690	CB11	16210	10	10	1990	6	11	1135	28	42
1262	690	CB11	16211	11	11	1990	6	11	1200	28	37
1263	690	CB11	16212	12	12	1990	6	11	1225	28	32
1264	690	CB11	16213	13	13	1990	6	11	1247	28	27
1265	690	CB11	16214	14	14	1990	6	11	1310	28	22
1266	690	CB11	16215	15	15	1990	6	11	1330	28	17
1267	690	CB11	16316	16	16	1990	6	12	830	29	15
1268	690	CB11	16317	17	17	1990	6	12	845	29	13
1269	690	CB11	16318	18	18	1990	6	12	855	29	11
1270	690	CB11	16319	19	19	1990	6	12	910	29	9
1271	690	CB11	16320	20	20	1990	6	12	925	29	7
1272	690	CB11	16321	21	21	1990	6	12	950	29	2
1273	690	CB11	16322	22	22	1990	6	12	1015	28	57
1274	690	CB11	16323	23	23	1990	6	12	1040	28	52
1275	690	CB11	16324	24	24	1990	6	12	1105	28	47
1276	690	CB11	16325	25	25	1990	6	12	1125	28	42
1277	690	CB11	16326	26	26	1990	6	12	1150	28	37
1278	690	CB11	16327	27	27	1990	6	12	1215	28	32

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1261	89	46.5	30.0	12	14	-1	6.7284	16.730	
1262	89	45.0	30.0	2	18	-1	10.6533	15.435	
1263	89	43.5	30.0	3	16	-1	3.9249	10.945	
1264	89	42.0	31.0	3	17	-1	5.6070	9.053	
1265	89	40.5	32.0	2	19	-1	68.0850	8.205	
1266	89	39.0	31.0	10	16	-1	17.9424	15.399	
1267	89	57.0	30.0	4	15	10	31.9599	16.079	
1268	89	56.0	30.0	4	14	28	29.7171	13.928	
1269	89	55.5	30.0	4	12	43	24.6708	12.821	
1270	89	55.0	29.0	7	14	55	34.7634	13.979	
1271	89	54.5	29.0	6	16	65	21.3066	14.978	
1272	89	52.5	29.0	9	17	97	11.7747	17.061	
1273	89	51.5	29.0	10	16	-1	6.1677	16.081	
1274	89	49.5	29.0	12	14	-1	7.8498	15.315	
1275	89	48.0	29.0	18	15	-1	4.4856	15.622	
1276	89	46.5	30.0	18	14	-1	3.9249	17.313	

1277	89	45.0	30.0	18	12	-1	3.2040	17.377
1278	89	43.5	30.0	6	16	-1	5.6070	16.133

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
1279	690	CB11	16328	28	28	1990	6	12	1235	28	27
1280	690	CB11	16329	29	29	1990	6	12	1300	28	22
1281	690	CB11	16330	30	30	1990	6	12	1320	28	17
1282	690	CB11	16431	31	31	1990	6	13	830	29	15
1283	690	CB11	16432	32	32	1990	6	13	845	29	13
1284	690	CB11	16433	33	33	1990	6	13	855	29	11
1285	690	CB11	16434	34	34	1990	6	13	905	29	9
1286	690	CB11	16435	35	35	1990	6	13	915	29	7
1287	690	CB11	16436	36	36	1990	6	13	940	29	2
1288	690	CB11	16437	37	37	1990	6	13	1005	28	57
1289	690	CB11	16438	38	38	1990	6	13	1030	28	52
1290	690	CB11	16439	39	39	1990	6	13	1055	28	47
1291	690	CB11	16440	40	40	1990	6	13	1120	28	42
1292	690	CB11	16441	41	41	1990	6	13	1140	28	37
1293	690	CB11	16442	42	42	1990	6	13	1205	28	32
1294	690	CB11	16443	43	43	1990	6	13	1225	28	27
1295	690	CB11	16444	44	44	1990	6	13	1250	28	22
1296	690	CB11	16445	45	45	1990	6	13	1310	28	17

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1279	89	42.0	30.0	3	15	-1	22.9887	12.917	
1280	89	40.5	31.0	3	17	-1	29.7171	11.476	
1281	89	39.0	32.0	3	16	-1	0.1852	11.149	
1282	89	57.0	30.0	3	15	10	27.4743	14.077	4 SHRIMPERS
1283	89	56.0	30.0	6	15	28	8.9712	15.697	3 SHRIMPERS
1284	89	55.5	29.0	11	12	43	5.6070	18.744	
1285	89	55.0	29.0	19	16	55	5.0463	20.571	
1286	89	54.5	30.0	25	12	65	1.6821	22.950	
1287	89	52.5	30.0	24	12	97	3.2040	21.854	
1288	89	51.5	30.0	17	5	-1	.	21.899	
1289	89	49.5	29.0	7	17	-1	14.5782	15.084	
1290	89	48.0	29.0	11	12	-1	9.5319	15.076	
1291	89	46.5	30.0	11	15	-1	5.0463	16.701	
1292	89	45.0	30.0	13	15	-1	3.9249	17.023	
1293	89	43.5	31.0	14	12	-1	5.0463	17.370	
1294	89	42.0	30.0	5	17	-1	17.9424	14.702	

1295	89	40.5	32.0	4	14	-1	17.9424	14.982
1296	89	39.0	31.0	7	12	-1	7.2891	20.461

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	TIME DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
1297	690	CB11	16546	46	46	1990	6	14	820	29	15
1298	690	CB11	16547	47	47	1990	6	14	845	29	13
1299	690	CB11	16548	48	48	1990	6	14	905	29	11
1300	690	CB11	16549	49	49	1990	6	14	925	29	9
1301	690	CB11	16550	50	50	1990	6	14	940	29	7
1302	690	CB11	16551	51	51	1990	6	14	1010	29	2
1303	690	CB11	16552	52	52	1990	6	14	1045	28	57
1304	690	CB11	16553	53	53	1990	6	14	1115	28	52
1305	690	CB11	16554	54	54	1990	6	14	1150	28	47
1306	690	CB11	16555	55	55	1990	6	14	1220	28	42
1307	690	CB11	16556	56	56	1990	6	14	1250	28	37
1308	690	CB11	16557	57	57	1990	6	14	1320	28	32
1309	690	CB11	16558	58	58	1990	6	14	1355	28	27
1310	690	CB11	16559	59	59	1990	6	14	1415	28	22
1311	690	CB11	16560	60	60	1990	6	14	1435	28	17
1312	690	CB11	16661	61	61	1990	6	15	810	29	15
1313	690	CB11	16662	62	62	1990	6	15	822	29	13
1314	690	CB11	16663	63	63	1990	6	15	832	29	11

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1297	89	57.0	30.5	2	15	10	32.5206	12.754	
1298	89	56.0	31.0	3	14	28	32.5206	12.827	
1299	89	55.5	29.5	6	16	43	17.3817	15.442	
1300	89	55.0	29.5	18	12	55	1.6821	22.181	
1301	89	54.5	29.5	18	15	65	2.4030	22.055	
1302	89	52.5	29.6	13	14	97	7.2090	21.008	
1303	89	51.5	29.5	17	14	-1	4.0050	21.706	
1304	89	49.5	29.8	8	14	-1	12.0150	16.123	
1305	89	48.0	29.4	10	15	-1	11.2140	16.404	
1306	89	46.5	29.6	6	15	-1	16.2603	15.555	
1307	89	45.0	29.3	3	16	-1	17.9424	12.894	
1308	89	43.5	29.4	4	15	-1	16.8210	13.884	
1309	89	42.0	29.0	5	16	-1	27.4743	16.373	
1310	89	40.5	29.3	6	16	-1	7.8498	18.480	
1311	89	39.0	29.7	7	15	-1	11.7747	22.057	
1312	89	57.0	29.5	3	16	10	31.9599	7.404	

1313	89	56.0	29.6	2	14	28	30.2778	6.497
1314	89	55.5	29.4	3	16	43	28.0350	12.363

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
1315	690	CB11	16664	64	64	1990	6	15	843	29	9.00
1316	690	CB11	16665	65	65	1990	6	15	853	29	7.00
1317	690	CB11	16666	66	66	1990	6	15	917	29	2.00
1318	690	CB11	16667	67	67	1990	6	15	940	28	57.00
1319	690	CB11	16668	68	68	1990	6	15	1003	28	52.00
1320	690	CB11	16669	69	69	1990	6	15	1026	28	47.00
1321	690	CB11	16670	70	70	1990	6	15	1048	28	42.00
1322	690	CB11	16671	71	71	1990	6	15	1109	28	37.00
1323	690	CB11	16672	72	72	1990	6	15	1131	28	32.00
1324	690	CB11	16673	73	73	1990	6	15	1200	28	27.00
1325	690	CB11	16674	74	74	1990	6	15	1223	28	22.00
1326	690	CB11	16675	75	75	1990	6	15	1248	28	17.00
1327	690	CB11	16776	76	76	1990	6	16	820	29	15.00
1328	690	CB11	16777	77	77	1990	6	16	845	29	13.00
1329	690	CB11	16778	78	78	1990	6	16	905	29	11.00
1330	690	CB11	16779	79	79	1990	6	16	920	29	9.00
1331	690	CB11	16780	80	80	1990	6	16	940	29	7.00
1332	690	CB11	16781	81	81	1990	6	16	1020	29	2.00

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1315	89	55.00	29.0	8	16	55	24.6708	12.204	
1316	89	54.50	28.8	10	15	65	19.6245	13.626	
1317	89	52.50	29.4	18	7	97	5.6070	21.623	
1318	89	51.50	29.0	6	15	-1	17.3817	19.226	
1319	89	49.50	29.0	5	14	-1	17.3817	18.915	
1320	89	48.00	29.8	8	14	-1	7.8498	17.045	
1321	89	46.50	30.0	7	12	-1	12.3354	16.922	
1322	89	45.00	30.4	4	15	-1	16.8210	14.276	
1323	89	43.50	31.3	3	15	-1	29.7171	11.140	
1324	89	42.00	29.8	3	16	-1	31.9599	11.015	
1325	89	40.50	30.0	3	17	-1	48.2202	10.401	
1326	89	39.00	30.9	4	17	-1	41.4918	10.312	
1327	89	57.00	30.5	3	15	10	37.5669	12.683	
1328	89	56.00	31.0	3	14	28	22.9887	12.787	
1329	89	55.50	29.5	6	16	43	19.0638	15.412	
1330	89	55.00	29.5	18	12	55	4.4856	22.164	

1331	89	54.50	29.5	18	15	65	3.3642	22.059
1332	89	52.50	29.6	13	14	97	5.0463	21.074

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
1333	690	CB11	16782	82	82	1990	6	16	1045	28	57.00
1334	690	CB11	16783	83	83	1990	6	16	1115	28	52.00
1335	690	CB11	16784	84	84	1990	6	16	1150	28	47.00
1336	690	CB11	16785	85	85	1990	6	16	1220	28	42.00
1337	690	CB11	16786	86	86	1990	6	16	1255	28	37.00
1338	690	CB11	16787	87	87	1990	6	16	1325	28	32.00
1339	690	CB11	16788	88	88	1990	6	16	1340	28	27.00
1340	690	CB11	16789	89	89	1990	6	16	1420	28	22.00
1341	690	CB11	16790	90	90	1990	6	16	1435	28	17.00
1342	690	CB07	16201	1	1	1990	6	11	1050	29	3.06
1343	690	CB07	16202	2	2	1990	6	11	1120	29	0.01
1344	690	CB07	16203	3	3	1990	6	11	1140	28	57.00
1345	690	CB07	16204	4	4	1990	6	11	1200	28	54.04
1346	690	CB07	16205	5	5	1990	6	11	1220	28	51.00
1347	690	CB07	16206	6	6	1990	6	11	1240	28	48.09
1348	690	CB07	16207	7	7	1990	6	11	1300	28	45.00
1349	690	CB07	16208	8	8	1990	6	11	1320	28	42.01
1350	690	CB07	16209	9	9	1990	6	11	1340	28	39.00

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1333	89	51.50	29.5	17	14	-1	4.4856	21.662	
1334	89	49.50	29.8	8	14	-1	9.5319	16.202	
1335	89	48.00	29.4	10	15	-1	7.8498	16.410	
1336	89	46.50	29.6	6	15	-1	13.4568	15.625	
1337	89	45.00	29.3	3	16	-1	16.8210	12.916	
1338	89	43.50	29.4	4	15	-1	15.1389	13.857	
1339	89	42.00	29.0	5	16	-1	25.7922	16.396	
1340	89	40.50	29.3	6	16	-1	21.3066	18.452	
1341	89	39.00	29.7	8	15	-1	9.6120	22.103	
1342	89	6.00	26.5	1	17	9	5.0463	0.385	
1343	89	6.00	26.0	1	17	10	5.6070	0.588	
1344	89	6.00	28.1	1	17	35	5.0463	0.854	
1345	89	6.00	27.0	1	17	-1	3.2040	2.039	
1346	89	6.00	27.5	1	17	-1	4.4856	1.568	
1347	89	6.01	28.3	1	17	-1	5.0463	1.677	
1348	89	6.00	28.3	2	16	-1	8.4105	1.266	

1349	89	6.09	29.3	2	16	-1	7.8498	1.962
1350	89	6.04	29.5	2	16	-1	15.6996	3.489

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
1351	690	CB07	16210	10	10	1990	6	11	1400	28	36.05
1352	690	CB07	16211	11	11	1990	6	11	1420	28	33.00
1353	690	CB07	16212	12	12	1990	6	11	1520	28	30.01
1354	690	CB07	16213	13	13	1990	6	11	1540	28	27.00
1355	690	CB07	16214	14	14	1990	6	11	1600	28	24.05
1356	690	CB07	16215	15	15	1990	6	11	1620	28	21.09
1357	690	CB07	16316	16	16	1990	6	12	645	29	3.00
1358	690	CB07	16317	17	17	1990	6	12	705	29	0.04
1359	690	CB07	16318	18	18	1990	6	12	725	28	57.00
1360	690	CB07	16319	19	19	1990	6	12	745	28	54.07
1361	690	CB07	16320	20	20	1990	6	12	820	28	51.00
1362	690	CB07	16321	21	21	1990	6	12	840	28	47.00
1363	690	CB07	16322	22	22	1990	6	12	900	28	45.06
1364	690	CB07	16323	23	23	1990	6	12	925	28	42.02
1365	690	CB07	16324	24	24	1990	6	12	945	28	39.01
1366	690	CB07	16325	25	25	1990	6	12	1015	28	36.04
1367	690	CB07	16326	26	26	1990	6	12	1035	28	33.00
1368	690	CB07	16327	27	27	1990	6	12	1115	28	30.04

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1351	89	6.00	29.5	4	15	-1	15.1389	6.335	
1352	89	6.00	29.9	80	3	-1	3.3642	29.798	
1353	89	6.09	30.3	-1	1	-1	.	36.419	
1354	89	6.00	30.3	-1	1	-1	.	36.382	
1355	89	6.01	30.3	-1	1	-1	.	36.394	
1356	89	6.00	30.3	-1	1	-1	.	36.403	
1357	89	6.00	26.0	1	17	10	8.4105	4.193	
1358	89	6.01	26.0	1	17	30	7.2891	1.134	
1359	89	6.00	28.0	1	17	35	5.0463	0.851	
1360	89	6.00	28.0	1	17	-1	.	2.052	
1361	89	6.00	27.0	1	17	-1	3.2040	1.561	
1362	89	6.07	28.0	1	17	-1	3.2040	1.676	
1363	89	6.00	28.3	2	16	-1	6.4080	1.324	
1364	89	6.01	29.3	2	16	-1	6.4080	1.963	
1365	89	6.09	29.3	2	16	-1	14.0175	3.489	
1366	89	6.01	30.5	4	15	-1	10.6533	8.959	

1367	89	6.09	30.0	90	3	-1	2.4030	29.799
1368	89	6.01	30.3	-1	1	-1	.	36.421

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
1369	690	CB07	16328	28	28	1990	6	12	1135	28	27.01
1370	690	CB07	16329	29	29	1990	6	12	1155	28	24.09
1371	690	CB07	16330	30	30	1990	6	12	1220	28	21.00
1372	690	CB07	16431	31	31	1990	6	13	930	29	3.01
1373	690	CB07	16432	32	32	1990	6	13	950	29	0.00
1374	690	CB07	16433	33	33	1990	6	13	1010	28	57.00
1375	690	CB07	16434	34	34	1990	6	13	1030	28	54.01
1376	690	CB07	16435	35	35	1990	6	13	1050	28	51.00
1377	690	CB07	16436	36	36	1990	6	13	1110	28	48.01
1378	690	CB07	16437	37	37	1990	6	13	1130	28	45.00
1379	690	CB07	16438	38	38	1990	6	13	1150	28	42.01
1380	690	CB07	16439	39	39	1990	6	13	1210	28	39.00
1381	690	CB07	16440	40	40	1990	6	13	1245	28	36.00
1382	690	CB07	16441	41	41	1990	6	13	1305	28	33.09
1383	690	CB07	16442	42	42	1990	6	13	1325	28	30.00
1384	690	CB07	16443	43	43	1990	6	13	1345	28	27.09
1385	690	CB07	16444	44	44	1990	6	13	1405	28	24.04
1386	690	CB07	16445	45	45	1990	6	13	1430	28	21.00

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1369	89	6.00	30.3	-1	1	-1	.	36.366	
1370	89	6.00	30.3	-1	1	-1	.	36.359	
1371	89	6.01	30.3	-1	1	-1	.	36.351	
1372	89	6.00	26.3	1	17	8	2.4030	1.230	
1373	89	6.03	26.3	1	17	10	2.4030	0.259	
1374	89	6.03	26.5	1	16	-1	3.3642	0.267	
1375	89	6.02	27.8	1	16	-1	5.6070	2.750	
1376	89	6.00	29.7	2	14	-1	45.4167	9.820	
1377	89	6.04	29.9	4	14	-1	35.3241	13.795	
1378	89	6.04	30.0	6	14	-1	25.7922	17.706	
1379	89	6.04	30.3	6	14	-1	15.6996	19.095	
1380	89	6.02	30.1	10	12	-1	8.4105	22.495	
1381	89	6.00	29.4	60	3	-1	1.6020	33.491	
1382	89	6.06	29.2	-1	1	-1	.	36.161	
1383	89	6.02	29.2	-1	1	-1	.	35.933	
1384	89	6.01	30.1	-1	1	-1	.	35.953	

1385	89	6.06	30.1	-1	1	-1	.	35.757
1386	89	6.00	30.1	-1	1	-1	.	35.678

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
1387	690	CB07	16546	46	46	1990	6	14	940	29	3.09
1388	690	CB07	16547	47	47	1990	6	14	1000	29	0.01
1389	690	CB07	16548	48	48	1990	6	14	1030	28	57.09
1390	690	CB07	16549	49	49	1990	6	14	1100	28	54.00
1391	690	CB07	16550	50	50	1990	6	14	1120	28	51.08
1392	690	CB07	16551	51	51	1990	6	14	1150	28	48.03
1393	690	CB07	16552	52	52	1990	6	14	1210	28	45.04
1394	690	CB07	16553	53	53	1990	6	14	1230	28	42.00
1395	690	CB07	16554	54	54	1990	6	14	1250	28	39.01
1396	690	CB07	16555	55	55	1990	6	14	1310	28	36.06
1397	690	CB07	16556	56	56	1990	6	14	1330	28	33.05
1398	690	CB07	16557	57	57	1990	6	14	1400	28	30.00
1399	690	CB07	16558	58	58	1990	6	14	1420	28	27.01
1400	690	CB07	16559	59	59	1990	6	14	1440	28	24.01
1401	690	CB07	16560	60	60	1990	6	14	1505	28	21.00
1402	690	CB07	16661	61	61	1990	6	15	930	29	3.01
1403	690	CB07	16662	62	62	1990	6	15	950	29	0.00
1404	690	CB07	16663	63	63	1990	6	15	1010	28	57.06

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1387	89	6.01	26.5	1	17	8	4.0050	0.218	
1388	89	6.00	26.5	1	17	11	3.9249	0.204	
1389	89	6.09	28.5	2	16	-1	11.7747	2.603	
1390	89	6.00	27.5	2	15	-1	6.7284	2.735	
1391	89	6.05	28.5	3	14	-1	8.8110	9.245	
1392	89	6.04	29.0	12	6	-1	11.2140	28.629	
1393	89	6.01	28.5	50	3	-1	.	35.327	
1394	89	6.00	29.0	-1	1	-1	.	36.257	
1395	89	6.00	29.0	-1	1	-1	.	36.239	
1396	89	6.01	29.0	-1	1	-1	.	36.339	
1397	89	6.01	29.0	-1	1	-1	.	36.269	
1398	89	6.00	29.0	-1	1	-1	.	36.296	
1399	89	6.03	29.0	-1	1	-1	.	36.303	
1400	89	6.04	29.0	-1	1	-1	.	36.283	
1401	89	6.00	29.0	-1	1	-1	.	36.331	
1402	89	6.00	26.9	1	17	8	3.3642	0.234	

1403	89	6.00	26.9	1	17	11	3.3642	0.231
1404	89	6.01	26.6	1	15	-1	2.8035	1.278

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
1405	690	CB07	16664	64	64	1990	6	15	1030	28	54.02	89
1406	690	CB07	16665	65	65	1990	6	15	1050	28	51.00	89
1407	690	CB07	16666	66	66	1990	6	15	1110	28	48.00	89
1408	690	CB07	16667	67	67	1990	6	15	1130	28	45.01	89
1409	690	CB07	16668	68	68	1990	6	15	1150	28	42.00	89
1410	690	CB07	16669	69	69	1990	6	15	1215	28	39.04	89
1411	690	CB07	16670	70	70	1990	6	15	1235	28	36.01	89
1412	690	CB07	16671	71	71	1990	6	15	1250	28	33.00	89
1413	690	CB07	16672	72	72	1990	6	15	1310	28	30.09	89
1414	690	CB07	16673	73	73	1990	6	15	1330	28	27.01	89
1415	690	CB07	16674	74	74	1990	6	15	1350	28	24.04	89
1416	690	CB07	16675	75	75	1990	6	15	1420	28	21.02	89
1417	690	CB07	16776	76	76	1990	6	16	900	29	3.04	89
1418	690	CB07	16777	77	77	1990	6	16	920	29	0.01	89
1419	690	CB07	16778	78	78	1990	6	16	940	28	57.04	89
1420	690	CB07	16779	79	79	1990	6	16	1000	28	54.01	89
1421	690	CB07	16780	80	80	1990	6	16	1020	28	51.02	89
1422	690	CB07	16781	81	81	1990	6	16	1040	28	48.00	89

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1405	6.00	28.0	2	15	-1	7.2891	3.881	
1406	6.00	28.5	3	14	-1	6.7284	6.047	
1407	6.00	28.9	4	10	-1	5.6070	7.380	
1408	6.03	29.9	5	7	-1	19.6245	14.861	
1409	6.05	29.1	10	8	-1	10.0926	20.677	
1410	6.00	29.8	12	8	-1	10.0926	20.182	
1411	6.02	29.3	90	3	-1	.	36.173	
1412	6.00	30.5	-1	1	-1	.	36.165	
1413	6.01	30.5	-1	1	-1	.	36.209	
1414	6.00	30.5	-1	1	-1	.	36.174	
1415	6.00	30.1	-1	1	-1	.	36.182	
1416	6.01	30.5	-1	1	-1	.	36.213	
1417	6.00	26.8	1	17	8	3.3642	0.237	
1418	6.02	26.9	1	17	11	3.9249	0.239	
1419	6.01	26.8	1	15	-1	5.0463	1.268	
1420	6.00	28.1	2	15	-1	7.2891	3.879	

1421	6.06	28.5	3	14	-1	6.7284	6.047
1422	6.00	28.9	4	10	-1	6.7284	7.350

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
1423	690	CB07	16782	82	82	1990	6	16	1100	28	45.00	89
1424	690	CB07	16783	83	83	1990	6	16	1125	28	42.00	89
1425	690	CB07	16784	84	84	1990	6	16	1150	28	39.04	89
1426	690	CB07	16785	85	85	1990	6	16	1210	28	36.00	89
1427	690	CB07	16786	86	86	1990	6	16	1230	28	33.04	89
1428	690	CB07	16787	87	87	1990	6	16	1250	28	30.02	89
1429	690	CB07	16788	88	88	1990	6	16	1310	28	27.01	89
1430	690	CB07	16789	89	89	1990	6	16	1330	28	24.00	89
1431	690	CB07	16790	90	90	1990	6	16	1400	28	21.01	89
1432	790	CB02	20401	1	1	1990	7	23	826	29	2.87	90
1433	790	CB02	20402	2	2	1990	7	23	842	29	1.03	90
1434	790	CB02	20403	3	3	1990	7	23	854	28	58.99	90
1435	790	CB02	20404	4	4	1990	7	23	908	28	56.90	90
1436	790	CB02	20405	5	5	1990	7	23	919	28	55.02	90
1437	790	CB02	20406	6	0	1990	7	23	929	28	52.91	90
1438	790	CB02	20407	7	7	1990	7	23	940	28	51.00	90
1439	790	CB02	20408	8	8	1990	7	23	951	28	48.98	90
1440	790	CB02	20409	9	9	1990	7	23	1002	28	47.02	90

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1423	6.04	28.9	5	7	-1	19.0638	14.872	
1424	6.01	29.0	10	8	-1	11.2140	20.677	
1425	6.00	29.9	12	8	-1	10.6533	20.165	
1426	6.01	29.9	80	4	-1	1.1214	36.166	
1427	6.02	29.5	-1	1	-1	.	36.202	
1428	6.04	30.5	-1	1	-1	.	36.192	
1429	6.00	30.5	-1	1	-1	.	36.189	
1430	6.00	30.5	-1	1	-1	.	36.211	
1431	6.00	30.5	-1	1	-1	.	36.198	
1432	40.11	30.2	12	10	13	2.0559	.	10 SHRIMP BOATS ALL ON ANCHOR
1433	40.03	30.0	13	10	23	4.2987	21.352	
1434	39.94	29.2	18	8	32	4.2987	21.169	
1435	40.06	29.1	20	8	35	2.9904	21.484	
1436	39.92	29.2	20	8	35	.	20.985	
1437	40.10	29.5	27	8	48	1.1214	20.556	
1438	39.98	29.2	33	8	58	0.5607	19.900	

1439	40.05	29.4	31	8	62	0.9345	20.215
1440	40.02	29.5	31	8	62	0.7476	20.579

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
1441	790	CB02	20410	10	10	1990	7	23	1013	28	45.02	90
1442	790	CB02	20411	11	11	1990	7	23	1024	28	42.91	90
1443	790	CB02	20412	12	12	1990	7	23	1034	28	40.93	90
1444	790	CB02	20413	13	13	1990	7	23	1045	28	39.01	90
1445	790	CB02	20414	14	14	1990	7	23	1055	28	37.00	90
1446	790	CB02	20415	15	15	1990	7	23	1106	28	34.98	90
1447	790	CB02	20516	16	16	1990	7	24	700	29	3.03	90
1448	790	CB02	20517	17	17	1990	7	24	711	29	0.98	90
1449	790	CB02	20518	18	18	1990	7	24	720	28	58.99	90
1450	790	CB02	20519	19	19	1990	7	24	729	28	56.99	90
1451	790	CB02	20520	20	20	1990	7	24	737	28	54.99	90
1452	790	CB02	20521	21	21	1990	7	24	747	28	52.99	90
1453	790	CB02	20522	22	22	1990	7	24	759	28	50.98	90
1454	790	CB02	20523	23	23	1990	7	24	810	28	49.00	90
1455	790	CB02	20524	24	24	1990	7	24	821	28	46.99	90
1456	790	CB02	20525	25	25	1990	7	24	831	28	44.98	90
1457	790	CB02	20526	26	26	1990	7	24	841	28	42.99	90
1458	790	CB02	20527	27	27	1990	7	24	850	28	41.00	90

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1441	40.00	29.5	32	8	57	1.1214	20.702	
1442	40.05	29.5	32	8	57	.	20.853	
1443	40.06	29.6	29	8	55	1.1214	21.476	
1444	39.97	29.8	33	8	59	.	24.207	
1445	39.96	29.7	29	8	61	0.7476	24.241	
1446	40.04	29.5	24	8	67	0.9345	24.357	
1447	40.03	30.0	6	16	11	3.1773	21.980	LOTS OF SHRIMP BOATS
1448	39.98	29.2	13	14	23	3.1773	21.987	
1449	39.97	29.2	16	14	31	1.4952	21.887	
1450	40.00	29.2	16	12	36	1.6821	21.967	
1451	40.00	29.0	19	12	25	.	21.517	
1452	40.02	29.2	23	12	47	1.6821	20.844	
1453	40.02	29.3	34	10	57	1.3083	20.790	
1454	40.01	29.4	47	10	61	1.3350	20.547	
1455	40.04	29.5	43	7	61	1.3083	20.520	
1456	40.02	29.0	39	7	57	1.3350	21.047	

1457	40.03	29.3	37	7	57	2.4297	20.757
1458	40.00	29.5	30	10	55	1.4952	20.584

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
1459	790	CB02	20528	28	28	1990	7	24	901	28	39.00	90
1460	790	CB02	20529	29	29	1990	7	24	911	28	36.99	90
1461	790	CB02	20530	30	30	1990	7	24	921	28	34.96	90
1462	790	CB02	20631	31	31	1990	7	25	708	29	3.08	90
1463	790	CB02	20632	32	32	1990	7	25	717	29	0.99	90
1464	790	CB02	20633	33	33	1990	7	25	726	28	58.99	90
1465	790	CB02	20634	34	34	1990	7	25	737	28	56.98	90
1466	790	CB02	20635	35	35	1990	7	25	745	28	54.97	90
1467	790	CB02	20636	36	36	1990	7	25	753	28	52.94	90
1468	790	CB02	20637	37	37	1990	7	25	801	28	51.00	90
1469	790	CB02	20638	38	38	1990	7	25	811	28	49.01	90
1470	790	CB02	20639	39	39	1990	7	25	821	28	49.99	90
1471	790	CB02	20640	40	40	1990	7	25	830	28	45.00	90
1472	790	CB02	20641	41	41	1990	7	25	839	28	42.98	90
1473	790	CB02	20642	42	42	1990	7	25	847	28	40.98	90
1474	790	CB02	20643	43	43	1990	7	25	855	28	39.00	90
1475	790	CB02	20644	44	44	1990	7	25	903	28	37.00	90
1476	790	CB02	20645	45	45	1990	7	25	910	28	35.00	90

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1459	40.03	29.8	35	10	60	2.2428	20.964	
1460	40.02	29.8	33	10	60	1.0680	21.327	
1461	39.99	29.4	35	10	68	0.8010	22.990	
1462	40.00	29.9	5	14	12	3.5511	22.621	15 SHRIMP BOATS ALL SHRIMPING
1463	40.05	29.9	10	12	24	2.4297	21.749	
1464	39.98	29.9	13	10	30	1.6020	21.990	
1465	40.04	29.6	15	8	35	1.6020	22.356	
1466	40.00	29.7	14	7	24	1.6020	22.333	
1467	40.01	29.5	18	7	47	2.1360	21.819	
1468	40.04	29.7	27	7	56	1.3350	21.228	
1469	40.03	29.8	27	7	61	1.0680	20.839	
1470	40.04	30.1	27	8	61	1.0680	20.727	
1471	40.02	29.9	22	8	57	1.6020	20.635	
1472	40.01	29.9	27	8	56	1.1214	20.715	
1473	40.06	30.0	27	8	55	0.9345	20.697	
1474	40.03	30.4	25	8	59	0.8010	21.050	

1475	40.01	30.2	24	8	60	0.9345	23.061
1476	40.02	30.2	26	8	66	0.8010	23.017

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
1477	790	CB02	20746	46	46	1990	7	26	905	29	3.00	90
1478	790	CB02	20747	47	47	1990	7	26	916	29	1.00	90
1479	790	CB02	20748	48	48	1990	7	26	925	28	58.99	90
1480	790	CB02	20749	49	49	1990	7	26	934	28	57.04	90
1481	790	CB02	20750	50	50	1990	7	26	944	28	54.99	90
1482	790	CB02	20751	51	51	1990	7	26	951	28	53.00	90
1483	790	CB02	20752	52	52	1990	7	26	1000	28	50.94	90
1484	790	CB02	20753	53	53	1990	7	26	1009	28	49.01	90
1485	790	CB02	20754	54	54	1990	7	26	1016	28	47.00	90
1486	790	CB02	20755	55	55	1990	7	26	1025	28	44.97	90
1487	790	CB02	20756	56	56	1990	7	26	1033	28	42.96	90
1488	790	CB02	20757	57	57	1990	7	26	1041	28	41.00	90
1489	790	CB02	20758	58	58	1990	7	26	1050	28	39.00	90
1490	790	CB02	20759	59	59	1990	7	26	1058	28	37.02	90
1491	790	CB02	20760	60	60	1990	7	26	1106	28	34.93	90
1492	790	CB02	20861	61	61	1990	7	27	651	29	2.95	90
1493	790	CB02	20862	62	62	1990	7	27	702	29	0.98	90
1494	790	CB02	20863	63	63	1990	7	27	711	28	58.96	90

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1477	40.06	31.0	5	14	12	8.2236	22.851	35 SHRIMP BOATS
1478	40.02	30.6	8	16	24	3.5511	21.927	
1479	40.01	30.0	13	12	30	1.1214	22.418	
1480	39.98	30.3	14	10	35	1.6821	22.011	
1481	40.02	30.3	12	10	24	1.8690	21.753	
1482	40.01	30.4	18	8	46	1.4952	21.863	
1483	40.00	30.5	15	8	57	1.6020	21.539	
1484	40.00	30.6	17	10	60	1.3083	21.193	
1485	40.00	30.7	16	7	61	1.8690	21.049	
1486	39.98	30.9	15	7	57	1.6020	21.246	
1487	40.02	30.8	23	7	56	1.0680	21.920	
1488	40.00	30.9	17	7	54	1.3350	22.853	
1489	39.99	30.8	19	8	60	1.3350	23.683	
1490	40.04	30.7	14	8	60	1.0680	23.752	
1491	40.03	30.8	16	7	67	0.9345	23.509	
1492	40.10	31.0	6	10	12	4.1118	22.333	APPROX 40 SHRIMP BOATS

1493	39.97	30.5	15	6	24	1.4952	22.517
1494	40.06	30.0	14	8	31	.	22.634

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
1495	790	CB02	20864	64	64	1990	7	27	720	28	56.98	90
1496	790	CB02	20865	65	65	1990	7	27	729	28	55.00	90
1497	790	CB02	20866	66	66	1990	7	27	737	28	52.98	90
1498	790	CB02	20867	67	67	1990	7	27	745	28	50.99	90
1499	790	CB02	20868	68	68	1990	7	27	755	28	49.00	90
1500	790	CB02	20869	69	69	1990	7	27	803	28	46.99	90
1501	790	CB02	20870	70	70	1990	7	27	811	28	45.00	90
1502	790	CB02	20871	71	71	1990	7	27	819	28	43.00	90
1503	790	CB02	20872	72	72	1990	7	27	827	28	41.01	90
1504	790	CB02	20873	73	73	1990	7	27	836	28	39.00	90
1505	790	CB02	20874	74	74	1990	7	27	844	28	37.03	90
1506	790	CB02	20875	75	75	1990	7	27	854	28	34.99	90
1507	790	CB02	20976	76	76	1990	7	28	702	29	3.01	90
1508	790	CB02	20977	77	77	1990	7	28	712	29	1.00	90
1509	790	CB02	20978	78	78	1990	7	28	721	28	59.00	90
1510	790	CB02	20979	79	79	1990	7	28	730	28	57.00	90
1511	790	CB02	20980	80	80	1990	7	28	741	28	54.96	90
1512	790	CB02	20981	81	81	1990	7	28	751	28	52.98	90

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1495	40.01	30.0	14	6	34	1.3350	22.415	
1496	40.00	30.5	14	8	24	1.3083	21.125	
1497	40.00	30.5	13	6	48	1.6020	21.123	
1498	40.00	30.0	15	6	58	1.0680	21.449	
1499	40.00	30.0	17	6	61	1.4952	21.665	
1500	40.02	30.0	18	6	62	1.0680	22.079	
1501	40.01	30.0	16	6	57	1.1214	22.881	
1502	39.98	30.5	17	6	56	0.8010	23.964	
1503	40.00	30.5	18	6	54	1.4952	23.660	
1504	39.99	30.5	17	8	60	1.4952	23.694	
1505	40.00	30.5	17	6	59	1.3083	23.740	
1506	40.00	30.5	18	6	66	1.1214	23.568	
1507	40.00	30.5	6	8	12	6.5415	22.235	
1508	40.00	30.0	12	7	24	2.2428	22.394	
1509	40.02	30.0	12	6	31	1.3083	21.801	
1510	39.97	30.0	13	6	34	2.0559	21.824	

1511	40.00	30.0	13	8	25	1.3083	22.284
1512	40.00	30.0	16	7	47	1.1214	22.628

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
1513	790	CB02	20982	82	82	1990	7	28	800	28	51.00	90
1514	790	CB02	20983	83	83	1990	7	28	808	28	49.02	90
1515	790	CB02	20984	84	84	1990	7	28	817	28	46.96	90
1516	790	CB02	20985	85	85	1990	7	28	826	28	44.96	90
1517	790	CB02	20986	86	86	1990	7	28	836	28	42.99	90
1518	790	CB02	20987	87	87	1990	7	28	845	28	41.02	90
1519	790	CB02	20988	88	88	1990	7	28	854	28	38.99	90
1520	790	CB02	20989	89	89	1990	7	28	903	28	37.01	90
1521	790	CB02	20990	90	90	1990	7	28	911	28	34.99	90
1522	790	CB03	20401	1	1	1990	7	23	840	29	13.00	91
1523	790	CB03	20402	2	2	1990	7	23	858	29	11.00	91
1524	790	CB03	20403	3	3	1990	7	23	912	29	9.00	91
1525	790	CB03	20404	4	4	1990	7	23	920	29	7.04	91
1526	790	CB03	20405	5	5	1990	7	23	936	29	4.93	91
1527	790	CB03	20406	6	6	1990	7	23	948	29	2.96	91
1528	790	CB03	20407	7	7	1990	7	23	1000	29	1.96	91
1529	790	CB03	20408	8	8	1990	7	23	1013	28	59.96	91
1530	790	CB03	20518	18	18	1990	7	24	825	29	13.00	91

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1513	39.99	30.5	14	8	57	1.4952	22.479	
1514	40.01	30.5	15	7	61	.	22.962	
1515	39.93	30.5	15	8	61	1.6821	23.290	
1516	40.02	30.5	15	6	56	1.1214	.	
1517	39.98	30.5	18	7	56	0.9345	24.593	
1518	39.98	30.0	20	6	54	.	23.642	
1519	40.03	30.0	20	7	59	0.8010	23.016	
1520	40.01	30.0	18	6	59	0.9345	23.064	
1521	40.01	30.0	17	6	67	1.1214	23.667	
1522	15.00	28.7	1	19	9	5.6070	5.371	
1523	15.05	29.2	2	17	13	.	5.620	
1524	15.06	29.6	4	16	15	8.9712	12.054	
1525	15.05	29.6	6	14	15	5.6070	17.695	
1526	15.07	29.4	6	15	16	6.3546	21.341	
1527	15.04	29.5	8	15	16	4.8594	21.881	
1528	15.06	29.6	8	15	16	4.2987	22.203	

1529	15.06	29.8	11	15	16	1.8690	22.492
1530	15.00	28.7	1	16	9	5.4201	5.122

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
1531	790	CB03	20519	19	19	1990	7	24	835	29	11.00	91
1532	790	CB03	20520	20	20	1990	7	24	845	29	9.00	91
1533	790	CB03	20521	21	21	1990	7	24	853	29	7.00	91
1534	790	CB03	20522	22	22	1990	7	24	900	29	5.00	91
1535	790	CB03	20523	23	23	1990	7	24	907	29	3.04	91
1536	790	CB03	20524	24	24	1990	7	24	915	29	1.04	91
1537	790	CB03	20525	25	25	1990	7	24	922	28	59.04	91
1538	790	CB03	20526	26	26	1990	7	24	932	28	57.04	91
1539	790	CB03	20527	27	27	1990	7	24	941	28	55.02	91
1540	790	CB03	20528	28	28	1990	7	24	951	28	53.02	91
1541	790	CB03	20529	29	29	1990	7	24	1001	28	51.01	91
1542	790	CB03	20530	30	30	1990	7	24	1012	28	49.01	91
1543	790	CB03	20531	31	31	1990	7	24	1022	28	47.01	91
1544	790	CB03	20532	32	32	1990	7	24	1032	28	45.04	91
1545	790	CB03	20533	33	33	1990	7	24	1044	28	43.00	91
1546	790	CB03	20534	34	34	1990	7	24	1054	28	41.00	91
1547	790	CB03	20635	35	35	1990	7	25	745	29	13.00	91
1548	790	CB03	20636	36	36	1990	7	25	755	29	10.90	91

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1531	15.05	28.8	1	16	12	7.8498	2.535	
1532	15.03	28.9	2	14	14	2.8035	2.941	
1533	15.03	29.1	2	14	15	2.9904	5.055	
1534	15.01	29.2	3	14	16	2.4297	6.443	
1535	15.00	29.4	3	14	16	7.4760	8.426	
1536	15.04	29.1	4	15	15	7.6629	10.298	
1537	15.03	29.2	5	14	15	.	12.464	
1538	15.03	29.8	8	14	19	3.5511	21.875	BIG SCHOOLS OF POGIE HERE
1539	15.01	30.0	12	14	21	2.0559	22.419	
1540	15.01	29.7	15	15	24	1.3083	22.244	
1541	15.01	29.9	16	12	28	0.9345	22.403	
1542	15.03	30.0	17	10	36	0.9345	22.720	
1543	15.03	30.1	19	8	41	0.9345	23.499	
1544	15.01	29.9	22	7	48	1.1214	23.259	
1545	15.01	30.2	22	8	56	0.3738	22.753	
1546	15.01	30.5	23	8	61	.	22.670	

1547	15.05	28.5	2	16	6	3.9249	14.008	POGIE BOAT 2 MI @ 240
1548	15.05	28.7	2	16	11	4.1118	8.059	4 POGIE BOATS STEAMING

3.2.2 CHARTER BOATS, continued:

OBS ID	CRUISE CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE
1549	790	CB03	20637	37	37	1990	7	25	802	29	9.90	91	15.05	29.4
1550	790	CB03	20638	38	38	1990	7	25	809	29	6.89	91	15.00	29.5
1551	790	CB03	20639	39	39	1990	7	25	816	29	4.98	91	15.01	29.8
1552	790	CB03	20640	40	40	1990	7	25	825	29	1.98	91	14.99	29.9
1553	790	CB03	20641	41	41	1990	7	25	833	29	1.98	91	15.99	30.1
1554	790	CB03	20642	42	42	1990	7	25	848	28	59.02	91	15.99	30.1
1555	790	CB03	20643	43	43	1990	7	25	857	28	57.00	91	15.99	30.4
1556	790	CB03	20644	44	44	1990	7	25	908	28	54.97	91	15.94	30.7
1557	790	CB03	20645	45	45	1990	7	25	917	28	52.93	91	15.02	31.0
1558	790	CB03	20646	46	46	1990	7	25	927	28	50.91	91	15.00	31.5
1559	790	CB03	20647	47	47	1990	7	25	937	28	48.91	91	14.98	31.0
1560	790	CB03	20648	48	48	1990	7	25	945	28	46.81	91	14.99	30.2
1561	790	CB03	20649	49	49	1990	7	25	952	28	44.81	91	15.99	29.8
1562	790	CB03	20650	50	50	1990	7	25	1000	28	42.84	91	15.99	28.7
1563	790	CB03	20651	51	51	1990	7	25	1011	28	41.09	91	15.02	29.8
1564	790	CB03	20752	52	52	1990	7	26	810	29	10.86	91	14.88	29.4
1565	790	CB03	20753	53	53	1990	7	26	820	29	9.04	91	14.99	29.5
1566	790	CB03	20754	54	54	1990	7	26	825	29	7.03	91	14.98	29.9

OBS	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1549	2	16	13	4.4856	4.053	EAST
1550	2	16	16	5.4201	3.474	
1551	2	16	16	5.6070	3.475	
1552	2	15	16	10.0926	4.373	
1553	3	15	15	7.8498	5.505	
1554	3	15	15	.	5.336	
1555	2	14	18	10.0926	5.089	
1556	4	15	21	10.6533	6.413	
1557	4	15	24	11.5878	6.846	
1558	4	14	28	13.0830	9.155	
1559	5	14	36	6.7284	12.711	
1560	8	14	42	4.4856	17.366	
1561	20	6	48	0.8010	24.649	
1562	24	4	56	0.5340	23.949	
1563	20	3	62	0.8010	23.473	

1564	4	15	.	5.7939	18.850	4 POGIE BOATS
1565	4	15	.	11.0271	15.551	3 SHRIMPERS
1566	4	15	.	5.4201	12.378	NO BOATS

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID	PLATFORM CODE	OBS CODE	SALINITY SAMPLE NUMBER	CHLOROPHYLL SAMPLE NO.	TIME SAMPLE NO.	YEAR	MONTH	DAY	OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE
1567	790	CB03	20755	55	55	1990	7	26	835	29	5.01	91	15.01	30.5	
1568	790	CB03	20756	56	56	1990	7	26	840	29	3.93	91	14.92	30.5	
1569	790	CB03	20757	57	57	1990	7	26	845	29	1.03	91	14.95	30.8	
1570	790	CB03	20758	58	58	1990	7	26	850	28	59.94	91	14.93	30.9	
1571	790	CB03	20759	59	59	1990	7	26	900	28	57.03	91	14.99	30.9	
1572	790	CB03	20760	60	60	1990	7	26	908	28	55.02	91	14.84	30.9	
1573	790	CB03	20761	61	61	1990	7	26	913	28	53.03	91	14.97	31.1	
1574	790	CB03	20762	62	62	1990	7	26	920	28	51.06	91	14.98	31.1	
1575	790	CB03	20763	63	63	1990	7	26	926	28	49.05	91	14.99	31.0	
1576	790	CB03	20764	64	64	1990	7	26	932	28	47.05	91	14.98	30.9	
1577	790	CB03	20765	65	65	1990	7	26	939	28	45.00	91	15.02	30.1	
1578	790	CB03	20766	66	66	1990	7	26	947	28	43.02	91	15.00	30.4	
1579	790	CB03	20767	67	67	1990	7	26	1000	28	40.96	91	14.97	30.3	
1580	790	CB03	20869	69	69	1990	7	27	753	29	13.93	91	15.18	30.4	
1581	790	CB03	20870	70	70	1990	7	27	803	29	10.93	91	15.06	30.9	
1582	790	CB03	20871	71	71	1990	7	27	811	29	8.96	91	15.01	30.6	
1583	790	CB03	20872	72	72	1990	7	27	819	29	7.96	91	15.04	30.8	
1584	790	CB03	20873	73	73	1990	7	27	822	29	4.88	91	15.03	31.0	

OBS	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1567	4	15	.	7.6629	9.102	
1568	4	15	.	26.5398	8.748	
1569	4	15	.	27.2874	10.958	
1570	4	15	.	20.3721	10.047	
1571	4	15	.	11.4009	11.661	
1572	7	15	.	.	18.834	
1573	6	15	.	.	16.602	
1574	6	15	.	4.6725	16.320	
1575	6	15	.	5.9808	15.650	
1576	9	15	.	3.5511	17.665	
1577	10	12	.	2.0559	22.003	2 WORK BOATS
1578	14	15	.	0.7476	24.245	
1579	11	6	.	.	25.824	
1580	3	16	9	6.9153	15.645	11 POGIE BOASTS IN SIGHT DULAC AND CAMERON BOATS 1ST TO 3RD POINT
1581	4	14	12	16.0734	16.754	

1582	4	14	14	24.6708	15.000
1583	4	14	15	22.4280	12.451
1584	5	12	15	16.8210	12.124

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
1585	790	CB03	20874	74	74	1990	7	27	835	29	2.60	91
1586	790	CB03	20875	75	75	1990	7	27	842	29	0.94	91
1587	790	CB03	20876	76	76	1990	7	27	848	28	58.95	91
1588	790	CB03	20877	77	77	1990	7	27	856	28	57.96	91
1589	790	CB03	20878	78	78	1990	7	27	904	28	54.84	91
1590	790	CB03	20879	79	79	1990	7	27	911	28	52.95	91
1591	790	CB03	20880	80	80	1990	7	27	920	28	51.02	91
1592	790	CB03	20881	81	81	1990	7	27	927	28	48.90	91
1593	790	CB03	20882	82	82	1990	7	27	934	28	46.96	91
1594	790	CB03	20883	83	83	1990	7	27	941	28	44.95	91
1595	790	CB03	20884	84	84	1990	7	27	948	28	42.96	91
1596	790	CB03	20885	85	85	1990	7	27	958	28	41.96	91
1597	790	CB06	20401	1	1	1990	7	23	1200	29	33.65	92
1598	790	CB06	20402	2	2	1990	7	23	1225	29	30.83	92
1599	790	CB06	20403	3	3	1990	7	23	1245	29	29.00	92
1600	790	CB06	20404	4	4	1990	7	23	1310	29	27.00	92
1601	790	CB06	20405	5	5	1990	7	23	1330	29	25.00	92
1602	790	CB06	20406	6	6	1990	7	23	1400	29	23.00	92

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1585	15.03	31.0	4	14	15	10.6533	13.327	
1586	15.04	30.9	5	12	14	8.4105	13.298	
1587	15.03	30.6	6	12	14	6.7284	14.376	
1588	15.02	30.4	15	10	19	.	20.323	
1589	14.96	30.5	17	7	21	.	21.034	
1590	15.02	31.0	14	7	24	.	19.883	
1591	15.02	31.0	12	9	28	.	19.331	
1592	14.97	31.1	12	7	36	.	19.717	
1593	15.04	30.8	10	9	42	3.3642	20.084	
1594	15.00	31.2	11	7	48	3.5511	20.084	
1595	15.01	31.0	12	7	56	.	20.085	
1596	15.01	30.6	13	7	64	.	20.800	
1597	3.16	29.1	1	18	8	8.4105	2.778	FILTERED 220 ML ROUGH SEAS
1598	3.96	30.0	1	18	11	8.0367	4.862	
1599	4.55	30.5	1	18	13	12.3354	6.027	
1600	5.71	30.8	2	18	15	9.3450	2.070	

1601	6.30	31.2	2	17	16	9.5319	6.043
1602	7.63	31.4	3	17	18	8.5974	6.048

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
1603	790	CB06	20407	7	7	1990	7	23	1430	29	21.00	92
1604	790	CB06	20508	8	8	1990	7	24	900	29	33.00	92
1605	790	CB06	20509	9	9	1990	7	24	920	29	31.00	92
1606	790	CB06	20510	10	10	1990	7	24	940	29	29.00	92
1607	790	CB06	20511	11	11	1990	7	24	1005	29	27.00	92
1608	790	CB06	20512	12	12	1990	7	24	1030	29	25.00	92
1609	790	CB06	20513	13	13	1990	7	24	1055	29	23.00	92
1610	790	CB06	20514	14	14	1990	7	24	1120	29	21.00	92
1611	790	CB06	20515	15	15	1990	7	24	1150	29	19.00	92
1612	790	CB06	20516	16	16	1990	7	24	1215	29	17.00	92
1613	790	CB06	20517	17	17	1990	7	24	1245	29	15.00	92
1614	790	CB06	20518	18	18	1990	7	24	1315	29	13.00	92
1615	790	CB06	20519	19	19	1990	7	24	1345	29	11.00	92
1616	790	CB06	20520	20	20	1990	7	24	1410	29	9.00	92
1617	790	CB06	20521	21	21	1990	7	24	1440	29	7.00	92
1618	790	CB06	20522	22	22	1990	7	24	1505	29	5.00	92
1619	790	CB06	20523	23	23	1990	7	24	1530	29	3.00	92
1620	790	CB06	20524	24	24	1990	7	24	1555	29	1.00	92

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1603	8.09	31.6	3	17	19	10.2795	6.043	SEAS TOO ROUGH TO WORK
1604	2.99	28.9	1	18	8	8.2236	2.399	FILTERED 200 ML
1605	3.04	29.3	1	18	11	.	5.266	
1606	3.24	29.6	1	18	13	9.1581	7.596	
1607	4.02	30.0	2	17	13	11.9616	8.599	
1608	4.60	30.3	2	17	14	13.8306	10.270	
1609	6.29	30.5	2	15	18	5.2332	14.779	
1610	7.61	30.6	3	15	19	8.5974	15.691	
1611	8.86	31.0	3	14	22	5.9808	16.035	
1612	10.39	31.2	4	14	22	8.2236	15.907	
1613	12.52	31.5	4	14	21	9.9057	18.333	
1614	13.86	31.8	5	14	20	12.5223	16.933	
1615	14.23	32.1	6	12	20	11.2140	18.074	
1616	15.07	32.3	6	12	42	11.5878	16.565	
1617	15.58	32.4	8	12	59	5.4201	17.148	
1618	16.02	32.3	18	12	72	0.8010	25.294	

1619	16.51	32.0	28	10	84	1.6020	23.793
1620	16.70	31.8	18	10	91	1.8690	23.383

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
1621	790	CB06	20625	25	25	1990	7	25	700	29	33.00
1622	790	CB06	20626	26	26	1990	7	25	725	29	31.00
1623	790	CB06	20627	27	27	1990	7	25	755	29	29.00
1624	790	CB06	20628	28	28	1990	7	25	820	29	27.00
1625	790	CB06	20629	29	29	1990	7	25	845	29	25.00
1626	790	CB06	20630	30	30	1990	7	25	910	29	23.00
1627	790	CB06	20631	31	31	1990	7	25	935	29	21.00
1628	790	CB06	20632	32	32	1990	7	25	1000	29	19.00
1629	790	CB06	20633	33	33	1990	7	25	1020	29	17.00
1630	790	CB06	20634	34	34	1990	7	25	1045	29	15.00
1631	790	CB06	20635	35	35	1990	7	25	1110	29	13.00
1632	790	CB06	20636	36	36	1990	7	25	1135	29	11.00
1633	790	CB06	20637	37	37	1990	7	25	1200	29	9.00
1634	790	CB06	20638	38	38	1990	7	25	1225	29	7.06
1635	790	CB06	20639	39	39	1990	7	25	1250	29	5.00
1636	790	CB06	20640	40	40	1990	7	25	1315	29	3.00
1637	790	CB06	20641	41	41	1990	7	25	1340	29	1.00
1638	790	CB06	20742	42	42	1990	7	26	600	29	33.00

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1621	92	2.54	29.5	1	18	9	10.6533	2.027	
1622	92	2.95	29.8	1	18	10	6.5415	.	
1623	92	2.96	30.0	2	18	12	16.2603	2.991	
1624	92	3.54	30.3	2	17	13	7.2891	6.133	
1625	92	4.22	30.7	2	17	17	13.2699	9.820	
1626	92	5.46	31.1	3	17	19	7.6629	11.950	
1627	92	6.85	31.5	4	17	19	3.4710	15.106	
1628	92	8.10	32.0	5	16	23	3.5511	15.312	
1629	92	8.80	32.2	5	14	25	3.7380	15.131	
1630	92	10.72	32.5	6	14	21	2.4297	15.422	
1631	92	12.67	32.9	6	14	18	5.0463	17.225	
1632	92	13.21	33.4	6	14	20	13.2699	18.042	
1633	92	13.87	33.1	7	12	40	11.2140	16.558	
1634	92	14.60	32.8	8	12	58	5.4201	17.142	
1635	92	14.98	32.4	18	12	72	0.9345	25.293	
1636	92	15.65	32.3	28	10	82	1.1214	23.814	

1637	92	16.10	32.1	19	10	90	1.6020	23.329
1638	92	3.56	29.3	1	18	9	9.9057	2.055

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
1639	790	CB06	20743	43	43	1990	7	26	620	29	31.00
1640	790	CB06	20744	44	44	1990	7	26	635	29	29.00
1641	790	CB06	20745	45	45	1990	7	26	700	29	27.00
1642	790	CB06	20746	46	46	1990	7	26	720	29	25.00
1643	790	CB06	20747	47	47	1990	7	26	740	29	23.00
1644	790	CB06	20748	48	48	1990	7	26	800	29	21.00
1645	790	CB06	20749	49	49	1990	7	26	825	29	19.00
1646	790	CB06	20750	50	50	1990	7	26	845	29	17.00
1647	790	CB06	20751	51	51	1990	7	26	905	29	15.00
1648	790	CB06	20752	52	52	1990	7	26	930	29	13.00
1649	790	CB06	20753	53	53	1990	7	26	950	29	11.00
1650	790	CB06	20754	54	54	1990	7	26	1015	29	9.00
1651	790	CB06	20755	55	55	1990	7	26	1035	29	7.00
1652	790	CB06	20756	56	56	1990	7	26	1055	29	5.00
1653	790	CB06	20757	57	57	1990	7	26	1115	29	3.00
1654	790	CB06	20758	58	58	1990	7	26	1135	29	1.00
1655	790	CB06	20859	59	59	1990	7	27	530	29	33.00
1656	790	CB06	20860	60	60	1990	7	27	550	29	31.00

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1639	92	4.71	29.7	1	18	11	5.9808	1.733	
1640	92	5.88	29.9	1	18	14	7.1022	2.993	
1641	92	6.30	30.4	2	17	16	17.7555	6.121	
1642	92	7.17	30.5	2	17	18	13.4568	9.812	
1643	92	8.93	30.8	3	17	19	8.0367	11.957	
1644	92	10.62	31.1	4	17	20	3.7380	15.107	
1645	92	11.14	31.3	4	16	22	2.8035	15.334	
1646	92	11.68	31.5	5	15	23	3.9249	15.243	
1647	92	12.12	31.4	6	14	21	2.8035	15.355	
1648	92	12.75	31.7	6	14	19	5.3400	17.265	
1649	92	13.47	32.0	6	14	21	10.2795	18.060	
1650	92	13.94	32.3	7	12	41	9.7188	16.560	
1651	92	14.30	32.5	8	12	59	4.8594	17.129	
1652	92	14.71	32.8	19	12	74	0.9345	25.299	
1653	92	15.10	32.6	28	10	83	1.3083	23.808	
1654	92	15.66	32.6	18	10	92	1.4952	23.375	

1655	92	2.93	29.7	1	18	8	9.9057	2.027
1656	92	3.40	30.1	1	18	11	7.2891	1.741

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
1657	790	CB06	20861	61	61	1990	7	27	605	29	29.00
1658	790	CB06	20862	62	62	1990	7	27	625	29	27.00
1659	790	CB06	20863	63	63	1990	7	27	640	29	25.00
1660	790	CB06	20864	64	64	1990	7	27	700	29	23.00
1661	790	CB06	20865	65	65	1990	7	27	725	29	21.00
1662	790	CB06	20866	66	66	1990	7	27	745	29	19.00
1663	790	CB06	20867	67	67	1990	7	27	805	29	17.00
1664	790	CB06	20868	68	68	1990	7	27	830	29	15.00
1665	790	CB06	20869	69	69	1990	7	27	850	29	13.00
1666	790	CB06	20870	70	70	1990	7	27	910	29	11.00
1667	790	CB06	20871	71	71	1990	7	27	930	29	9.00
1668	790	CB06	20872	72	72	1990	7	27	955	29	7.00
1669	790	CB06	20873	73	73	1990	7	27	1015	29	5.00
1670	790	CB06	20874	74	74	1990	7	27	1040	29	3.00
1671	790	CB06	20875	75	75	1990	7	27	1100	29	1.00
1672	790	CB07	20401	1	1	1990	7	23	1005	29	3.01
1673	790	CB07	20402	2	2	1990	7	23	1025	29	0.00
1674	790	CB07	20403	3	3	1990	7	23	1045	28	57.02

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1657	92	3.72	30.3	1	18	13	7.2891	2.995	
1658	92	5.11	30.6	2	18	14	17.0079	6.142	
1659	92	5.91	31.0	2	17	17	11.9616	9.836	
1660	92	6.70	31.2	3	17	17	8.7843	11.972	
1661	92	8.54	31.5	3	17	19	2.8035	15.131	
1662	92	9.12	31.9	4	15	21	2.4297	15.313	
1663	92	10.67	31.7	5	14	22	3.5511	15.240	
1664	92	12.02	32.0	6	14	20	2.2428	15.455	
1665	92	13.25	32.3	6	14	18	4.2720	17.236	
1666	92	13.87	32.8	6	14	20	8.5440	18.029	
1667	92	14.20	33.1	7	12	42	11.0271	16.556	
1668	92	14.91	32.9	8	12	60	0.9345	17.139	
1669	92	15.34	32.9	20	12	73	1.3083	25.272	
1670	92	15.79	32.7	27	10	84	1.3350	23.795	
1671	92	16.24	32.6	19	10	91	.	23.383	
1672	89	6.00	29.0	2	15	9	1.3083	20.421	

1673	89	6.03	29.0	3	14	30	1.4952	27.508
1674	89	6.00	29.0	3	14	-1	5.0463	13.788

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
1675	790	CB07	20404	4	4	1990	7	23	1100	28	54.06
1676	790	CB07	20405	5	5	1990	7	23	1120	28	51.04
1677	790	CB07	20406	6	6	1990	7	23	1140	28	48.00
1678	790	CB07	20407	7	7	1990	7	23	1200	28	45.09
1679	790	CB07	20408	8	8	1990	7	23	1220	28	41.00
1680	790	CB07	20409	9	9	1990	7	23	1240	28	39.00
1681	790	CB07	20410	10	10	1990	7	23	1310	28	36.00
1682	790	CB07	20411	11	11	1990	7	23	1330	28	33.01
1683	790	CB07	20516	16	16	1990	7	24	830	29	3.00
1684	790	CB07	20517	17	17	1990	7	24	850	29	0.01
1685	790	CB07	20518	18	18	1990	7	24	910	28	57.01
1686	790	CB07	20519	19	19	1990	7	24	930	28	54.00
1687	790	CB07	20520	20	20	1990	7	24	950	28	51.01
1688	790	CB07	20521	21	21	1990	7	24	1015	28	48.06
1689	790	CB07	20522	22	22	1990	7	24	1035	28	45.02
1690	790	CB07	20523	23	23	1990	7	24	1055	28	41.01
1691	790	CB07	20524	24	24	1990	7	24	1115	28	39.01
1692	790	CB07	20525	25	25	1990	7	24	1140	28	36.01

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1675	89	6.00	29.0	5	12	-1	2.6166	17.239	
1676	89	6.01	29.3	6	12	-1	7.2891	23.298	
1677	89	6.00	29.3	6	12	-1	10.8402	19.608	
1678	89	6.06	29.5	12	7	-1	3.1773	25.066	
1679	89	6.01	29.5	12	7	-1	2.0559	25.137	
1680	89	6.00	29.5	15	6	-1	2.4297	25.292	
1681	89	6.00	29.5	15	6	-1	2.6700	25.357	
1682	89	6.04	29.5	15	6	-1	2.4030	25.278	
1683	89	6.01	29.0	2	15	9	1.4952	22.095	
1684	89	6.00	29.0	3	14	30	1.3083	27.508	
1685	89	6.04	28.3	3	14	-1	5.4201	13.792	
1686	89	6.01	28.3	5	12	-1	2.6700	17.262	
1687	89	6.00	29.0	6	12	-1	7.1022	23.310	
1688	89	6.04	29.3	6	12	-1	9.3450	19.616	
1689	89	6.01	29.5	12	7	-1	3.1773	25.076	
1690	89	6.04	29.5	12	7	-1	2.8035	25.167	

1691	89	6.00	29.5	15	6	-1	2.9370	25.143
1692	89	6.00	29.5	15	6	-1	2.4030	25.205

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
1693	790	CB07	20526	26	26	1990	7	24	1205	28	33.00
1694	790	CB07	20527	27	27	1990	7	24	1225	28	30.02
1695	790	CB07	20528	28	28	1990	7	24	1245	28	27.00
1696	790	CB07	20529	29	29	1990	7	24	1315	28	24.05
1697	790	CB07	20530	30	30	1990	7	24	1345	28	21.01
1698	790	CB07	20631	31	31	1990	7	25	1030	29	3.04
1699	790	CB07	20632	32	32	1990	7	25	1055	29	0.10
1700	790	CB07	20633	33	33	1990	7	25	1120	28	57.04
1701	790	CB07	20634	34	34	1990	7	25	1145	28	54.04
1702	790	CB07	20635	35	35	1990	7	25	1205	28	51.00
1703	790	CB07	20636	36	36	1990	7	25	1230	28	48.04
1704	790	CB07	20637	37	37	1990	7	25	1255	28	45.01
1705	790	CB07	20638	38	38	1990	7	25	1320	28	42.02
1706	790	CB07	20639	39	39	1990	7	25	1345	28	39.00
1707	790	CB07	20640	40	40	1990	7	25	1410	28	36.02
1708	790	CB07	20641	41	41	1990	7	25	1430	28	33.01
1709	790	CB07	20642	42	42	1990	7	25	1455	28	30.04
1710	790	CB07	20643	43	43	1990	7	25	1520	28	27.04

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1693	89	6.00	29.8	15	6	-1	2.4030	25.365	
1694	89	6.09	29.9	15	6	-1	3.4710	24.951	
1695	89	6.00	30.0	15	6	-1	3.2040	24.633	
1696	89	6.06	30.0	15	6	-1	2.9370	.	
1697	89	6.04	30.0	15	6	-1	2.2428	24.597	
1698	89	6.00	29.0	2	15	8	62.0508	5.096	
1699	89	6.00	29.0	3	14	30	35.6979	13.096	
1700	89	6.01	29.0	3	14	-1	42.4263	16.977	
1701	89	6.00	29.0	5	12	-1	35.5110	16.929	
1702	89	6.00	29.0	6	12	-1	11.2140	23.741	
1703	89	6.05	29.0	6	12	-1	9.7188	24.592	
1704	89	6.00	29.3	9	12	-1	2.6700	24.985	
1705	89	6.06	29.5	12	7	-1	2.8035	24.950	
1706	89	6.03	29.5	15	6	-1	2.8035	25.294	
1707	89	6.00	29.5	15	6	-1	2.6077	25.173	
1708	89	6.02	29.8	15	6	-1	2.0559	25.250	

1709	89	6.01	29.8	15	6	-1	2.4297	25.073
1710	89	6.04	30.0	15	6	-1	2.4297	24.680

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
1711	790	CB07	20644	44	44	1990	7	25	1555	28	24.01
1712	790	CB07	20645	45	45	1990	7	25	1630	28	21.02
1713	790	CB07	20746	46	46	1990	7	26	815	29	3.01
1714	790	CB07	20747	47	47	1990	7	26	835	29	0.00
1715	790	CB07	20748	48	48	1990	7	26	855	28	57.09
1716	790	CB07	20749	49	49	1990	7	26	915	28	54.00
1717	790	CB07	20750	50	50	1990	7	26	935	28	51.01
1718	790	CB07	20751	51	51	1990	7	26	955	28	48.00
1719	790	CB07	20752	52	52	1990	7	26	1015	28	45.00
1720	790	CB07	20753	53	53	1990	7	26	1040	28	42.02
1721	790	CB07	20754	54	54	1990	7	26	1055	28	39.00
1722	790	CB07	20755	55	55	1990	7	26	1115	28	36.02
1723	790	CB07	20756	56	56	1990	7	26	1135	28	33.00
1724	790	CB07	20757	57	57	1990	7	26	1150	28	30.00
1725	790	CB07	20758	58	58	1990	7	26	1210	28	27.04
1726	790	CB07	20759	59	59	1990	7	26	1230	28	24.00
1727	790	CB07	20760	60	60	1990	7	26	1245	28	21.01
1728	790	CB07	20861	61	61	1990	7	27	1125	29	3.04

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1711	89	6.01	30.0	15	6	-1	2.6700	24.436	
1712	89	6.05	30.0	15	6	-1	3.2040	24.440	
1713	89	6.00	30.0	2	15	9	22.8018	22.501	
1714	89	6.00	30.0	3	14	30	16.2603	5.125	
1715	89	6.01	29.7	3	14	-1	19.4376	12.182	
1716	89	6.00	30.1	5	14	-1	17.9424	19.803	
1717	89	6.09	30.0	6	12	-1	13.0830	23.319	
1718	89	6.00	29.7	10	7	-1	0.9345	27.271	
1719	89	6.09	29.7	10	7	-1	1.3083	26.355	
1720	89	6.00	29.9	15	6	-1	1.0680	26.150	
1721	89	6.05	29.9	10	6	-1	1.6821	25.206	
1722	89	6.01	29.9	10	6	-1	2.0559	25.136	
1723	89	6.04	29.9	10	6	-1	1.8690	25.179	
1724	89	6.00	29.9	10	6	-1	2.2428	25.184	
1725	89	6.00	29.9	10	6	-1	2.0559	25.200	
1726	89	6.01	29.9	10	6	-1	2.0559	25.103	

1727	89	6.04	29.9	10	6	-1	2.0559	25.102
1728	89	6.00	29.7	2	15	9	20.5590	5.127

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)
1729	790	CB07	20862	62	62	1990	7	27	1145	29	0.01	89	6.00
1730	790	CB07	20863	63	63	1990	7	27	1200	28	57.09	89	6.01
1731	790	CB07	20864	64	64	1990	7	27	1215	28	54.02	89	6.04
1732	790	CB07	20865	65	65	1990	7	27	1235	28	51.03	89	6.00
1733	790	CB07	20866	66	66	1990	7	27	1250	28	48.00	89	6.01
1734	790	CB07	20867	67	67	1990	7	27	1310	28	45.07	89	0.00
1735	790	CB07	20868	68	68	1990	7	27	1330	28	42.00	89	6.00
1736	790	CB07	20869	69	69	1990	7	27	1345	28	39.00	89	6.05
1737	790	CB07	20870	70	70	1990	7	27	1400	28	36.07	89	6.01
1738	790	CB07	20871	71	71	1990	7	27	1420	28	33.00	89	6.00
1739	790	CB07	20872	72	72	1990	7	27	1435	28	30.05	89	6.09
1740	790	CB07	20873	73	73	1990	7	27	1455	28	27.04	89	6.01
1741	790	CB07	20874	74	74	1990	7	27	1510	28	24.00	89	6.04
1742	790	CB07	20875	75	75	1990	7	27	1530	28	21.05	89	6.09
1743	790	CB07	20976	76	76	1990	7	28	1030	29	3.04	89	6.02
1744	790	CB07	20977	77	77	1990	7	28	1045	29	0.00	89	6.00
1745	790	CB07	20978	78	78	1990	7	28	1105	28	57.06	89	6.01
1746	790	CB07	20979	79	79	1990	7	28	1125	28	54.00	89	6.00

OBS	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1729	30.0	3	14	30	16.0734	5.128	
1730	29.7	3	14	-1	27.8481	12.206	
1731	29.7	5	12	-1	18.5031	19.637	
1732	29.5	6	12	-1	12.8961	23.350	
1733	29.5	6	12	-1	1.3083	27.252	
1734	29.5	12	7	-1	1.3350	26.367	
1735	29.5	12	7	-1	1.1214	26.052	
1736	29.5	15	6	-1	2.6166	25.185	
1737	29.9	15	6	-1	2.2428	25.115	
1738	29.9	15	6	-1	2.8035	25.177	
1739	30.0	15	6	-1	2.1360	25.065	
1740	29.8	15	6	-1	2.2428	25.195	
1741	30.0	15	6	-1	2.4030	24.946	
1742	30.0	15	6	-1	2.8035	25.109	
1743	30.0	2	17	8	9.5319	3.928	
1744	30.1	2	17	30	4.2987	3.933	

1745	30.1	3	15	-1	7.8498	3.897
1746	31.0	5	14	-1	13.0830	21.299

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)
1747	790	CB07	20980	80	80	1990	7	28	1145	28	51.09	89	6.05
1748	790	CB07	20981	81	81	1990	7	28	1200	28	48.02	89	6.05
1749	790	CB07	20982	82	82	1990	7	28	1220	28	45.00	89	6.00
1750	790	CB07	20983	83	83	1990	7	28	1240	28	42.02	89	6.05
1751	790	CB07	20984	84	84	1990	7	28	1300	28	39.00	89	6.03
1752	790	CB07	20985	85	85	1990	7	28	1320	28	36.04	89	6.04
1753	790	CB07	20986	86	86	1990	7	28	1345	28	33.00	89	6.00
1754	790	CB07	20987	87	87	1990	7	28	1405	28	30.01	89	6.01
1755	790	CB07	20988	88	88	1990	7	28	1425	28	27.00	89	6.00
1756	790	CB07	20989	89	89	1990	7	28	1445	28	24.05	89	6.00
1757	790	CB07	20990	90	90	1990	7	28	1505	28	21.04	89	6.09
1758	790	CB09	20401	1	1	1990	7	23	1345	29	15.00	89	57.00
1759	790	CB09	20402	2	2	1990	7	23	1406	29	13.00	89	56.00
1760	790	CB09	20403	3	3	1990	7	23	1430	29	11.00	89	55.50
1761	790	CB09	20404	4	4	1990	7	23	1505	29	9.00	89	55.00
1762	790	CB09	20405	5	5	1990	7	23	1535	29	7.00	89	54.00
1763	790	CB09	20406	6	6	1990	7	23	1610	29	2.00	89	52.50
1764	790	CB09	20407	7	7	1990	7	23	1635	28	57.00	89	51.50

OBS	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1747	31.0	7	14	-1	10.4664	21.309	
1748	31.0	7	14	-1	8.2236	21.304	
1749	30.8	10	12	-1	3.1773	24.749	
1750	30.7	10	12	-1	3.4710	24.641	
1751	30.8	10	12	-1	2.2428	24.653	
1752	30.8	16	7	-1	1.3083	27.411	
1753	30.5	18	6	-1	0.7476	27.437	
1754	30.5	18	6	-1	1.1214	27.418	
1755	30.5	18	6	-1	0.8010	27.330	
1756	30.5	18	6	-1	1.1214	27.338	
1757	30.5	18	6	-1	0.9345	27.342	
1758	30.5	13	16	.	7.4760	22.466	
1759	30.9	13	16	.	5.6070	22.591	
1760	30.8	6	15	.	19.2507	22.772	
1761	30.9	6	12	.	4.1118	23.017	
1762	31.0	4	19	.	.	23.819	

1763	30.7	5	19	.	4.8594	23.483	DENSITY CAUSED BY EMISSION OF MISS RIVER
1764	31.0	6	19	.	15.6996	18.004	

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)
1765	790	CB09	20408	8	8	1990	7	23	1700	28	52	89
1766	790	CB09	20409	9	9	1990	7	23	1730	28	47	89
1767	790	CB09	20410	10	10	1990	7	23	1801	28	42	89
1768	790	CB09	20411	11	11	1990	7	23	1832	28	37	89
1769	790	CB09	20512	12	12	1990	7	24	730	29	15	89
1770	790	CB09	20513	13	13	1990	7	24	750	29	13	89
1771	790	CB09	20514	14	14	1990	7	24	819	29	11	89
1772	790	CB09	20515	15	15	1990	7	24	838	29	9	89
1773	790	CB09	20516	16	16	1990	7	24	911	29	7	89
1774	790	CB09	20517	17	17	1990	7	24	942	29	2	89
1775	790	CB09	20518	18	18	1990	7	24	1015	28	57	89
1776	790	CB09	20519	19	19	1990	7	24	1045	28	52	89
1777	790	CB09	20520	20	20	1990	7	24	1116	28	47	89
1778	790	CB09	20521	21	21	1990	7	24	1148	28	42	89
1779	790	CB09	20522	22	22	1990	7	24	1220	28	37	89
1780	790	CB09	20523	23	23	1990	7	24	1252	28	32	89
1781	790	CB09	20524	24	24	1990	7	24	1325	28	27	89
1782	790	CB09	20525	25	25	1990	7	24	1355	28	22	89

OBS	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1765	49.5	31.0	3	21	.	37.5669	18.364	
1766	48.0	30.5	3	28	.	22.0542	16.241	
1767	46.5	29.0	4	44	.	44.8560	17.953	
1768	45.0	29.5	5	44	.	4.6725	17.945	
1769	57.0	30.9	3	16	.	8.9712	22.056	
1770	56.0	30.8	3	16	.	6.7284	22.108	HEAVILY EXPLOITED BY SHRIMPERS
1771	55.5	30.0	6	15	.	18.3162	22.991	
1772	55.0	30.5	6	12	.	4.4856	23.232	
1773	54.5	30.5	6	19	.	16.2603	23.587	
1774	52.5	31.0	5	19	.	5.2332	23.236	
1775	51.5	31.3	6	19	.	19.2507	18.005	MANY RIGS
1776	49.5	30.9	3	21	.	42.4263	18.323	
1777	48.0	31.0	3	21	.	24.6708	16.269	SULFER MINE
1778	46.5	30.5	4	14	.	40.7442	18.017	
1779	45.0	30.0	4	14	.	5.9808	17.913	
1780	43.5	30.5	6	15	.	4.8594	17.905	OIL PROD PLATFORMS

1781	42.0	30.0	6	15	.	4.5390	17.886
1782	40.5	30.0	7	12	.	3.7380	17.903

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
1783	790	CB09	20526	26	26	1990	7	24	1431	28	17
1784	790	CB09	20627	27	27	1990	7	25	630	29	15
1785	790	CB09	20628	28	28	1990	7	25	650	29	13
1786	790	CB09	20629	29	29	1990	7	25	710	29	11
1787	790	CB09	20630	30	30	1990	7	25	728	29	9
1788	790	CB09	20631	31	31	1990	7	25	748	29	7
1789	790	CB09	20632	32	32	1990	7	25	820	29	2
1790	790	CB09	20633	33	33	1990	7	25	848	28	57
1791	790	CB09	20634	34	34	1990	7	25	918	28	52
1792	790	CB09	20635	35	35	1990	7	25	948	28	47
1793	790	CB09	20636	36	36	1990	7	25	1020	28	42
1794	790	CB09	20637	37	37	1990	7	25	1050	28	37
1795	790	CB09	20638	38	38	1990	7	25	1121	28	32
1796	790	CB09	20639	39	39	1990	7	25	1151	28	27
1797	790	CB09	20640	40	40	1990	7	25	1220	28	22
1798	790	CB09	20641	41	41	1990	7	25	1250	28	17
1799	790	CB09	20742	42	42	1990	7	26	625	29	15
1800	790	CB09	20743	43	43	1990	7	26	640	29	13

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1783	89	39.0	29.8	6	12	.	4.5390	17.854	
1784	89	57.0	29.0	18	10	.	2.6700	27.740	
1785	89	56.0	29.5	15	10	.	2.2428	27.596	
1786	89	55.5	29.5	26	8	.	1.3350	27.315	
1787	89	55.0	29.9	19	14	.	1.6821	26.873	
1788	89	54.5	30.0	22	10	.	1.4952	25.327	
1789	89	52.5	30.1	16	12	.	1.8690	25.448	
1790	89	51.5	30.1	14	14	.	2.0559	17.956	
1791	89	49.5	30.4	22	8	.	1.8690	17.526	
1792	89	48.0	30.0	18	8	.	.	17.513	
1793	89	46.5	30.6	19	8	.	4.8594	17.446	
1794	89	45.0	31.5	19	8	.	5.9808	17.469	
1795	89	43.5	30.0	17	8	.	3.9249	17.445	
1796	89	42.0	30.1	22	10	.	4.8594	17.488	
1797	89	40.5	29.8	30	10	.	4.6725	17.463	
1798	89	39.0	30.0	21	10	.	5.2332	17.463	

1799	89	57.0	30.8	3	16	.	2.9904	27.778
1800	89	56.0	30.8	3	16	.	2.8035	27.721

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
1801	790	CB09	20744	44	44	1990	7	26	659	29	11
1802	790	CB09	20745	45	45	1990	7	26	720	29	9
1803	790	CB09	20746	46	46	1990	7	26	738	29	7
1804	790	CB09	20747	47	47	1990	7	26	810	29	2
1805	790	CB09	20748	48	48	1990	7	26	840	28	52
1806	790	CB09	20749	49	49	1990	7	26	910	28	47
1807	790	CB09	20750	50	50	1990	7	26	938	28	42
1808	790	CB09	20751	51	51	1990	7	26	1008	28	37
1809	790	CB09	20752	52	52	1990	7	26	1040	28	32
1810	790	CB09	20753	53	53	1990	7	26	1110	28	27
1811	790	CB09	20754	54	54	1990	7	26	1145	28	22
1812	790	CB09	20755	55	55	1990	7	26	1230	28	17
1813	790	CB09	20756	56	56	1990	7	26	1305	28	12
1814	790	CB09	20857	57	57	1990	7	27	628	29	15
1815	790	CB09	20858	58	58	1990	7	27	642	29	13
1816	790	CB09	20859	59	59	1990	7	27	659	29	11
1817	790	CB09	20860	60	60	1990	7	27	722	29	9
1818	790	CB09	20861	61	61	1990	7	27	740	29	7

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1801	89	55.5	30.0	6	14	.	1.3083	27.307	
1802	89	55.0	30.5	6	15	.	1.4952	25.438	
1803	89	54.0	30.5	6	12	.	1.3350	25.454	
1804	89	52.0	31.0	6	15	.	1.3350	17.943	
1805	89	51.0	31.2	6	19	.	1.6020	17.554	
1806	89	49.0	30.7	6	18	.	2.1360	.	
1807	89	48.0	31.0	3	21	.	0.5340	.	
1808	89	46.0	30.0	3	21	.	4.2987	17.466	
1809	89	45.0	30.5	4	14	.	4.8594	17.450	
1810	89	43.0	30.6	4	15	.	4.6725	17.442	
1811	89	42.0	30.0	4	14	.	5.0463	17.455	
1812	89	40.0	30.1	4	15	.	5.2332	17.473	
1813	89	39.0	29.7	4	15	.	5.0730	17.432	
1814	89	57.0	29.0	18	10	.	2.4297	27.756	
1815	89	56.0	29.5	15	10	.	2.2428	27.642	
1816	89	55.5	29.5	26	9	.	1.1214	27.347	

1817	89	55.0	29.8	18	14	.	1.6020	26.841
1818	89	54.5	30.0	22	10	.	1.3083	25.447

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
1819	790	CB09	20862	62	62	1990	7	27	810	29	2
1820	790	CB09	20863	63	63	1990	7	27	841	28	57
1821	790	CB09	20864	64	64	1990	7	27	912	28	52
1822	790	CB09	20865	65	65	1990	7	27	940	28	47
1823	790	CB09	20866	66	66	1990	7	27	1010	28	42
1824	790	CB09	20867	67	67	1990	7	27	1041	28	37
1825	790	CB09	20868	68	68	1990	7	27	1109	28	32
1826	790	CB09	20869	69	69	1990	7	27	1146	28	27
1827	790	CB09	20870	70	70	1990	7	27	1235	28	22
1828	790	CB09	20871	71	71	1990	7	27	1310	28	17
1829	790	CB09	20972	72	72	1990	7	28	0	29	15
1830	790	CB09	20973	73	73	1990	7	28	0	29	13
1831	790	CB09	20974	74	74	1990	7	28	0	29	11
1832	790	CB09	20975	75	75	1990	7	28	0	29	9
1833	790	CB09	20976	76	76	1990	7	28	0	29	7
1834	790	CB09	20977	77	77	1990	7	28	0	29	2
1835	790	CB09	20978	78	78	1990	7	28	0	28	57

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1819	89	52.5	29.9	16	12	.	2.1360	25.444	
1820	89	51.5	30.1	14	14	.	1.4952	17.953	
1821	89	49.5	30.1	22	8	.	1.8690	17.833	
1822	89	48.0	30.3	22	18	.	0.5607	17.566	
1823	89	46.5	30.0	19	8	.	0.5340	17.971	
1824	89	45.0	30.6	19	9	.	.	17.968	
1825	89	43.5	31.5	17	8	.	0.5607	17.912	
1826	89	42.0	30.0	22	10	.	0.9345	17.890	
1827	89	40.5	30.1	30	9	.	0.7476	17.876	
1828	89	39.0	30.0	21	18	.	0.5607	18.018	
1829	89	57.0	.	.	.	.	2.4297	27.738	
1830	89	56.0	.	.	.	.	2.0559	27.730	
1831	89	55.5	.	.	.	.	1.3083	27.299	
1832	89	55.0	.	.	.	.	1.6821	26.848	
1833	89	54.5	.	.	.	.	1.6821	25.435	
1834	89	52.5	.	.	.	.	2.6166	25.435	
1835	89	51.5	.	.	.	.	1.6821	17.966	

3.2.2 CHARTER BOATS, continued:

OBS	CRUISE ID CODE	PLATFORM CODE	OBS NUMBER	SALINITY SAMPLE NO.	CHLOROPHYLL SAMPLE NO.	YEAR	MONTH	DAY	TIME OF OBS.	LATITUDE (DEGREES)	LATITUDE (MINUTES)
1836	790	CB09	20979	79	79	1990	7	28	0	28	52
1837	790	CB09	20980	80	80	1990	7	28	0	28	47

OBS	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SURFACE WATER TEMPERATURE	SECCI DEPTH	FOREL-ULE NUMBER	WATER DEPTH	SURFACE CHLOROPHYLL	SURFACE SALINITY	COMMENTS
1836	89	49.5	.	.	2.1360	17.547			
1837	89	48.0	.	.	0.9345	17.567			

3.2.3 RESEARCH VESSELS

3.2.3.1 R.V. OREGON II, CRUISE #176

OBS	CARD	VESSEL CODE	STATION NUMBER	CRUISE NUMBER	START DATE	LATITUDE TIME ZONE	HEMISPHERE CODE	LONGITUDE HEMISPHERE CODE	LATITUDE	GEAR SIZE	LONGITUDE
1	1	4	48405	176	82588	723	4	1	2847.7	1	8932.3
2	1	4	48406	176	82588	950	4	1	2841.2	1	8928.2
3	1	4	48407	176	82588	1250	4	1	2835.8	1	8926.2
4	1	4	48408	176	82588	1440	4	1	2838.0	1	8931.9
5	1	4	48479	176	83088	1935	4	1	2906.9	1	8854.6
6	1	4	48483	176	83188	1146	4	1	2914.3	1	8847.0
7	1	4	48484	176	83188	1310	4	1	2916.7	1	8850.5

OBS	GEAR TYPE CODE	WIND SPEED	WIND DIRECTION	WAVE HEIGHT	BAROMETRIC PRESSURE	CLOUD COVER	SECCI DEPTH	WATER COLOR	MIDWATER WATER DEPTH	MAXIMUM SAMPLE DEPTH	SEAMAP SAMPLE DEPTH	STATION NUMBER	CARD	XBT?
1	99	9	140	0.3	1013.6	80	.	.	86	40	81	2	1	
2	99	9	10	0.3	1013.6	.	.	.	.	.	.	2	2	
3	99	9	335	0.3	1013.8	.	.	.	.	.	.	2	2	
4	99	0	0	.	.	.	.	.	.	.	.	2	2	
5	99	18	140	0.3	1011.9	.	.	.	.	.	.	2	2	
6	99	33	95	0.6	1013.5	.	.	.	.	.	.	2	2	
7	99	33	115	0.6	1013.5	.	.	.	.	.	.	2	2	

OBS	STD OR CTD?	SURFACE WATER TEMPERATURE	MIDWATER TEMPERATURE	BOTTOM WATER TEMPERATURE	SURFACE SALINITY	MIDWATER SALINITY	BOTTOM SALINITY	SURFACE CHLOROPHYLL	MIDWATER CHLOROPHYLL
1	1	29.76	19.88	18.15	31.698	36.585	36.527	.	.
2	2	.	.	.	.	.	.	.	.
3	2	.	.	.	.	.	.	.	.
4	2	.	.	.	.	.	.	.	.
5	2	.	.	.	.	.	.	.	.
6	2	.	.	.	.	.	.	.	.
7	2	.	.	.	.	.	.	.	.

OBS	BOTTOM CHLOROPHYLL	CARD	SURFACE DISSOLVED OXYGEN	MIDWATER DISSOLVED OXYGEN	BOTTOM DISSOLVED OXYGEN	SURFACE TURBIDITY	MIDWATER TURBIDITY	BOTTOM TURBIDITY	THERMOCLINE DEPTH
1	.	3	.	.	.	.	.	.	.

2	.	3	.	.	.	.	.	.	.
3	.	3	.	.	.	.	.	.	.
4	.	3	.	.	.	.	.	.	.
5	.	3	.	.	.	.	.	.	.
6	.	3	.	.	.	.	.	.	.
7	.	3	.	.	.	.	.	.	.

3.2.3.1 R.V. OREGON II, CRUISE #176, continued:

OBS	CARD	VESSEL CODE	STATION NUMBER	CRUISE NUMBER	START DATE	LATITUDE TIME ZONE TIME	LATITUDE HEMISPHERE CODE	LONGITUDE HEMISPHERE CODE	LATITUDE	GEAR SIZE	LONGITUDE
8	1	4	48485	176	83188	1450	4	1	2919.2	1	8854.2 .
9	1	4	48486	176	83188	1617	4	1	2919.0	1	8858.9 .
10	1	4	48487	176	83188	1910	4	1	2908.3	1	8854.3 .
11	1	4	48488	176	83188	2350	4	1	2854.9	1	8851.1 .
12	1	4	48489	176	90188	225	4	1	2908.3	1	8854.2 .
13	1	4	48490	176	90188	605	4	1	2908.3	1	8854.2 .
14	1	4	48491	176	90188	934	4	1	2908.3	1	8854.2 .

OBS	GEAR TYPE CODE	WIND SPEED	WIND DIRECTION	WAVE HEIGHT	BAROMETRIC PRESSURE	CLOUD COVER	SECCI DEPTH	MIDWATER WATER COLOR	MAXIMUM WATER DEPTH	SEAMAP SAMPLE DEPTH	SAMPLE DEPTH	STATION NUMBER	CARD	XBT?
8	99	37	175	0.6	1013.0	.	.	.	.	.	.	2	2			
9	99	33	180	0.6	1013.0	.	.	.	.	.	.	2	2			
10	99	5	140	.	.	.	.	.	.	.	.	2	2			
11	99	29	65	0.9	1012.9	.	.	.	.	.	.	2	2			
12	99	44	85	0.6	1013.0	.	.	.	.	.	.	2	2			
13	99	31	110	0.6	1012.7	.	.	.	.	.	.	2	2			
14	99	33	90	0.9	1015.5	.	.	.	.	.	.	2	2			

OBS	STD OR CTD?	SURFACE WATER TEMPERATURE	MIDWATER TEMPERATURE	BOTTOM WATER TEMPERATURE	SURFACE SALINITY	MIDWATER SALINITY	BOTTOM SALINITY	SURFACE CHLOROPHYLL	MIDWATER CHLOROPHYLL
8	2	.	.	.	.	.	.	.	.
9	2	.	.	.	.	.	.	.	.
10	2	.	.	.	.	.	.	.	.
11	2	.	.	.	.	.	.	.	.
12	2	.	.	.	.	.	.	.	.
13	2	.	.	.	.	.	.	.	.
14	2	.	.	.	.	.	.	.	.

OBS	BOTTOM CHLOROPHYLL	CARD	SURFACE DISSOLVED OXYGEN	MIDWATER DISSOLVED OXYGEN	BOTTOM DISSOLVED OXYGEN	SURFACE TURBIDITY	MIDWATER TURBIDITY	BOTTOM TURBIDITY	THERMOCLINE DEPTH
8	.	3	.	.	.	.	.	.	.

9	.	3	.	.	.	.	.	.	.
10	.	3	.	.	.	.	.	.	.
11	.	3	.	.	.	.	.	.	.
12	.	3	.	.	.	.	.	.	.
13	.	3	.	.	.	.	.	.	.
14	.	3	.	.	.	.	.	.	.

3.2.3.1 R.V. OREGON II, CRUISE #176, continued:

OBS	CARD	VESSEL CODE	STATION NUMBER	CRUISE NUMBER	START DATE	TIME	LATITUDE TIME ZONE CODE	LATITUDE HEMISPHERE CODE	LATITUDE	LONGITUDE HEMISPHERE CODE	LONGITUDE	GEAR SIZE
15	1	4	48492	176	90188	1215	4	1	2855.3	1	8911.5	.
16	1	4	48493	176	90188	1330	4	1	2853.9	1	8911.2	.
17	1	4	48494	176	90188	1638	4	1	2852.5	1	8910.5	.
18	1	4	48495	176	90788	1428	4	1	2809.6	1	8459.8	.
19	1	4	48496	176	90788	1837	4	1	2800.0	1	8429.9	.
20	1	4	48497	176	90788	2204	4	1	2759.9	1	8400.1	.
21	1	4	48498	176	90888	250	4	1	2800.1	1	8330.0	.

OBS	GEAR TYPE CODE	WIND SPEED	WIND DIRECTION	WAVE HEIGHT	BAROMETRIC PRESSURE	CLOUD COVER	SECCI DEPTH	WATER COLOR	MIDWATER WATER DEPTH	MAXIMUM WATER DEPTH	SEAMAP SAMPLE DEPTH	SAMPLE DEPTH	STATION NUMBER	CARD	XBT?
15	99	18	70	0.9	1015.8	.	.	.	.	.	.	2	2		
16	99	29	70	1.2	1015.2	.	.	.	.	.	.	2	2		
17	99	37	55	1.2	1014.3	.	.	.	.	.	.	2	2		
18	52	40	30	0.9	1009.5	100	.	.	176	87	175	2	1		
19	52	22	80	2.0	1010.0	.	.	.	78	38	75	2	1		
20	52	48	155	1.2	1010.0	.	.	.	47	23	45	2	2		
21	52	29	125	3.0	1009.3	.	.	.	29	14	28	2	1		

OBS	STD OR CTD?	SURFACE WATER TEMPERATURE	MIDWATER TEMPERATURE	BOTTOM WATER TEMPERATURE	SURFACE SALINITY	MIDWATER SALINITY	BOTTOM SALINITY	SURFACE CHLOROPHYLL	MIDWATER CHLOROPHYLL
15	2	.	.	.	.	.	.	0.0934	.
16	2	.	.	.	.	.	.	.	.
17	2	.	.	.	.	.	.	.	.
18	1	28.67	19.20	15.80	35.177	36.451	36.094	0.1079	.
19	2	28.00	20.70	18.25	27.033	36.382	36.337	0.1184	.
20	1	28.48	23.05	19.59	34.854	36.528	36.493	0.0655	.
21	2	28.50	28.50	28.50	.	.	35.249	.	.

OBS	BOTTOM CHLOROPHYLL	CARD	SURFACE DISSOLVED OXYGEN	MIDWATER DISSOLVED OXYGEN	BOTTOM DISSOLVED OXYGEN	SURFACE TURBIDITY	MIDWATER TURBIDITY	BOTTOM TURBIDITY	THERMOCLINE DEPTH
15	.	3	.	.	.	.	.	.	.

16	.	3	.	.	.	.	.	.	.
17	.	3	.	.	.	.	.	.	.
18	.	3	7.3	4.6	5.7	.	.	.	.
19	.	3	6.8	6.6	6.4	.	.	.	.
20	.	3	7.3	8.1	7.0	.	.	.	.
21	.	3	7.2	7.4	7.2	.	.	.	.

3.2.3.1 R.V. OREGON II, CRUISE #176, continued:

OBS	CARD	VESSEL CODE	STATION NUMBER	CRUISE NUMBER	START DATE	LATITUDE TIME ZONE TIME	HEMISPHERE CODE	LONGITUDE HEMISPHERE CODE	GEAR LATITUDE	GEAR LONGITUDE	GEAR SIZE
22	1	4	48499	176	90888	1820	4	1	2859.9	1	8529.8	.
23	1	4	48500	176	90888	2102	4	1	2911.8	1	8600.6	.
24	1	4	48501	176	90888	2348	4	1	2930.0	1	8600.1	.
25	1	4	48502	176	90988	255	4	1	3000.0	1	8600.0	.
26	1	4	48503	176	90988	627	1	1	3018.0	1	8630.1	.
27	1	4	48504	176	91888	342	4	1	2929.8	1	8630.0	.
28	1	4	48505	176	91888	700	4	1	3000.0	1	8630.0	.

OBS	GEAR TYPE CODE	WIND SPEED	WIND DIRECTION	WAVE HEIGHT	BAROMETRIC PRESSURE	CLOUD COVER	SECCI DEPTH	MIDWATER WATER COLOR	MAXIMUM WATER DEPTH	SEAMAP SAMPLE DEPTH	SAMPLE DEPTH	STATION NUMBER	CARD	XBT?
22	52	33	50	3.0	1009.9	.	.	.	73	36	73	2	1	
23	52	33	55	0.9	1011.8	.	.	.	192	93	187	2	1	
24	52	11	60	0.9	1012.0	.	.	.	59	28	59	2	1	
25	52	22	50	2.0	1010.5	.	.	.	31	15	30	2	1	
26	52	40	50	0.1	1012.2	.	.	.	25	.	.	2	1	
27	52	4	95	.	1017.8	.	.	.	210	100	200	2	1	
28	52	0	0	.	1018.4	95	.	.	57	28	56	2	1	

OBS	STD OR CTD?	SURFACE WATER TEMPERATURE	MIDWATER TEMPERATURE	BOTTOM WATER TEMPERATURE	SURFACE SALINITY	MIDWATER SALINITY	BOTTOM SALINITY	SURFACE CHLOROPHYLL	MIDWATER CHLOROPHYLL
22	2	26.80	23.93	19.59	33.793	36.015	36.438	.	.
23	2	28.01	18.72	14.85	33.767	36.439	35.984	0.1869	.
24	2	28.08	26.85	21.97	35.693	34.924	36.118	0.3115	.
25	2	27.00	27.80	25.50	.	34.902	35.189	0.4486	.
26	2	27.32	.	27.50	34.197	34.065	34.099	0.2804	.
27	2	28.06	18.58	15.45	34.490	36.411	36.031	0.1095	.
28	2	28.19	28.10	23.20	34.290	34.579	36.134	0.3115	.

OBS	BOTTOM CHLOROPHYLL	CARD	SURFACE DISSOLVED OXYGEN	MIDWATER DISSOLVED OXYGEN	BOTTOM DISSOLVED OXYGEN	SURFACE TURBIDITY	MIDWATER TURBIDITY	BOTTOM TURBIDITY	THERMOCLINE DEPTH
22	.	3	7.6	8.0	6.8	.	.	.	.

23	.	3	8.1	6.5	6.3	.	.	.	.
24	.	3	7.3	7.0	6.1	.	.	.	.
25	.	3	7.4	7.3	7.0	.	.	.	.
26	.	3	8.0	7.7	7.8	.	.	.	.
27	.	3	7.5	6.5	5.8	.	.	.	.
28	.	3	7.4	6.7	6.1	.	.	.	.

3.2.3.1 R.V. OREGON II, CRUISE #176, continued:

OBS	CARD	VESSEL CODE	STATION NUMBER	CRUISE NUMBER	START DATE	LATITUDE TIME ZONE TIME	HEMISPHERE CODE	LATITUDE	LONGITUDE HEMISPHERE CODE	LONGITUDE	GEAR SIZE
29	1	4	48506	176	91888	1047	4	1	3018.4	1	8700.0	.
30	1	4	48507	176	91888	1320	4	1	3000.0	1	8700.0	.
31	1	4	48508	176	91888	1513	4	1	2948.0	1	8700.0	.
32	1	4	48509	176	91888	1848	4	1	3010.0	1	8730.0	.
33	1	4	48510	176	91888	2034	4	1	2959.9	1	8730.1	.
34	1	4	48511	176	91888	2344	4	1	2929.8	1	8730.1	.
35	1	4	48512	176	91988	358	4	1	2915.0	1	8800.0	.

OBS	GEAR TYPE CODE	WIND SPEED	WIND DIRECTION	WAVE HEIGHT	BAROMETRIC PRESSURE	CLOUD COVER	SECCI DEPTH	WATER COLOR	MIDWATER WATER DEPTH	MAXIMUM SAMPLE DEPTH	SEAMAP SAMPLE DEPTH	STATION NUMBER	CARD	XBT?
29	52	0	0	.	1019.0	80	80	3	20	10	20	2	1	
30	52	0	0	0.6	1017.5	75	210	.	71	35	70	2	1	
31	52	7	150	0.5	1016.2	80	230	4	192	96	192	2	1	
32	52	15	195	.	1016.0	.	.	.	26	13	25	2	2	
33	52	13	190	.	1016.2	.	.	.	27	13	26	2	2	
34	52	11	170	0.6	1016.5	.	.	.	70	35	70	2	2	
35	52	7	180	0.6	1014.9	.	.	.	244	100	200	2	2	

OBS	STD OR CTD?	SURFACE WATER TEMPERATURE	MIDWATER TEMPERATURE	BOTTOM WATER TEMPERATURE	SURFACE SALINITY	MIDWATER SALINITY	BOTTOM SALINITY	SURFACE CHLOROPHYLL	MIDWATER CHLOROPHYLL
29	2	27.91	27.75	27.64	33.515	33.680	33.808	0.6764	.
30	2	28.75	27.72	20.65	33.827	35.252	36.700	0.2029	.
31	2	29.43	19.29	15.56	33.759	36.585	36.227	0.0401	.
32	1	28.57	27.68	27.59	33.404	33.870	33.953	0.4673	.
33	1	28.76	27.70	27.67	34.065	33.993	34.077	0.3987	.
34	1	28.23	25.37	19.93	35.053	36.259	36.604	0.1068	.
35	1	28.34	19.13	15.06	34.716	36.792	36.121	2.3496	.

OBS	BOTTOM CHLOROPHYLL	CARD	SURFACE DISSOLVED OXYGEN	MIDWATER DISSOLVED OXYGEN	BOTTOM DISSOLVED OXYGEN	SURFACE TURBIDITY	MIDWATER TURBIDITY	BOTTOM TURBIDITY	THERMOCLINE DEPTH
29	.	3	6.8	6.7	6.3	.	.	.	.

30	.	3	7.7	7.1	6.7	.	.	.	.
31	.	3	8.1	6.7	6.2	.	.	.	.
32	.	3	7.2	6.5	6.6	.	.	.	.
33	.	3	7.7	7.1	6.7	.	.	.	.
34	.	3	7.1	7.6	6.4	.	.	.	.
35	.	3	7.2	5.8	.	.	.	.	.

3.2.3.1 R.V. OREGON II, CRUISE #176, continued:

OBS	CARD	VESSEL CODE	STATION NUMBER	CRUISE NUMBER	START DATE	TIME ZONE TIME	LATITUDE HEMISPHERE CODE	LATITUDE	LONGITUDE HEMISPHERE CODE	LONGITUDE	GEAR SIZE
36	1	4	48513	176	91988	653	4	1	2913.0	1	8830.0	.
37	1	4	48514	176	91988	1004	4	1	2905.3	1	8856.7	.
38	1	4	48515	176	91988	1116	4	1	2859.9	1	8900.1	.
39	1	4	48516	176	91988	1520	4	1	2835.0	1	8930.2	.
40	1	4	48517	176	91988	1808	4	1	2900.0	1	8930.0	.
41	1	4	48518	176	91988	2331	4	1	2855.6	1	9029.9	.
42	1	4	48519	176	92088	230	4	1	2830.0	1	9030.0	.

OBS	GEAR TYPE CODE	WIND SPEED	WIND DIRECTION	WAVE HEIGHT	BAROMETRIC PRESSURE	CLOUD COVER	SECCI DEPTH	WATER COLOR	MIDWATER WATER DEPTH	MAXIMUM SAMPLE DEPTH	SEAMAP SAMPLE DEPTH	STATION NUMBER	CARD	XBT?
36	52	16	178	0.3	1016.1	.	.	.	120	60	120	2	1	
37	52	16	180	0.3	1016.8	35	65	4	53	26	52	2	2	
38	52	15	160	0.3	1016.7	35	60	7	71	35	70	2	2	
39	52	15	180	0.3	1015.5	40	320	4	187	93	186	2	2	
40	52	16	230	0.3	1015.0	35	.	.	14	7	13	2	2	
41	52	15	220	0.3	1016.8	.	.	.	14	7	14	2	2	
42	52	13	165	0.3	1016.9	.	.	.	38	19	38	2	2	

OBS	STD OR CTD?	SURFACE WATER TEMPERATURE	MIDWATER TEMPERATURE	BOTTOM WATER TEMPERATURE	SURFACE SALINITY	MIDWATER SALINITY	BOTTOM SALINITY	SURFACE CHLOROPHYLL	MIDWATER CHLOROPHYLL
36	1	28.00	22.72	18.23	34.321	36.261	36.331	1.1006	.
37	1	28.26	27.56	23.20	31.591	33.886	35.979	0.9220	.
38	1	28.40	27.75	21.46	31.203	34.732	36.279	0.9096	.
39	1	28.85	20.21	16.29	36.591	36.644	36.308	0.0801	.
40	1	28.43	28.13	27.60	31.353	31.384	33.005	0.7788	.
41	1	28.39	27.88	27.80	32.809	32.834	26.977	0.5465	.
42	1	28.22	28.30	28.36	33.723	35.857	36.051	0.2367	.

OBS	BOTTOM CHLOROPHYLL	CARD	SURFACE DISSOLVED OXYGEN	MIDWATER DISSOLVED OXYGEN	BOTTOM DISSOLVED OXYGEN	SURFACE TURBIDITY	MIDWATER TURBIDITY	BOTTOM TURBIDITY	THERMOCLINE DEPTH
36	.	3	7.1	5.8	5.0	.	.	.	.

37	.	3	7.8	6.8	5.8	.	.	.	.
38	.	3	7.9	7.2	5.5	.	.	.	.
39	.	3	7.1	7.4	5.4	.	.	.	.
40	.	3	8.5	8.4	5.3	.	.	.	.
41	.	3	7.3	7.0	7.0	.	.	.	.
42	.	3	7.3	7.1	6.9	.	.	.	.

3.2.3.1 R.V. OREGON II, CRUISE #176, continued:

OBS	CARD	VESSEL CODE	STATION NUMBER	CRUISE NUMBER	START DATE	START TIME	TIME ZONE CODE	LATITUDE HEMISPHERE CODE	LATITUDE	LONGITUDE HEMISPHERE CODE	LONGITUDE	GEAR SIZE
43	1	4	48520	176	92088	527	4	1	2805.0	1	9030.0	.
44	1	4	48521	176	92088	1124	4	1	2800.1	1	9130.1	.
45	1	4	48522	176	92088	1526	4	1	2830.2	1	9129.9	.
46	1	4	48523	176	92088	1752	4	1	2853.0	1	9130.0	.
47	1	4	48524	176	92088	2322	4	1	2915.0	1	9230.0	.
48	1	4	48525	176	92188	133	4	1	2859.9	1	9230.0	.
49	1	4	48526	176	92188	445	4	1	2830.0	1	9230.0	.

OBS	GEAR TYPE CODE	WIND SPEED	WIND DIRECTION	WAVE HEIGHT	BAROMETRIC PRESSURE	CLOUD COVER	SECCI DEPTH	WATER COLOR	MIDWATER WATER DEPTH	MAXIMUM SAMPLE DEPTH	SEAMAP SAMPLE DEPTH	STATION NUMBER	CARD	XBT?
43	52	18	125	0.3	1016.9	.	.	.	140	70	139	2	2	
44	52	18	75	0.3	1019.8	80	.	.	164	82	163	2	1	
45	52	22	75	0.3	1019.0	20	185	1	45	23	45	2	2	
46	52	15	120	0.3	1019.0	.	.	.	16	8	16	2	2	
47	52	18	150	0.3	1019.3	.	.	.	13	6	12	2	2	
48	52	15	215	0.3	1019.1	.	.	.	24	12	23	2	2	
49	52	18	160	0.3	1020.2	.	.	.	50	25	50	2	2	

OBS	STD OR CTD?	SURFACE WATER TEMPERATURE	MIDWATER TEMPERATURE	BOTTOM WATER TEMPERATURE	SURFACE SALINITY	MIDWATER SALINITY	BOTTOM SALINITY	SURFACE CHLOROPHYLL	MIDWATER CHLOROPHYLL
43	1	28.33	22.37	18.29	35.971	36.630	36.582	0.1139	.
44	1	28.73	20.77	17.59	36.396	36.365	36.327	0.1780	.
45	1	28.29	28.15	27.90	36.084	36.252	36.249	0.1958	.
46	1	28.24	28.13	28.13	34.559	34.698	35.049	0.1602	.
47	1	28.57	28.32	28.08	33.403	33.434	34.439	0.8473	.
48	1	27.45	27.82	27.56	35.442	33.957	34.650	0.1246	.
49	1	28.12	28.00	25.14	34.533	24.755	36.393	0.1402	.

OBS	BOTTOM CHLOROPHYLL	CARD	SURFACE DISSOLVED OXYGEN	MIDWATER DISSOLVED OXYGEN	BOTTOM DISSOLVED OXYGEN	SURFACE TURBIDITY	MIDWATER TURBIDITY	BOTTOM TURBIDITY	THERMOCLINE DEPTH
43	.	3	8.6	8.4	6.7	.	.	.	.

44	.	3	8.1	6.8	6.3	.	.	.	.
45	.	3	7.3	7.3	7.1	.	.	.	.
46	.	3	7.8	7.9	7.3	.	.	.	.
47	.	3	7.5	7.1	5.5	.	.	.	.
48	.	3	7.3	6.4	5.5	.	.	.	.
49	.	3	7.1	7.4	4.1	.	.	.	.

3.2.3.1 R.V. OREGON II, CRUISE #176, continued:

OBS	CARD	VESSEL CODE	STATION NUMBER	CRUISE NUMBER	START DATE	TIME	LATITUDE TIME ZONE CODE	LATITUDE HEMISPHERE CODE	LATITUDE	LONGITUDE HEMISPHERE CODE	LONGITUDE	GEAR SIZE
50	1	4	48527	176	92188	745	4	1	2800.0	1	9230.0	.
51	1	4	48528	176	92188	1305	4	1	2800.0	1	9329.9	.
52	1	4	48529	176	92188	1633	4	1	2830.0	1	9330.0	.
53	1	4	48530	176	92188	1925	4	1	2900.0	1	9328.9	.
54	1	4	48531	176	92188	2135	4	1	2920.0	1	9329.8	.
55	1	4	48532	176	92288	225	4	1	2920.0	1	9420.0	.
56	1	4	48533	176	92288	508	4	1	2900.0	1	9428.4	.

OBS	GEAR TYPE CODE	WIND SPEED	WIND DIRECTION	WAVE HEIGHT	BAROMETRIC PRESSURE	CLOUD COVER	SECCI DEPTH	WATER COLOR	MIDWATER WATER DEPTH	MAXIMUM SAMPLE DEPTH	SEAMAP SAMPLE DEPTH	STATION NUMBER	CARD	XBT?
50	52	4	150	0.3	1021.0	10	315	4	106	52	105	2	1	
51	52	16	85	0.3	1021.0	.	360	1	94	47	93	2	2	
52	52	18	100	0.3	1020.0	.	145	3	43	21	43	2	2	
53	52	18	125	0.3	1019.0	.	.	.	23	11	22	2	2	
54	52	4	150	0.3	1019.1	.	.	.	15	7	14	2	2	
55	52	26	190	0.3	1017.8	.	.	.	14	7	14	2	2	
56	52	26	210	0.3	1017.8	.	.	.	18	8	16	2	2	

OBS	STD OR CTD?	SURFACE WATER TEMPERATURE	MIDWATER TEMPERATURE	BOTTOM WATER TEMPERATURE	SURFACE SALINITY	MIDWATER SALINITY	BOTTOM SALINITY	SURFACE CHLOROPHYLL	MIDWATER CHLOROPHYLL
50	1	28.21	23.49	19.78	36.257	36.495	36.405	0.0701	.
51	1	28.72	28.28	20.91	36.511	36.797	36.611	0.0712	.
52	1	28.53	28.08	27.95	36.215	36.209	36.273	0.0926	.
53	1	28.52	28.16	27.97	34.135	34.396	35.368	0.1402	.
54	1	28.59	28.15	27.82	31.366	32.394	33.361	0.4112	.
55	1	28.65	28.07	27.82	28.822	30.912	33.025	0.5233	.
56	1	28.43	28.38	27.99	35.420	35.417	35.514	0.4517	.

OBS	BOTTOM CHLOROPHYLL	CARD	SURFACE DISSOLVED OXYGEN	MIDWATER DISSOLVED OXYGEN	BOTTOM DISSOLVED OXYGEN	SURFACE TURBIDITY	MIDWATER TURBIDITY	BOTTOM TURBIDITY	THERMOCLINE DEPTH
50	.	3	7.8	7.8	5.9	.	.	.	.

51	.	3	6.4	6.4	5.4	.	.	.	.
52	.	3	7.3	8.4	7.0	.	.	.	.
53	.	3	7.5	7.4	6.4	.	.	.	.
54	.	3	7.8	7.5	6.0	.	.	.	.
55	.	3	8.5	7.7	4.6	.	.	.	.
56	.	3	7.3	7.4	6.6	.	.	.	.

3.2.3.1 R.V. OREGON II, CRUISE #176, continued:

OBS	CARD	VESSEL CODE	STATION NUMBER	CRUISE NUMBER	START DATE	START TIME	TIME ZONE CODE	LATITUDE HEMISPHERE CODE	LATITUDE	LONGITUDE HEMISPHERE CODE	LONGITUDE	GEAR SIZE
57	1	4	48534	176	92288	814	4	1	2829.9	1	9430.1	.
58	1	4	48535	176	92288	1118	4	1	2800.0	1	9430.0	.
59	1	4	48536	176	92288	1644	4	1	2745.0	1	9530.0	.
60	1	4	48537	176	92288	1837	4	1	2800.0	1	9530.0	.
61	1	4	48538	176	92288	2142	4	1	2829.9	1	9529.9	.
62	1	4	48539	176	92388	35	4	1	2827.1	1	9559.9	.
63	1	4	48540	176	92388	312	4	1	2820.0	1	9620.0	.

OBS	GEAR TYPE CODE	WIND SPEED	WIND DIRECTION	WAVE HEIGHT	BAROMETRIC PRESSURE	CLOUD COVER	SECCI DEPTH	WATER COLOR	MIDWATER WATER DEPTH	MAXIMUM SAMPLE DEPTH	SEAMAP SAMPLE DEPTH	STATION NUMBER	CARD	XBT?
57	52	4	145	0.3	1018.8	20	60	3	36	18	35	2	1	
58	52	15	130	0.3	1019.2	10	230	1	69	34	68	2	2	
59	52	26	135	0.6	1015.5	20	140	3	106	53	106	2	1	
60	52	24	140	0.6	1015.5	.	.	.	54	26	53	2	1	
61	52	22	135	0.6	1015.9	.	.	.	26	13	26	2	1	
62	52	33	190	0.6	1015.8	.	.	.	18	9	18	2	1	
63	52	40	150	0.6	1014.3	.	.	.	16	8	16	2	2	

OBS	STD OR CTD?	SURFACE WATER TEMPERATURE	MIDWATER TEMPERATURE	BOTTOM WATER TEMPERATURE	SURFACE SALINITY	MIDWATER SALINITY	BOTTOM SALINITY	SURFACE CHLOROPHYLL	MIDWATER CHLOROPHYLL
57	1	28.03	28.03	27.86	36.076	36.050	36.205	0.3186	.
58	1	27.94	26.12	22.00	36.453	36.585	36.742	0.0997	.
59	2	28.41	26.33	21.35	36.070	36.366	36.484	0.1406	.
60	2	28.17	27.98	27.65	36.349	36.290	36.400	0.1662	.
61	2	28.58	27.89	27.54	29.538	30.045	35.761	0.3367	.
62	2	28.35	28.25	27.55	31.328	31.345	34.644	0.3809	.
63	1	28.38	28.36	27.80	31.492	31.468	34.898	0.5607	.

OBS	BOTTOM CHLOROPHYLL	CARD	SURFACE DISSOLVED OXYGEN	MIDWATER DISSOLVED OXYGEN	BOTTOM DISSOLVED OXYGEN	SURFACE TURBIDITY	MIDWATER TURBIDITY	BOTTOM TURBIDITY	THERMOCLINE DEPTH
57	.	3	7.3	7.2	7.2	.	.	.	.

58	.	3	7.3	7.9	7.3	.	.	.	.
59	.	3	8.1	7.9	7.0	.	.	.	.
60	.	3	7.7	7.8	6.3	.	.	.	.
61	.	3	8.4	8.5	6.7	.	.	.	.
62	.	3	7.6	7.9	5.8	.	.	.	.
63	.	3	5.7	5.8	4.4	.	.	.	.

3.2.3.1 R.V. OREGON II, CRUISE #176, continued:

OBS	CARD	VESSEL CODE	STATION NUMBER	CRUISE NUMBER	START DATE	TIME	LATITUDE TIME ZONE CODE	LATITUDE HEMISPHERE CODE	LATITUDE	LONGITUDE HEMISPHERE CODE	LONGITUDE	GEAR SIZE
64	1	4	48541	176	92388	557	4	1	2800.0	1	9630.0	.
65	1	4	48542	176	92388	1205	4	1	2800.0	1	9600.0	.
66	1	4	48543	176	92388	1456	4	1	2735.0	1	9600.0	.
67	1	4	48544	176	92388	1751	4	1	2730.0	1	9630.0	.
68	1	4	48545	176	92388	2055	4	1	2730.0	1	9700.0	.
69	1	4	48546	176	92488	130	4	1	2700.0	1	9640.1	.
70	1	4	48547	176	92488	313	4	1	2701.0	1	9711.9	.

OBS	GEAR TYPE CODE	WIND SPEED	WIND DIRECTION	WAVE HEIGHT	BAROMETRIC PRESSURE	CLOUD COVER	SECCI DEPTH	WATER COLOR	MIDWATER WATER DEPTH	MAXIMUM SAMPLE DEPTH	SEAMAP SAMPLE DEPTH	STATION NUMBER	CARD	XBT?
64	52	33	195	0.6	1014.0	.	.	.	27	13	25	2	1	
65	52	22	170	0.9	1016.0	10	60	4	45	23	45	2	1	
66	52	22	155	0.6	1014.2	10	70	1	142	71	142	2	1	
67	52	22	150	0.6	1013.0	.	.	.	73	32	73	2	1	
68	52	31	125	0.6	1014.0	.	.	.	28	14	28	2	1	
69	52	37	165	0.6	1014.4	.	.	.	88	44	88	2	1	
70	52	31	180	0.6	1013.9	.	.	.	27	14	27	2	1	

OBS	STD OR CTD?	SURFACE WATER TEMPERATURE	MIDWATER TEMPERATURE	BOTTOM WATER TEMPERATURE	SURFACE SALINITY	MIDWATER SALINITY	BOTTOM SALINITY	SURFACE CHLOROPHYLL	MIDWATER CHLOROPHYLL
64	2	28.09	27.97	27.97	31.865	31.824	34.463	0.4361	.
65	2	27.94	27.64	26.76	35.548	36.165	36.228	0.2670	.
66	2	28.41	21.65	19.74	35.711	36.536	36.497	0.0890	.
67	2	28.43	28.20	22.12	34.134	36.519	36.514	0.2284	.
68	2	28.15	28.15	27.38	34.066	34.168	36.022	0.4673	.
69	2	28.41	27.92	21.11	34.940	36.228	36.475	0.7725	.
70	2	28.19	28.09	27.25	35.071	35.042	35.798	1.2211	.

OBS	BOTTOM CHLOROPHYLL	CARD	SURFACE DISSOLVED OXYGEN	MIDWATER DISSOLVED OXYGEN	BOTTOM DISSOLVED OXYGEN	SURFACE TURBIDITY	MIDWATER TURBIDITY	BOTTOM TURBIDITY	THERMOCLINE DEPTH
64	.	3	7.9	7.8	6.4	.	.	.	.

65	.	3	7.9	7.4	6.8	.	.	.	.
66	.	3	7.6	8.0	6.7	.	.	.	.
67	.	3	7.8	7.8	7.2	.	.	.	.
68	.	3	7.9	7.8	6.5	.	.	.	.
69	.	3	7.8	7.3	6.7	.	.	.	.
70	.	3	7.4	7.6	6.2	.	.	.	.

3.2.3.1 R.V. OREGON II, CRUISE #176, continued:

OBS	CARD	VESSEL CODE	STATION NUMBER	CRUISE NUMBER	START DATE	TIME	LATITUDE TIME ZONE CODE	LATITUDE HEMISPHERE CODE	LATITUDE	LONGITUDE HEMISPHERE CODE	LONGITUDE	GEAR SIZE
71	1	4	48548	176	92488	647	4	1	2630.0	1	9700.0	.
72	1	4	48549	176	92488	945	4	1	2600.1	1	9700.0	.
73	1	4	48550	176	92488	1224	4	1	2603.0	1	9629.9	.
74	1	4	48551	176	92488	1507	4	1	2629.9	1	9630.2	.
75	1	4	48552	176	92588	107	4	1	2800.0	1	9500.0	.
76	1	4	48553	176	92588	445	4	1	2830.0	1	9500.0	.
77	1	4	48554	176	92588	741	4	1	2900.0	1	9459.9	.

OBS	GEAR TYPE CODE	WIND SPEED	WIND DIRECTION	WAVE HEIGHT	BAROMETRIC PRESSURE	CLOUD COVER	SECCI DEPTH	WATER COLOR	MIDWATER WATER DEPTH	MAXIMUM WATER DEPTH	SEAMAP SAMPLE DEPTH	SAMPLE DEPTH	STATION NUMBER	CARD	XBT?
71	52	29	160	0.6	1015.0	.	.	.	35	17	34	2	1		
72	52	26	150	0.9	1016.9	65	43	4	28	12	25	2	1		
73	52	22	145	0.6	1016.8	30	.	.	62	31	62	2	1		
74	52	16	150	0.3	1014.8	15	110	1	84	41	84	2	1		
75	52	22	215	0.3	1016.3	.	.	.	80	40	79	2	1		
76	52	18	230	0.3	1016.5	.	.	.	35	17	34	2	1		
77	52	29	87	0.6	1018.0	.	.	.	17	8	16	2	1		

OBS	STD OR CTD?	SURFACE WATER TEMPERATURE	MIDWATER TEMPERATURE	BOTTOM WATER TEMPERATURE	SURFACE SALINITY	MIDWATER SALINITY	BOTTOM SALINITY	SURFACE CHLOROPHYLL	MIDWATER CHLOROPHYLL
71	2	28.27	28.27	28.33	.	.	.	0.9950	.
72	2	27.96	27.96	27.91	36.333	36.282	36.345	0.6728	.
73	2	28.16	28.04	24.36	33.868	36.444	36.568	0.1744	.
74	2	28.19	25.49	21.01	34.355	36.575	36.495	0.1682	.
75	2	28.08	27.87	27.51	36.239	36.579	36.471	0.1121	.
76	2	28.16	28.16	27.70	31.849	35.879	35.994	0.1495	.
77	2	27.93	27.93	27.87	32.536	32.505	35.392	1.9188	.

OBS	BOTTOM CHLOROPHYLL	CARD	SURFACE DISSOLVED OXYGEN	MIDWATER DISSOLVED OXYGEN	BOTTOM DISSOLVED OXYGEN	SURFACE TURBIDITY	MIDWATER TURBIDITY	BOTTOM TURBIDITY	THERMOCLINE DEPTH
71	.	3	7.4	7.6	5.7	.	.	.	.

72	.	3	7.4	7.4	7.1	.	.	.	.
73	.	3	8.3	7.5	7.2	.	.	.	.
74	.	3	7.7	8.4	7.6	.	.	.	.
75	.	3	8.3	7.8	7.4	.	.	.	.
76	.	3	8.0	7.7	7.4	.	.	.	.
77	.	3	8.1	7.9	7.6	.	.	.	.

3.2.3.1 R.V. OREGON II, CRUISE #176, continued:

OBS	CARD	VESSEL CODE	STATION NUMBER	CRUISE NUMBER	START DATE	LATITUDE TIME ZONE TIME	LATITUDE HEMISPHERE CODE	LATITUDE	LONGITUDE HEMISPHERE CODE	LONGITUDE	GEAR SIZE
78	1	4	48555	176	92588	1318	4	1	2927.1	1	9404.9	.
79	1	4	48556	176	92588	1606	4	1	2900.0	1	9400.0	.
80	1	4	48557	176	92588	1824	4	1	2830.0	1	9400.0	.
81	1	4	48558	176	92588	2157	4	1	2800.1	1	9400.1	.
82	1	4	48559	176	92688	243	4	1	2800.0	1	9300.0	.
83	1	4	48560	176	92688	601	4	1	2830.0	1	9300.0	.
84	1	4	48561	176	92688	856	4	1	2900.0	1	9259.9	.

OBS	GEAR TYPE CODE	WIND SPEED	WIND DIRECTION	WAVE HEIGHT	BAROMETRIC PRESSURE	CLOUD COVER	SECCI DEPTH	WATER COLOR	MIDWATER WATER DEPTH	MAXIMUM SAMPLE DEPTH	SEAMAP SAMPLE DEPTH	STATION NUMBER	CARD	XBT?
78	52	7	180	0.6	1018.5	.	30	6	14	.	14	2	1	
79	52	11	210	0.6	1017.2	15	90	5	17	8	16	2	1	
80	52	9	210	.	1017.0	.	.	.	41	20	40	2	1	
81	52	5	200	.	1018.0	.	.	.	82	41	82	2	1	
82	52	0	0	.	1017.9	.	.	.	108	54	108	2	1	
83	52	15	10	.	1018.3	.	.	.	45	22	44	2	1	
84	52	15	20	.	1019.7	10	160	1	24	12	24	2	1	

OBS	STD OR CTD?	SURFACE WATER TEMPERATURE	MIDWATER TEMPERATURE	BOTTOM WATER TEMPERATURE	SURFACE SALINITY	MIDWATER SALINITY	BOTTOM SALINITY	SURFACE CHLOROPHYLL	MIDWATER CHLOROPHYLL
78	2	28.55	28.55	27.66	31.236	31.162	33.800	0.8348	.
79	2	28.42	28.42	28.35	32.906	34.657	35.229	0.2492	.
80	2	28.19	28.19	27.89	36.133	36.104	36.142	0.1816	.
81	2	28.31	26.01	21.49	.	.	.	0.0913	.
82	2	28.24	22.06	19.26	36.218	36.493	36.383	0.0605	.
83	2	28.18	28.18	27.27	34.719	34.908	36.313	0.1228	.
84	2	27.90	28.23	27.99	33.610	33.900	34.994	0.1143	.

OBS	BOTTOM CHLOROPHYLL	CARD	SURFACE DISSOLVED OXYGEN	MIDWATER DISSOLVED OXYGEN	BOTTOM DISSOLVED OXYGEN	SURFACE TURBIDITY	MIDWATER TURBIDITY	BOTTOM TURBIDITY	THERMOCLINE DEPTH
78	.	3	4.2	4.3	3.0	.	.	.	.

79	.	3	7.6	7.7	7.4	.	.	.	.
80	.	3	7.9	7.7	6.5	.	.	.	.
81	.	3	8.0	8.4	7.6	.	.	.	.
82	.	3	8.4	5.2	7.2	.	.	.	.
83	.	3	8.0	8.2	7.5	.	.	.	.
84	1.0280	3	8.0	7.9	7.2	.	.	.	.

3.2.3.1 R.V. OREGON II, CRUISE #176, continued:

OBS	CARD	VESSEL CODE	STATION NUMBER	CRUISE NUMBER	START DATE	LATITUDE TIME ZONE TIME	LATITUDE HEMISPHERE CODE	LATITUDE	LONGITUDE HEMISPHERE CODE	LONGITUDE	GEAR SIZE
85	1	4	48562	176	92688	1145	4	1	2929.9	1	9259.9	.
86	1	4	48563	176	92688	1028	4	1	2900.0	1	9200.0	.
87	1	4	48564	176	92688	2008	4	1	2830.0	1	9159.9	.
88	1	4	48565	176	92688	2305	4	1	2759.9	1	9200.0	.
89	1	4	48566	176	92788	400	4	1	2800.0	1	9100.0	.
90	1	4	48567	176	92788	700	4	1	2830.0	1	9100.0	.
91	1	4	48568	176	92788	819	4	1	2841.4	1	9100.0	.

OBS	GEAR TYPE CODE	WIND SPEED	WIND DIRECTION	WAVE HEIGHT	BAROMETRIC PRESSURE	CLOUD COVER	SECCI DEPTH	WATER COLOR	MIDWATER WATER DEPTH	MAXIMUM SAMPLE DEPTH	SEAMAP SAMPLE DEPTH	STATION NUMBER	CARD	XBT?
85	52	11	80	.	1019.7	.	60	12	13	7	13	2	1	
86	52	7	310	.	1017.0	.	.	.	20	9	18	2	1	
87	52	11	305	0.3	1017.0	.	.	.	50	25	49	2	1	
88	52	16	0	0.1	1018.1	.	.	.	120	60	120	2	1	
89	52	0	0	.	1017.0	.	.	.	152	75	150	2	1	
90	52	0	0	.	1017.3	.	.	.	34	16	32	2	1	
91	52	0	0	.	1018.0	20	70	12	15	7	14	2	1	

OBS	STD OR CTD?	SURFACE WATER TEMPERATURE	MIDWATER TEMPERATURE	BOTTOM WATER TEMPERATURE	SURFACE SALINITY	MIDWATER SALINITY	BOTTOM SALINITY	SURFACE CHLOROPHYLL	MIDWATER CHLOROPHYLL
85	2	28.52	28.46	28.54	27.692	27.670	32.213	0.9843	.
86	2	28.92	28.32	28.03	33.261	33.844	34.763	0.3827	.
87	2	28.54	28.00	25.01	35.261	35.673	36.007	0.1144	.
88	2	28.33	24.14	18.74	36.225	36.474	36.367	0.0763	.
89	2	28.45	23.08	15.45	36.328	36.416	35.983	0.1095	.
90	2	.	.	.	34.318	32.767	36.105	0.9345	.
91	2	28.40	28.40	28.48	33.274	33.275	35.530	0.3426	.

OBS	BOTTOM CHLOROPHYLL	CARD	SURFACE DISSOLVED OXYGEN	MIDWATER DISSOLVED OXYGEN	BOTTOM DISSOLVED OXYGEN	SURFACE TURBIDITY	MIDWATER TURBIDITY	BOTTOM TURBIDITY	THERMOCLINE DEPTH
85	3.3486	3	8.4	8.3	3.8	.	.	.	.

86	0.1682	3	7.9	8.2	7.8	.	.	.	.
87	.	3	8.2	8.0	5.2	.	.	.	.
88	.	3	8.2	9.6	6.2	.	.	.	.
89	.	3	8.0	9.3	6.2	.	.	.	.
90	.	3	7.9	7.9	7.0	.	.	.	.
91	1.2149	3	8.3	8.3	7.6	.	.	.	.

3.2.3.1 R.V. OREGON II, CRUISE #176, continued:

OBS	CARD	VESSEL CODE	STATION NUMBER	CRUISE NUMBER	START DATE	TIME ZONE TIME	LATITUDE HEMISPHERE CODE	LATITUDE	LONGITUDE HEMISPHERE CODE	LONGITUDE	GEAR SIZE
92	1	4	48569	176	92788	1313	4	1	2900.0	1	9000.0	.
93	1	4	48570	176	92788	1627	4	1	2830.0	1	9000.0	.
94	1	4	48571	176	92788	1745	4	1	2820.0	1	9000.0	.
95	1	4	48572	176	92888	1446	4	1	2800.0	1	8500.0	.
96	1	4	48573	176	92888	1757	4	1	2900.0	1	8430.0	.
97	1	4	48574	176	92888	2055	4	1	2900.0	1	8400.0	.
98	1	4	48575	176	92888	2352	4	1	2900.0	1	8330.0	.

OBS	GEAR TYPE CODE	WIND SPEED	WIND DIRECTION	WAVE HEIGHT	BAROMETRIC PRESSURE	CLOUD COVER	SECCI DEPTH	WATER COLOR	MIDWATER WATER DEPTH	MAXIMUM SAMPLE DEPTH	SEAMAP SAMPLE DEPTH	STATION NUMBER	CARD	XBT?
92	52	18	50	0.6	1017.9	.	75	14	25	12	25		2	1
93	52	0	0	.	1016.5	.	115	1	91	45	90		2	1
94	52	0	0	.	1016.3	.	.	.	111	55	110		2	1
95	52	18	80	0.9	1018.1	30	160	1	40	20	40		2	1
96	52	18	70	0.3	1018.3	.	.	.	35	17	33		2	1
97	52	26	50	0.3	1018.9	.	.	.	30	15	30		2	1
98	52	33	75	0.3	1019.0	.	.	.	19	9	19		2	1

OBS	STD OR CTD?	SURFACE WATER TEMPERATURE	MIDWATER TEMPERATURE	BOTTOM WATER TEMPERATURE	SURFACE SALINITY	MIDWATER SALINITY	BOTTOM SALINITY	SURFACE CHLOROPHYLL	MIDWATER CHLOROPHYLL
92	2	28.42	28.28	27.08	31.605	31.926	35.539	0.5108	.
93	2	28.58	27.50	17.47	34.548	36.155	36.257	0.1869	.
94	2	28.54	25.40	16.17	35.928	36.256	36.135	0.2990	.
95	2	28.55	28.30	20.96	34.878	34.860	36.254	0.1424	.
96	2	28.70	28.70	24.20	34.928	34.910	35.777	0.1744	.
97	2	28.87	28.87	28.93	34.762	34.693	34.692	0.3738	.
98	2	28.97	28.96	28.95	34.852	34.841	34.832	0.3738	.

OBS	BOTTOM CHLOROPHYLL	CARD	SURFACE DISSOLVED OXYGEN	MIDWATER DISSOLVED OXYGEN	BOTTOM DISSOLVED OXYGEN	SURFACE TURBIDITY	MIDWATER TURBIDITY	BOTTOM TURBIDITY	THERMOCLINE DEPTH
92	.	3	8.4	8.4	6.0	.	.	.	.

93	.	3	8.2	8.3	5.8	.	.	.	.
94	.	3	8.0	8.4	6.1	.	.	.	.
95	.	3	8.4	8.3	6.5	.	.	.	.
96	.	3	8.8	8.8	7.6	.	.	.	.
97	.	3	8.6	8.4	8.2	.	.	.	.
98	.	3	9.0	9.4	9.2	.	.	.	.

3.2.3.2 R.V. OREGON II, CRUISE #183

OBS	CARD	VESSEL CODE	STATION NUMBER	CRUISE NUMBER	START DATE	TIME	TIME ZONE CODE	LATITUDE HEMISPHERE CODE	LATITUDE	LONGITUDE HEMISPHERE CODE	LONGITUDE	GEAR SIZE
1	1	4	50268	183	90289	732	4	N	2908.30	W	8854.10	.
2	1	4	50269	183	90289	1059	4	N	2907.70	W	8853.90	.
3	1	4	50270	183	90389	850	4	N	2903.20	W	8858.90	.
4	1	4	50271	183	90489	208	4	N	2852.80	W	8913.10	.
5	1	4	50272	183	90489	545	4	N	2852.10	W	8914.50	.
6	1	4	50273	183	90489	832	4	N	2857.50	W	8912.00	.
7	1	4	50274	183	90489	1621	4	N	2844.00	W	8912.10	.

OBS	GEAR TYPE CODE	WIND SPEED	WIND DIRECTION	WAVE HEIGHT	BAROMETRIC PRESSURE	CLOUD COVER	SECCI DEPTH	MIDWATER WATER COLOR	MAXIMUM WATER DEPTH	SEAMAP SAMPLE DEPTH	SAMPLE DEPTH	STATION NUMBER	CARD	XBT?
1	52	20	290	0.3	1015.1	.	.	.	54	28	54	2	2	
2	52	33	335	0.3	1016.1	.	.	.	.	39	77	2	2	
3	52	18	15	0.3	1014.4	.	.	.	52	26	51	2	2	
4	51	13	50	0.3	1012.1	.	.	.	84	42	83	2	2	
5	51	13	15	0.3	1011.9	.	.	.	82	41	81	2	2	
6	51	18	80	0.6	1013.1	.	.	.	21	10	20	2	2	
7	52	33	55	0.6	1012.6	.	.	.	190	87	175	2	2	

OBS	STD OR CTD?	SURFACE WATER TEMPERATURE	MIDWATER TEMPERATURE	BOTTOM WATER TEMPERATURE	SURFACE SALINITY	MIDWATER SALINITY	BOTTOM SALINITY	SURFACE CHLOROPHYLL	MIDWATER CHLOROPHYLL
1	1	30.64	26.88	23.52	27.488	36.439	36.613	.	.
2	1	31.05	.	.	27.323	.	.	.	.
3	1	31.09	.	.	26.263	.	.	.	.
4	1	30.68	25.27	20.25	27.714	36.226	21.595	0.1300	.
5	1	30.35	25.06	19.69	27.764	36.245	36.427	0.1200	.
6	1	31.02	29.55	27.30	20.496	31.651	35.739	0.1800	.
7	1	30.24	20.03	14.55	32.614	36.496	35.897	0.0190	.

OBS	BOTTOM CHLOROPHYLL	CARD	SURFACE DISSOLVED OXYGEN	MIDWATER DISSOLVED OXYGEN	BOTTOM DISSOLVED OXYGEN	SURFACE TURBIDITY	MIDWATER TURBIDITY	BOTTOM TURBIDITY	THERMOCLINE DEPTH
1	.	3	.	.	.	75.78	76.80	71.19	54

2	.	3	.	.	.	91.99	.	.	.
3	.	3	.	.	.	.	.	.	.
4	.	3	.	.	.	.	.	.	.
5	.	3	.	.	.	.	.	.	.
6	.	3	.	.	.	.	.	.	.
7	.	3	.	.	.	.	.	.	.

3.2.3.2 R.V. OREGON II, CRUISE #183, continued:

OBS	CARD	VESSEL CODE	STATION NUMBER	CRUISE NUMBER	START DATE	TIME ZONE	LATITUDE HEMISPHERE CODE	LATITUDE	LONGITUDE HEMISPHERE CODE	LONGITUDE	GEAR SIZE
8	1	4	50275	183	90489	1920	4 N	2846.40	W	8913.10	.
9	1	4	50276	183	90489	2146	4 N	2849.80	W	8914.50	.
10	1	4	50277	183	90589	17	4 N	2853.20	W	8917.70	.
11	1	4	50278	183	90589	317	4 N	2856.30	W	8916.90	.
12	1	4	50279	183	90589	600	4 N	2852.00	W	8923.00	.
13	1	4	50280	183	90589	1038	4 N	2855.50	W	8932.50	.
14	1	4	50281	183	90689	400	4 N	2902.00	W	8943.90	.

OBS	GEAR TYPE CODE	WIND SPEED	WIND DIRECTION	WAVE HEIGHT	BAROMETRIC PRESSURE	CLOUD COVER	SECCI DEPTH	MIDWATER WATER COLOR	MAXIMUM WATER DEPTH	SEAMAP SAMPLE DEPTH	SAMPLE DEPTH	STATION NUMBER	CARD	XBT?
8	52	18	90	0.6	1012.5	.	.	.	144	72	139	2	2	
9	52	29	95	0.6	1013.8	.	.	.	109	47	95	2	2	
10	52	33	130	0.6	1014.7	.	.	.	.	.	.	2	2	
11	52	27	120	0.6	1014.0	.	.	.	37	17	33	2	2	
12	52	13	15	0.3	1011.9	.	.	.	48	24	42	2	2	
13	52	22	140	0.6	1016.0	.	.	.	51	22	44	2	2	
14	52	26	110	0.6	1015.0	.	.	.	36	.	10	2	2	

OBS	STD OR CTD?	SURFACE WATER TEMPERATURE	MIDWATER TEMPERATURE	BOTTOM WATER TEMPERATURE	SURFACE SALINITY	MIDWATER SALINITY	BOTTOM SALINITY	SURFACE CHLOROPHYLL	MIDWATER CHLOROPHYLL
8	1	30.38	21.44	16.59	30.854	36.476	36.240	0.0400	.
9	1	30.42	25.08	19.84	29.877	36.285	36.502	0.0190	.
10	1	.	.	.	.	.	.	.	.
11	1	30.52	30.61	26.63	28.145	29.694	23.713	0.3600	.
12	1	30.39	28.13	25.26	29.962	35.476	36.168	0.0440	.
13	1	30.66	28.55	26.46	26.837	35.194	36.170	.	.
14	1	30.09	.	.	25.869	.	.	0.0000	.

OBS	BOTTOM CHLOROPHYLL	CARD	SURFACE DISSOLVED OXYGEN	MIDWATER DISSOLVED OXYGEN	BOTTOM DISSOLVED OXYGEN	SURFACE TURBIDITY	MIDWATER TURBIDITY	BOTTOM TURBIDITY	THERMOCLINE DEPTH
8	.	3	.	.	.	.	.	.	.

9	.	3	.	.	.	.	.	.	.
10	.	3	.	.	.	.	.	.	.
11	.	3	.	.	.	.	.	.	.
12	.	3	.	.	.	.	.	.	.
13	.	3	.	.	.	.	.	.	.
14	.	3	.	.	.	73.14	.	.	.

3.2.3.2 R.V. OREGON II, CRUISE #183, continued:

OBS	CARD	VESSEL CODE	STATION NUMBER	CRUISE NUMBER	START DATE	TIME	LATITUDE TIME ZONE CODE	LATITUDE HEMISPHERE CODE	LATITUDE	LONGITUDE HEMISPHERE CODE	LONGITUDE	GEAR SIZE
15	1	4	50282	183	90689	717	4	N	2900.50	W	8936.80	.
16	1	4	50283	183	90689	1127	4	N	2848.80	W	8931.60	.
17	1	4	50284	183	90689	2033	4	N	2846.10	W	8944.80	.
18	1	4	50285	183	90789	2307	4	N	2848.60	W	8943.20	.
19	1	4	50286	183	90789	121	4	N	2851.60	W	8941.80	.
20	1	4	50287	183	90789	418	4	N	2854.80	W	8940.40	.
21	1	4	50288	183	90789	835	4	N	2900.70	W	8929.50	.

OBS	GEAR TYPE CODE	WIND SPEED	WIND DIRECTION	WAVE HEIGHT	BAROMETRIC PRESSURE	CLOUD COVER	SECCI DEPTH	MIDWATER WATER COLOR	MAXIMUM WATER DEPTH	SEAMAP SAMPLE DEPTH	SAMPLE DEPTH	STATION NUMBER	CARD	XBT?
15	52	22	70	0.3	1016.1	.	.	.	32	16	32	2	2	
16	52	29	100	0.3	1017.5	.	.	.	78	35	73	2	2	
17	52	20	115	0.3	1016.3	.	.	.	77	38	73	2	2	
18	52	18	180	0.3	1016.3	.	.	.	70	33	65	2	2	
19	52	18	75	0.6	1016.0	.	.	.	65	.	10	2	2	
20	52	22	95	0.3	1014.9	.	.	.	58	28	.	2	2	
21	51	20	90	0.3	1016.4	.	.	.	13	6	10	2	1	

OBS	STD OR CTD?	SURFACE WATER TEMPERATURE	MIDWATER TEMPERATURE	BOTTOM WATER TEMPERATURE	SURFACE SALINITY	MIDWATER SALINITY	BOTTOM SALINITY	SURFACE CHLOROPHYLL	MIDWATER CHLOROPHYLL
15	1	30.19	.	27.83	25.607	.	32.669	0.9750	.
16	1	30.16	27.79	22.78	27.431	36.281	36.606	0.0000	.
17	1	30.16	27.29	21.53	31.219	36.890	36.780	0.0253	.
18	1	30.19	28.12	22.37	28.884	36.765	36.688	0.0636	.
19	1	29.86	.	30.16	25.564	.	30.188	0.0000	.
20	1	29.65	27.96	.	22.250	35.712	.	0.2070	.
21	1	29.80	29.88	29.58	24.495	24.727	29.399	0.0000	.

OBS	BOTTOM CHLOROPHYLL	CARD	SURFACE DISSOLVED OXYGEN	MIDWATER DISSOLVED OXYGEN	BOTTOM DISSOLVED OXYGEN	SURFACE TURBIDITY	MIDWATER TURBIDITY	BOTTOM TURBIDITY	THERMOCLINE DEPTH
15	.	3	.	.	5.7	79.29	.	80.61	.

16	.	3	.	.	.	95.26	85.15	76.31	.
17	.	3	.	.	.	74.70	78.27	72.31	.
18	.	3	.	.	.	73.82	78.56	76.36	.
19	.	3	.	.	.	71.58	.	75.78	.
20	.	3	.	.	.	70.36	76.61	.	.
21	.	3	.	.	.	82.32	87.78	81.45	.

3.2.3.2 R.V. OREGON II, CRUISE #183, continued:

OBS	CARD	VESSEL CODE	STATION NUMBER	CRUISE NUMBER	START DATE	LATITUDE TIME	TIME ZONE CODE	LONGITUDE HEMISPHERE CODE	LATITUDE	HEMISPHERE CODE	LONGITUDE	GEAR SIZE
22	1	4	50289	183	90789	1836	4	N	2843.70	W	8902.20	.
23	1	4	50290	183	90789	2049	4	N	2846.00	W	8903.50	.
24	1	4	50291	183	90889	2330	4	N	2849.60	W	8905.20	.
25	1	4	50292	183	90889	158	4	N	2852.80	W	8905.90	.
26	1	4	50293	183	90889	404	4	N	2855.20	W	8907.90	.
27	1	4	50294	183	90889	656	4	N	2859.50	W	8901.60	.
28	1	4	50295	183	90889	830	4	N	2859.30	W	8901.30	.

OBS	GEAR TYPE CODE	WIND SPEED	WIND DIRECTION	WAVE HEIGHT	BAROMETRIC PRESSURE	CLOUD COVER	SECCI DEPTH	MIDWATER WATER COLOR	MAXIMUM WATER DEPTH	SEAMAP SAMPLE DEPTH	SAMPLE DEPTH	STATION NUMBER	CARD	XBT?
22	52	16	70	0.3	1015.0	.	.	.	149	65	.	2	2	
23	52	16	75	0.3	1015.0	.	.	.	343	100	201	2	2	
24	52	18	80	0.3	1015.5	.	.	.	200	98	194	2	2	
25	52	11	100	0.3	1014.5	.	.	.	89	.	31	2	2	
26	52	13	65	0.3	1014.2	.	.	.	60	.	28	2	2	
27	52	16	60	0.3	1015.1	.	.	.	64	.	31	2	2	
28	51	18	70	0.3	1015.7	.	.	.	64	31	62	2	2	

OBS	STD OR CTD?	SURFACE WATER TEMPERATURE	MIDWATER TEMPERATURE	BOTTOM WATER TEMPERATURE	SURFACE SALINITY	MIDWATER SALINITY	BOTTOM SALINITY	SURFACE CHLOROPHYLL	MIDWATER CHLOROPHYLL
22	1	29.83	.	21.54	31.915	.	36.784	0.5597	.
23	1	29.84	18.53	14.38	31.189	36.802	36.223	0.0813	.
24	1	29.96	19.19	13.76	28.115	36.887	36.106	0.2775	.
25	1	29.67	.	29.56	26.084	.	31.481	0.0000	.
26	1	29.36	.	28.33	23.543	.	34.973	0.0000	.
27	1	29.25	.	28.38	24.611	.	35.757	0.6570	.
28	1	29.32	27.95	19.09	24.617	35.909	36.973	0.7728	.

OBS	BOTTOM CHLOROPHYLL	DISSOLVED OXYGEN CARD	SURFACE DISSOLVED OXYGEN	MIDWATER DISSOLVED OXYGEN	BOTTOM DISSOLVED OXYGEN	SURFACE TURBIDITY	MIDWATER TURBIDITY	BOTTOM TURBIDITY	THERMOCLINE DEPTH
22	.	3	.	.	.	82.56	.	75.34	.

23	.	3	.	.	.	71.67	70.65	48.70	.
24	.	3	.	.	.	70.84	66.60	35.00	.
25	.	3	.	.	.	69.87	.	74.07	.
26	.	3	.	.	.	67.13	.	74.07	.
27	.	3	.	.	.	70.31	.	74.90	.
28	.	3	.	.	.	79.58	78.80	75.92	.

3.2.3.2 R.V. OREGON II, CRUISE #183, continued:

OBS	CARD	VESSEL CODE	STATION NUMBER	CRUISE NUMBER	START DATE	TIME	LATITUDE TIME ZONE CODE	LATITUDE HEMISPHERE CODE	LATITUDE	LONGITUDE HEMISPHERE CODE	LONGITUDE	GEAR SIZE
29	1	4	50296	183	90889	1908	4	N	2854.30	W	8858.00	.
30	1	4	50297	183	90889	2138	4	N	2857.20	W	8859.90	.
31	1	4	50298	183	90989	17	4	N	2859.90	W	8901.20	.
32	1	4	50299	183	90989	215	4	N	2900.80	W	8926.70	.
33	1	4	50300	183	90989	838	4	N	2900.00	W	8929.00	.
34	1	4	50346	183	92089	834	4	N	2810.54	W	9059.94	.

OBS	GEAR TYPE CODE	WIND SPEED	WIND DIRECTION	WAVE HEIGHT	BAROMETRIC PRESSURE	CLOUD COVER	SECCI DEPTH	WATER COLOR	MIDWATER WATER DEPTH	MAXIMUM SAMPLE DEPTH	SEAMAP SAMPLE DEPTH	STATION NUMBER	CARD	XBT?
29	52	15	85	0.3	1014.0	.	.	.	183	90	182	2	2	
30	52	18	120	0.3	1013.3	.	.	.	100	50	99	2	2	
31	52	16	100	0.3	1013.2	.	.	.	82	.	10	2	2	
32	52	18	120	0.3	1013.2	.	.	.	44	.	18	2	2	
33	51	16	70	0.3	1015.7	.	.	.	13	6	11	2	2	
34	51	37	55	1.0	1013.6	2	.	.	90	46	87	2	2	

OBS	STD OR CTD?	SURFACE WATER TEMPERATURE	MIDWATER TEMPERATURE	BOTTOM WATER TEMPERATURE	SURFACE SALINITY	MIDWATER SALINITY	BOTTOM SALINITY	SURFACE CHLOROPHYLL	MIDWATER CHLOROPHYLL
29	1	29.82	19.85	14.59	31.675	36.961	36.227	0.0000	.
30	1	30.06	23.36	16.49	27.557	37.032	36.640	0.0000	.
31	1	29.98	.	29.70	26.392	.	31.300	0.6156	.
32	1	29.76	.	29.42	30.327	.	32.264	0.5098	.
33	1	29.52	29.98	29.80	21.953	22.969	28.656	0.0000	.
34	1	28.82	26.49	20.24	36.714	37.040	36.712	0.0561	.

OBS	BOTTOM CHLOROPHYLL	CARD	SURFACE DISSOLVED OXYGEN	MIDWATER DISSOLVED OXYGEN	BOTTOM DISSOLVED OXYGEN	SURFACE TURBIDITY	MIDWATER TURBIDITY	BOTTOM TURBIDITY	THERMOCLINE DEPTH
29	.	3	.	.	78.46	74.80	49.29	.	

30	.	3	.	.	.	71.24	76.12	69.92	.
31	.	3	.	.	.	71.19	.	74.60	.
32	.	3	.	.	.	68.89	.	71.14	.
33	.	3	.	.	.	79.29	78.85	79.10	.
34	.	3	6.1	6.6	5.5	80.81	78.66	72.61	.

3.2.3.2 R.V. OREGON II, CRUISE #183, continued:

OBS	CARD	VESSEL CODE	STATION NUMBER	CRUISE NUMBER	START DATE	TIME	LATITUDE TIME ZONE CODE	LATITUDE HEMISPHERE CODE	LATITUDE	LONGITUDE HEMISPHERE CODE	LONGITUDE	GEAR SIZE
35	1	4	50347	183	92089	913	4	N	2814.30	W	9100.02	.
36	1	4	50348	183	92089	957	4	N	2819.93	W	9100.08	.
37	1	4	50349	183	92089	1039	4	N	2825.42	W	9059.99	.
38	1	4	50350	183	92089	1231	4	N	2840.50	W	9100.10	.

OBS	GEAR TYPE CODE	WIND SPEED	WIND DIRECTION	WAVE HEIGHT	BAROMETRIC PRESSURE	CLOUD COVER	SECCI DEPTH	WATER COLOR	MIDWATER WATER DEPTH	MAXIMUM SAMPLE DEPTH	SEAMAP SAMPLE DEPTH	STATION NUMBER	CARD	XBT?
35	51	37	55	1.0	1013.6	2	.	.	73	36	71	2	2	
36	51	35	55	1.0	1014.0	5	.	.	55	28	53	2	2	
37	52	33	50	1.0	1014.5	5	100	.	40	20	37	5	2	2
38	51	35	65	1.0	1014.2	10	62	10	14	6	13	2	2	

OBS	STD OR CTD?	SURFACE WATER TEMPERATURE	MIDWATER TEMPERATURE	BOTTOM WATER TEMPERATURE	SURFACE SALINITY	MIDWATER SALINITY	BOTTOM SALINITY	SURFACE CHLOROPHYLL	MIDWATER CHLOROPHYLL
35	1	28.85	28.84	21.69	36.551	36.671	36.789	0.1130	.
36	1	28.91	29.19	22.54	36.205	36.499	37.220	0.0801	.
37	1	28.57	29.08	24.18	33.366	35.333	38.441	0.3863	.
38	1	28.26	28.23	28.41	31.584	31.710	32.269	1.6376	.

OBS	BOTTOM CHLOROPHYLL	CARD	SURFACE DISSOLVED OXYGEN	MIDWATER DISSOLVED OXYGEN	BOTTOM DISSOLVED OXYGEN	SURFACE TURBIDITY	MIDWATER TURBIDITY	BOTTOM TURBIDITY	THERMOCLINE DEPTH
35	.	3	5.9	.	.	.	69.34	69.97	.
36	.	3	5.9	6.0	5.1	65.28	67.19	69.68	.
37	.	3	6.1	6.1	5.7	67.29	68.31	70.07	.
38	.	3	6.3	6.2	.	73.68	73.97	73.73	.

3.2.3.3 R.V. OREGON II, CRUISE #189

OBS	CARD	VESSEL CODE	STATION NUMBER	CRUISE NUMBER	START DATE	START TIME	TIME ZONE CODE	LATITUDE HEMISPHERE CODE	LATITUDE	LONGITUDE HEMISPHERE CODE	LONGITUDE	GEAR SIZE
1	1	4	51483	189	61490	848	4	N	2859.20	W	8905.30	.
2	1	4	51484	189	61490	952	4	N	2854.60	W	8855.30	.
3	1	4	51485	189	61490	1045	4	N	2852.70	W	8850.80	.
4	1	4	51486	189	61490	1135	4	N	2849.50	W	8844.70	.
5	1	4	51487	189	61490	1225	4	N	2846.88	W	8838.78	.
6	1	4	51488	189	61490	1319	4	N	2843.50	W	8831.50	.

OBS	GEAR TYPE CODE	WIND SPEED	WIND DIRECTION	WAVE HEIGHT	BAROMETRIC PRESSURE	CLOUD COVER	SECCI DEPTH	WATER COLOR	MIDWATER WATER DEPTH	MAXIMUM SAMPLE DEPTH	SEAMAP SAMPLE DEPTH	STATION NUMBER	CARD	XBT?
1	51	9	150	1.0	1019.0	55	.	.	33	16	33	2	2	
2	51	9	160	1.0	1019.4	52	.	.	234	100	200	2	2	
3	51	9	160	0.6	1019.3	50	.	.	490	100	200	2	2	
4	51	5	20	0.3	1019.4	50	.	.	658	100	200	2	2	
5	51	9	115	0.3	1019.6	45	.	.	927	100	200	2	2	
6	51	9	115	0.3	1019.6	20	.	.	1236	100	200	2	2	

OBS	STD OR CTD?	SURFACE WATER TEMPERATURE	MIDWATER TEMPERATURE	BOTTOM WATER TEMPERATURE	SURFACE SALINITY	MIDWATER SALINITY	BOTTOM SALINITY	SURFACE CHLOROPHYLL	MIDWATER CHLOROPHYLL
1	1	28.56	24.72	21.72	20.254	36.276	36.683	.	.
2	1	28.32	20.13	15.67	30.499	36.748	36.513	.	.
3	1	27.95	19.76	15.23	36.646	36.731	36.478	.	.
4	1	28.03	20.11	14.90	36.698	36.835	36.528	.	.
5	1	27.92	19.76	14.80	36.543	36.899	36.424	.	.
6	1	28.40	20.25	15.05	36.427	36.858	36.425	.	.

OBS	BOTTOM CHLOROPHYLL	CARD	SURFACE DISSOLVED OXYGEN	MIDWATER DISSOLVED OXYGEN	BOTTOM DISSOLVED OXYGEN	SURFACE TURBIDITY	MIDWATER TURBIDITY	BOTTOM TURBIDITY	THERMOCLINE DEPTH
1	.	3	.	.	.	.	.	.	.
2	.	3	.	.	.	.	.	.	.
3	.	3	.	.	.	.	.	.	.
4	.	3	.	.	.	.	.	.	.

3.2.3.4 R.V. GYRE, JULY 1990

OBS	SERIAL NO.	CRUISE NO.	STATION NO.	GREGORIAN DATE	DATE AS YYMMDD	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SAMPLE DEPTH	TEMPERATURE
1	3	90G10	B90G10*1	11JUL90	900711	1600	29	16.3	-94	34.3	0	99.00
2	3	90G10	B90G10*1	11JUL90	900711	1600	29	16.3	-94	34.3	5	99.00
3	3	90G10	B90G10*1	11JUL90	900711	1600	29	16.3	-94	34.3	9	99.00
4	3	90G10	B90G10*2	11JUL90	900711	1836	29	10.9	-94	37.1	2	30.17
5	3	90G10	B90G10*2	11JUL90	900711	1836	29	10.9	-94	37.1	8	29.68
6	3	90G10	B90G10*2	11JUL90	900711	1836	29	10.9	-94	37.1	13	28.99
7	3	90G10	B90G10*3	11JUL90	900711	2037	29	3.8	-94	29.5	2	30.34
8	3	90G10	B90G10*3	11JUL90	900711	2037	29	3.8	-94	29.5	8	29.83
9	3	90G10	B90G10*3	11JUL90	900711	2037	29	3.8	-94	29.5	13	29.79
10	4	90G10	B90G10*8	19JUL90	900719	2215	28	20.2	-91	0.7	1	29.21
11	4	90G10	B90G10*8	19JUL90	900719	2215	28	20.2	-91	0.7	11	28.92
12	4	90G10	B90G10*8	19JUL90	900719	2215	28	20.2	-91	0.7	26	27.79
13	4	90G10	B90G10*8	19JUL90	900719	2215	28	20.2	-91	0.7	50	21.72
14	3	90G10	B90G10*4	11JUL90	900711	2037	29	3.8	-94	29.5	1	30.56
15	3	90G10	B90G10*4	11JUL90	900711	2037	29	3.8	-94	29.5	8	30.11
16	3	90G10	B90G10*4	11JUL90	900711	2037	29	3.8	-94	29.5	14	29.26
17	3	90G10	B90G10*5	11JUL90	900711	2124	28	59.2	-94	25.7	2	30.33
18	3	90G10	B90G10*5	11JUL90	900711	2124	28	59.2	-94	25.7	7	29.81
19	3	90G10	B90G10*5	11JUL90	900711	2124	28	59.2	-94	25.7	13	29.48
20	5	90G10	B90G10*6	11JUL90	900711	2223	28	54.2	-95	22.0	2	30.96

OBS	CHLOROPHYLL	NOT USED	SALINITY	OXYGEN	AMMONIA	PHOSPHATE	SILICON	NITRATE	NITRITE	UREA
1	0.42	99	30.538	4.502	0.16	0.34	8.20	0.19	0.08	0.27
2	0.47	99	31.074	4.497	0.24	0.23	7.22	0.10	0.06	0.26
3	1.97	99	31.126	4.427	0.35	0.26	7.87	0.21	0.09	0.14
4	0.71	99	31.657	4.607	0.09	0.12	6.97	0.24	0.01	0.13
5	0.79	99	32.390	4.229	0.40	0.24	12.50	0.18	0.04	1.22
6	2.03	99	32.928	3.170	0.59	0.49	20.20	0.48	0.25	1.34
7	0.15	99	31.501	4.646	0.05	0.04	3.78	0.19	0.01	0.06
8	0.20	99	31.758	4.635	0.06	0.05	4.15	0.21	0.01	0.11
9	0.26	99	31.848	4.926	0.05	0.05	4.50	0.46	0.01	0.12
10	99.00	99	26.376	5.052	0.15	0.07	2.04	0.12	0.01	0.21
11	99.00	99	29.720	4.716	0.09	0.02	1.93	0.19	0.01	0.31
12	99.00	99	35.695	4.484	0.22	0.14	6.86	1.60	0.23	0.50
13	99.00	99	36.169	4.495	0.03	0.11	6.22	0.79	0.38	0.17
14	0.31	99	29.657	4.702	0.06	0.05	2.59	0.21	0.01	0.01

15	0.71	99	30.051	4.645	0.06	0.09	3.44	0.18	0.01	0.00
16	1.97	99	32.226	3.886	0.06	0.24	9.33	0.08	0.01	0.10
17	0.34	99	29.796	5.010	0.06	0.06	3.06	0.39	0.01	0.14
18	0.48	99	30.475	4.951	0.05	0.07	3.43	0.20	0.01	0.13
19	0.71	99	31.373	4.670	0.10	0.12	4.21	0.25	0.00	0.23
20	0.19	99	30.170	5.040	0.08	0.06	2.92	0.15	0.01	0.11

3.2.3.4 R.V. GYRE, JULY 1990, continued:

OBS	SERIAL NO.	CRUISE NO.	STATION NO.	GREGORIAN DATE	DATE AS YYMMDD	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SAMPLE DEPTH	TEMPERATURE
21	5	90G10	B90G10*6	11JUL90	900711	2223	28	54.2	-95	22.0	7	29.88
22	5	90G10	B90G10*6	11JUL90	900711	2223	28	54.2	-95	22.0	11	29.53
23	5	90G10	B90G10*6	11JUL90	900711	2223	28	54.2	-95	22.0	16	26.78
24	5	90G10	B90G10*6	11JUL90	900711	2223	28	54.2	-95	22.0	20	26.82
25	5	90G10	B90G10*7	12JUL90	900712	430	28	49.9	-94	17.8	2	29.90
26	5	90G10	B90G10*7	12JUL90	900712	430	28	49.9	-94	17.8	7	29.88
27	5	90G10	B90G10*7	12JUL90	900712	430	28	49.9	-94	17.8	11	29.38
28	5	90G10	B90G10*7	12JUL90	900712	430	28	49.9	-94	17.8	17	28.14
29	5	90G10	B90G10*7	12JUL90	900712	430	28	49.9	-94	17.8	22	26.07
30	5	90G10	B90G10*8	12JUL90	900712	547	28	45.0	-94	13.7	2	29.71
31	5	90G10	B90G10*8	12JUL90	900712	547	28	45.0	-94	13.7	7	29.77
32	5	90G10	B90G10*8	12JUL90	900712	547	28	45.0	-94	13.7	12	29.88
33	5	90G10	B90G10*8	12JUL90	900712	547	28	45.0	-94	13.7	17	29.71
34	5	90G10	B90G10*8	12JUL90	900712	547	28	45.0	-94	13.7	25	25.73
35	6	90G10	B90G10*9	12JUL90	900712	1104	28	40.5	-94	9.5	2	29.67
36	6	90G10	B90G10*9	12JUL90	900712	1104	28	40.5	-94	9.5	7	29.63
37	6	90G10	B90G10*9	12JUL90	900712	1104	28	40.5	-94	9.5	14	29.77
38	6	90G10	B90G10*9	12JUL90	900712	1104	28	40.5	-94	9.5	18	28.64
39	6	90G10	B90G10*9	12JUL90	900712	1104	28	40.5	-94	9.5	22	26.38
40	6	90G10	B90G10*9	12JUL90	900712	1104	28	40.5	-94	9.5	28	25.81

OBS	CHLOROPHYLL	NOT USED	SALINITY	OXYGEN	AMMONIA	PHOSPHATE	SILICON	NITRATE	NITRITE	UREA
21	0.28	99	30.174	4.966	0.10	0.05	2.92	0.08	0.02	0.05
22	1.10	99	32.541	4.253	0.07	0.25	7.89	0.57	0.22	0.15
23	4.30	99	34.946	2.027	0.18	0.91	37.40	3.09	1.92	0.25
24	4.51	99	34.740	2.154	0.11	0.87	36.30	3.23	1.83	0.50
25	0.11	99	30.692	4.886	0.04	0.02	3.18	0.39	0.00	0.20
26	0.22	99	30.827	4.717	0.04	0.02	3.14	0.23	0.00	0.11
27	0.48	99	31.983	4.284	0.10	0.09	4.71	0.28	0.01	0.23
28	1.10	99	33.688	3.385	0.07	0.32	9.71	0.31	0.16	0.11
29	1.92	99	35.458	2.232	0.09	0.54	30.00	3.79	2.35	0.21
30	0.12	99	29.718	4.704	0.10	0.01	2.45	0.08	0.01	0.03
31	0.17	99	30.173	4.715	0.07	0.00	2.58	0.02	0.01	0.03
32	0.16	99	31.191	4.706	0.10	0.02	3.59	0.06	0.01	0.16
33	0.44	99	32.479	4.289	0.13	0.07	7.14	0.30	0.10	0.18
34	1.32	99	35.513	3.544	0.27	0.18	16.70	1.24	0.64	0.25

35	0.11	99	29.808	5.017	0.04	0.02	2.44	0.13	0.00	0.05
36	0.12	99	30.043	4.722	0.02	0.02	2.54	0.13	0.00	0.04
37	0.16	99	31.524	4.687	0.03	0.02	3.16	0.11	0.00	0.11
38	0.21	99	33.652	4.606	0.02	0.02	3.50	0.08	0.00	0.15
39	0.24	99	34.912	4.798	0.00	0.02	3.66	0.06	0.00	0.06
40	0.31	99	35.421	4.706	0.02	0.03	5.11	0.05	0.00	0.09

3.2.3.4 R.V. GYRE, JULY 1990, continued:

OBS	SERIAL NO.	CRUISE NO.	STATION NO.	GREGORIAN DATE	DATE AS YYMMDD	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SAMPLE DEPTH	TEMPERATURE
41	7	90G10	B90G10*1	12JUL90	900712	1202	28	35.3	-94	5.3	2	29.65
42	7	90G10	B90G10*1	12JUL90	900712	1202	28	35.3	-94	5.3	7	29.66
43	7	90G10	B90G10*1	12JUL90	900712	1202	28	35.3	-94	5.3	11	29.67
44	7	90G10	B90G10*1	12JUL90	900712	1202	28	35.3	-94	5.3	17	28.71
45	7	90G10	B90G10*1	12JUL90	900712	1202	28	35.3	-94	5.3	22	26.09
46	7	90G10	B90G10*1	12JUL90	900712	1202	28	35.3	-94	5.3	27	25.88
47	7	90G10	B90G10*1	12JUL90	900712	1202	28	35.3	-94	5.3	32	24.69
48	6	90G10	B90G10*1	12JUL90	900712	1330	28	30.6	-94	1.2	2	29.82
49	6	90G10	B90G10*1	12JUL90	900712	1330	28	30.6	-94	1.2	6	29.31
50	6	90G10	B90G10*1	12JUL90	900712	1330	28	30.6	-94	1.2	11	29.86
51	6	90G10	B90G10*1	12JUL90	900712	1330	28	30.6	-94	1.2	21	28.18
52	6	90G10	B90G10*1	12JUL90	900712	1330	28	30.6	-94	1.2	31	25.59
53	6	90G10	B90G10*1	12JUL90	900712	1330	28	30.6	-94	1.2	37	23.76
54	6	90G10	B90G10*1	12JUL90	900712	1431	28	25.7	-93	56.7	2	29.88
55	6	90G10	B90G10*1	12JUL90	900712	1431	28	25.7	-93	56.7	7	29.85
56	6	90G10	B90G10*1	12JUL90	900712	1431	28	25.7	-93	56.7	17	29.79
57	6	90G10	B90G10*1	12JUL90	900712	1431	28	25.7	-93	56.7	26	27.46
58	6	90G10	B90G10*1	12JUL90	900712	1431	28	25.7	-93	56.7	37	24.42
59	6	90G10	B90G10*1	12JUL90	900712	1431	28	25.7	-93	56.7	47	22.31
60	6	90G10	B90G10*1	13JUL90	900713	37	28	21.5	-93	52.2	1	29.98

OBS	CHLOROPHYLL	NOT USED	SALINITY	OXYGEN	AMMONIA	PHOSPHATE	SILICON	NITRATE	NITRITE	UREA
41	0.15	99	30.466	4.700	0.01	0.03	2.21	0.12	0.01	0.24
42	0.13	99	30.591	4.673	0.01	0.05	2.36	0.10	0.01	0.29
43	0.16	99	31.935	4.539	0.02	0.04	2.73	0.13	0.01	0.38
44	0.17	99	34.282	4.389	0.11	0.06	3.95	0.19	0.02	0.56
45	0.24	99	35.160	4.990	0.01	0.05	4.38	0.22	0.01	0.32
46	0.48	99	35.757	4.163	0.06	0.08	9.53	0.27	0.03	0.30
47	0.64	99	35.868	3.603	0.01	0.10	13.20	0.28	0.05	0.14
48	0.12	99	30.110	4.660	0.01	0.01	1.85	0.05	0.00	0.10
49	0.14	99	30.154	4.633	0.00	0.01	1.95	0.03	0.00	0.13
50	0.16	99	30.407	4.702	0.03	0.01	2.05	0.00	0.00	0.29
51	0.19	99	34.061	4.714	0.04	0.03	3.80	0.00	0.01	0.00
52	0.29	99	35.850	4.564	0.02	0.02	6.08	0.02	0.01	0.11
53	0.58	99	35.999	4.406	0.07	0.07	6.65	0.32	0.04	0.11
54	0.13	99	29.897	4.696	0.07	0.02	1.94	0.16	0.01	0.22

55	0.14	99	29.935	4.702	0.02	0.02	1.91	0.24	0.01	0.15
56	0.26	99	32.048	4.676	0.02	0.02	2.43	0.21	0.01	0.10
57	0.44	99	35.438	5.389	0.00	0.02	4.05	0.24	0.01	0.07
58	0.77	99	36.052	3.844	0.00	0.08	6.86	0.55	0.22	0.06
59	0.56	99	36.200	4.090	0.04	0.16	7.72	1.49	0.51	0.18
60	0.13	99	29.898	4.870	0.02	0.00	1.56	0.08	0.01	0.14

3.2.3.4 R.V. GYRE, JULY 1990, continued:

OBS	SERIAL NO.	CRUISE NO.	STATION NO.	GREGORIAN DATE	DATE AS YYMMDD	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SAMPLE DEPTH	TEMPERATURE
61	6	90G10	B90G10*1	13JUL90	900713	37	28	21.5	-93	52.2	11	29.83
62	6	90G10	B90G10*1	13JUL90	900713	37	28	21.5	-93	52.2	21	28.09
63	6	90G10	B90G10*1	13JUL90	900713	37	28	21.5	-93	52.2	31	26.21
64	6	90G10	B90G10*1	13JUL90	900713	37	28	21.5	-93	52.2	41	22.79
65	6	90G10	B90G10*1	13JUL90	900713	37	28	21.5	-93	52.2	53	21.73
66	7	90G10	B90G10*1	13JUL90	900713	146	28	16.5	-93	48.1	1	30.23
67	7	90G10	B90G10*1	13JUL90	900713	146	28	16.5	-93	48.1	6	29.90
68	7	90G10	B90G10*1	13JUL90	900713	146	28	16.5	-93	48.1	16	29.99
69	7	90G10	B90G10*1	13JUL90	900713	146	28	16.5	-93	48.1	31	25.47
70	7	90G10	B90G10*1	13JUL90	900713	146	28	16.5	-93	48.1	41	23.20
71	7	90G10	B90G10*1	13JUL90	900713	146	28	16.5	-93	48.1	51	22.02
72	7	90G10	B90G10*1	13JUL90	900713	146	28	16.5	-93	48.1	58	21.47
73	7	90G10	B90G10*1	13JUL90	900713	349	28	11.7	-93	43.9	2	29.34
74	7	90G10	B90G10*1	13JUL90	900713	349	28	11.7	-93	43.9	12	29.57
75	7	90G10	B90G10*1	13JUL90	900713	349	28	11.7	-93	43.9	22	28.82
76	7	90G10	B90G10*1	13JUL90	900713	349	28	11.7	-93	43.9	32	25.32
77	7	90G10	B90G10*1	13JUL90	900713	349	28	11.7	-93	43.9	42	23.58
78	7	90G10	B90G10*1	13JUL90	900713	349	28	11.7	-93	43.9	52	21.42
79	7	90G10	B90G10*1	13JUL90	900713	349	28	11.7	-93	43.9	65	20.71
80	7	90G10	B90G10*1	13JUL90	900713	543	28	2.9	-93	36.4	1	30.21

OBS	CHLOROPHYLL	NOT USED	SALINITY	OXYGEN	AMMONIA	PHOSPHATE	SILICON	NITRATE	NITRITE	UREA
61	0.17	99	31.022	4.840	0.02	0.01	2.00	0.06	0.01	0.12
62	0.40	99	34.979	4.726	0.03	0.03	3.46	0.10	0.00	0.23
63	0.52	99	35.623	4.902	0.00	0.00	3.30	0.09	0.00	0.14
64	0.31	99	36.266	4.908	0.18	0.05	3.82	0.16	0.04	0.48
65	0.45	99	36.315	4.537	0.02	0.09	5.30	0.65	0.23	0.14
66	0.14	99	29.901	5.188	0.06	0.01	1.81	0.32	0.00	0.19
67	0.14	99	30.261	4.864	0.03	0.01	1.67	0.15	0.01	0.18
68	0.26	99	33.288	4.690	0.03	0.01	2.62	0.11	0.01	0.17
69	0.35	99	35.807	5.039	0.00	0.02	2.56	0.05	0.00	0.10
70	0.35	99	36.191	4.838	0.02	0.03	4.01	0.04	0.08	0.04
71	0.27	99	36.356	4.850	0.00	0.04	3.63	0.15	1.33	0.04
72	0.34	99	36.370	4.686	0.03	0.01	4.31	0.87	0.33	0.14
73	0.10	99	30.830	4.954	0.02	0.04	1.93	0.02	0.01	0.10
74	0.13	99	31.955	4.982	0.08	0.03	2.20	0.09	0.01	0.02

75	0.18	99	35.145	4.615	0.05	0.04	4.38	0.08	0.02	0.01
76	0.20	99	35.364	4.440	0.05	0.05	4.98	0.11	0.02	0.15
77	0.67	99	36.130	4.645	0.05	0.08	5.56	0.56	0.16	0.10
78	0.55	99	36.345	4.659	0.05	0.15	4.87	1.74	0.17	0.19
79	0.27	99	36.365	4.507	0.08	0.22	4.99	2.52	0.27	0.18
80	0.13	99	30.230	4.681	0.03	0.00	1.31	0.12	0.00	0.12

3.2.3.4 R.V. GYRE, JULY 1990, continued:

OBS	SERIAL NO.	CRUISE NO.	STATION NO.	GREGORIAN DATE	DATE AS YYMMDD	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SAMPLE DEPTH	TEMPERATURE
81	7	90G10	B90G10*1	13JUL90	900713	543	28	2.9	-93	36.4	12	29.70
82	7	90G10	B90G10*1	13JUL90	900713	543	28	2.9	-93	36.4	21	25.90
83	7	90G10	B90G10*1	13JUL90	900713	543	28	2.9	-93	36.4	31	24.98
84	7	90G10	B90G10*1	13JUL90	900713	543	28	2.9	-93	36.4	41	23.44
85	7	90G10	B90G10*1	13JUL90	900713	543	28	2.9	-93	36.4	51	22.20
86	7	90G10	B90G10*1	13JUL90	900713	543	28	2.9	-93	36.4	66	20.26
87	9	90G10	B90G10*1	13JUL90	900713	543	28	2.9	-93	36.4	2	29.75
88	9	90G10	B90G10*1	13JUL90	900713	543	28	2.9	-93	36.4	7	29.62
89	9	90G10	B90G10*1	13JUL90	900713	543	28	2.9	-93	36.4	12	29.48
90	9	90G10	B90G10*1	13JUL90	900713	543	28	2.9	-93	36.4	21	27.33
91	9	90G10	B90G10*1	13JUL90	900713	543	28	2.9	-93	36.4	42	23.56
92	9	90G10	B90G10*1	13JUL90	900713	543	28	2.9	-93	36.4	57	21.74
93	9	90G10	B90G10*1	13JUL90	900713	543	28	2.9	-93	36.4	62	21.47
94	9	90G10	B90G10*1	13JUL90	900713	543	28	2.9	-93	36.4	82	20.79
95	9	90G10	B90G10*1	13JUL90	900713	543	28	2.9	-93	36.4	85	20.60
96	9	90G10	B90G10*1	13JUL90	900713	1542	27	59.7	-29	33.1	1	29.16
97	9	90G10	B90G10*1	13JUL90	900713	1542	27	59.7	-29	33.1	31	27.72
98	9	90G10	B90G10*1	13JUL90	900713	1542	27	59.7	-29	33.1	41	23.95
99	9	90G10	B90G10*1	13JUL90	900713	1542	27	59.7	-29	33.1	50	23.65
100	9	90G10	B90G10*1	13JUL90	900713	1542	27	59.7	-29	33.1	60	22.08

OBS	CHLOROPHYLL	NOT USED	SALINITY	OXYGEN	AMMONIA	PHOSPHATE	SILICON	NITRATE	NITRITE	UREA
81	0.13	99	32.495	4.652	0.16	0.04	2.07	0.13	0.00	0.32
82	0.25	99	35.415	4.743	0.00	0.01	3.55	0.21	0.00	0.08
83	0.35	99	35.975	5.221	0.00	0.04	3.48	0.15	0.02	0.07
84	0.47	99	36.171	4.605	0.00	0.01	4.91	0.39	0.53	0.08
85	0.58	99	36.286	4.507	0.00	0.13	5.23	1.40	0.55	0.09
86	0.29	99	36.368	4.127	0.00	0.23	4.82	3.88	0.10	0.07
87	0.07	99	30.881	5.688	0.14	0.00	1.87	0.22	0.01	0.15
88	0.09	99	31.860	4.409	0.63	0.00	2.15	0.36	0.02	0.26
89	0.13	99	33.659	4.981	0.14	0.00	2.20	0.36	0.00	0.15
90	0.18	99	35.418	5.146	0.13	0.00	2.26	0.12	0.01	0.16
91	0.31	99	36.348	5.537	0.15	0.02	2.29	0.15	0.01	0.10
92	0.40	99	36.415	4.896	0.15	0.09	3.98	1.31	0.12	0.14
93	0.34	99	36.344	4.938	0.13	0.08	3.50	0.98	0.18	0.05
94	0.07	99	36.379	4.528	0.13	0.13	3.96	1.95	0.04	0.06

95	0.12	99	36.379	4.586	0.19	0.16	4.04	1.87	0.04	0.29
96	0.13	99	32.879	4.561	0.13	0.04	1.94	0.05	0.14	0.20
97	0.08	99	34.063	4.624	0.10	0.03	2.24	0.00	0.13	0.21
98	0.10	99	36.023	4.615	0.05	0.02	2.38	0.00	0.13	0.19
99	0.15	99	36.204	4.896	0.03	0.01	2.54	0.03	0.13	0.06
100	0.19	99	36.151	4.914	0.03	0.02	3.43	0.00	0.13	0.06

3.2.3.4 R.V. GYRE, JULY 1990, continued:

OBS	SERIAL NO.	CRUISE NO.	STATION NO.	GREGORIAN DATE	DATE AS YYMMDD	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SAMPLE DEPTH	TEMPERATURE
101	9	90G10	B90G10*1	13JUL90	900713	1542	27	59.7	-29	33.1	70	21.23
102	9	90G10	B90G10*1	13JUL90	900713	1542	27	59.7	-29	33.1	80	20.81
103	9	90G10	B90G10*1	13JUL90	900713	1542	27	59.7	-29	33.1	90	20.28
104	9	90G10	B90G10*1	13JUL90	900713	1542	27	59.7	-29	33.1	93	19.78
105	9	90G10	B90G10*1	13JUL90	900713	1701	27	54.5	-93	28.6	2	29.26
106	9	90G10	B90G10*1	13JUL90	900713	1701	27	54.5	-93	28.6	13	29.22
107	9	90G10	B90G10*1	13JUL90	900713	1701	27	54.5	-93	28.6	22	28.78
108	9	90G10	B90G10*1	13JUL90	900713	1701	27	54.5	-93	28.6	42	25.45
109	9	90G10	B90G10*1	13JUL90	900713	1701	27	54.5	-93	28.6	62	21.84
110	9	90G10	B90G10*1	13JUL90	900713	1701	27	54.5	-93	28.6	73	21.16
111	9	90G10	B90G10*1	13JUL90	900713	1701	27	54.5	-93	28.6	82	20.54
112	9	90G10	B90G10*1	13JUL90	900713	1701	27	54.5	-93	28.6	102	19.94
113	9	90G10	B90G10*1	13JUL90	900713	1701	27	54.5	-93	28.6	121	17.62
114	11	90G10	B90G10*2	13JUL90	900713	1803	27	50.0	-93	24.6	1	29.10
115	11	90G10	B90G10*2	13JUL90	900713	1803	27	50.0	-93	24.6	21	27.89
116	11	90G10	B90G10*2	13JUL90	900713	1803	27	50.0	-93	24.6	41	25.00
117	11	90G10	B90G10*2	13JUL90	900713	1803	27	50.0	-93	24.6	60	22.29
118	11	90G10	B90G10*2	13JUL90	900713	1803	27	50.0	-93	24.6	70	21.71
119	11	90G10	B90G10*2	13JUL90	900713	1803	27	50.0	-93	24.6	80	20.95
120	11	90G10	B90G10*2	13JUL90	900713	1803	27	50.0	-93	24.6	100	19.27

OBS	CHLOROPHYLL	NOT USED	SALINITY	OXYGEN	AMMONIA	PHOSPHATE	SILICON	NITRATE	NITRITE	UREA
101	0.27	99	36.289	5.102	0.00	0.01	2.36	0.00	0.13	0.06
102	0.39	99	36.358	4.872	0.02	0.03	2.83	0.39	0.10	0.10
103	0.14	99	36.387	4.299	0.00	0.14	3.42	2.74	0.07	0.14
104	0.15	99	36.393	4.071	0.08	0.23	4.01	4.37	0.06	0.49
105	0.16	99	32.036	4.571	0.10	0.02	1.75	0.25	0.00	0.15
106	0.12	99	34.474	4.590	0.07	0.03	2.22	0.18	0.00	0.15
107	0.14	99	36.258	4.778	0.05	0.03	2.31	0.19	0.00	0.10
108	0.17	99	36.273	5.095	0.12	0.03	2.31	0.18	0.00	0.05
109	0.21	99	36.303	5.194	0.08	0.03	2.31	0.13	0.00	0.06
110	0.26	99	36.336	5.096	0.08	0.03	2.37	0.28	0.00	0.11
111	0.24	99	36.373	4.857	0.10	0.04	2.60	0.52	0.10	0.19
112	0.11	99	36.395	3.748	0.03	0.31	4.01	6.56	0.09	0.13
113	0.05	99	36.308	3.063	0.05	0.67	6.25	12.70	0.03	0.11
114	0.16	99	32.465	4.678	0.11	0.02	1.76	0.23	0.00	0.11

115	0.16	99	35.891	4.797	0.10	0.01	2.58	0.05	0.00	0.05
116	0.18	99	36.186	5.127	0.05	0.02	2.56	0.00	0.00	0.00
117	0.22	99	36.343	5.143	0.02	0.03	2.50	0.06	0.01	0.06
118	0.22	99	36.371	5.003	0.03	0.04	2.61	0.17	0.01	0.06
119	0.29	99	36.392	4.730	0.05	0.04	2.78	0.21	0.03	0.06
120	0.13	99	36.439	3.495	0.02	0.40	4.20	7.63	0.07	0.11

3.2.3.4 R.V. GYRE, JULY 1990, continued:

OBS	SERIAL NO.	CRUISE NO.	STATION NO.	GREGORIAN DATE	DATE AS YYMMDD	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SAMPLE DEPTH	TEMPERATURE
121	11	90G10	B90G10*2	13JUL90	900713	1803	27	50.0	-93	24.6	119	18.18
122	11	90G10	B90G10*2	13JUL90	900713	1803	27	50.0	-93	24.6	139	17.30
123	11	90G10	B90G10*2	13JUL90	900713	1803	27	50.0	-93	24.6	160	16.20
124	11	90G10	B90G10*2	13JUL90	900713	1803	27	50.0	-93	24.6	172	15.28
125	8	90G10	B90G10*2	13JUL90	900713	1803	27	50.0	-93	24.6	2	29.08
126	8	90G10	B90G10*2	13JUL90	900713	1803	27	50.0	-93	24.6	23	29.20
127	8	90G10	B90G10*2	13JUL90	900713	1803	27	50.0	-93	24.6	42	25.26
128	8	90G10	B90G10*2	13JUL90	900713	1803	27	50.0	-93	24.6	62	22.12
129	8	90G10	B90G10*2	13JUL90	900713	1803	27	50.0	-93	24.6	71	21.60
130	8	90G10	B90G10*2	13JUL90	900713	1803	27	50.0	-93	24.6	82	20.70
131	8	90G10	B90G10*2	13JUL90	900713	1803	27	50.0	-93	24.6	101	19.39
132	8	90G10	B90G10*2	13JUL90	900713	1803	27	50.0	-93	24.6	113	18.72
133	11	90G10	B90G10*2	14JUL90	900714	23	27	44.8	-93	20.5	1	29.09
134	11	90G10	B90G10*2	14JUL90	900714	23	27	44.8	-93	20.5	29	29.41
135	11	90G10	B90G10*2	14JUL90	900714	23	27	44.8	-93	20.5	42	25.13
136	11	90G10	B90G10*2	14JUL90	900714	23	27	44.8	-93	20.5	54	22.21
137	11	90G10	B90G10*2	14JUL90	900714	23	27	44.8	-93	20.5	72	21.64
138	11	90G10	B90G10*2	14JUL90	900714	23	27	44.8	-93	20.5	88	21.05
139	11	90G10	B90G10*2	14JUL90	900714	23	27	44.8	-93	20.5	103	19.41
140	11	90G10	B90G10*2	14JUL90	900714	23	27	44.8	-93	20.5	120	18.02

OBS	CHLOROPHYLL	NOT USED	SALINITY	OXYGEN	AMMONIA	PHOSPHATE	SILICON	NITRATE	NITRITE	UREA
121	0.08	99	36.359	3.115	0.02	0.64	5.67	11.70	0.01	0.06
122	0.04	99	36.272	2.990	0.02	0.77	6.49	14.30	0.01	0.13
123	0.02	99	36.123	2.867	0.02	0.93	8.08	16.80	0.01	0.09
124	0.01	99	36.022	2.854	0.02	1.01	8.67	18.00	0.01	0.12
125	0.17	99	33.534	4.654	0.11	0.00	2.17	0.30	0.01	0.00
126	0.14	99	36.178	4.695	0.10	0.00	2.45	0.21	0.01	0.03
127	0.16	99	36.323	4.969	0.10	0.02	2.21	0.32	0.01	0.11
128	0.23	99	36.363	5.134	0.10	0.02	2.56	0.35	0.01	0.06
129	0.27	99	36.409	4.943	0.10	0.03	2.44	0.38	0.01	0.07
130	0.27	99	36.405	4.667	0.10	0.04	2.61	0.47	0.16	0.04
131	0.12	99	36.401	3.742	0.10	0.33	4.12	7.02	0.11	0.07
132	0.10	99	36.401	3.303	0.08	0.48	4.76	9.79	0.08	0.06
133	0.07	99	33.711	4.620	0.28	0.00	2.69	0.25	0.02	0.21
134	0.03	99	36.091	4.662	0.17	0.01	2.97	0.34	0.05	0.31

135	0.01	99	36.321	5.097	0.12	0.04	2.62	0.32	0.02	0.19
136	0.01	99	36.373	5.842	0.12	0.03	2.67	0.39	0.02	0.22
137	0.12	99	36.383	4.426	0.22	0.01	2.73	0.42	0.02	0.45
138	0.11	99	36.426	4.556	0.12	0.03	2.96	1.01	0.15	0.29
139	0.20	99	36.421	3.635	0.08	0.33	4.35	6.89	0.12	0.18
140	0.24	99	36.408	3.183	0.10	0.62	5.17	12.20	0.05	0.15

3.2.3.4 R.V. GYRE, JULY 1990, continued:

OBS	SERIAL NO.	CRUISE NO.	STATION NO.	GREGORIAN DATE	DATE AS YYMMDD	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SAMPLE DEPTH	TEMPERATURE
141	11	90G10	B90G10*2	14JUL90	900714	23	27	44.8	-93	20.5	148	16.13
142	11	90G10	B90G10*2	14JUL90	900714	23	27	44.8	-93	20.5	214	14.72
143	11	90G10	B90G10*2	14JUL90	900714	23	27	44.8	-93	20.5	250	13.15
144	11	90G10	B90G10*2	14JUL90	900714	310	27	35.2	-93	12.0	2	28.78
145	11	90G10	B90G10*2	14JUL90	900714	310	27	35.2	-93	12.0	24	29.13
146	11	90G10	B90G10*2	14JUL90	900714	310	27	35.2	-93	12.0	42	25.60
147	11	90G10	B90G10*2	14JUL90	900714	310	27	35.2	-93	12.0	62	23.31
148	11	90G10	B90G10*2	14JUL90	900714	310	27	35.2	-93	12.0	71	21.72
149	11	90G10	B90G10*2	14JUL90	900714	310	27	35.2	-93	12.0	80	20.49
150	11	90G10	B90G10*2	14JUL90	900714	310	27	35.2	-93	12.0	101	18.78
151	11	90G10	B90G10*2	14JUL90	900714	310	27	35.2	-93	12.0	148	16.52
152	11	90G10	B90G10*2	14JUL90	900714	310	27	35.2	-93	12.0	198	14.60
153	11	90G10	B90G10*2	14JUL90	900714	310	27	35.2	-93	12.0	247	13.20
154	11	90G10	B90G10*2	14JUL90	900714	310	27	35.2	-93	12.0	378	9.37
155	11	90G10	B90G10*2	14JUL90	900714	505	27	30.3	-93	7.7	1	28.75
156	11	90G10	B90G10*2	14JUL90	900714	505	27	30.3	-93	7.7	33	29.02
157	11	90G10	B90G10*2	14JUL90	900714	505	27	30.3	-93	7.7	65	24.17
158	11	90G10	B90G10*2	14JUL90	900714	505	27	30.3	-93	7.7	74	21.28
159	11	90G10	B90G10*2	14JUL90	900714	505	27	30.3	-93	7.7	105	18.93
160	11	90G10	B90G10*2	14JUL90	900714	505	27	30.3	-93	7.7	159	16.41

OBS	CHLOROPHYLL	NOT USED	SALINITY	OXYGEN	AMMONIA	PHOSPHATE	SILICON	NITRATE	NITRITE	UREA
141	0.24	99	36.183	3.012	0.17	0.85	6.80	15.90	0.03	0.20
142	0.29	99	35.924	2.830	0.13	1.09	8.96	19.30	0.02	0.19
143	0.17	99	35.686	2.713	0.18	1.31	11.10	22.40	0.02	0.31
144	0.14	99	33.014	4.565	0.16	0.02	2.17	0.23	0.01	0.14
145	0.10	99	36.017	4.673	0.14	0.01	2.64	0.17	0.00	0.08
146	0.18	99	36.263	5.042	0.13	0.03	2.64	0.19	0.00	0.12
147	0.17	99	36.477	4.771	0.13	0.02	2.66	0.24	0.00	0.34
148	0.32	99	36.564	4.262	0.15	0.05	2.86	0.92	0.06	0.14
149	0.29	99	36.461	4.303	0.12	0.10	3.13	1.52	0.31	0.22
150	0.13	99	36.448	3.240	0.11	0.55	5.32	9.61	0.09	0.30
151	0.03	99	36.211	3.088	0.07	0.82	7.09	14.20	0.01	0.17
152	0.00	99	35.906	2.888	0.06	1.10	9.78	19.30	0.00	0.19
153	0.00	99	35.682	2.674	0.11	1.32	12.00	22.70	0.00	0.21
154	0.00	99	35.137	2.595	0.01	1.83	19.20	29.60	0.00	0.12

155	0.10	99	35.809	4.519	0.15	0.01	2.48	0.05	0.01	0.23
156	0.11	99	36.353	4.568	0.15	0.01	2.84	0.07	0.01	0.16
157	0.16	99	36.349	5.197	0.17	0.03	2.23	0.08	0.01	0.31
158	0.24	99	36.405	4.789	0.16	0.01	2.56	0.10	0.01	0.11
159	0.14	99	36.445	3.311	0.13	0.09	4.93	9.51	0.07	0.09
160	0.24	99	36.201	3.263	0.03	0.77	6.58	13.00	0.02	0.09

3.2.3.4 R.V. GYRE, JULY 1990, continued:

OBS	SERIAL NO.	CRUISE NO.	STATION NO.	GREGORIAN DATE	DATE AS YYMMDD	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SAMPLE DEPTH	TEMPERATURE
161	11	90G10	B90G10*2	14JUL90	900714	505	27	30.3	-93	7.7	205	14.62
162	11	90G10	B90G10*2	14JUL90	900714	505	27	30.3	-93	7.7	250	13.10
163	11	90G10	B90G10*2	14JUL90	900714	505	27	30.3	-93	7.7	291	11.72
164	11	90G10	B90G10*2	14JUL90	900714	505	27	30.3	-93	7.7	407	9.63
165	11	90G10	B90G10*2	14JUL90	900714	505	27	30.3	-93	7.7	484	8.18
166	9	90G10	B90G10*2	14JUL90	900714	720	27	19.8	-92	58.9	7	29.20
167	9	90G10	B90G10*2	14JUL90	900714	720	27	19.8	-92	58.9	22	28.98
168	9	90G10	B90G10*2	14JUL90	900714	720	27	19.8	-92	58.9	77	20.87
169	9	90G10	B90G10*2	14JUL90	900714	720	27	19.8	-92	58.9	101	19.72
170	9	90G10	B90G10*2	14JUL90	900714	720	27	19.8	-92	58.9	201	14.88
171	9	90G10	B90G10*2	14JUL90	900714	720	27	19.8	-92	58.9	251	13.68
172	9	90G10	B90G10*2	14JUL90	900714	720	27	19.8	-92	58.9	300	12.52
173	9	90G10	B90G10*2	14JUL90	900714	720	27	19.8	-92	58.9	400	10.11
174	9	90G10	B90G10*2	14JUL90	900714	720	27	19.8	-92	58.9	747	5.98
175	8	90G10	B90G10*2	14JUL90	900714	1801	27	40.8	-93	0.2	2	29.06
176	8	90G10	B90G10*2	14JUL90	900714	1801	27	40.8	-93	0.2	32	28.22
177	8	90G10	B90G10*2	14JUL90	900714	1801	27	40.8	-93	0.2	63	21.12
178	8	90G10	B90G10*2	14JUL90	900714	1801	27	40.8	-93	0.2	73	21.28
179	8	90G10	B90G10*2	14JUL90	900714	1801	27	40.8	-93	0.2	82	20.85
180	8	90G10	B90G10*2	14JUL90	900714	1801	27	40.8	-93	0.2	101	20.17

OBS	CHLOROPHYLL	NOT USED	SALINITY	OXYGEN	AMMONIA	PHOSPHATE	SILICON	NITRATE	NITRITE	UREA
161	0.02	100	35.906	3.080	0.11	1.06	8.60	16.00	0.01	0.26
162	0.01	99	35.660	2.862	0.05	1.30	11.20	20.00	0.00	0.31
163	0.00	99	35.454	2.704	0.04	1.52	14.10	24.10	0.01	0.20
164	0.01	99	35.190	2.890	0.09	1.79	18.00	28.80	0.01	0.07
165	0.00	99	34.991	2.787	0.12	1.97	22.30	31.70	0.01	0.11
166	0.08	99	35.855	4.577	0.13	0.02	1.63	0.04	0.19	0.10
167	0.08	99	36.027	4.743	0.08	0.01	1.68	0.06	0.19	0.09
168	0.27	99	36.314	4.925	0.07	0.03	2.33	0.00	0.21	0.06
169	0.17	99	36.307	4.534	0.12	0.08	2.26	1.73	0.30	0.06
170	0.01	99	36.015	3.132	0.05	0.97	7.75	16.70	0.02	0.07
171	0.00	99	35.750	3.136	0.02	1.20	9.68	19.30	0.20	0.03
172	0.00	99	35.569	3.177	0.00	1.40	11.50	20.60	0.20	0.21
173	0.00	99	34.976	2.851	0.00	2.02	21.30	28.70	0.20	0.20
174	0.00	99	34.889	3.825	0.00	2.03	27.20	28.90	0.20	0.15

175	0.08	99	99.000	4.712	0.05	0.04	2.34	0.09	0.00	0.09
176	0.15	99	99.000	4.971	0.04	0.04	3.07	0.12	0.01	0.21
177	0.27	99	99.000	5.048	0.15	0.05	3.27	0.17	0.01	0.22
178	0.27	99	99.000	4.988	0.07	0.06	3.00	0.16	0.02	0.25
179	0.22	99	99.000	4.789	0.04	0.07	3.08	0.12	0.07	0.15
180	0.16	99	99.000	4.425	0.01	0.12	3.11	1.39	0.16	0.07

3.2.3.4 R.V. GYRE, JULY 1990, continued:

OBS	SERIAL NO.	CRUISE NO.	STATION NO.	GREGORIAN DATE	DATE AS YYMMDD	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SAMPLE DEPTH	TEMPERATURE
181	8	90G10	B90G10*2	14JUL90	900714	1801	27	40.8	-93	0.2	126	18.31
182	8	90G10	B90G10*2	14JUL90	900714	1801	27	40.8	-93	0.2	203	14.20
183	8	90G10	B90G10*2	14JUL90	900714	1912	27	47.2	-93	0.1	2	29.19
184	8	90G10	B90G10*2	14JUL90	900714	1912	27	47.2	-93	0.1	22	29.20
185	8	90G10	B90G10*2	14JUL90	900714	1912	27	47.2	-93	0.1	42	24.71
186	8	90G10	B90G10*2	14JUL90	900714	1912	27	47.2	-93	0.1	62	22.54
187	8	90G10	B90G10*2	14JUL90	900714	1912	27	47.2	-93	0.1	71	21.75
188	8	90G10	B90G10*2	14JUL90	900714	1912	27	47.2	-93	0.1	80	21.35
189	8	90G10	B90G10*2	14JUL90	900714	1912	27	47.2	-93	0.1	127	18.03
190	8	90G10	B90G10*2	14JUL90	900714	1912	27	47.2	-93	0.1	151	16.77
191	10	90G10	B90G10*2	14JUL90	900714	2026	27	53.5	-93	0.0	2	29.17
192	10	90G10	B90G10*2	14JUL90	900714	2026	27	53.5	-93	0.0	22	28.62
193	10	90G10	B90G10*2	14JUL90	900714	2026	27	53.5	-93	0.0	42	24.40
194	10	90G10	B90G10*2	14JUL90	900714	2026	27	53.5	-93	0.0	61	21.83
195	10	90G10	B90G10*2	14JUL90	900714	2026	27	53.5	-93	0.0	71	21.41
196	10	90G10	B90G10*2	14JUL90	900714	2026	27	53.5	-93	0.0	81	21.02
197	10	90G10	B90G10*2	14JUL90	900714	2026	27	53.5	-93	0.0	101	20.15
198	10	90G10	B90G10*2	14JUL90	900714	2026	27	53.5	-93	0.0	121	18.74
199	10	90G10	B90G10*2	14JUL90	900714	2026	27	53.5	-93	0.0	136	16.85
200	10	90G10	B90G10*2	14JUL90	900714	2026	27	53.5	-93	0.0	163	15.01

OBS	CHLOROPHYLL	NOT USED	SALINITY	OXYGEN	AMMONIA	PHOSPHATE	SILICON	NITRATE	NITRITE	UREA
181	0.07	99	36.385	3.272	0.02	0.63	5.67	10.50	0.03	0.07
182	0.01	99	35.841	2.868	0.03	1.19	10.50	18.80	0.01	0.08
183	0.00	99	99.000	4.749	0.08	0.05	2.24	0.14	0.00	0.21
184	0.00	99	99.000	4.846	0.09	0.06	2.92	0.09	0.01	0.22
185	0.07	99	99.000	5.121	0.04	0.09	2.85	0.03	0.00	0.11
186	0.14	99	99.000	5.158	0.04	0.08	2.93	0.00	0.06	0.03
187	0.24	99	99.000	5.406	0.11	0.09	3.01	0.06	0.14	0.25
188	0.29	99	99.000	5.068	0.02	0.07	3.19	0.07	0.13	0.02
189	0.02	99	99.000	3.195	0.03	0.70	6.38	11.30	0.03	0.02
190	0.05	99	36.184	3.001	0.07	0.85	7.65	13.00	0.01	0.09
191	0.09	99	99.000	4.820	0.09	0.02	2.22	0.09	0.01	0.17
192	0.12	99	99.000	4.790	0.12	0.04	2.20	0.12	0.00	0.24
193	0.29	99	99.000	5.084	0.05	0.04	3.68	0.00	0.01	0.13
194	0.42	99	99.000	4.853	0.04	0.09	4.25	0.14	0.55	0.11

195	0.21	99	99.000	4.858	0.04	0.08	3.99	0.50	0.19	0.05
196	0.18	99	99.000	4.816	0.04	0.08	3.58	0.56	0.18	0.04
197	0.11	99	99.000	4.275	0.03	0.18	4.05	2.75	0.09	0.02
198	0.05	99	99.000	3.306	0.04	0.59	6.23	8.94	0.03	0.01
199	0.03	99	99.000	3.026	0.00	0.85	8.27	13.10	0.02	0.10
200	0.01	99	36.000	2.985	0.02	0.98	9.52	15.30	0.02	0.09

3.2.3.4 R.V. GYRE, JULY 1990, continued:

OBS	SERIAL NO.	CRUISE NO.	STATION NO.	GREGORIAN DATE	DATE AS YYMMDD	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SAMPLE DEPTH	TEMPERATURE
201	7	90G10	B90G10*2	14JUL90	900714	2129	27	59.5	-93.0	0.0	2.00	29.01
202	7	90G10	B90G10*2	14JUL90	900714	2129	27	59.5	-93.0	0.0	22.00	29.76
203	7	90G10	B90G10*2	14JUL90	900714	2129	27	59.5	-93.0	0.0	42.00	25.03
204	7	90G10	B90G10*2	14JUL90	900714	2129	27	59.5	-93.0	0.0	61.00	22.16
205	7	90G10	B90G10*2	14JUL90	900714	2129	27	59.5	-93.0	0.0	71.00	21.54
206	7	90G10	B90G10*2	14JUL90	900714	2129	27	59.5	-93.0	0.0	81.00	21.08
207	7	90G10	B90G10*2	14JUL90	900714	2129	27	59.5	-93.0	0.0	103.00	18.71
208	6	90G10	B90G10*3	14JUL90	900714	2241	28	6.0	-93.0	0.6	2.00	28.85
209	6	90G10	B90G10*3	14JUL90	900714	2241	28	6.0	-93.0	0.6	21.00	29.63
210	6	90G10	B90G10*3	14JUL90	900714	2241	28	6.0	-93.0	0.6	41.00	24.22
211	6	90G10	B90G10*3	14JUL90	900714	2241	28	6.0	-93.0	0.6	61.00	21.83
212	6	90G10	B90G10*3	14JUL90	900714	2241	28	6.0	-93.0	0.6	70.00	21.16
213	6	90G10	B90G10*3	14JUL90	900714	2241	28	6.0	-93.0	0.6	83.00	19.42
214	5	90G10	B90G10*3	15JUL90	900715	125	28	12.2	-93.0	0.0	2.00	28.89
215	5	90G10	B90G10*3	15JUL90	900715	125	28	12.2	-93.0	0.0	21.00	29.06
216	5	90G10	B90G10*3	15JUL90	900715	125	28	12.2	-93.0	0.0	42.00	23.45
217	5	90G10	B90G10*3	15JUL90	900715	125	28	12.2	-93.0	0.0	51.00	22.35
218	5	90G10	B90G10*3	15JUL90	900715	125	28	12.2	-93.0	0.0	63.00	21.27
219	5	90G10	B90G10*3	15JUL90	900715	233	28	18.6	-92.0	59.8	2.00	29.10
220	5	90G10	B90G10*3	15JUL90	900715	233	28	18.6	-92.0	59.8	11.00	29.34

OBS	CHLOROPHYLL	NOT USED	SALINITY	OXYGEN	AMMONIA	PHOSPHATE	SILICON	NITRATE	NITRITE	UREA
201	0.11	99.000	99.000	5.143	0.03	0.01	2.08	0.06	0.00	0.20
202	0.00	99.000	99.000	4.849	0.06	0.02	2.75	0.01	0.00	0.13
203	0.19	99.000	99.000	5.162	0.01	0.03	3.11	0.06	0.00	0.14
204	0.39	99.000	99.000	4.813	0.03	0.07	4.09	0.41	0.22	0.15
205	0.35	99.000	99.000	4.729	0.04	0.10	4.20	0.75	0.14	0.07
206	0.24	99.000	99.000	4.394	0.11	0.18	4.30	2.25	0.12	0.16
207	0.13	99.000	36.371	3.615	0.10	0.40	5.76	6.75	0.06	0.17
208	0.20	99.000	99.000	4.361	0.03	0.01	2.15	0.00	0.02	0.24
209	0.14	99.000	99.000	4.840	0.03	0.03	3.13	0.06	0.01	0.24
210	0.26	99.000	99.000	5.026	0.01	0.03	3.58	0.10	0.01	0.31
211	0.31	99.000	99.000	4.727	0.01	0.09	4.66	0.90	0.20	0.31
212	0.26	99.000	99.000	4.359	0.02	0.19	4.87	2.95	0.09	0.30
213	0.17	99.000	36.372	3.973	0.04	0.29	5.19	4.63	0.09	0.29
214	0.19	99.000	99.000	4.906	0.11	0.01	1.65	0.03	0.01	0.30

215	0.20	99.000	99.000	4.885	0.07	0.03	3.51	0.03	0.01	0.25
216	0.31	99.000	99.000	4.978	0.08	0.06	4.25	0.02	0.04	0.23
217	0.40	99.000	99.000	4.627	0.16	0.13	5.50	0.36	0.43	0.36
218	0.47	99.000	36.346	4.879	0.08	0.19	6.59	1.01	0.72	0.24
219	0.26	99.000	29.129	4.922	0.06	0.00	1.80	0.21	0.00	1.80
220	0.18	99.000	32.079	4.887	0.03	0.00	2.24	0.17	0.00	2.24

3.2.3.4 R.V. GYRE, JULY 1990, continued:

OBS	SERIAL NO.	CRUISE NO.	STATION NO.	GREGORIAN DATE	DATE AS YYMMDD	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SAMPLE DEPTH	TEMPERATURE
221	5	90G10	B90G10*3	15JUL90	900715	233	28	18.6	-92.0	59.8	20.00	28.75
222	5	90G10	B90G10*3	15JUL90	900715	233	28	18.6	-92.0	59.8	37.00	24.50
223	5	90G10	B90G10*3	15JUL90	900715	233	28	18.6	-92.0	59.8	50.00	21.91
224	3	90G10	B90G10*5	17JUL90	900717	28	29	9.9	-93.0	10.8	2.00	29.03
225	3	90G10	B90G10*5	17JUL90	900717	28	29	9.9	-93.0	10.8	7.00	29.07
226	3	90G10	B90G10*5	17JUL90	900717	28	29	9.9	-93.0	10.8	14.00	28.88
227	4	90G10	B90G10*3	15JUL90	900715	327	28	24.1	-92.0	59.9	2.00	29.32
228	4	90G10	B90G10*3	15JUL90	900715	327	28	24.1	-92.0	59.9	17.00	28.97
229	4	90G10	B90G10*3	15JUL90	900715	327	28	24.1	-92.0	59.9	32.00	25.25
230	4	90G10	B90G10*3	15JUL90	900715	327	28	24.1	-92.0	59.9	46.00	22.38
231	3	90G10	B90G10*5	17JUL90	900717	1259	29	9.5	-92.0	49.3	2.00	28.34
232	3	90G10	B90G10*5	17JUL90	900717	1259	29	9.5	-92.0	49.3	10.00	29.62
233	3	90G10	B90G10*5	17JUL90	900717	1259	29	9.5	-92.0	49.3	18.00	28.70
234	3	90G10	B90G10*6	17JUL90	900717	532	29	6.7	-92.0	28.4	1.00	28.41
235	3	90G10	B90G10*6	17JUL90	900717	532	29	6.7	-92.0	28.4	9.00	29.90
236	3	90G10	B90G10*6	17JUL90	900717	532	29	6.7	-92.0	28.4	16.00	26.98
237	3	90G10	B90G10*6	17JUL90	900717	819	29	1.4	-92.0	6.1	1.00	28.00
238	3	90G10	B90G10*6	17JUL90	900717	819	29	1.4	-92.0	6.1	9.00	27.60
239	3	90G10	B90G10*6	17JUL90	900717	819	29	1.4	-92.0	6.1	16.00	26.54
240	3	90G10	B90G10*6	17JUL90	900717	950	29	3.7	-91.0	53.0	2.00	28.74

OBS	CHLOROPHYLL	NOT USED	SALINITY	OXYGEN	AMMONIA	PHOSPHATE	SILICON	NITRATE	NITRITE	UREA
221	0.22	99.000	34.864	4.999	0.00	0.02	3.05	0.02	0.00	3.05
222	0.37	99.000	35.974	5.114	0.03	0.03	3.72	0.06	0.00	3.72
223	0.60	99.000	36.235	4.304	0.04	0.18	6.49	0.88	0.24	6.49
224	0.55	99.000	29.837	4.783	0.09	0.13	3.80	0.37	0.00	0.19
225	0.52	99.000	29.872	4.610	0.33	0.25	7.07	0.30	0.02	0.18
226	0.34	99.000	31.883	2.626	0.41	0.29	8.32	0.16	0.07	0.16
227	0.22	99.000	99.000	4.792	0.08	0.07	2.28	0.04	0.02	0.04
228	0.23	99.000	99.000	4.822	0.03	0.07	3.23	0.17	0.02	0.12
229	0.47	99.000	99.000	4.903	0.07	0.11	4.51	0.42	0.12	0.23
230	0.71	99.000	36.252	4.271	0.07	0.20	7.28	0.58	0.54	0.24
231	0.50	99.000	24.777	4.802	0.21	0.23	4.50	0.00	0.00	0.05
232	0.37	99.000	26.513	4.881	0.18	0.23	3.10	0.09	0.01	0.04
233	0.31	99.000	31.112	2.554	0.40	0.25	15.50	2.93	1.91	0.06
234	0.69	99.000	24.107	4.629	0.43	0.10	6.95	0.04	0.01	0.22

235	0.35	99.000	29.159	4.006	0.25	0.18	7.12	0.63	0.17	0.27
236	0.37	99.000	34.887	0.703	0.08	1.08	55.30	10.40	0.24	0.53
237	2.25	99.000	24.631	4.428	0.40	0.19	7.72	0.74	0.08	0.19
238	0.50	99.000	34.923	0.952	0.00	0.83	38.20	8.21	1.16	0.22
239	0.63	99.000	35.646	1.464	0.05	1.09	42.90	5.35	5.88	0.52
240	1.53	99.000	24.513	4.225	0.82	0.25	7.72	0.19	0.17	0.17

3.2.3.4 R.V. GYRE, JULY 1990, continued:

OBS	SERIAL NO.	CRUISE NO.	STATION NO.	GREGORIAN DATE	DATE AS YYMMDD	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SAMPLE DEPTH	TEMPERATURE
241	3	90G10	B90G10*6	17JUL90	900717	950	29	3.7	-91.0	53.0	7.00	30.14
242	3	90G10	B90G10*6	17JUL90	900717	950	29	3.7	-91.0	53.0	13.00	27.98
243	2	90G10	B90G10*6	17JUL90	900717	1115	29	3.3	-91.0	39.4	2.00	28.28
244	2	90G10	B90G10*6	17JUL90	900717	1115	29	3.3	-91.0	39.4	6.00	28.11
245	3	90G10	B90G10*6	0	0	28	58	-91.0	45.1	1.0	28.34	2.74
246	3	90G10	B90G10*6	0	0	28	58	-91.0	45.1	8.0	28.54	0.34
247	3	90G10	B90G10*6	0	0	28	58	-91.0	45.1	15.0	27.04	0.20
248	4	90G10	B90G10*6	17JUL90	900717	1324	28	53.0	-91.0	44.3	2.00	29.92
249	4	90G10	B90G10*6	17JUL90	900717	1324	28	53.0	-91.0	44.3	7.00	29.81
250	4	90G10	B90G10*6	17JUL90	900717	1324	28	53.0	-91.0	44.3	12.00	28.26
251	4	90G10	B90G10*6	17JUL90	900717	1324	28	53.0	-91.0	44.3	20.00	26.69
252	4	90G10	B90G10*6	17JUL90	900717	1410	28	49.0	-91.0	46.3	2.00	28.77
253	4	90G10	B90G10*6	17JUL90	900717	1410	28	49.0	-91.0	46.3	12.00	29.37
254	4	90G10	B90G10*6	17JUL90	900717	1410	28	49.0	-91.0	46.3	17.00	28.31
255	4	90G10	B90G10*6	17JUL90	900717	1410	28	49.0	-91.0	46.3	25.00	26.19
256	5	90G10	B90G10*6	17JUL90	900717	1452	28	45.3	-91.0	47.9	1.00	28.78
257	5	90G10	B90G10*6	17JUL90	900717	1452	28	45.3	-91.0	47.9	7.00	28.71
258	5	90G10	B90G10*6	17JUL90	900717	1452	28	45.3	-91.0	47.9	11.00	29.51
259	5	90G10	B90G10*6	17JUL90	900717	1452	28	45.3	-91.0	47.9	17.00	28.27
260	5	90G10	B90G10*6	17JUL90	900717	1452	28	45.3	-91.0	47.9	27.00	25.98

OBS	CHLOROPHYLL	NOT USED	SALINITY	OXYGEN	AMMONIA	PHOSPHATE	SILICON	NITRATE	NITRITE	UREA
241	0.64	99.000	29.602	3.201	1.28	0.49	13.00	1.03	0.68	0.17
242	1.42	99.000	34.916	0.288	2.13	1.94	62.90	4.88	3.89	0.34
243	4.10	99.000	15.502	3.995	5.73	0.48	32.00	6.74	1.18	0.88
244	0.66	99.000	29.493	0.590	9.50	4.43	61.60	1.08	0.44	1.36
245	99.00	19.027	4.603	1.560	0.15	8.76	1.47	0.17	0.47	.
246	99.00	31.073	1.262	4.100	1.68	40.60	4.60	3.04	0.64	.
247	99.00	34.876	0.379	2.040	2.14	67.80	12.30	1.71	0.21	.
248	1.21	99.000	23.418	4.363	0.81	0.11	2.70	0.53	0.03	0.19
249	0.68	99.000	26.440	4.099	0.73	0.15	4.12	0.39	0.13	0.19
250	0.23	99.000	34.693	2.241	0.08	0.76	28.80	4.67	1.49	0.21
251	0.21	99.000	35.593	0.563	0.04	1.55	63.20	15.20	0.12	0.32
252	0.53	99.000	25.106	4.557	0.07	0.06	2.50	0.38	0.02	0.31
253	0.45	99.000	26.569	4.136	0.19	0.11	3.65	0.44	0.12	0.22
254	0.18	99.000	31.426	3.219	0.45	0.19	8.01	0.88	0.57	0.54

255	0.24	99.000	35.180	3.724	0.40	0.25	9.45	1.80	0.46	0.27
256	0.00	99.000	25.703	4.625	0.05	0.04	2.15	0.37	0.02	0.15
257	0.00	99.000	27.202	4.064	0.22	0.06	3.58	0.37	0.23	0.12
258	0.06	99.000	30.710	3.012	0.42	0.12	7.25	0.48	0.89	0.19
259	0.09	99.000	35.046	4.052	0.37	0.06	5.00	0.28	0.06	0.19
260	0.09	99.000	35.608	3.797	0.56	0.24	10.70	1.04	0.99	0.25

3.2.3.4 R.V. GYRE, JULY 1990, continued:

OBS	SERIAL NO.	CRUISE NO.	STATION NO.	GREGORIAN DATE	DATE AS YYMMDD	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SAMPLE DEPTH	TEMPERATURE
261	3	90G10	B90G10*6	18JUL90	900718	315	28	40.1	-91	50.0	3	28.79
262	3	90G10	B90G10*6	18JUL90	900718	315	28	40.1	-91	50.0	22	27.89
263	3	90G10	B90G10*6	18JUL90	900718	315	28	40.1	-91	50.0	33	25.11
264	3	90G10	B90G10*6	18JUL90	900718	410	28	35.5	-91	529.0	3	28.77
265	3	90G10	B90G10*6	18JUL90	900718	410	28	35.5	-91	529.0	22	27.67
266	3	90G10	B90G10*6	18JUL90	900718	410	28	35.5	-91	529.0	37	24.43
267	3	90G10	B90G10*7	18JUL90	900718	503	28	30.0	-91	55.6	3	28.31
268	3	90G10	B90G10*7	18JUL90	900718	503	28	30.0	-91	55.6	16	29.55
269	3	90G10	B90G10*7	18JUL90	900718	503	28	30.0	-91	55.6	30	25.26
270	6	90G10	B90G10*7	18JUL90	900718	2116	28	2.6	-92	10.4	2	29.10
271	6	90G10	B90G10*7	18JUL90	900718	2116	28	2.6	-92	10.4	6	29.11
272	6	90G10	B90G10*7	18JUL90	900718	2116	28	2.6	-92	10.4	42	23.79
273	6	90G10	B90G10*7	18JUL90	900718	2116	28	2.6	-92	10.4	57	22.15
274	6	90G10	B90G10*7	18JUL90	900718	2116	28	2.6	-92	10.4	71	21.00
275	6	90G10	B90G10*7	18JUL90	900718	2116	28	2.6	-92	10.4	97	19.38
276	9	90G10	B90G10*7	19JUL90	900719	331	27	55.4	-92	12.0	1	99.00
277	9	90G10	B90G10*7	19JUL90	900719	331	27	55.4	-92	12.0	20	99.00
278	9	90G10	B90G10*7	19JUL90	900719	331	27	55.4	-92	12.0	40	99.00
279	9	90G10	B90G10*7	19JUL90	900719	331	27	55.4	-92	12.0	60	99.00
280	9	90G10	B90G10*7	19JUL90	900719	331	27	55.4	-92	12.0	70	99.00

OBS	CHLOROPHYLL	NOT USED	SALINITY	OXYGEN	AMMONIA	PHOSPHATE	SILICON	NITRATE	NITRITE	UREA
261	1.26	99	27.412	4.766	0.09	0.08	2.07	0.21	0.01	0.25
262	0.38	99	35.172	4.363	0.33	0.08	3.69	0.01	0.03	0.26
263	0.31	99	35.911	3.860	0.17	0.16	7.35	0.10	1.23	0.50
264	0.78	99	28.789	4.716	0.02	0.05	2.15	0.34	0.00	0.16
265	0.52	99	35.434	4.640	0.13	0.08	3.68	0.38	0.00	0.20
266	0.03	99	35.973	4.694	0.09	0.08	4.16	0.35	0.26	0.56
267	0.46	99	30.873	4.664	0.15	0.06	2.03	0.26	0.00	0.41
268	0.23	99	34.539	4.583	0.08	0.04	2.99	0.20	0.00	0.21
269	0.30	99	35.892	4.817	0.22	0.08	3.34	0.27	0.00	0.70
270	0.12	99	32.598	4.718	0.00	0.03	1.90	0.15	0.01	0.16
271	0.12	99	32.606	4.687	0.01	0.05	1.91	0.09	0.01	0.15
272	0.35	99	36.337	5.192	0.00	0.07	2.64	0.06	0.01	0.14
273	0.27	99	36.329	5.051	0.02	0.06	2.75	0.05	0.01	0.17
274	0.19	99	36.364	4.755	0.02	0.10	3.12	0.43	0.10	0.12

275	0.16	99	36.372	3.760	0.60	0.36	5.42	6.15	0.09	0.11
276	0.06	99	33.688	4.034	0.04	0.03	2.47	0.08	0.00	0.12
277	0.06	99	35.078	4.606	0.04	0.04	2.74	0.01	0.00	0.09
278	0.13	99	36.295	5.062	0.05	0.06	2.84	0.04	0.00	0.15
279	0.26	99	36.376	5.097	0.08	0.04	2.88	0.08	0.00	0.04
280	0.19	99	36.398	4.838	0.10	0.06	3.02	0.32	0.05	0.05

3.2.3.4 R.V. GYRE, JULY 1990, continued:

OBS	SERIAL NO.	CRUISE NO.	STATION NO.	GREGORIAN DATE	DATE AS YYMMDD	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SAMPLE DEPTH	TEMPERATURE
281	9	90G10	B90G10*7	19JUL90	900719	331	27	55.4	-92	12.0	80	99.00
282	9	90G10	B90G10*7	19JUL90	900719	331	27	55.4	-92	12.0	108	99.00
283	9	90G10	B90G10*7	19JUL90	900719	331	27	55.4	-92	12.0	127	99.00
284	9	90G10	B90G10*7	19JUL90	900719	331	27	55.4	-92	12.0	140	99.00
285	7	90G10	B90G10*8	19JUL90	900719	510	27	50.6	-92	15.1	1	99.00
286	7	90G10	B90G10*8	19JUL90	900719	510	27	50.6	-92	15.1	30	99.00
287	7	90G10	B90G10*8	19JUL90	900719	510	27	50.6	-92	15.1	60	99.00
288	7	90G10	B90G10*8	19JUL90	900719	510	27	50.6	-92	15.1	70	99.00
289	7	90G10	B90G10*8	19JUL90	900719	510	27	50.6	-92	15.1	80	99.00
290	7	90G10	B90G10*8	19JUL90	900719	510	27	50.6	-92	15.1	100	99.00
291	7	90G10	B90G10*8	19JUL90	900719	510	27	50.6	-92	15.1	135	99.00
292	10	90G10	B90G10*8	20JUL90	900720	453	28	309.0	-90	11.6	1	28.87
293	10	90G10	B90G10*8	20JUL90	900720	453	28	309.0	-90	11.6	31	26.18
294	10	90G10	B90G10*8	20JUL90	900720	453	28	309.0	-90	11.6	60	22.50
295	10	90G10	B90G10*8	20JUL90	900720	453	28	309.0	-90	11.6	69	21.65
296	10	90G10	B90G10*8	20JUL90	900720	453	28	309.0	-90	11.6	79	21.00
297	10	90G10	B90G10*8	20JUL90	900720	453	28	309.0	-90	11.6	97	19.64
298	10	90G10	B90G10*8	20JUL90	900720	453	28	309.0	-90	11.6	147	16.37
299	10	90G10	B90G10*8	20JUL90	900720	453	28	309.0	-90	11.6	196	13.98
300	10	90G10	B90G10*8	20JUL90	900720	453	28	309.0	-90	11.6	299	11.03

OBS	CHLOROPHYLL	NOT USED	SALINITY	OXYGEN	AMMONIA	PHOSPHATE	SILICON	NITRATE	NITRITE	UREA
281	0.13	99	36.379	4.647	0.00	0.09	3.34	0.76	0.24	0.05
282	0.07	99	36.475	3.583	0.06	0.36	4.60	6.95	0.14	0.27
283	0.02	99	36.191	2.982	0.00	0.82	7.84	14.80	0.04	0.08
284	0.03	99	36.166	2.957	0.01	0.84	8.11	15.50	0.04	0.08
285	0.06	99	34.799	4.595	0.20	0.08	2.67	0.21	0.00	0.38
286	0.05	99	36.055	4.707	0.15	0.06	3.03	0.13	0.01	0.16
287	0.15	99	36.350	5.033	0.19	0.06	3.16	0.32	0.01	0.21
288	0.04	99	36.350	4.985	0.29	0.09	3.21	0.20	0.02	0.49
289	0.09	99	36.386	4.737	0.14	0.10	3.35	0.81	0.09	0.47
290	0.05	99	36.416	3.799	0.10	0.36	7.38	6.06	0.01	0.42
291	0.02	99	36.161	2.974	0.08	0.87	8.20	15.70	0.06	0.48
292	0.18	99	31.638	4.571	0.11	0.02	2.99	0.16	0.01	0.29
293	0.14	99	36.330	4.900	0.01	0.04	2.50	0.17	0.01	0.22
294	0.21	99	36.357	4.998	0.13	0.04	2.91	0.16	0.01	0.20

295	0.19	99	36.332	4.998	0.28	0.06	3.10	0.18	0.04	0.49
296	0.10	99	36.352	4.780	0.12	0.07	3.46	0.46	0.20	0.25
297	0.07	99	36.400	3.811	0.08	0.29	4.46	6.00	0.09	0.24
298	0.02	99	36.177	2.969	0.10	0.88	8.27	15.50	0.07	0.45
299	0.04	99	35.815	2.912	0.08	1.17	10.50	19.80	0.09	0.24
300	99.00	99	35.356	2.789	0.22	1.59	14.90	25.20	0.10	0.90

3.2.3.4 R.V. GYRE, JULY 1990, continued:

OBS	SERIAL NO.	CRUISE NO.	STATION NO.	GREGORIAN DATE	DATE AS YYMMDD	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SAMPLE DEPTH	TEMPERATURE
301	10	90G10	B90G10*8	20JUL90	900720	453	28	309.0	-90	11.6	366	9.63
302	9	90G10	B90G10*8	20JUL90	900720	606	28	7.6	-90	12.9	1	28.90
303	9	90G10	B90G10*8	20JUL90	900720	606	28	7.6	-90	12.9	31	26.68
304	9	90G10	B90G10*8	20JUL90	900720	606	28	7.6	-90	12.9	61	21.93
305	9	90G10	B90G10*8	20JUL90	900720	606	28	7.6	-90	12.9	70	21.29
306	9	90G10	B90G10*8	20JUL90	900720	606	28	7.6	-90	12.9	81	20.83
307	9	90G10	B90G10*8	20JUL90	900720	606	28	7.6	-90	12.9	100	19.81
308	9	90G10	B90G10*8	20JUL90	900720	606	28	7.6	-90	12.9	120	17.75
309	9	90G10	B90G10*8	20JUL90	900720	606	28	7.6	-90	12.9	151	15.72
310	9	90G10	B90G10*8	20JUL90	900720	606	28	7.6	-90	12.9	183	13.99
311	7	90G10	B90G10*8	20JUL90	900720	710	28	13.0	-90	15.5	1	28.77
312	7	90G10	B90G10*8	20JUL90	900720	710	28	13.0	-90	15.5	11	28.63
313	7	90G10	B90G10*8	20JUL90	900720	710	28	13.0	-90	15.5	24	26.00
314	7	90G10	B90G10*8	20JUL90	900720	710	28	13.0	-90	15.5	61	21.74
315	7	90G10	B90G10*8	20JUL90	900720	710	28	13.0	-90	15.5	71	20.88
316	7	90G10	B90G10*8	20JUL90	900720	710	28	13.0	-90	15.5	80	20.35
317	7	90G10	B90G10*8	20JUL90	900720	710	28	13.0	-90	15.5	100	19.13
318	5	90G10	B90G10*8	20JUL90	900720	802	28	18.4	-90	17.5	2	28.91
319	5	90G10	B90G10*8	20JUL90	900720	802	28	18.4	-90	17.5	11	28.98
320	5	90G10	B90G10*8	20JUL90	900720	802	28	18.4	-90	17.5	22	27.16

OBS	CHLOROPHYLL	NOT USED	SALINITY	OXYGEN	AMMONIA	PHOSPHATE	SILICON	NITRATE	NITRITE	UREA
301	99.00	99	35.172	4.706	0.10	1.76	18.40	28.10	0.10	0.24
302	99.00	99	30.953	4.478	0.09	0.02	3.20	0.14	0.01	0.14
303	99.00	99	36.317	4.907	0.11	0.03	2.69	0.14	0.01	0.09
304	0.15	99	36.317	4.905	0.09	0.06	3.92	0.08	0.12	0.18
305	0.08	99	36.316	4.731	0.07	0.07	4.05	0.39	0.30	0.30
306	0.07	99	36.353	4.645	0.09	0.09	3.78	0.95	0.22	0.27
307	0.08	99	36.364	3.783	0.17	0.32	5.69	5.73	0.07	0.45
308	0.04	99	36.328	3.070	0.10	0.67	7.01	13.00	0.04	0.37
309	0.01	99	36.064	3.401	0.06	0.92	8.42	16.80	0.05	0.34
310	0.01	99	35.822	2.581	0.05	1.12	10.60	19.20	0.08	0.15
311	0.31	99	26.279	4.674	0.08	0.02	3.19	0.18	0.02	0.16
312	0.39	99	35.372	4.368	0.05	0.04	3.77	0.35	0.42	0.17
313	0.23	99	35.933	4.678	0.15	0.06	3.84	0.44	0.44	0.30
314	0.11	99	36.285	4.685	0.11	0.11	5.28	0.98	0.11	0.23

315	0.12	99	36.293	3.692	0.06	0.31	9.76	4.55	0.08	0.18
316	0.16	99	36.318	3.432	0.19	0.43	10.20	5.93	0.05	0.46
317	0.09	99	36.352	3.113	0.05	0.55	10.30	8.69	0.06	0.08
318	0.20	99	30.431	4.576	0.13	0.01	3.05	0.32	0.01	0.35
319	0.17	99	34.944	4.316	0.06	0.02	4.11	0.29	0.11	0.27
320	0.68	99	35.819	4.078	0.09	0.02	7.70	1.43	0.75	0.11

3.2.3.4 R.V. GYRE, JULY 1990, continued:

OBS	SERIAL NO.	CRUISE NO.	STATION NO.	GREGORIAN DATE	DATE AS YYMMDD	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SAMPLE DEPTH	TEMPERATURE
321	5	90G10	B90G10*8	20JUL90	900720	802	28	18.4	-90	17.5	41	22.17
322	5	90G10	B90G10*8	20JUL90	900720	802	28	18.4	-90	17.5	63	21.13
323	5	90G10	B90G10*3	15JUL90	900715	357	28	29.2	-93	0.2	2	28.95
324	5	90G10	B90G10*3	15JUL90	900715	357	28	29.2	-93	0.2	12	29.46
325	5	90G10	B90G10*3	15JUL90	900715	357	28	29.2	-93	0.2	22	28.15
326	5	90G10	B90G10*3	15JUL90	900715	357	28	29.2	-93	0.2	32	25.40
327	5	90G10	B90G10*3	15JUL90	900715	357	28	29.2	-93	0.2	43	23.03
328	4	90G10	B90G10*3	15JUL90	900715	801	28	35.8	-92	60.0	2	29.27
329	4	90G10	B90G10*3	15JUL90	900715	801	28	35.8	-92	60.0	7	29.36
330	4	90G10	B90G10*3	15JUL90	900715	801	28	35.8	-92	60.0	17	28.63
331	4	90G10	B90G10*3	15JUL90	900715	801	28	35.8	-92	60.0	31	24.39
332	4	90G10	B90G10*3	15JUL90	900715	855	28	42.1	-92	60.0	2	29.92
333	4	90G10	B90G10*3	15JUL90	900715	855	28	42.1	-92	60.0	12	30.06
334	4	90G10	B90G10*3	15JUL90	900715	855	28	42.1	-92	60.0	22	27.59
335	4	90G10	B90G10*3	15JUL90	900715	855	28	42.1	-92	60.0	29	24.25
336	4	90G10	B90G10*3	15JUL90	900715	942	28	47.8	-93	59.9	1	29.51
337	4	90G10	B90G10*3	15JUL90	900715	942	28	47.8	-93	59.9	6	29.85
338	4	90G10	B90G10*3	15JUL90	900715	942	28	47.8	-93	59.9	11	28.75
339	4	90G10	B90G10*3	15JUL90	900715	942	28	47.8	-93	59.9	22	27.41
340	4	90G10	B90G10*3	15JUL90	900715	1028	28	53.9	-92	59.9	2	29.18

OBS	CHLOROPHYLL	NOT USED	SALINITY	OXYGEN	AMMONIA	PHOSPHATE	SILICON	NITRATE	NITRITE	UREA
321	0.24	99	36.130	3.864	0.07	0.13	9.23	2.20	0.25	0.21
322	0.13	99	36.254	3.878	0.09	0.20	9.73	2.84	0.21	0.27
323	0.22	99	99.000	4.821	0.14	0.06	1.68	0.16	0.02	0.16
324	0.21	99	99.000	4.773	0.09	0.06	2.54	0.10	0.02	0.08
325	0.29	99	99.000	4.956	0.12	0.05	2.93	0.07	0.01	0.03
326	0.40	99	99.000	4.996	0.10	0.06	3.70	0.09	0.02	0.03
327	0.68	99	36.131	4.328	0.08	0.15	6.93	0.27	0.27	0.06
328	0.56	99	27.615	4.544	0.12	0.07	2.54	0.18	0.06	0.16
329	0.60	99	32.126	3.952	0.24	0.09	4.73	0.18	0.05	0.51
330	0.58	99	32.047	4.031	0.09	0.06	2.40	0.24	0.04	0.23
331	0.45	99	35.930	4.245	0.31	0.13	5.97	0.50	0.04	0.50
332	0.61	99	28.777	4.752	0.23	0.09	2.19	0.00	0.04	0.38
333	0.32	99	33.080	3.566	0.47	0.14	7.51	0.29	0.51	0.17
334	0.58	99	35.569	3.568	0.79	0.17	7.32	0.38	0.22	0.16

335	0.64	99	35.587	3.658	0.73	0.18	8.44	0.31	0.24	0.21
336	0.24	99	27.823	4.666	0.14	0.06	1.93	0.31	0.03	0.22
337	0.29	99	29.282	4.641	0.12	0.06	2.08	0.12	0.04	0.23
338	0.52	99	32.563	3.711	0.30	0.12	6.89	0.32	0.64	0.24
339	0.55	99	34.685	3.705	0.54	0.14	6.81	0.29	0.38	0.41
340	0.31	99	27.610	4.692	0.17	0.04	1.55	0.14	0.01	0.29

3.2.3.4 R.V. GYRE, JULY 1990, continued:

OBS	SERIAL NO.	CRUISE NO.	STATION NO.	GREGORIAN DATE	DATE AS YYMMDD	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SAMPLE DEPTH	TEMPERATURE
341	4	90G10	B90G10*3	15JUL90	900715	1028	28	53.9	-92	59.9	7	29.71
342	4	90G10	B90G10*3	15JUL90	900715	1028	28	53.9	-92	59.9	12	29.90
343	4	90G10	B90G10*3	15JUL90	900715	1028	28	53.9	-92	59.9	17	28.76
344	4	90G10	B90G10*3	15JUL90	900715	1117	28	59.6	-92	59.9	2	29.07
345	4	90G10	B90G10*3	15JUL90	900715	1117	28	59.6	-92	59.9	7	29.44
346	4	90G10	B90G10*3	15JUL90	900715	1117	28	59.6	-92	59.9	12	29.81
347	4	90G10	B90G10*3	15JUL90	900715	1117	28	59.6	-92	59.9	19	27.54
348	4	90G10	B90G10*4	15JUL90	900715	1200	29	5.8	-92	59.9	2	29.18
349	4	90G10	B90G10*4	15JUL90	900715	1200	29	5.8	-92	59.9	7	29.92
350	4	90G10	B90G10*4	15JUL90	900715	1200	29	5.8	-92	59.9	12	29.85
351	4	90G10	B90G10*4	15JUL90	900715	1200	29	5.8	-92	59.9	16	27.95
352	3	90G10	B90G10*4	15JUL90	900715	1611	29	13.0	-93	0.0	1	29.06
353	3	90G10	B90G10*4	15JUL90	900715	1611	29	13.0	-93	0.0	6	29.20
354	3	90G10	B90G10*4	15JUL90	900715	1611	29	13.0	-93	0.0	14	27.34
355	3	90G10	B90G10*4	15JUL90	900715	1656	29	18.8	-93	0.2	2	28.95
356	3	90G10	B90G10*4	15JUL90	900715	1656	29	18.8	-93	0.2	7	29.66
357	3	90G10	B90G10*4	15JUL90	900715	1656	29	18.8	-93	0.2	13	29.71
358	3	90G10	B90G10*4	15JUL90	900715	1740	29	24.7	-92	59.9	2	29.10
359	3	90G10	B90G10*4	15JUL90	900715	1740	29	24.7	-92	59.9	8	30.42
360	3	90G10	B90G10*4	15JUL90	900715	1740	29	24.7	-92	59.9	15	28.70

OBS	CHLOROPHYLL	NOT USED	SALINITY	OXYGEN	AMMONIA	PHOSPHATE	SILICON	NITRATE	NITRITE	UREA
341	0.53	99	29.170	4.604	0.14	0.03	2.00	0.15	0.01	0.16
342	0.52	99	30.617	3.874	0.20	0.04	4.22	0.05	0.18	0.22
343	0.68	99	31.927	3.286	0.24	0.07	6.06	0.23	0.40	0.26
344	0.31	99	27.192	4.705	0.14	0.04	1.91	0.31	0.02	0.29
345	0.37	99	30.462	4.303	0.22	0.12	4.15	0.28	0.09	0.32
346	0.46	99	31.383	3.792	0.31	0.14	4.91	0.16	0.07	0.34
347	0.55	99	32.864	3.046	0.43	0.18	11.70	0.57	0.49	0.30
348	0.27	99	27.019	4.699	0.45	0.07	2.03	0.21	0.03	0.35
349	0.38	99	30.432	4.212	1.04	0.12	3.93	0.22	0.06	0.34
350	0.43	99	30.432	3.475	0.87	0.15	7.16	0.57	0.18	0.27
351	0.52	99	33.451	3.063	1.09	0.13	10.40	0.57	0.39	1.13
352	0.00	99	26.081	4.688	0.17	0.07	2.21	0.27	0.02	0.16
353	0.00	99	29.943	3.684	0.58	0.15	8.12	0.51	0.04	1.62
354	0.00	99	31.522	2.967	0.33	0.26	15.20	1.11	0.11	1.17

355	0.47	99	27.108	4.689	0.08	0.23	2.53	0.13	0.00	0.26
356	0.55	99	29.334	4.336	0.05	0.11	4.49	0.21	0.01	0.11
357	0.61	99	29.819	3.908	0.15	0.19	8.93	0.27	0.05	0.33
358	99.00	99	24.482	4.656	0.11	0.09	4.87	0.37	0.02	0.26
359	99.00	99	29.662	3.932	0.34	0.20	8.57	0.33	0.23	0.24
360	99.00	99	30.634	2.706	0.60	0.35	22.10	0.64	0.90	0.22

3.2.3.4 R.V. GYRE, JULY 1990, continued:

OBS	SERIAL NO.	CRUISE NO.	STATION NO.	GREGORIAN DATE	DATE AS YYMMDD	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SAMPLE DEPTH	TEMPERATURE
361	3	90G10	B90G10*4	15JUL90	900715	1820	29	29.6	-92	59.9	2	29.34
362	3	90G10	B90G10*4	15JUL90	900715	1820	29	29.6	-92	59.9	8	30.11
363	3	90G10	B90G10*4	15JUL90	900715	1820	29	29.6	-92	59.9	12	28.79
364	3	90G10	B90G10*4	15JUL90	900715	2208	29	34.4	-92	58.5	2	29.58
365	3	90G10	B90G10*4	15JUL90	900715	2208	29	34.4	-92	58.5	7	29.44
366	3	90G10	B90G10*4	15JUL90	900715	2208	29	34.4	-92	58.5	11	29.01
367	3	90G10	B90G10*4	15JUL90	900715	2346	29	28.0	-93	10.1	2	99.00
368	3	90G10	B90G10*4	15JUL90	900715	2346	29	28.0	-93	10.1	9	99.00
369	3	90G10	B90G10*4	15JUL90	900715	2346	29	28.0	-93	10.1	13	99.00
370	3	90G10	B90G10*4	16JUL90	900716	52	29	26.9	-93	20.4	2	29.00
371	3	90G10	B90G10*4	16JUL90	900716	52	29	26.9	-93	20.4	5	29.24
372	3	90G10	B90G10*4	16JUL90	900716	52	29	26.9	-93	20.4	9	30.08
373	3	90G10	B90G10*4	16JUL90	900716	201	29	25.6	-93	30.6	2	29.33
374	3	90G10	B90G10*4	16JUL90	900716	201	29	25.6	-93	30.6	8	29.34
375	3	90G10	B90G10*4	16JUL90	900716	201	29	25.6	-93	30.6	13	29.73
376	3	90G10	B90G10*4	16JUL90	900716	319	29	23.8	-93	43.8	2	29.12
377	3	90G10	B90G10*4	16JUL90	900716	319	29	23.8	-93	43.8	8	29.21
378	3	90G10	B90G10*4	16JUL90	900716	319	29	23.8	-93	43.8	12	29.14
379	3	90G10	B90G10*4	16JUL90	900716	427	29	22.5	-93	53.9	2	28.97
380	3	90G10	B90G10*4	16JUL90	900716	427	29	22.5	-93	53.9	8	28.98

OBS	CHLOROPHYLL	NOT USED	SALINITY	OXYGEN	AMMONIA	PHOSPHATE	SILICON	NITRATE	NITRITE	UREA
361	0.47	99	24.267	4.385	0.16	0.15	8.72	0.55	0.27	0.17
362	0.55	99	27.932	1.950	0.41	0.49	25.00	1.15	2.17	0.35
363	0.61	99	29.793	2.037	0.16	0.58	30.00	1.14	2.68	0.36
364	0.87	99	23.948	4.272	0.13	0.32	10.30	0.44	0.10	0.22
365	1.37	99	28.424	1.397	1.08	1.40	40.80	3.04	1.17	0.40
366	1.64	99	30.404	0.335	1.52	1.76	51.20	4.07	1.86	0.46
367	99.00	99	22.453	4.689	0.10	0.10	7.46	0.34	0.08	0.30
368	99.00	99	31.280	1.491	0.40	0.78	40.70	1.09	3.70	0.34
369	99.00	99	31.977	0.981	1.00	0.93	51.70	1.28	4.44	0.34
370	99.00	99	22.819	5.275	0.07	0.12	4.97	0.57	0.03	0.25
371	1.06	99	24.499	5.017	0.07	0.16	4.94	0.52	0.06	0.34
372	1.06	99	27.436	4.505	0.17	0.26	7.87	0.54	0.14	0.32
373	0.21	99	26.048	5.115	0.08	0.12	2.66	0.26	0.02	0.13
374	0.87	99	26.746	4.789	0.06	0.18	4.34	0.42	0.04	0.19

375	1.61	99	29.603	3.568	0.21	0.51	20.30	0.56	0.38	0.17
376	0.19	99	26.017	4.819	0.07	0.21	3.93	0.06	0.03	0.23
377	2.41	99	29.786	1.903	0.10	1.33	35.50	0.09	3.09	0.24
378	2.96	99	31.230	0.850	0.11	1.84	46.60	2.08	4.19	0.31
379	0.87	99	26.822	4.827	0.04	0.17	3.75	0.26	0.01	0.33
380	0.97	99	27.623	3.945	0.11	0.32	8.39	0.16	0.10	0.32

3.2.3.4 R.V. GYRE, JULY 1990, continued:

OBS	SERIAL NO.	CRUISE NO.	STATION NO.	GREGORIAN DATE	DATE AS YYMMDD	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SAMPLE DEPTH	TEMPERATURE
381	3	90G10	B90G10*4	16JUL90	900716	427	29	22.5	-93	53.9	11	29.57
382	3	90G10	B90G10*5	16JUL90	900716	536	29	21.4	-94	3.7	2	28.98
383	3	90G10	B90G10*5	16JUL90	900716	536	29	21.4	-94	3.7	4	28.98
384	3	90G10	B90G10*5	16JUL90	900716	536	29	21.4	-94	3.7	7	29.05
385	3	90G10	B90G10*5	16JUL90	900716	638	29	20.1	-94	13.5	2	29.13
386	3	90G10	B90G10*5	16JUL90	900716	638	29	20.1	-94	13.5	6	29.15
387	3	90G10	B90G10*5	16JUL90	900716	638	29	20.1	-94	13.5	11	29.23
388	3	90G10	B90G10*5	16JUL90	900716	740	29	19.1	-94	23.4	2	28.97
389	3	90G10	B90G10*5	16JUL90	900716	740	29	19.1	-94	23.4	6	29.96
390	3	90G10	B90G10*5	16JUL90	900716	740	29	19.1	-94	23.4	10	29.51
391	3	90G10	B90G10*5	16JUL90	900716	827	29	18.1	-94	30.0	2	29.09
392	3	90G10	B90G10*5	16JUL90	900716	827	29	18.1	-94	30.0	6	29.10
393	3	90G10	B90G10*5	16JUL90	900716	827	29	18.1	-94	30.0	11	29.12
394	3	90G10	B90G10*5	16JUL90	900716	922	29	18.0	-94	38.0	2	28.84
395	3	90G10	B90G10*5	16JUL90	900716	922	29	18.0	-94	38.0	6	28.88
396	3	90G10	B90G10*5	16JUL90	900716	922	29	18.0	-94	38.0	12	29.02
397	3	90G10	B90G10*5	16JUL90	900716	1734	29	9.5	-94	15.4	2	28.99
398	3	90G10	B90G10*5	16JUL90	900716	1734	29	9.5	-94	15.4	7	29.04
399	3	90G10	B90G10*5	16JUL90	900716	1734	29	9.5	-94	15.4	11	29.13
400	3	90G10	B90G10*5	16JUL90	900716	1935	29	5.8	-93	57.8	2	28.89

OBS	CHLOROPHYLL	NOT USED	SALINITY	OXYGEN	AMMONIA	PHOSPHATE	SILICON	NITRATE	NITRITE	UREA
381	1.42	99	28.597	3.780	0.14	0.49	12.10	0.08	0.30	0.28
382	0.28	99	28.688	4.570	0.10	0.27	5.41	0.37	0.01	0.20
383	0.13	99	28.689	4.574	0.18	0.28	5.68	0.42	0.01	0.50
384	0.34	99	28.729	4.548	0.14	0.29	5.75	0.37	0.01	0.60
385	0.13	99	30.453	4.611	0.12	0.06	4.04	0.22	0.00	0.16
386	0.13	99	30.465	4.536	0.11	0.06	4.05	0.29	0.00	0.16
387	0.10	99	30.509	4.542	0.23	0.07	4.32	0.30	0.01	0.17
388	0.08	99	29.851	4.629	0.07	0.13	6.43	0.27	0.00	0.28
389	0.10	99	30.044	4.546	0.18	0.17	6.60	0.18	0.01	0.28
390	0.74	99	31.211	3.939	0.18	0.34	8.29	0.18	0.12	0.19
391	0.10	99	31.617	4.556	0.04	0.12	6.06	0.35	0.01	0.04
392	0.12	99	31.621	4.555	0.04	0.12	6.08	0.39	0.00	0.13
393	0.14	99	31.653	4.547	0.17	0.18	6.56	0.39	0.00	0.26
394	0.21	99	30.145	4.618	0.21	0.41	11.70	0.17	0.03	0.21

395	0.31	99	30.643	4.425	0.24	0.53	10.90	0.00	0.04	0.21
396	0.71	99	32.346	3.590	1.06	0.69	13.90	0.11	0.17	0.65
397	0.37	99	30.078	4.679	0.11	0.16	3.05	0.13	0.01	0.00
398	0.32	99	30.216	4.698	0.11	0.11	3.26	0.18	0.01	0.00
399	0.27	99	30.526	4.685	0.13	0.11	3.78	0.17	0.01	0.03
400	0.40	99	29.646	4.617	0.09	0.09	2.51	0.00	0.01	0.15

3.2.3.4 R.V. GYRE, JULY 1990, continued:

OBS	SERIAL NO.	CRUISE NO.	STATION NO.	GREGORIAN DATE	DATE AS YYMMDD	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SAMPLE DEPTH	TEMPERATURE
401	3	90G10	B90G10*5	16JUL90	900716	1935	29	5.8	-93	57.8	9	29.09
402	3	90G10	B90G10*5	16JUL90	900716	1935	29	5.8	-93	57.8	16	29.48
403	3	90G10	B90G10*5	16JUL90	900716	2158	29	8.2	-93	34.4	3	28.86
404	3	90G10	B90G10*5	16JUL90	900716	2158	29	8.2	-93	34.4	9	29.17
405	3	90G10	B90G10*5	16JUL90	900716	2158	29	8.2	-93	34.4	14	29.30
406	5	90G10	B90G10*8	20JUL90	900720	851	28	24.1	-90	19.3	1	28.99
407	5	90G10	B90G10*8	20JUL90	900720	851	28	24.1	-90	19.3	7	29.04
408	5	90G10	B90G10*8	20JUL90	900720	851	28	24.1	-90	19.3	26	25.02
409	5	90G10	B90G10*8	20JUL90	900720	851	28	24.1	-90	19.3	36	22.74
410	5	90G10	B90G10*8	20JUL90	900720	851	28	24.1	-90	19.3	51	21.46
411	5	90G10	B90G10*8	20JUL90	900720	931	28	29.6	-90	21.5	1	28.89
412	5	90G10	B90G10*8	20JUL90	900720	931	28	29.6	-90	21.5	12	29.08
413	5	90G10	B90G10*8	20JUL90	900720	931	28	29.6	-90	21.5	21	24.76
414	5	90G10	B90G10*8	20JUL90	900720	931	28	29.6	-90	21.5	31	22.57
415	5	90G10	B90G10*8	20JUL90	900720	931	28	29.6	-90	21.5	42	22.42
416	4	90G10	B90G10*8	20JUL90	900720	1015	28	35.0	-90	24.1	2	28.88
417	4	90G10	B90G10*8	20JUL90	900720	1015	28	35.0	-90	24.1	12	28.85
418	4	90G10	B90G10*8	20JUL90	900720	1015	28	35.0	-90	24.1	21	24.45
419	4	90G10	B90G10*8	20JUL90	900720	1015	28	35.0	-90	24.1	31	24.03
420	3	90G10	B90G10*8	20JUL90	900720	1059	28	40.7	-90	26.0	2	28.75

OBS	CHLOROPHYLL	NOT USED	SALINITY	OXYGEN	AMMONIA	PHOSPHATE	SILICON	NITRATE	NITRITE	UREA
401	0.34	99	29.828	4.740	0.08	0.09	2.56	0.01	0.00	0.06
402	0.21	99	30.558	4.445	0.37	0.28	6.23	0.08	0.01	0.04
403	0.42	99	29.861	4.659	0.09	0.13	3.80	0.37	0.00	0.19
404	0.21	99	30.471	4.443	0.33	0.25	7.07	0.30	0.02	0.18
405	0.18	99	30.645	4.241	0.41	0.29	8.32	0.16	0.07	0.16
406	0.13	99	30.808	4.540	0.12	0.01	2.87	0.19	0.02	0.14
407	0.16	99	34.094	4.392	0.05	0.03	3.93	0.65	0.03	0.15
408	0.45	99	36.011	3.484	0.06	0.29	12.90	3.81	0.35	0.24
409	0.24	99	36.131	3.972	0.05	0.25	7.35	2.37	0.52	0.25
410	0.11	99	36.187	2.692	0.12	0.82	20.60	8.18	0.15	0.37
411	0.11	99	31.140	4.525	0.05	0.00	2.60	0.26	0.01	0.15
412	0.21	99	33.747	4.292	0.03	0.03	3.82	0.68	0.05	0.12
413	0.39	99	35.797	2.122	0.01	0.62	20.00	8.12	0.16	0.11
414	0.27	99	36.113	3.131	0.02	0.53	17.40	6.19	0.12	0.12

415	0.15	99	36.012	1.965	0.05	0.77	27.80	10.10	0.06	0.15
416	0.18	99	29.802	4.574	0.10	0.00	2.53	0.25	0.03	0.27
417	0.26	99	33.733	3.051	0.13	0.45	13.70	3.87	0.72	0.16
418	0.22	99	35.882	0.544	0.08	1.51	39.70	12.60	0.16	0.21
419	0.27	99	35.884	0.583	0.08	1.42	39.00	12.80	0.27	0.25
420	0.19	99	30.726	4.536	0.09	0.00	1.98	0.23	0.04	0.14

3.2.3.4 R.V. GYRE, JULY 1990, continued:

OBS	SERIAL NO.	CRUISE NO.	STATION NO.	GREGORIAN DATE	DATE AS YYMMDD	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SAMPLE DEPTH	TEMPERATURE
421	3	90G10	B90G10*8	20JUL90	900720	1059	28	40.7	-90	26.0	11	28.77
422	3	90G10	B90G10*8	20JUL90	900720	1059	28	40.7	-90	26.0	18	25.57
423	3	90G10	B90G10*9	20JUL90	900720	1139	28	46.0	-90	28.0	1	28.97
424	3	90G10	B90G10*9	20JUL90	900720	1139	28	46.0	-90	28.0	9	28.97
425	3	90G10	B90G10*9	20JUL90	900720	1139	28	46.0	-90	28.0	16	27.63
426	3	90G10	B90G10*9	20JUL90	900720	1217	28	50.8	-90	30.5	1	28.61
427	3	90G10	B90G10*9	20JUL90	900720	1217	28	50.8	-90	30.5	10	28.86
428	3	90G10	B90G10*9	20JUL90	900720	1217	28	50.8	-90	30.5	18	24.44
429	6	90G10	B90G10*9	20JUL90	900720	1517	28	37.5	-90	23.2	2	28.41
430	6	90G10	B90G10*9	20JUL90	900720	1517	28	37.5	-90	23.2	5	28.31
431	6	90G10	B90G10*9	20JUL90	900720	1517	28	37.5	-90	23.2	9	28.88
432	6	90G10	B90G10*9	20JUL90	900720	1517	28	37.5	-90	23.2	14	26.85
433	6	90G10	B90G10*9	20JUL90	900720	1517	28	37.5	-90	23.2	22	24.47
434	6	90G10	B90G10*9	20JUL90	900720	1517	28	37.5	-90	23.2	30	23.99
435	5	90G10	B90G10*9	21JUL90	900721	1251	29	23.9	-88	46.8	2	28.70
436	5	90G10	B90G10*9	21JUL90	900721	1251	29	23.9	-88	46.8	7	28.82
437	5	90G10	B90G10*9	21JUL90	900721	1251	29	23.9	-88	46.8	12	25.30
438	5	90G10	B90G10*9	21JUL90	900721	1251	29	23.9	-88	46.8	22	25.04
439	5	90G10	B90G10*9	21JUL90	900721	1251	29	23.9	-88	46.8	32	25.00
440	6	90G10	B90G10*9	21JUL90	900721	1420	29	12.5	-88	50.9	1	28.72

OBS	CHLOROPHYLL	NOT USED	SALINITY	OXYGEN	AMMONIA	PHOSPHATE	SILICON	NITRATE	NITRITE	UREA
421	0.20	99	31.936	3.850	0.08	0.17	7.05	1.87	0.51	0.25
422	0.37	99	35.293	1.788	0.04	1.04	28.60	7.64	1.40	0.12
423	0.20	99	28.301	4.559	0.15	0.01	2.32	0.40	0.02	0.20
424	0.19	99	29.576	4.290	0.19	0.03	3.00	0.75	0.18	0.18
425	0.24	99	33.753	3.007	0.11	0.27	9.63	3.59	1.33	0.11
426	0.35	99	24.818	4.600	0.22	0.02	2.66	0.00	0.04	0.22
427	99.00	99	29.946	2.834	2.56	0.82	18.70	0.82	1.14	0.32
428	99.00	99	34.144	0.392	9.95	2.56	58.90	0.69	0.85	0.49
429	0.20	99	29.081	4.521	0.14	0.05	2.67	0.17	0.02	0.12
430	0.22	99	30.362	4.305	0.08	0.08	4.00	0.76	0.12	0.08
431	0.32	99	32.750	3.231	0.09	0.36	11.30	3.50	0.60	0.08
432	0.40	99	35.663	1.005	0.08	1.33	32.60	9.70	0.75	0.74
433	0.32	99	35.866	0.359	0.23	1.72	42.10	12.10	0.57	0.75
434	0.35	99	35.639	0.418	0.13	1.59	40.40	11.80	0.69	0.37

435	0.37	99	29.998	4.691	0.10	0.05	2.12	0.30	0.10	0.20
436	0.37	99	29.993	4.003	0.14	0.17	7.71	1.22	1.07	0.58
437	0.47	99	34.981	3.550	0.06	0.33	13.20	3.70	0.67	0.79
438	0.42	99	35.631	3.303	0.06	0.36	15.10	2.75	2.56	0.44
439	0.42	99	35.618	3.388	0.23	0.50	15.20	2.68	2.57	0.91
440	5.33	99	26.678	5.389	0.29	0.01	3.75	6.11	0.30	0.59

3.2.3.4 R.V. GYRE, JULY 1990, continued:

OBS	SERIAL NO.	CRUISE NO.	STATION NO.	GREGORIAN DATE	DATE AS YYMMDD	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SAMPLE DEPTH	TEMPERATURE
441	6	90G10	B90G10*9	21JUL90	900721	1420	29	12.5	-88	50.9	7	28.65
442	6	90G10	B90G10*9	21JUL90	900721	1420	29	12.5	-88	50.9	22	24.17
443	6	90G10	B90G10*9	21JUL90	900721	1420	29	12.5	-88	50.9	31	23.54
444	6	90G10	B90G10*9	21JUL90	900721	1420	29	12.5	-88	50.9	42	23.04
445	6	90G10	B90G10*9	21JUL90	900721	1420	29	12.5	-88	50.9	64	21.73
446	8	90G10	B90G10*9	21JUL90	900721	1542	29	3.2	-88	53.0	1	28.87
447	8	90G10	B90G10*9	21JUL90	900721	1542	29	3.2	-88	53.0	6	28.57
448	8	90G10	B90G10*9	21JUL90	900721	1542	29	3.2	-88	53.0	12	28.72
449	8	90G10	B90G10*9	21JUL90	900721	1542	29	3.2	-88	53.0	31	23.94
450	8	90G10	B90G10*9	21JUL90	900721	1542	29	3.2	-88	53.0	61	21.85
451	8	90G10	B90G10*9	21JUL90	900721	1542	29	3.2	-88	53.0	72	20.43
452	8	90G10	B90G10*9	21JUL90	900721	1542	29	3.2	-88	53.0	81	19.79
453	8	90G10	B90G10*9	21JUL90	900721	1542	29	3.2	-88	53.0	103	18.22
454	9	90G10	B90G10*9	21JUL90	900721	1703	28	55.2	-89	0.9	1	28.87
455	9	90G10	B90G10*9	21JUL90	900721	1703	28	55.2	-89	0.9	12	25.97
456	9	90G10	B90G10*9	21JUL90	900721	1703	28	55.2	-89	0.9	22	24.04
457	9	90G10	B90G10*9	21JUL90	900721	1703	28	55.2	-89	0.9	42	23.20
458	9	90G10	B90G10*9	21JUL90	900721	1703	28	55.2	-89	0.9	62	22.72
459	9	90G10	B90G10*9	21JUL90	900721	1703	28	55.2	-89	0.9	72	22.52
460	9	90G10	B90G10*9	21JUL90	900721	1703	28	55.2	-89	0.9	82	21.22

OBS	CHLOROPHYLL	NOT USED	SALINITY	OXYGEN	AMMONIA	PHOSPHATE	SILICON	NITRATE	NITRITE	UREA
441	0.28	99	34.311	4.172	0.29	0.01	4.25	1.35	0.08	0.65
442	0.29	99	35.910	3.342	0.05	0.38	14.10	4.23	1.52	0.77
443	0.13	99	36.030	3.166	0.06	0.41	14.60	5.71	0.70	0.35
444	0.10	99	36.173	3.404	0.06	0.46	12.30	5.95	0.24	0.64
445	0.18	99	36.222	3.202	0.08	0.57	15.10	6.82	0.20	0.60
446	4.92	99	20.063	5.697	1.77	0.93	15.00	43.90	0.98	1.21
447	1.97	99	30.239	4.546	0.45	0.07	3.73	0.45	0.06	0.56
448	99.00	99	35.386	4.129	0.26	0.10	5.86	1.31	0.28	0.58
449	99.00	99	36.114	3.464	0.03	0.36	13.00	4.84	0.57	0.61
450	99.00	99	36.240	3.506	0.02	0.44	12.60	5.64	0.11	0.45
451	99.00	99	36.318	3.223	0.08	0.59	13.40	7.13	0.11	0.55
452	99.00	99	36.349	2.997	0.07	0.71	13.60	9.20	0.15	0.41
453	99.00	99	36.341	2.798	0.12	0.87	13.20	11.70	0.41	0.51
454	8.00	99	25.803	5.728	1.01	0.20	5.50	8.87	0.46	0.61

455	1.15	99	33.915	3.499	1.32	0.17	6.46	1.65	0.90	0.26
456	0.34	99	36.022	3.456	0.07	0.30	10.60	3.94	0.81	0.13
457	0.26	99	36.090	2.965	0.05	0.48	15.50	6.21	0.08	0.14
458	0.24	99	36.178	2.923	0.05	0.56	15.80	6.84	0.10	0.00
459	0.16	99	36.190	2.892	0.10	0.61	15.80	7.04	0.11	0.14
460	0.22	99	36.232	3.081	0.06	0.67	13.60	7.05	0.15	0.22

3.2.3.4 R.V. GYRE, JULY 1990, continued:

OBS	SERIAL NO.	CRUISE NO.	STATION NO.	GREGORIAN DATE	DATE AS YYMMDD	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SAMPLE DEPTH	TEMPERATURE
461	9	90G10	B90G10*9	21JUL90	900721	1703	28	55.2	-89	0.9	101	19.23
462	9	90G10	B90G10*9	21JUL90	900721	1703	28	55.2	-89	0.9	116	17.24
463	9	90G10	B90G10*9	21JUL90	900721	1822	28	51.3	-89	0.9	1	28.39
464	9	90G10	B90G10*9	21JUL90	900721	1822	28	51.3	-89	0.9	11	27.40
465	9	90G10	B90G10*9	21JUL90	900721	1822	28	51.3	-89	0.9	21	25.11
466	9	90G10	B90G10*9	21JUL90	900721	1822	28	51.3	-89	0.9	41	23.96
467	9	90G10	B90G10*9	21JUL90	900721	1822	28	51.3	-89	0.9	61	22.23
468	9	90G10	B90G10*9	21JUL90	900721	1822	28	51.3	-89	0.9	71	21.37
469	9	90G10	B90G10*9	21JUL90	900721	1822	28	51.3	-89	0.9	81	20.96
470	9	90G10	B90G10*9	21JUL90	900721	1822	28	51.3	-89	0.9	100	18.50
471	9	90G10	B90G10*9	21JUL90	900721	1822	28	51.3	-89	0.9	121	17.21
472	5	90G10	B90G10*9	21JUL90	900721	1941	28	50.8	-89	21.9	2	28.42
473	5	90G10	B90G10*9	21JUL90	900721	1941	28	50.8	-89	21.9	11	28.00
474	5	90G10	B90G10*9	21JUL90	900721	1941	28	50.8	-89	21.9	26	24.76
475	5	90G10	B90G10*9	21JUL90	900721	1941	28	50.8	-89	21.9	41	23.85
476	5	90G10	B90G10*9	21JUL90	900721	1941	28	50.8	-89	21.9	62	22.84
477	5	90G10	B90G10*9	21JUL90	900721	1941	28	50.8	-89	21.9	1	28.95
478	5	90G10	B90G10*9	21JUL90	900721	1941	28	50.8	-89	21.9	17	27.83
479	5	90G10	B90G10*9	21JUL90	900721	1941	28	50.8	-89	21.9	31	24.94
480	5	90G10	B90G10*9	21JUL90	900721	1941	28	50.8	-89	21.9	46	23.56

OBS	CHLOROPHYLL	NOT USED	SALINITY	OXYGEN	AMMONIA	PHOSPHATE	SILICON	NITRATE	NITRITE	UREA
461	0.09	99	36.358	3.102	0.05	0.67	8.86	9.52	0.11	0.42
462	0.06	99	36.297	2.871	0.06	0.83	10.10	13.00	0.29	0.37
463	7.79	99	24.278	7.705	0.79	0.18	4.33	8.90	0.60	0.50
464	0.58	99	33.864	2.501	1.60	0.53	10.80	7.11	2.71	0.71
465	0.29	99	35.759	2.714	0.07	0.43	12.20	5.43	1.98	0.27
466	0.21	99	36.065	3.099	0.07	0.48	12.50	6.62	0.50	0.19
467	0.08	99	36.321	4.788	0.52	0.12	3.49	0.73	0.43	0.22
468	0.09	99	36.264	4.587	0.11	0.14	5.09	1.30	0.19	0.23
469	0.12	99	36.301	3.599	0.05	0.39	9.24	5.20	0.05	0.24
470	0.20	99	36.361	3.068	0.03	0.64	8.34	10.80	0.06	0.33
471	0.17	99	36.300	2.895	0.05	0.74	8.67	13.40	0.23	0.23
472	5.74	99	27.013	6.752	0.47	0.08	2.72	2.46	0.45	0.31
473	5.74	99	32.250	3.359	1.12	0.22	7.18	4.13	1.96	0.33
474	0.26	99	35.864	2.757	0.03	0.38	12.10	6.83	1.34	0.08

475	0.21	99	35.964	2.579	0.05	0.43	13.40	8.55	0.12	0.22
476	0.26	99	36.104	3.183	0.18	0.54	12.20	6.86	0.36	0.44
477	8.20	99	17.331	6.854	2.84	0.18	25.40	30.30	0.48	1.02
478	0.37	99	35.501	3.772	0.08	0.16	6.71	2.09	1.19	1.14
479	0.26	99	35.921	3.703	0.06	0.41	8.45	4.10	0.22	0.59
480	0.20	99	36.080	3.162	0.08	0.43	11.30	6.34	0.46	0.69

3.2.3.4 R.V. GYRE, JULY 1990, continued:

OBS	SERIAL NO.	CRUISE NO.	STATION NO.	GREGORIAN DATE	DATE AS YYMMDD	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SAMPLE DEPTH	TEMPERATURE
481	5	90G10	B90G10*9	21JUL90	900721	1941	28	50.8	-89	21.9	58	22.29
482	5	90G10	B90G10*1	21JUL90	900721	2228	29	1.3	-89	41.2	2	29.52
483	5	90G10	B90G10*1	21JUL90	900721	2228	29	1.3	-89	41.2	7	28.56
484	5	90G10	B90G10*1	21JUL90	900721	2228	29	1.3	-89	41.2	17	26.57
485	5	90G10	B90G10*1	21JUL90	900721	2228	29	1.3	-89	41.2	27	25.51
486	5	90G10	B90G10*1	21JUL90	900721	2228	29	1.3	-89	41.2	38	24.18
487	10	90G10	B90G10*1	22JUL90	900722	1104	28	15.9	-59	34.2	1	28.98
488	10	90G10	B90G10*1	22JUL90	900722	1104	28	15.9	-59	34.2	51	22.67
489	10	90G10	B90G10*1	22JUL90	900722	1104	28	15.9	-59	34.2	76	20.44
490	10	90G10	B90G10*1	22JUL90	900722	1104	28	15.9	-59	34.2	149	16.29
491	10	90G10	B90G10*1	22JUL90	900722	1104	28	15.9	-59	34.2	160	99.00
492	10	90G10	B90G10*1	22JUL90	900722	1104	28	15.9	-59	34.2	198	14.94
493	10	90G10	B90G10*1	22JUL90	900722	1104	28	15.9	-59	34.2	248	13.15
494	10	90G10	B90G10*1	22JUL90	900722	1104	28	15.9	-59	34.2	297	11.97
495	10	90G10	B90G10*1	22JUL90	900722	1104	28	15.9	-59	34.2	398	9.87
496	10	90G10	B90G10*1	22JUL90	900722	1104	28	15.9	-59	34.2	750	5.79
497	11	90G10	B90G10*1	22JUL90	900722	1224	28	21.6	-89	38.1	1	28.59
498	11	90G10	B90G10*1	22JUL90	900722	1224	28	21.6	-89	38.1	27	26.49
499	11	90G10	B90G10*1	22JUL90	900722	1224	28	21.6	-89	38.1	51	22.28
500	11	90G10	B90G10*1	22JUL90	900722	1224	28	21.6	-89	38.1	74	20.25

OBS	CHLOROPHYLL	NOT USED	SALINITY	OXYGEN	AMMONIA	PHOSPHATE	SILICON	NITRATE	NITRITE	UREA
481	0.18	99	36.167	4.105	0.48	0.27	7.70	3.02	0.66	0.78
482	8.00	99	17.477	7.044	1.75	0.05	5.21	27.50	0.65	0.65
483	7.79	99	22.046	3.857	6.50	0.13	10.50	21.20	1.16	1.26
484	0.42	99	35.375	3.343	0.05	0.33	8.64	5.72	0.38	0.38
485	0.31	99	35.981	4.042	0.06	0.19	6.05	2.64	1.13	0.37
486	0.32	99	36.015	3.840	0.09	0.45	8.73	4.42	0.38	0.42
487	0.11	99	34.124	4.543	0.09	0.03	2.40	0.40	0.05	0.23
488	0.17	99	36.293	5.003	0.10	0.05	3.26	0.45	0.09	0.21
489	0.12	99	36.401	4.186	0.08	0.15	3.92	2.80	0.34	0.22
490	0.08	99	36.402	3.422	0.17	0.55	5.47	9.83	0.12	0.68
491	0.03	99	36.166	3.130	0.10	0.84	7.40	15.40	0.10	0.48
492	0.02	99	35.945	3.295	0.10	0.99	8.28	14.90	0.11	0.54
493	0.03	99	35.658	3.062	0.12	1.22	10.90	19.30	0.13	0.30
494	0.07	99	35.482	2.899	0.14	1.39	13.20	22.70	0.14	0.40

495	0.02	99	35.180	2.765	0.09	1.70	17.70	29.80	0.17	0.27
496	0.08	99	34.893	3.557	0.08	1.86	27.60	31.70	0.17	0.33
497	0.17	99	32.102	4.558	0.19	0.05	2.58	0.22	0.06	0.30
498	0.13	99	35.901	4.646	0.19	0.10	5.24	0.32	0.08	0.20
499	0.22	99	36.285	4.961	0.19	0.08	3.68	0.29	0.10	0.15
500	0.06	99	36.386	4.217	0.12	0.19	4.01	2.82	0.22	0.18

3.2.3.4 R.V. GYRE, JULY 1990, continued:

OBS	SERIAL NO.	CRUISE NO.	STATION NO.	GREGORIAN DATE	DATE AS YYMMDD	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SAMPLE DEPTH	TEMPERATURE
501	11	90G10	B90G10*1	22JUL90	900722	1224	28	21.6	-89	38.1	100	18.43
502	11	90G10	B90G10*1	22JUL90	900722	1224	28	21.6	-89	38.1	147	16.35
503	11	90G10	B90G10*1	22JUL90	900722	1224	28	21.6	-89	38.1	194	14.45
504	11	90G10	B90G10*1	22JUL90	900722	1224	28	21.6	-89	38.1	247	12.95
505	11	90G10	B90G10*1	22JUL90	900722	1224	28	21.6	-89	38.1	299	11.42
506	11	90G10	B90G10*1	22JUL90	900722	1224	28	21.6	-89	38.1	400	9.73
507	11	90G10	B90G10*1	22JUL90	900722	1224	28	21.6	-89	38.1	776	8.11
508	11	90G10	B90G10*1	22JUL90	900722	1350	28	26.5	-89	42.1	1	29.03
509	11	90G10	B90G10*1	22JUL90	900722	1350	28	26.5	-89	42.1	28	27.69
510	11	90G10	B90G10*1	22JUL90	900722	1350	28	26.5	-89	42.1	53	22.21
511	11	90G10	B90G10*1	22JUL90	900722	1350	28	26.5	-89	42.1	77	19.81
512	11	90G10	B90G10*1	22JUL90	900722	1350	28	26.5	-89	42.1	101	17.34
513	11	90G10	B90G10*1	22JUL90	900722	1350	28	26.5	-89	42.1	149	15.17
514	11	90G10	B90G10*1	22JUL90	900722	1350	28	26.5	-89	42.1	199	13.61
515	11	90G10	B90G10*1	22JUL90	900722	1350	28	26.5	-89	42.1	249	12.34
516	11	90G10	B90G10*1	22JUL90	900722	1350	28	26.5	-89	42.1	301	11.34
517	11	90G10	B90G10*1	22JUL90	900722	1350	28	26.5	-89	42.1	397	9.64
518	11	90G10	B90G10*1	22JUL90	900722	1350	28	26.5	-89	42.1	636	7.84
519	12	90G10	B90G10*1	22JUL90	900722	1614	28	31.5	-89	46.4	1	29.14
520	12	90G10	B90G10*1	22JUL90	900722	1614	28	31.5	-89	46.4	11	29.19

OBS	CHLOROPHYLL	NOT USED	SALINITY	OXYGEN	AMMONIA	PHOSPHATE	SILICON	NITRATE	NITRITE	UREA
501	0.05	99	36.410	3.204	0.15	0.30	6.04	11.10	0.12	0.52
502	0.02	99	36.206	3.293	0.18	0.80	7.03	12.50	0.10	0.67
503	0.00	99	35.877	3.188	0.12	1.04	9.13	17.20	0.12	0.60
504	0.00	99	35.647	2.884	0.11	1.29	12.60	21.70	0.14	0.40
505	0.01	99	35.418	2.774	0.17	1.49	14.90	26.60	0.15	0.50
506	0.00	99	35.175	2.739	0.10	1.72	18.20	30.00	0.17	0.37
507	0.11	99	34.981	2.850	0.10	1.88	21.80	32.80	0.17	0.33
508	99.00	99	33.151	4.595	0.12	0.01	4.47	0.44	0.03	0.37
509	99.00	99	35.832	4.502	0.08	0.06	7.30	0.89	0.06	0.26
510	0.18	99	36.207	3.556	0.11	0.28	13.00	4.17	0.16	0.29
511	0.07	99	36.345	3.297	0.14	0.48	9.76	9.14	0.07	0.40
512	0.03	99	36.282	3.044	0.08	0.71	8.73	14.40	0.06	0.26
513	0.00	99	35.979	3.170	0.12	0.92	10.10	17.10	0.06	0.40
514	0.00	99	35.739	2.965	0.10	1.17	12.90	21.10	0.06	0.30

515	0.01	99	35.554	2.850	0.10	1.34	15.00	23.50	0.07	0.30
516	0.01	99	35.397	2.834	0.09	1.46	16.10	25.30	0.08	0.30
517	0.01	99	35.161	2.741	0.07	1.70	20.20	29.10	0.09	0.39
518	0.01	99	34.896	3.152	0.10	1.92	28.40	31.90	0.10	0.35
519	0.17	99	31.260	4.605	0.12	0.02	8.79	0.48	0.02	0.27
520	0.16	99	34.662	4.604	0.13	0.03	9.26	0.42	0.03	0.28

3.2.3.4 R.V. GYRE, JULY 1990, continued:

OBS	SERIAL NO.	CRUISE NO.	STATION NO.	GREGORIAN DATE	DATE AS YYMMDD	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SAMPLE DEPTH	TEMPERATURE
521	12	90G10	B90G10*1	22JUL90	900722	1614	28	31.5	-89	46.4	26.0	26.99
522	12	90G10	B90G10*1	22JUL90	900722	1614	28	31.5	-89	46.4	51.0	22.28
523	12	90G10	B90G10*1	22JUL90	900722	1614	28	31.5	-89	46.4	76.0	19.06
524	12	90G10	B90G10*1	22JUL90	900722	1614	28	31.5	-89	46.4	100.0	17.81
525	12	90G10	B90G10*1	22JUL90	900722	1614	28	31.5	-89	46.4	148.0	15.63
526	12	90G10	B90G10*1	22JUL90	900722	1614	28	31.5	-89	46.4	199.0	13.68
527	12	90G10	B90G10*1	22JUL90	900722	1614	28	31.5	-89	46.4	249.0	11.94
528	12	90G10	B90G10*1	22JUL90	900722	1614	28	31.5	-89	46.4	298.0	11.16
529	12	90G10	B90G10*1	22JUL90	900722	1614	28	31.5	-89	46.4	398.0	9.25
530	12	90G10	B90G10*1	22JUL90	900722	1614	28	31.5	-89	46.4	512.0	7.71
531	9	90G10	B90G10*1	22JUL90	900722	1726	28	34.8	-89	51.6	1.0	29.27
532	9	90G10	B90G10*1	22JUL90	900722	1726	28	34.8	-89	51.6	51.0	22.20
533	9	90G10	B90G10*1	22JUL90	900722	1726	28	34.8	-89	51.6	75.0	19.41
534	9	90G10	B90G10*1	22JUL90	900722	1726	28	34.8	-89	51.6	100.0	18.26
535	9	90G10	B90G10*1	22JUL90	900722	1726	28	34.8	-89	51.6	149.0	16.03
536	9	90G10	B90G10*1	22JUL90	900722	1726	28	34.8	-89	51.6	198.0	13.61
537	9	90G10	B90G10*1	22JUL90	900722	1726	28	34.8	-89	51.6	247.0	11.95
538	9	90G10	B90G10*1	22JUL90	900722	1726	28	34.8	-89	51.6	296.0	11.00
539	9	90G10	B90G10*1	22JUL90	900722	1726	28	34.8	-89	51.6	425.0	8.95
540	11	90G10	B90G10*1	23JUL90	900723	554	28	32.6	-89	49.2	1.0	29.24

OBS	CHLOROPHYLL	NOT USED	SALINITY	OXYGEN	AMMONIA	PHOSPHATE	SILICON	NITRATE	NITRITE	UREA
521	0.02	99	35.841	4.720	0.12	0.07	10.20	0.54	0.07	0.31
522	0.14	99	36.147	4.152	0.08	0.14	9.10	2.19	0.26	0.22
523	0.04	99	36.392	99.000	0.11	0.56	9.76	9.64	0.08	0.34
524	0.04	99	36.318	2.914	0.14	0.76	10.90	13.80	0.05	0.40
525	0.02	99	36.026	2.996	0.17	0.96	11.10	17.00	0.06	0.50
526	0.01	99	35.797	2.969	0.04	1.12	12.50	20.00	0.06	0.20
527	0.01	99	35.468	2.811	0.05	1.42	16.00	24.10	0.07	0.10
528	0.01	99	35.353	2.779	0.05	1.53	17.30	25.70	0.07	0.20
529	0.01	99	35.096	2.773	0.03	1.78	21.00	28.80	0.09	0.30
530	0.00	99	34.957	2.877	0.07	1.93	25.00	29.20	0.10	0.26
531	0.45	99	28.496	4.891	0.16	0.04	2.17	0.14	0.04	0.33
532	0.06	99	36.211	3.537	0.10	0.31	9.50	4.01	0.10	0.34
533	0.04	99	36.379	3.246	0.11	0.56	8.86	7.98	0.07	0.43
534	0.03	99	36.353	2.942	0.11	0.72	8.70	12.00	0.07	0.53

535	0.01	99	36.087	2.990	0.08	0.92	9.20	16.30	0.06	0.57
536	0.01	99	35.727	2.898	0.03	1.20	11.40	20.60	0.06	0.40
537	0.01	99	35.475	2.804	0.03	1.41	13.60	23.70	0.07	0.30
538	99.00	99	35.342	2.757	0.06	1.56	15.50	25.60	0.08	0.00
539	99.00	99	35.083	2.651	0.72	2.26	22.60	29.00	0.25	1.60
540	0.19	99	30.542	4.676	0.10	0.01	1.93	0.21	0.02	0.25

3.2.3.4 R.V. GYRE, JULY 1990, continued:

OBS	SERIAL NO.	CRUISE NO.	STATION NO.	GREGORIAN DATE	DATE AS YYMMDD	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SAMPLE DEPTH	TEMPERATURE
541	11	90G10	B90G10*1	23JUL90	900723	554	28	32.6	-89	49.2	31.0	25.49
542	11	90G10	B90G10*1	23JUL90	900723	554	28	32.6	-89	49.2	60.0	20.89
543	11	90G10	B90G10*1	23JUL90	900723	554	28	32.6	-89	49.2	71.0	19.96
544	11	90G10	B90G10*1	23JUL90	900723	554	28	32.6	-89	49.2	80.0	19.11
545	11	90G10	B90G10*1	23JUL90	900723	554	28	32.6	-89	49.2	100.0	19.04
546	11	90G10	B90G10*1	23JUL90	900723	554	28	32.6	-89	49.2	149.0	15.68
547	11	90G10	B90G10*1	23JUL90	900723	554	28	32.6	-89	49.2	199.0	13.73
548	11	90G10	B90G10*1	23JUL90	900723	554	28	32.6	-89	49.2	297.0	10.63
549	11	90G10	B90G10*1	23JUL90	900723	554	28	32.6	-89	49.2	396.0	9.45
550	11	90G10	B90G10*1	23JUL90	900723	554	28	32.6	-89	49.2	471.0	8.06
551	9	90G10	B90G10*1	23JUL90	900723	725	28	36.5	-89	58.1	1.0	29.42
552	9	90G10	B90G10*1	23JUL90	900723	725	28	36.5	-89	58.1	30.0	25.05
553	9	90G10	B90G10*1	23JUL90	900723	725	28	36.5	-89	58.1	60.0	21.13
554	9	90G10	B90G10*1	23JUL90	900723	725	28	36.5	-89	58.1	70.0	21.03
555	9	90G10	B90G10*1	23JUL90	900723	725	28	36.5	-89	58.1	80.0	20.73
556	9	90G10	B90G10*1	23JUL90	900723	725	28	36.5	-89	58.1	99.1	19.82
557	9	90G10	B90G10*1	23JUL90	900723	725	28	36.5	-89	58.1	149.0	15.61
558	9	90G10	B90G10*1	23JUL90	900723	725	28	36.5	-89	58.1	199.0	13.87
559	9	90G10	B90G10*1	23JUL90	900723	725	28	36.5	-89	58.1	251.0	12.32
560	7	90G10	B90G10*1	23JUL90	900723	824	28	37.5	-90	4.6	1.0	29.38

OBS	CHLOROPHYLL	NOT USED	SALINITY	OXYGEN	AMMONIA	PHOSPHATE	SILICON	NITRATE	NITRITE	UREA
541	0.50	99.00	35.923	4.155	0.07	0.12	6.60	1.18	0.42	0.20
542	0.05	99.00	36.262	3.530	0.06	0.36	9.85	5.19	0.08	0.35
543	0.03	99.00	36.364	3.439	0.04	0.49	8.49	7.39	0.06	0.32
544	0.03	99.00	36.383	3.072	0.06	0.61	8.34	10.40	0.05	0.33
545	0.02	99.00	36.330	2.911	0.07	0.73	8.91	12.90	0.05	0.31
546	0.01	99.00	36.031	2.983	0.01	0.94	9.47	16.70	0.06	0.38
547	0.01	99.00	35.744	2.961	0.39	0.98	9.43	16.90	0.06	3.03
548	0.00	99.00	35.294	2.735	0.02	1.14	10.60	20.10	0.07	0.33
549	0.00	99.00	35.135	2.718	0.06	1.73	18.80	28.50	0.11	0.52
550	0.01	99.00	34.987	2.822	0.03	1.84	21.90	30.40	0.11	0.37
551	0.39	99.00	28.231	4.899	0.12	0.02	1.54	0.63	0.05	0.53
552	0.16	99.00	36.117	4.331	0.18	0.14	5.61	1.82	0.25	0.60
553	0.04	99.00	36.288	4.243	0.17	0.24	6.60	2.67	0.15	0.45
554	0.04	99.00	36.296	4.047	0.08	0.27	7.45	3.33	0.15	0.45

555	0.04	99.00	36.315	4.178	0.03	0.42	9.38	5.27	0.09	0.37
556	0.03	99.00	36.354	2.834	0.16	0.60	9.90	9.07	0.05	0.58
557	0.02	99.00	36.040	2.942	0.15	0.95	9.85	16.80	0.06	0.29
558	0.01	99.00	35.788	2.842	0.35	1.16	11.80	19.80	0.08	0.30
559	0.01	99.00	35.563	2.752	0.02	1.35	14.60	22.60	0.18	0.28
560	0.48	99.00	29.234	4.804	0.07	0.01	1.67	0.19	0.06	0.42

3.2.3.4 R.V. GYRE, JULY 1990, continued:

OBS	SERIAL NO.	CRUISE NO.	STATION NO.	GREGORIAN DATE	DATE AS YYMMDD	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SAMPLE DEPTH	TEMPERATURE
561	7	90G10	B90G10*1	23JUL90	900723	824	28	37.5	-90	4.6	30	25.18
562	7	90G10	B90G10*1	23JUL90	900723	824	28	37.5	-90	4.6	60	22.00
563	7	90G10	B90G10*1	23JUL90	900723	824	28	37.5	-90	4.6	70	21.41
564	7	90G10	B90G10*1	23JUL90	900723	824	28	37.5	-90	4.6	80	21.19
565	7	90G10	B90G10*1	23JUL90	900723	824	28	37.5	-90	4.6	100	19.54
566	7	90G10	B90G10*1	23JUL90	900723	824	28	37.5	-90	4.6	161	15.28
567	6	90G10	B90G10*1	23JUL90	900723	909	28	38.6	-90	11.2	2	29.43
568	6	90G10	B90G10*1	23JUL90	900723	909	28	38.6	-90	11.2	12	29.31
569	6	90G10	B90G10*1	23JUL90	900723	909	28	38.6	-90	11.2	21	26.66
570	6	90G10	B90G10*1	23JUL90	900723	909	28	38.6	-90	11.2	31	23.15
571	6	90G10	B90G10*1	23JUL90	900723	909	28	38.6	-90	11.2	41	23.09
572	6	90G10	B90G10*1	23JUL90	900723	909	28	38.6	-90	11.2	48	23.08
573	4	90G10	B90G10*1	23JUL90	900723	1035	28	39.8	-90	17.4	2	99.00
574	4	90G10	B90G10*1	23JUL90	900723	1035	28	39.8	-90	17.4	12	99.00
575	4	90G10	B90G10*1	23JUL90	900723	1035	28	39.8	-90	17.4	22	99.00
576	4	90G10	B90G10*1	23JUL90	900723	1035	28	39.8	-90	17.4	27	99.00
577	12	90G10	B90G10*1	23JUL90	900723	1035	28	39.9	-90	17.5	2	29.48
578	12	90G10	B90G10*1	23JUL90	900723	1035	28	39.9	-90	17.5	4	29.48
579	12	90G10	B90G10*1	23JUL90	900723	1035	28	39.9	-90	17.5	6	29.61
580	12	90G10	B90G10*1	23JUL90	900723	1035	28	39.9	-90	17.5	7	29.59

OBS	CHLOROPHYLL	NOT USED	SALINITY	OXYGEN	AMMONIA	PHOSPHATE	SILICON	NITRATE	NITRITE	UREA
561	0.19	99.00	36.024	4.197	0.07	0.13	6.08	2.01	0.57	0.34
562	0.04	99.00	36.223	4.540	0.05	0.16	5.75	1.56	0.23	0.33
563	0.00	59.00	36.237	4.043	0.15	0.27	7.97	2.67	0.20	0.37
564	0.04	99.00	36.252	3.682	0.18	0.42	10.10	4.45	0.07	0.40
565	0.03	99.00	36.357	3.075	0.10	0.66	10.40	9.95	0.06	0.38
566	0.03	99.00	36.038	3.071	0.10	1.00	10.80	11.80	0.17	0.36
567	0.31	99.00	27.705	4.842	0.06	0.03	8.47	0.41	0.31	0.35
568	0.45	99.00	35.339	4.326	0.07	0.00	6.84	0.17	0.02	0.07
569	0.19	99.00	35.972	3.624	0.05	0.21	8.77	3.22	0.40	0.36
570	0.09	99.00	36.118	3.683	0.07	0.40	10.30	4.72	0.17	0.67
571	0.13	99.00	36.117	3.639	0.10	0.42	10.40	4.71	0.18	0.71
572	0.13	99.00	36.113	3.644	0.08	0.43	10.40	4.69	0.20	0.63
573	29.62	0.45	28.727	4.278	0.38	0.03	2.09	1.36	0.20	0.18
574	28.96	0.53	35.366	3.991	0.06	0.11	5.71	1.63	0.44	0.18

575	25.14	0.13	35.933	3.392	0.04	0.43	14.80	3.83	0.59	0.20
576	24.51	0.20	35.844	2.413	0.05	0.70	22.10	6.03	0.51	0.27
577	0.32	99.00	30.287	4.695	0.09	0.02	1.87	0.11	0.00	0.15
578	0.22	99.00	31.513	4.630	0.08	0.01	1.97	0.16	0.00	0.06
579	0.12	99.00	33.393	4.610	0.15	0.02	2.21	0.16	0.00	0.25
580	0.12	99.00	33.937	4.611	0.09	0.02	2.39	0.21	0.00	0.19

3.2.3.4 R.V. GYRE, JULY 1990, continued:

OBS	SERIAL NO.	CRUISE NO.	STATION NO.	GREGORIAN DATE	DATE AS YYMMDD	TIME	LATITUDE (DEGREES)	LATITUDE (MINUTES)	LONGITUDE (DEGREES)	LONGITUDE (MINUTES)	SAMPLE DEPTH	TEMPERATURE
581	12	90G10	B90G10*1	23JUL90	900723	1035	28	39.9	-90	17.5	10	29.12
582	12	90G10	B90G10*1	23JUL90	900723	1035	28	39.9	-90	17.5	11	29.20
583	12	90G10	B90G10*1	23JUL90	900723	1035	28	39.9	-90	17.5	14	29.20
584	12	90G10	B90G10*1	23JUL90	900723	1035	28	39.9	-90	17.5	26	28.25
585	12	90G10	B90G10*1	23JUL90	900723	1035	28	39.9	-90	17.5	59	21.37
586	12	90G10	B90G10*1	23JUL90	900723	1035	28	39.9	-90	17.5	71	21.15
587	12	90G10	B90G10*1	23JUL90	900723	1035	28	39.9	-90	17.5	78	20.23
588	12	90G10	B90G10*1	23JUL90	900723	1035	28	39.9	-90	17.5	96	19.23

OBS	CHLOROPHYLL	NOT USED	SALINITY	OXYGEN	AMMONIA	PHOSPHATE	SILICON	NITRATE	NITRITE	UREA
581	0.10	99.00	34.414	4.580	0.05	0.02	2.39	0.21	0.00	0.09
582	0.10	99.00	34.495	4.579	0.06	0.02	2.44	0.25	0.00	0.11
583	99.00	99.00	35.181	4.593	0.19	0.05	2.74	0.22	0.01	0.51
584	99.00	99.00	35.838	4.689	0.04	0.03	3.40	0.55	0.02	0.20
585	99.00	99.00	36.277	4.813	0.11	0.06	4.25	0.39	0.27	0.50
586	99.00	99.00	36.288	4.346	0.06	0.15	5.94	1.67	0.26	0.37
587	99.00	99.00	36.318	3.477	0.06	0.35	9.47	5.69	0.05	0.30
588	99.00	99.00	36.364	3.181	0.13	0.52	9.71	8.72	0.07	0.40

4.0 LITERATURE CITED

Wrigley, R. C., T. R. Ory, J. T. Brucks, J. Jett, W. Bryant. 1991. Application of the airborne ocean color imager for commercial fishing. Final Report, EOCAP I (NRA-87-51), National Aeronautics and Space Administration, Ames Research Center, Moffett Field, California, 43 pp.

5.0 DIGITAL COPIES OF THE AOCI DATA BASE

Table 2. Contents of the primary and backup data diskettes.

Data set name	Size (bytes)	Identity and date of coverage
SFJUN90.DAT	12181	Sport fishing, 6/90.
SFJUL90.DAT	10585	Sport fishing, 7/90.
SFJUN91.DAT	16885	Sport fishing, 6/91.
SAMAY89.DAT	2441	Menhaden spotter aircraft, 5/89.
SASEP89.DAT	11681	Menhaden spotter aircraft, 8/89 - 9/89.
SAJUN90.DAT	2161	Menhaden spotter aircraft, 6/90.
SAJUL90.DAT	6121	Menhaden spotter aircraft, 7/90.
SAJUN91.DAT	3881	Menhaden spotter aircraft, 6/91.
FVMAY89.DAT	8912	Menhaden fishing vessels, 5/89.
FVSEP89.DAT	27847	Menhaden fishing vessels, 8/89 - 9/89.
FVJUN90.DAT	8192	Menhaden fishing vessels, 6/90.
FVJUL90.DAT	13339	Menhaden fishing vessels, 7/90.
FOSEP89.DAT	26071	Menhaden vessels w/ observers, 8/89 - 9/89.
FOJUN90.DAT	6679	Menhaden vessels w/ observers, 6/90.
FOJUL90.DAT	11535	Menhaden vessels w/ observers, 7/90.
CBMAY89.DAT	23725	Charter boats, 5/89.
CBSEP89.DAT	119923	Charter boats, 8/89 - 9/89.
CBJUN90.DAT	62221	Charter boats, 6/90.
CBJUL90.DAT	62445	Charter boats, 7/90.
ORAUG88.DAT	15501	R.V. Oregon II, cruise #176.
ORSEP89.DAT	7178	R.V. Oregon II, cruise #183.
ORJUN90.DAT	1104	R.V. Oregon II, cruise #189.
GYJUL90.DAT	76780	R.V. Gyre, 7/90.
README.DOC	16026	Data formats from section 2.0, ASCII text.