UNIVERSITY OF CALIFORNIA SCRIPPS INSTITUTION OF OCEANOGRAPHY

data report

PHYSICAL, CHEMICAL AND BIOLOGICAL DATA

CalCOFI Cruise 8401
4-27 January 1984

SIO Reference 84-18
31 July 1984

UNIVERSITY OF CALIFORNIA

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Approved for distribution:

W. A. Nierenberg, Director

CONTENTS

INTRODUCTION

The data in this report were collected during Cruise 8401* of the California Cooperative Oceanic Fisheries Investigations (CalCOFI) program aboard the RV *David Starr Jordan* of the National Marine Fisheries Service and the RV *New Horizon* of the Scripps Institution of Oceanography. In addition to routine station sampling, six 24-hour stations were occupied to make several Nansen casts and net tows in order to assess within-station hydrographic, chemical and biological variability. Primary productivity casts were taken daily near local noontime.

The data were collected and processed by personnel of the Physical and Chemical Oceanographic Data Facility (PACODF), Marine Life Research Group (MLRG), the Southwest Fisheries Center, National Marine Fisheries Service (NMFS), and the Instituto Nacional de Pesca (INP). Many volunteers also assisted in the collection of data at sea.

STANDARD PROCEDURES

Hydrographic Cast Data

The hydrographic casts consisted of 20 or fewer Nansen bottles lowered to a maximum sampling depth of 600 meters, bottom depth permitting. Temperature, salinity, oxygen and nutrients were determined for all depths sampled. Chlorophyll-*a* and phaeopigments were usually determined from the top 12 depths.

Paired protected reversing thermometers were used to determine temperatures which are recorded to hundredths of a degree Celsius. Sampling bottles used below a depth of 100 meters were equipped with unprotected thermometers for determination of the depth of sampling.

Salinity samples were analyzed at sea using inductive-type salinometers. Salinometers were standardized with sub-standard seawater. The sub-standard water was prepared from filtered seawater collected in 30-liter Niskin bottles from a depth of 400 m, gently evaporated to increase the salinity to near 35‰. Periodic checks on the concentration of the substandard were made by comparison with Wormley Standard Seawater batch P-90. The salinity values are reported to three decimal places.

Dissolved oxygen was determined by the Winkler method as modified by Carpenter (1965), using the equipment and procedure outlined by Anderson (1971).

Silicate, phosphate, nitrate and nitrite nutrients were determined at sea using an automated analyzer. The procedures used are similar to those described in Atlas *et al.* (1971).

Chlorophyll was measured with a fluorometric technique (Yentsch and Menzel, 1963; Holm-Hansen *et al.*, 1965). Subsamples (65 or 140 ml) were drawn from the Nansen bottles and filtered onto GF/C filters. The filters were placed in scintillation vials containing 10 ml of 90% acetone and the pigments were extracted in the dark in a refrigerator for a period between one and four days. The samples were then brought to room temperature and the fluorescence of the sample was determined before and after acidification with a Turner 111 fluorometer. The potential biases in this technique are discussed in Venrick and Hayward (1984).

The observed data have been evaluated using the methodology described by Klein (1973). This involves consideration of their variation as functions of density or depth and their relations to each other, and comparisons with adjacent observations.

Primary Productivity Casts

Primary production was estimated from ^{14}C uptake using a simulated *in situ* technique. Light penetration was estimated from the Secchi depth (assuming that the 1% light level is three times the Secchi depth). Six depths, corresponding to predetermined levels of light penetration, were sampled with 5 l Niskin bottles. Triplicate subsamples were drawn from each depth into 125 ml polycarbonate

* The first two digits represent the year and the second two digits the month of the cruise.

incubation bottles which were innoculated with 10 μci of ^{14}C as $NaHCO_3$. Two light and one dark (control) bottle were then incubated approximately from local apparent noon to civil twilight in sea water cooled incubators with neutral density screens which simulate the *in situ* light levels. At the end of the incubation, the samples were filtered onto HA milipore filters and placed in scintillation vials. One-half ml of 10% HCl was added to each sample, which was then allowed to sit without a cap, at room temperature for 12 hours (after Lean and Burnison, 1979). Following this, 10 ml of scintillation fluor were added to each sample and the samples were returned to S.I.O. where the radioactivity was determined with a scintillation counter.

Macrozooplankton Net Tows

Macrozooplankton was sampled with a 71 cm mouth diameter paired net (bongo net) equipped with 0.505 mm plankton mesh. Bottom depth permitting, the nets were towed obliquely from 210 m to the surface. The tow time for a standard tow was 21.5 minutes. Volumes filtered were determined from flowmeter readings and the mouth area of the net. Only one sample of the pair was retained and preserved. The biomass, as wet displacement volume, after removal of large (>5 ml) organisms, was determined in the laboratory ashore. These procedures are summarized in greater detail in Kramer *et al.* (1972).

Conductivity/Temperature/Depth/Oxygen Recorder (CTDO) Data

CTDO data were collected on some lines occupied by the *David Starr Jordan*, as shown by the station position map (Fig. 1). The CTDO data are not included in this report.

TABULATED DATA

The tabulated data in this report have substantial changes in both content and appearance from data tabulations that have appeared in previous CalCOFI data reports. Some of the most notable changes are listed below:

1. Observed data and interpolated standard level data have been interspersed and are presented together in depth sequence.

2. Salinities have been calculated from the algorithms for the Practical Salinity Scale, 1978 (PSS78) as recommended by the Joint Panel on Oceanographic Tables and Standards (Lewis, 1980; UNESCO, 1981). Between 34 and 36 salinity, the differences between the new PSS78 and old UNESCO66 salinity scales are .001 or less. At practical salinity = 30, the new salinity is .005 higher than the old salinity scale. Parts per thousand or the symbol ‰ is not used for PSS78 salinities, so the new practical salinities are 1000 times larger than salinities based on previous scales.

3. Potential temperature has been added to the tabulation. The difference between *in situ* temperature and potential temperature is only .05° at 500 m, so potential temperature is not important for the shallow casts presented in this report. However, potential temperature is of interest for deeper casts that are typically taken on expeditions and occasionally on CalCOFI cruises, so it will be reported routinely. Potential temperature is calculated from the expressions given by Fofonoff (1977), based upon Bryden's (1973) results.

4. Density related parameters are calculated from the International Equation of State of Seawater 1980 (EOS80) algorithms published by Millero, Chen, Bradshaw and Schleicher (1980) and UNESCO (1981). Sigma-theta in this report is about .03 lower than the sigma-t that appeared in earlier reports. EOS80 is in terms of true density, while the older equations were in terms of specific gravity, treated as if they were density. That accounts for most of the difference between new and old equation of state densities. The newer experimental measurements on the density of seawater also show small differences that are variable over the temperature-salinity range of seawater. Sigma-theta is calculated from potential temperature instead of *in situ* temperature. The differences in sigmas would have been somewhat greater if *in situ* temperatures had been used to calculate sigma in the present data report.

Dynamic heights in this report are within one dynamic millimeter of the values calculated in previous CalCOFI reports. The different equations of state have little effect on the dynamic height calculation in the top 600 meters.

Specific volume anomaly (with pressure terms) is given in this data report. Previously, thermosteric anomaly (without pressure terms) was reported, although the dynamic heights were calculated from specific volume anomaly.

5. Pressure has been added to the data listing. Although depth remains as the primary key to the data for historical reasons and to facilitate comparisons with past cruises, pressure is required for the EOS80 density calculations.

6. Percent oxygen saturation has been added. The values are calculated from the equations of Weiss (1970) and UNESCO (1973). The solubility of oxygen varies primarily with temperature and secondarily with salinity. For convenience, an oxygen saturation is also given for levels where temperature or salinity is missing. Those values are based upon interpolated temperature or salinity and should be used with caution.

7. Chlorophyll-*a* and phaeopigments have been incorporated with the hydrographic and chemical data instead of being reported separately.

8. Heading information has been expanded to include more of the weather observations; most of the observations have been de-coded and are self-explanatory. Weather conditions are coded using WMO code 4501. Bottom depths, determined acoustically, have been corrected using Matthews (1939) tables.

9. CalCOFI line and station numbers are separated by a few blank spaces in order to leave room for finer resolution of line and station numbers when appropriate. Most CalCOFI cruises occupy stations on cardinal lines and on ordinal lines with 1/3 and 2/3 spacing between cardinal lines. For example, the desired lines between lines 90 and 100 are lines 93-1/3 and 96-2/3. As in previous reports, ordinal line numbers have been rounded to the nearest whole number (lines 93 and 97, respectively, in the previous example). Additional lines and more closely spaced stations are occupied on some cruises, then it is useful to list some line and station numbers to the nearest 0.1. Eber and Hewitt (1979) give conversion algorithms for conversion of latitude and longitude to CalCOFI station number. A few inshore stations have been listed to one decimal place in this report. It is not practical or desirable to list *all* stations to one decimal place because stations that occurred more than ± 0.2 n.m. along the station direction or ± 0.6 n.m. along the line direction from the desired position would require a different CalCOFI station number. For example, some of the repeat casts taken on the 24-hour stations would have different station numbers if listed to 0.1, although all casts were done within a very small area.

Primary Productivity Casts

The tabulated data include: sample depths, the light levels at which the samples were incubated, the uptake from each of the replicate light bottles (uptake 1 and uptake 2) which have been corrected for dark uptake by subtracting the dark value, the mean of the two uptake values, the dark uptake, nutrients (when measured), chlorophyll and phaeophytin. The uptake values shown are the total for the incubation period. The times of local apparent noon (LAN), civil twilight, and the vertically integrated value of the mean uptake from the surface to the deepest sample depth (assuming that the shallowest measured value extends to the surface and that negative values are zero) are also shown for each experiment. The uptake data have been presented to two significant digits (values < 1.00) or one decimal (values > 1.00). The higher production values may not warrant all of the significant digits presented. Incubation time, LAN, and civil twilight are given in local Pacific Standard Time (PST); to convert to GMT, add eight hours to the PST time.

FOOTNOTES

In addition to footnotes, special notations are used without footnotes because the meaning is always the same.

ISL: After depth values indicates interpolated or extrapolated standard level.

P: After depth values indicates the Nansen bottle posttripped.

U: Uncertain value. Values which are not used in interpolation because they seem to be in error without apparent reason.

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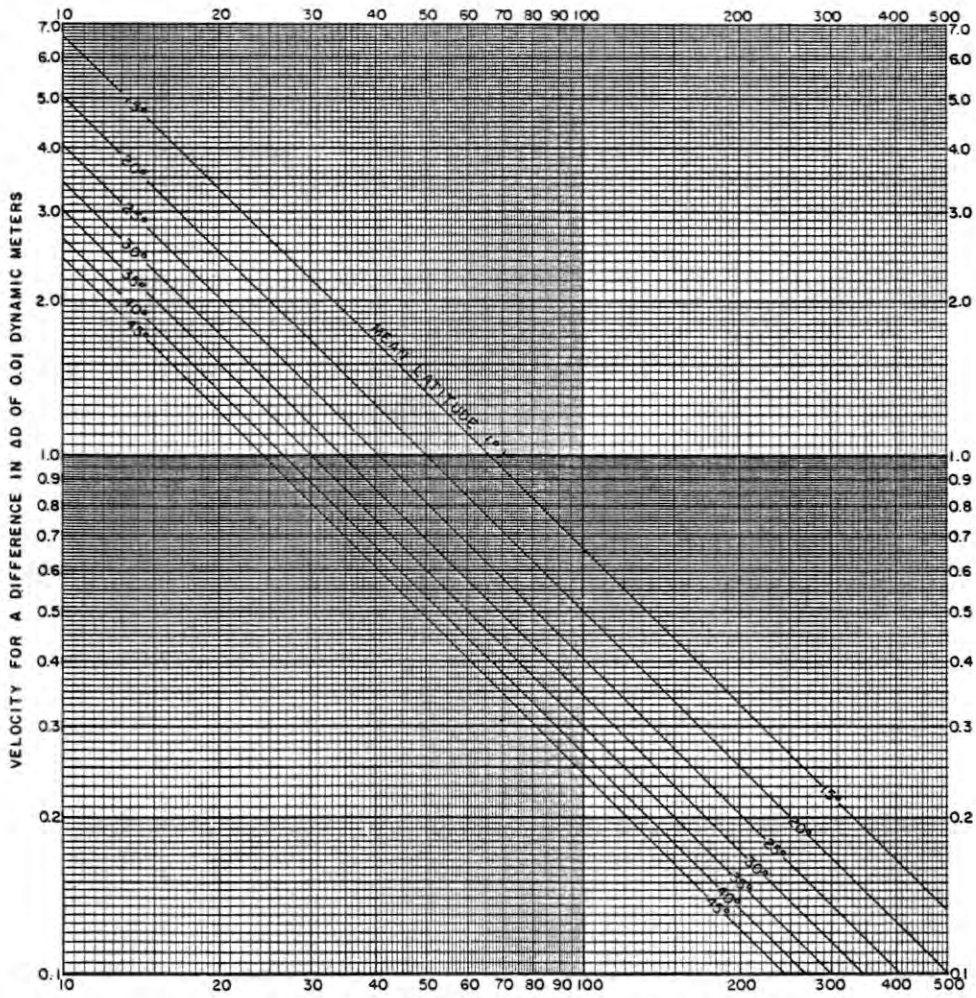

VELOCITY OF GEOSTROPHIC FLOW
(NAUTICAL MILES PER DAY)

cm/sec	0	1	2	3	4	5	6	7	8	9
0	KNOTS / NM/DAY	0.02 / 0.47	0.04 / 0.93	0.06 / 1.40	0.08 / 1.86	0.10 / 2.33	0.12 / 2.80	0.14 / 3.26	0.16 / 3.73	0.17 / 4.20
10	0.19 / 4.66	0.21 / 5.13	0.23 / 5.59	0.25 / 6.06	0.27 / 6.53	0.29 / 6.99	0.31 / 7.46	0.33 / 7.93	0.35 / 8.39	0.37 / 8.86
20	0.39 / 9.32	0.41 / 9.79	0.43 / 10.26	0.45 / 10.72	0.47 / 11.19	0.49 / 11.66	0.51 / 12.12	0.52 / 12.59	0.54 / 13.05	0.56 / 13.52
30	0.58 / 13.99	0.60 / 14.45	0.62 / 14.92	0.64 / 15.38	0.66 / 15.85	0.68 / 16.32	0.70 / 16.78	0.72 / 17.25	0.74 / 17.72	0.76 / 18.18
40	0.78 / 18.65	0.80 / 19.11	0.82 / 19.58	0.84 / 20.05	0.85 / 20.51	0.87 / 20.98	0.89 / 21.45	0.91 / 21.91	0.93 / 22.38	0.95 / 22.84
50	0.97 / 2331	0.99 / 23.78	1.01 / 24.24	1.03 / 24.71	1.05 / 25.17	1.07 / 25.64	1.09 / 26.11	1.11 / 26.57	1.13 / 27.04	1.15 / 27.51
60	1.17 / 27.98	1.18 / 28.44	1.20 / 28.90	1.22 / 29.37	1.24 / 29.84	1.26 / 30.30	1.28 / 30.77	1.30 / 31.24	1.32 / 31.70	1.34 / 32.17
70	1.36 / 32.63	1.38 / 33.10	1.40 / 33.57	1.42 / 34.03	1.44 / 34.50	1.46 / 34.96	1.48 / 35.43	1.50 / 35.90	1.52 / 36.36	1.53 / 36.83
80	1.55 / 37.30	1.57 / 37.76	1.59 / 38.23	1.61 / 38.69	1.63 / 39.16	1.65 / 39.63	1.67 / 40.09	1.69 / 40.56	1.71 / 41.03	1.73 / 41.49
90	1.75 / 41.96	1.77 / 42.42	1.79 / 42.89	1.81 / 43.36	1.83 / 43.82	1.85 / 44.29	1.86 / 44.76	1.88 / 45.22	1.90 / 45.69	1.92 / 46.15
100	1.94 / 46.62	1.96 / 47.09	1.98 / 47.55	2.00 / 48.02	2.02 / 48.48	2.04 / 48.95	2.06 / 49.42	2.08 / 49.88	2.10 / 50.35	2.12 / 50.82

CONVERSION TABLE
(CENTIMETERS / SECOND – KNOTS – NAUTICAL MILES / DAY)

1 cm/sec = 0.019 kts = 0.466 NAUTICAL MILES / DAY
1 kt = 24 NAUTICAL MILES / DAY = 51.48 cm/sec
1 NAUTICAL MILE / DAY = 0.042 kts = 2.14 cm/sec

FIGURES

Cruise 8401

1. CalCOFI Cruise 8401, station positions.
2. Horizontal distribution of dynamic height anomaly (0 over 500 d-bar).
3. Horizontal distribution of dynamic height anomaly (200 over 500 d-bar).
4. Horizontal distribution of temperature at 10 meters
5. Horizontal distribution of salinity at 10 meters.
6. Horizontal distribution of thermosteric anomaly at 10 meters.
7. Horizontal distribution of chlorophyll-*a* at 10 meters.
8. Horizontal distribution of temperature at 200 meters.
9. Horizontal distribution of salinity at 200 meters.
10. Horizontal distribution of thermosteric anomaly at 200 meters.

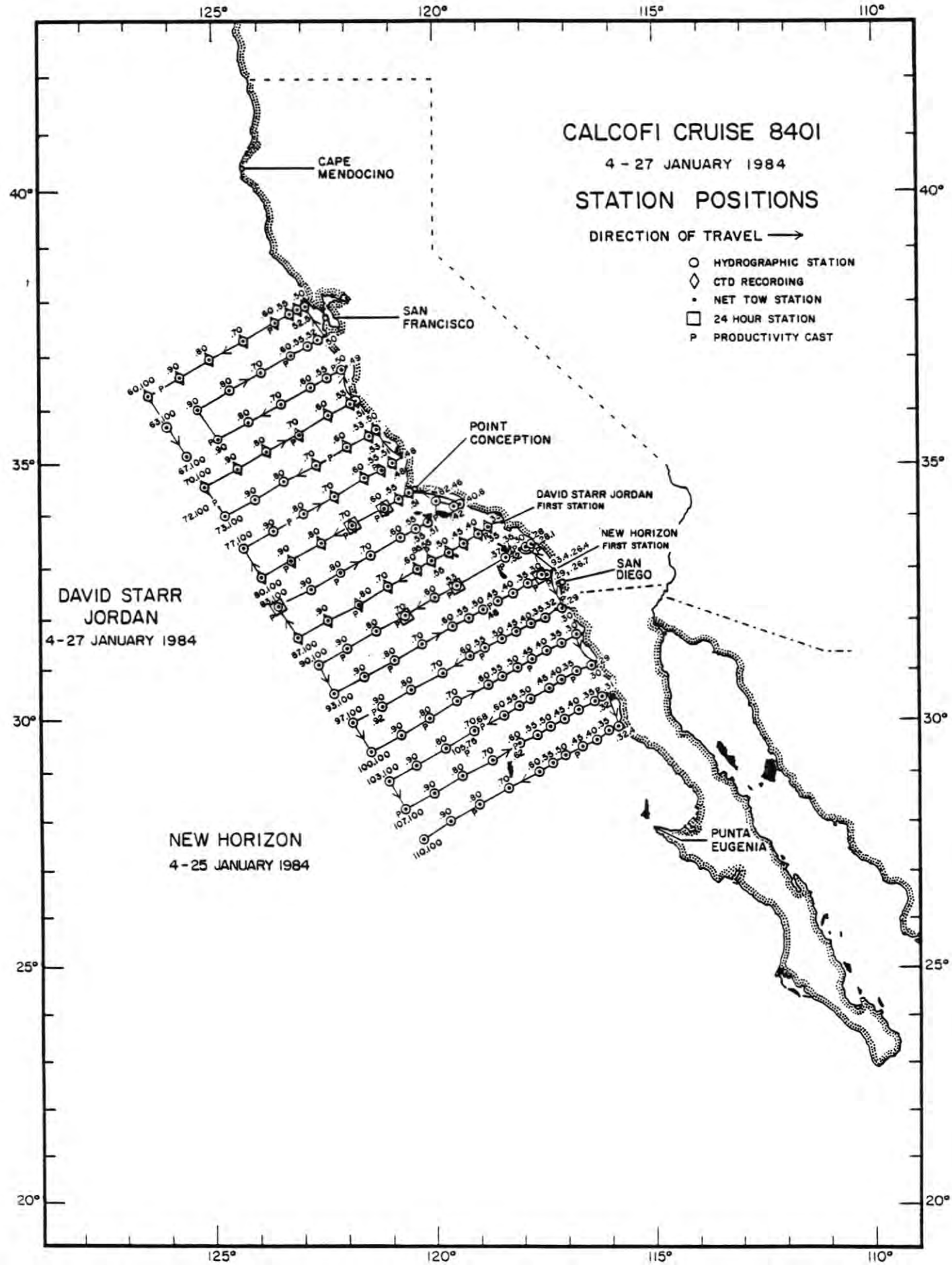
CALCOFI CRUISE 8401
4 - 27 JANUARY 1984
STATION POSITIONS
DIRECTION OF TRAVEL
HYDROGRAPHIC STATION
CTD RECORDING
NET TOW STATION
24 HOUR STATION
P PRODUCTIVITY CAST
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
DAVID STARR JORDAN FIRST STATION
NEW HORIZON FIRST STATION
SAN DIEGO
PUNTA EUGENIA
DAVID STARR JORDAN
4-27 JANUARY 1984
NEW HORIZON
4-25 JANUARY 1984
125°
120°
115°
110°
40°
35°
30°
25°
20°

FIGURE 1

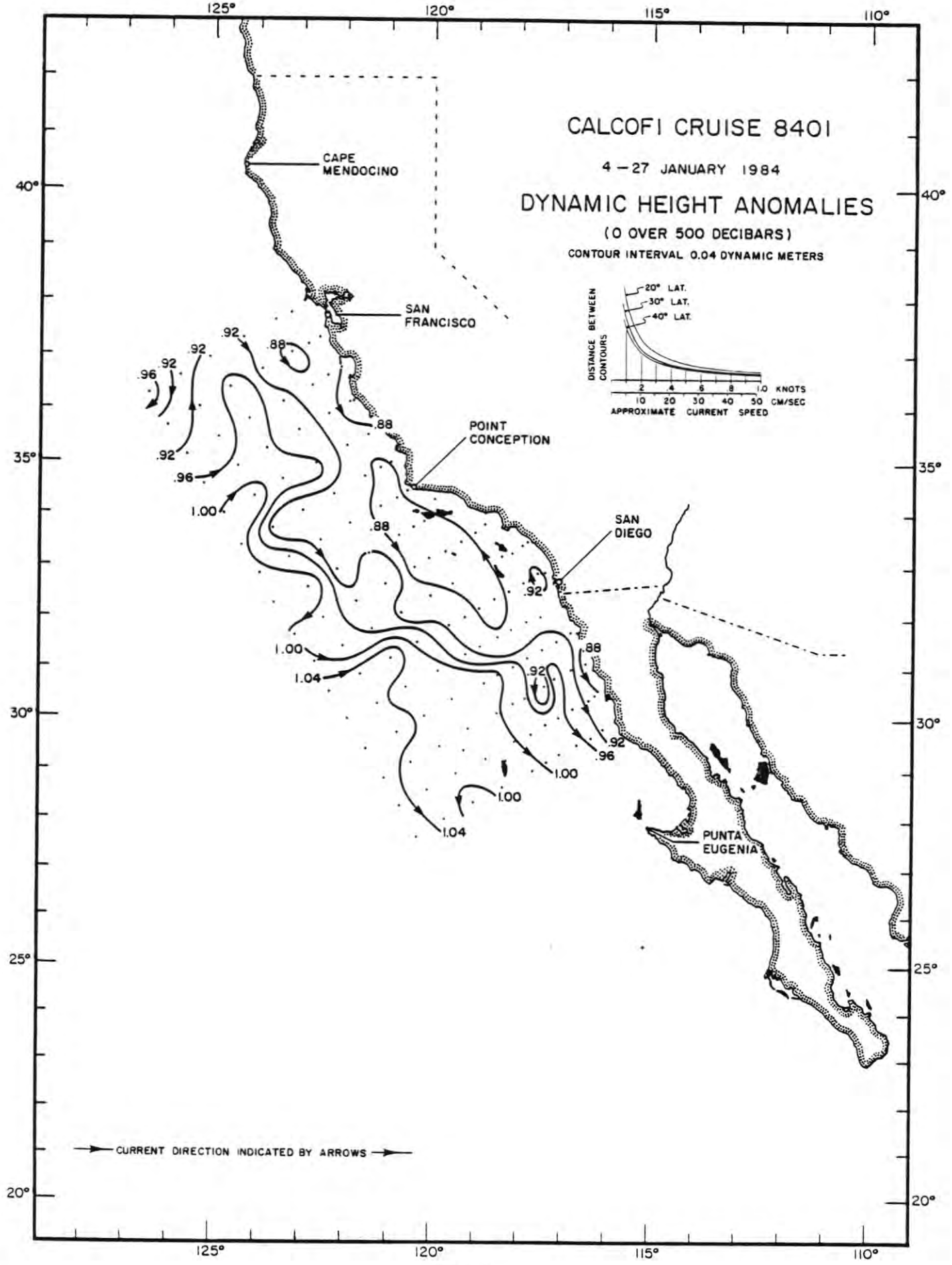
CALCOFI CRUISE 8401
4 – 27 JANUARY 1984
DYNAMIC HEIGHT ANOMALIES
(0 OVER 500 DECIBARS)
CONTOUR INTERVAL 0.04 DYNAMIC METERS
20° LAT.
30° LAT.
40° LAT.
DISTANCE BETWEEN CONTOURS
2 4 6 8 1.0 KNOTS
10 20 30 40 50 CM/SEC
APPROXIMATE CURRENT SPEED
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
125°
120°
115°
110°
40°
35°
30°
25°
20°
.92
.88
.96
1.00
1.04
CURRENT DIRECTION INDICATED BY ARROWS

FIGURE 2

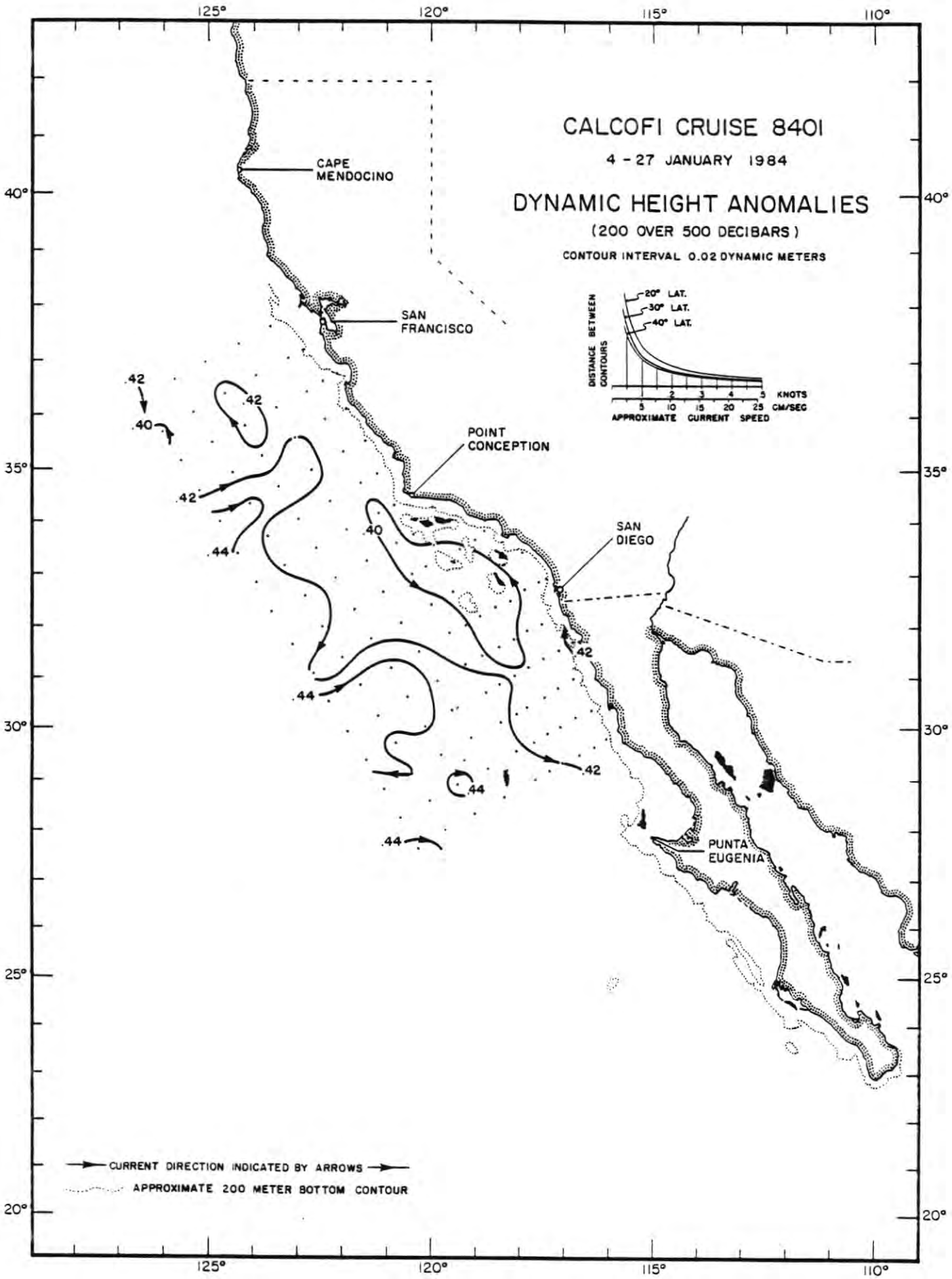
CALCOFI CRUISE 8401
4 - 27 JANUARY 1984
DYNAMIC HEIGHT ANOMALIES
(200 OVER 500 DECIBARS)
CONTOUR INTERVAL 0.02 DYNAMIC METERS
20° LAT.
30° LAT.
40° LAT.
DISTANCE BETWEEN CONTOURS
KNOTS
CM/SEC
APPROXIMATE CURRENT SPEED
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
125°
120°
115°
110°
40°
35°
30°
25°
20°
CURRENT DIRECTION INDICATED BY ARROWS
APPROXIMATE 200 METER BOTTOM CONTOUR

FIGURE 3

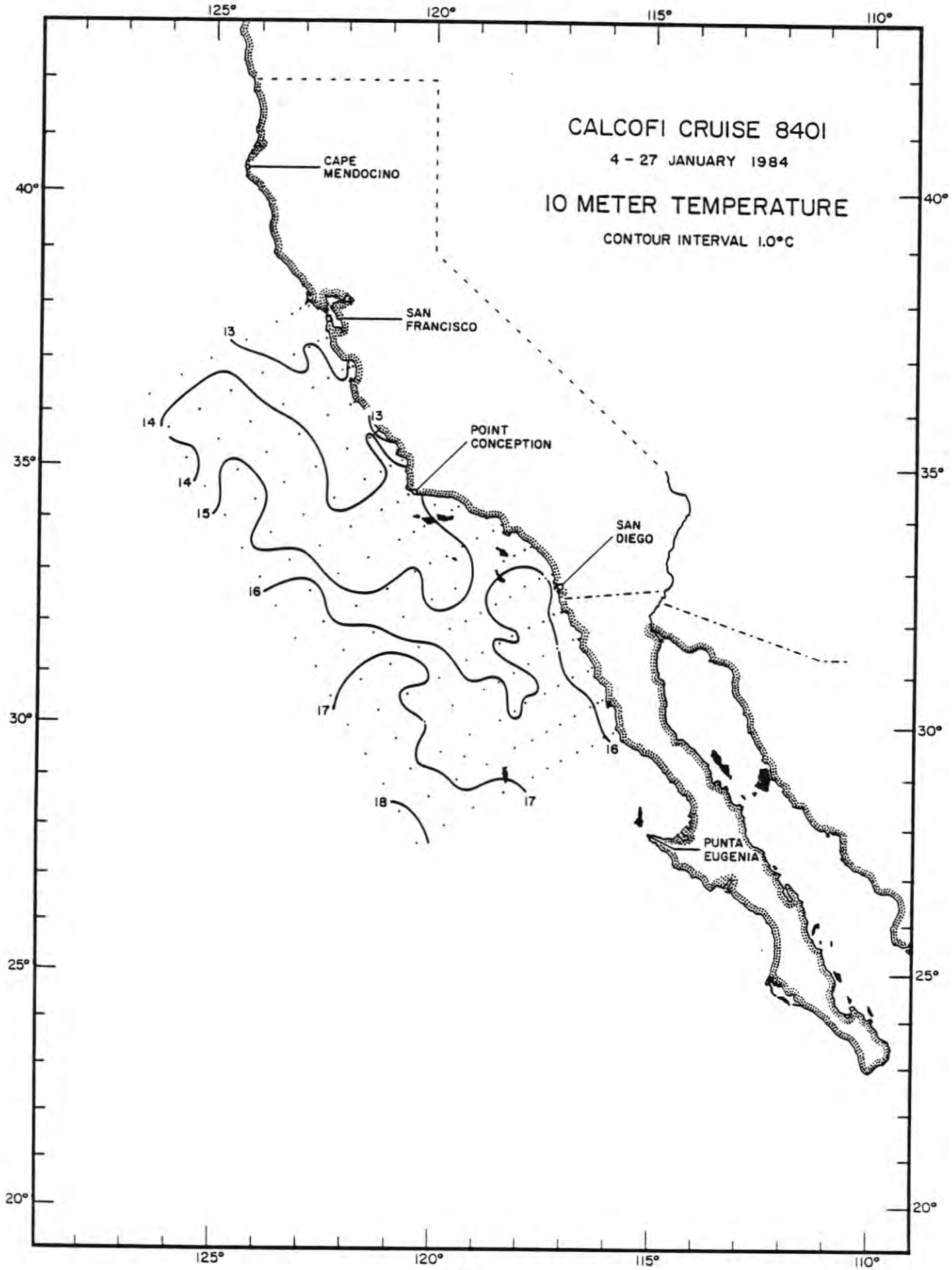
CALCOFI CRUISE 8401
4 - 27 JANUARY 1984
10 METER TEMPERATURE
CONTOUR INTERVAL 1.0°C
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
125°
120°
115°
110°
40°
35°
30°
25°
20°
13
14
15
16
17
18

FIGURE 4

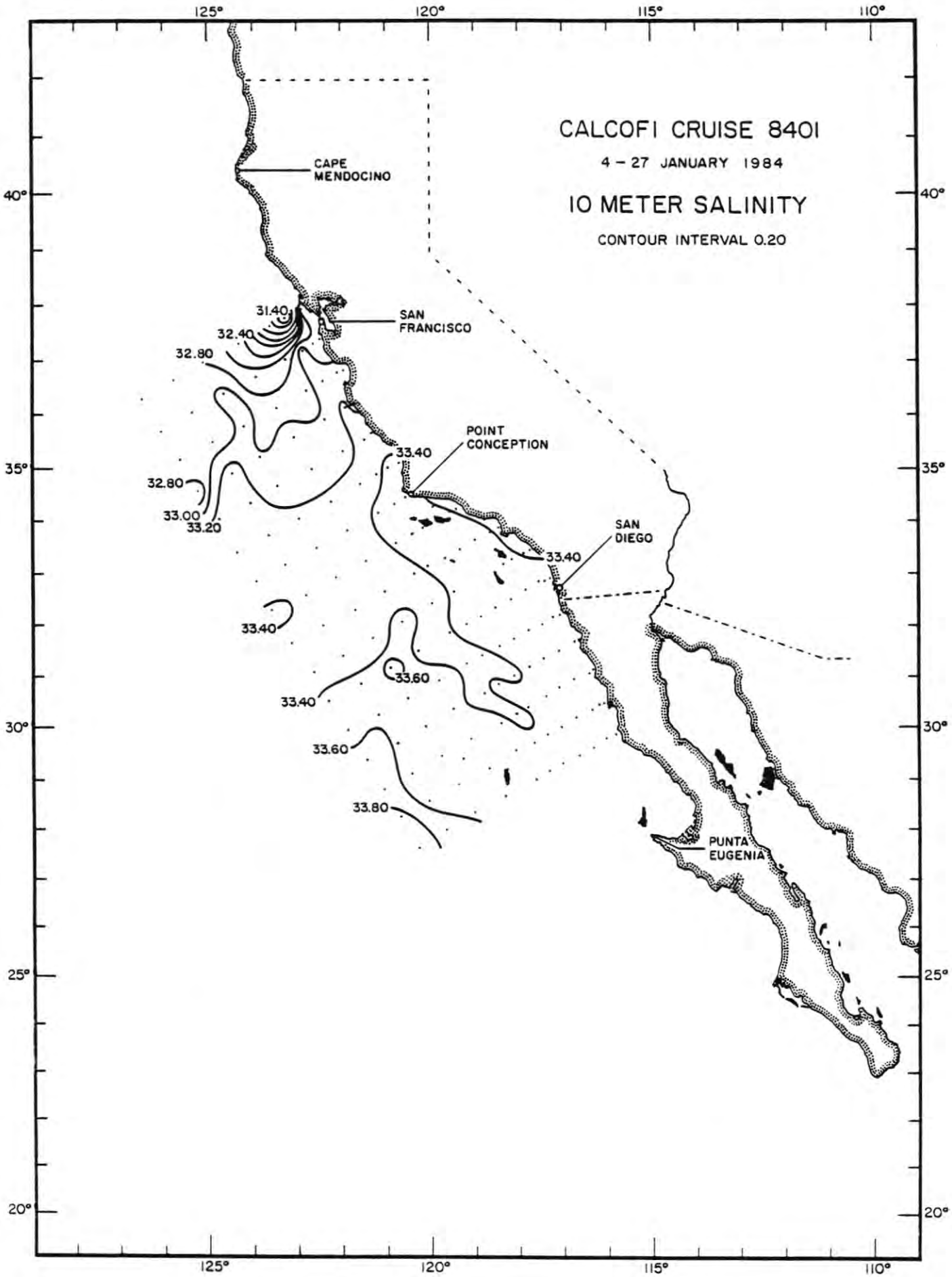
CALCOFI CRUISE 8401
4 – 27 JANUARY 1984
10 METER SALINITY
CONTOUR INTERVAL 0.20
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
31.40
32.40
32.80
33.40
32.80
33.00
33.20
33.40
33.40
33.60
33.60
33.80
125°
120°
115°
110°
40°
35°
30°
25°
20°

FIGURE 5

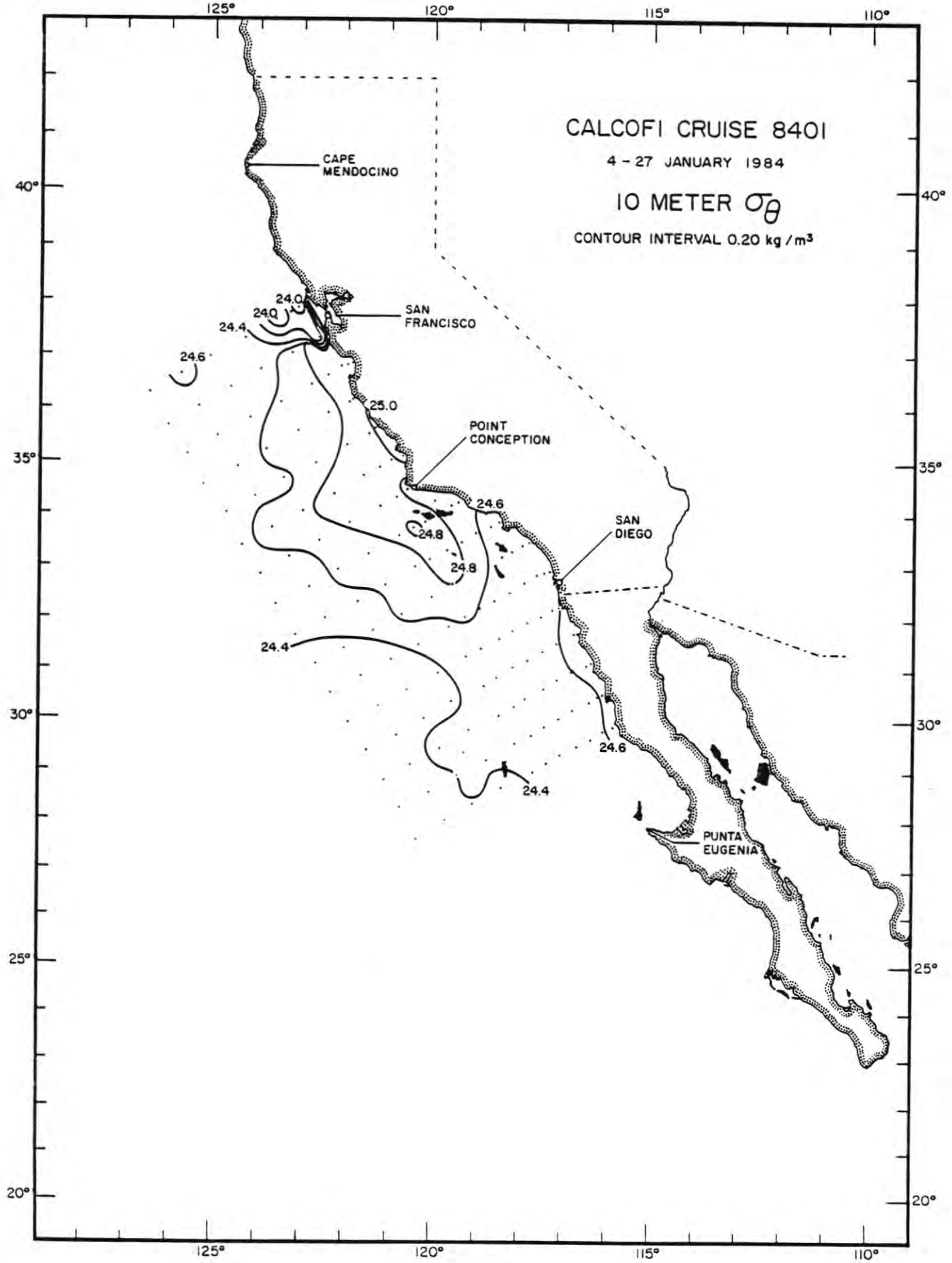
CALCOFI CRUISE 8401
4 - 27 JANUARY 1984
10 METER σ_θ
CONTOUR INTERVAL 0.20 kg / m³
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
24.0
24.0
24.4
24.6
25.0
24.6
24.8
24.8
24.4
24.6
24.4
125°
120°
115°
110°
40°
35°
30°
25°
20°

FIGURE 6

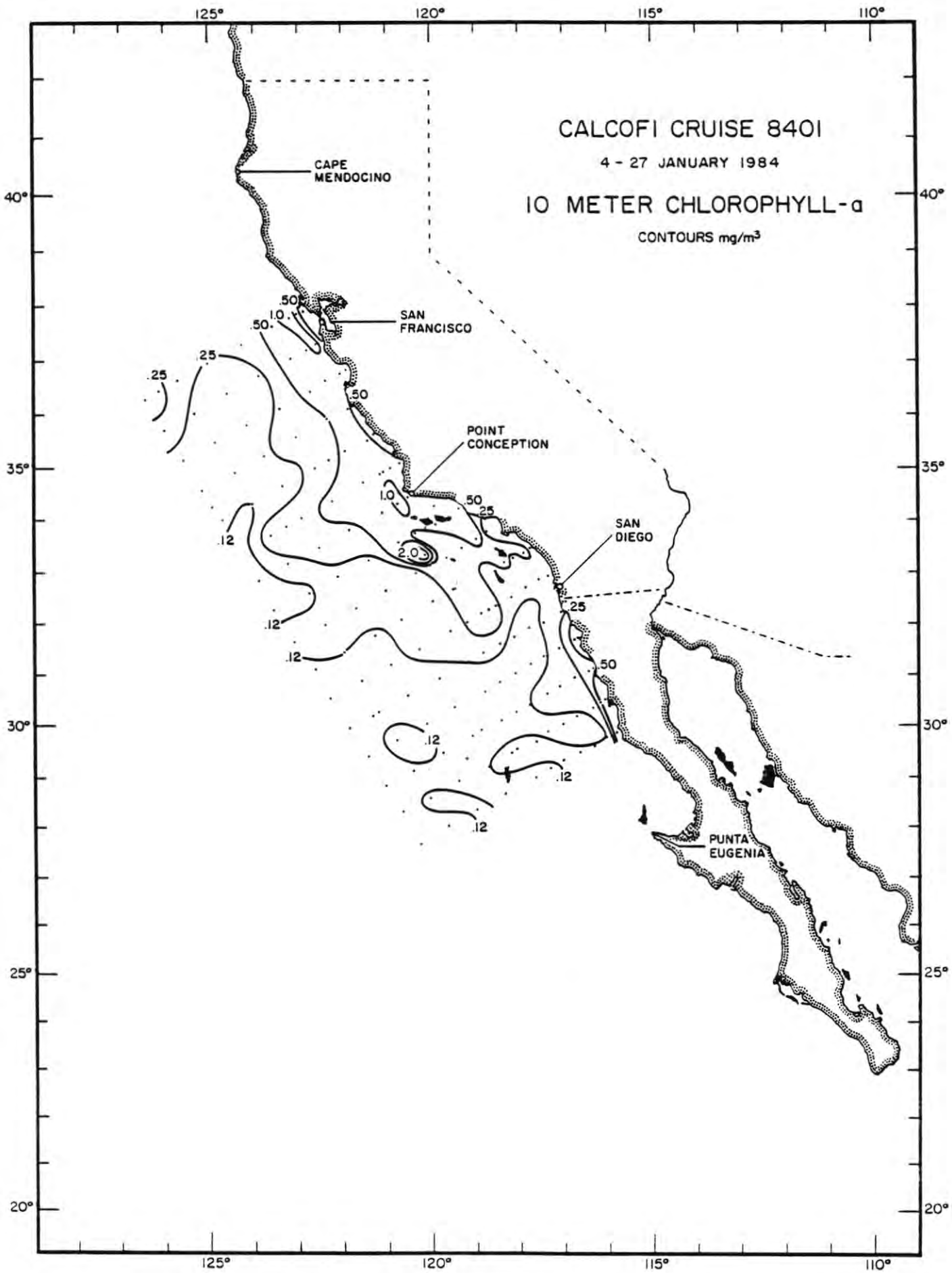
CALCOFI CRUISE 8401
4 - 27 JANUARY 1984
10 METER CHLOROPHYLL-a
CONTOURS mg/m³
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
125°
120°
115°
110°
40°
35°
30°
25°
20°
.50
1.0
.25
2.0
.12

FIGURE 7

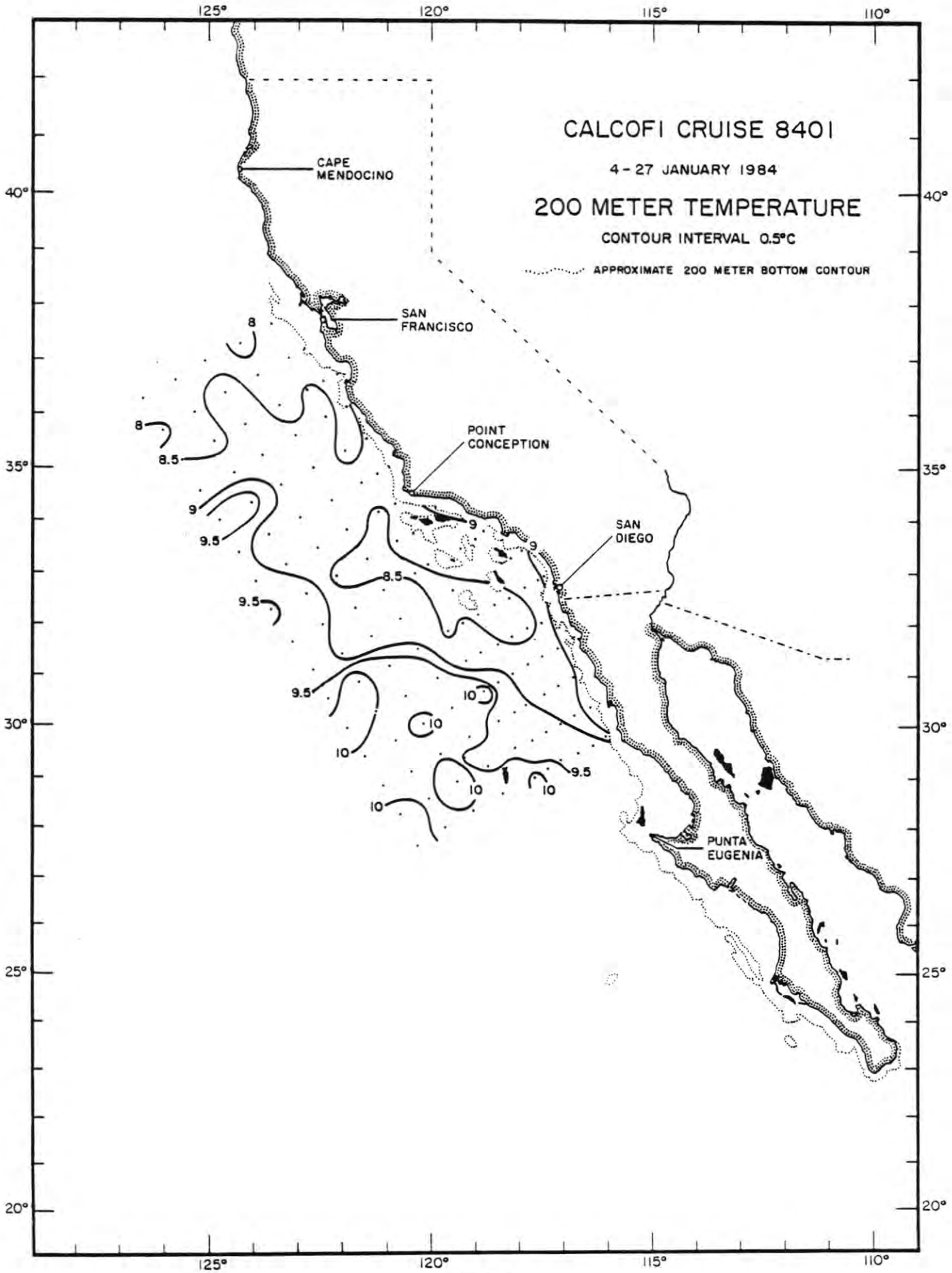
CALCOFI CRUISE 8401
4 - 27 JANUARY 1984
200 METER TEMPERATURE
CONTOUR INTERVAL 0.5°C
APPROXIMATE 200 METER BOTTOM CONTOUR
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
125°
120°
115°
110°
40°
35°
30°
25°
20°
8
8.5
9
9.5
10

FIGURE 8

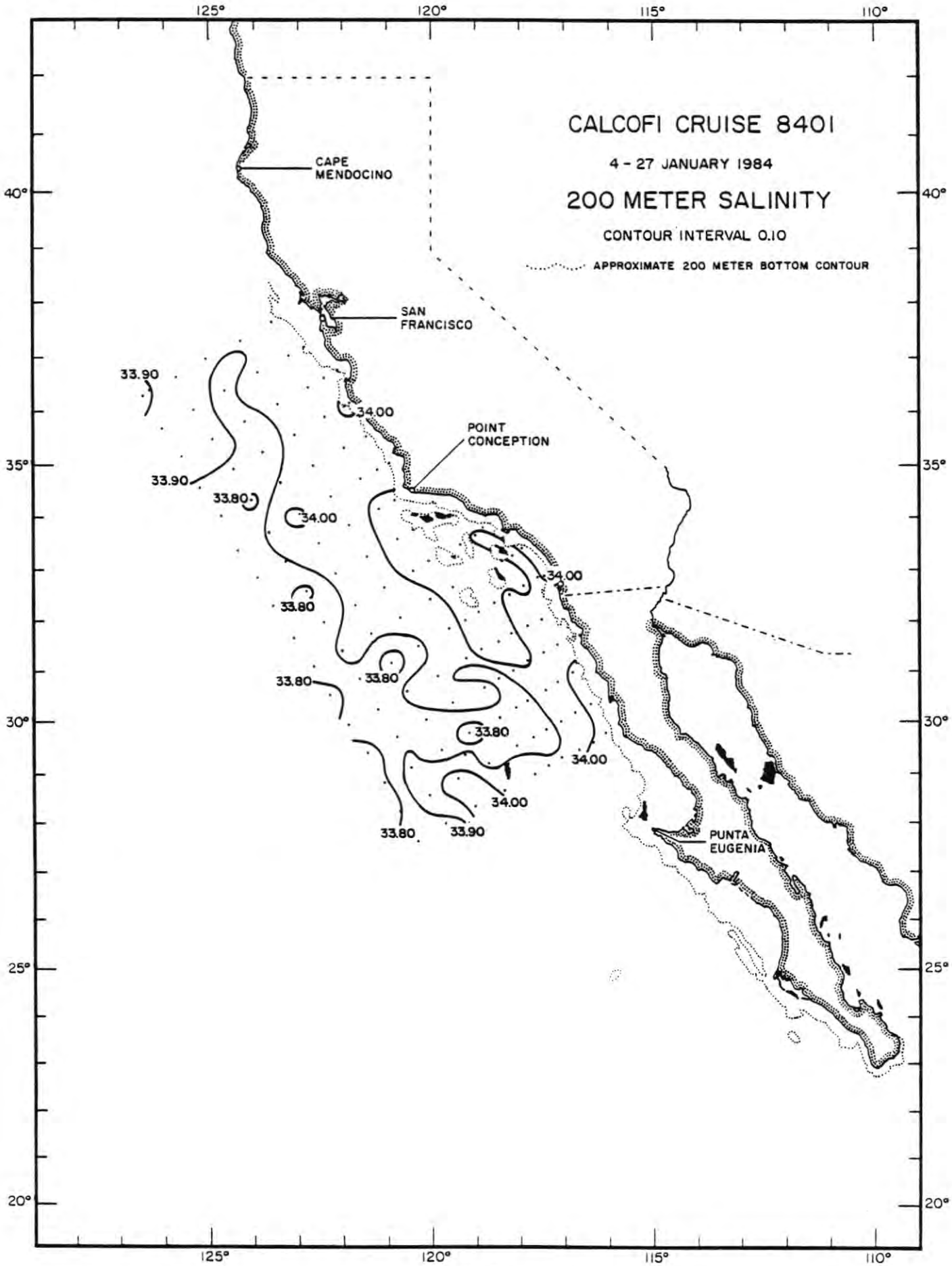
CALCOFI CRUISE 8401
4 - 27 JANUARY 1984
200 METER SALINITY
CONTOUR INTERVAL 0.10
APPROXIMATE 200 METER BOTTOM CONTOUR
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
PUNTA EUGENIA
33.90
34.00
33.80
125°
120°
115°
110°
40°
35°
30°
25°
20°

FIGURE 9

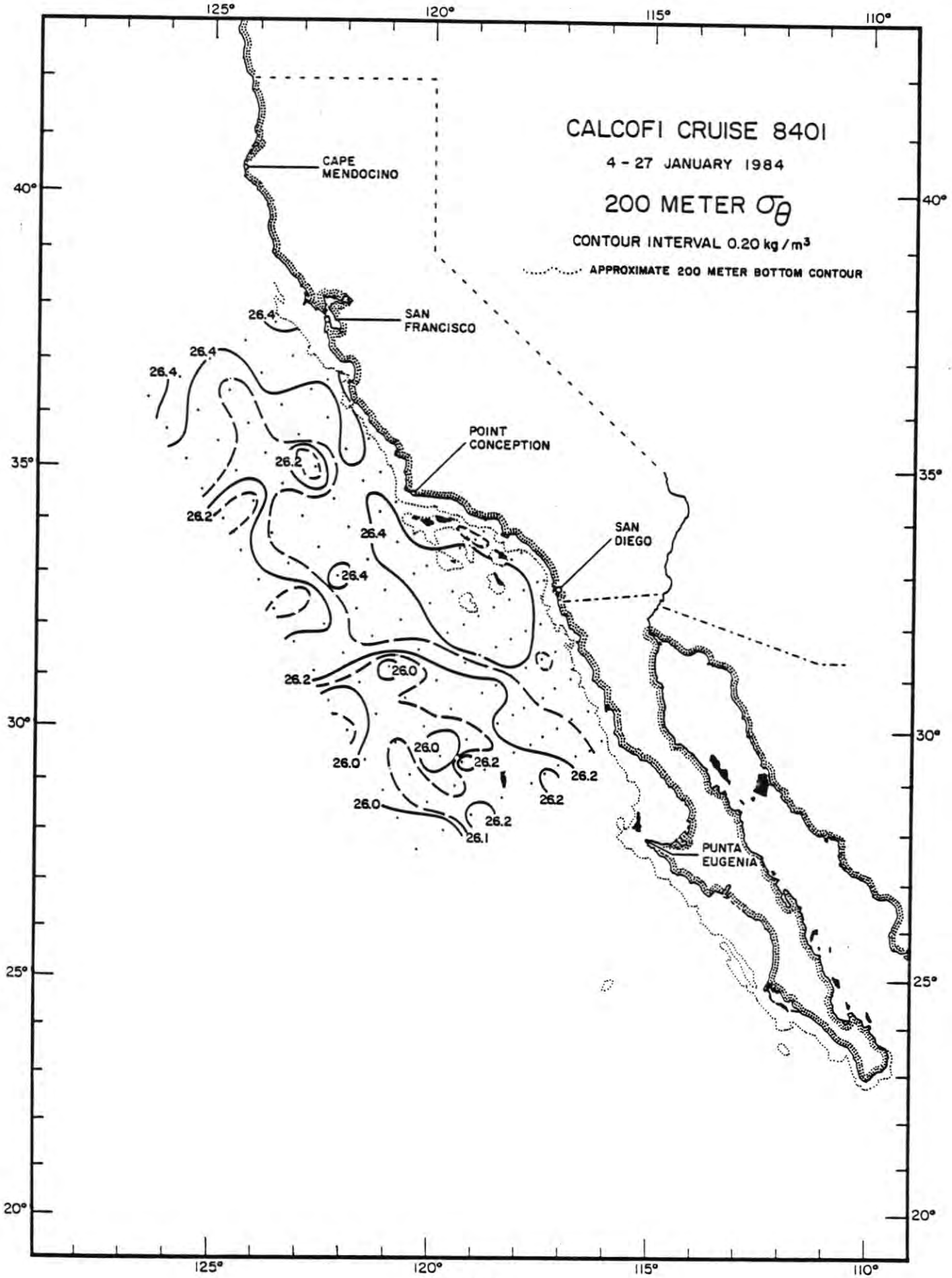
CALCOFI CRUISE 8401
4 - 27 JANUARY 1984
200 METER σ_θ
CONTOUR INTERVAL 0.20 kg / m³
APPROXIMATE 200 METER BOTTOM CONTOUR
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
125°
120°
115°
110°
40°
35°
30°
25°
20°
26.4
26.2
26.0
26.1

FIGURE 10

PERSONNEL

Cruise 8401

SHIPS' CAPTAINS

Roll, Milton, RV *David Starr Jordan*
Desjardins, Thomas J., RV *New Horizon*

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

RV *David Starr Jordan*

Flerx, William C. (in charge)	Fishery Biologist, NMFS
Ambrose, David A.	Fishery Biologist, NMFS
Anderson, George C.	Staff Research Associate, SIO
Bliss, Kenneth A.	Oceanographer, NMFS
Cisneros, Miguel A.	Student, CICESE
Cozzi, Carole A.	Student, SDSU
Hester, Arthur W.	Staff Research Associate, SIO
Kemper, Cecelia A.	Staff Research Associate, SIO
Miller, Mark D.	Volunteer
Ravitch, Adam B.	Student, SDSU
Ripa, Ernesto	Student, CICESE
Schiff, Kenneth C.	Student, SDSU
Torres, Juan A.	Student, ESCM/UABC

RV *New Horizon*

Hayward, Thomas L. (in charge)	Asst. Research Oceanographer, SIO
Abramenkoff, Dimitry N.	Biological Technician, NMFS
Bryan, Walter R.	Marine Technician, SIO
Bustos-Serrano, Hector	Student, CICESE
Camacho, Victor	Student, ESCM/UABC
Cota-V., Alfredo	Fishery Biologist, INP
Cummings, Sherry L.	Staff Research Associate, SIO
Garcia-Tirado, Victor M.	Oceanographer, INP
Masten, Douglas M.	Marine Technician, SIO
Mead, Richard V.	Marine Technician, SIO
Metoyer, Jack D.	Biological Technician, NMFS
Patrick, Ronald G.	Staff Research Associate, SIO
Pedrin-Osuna, Oscar A.	Fishery Biologist, INP

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 60 50

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 56.8 N	122 52.9 W	01/23/84	1001 GMT	44 M	240	11 KT		1	1026.1 MB	11.1 C	10.1 C	1/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	11.92	11.92	29.934	22.673	516.8	.000	6.88	109.9							0
1	1	11.92	11.92	29.934	22.673	516.8	.005	6.88	109.9	18.7	.39	.5	.01	4.31	.37	1
1	10	12.69	12.69	32.921	24.844	309.9	.042	5.22	86.4	11.6	.73	5.7	.14	.28	.35	10
	20 ISL	12.55	12.55	33.097	25.007	294.6	.073	4.98	82.3							20
1	21	12.54	12.54	33.113	25.022	293.2	.075	4.96	81.9	13.1	.87	7.5	.04	.14	.25	21
	30 ISL	12.00	12.00	33.268	25.245	272.2	.101	4.61	75.3							30
1	31	11.93	11.93	33.283	25.270	269.9	.103	4.57	74.6	15.3	1.03	10.3	.00	.07	.22	31

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 60 52.5

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 51.8 N	123 03.8 W	01/23/84	1206 GMT	88 M	340	20 KT		1	1026.1 MB	11.8 C	10.0 C	1/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	12.22	12.22	31.243	23.633	425.1	.000	6.46	104.8							0
1	3	12.22	12.22	31.243	23.633	425.1	.013	6.46	104.8	13.3	.47	.5	.06	2.62	.46	3
	10 ISL	12.47	12.47	31.664	23.913	398.6	.042	6.32	103.3							10
1	12	12.55	12.55	31.808	24.009	389.5	.049	6.26	102.6	12.4	.48	1.0	.16	.99	.45	12
	20 ISL	12.98	12.98	32.579	24.523	340.7	.079	5.85	97.2							20
1	23	13.12	13.12	32.824	24.685	325.4	.088	5.72	95.5	7.0	.57	2.6	.22	.27	.23	23
	30 ISL	13.26	13.25	32.955	24.760	318.5	.111	5.71	95.6							30
1	33	13.31	13.31	32.981	24.769	317.7	.120	5.70	95.6	6.1	.56	2.7	.14	.19	.19	33
1	42	12.70	12.69	33.167	25.034	292.6	.148	5.22	86.5	9.3	.76	6.3	.01	.09	.20	42
	50 ISL	12.30	12.29	33.232	25.162	280.7	.171	4.94	81.3							50
1	53	12.19	12.18	33.243	25.191	278.0	.179	4.87	79.9	12.1	.94	8.8	.00	.08	.20	53
1	64	11.85	11.84	33.311	25.307	267.1	.209	4.58	74.6	14.2	1.06	10.8	.00	.08	.18	64
1	74	11.27	11.26	33.411	25.492	249.8	.234	4.31	69.4	15.6	1.21	13.2	.01	.05	.15	74
	75 ISL	11.20	11.19	33.425	25.515	247.5	.238	4.26	68.5							76
1	84	10.79	10.78	33.521	25.664	233.6	.258	3.90	62.2	20.5	1.40	16.0	.06	.03	.22	84

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 60 55

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 46.8 N	123 14.7 W	01/23/84	1516 GMT	97 M	340	22 KT	340 08 08	0	1027.4 MB	10.2 C	9.9 C	0/8	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	12.24	12.24	31.029	23.463	441.3	.000	6.42	104.0							0
1	1	12.24	12.24	31.029	23.463	441.3	.004	6.42	104.0	16.0	.43	.9	.10	1.69	.45	1
1	9	12.31	12.31	31.095	23.501	437.9	.039	6.46	104.9					1.57	.57	9
	10 ISL	12.43	12.42	31.296	23.636	425.1	.044	6.42	104.7							10
1	18	13.28	13.28	32.852	24.675	326.2	.074	6.11	102.3	4.5	.41	.1	.06	.68	.35	18
	20 ISL	13.30	13.30	32.867	24.683	325.5	.080	6.06	101.6							20
1	26	13.35	13.35	32.911	24.707	323.4	.100	5.98	100.3	3.6	.41	.4	.11	.33	.35	26
	30 ISL	13.34	13.33	32.919	24.716	322.7	.113	5.98	100.4							30
1	35	13.31	13.31	32.922	24.724	322.0	.128	5.99	100.4	3.5	.40	.4	.11	.33	.19	35
1	44	13.30	13.30	32.947	24.744	320.3	.157	5.90	98.9	3.6	.43	.9	.13	.25	.16	44
	50 ISL	13.24	13.23	32.969	24.775	317.6	.177	5.82	97.5							50
1	53	13.21	13.20	32.979	24.788	316.3	.186	5.79	96.9	4.1	.47	1.7	.15	.18	.17	53
1	62	12.48	12.47	33.110	25.033	293.3	.213	5.26	86.8	7.0	.70	5.9	.02	.08	.16	62
1	72	11.29	11.28	33.249	25.363	261.9	.241	4.84	77.9	10.7	.97	10.5	.00	.07	.11	72

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 60 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 36.8 N	123 36.5 W	01/23/84	1915 GMT	3163 M	350	21 KT	320 08 08	1	1030.1 MB	13.0 C	11.1 C	1/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	12.35	12.35	31.540	23.838	405.6	.000	6.38	103.9							0
1	3	12.35	12.35	31.540	23.838	405.6	.012	6.38	103.9	14.2	.36	.5	.03	.76	.32	3
	10 ISL	12.43	12.43	31.706	23.953	394.8	.040	6.43	105.1							10
1	13	12.46	12.46	31.772	23.997	390.6	.052	6.44	105.3	12.4	.40	.4	.01	.70	.26	13
	20 ISL	12.52	12.52	31.882	24.072	383.7	.079	6.38	104.6							20
1	28	12.66	12.66	32.063	24.186	373.0	.109	6.32	104.0	10.7	.40	.3	.02	.59	.41	28
	30 ISL	12.79	12.79	32.181	24.252	366.8	.117	6.28	103.7							30
1	44	13.43	13.42	32.933	24.708	323.7	.164	5.93	99.7	4.3	.41	.3	.20	.30	.24	44
	50 ISL	13.20	13.20	33.049	24.844	311.0	.184	5.68	95.1							50
1	59	12.64	12.63	33.114	25.004	295.9	.211	5.32	88.1	7.4	.65	5.3	.01	.08	.13	59
1	74	11.67	11.66	33.239	25.285	269.5	.253	4.90	79.5	10.3	.90	9.4	.00	.09	.12	74
	75 ISL	11.55	11.54	33.250	25.316	266.6	.256	4.86	78.7							76
1	84	10.83	10.82	33.328	25.505	248.6	.279	4.62	73.7	13.0	1.09	12.6	.00	.05	.09	84
1	99	10.43	10.42	33.488	25.700	230.4	.314	4.06	64.2	18.0	1.34	16.6	.00	.02	.09	99
	100 ISL	10.38	10.37	33.500	25.719	228.7	.318	4.02	63.5							101
1	118	9.74	9.73	33.636	25.933	208.6	.358	3.56	55.5	23.1	1.64	20.9	.00	.01	.07	119
	125 ISL	9.57	9.56	33.689	26.002	202.1	.371	3.40	52.9							126
1	139	9.30	9.28	33.787	26.123	190.9	.399	3.13	48.4	28.1	1.86	24.0	.00	.01	.07	140
	150 ISL	9.19	9.17	33.820	26.168	186.8	.420	3.04	46.8							151
1	159	9.10	9.08	33.841	26.198	184.1	.437	2.98	45.9	29.7	1.92	25.0	.00	.00	.06	160
1	179	8.76	8.74	33.920	26.313	173.4	.472	2.79	42.6	33.0	2.04	26.6	.00	.00	.06	180
1	198			33.958			.505	2.73	41.5	35.3	2.10	27.4	.00			200
	200 ISL	8.49	8.47	33.961	26.388	166.7	.508	2.72	41.3							202
1	219	8.25	8.23	34.005	26.459	160.2	.538	2.57	38.8	39.6	2.18	28.2	.00			220
	250 ISL	7.70	7.68	34.048	26.573	149.6	.587	2.27	34.0							252
1	253	7.64	7.62	34.052	26.585	148.6	.592	2.24	33.4	45.8	2.34	30.6	.00			255
	300 ISL	7.12	7.09	34.077	26.680	140.1	.659	1.82	26.9							303
1	304	7.08	7.05	34.078	26.686	139.5	.665	1.79	26.3	54.6	2.57	33.6	.00			306
1	359	6.39	6.35	34.077	26.778	131.1	.739	1.43	20.7	64.0	2.78	36.2	.00			361
	400 ISL	6.01	5.97	34.098	26.844	125.2	.792	1.12	16.1							404
1	443	5.71	5.67	34.129	26.906	119.6	.844	.83	11.8	78.1	3.04	39.6	.00			446
	500 ISL	5.42	5.38	34.169	26.972	113.8	.911	.62	8.8							504
1	526	5.32	5.27	34.188	27.000	111.4	.940	.56	7.9	88.2	3.21	41.3	.00			530
	600 ISL	4.96	4.91	34.245	27.087	103.6	1.020	.36	5.1							606
1	610	4.91	4.86	34.253	27.099	102.5	1.031	.34	4.8	98.7	3.34	42.9	.00			615

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 60 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 16.8 N	124 19.9 W	01/24/84	0345 GMT	4053 M	350	23 KT		0	1029.1 MB	12.7 C	11.0 C	0/8	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	12.86	12.86	32.422	24.425	349.6	.000	6.21	102.8							0
1	2	12.86	12.86	32.422	24.425	349.6	.007	6.21	102.8	5.1	.34	.1	.00	.34	.06	2
	10 ISL	12.86	12.86	32.420	24.423	350.0	.035	6.24	103.3							10
1	12	12.86	12.86	32.419	24.422	350.1	.042	6.24	103.3	5.0	.35	.0	.00	.29	.10	12
	20 ISL	12.87	12.87	32.436	24.434	349.2	.070	6.23	103.3							20
1	26	12.89	12.88	32.465	24.453	347.5	.090	6.23	103.2	4.7	.36	.0	.00	.31	.12	26
	30 ISL	12.91	12.90	32.511	24.484	344.7	.105	6.20	102.9							30
1	41	12.96	12.96	32.625	24.563	337.5	.142	6.13	101.8	2.7	.36	.1	.01	.35	.08	41
	50 ISL	12.96	12.95	32.639	24.574	336.6	.173	6.10	101.4							50
1	55	12.96	12.95	32.646	24.580	336.2	.189	6.09	101.2	2.7	.35	.2	.02	.34	.12	55
1	70	11.85	11.85	32.879	24.971	299.2	.236	5.65	91.8	5.4	.61	4.0	.03	.15	.13	70
	75 ISL	11.51	11.50	32.927	25.073	289.7	.252	5.56	89.7							76
1	80	11.24	11.23	32.972	25.156	281.7	.265	5.46	87.6	7.4	.73	6.2	.02	.09	.11	80
1	94	10.66	10.65	33.232	25.461	253.0	.302	4.82	76.5	12.0	1.02	12.1	.02	.05	.07	94
	100 ISL	10.33	10.32	33.286	25.560	243.7	.318	4.65	73.3							101
1	112	9.72	9.71	33.355	25.717	228.9	.348	4.45	69.2	17.0	1.28	16.2	.01	.02	.06	113
	125 ISL	9.29	9.28	33.466	25.874	214.2	.375	4.33	66.8							126
1	132	9.11	9.09	33.535	25.957	206.4	.391	4.27	65.6	21.3	1.43	19.1	.01	.00	.05	133
	150 ISL	8.87	8.86	33.700	26.123	190.9	.426	3.91	59.7							151
1	151	8.86	8.84	33.710	26.133	190.0	.428			24.1	1.54	21.4	.00	.01	.03	152
1	170	8.46	8.44	33.798	26.264	177.8	.463	3.58	54.3	30.1	1.75	24.6	.00	.01	.03	171
1	190	8.06	8.04	33.876	26.385	166.6	.497	3.63	54.6	33.0	1.79	25.4	.00			191
	200 ISL	7.90	7.88	33.905	26.431	162.3	.514	3.58	53.6							202
1	208	7.79	7.77	33.922	26.461	159.6	.526	3.52	52.6	36.2	1.85	26.5	.00			209
1	242	7.55	7.53	33.946	26.515	154.9	.579	3.27	48.6	39.9	1.97	27.8	.00			243
	250 ISL	7.48	7.45	33.961	26.538	152.9	.592	3.08	45.8							252
1	290	7.10	7.08	34.037	26.650	142.7	.652	2.15	31.7	51.4	2.37	32.7	.00			292
	300 ISL	7.01	6.98	34.045	26.669	141.0	.666	2.03	29.9							303
1	343	6.62	6.59	34.064	26.737	135.0	.725	1.67	24.3	59.7	2.60	35.5	.00			345
	400 ISL	6.16	6.12	34.104	26.830	126.6	.799	1.13	16.2							404
1	425	5.96	5.93	34.123	26.869	123.1	.831	.92	13.2	73.8	2.91	39.1	.00			428
	500 ISL	5.40	5.36	34.165	26.971	113.9	.919	.62	8.8							504
1	508	5.35	5.30	34.169	26.981	112.9	.929	.60	8.5	86.2	3.12	41.4	.00			512
1	592	4.91	4.86	34.238	27.087	103.4	1.019	.41	5.7	97.6	3.24	42.8	.00			596

RV DAVID STARR JORDAN

CALCOFI CRUISE 8401

STATION 60 80

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
36 56.8 N	125 03.2 W	01/24/84	1005 GMT	4302 M	360	21 KT		0	1030.1 MB	13.6 C	12.0 C	0/8

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	13.63	13.63	32.799	24.563	336.4	.000	6.11	103.0							0
1	2	13.63	13.63	32.799	24.563	336.4	.007	6.11	103.0	1.8	.34	.1	.00	.24	.07	2
	10 ISL	13.63	13.63	32.800	24.564	336.5	.034	6.16	103.8							10
1	11	13.63	13.63	32.800	24.564	336.5	.037	6.16	103.9	1.8	.35	.1	.00	.24	.06	11
	20 ISL	13.64	13.63	32.802	24.564	337.0	.067	6.13	103.5							20
	30 ISL	13.66	13.66	32.804	24.561	337.5	.101	6.07	102.5							30
1	32	13.67	13.67	32.805	24.560	337.6	.107	6.06	102.3	1.8	.36	.0	.00	.24	.08	32
	50 ISL	13.79	13.78	32.845	24.568	337.3	.169	6.00	101.6							50
1	51	13.79	13.78	32.846	24.568	337.3	.171	6.00	101.5	1.8	.35	.0	.00	.30	.08	51
1	64	14.15	14.14	32.983	24.600	334.7	.215	5.92	101.0	1.8	.35	.1	.01	.34	.12	64
1	73	13.84	13.83	33.003	24.680	327.3	.244	5.72	97.0	2.9	.43	1.2	.04	.19	.12	73
	75 ISL	13.46	13.45	33.026	24.776	318.2	.252	5.61	94.4							76
1	83	12.03	12.02	33.125	25.131	284.4	.275	5.23	85.4	6.8	.75	6.4	.01	.10	.06	83
1	98	10.57	10.55	33.234	25.479	251.3	.315	4.82	76.4	11.2	1.04	11.5	.01	.05	.06	98
	100 ISL	10.41	10.39	33.243	25.513	248.1	.321	4.79	75.7							101
1	111	9.86	9.85	33.298	25.649	235.4	.349	4.64	72.4	14.5	1.21	14.5	.00	.02	.06	112
	125 ISL	9.52	9.51	33.501	25.864	215.2	.379	4.09	63.4							126
1	134	9.39	9.38	33.648	26.000	202.5	.399	3.67	56.8	22.9	1.60	21.3	.00	.00	.04	135
	150 ISL	9.18	9.16	33.748	26.112	192.1	.429	3.25	50.0							151
1	152	9.15	9.14	33.757	26.124	191.0	.434	3.20	49.3	27.0	1.82	24.2	.00	.00	.04	153
1	171	8.89	8.87	33.856	26.243	180.0	.469	2.95	45.2	29.7	1.92	25.8	.00	.01	.03	172
1	192			33.914			.506	3.10	47.1	32.8	1.93	26.4	.00			194
	200 ISL	8.40	8.37	33.925	26.374	168.0	.519	3.19	48.4							202
1	217	8.12	8.10	33.942	26.429	162.9	.547	3.32	50.0	34.2	1.90	26.0	.00			218
1	243	7.81	7.78	33.978	26.503	156.2	.588	3.05	45.6	38.9	2.02	27.5	.00			244
	250 ISL	7.70	7.67	33.987	26.527	154.0	.599	2.94	43.9							252
1	274	7.31	7.28	34.010	26.600	147.3	.636	2.60	38.5	45.5	2.21	30.3	.00			276
	300 ISL	6.91	6.88	34.011	26.656	142.0	.673	2.41	35.4							303
1	317	6.67	6.64	34.012	26.689	139.1	.697	2.31	33.7	52.7	2.36	32.8	.00			319
1	374	6.14	6.11	34.028	26.771	131.8	.774	1.72	24.8	62.5	2.64	36.1	.00			376
	400 ISL	5.99	5.96	34.053	26.810	128.3	.808	1.42	20.3							403
1	435	5.81	5.77	34.093	26.865	123.5	.852	1.05	15.0	72.1	2.90	38.9	.00			438
	500 ISL	5.28	5.23	34.153	26.977	113.2	.929	.64	9.1							504
1	501	5.27	5.23	34.153	26.977	113.1	.930	.64	9.0	83.4	3.11	40.8	.00			504

RV DAVID STARR JORDAN

CALCOFI CRUISE 8401

STATION 60 90

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
36 36.8 N	125 46.3 W	01/24/84	1630 GMT	4493 M	360	19 KT	360 06 06	0	1032.5 MB	13.9 C	13.2 C	0/8

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	13.83	13.83	32.923	24.618	331.1	.000	5.99	101.5							0
1	1	13.83	13.83	32.923	24.618	331.1	.003	5.99	101.5	3.0	.37	.1	.00	.32	.08	1
	10 ISL	13.82	13.82	32.922	24.620	331.3	.033	6.02	102.0							10
1	11	13.82	13.82	32.922	24.619	331.3	.036	6.02	102.0	3.1	.38	.1	.00	.33	.08	11
	20 ISL	13.84	13.83	32.922	24.616	331.8	.066	6.00	101.7							20
1	24	13.84	13.84	32.922	24.615	332.1	.079	5.99	101.5	3.3	.38	.1	.00	.31	.09	24
	30 ISL	13.84	13.84	32.922	24.615	332.3	.099	5.99	101.5							30
1	37	13.84	13.84	32.922	24.616	332.4	.122	5.99	101.5	3.1	.38	.1	.00	.32	.09	37
1	50	13.83	13.83	32.923	24.618	332.5	.165	5.99	101.5	3.0	.38	.2	.00	.31	.10	50
1	59	12.98	12.97	32.974	24.830	312.5	.194	5.60	93.3	5.2	.57	3.1	.00	.12	.12	59
1	68	12.64	12.63	32.982	24.902	305.9	.222	5.59	92.4	5.5	.61	3.4	.01	.12	.12	68
	75 ISL	12.18	12.17	33.009	25.012	295.5	.244	5.50	90.1							76
1	81	11.77	11.76	33.043	25.115	285.8	.260	5.39	87.5	7.0	.70	5.4	.02	.09	.09	81
1	94	10.88	10.87	33.157	25.365	262.2	.296	5.02	80.0	10.2	.94	9.3	.02	.05	.08	94
	100 ISL	10.42	10.41	33.215	25.490	250.4	.312	4.86	76.7							101
1	106	10.01	10.00	33.281	25.610	239.0	.328	4.67	73.1	14.8	1.19	14.1	.02	.02	.06	107
	125 ISL	9.66	9.65	33.560	25.886	213.1	.370	3.78	58.8							126
1	128	9.64	9.63	33.606	25.926	209.4	.377	3.63	56.5	22.2	1.60	21.3	.01	.00	.05	129
1	145	9.17	9.16	33.693	26.070	196.0	.411	3.51	54.1	25.3	1.68	22.7	.01	.00	.04	146
	150 ISL	9.09	9.07	33.729	26.112	192.1	.420	3.40	52.3							151
1	163	8.87	8.85	33.824	26.221	181.9	.445	3.09	47.3	29.4	1.85	25.2	.01			164
1	181	8.51	8.49	33.907	26.342	170.7	.476	2.96	45.0	32.3	1.94	26.6	.00			182
	200 ISL	8.18	8.16	33.963	26.436	162.0	.508	2.84	42.9							202
1	207	8.08	8.06	33.977	26.462	159.6	.519	2.80	42.2	36.8	2.03	28.1	.00			208
1	243	7.65	7.63	34.026	26.563	150.4	.574	2.52	37.6	42.7	2.18	30.1	.00			244
	250 ISL	7.55	7.52	34.036	26.586	148.4	.586	2.42	35.9							252
1	295	6.97	6.94	34.075	26.699	138.1	.650	1.80	26.4	54.0	2.48	34.1	.00			297
	300 ISL	6.93	6.90	34.074	26.704	137.7	.657	1.77	25.9							303
1	362	6.50	6.47	34.049	26.741	134.7	.741	1.53	22.2	59.9	2.63	35.9	.00			364
	400 ISL	6.13	6.10	34.059	26.797	129.7	.792	1.40	20.2							403
1	429	5.85	5.82	34.078	26.847	125.1	.829	1.27	18.2	68.7	2.78	38.1	.00			432
1	500	5.41	5.37	34.161	26.967	114.2	.913	.67	9.5	82.1	3.01	40.8	.00			503

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 60 100

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
36 16.8 N	126 29.1 W	01/24/84	2311 GMT	4683 M	350	15 KT	350 04 05	0	1029.8 MB	15.3 C	14.0 C	0/8	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	13.89	13.88	32.817	24.525	340.1	.000	6.00	101.7							0
1	2	13.89	13.88	32.817	24.525	340.1	.007	6.00	101.7	2.1	.34	.0	.00	.17	.04	2
	10 ISL	13.84	13.84	32.817	24.534	339.4	.034	6.08	102.9							10
1	11	13.84	13.84	32.817	24.535	339.4	.037	6.08	103.0	1.9	.32	.0	.00	.15	.06	11
	20 ISL	13.84	13.84	32.821	24.538	339.3	.068	6.06	102.6							20
1	26	13.84	13.84	32.824	24.540	339.3	.088	6.02	102.0	2.3	.31	.0	.00	.16	.07	26
	30 ISL	13.84	13.84	32.826	24.542	339.3	.102	6.01	101.8							30
1	41	13.84	13.83	32.829	24.545	339.2	.139	5.99	101.5	2.3	.31	.0	.00	.16	.08	41
	50 ISL	13.84	13.83	32.830	24.546	339.4	.170	5.98	101.3							50
1	54	13.83	13.83	32.830	24.547	339.4	.182	5.98	101.3	2.3	.32	.0	.00	.18	.08	54
1	70	13.80	13.79	32.836	24.560	338.6	.236	5.97	101.0	2.3	.32	.1	.01	.18	.09	70
	75 ISL	13.34	13.33	32.875	24.681	327.2	.254	5.89	98.7							76
1	80	12.89	12.88	32.920	24.806	315.4	.269	5.80	96.4	3.7	.45	1.4	.03	.20	.14	80
1	94	11.98	11.97	33.086	25.109	286.8	.311	5.60	91.6	5.5	.57	3.7	.01	.09	.06	94
	100 ISL	11.64	11.63	33.162	25.231	275.2	.329	5.42	87.9							101
1	114	10.93	10.92	33.312	25.477	252.1	.367	4.99	79.7	10.1	.88	9.7	.01	.02	.04	115
	125 ISL	10.39	10.38	33.388	25.630	237.6	.393	4.77	75.4							126
1	133	9.99	9.98	33.445	25.742	227.1	.412	4.62	72.4	14.9	1.14	14.5	.01	.02	.02	134
	150 ISL	9.36	9.34	33.591	25.960	206.6	.448	4.33	66.9							151
1	154	9.23	9.21	33.628	26.010	201.8	.457	4.26	65.7	20.7	1.39	18.7	.00	.00	.01	155
1	174	8.82	8.80	33.787	26.200	184.1	.495	3.93	60.1	25.7	1.57	21.8	.00	.00	.01	175
1	194	8.42	8.39	33.876	26.332	171.8	.531	4.10	62.2	27.7	1.57	22.3	.00			195
	200 ISL	8.33	8.31	33.895	26.361	169.2	.541	4.05	61.2							202
1	214	8.15	8.13	33.927	26.413	164.4	.564	3.90	58.8	30.4	1.63	23.4	.00			215
1	247	7.76	7.73	33.951	26.490	157.5	.617	4.07	60.8	33.2	1.66	24.0	.00			248
	250 ISL	7.72	7.70	33.955	26.497	156.8	.622	4.00	59.8							252
1	297	7.30	7.27	34.007	26.599	147.7	.694	2.71	40.1	44.8	2.14	30.0	.01			299
	300 ISL	7.27	7.25	34.011	26.606	147.2	.698	2.65	39.1							303
1	352	6.78	6.75	34.058	26.710	137.8	.772	1.73	25.3	56.4	2.48	34.7	.00			354
	400 ISL	6.30	6.26	34.074	26.787	130.8	.837	1.31	18.9							403
1	435	5.98	5.95	34.086	26.838	126.2	.882	1.12	16.1	70.2	2.77	38.0	.00			438
	500 ISL	5.63	5.58	34.154	26.936	117.5	.961	.69	9.8							504
1	517	5.55	5.50	34.172	26.960	115.3	.981	.60	8.5	83.0	3.02	40.7	.00			521
	600 ISL	5.04	4.99	34.222	27.060	106.2	1.073	.44	6.2							605
1	602	5.03	4.98	34.223	27.062	106.1	1.074	.44	6.2	93.7	3.13	42.2	.00			606

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 63 50

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 22.6 N	122 28.4 W	01/23/84	0434 GMT	31 M	350	12 KT			1024.7 MB	12.0 C	11.2 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	12.72	12.72	32.960	24.868	307.6	.031	5.70	94.4	9.1	.64	4.3	.13	.39	.33	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 63 52

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 18.6 N	122 37.1 W	01/23/84	0154 GMT	88 M	320	11 KT		2	1024.4 MB	12.0 C	11.2 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	12.30	12.30	31.111	23.516	436.3	.000	6.40	103.9							0
1	1	12.30	12.30	31.111	23.516	436.3	.004	6.40	103.9	18.9	.55	2.7	.21	1.51	.60	1
	10 ISL	12.85	12.85	32.827	24.740	319.9	.038	6.25	103.7							10
1	11	12.89	12.89	32.929	24.812	313.0	.041	6.23	103.5	5.9	.39	.9	.12	1.13	.42	11
	20 ISL	12.97	12.97	33.071	24.906	304.3	.069	6.07	101.2							20
1	21	12.98	12.97	33.085	24.916	303.4	.072	6.05	100.8	4.7	.42	1.2	.13	.71	.23	21
	30 ISL	12.83	12.83	33.143	24.990	296.5	.099	5.68	94.4							30
1	31	12.82	12.81	33.153	25.000	295.6	.102	5.63	93.6	6.0	.59	3.9	.11	.27	.18	31
1	41	12.00	12.00	33.281	25.256	271.5	.130	4.91	80.3	9.9	.90	9.0	.05	.10	.16	41
	50 ISL	11.72	11.71	33.352	25.363	261.5	.155	4.56	74.2							50
1	52	11.69	11.69	33.361	25.375	260.4	.159	4.52	73.4	14.5	1.10	11.4	.07	.07	.18	52
1	62	11.50	11.49	33.397	25.440	254.4	.185	4.33	70.1	16.7	1.12	12.6	.07	.08	.18	62
	75 ISL	11.16	11.15	33.400	25.503	248.7	.218	4.32	69.8							76
1	76	11.12	11.11				.222									77

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 63 55

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 12.6 N	122 50.1 W	01/22/84	2323 GMT	298 M	320	15 KT	320 04 06	2	1024.4 MB	12.5 C	11.8 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	13.12	13.12	33.054	24.863	307.8	.000	6.09	101.8							0
1	1	13.12	13.12	33.054	24.863	307.8	.003	6.09	101.8	4.8	.37	.4	.03	.84	.09	1
	10 ISL	13.12	13.12	33.054	24.863	308.0	.031	6.16	102.9							10
1	11	13.12	13.12	33.054	24.863	308.1	.034	6.16	103.0	4.8	.37	.4	.03	.78	.23	11
	20 ISL	13.12	13.12	33.054	24.864	308.3	.062	6.13	102.5							20
1	21	13.12	13.12	33.055	24.864	308.3	.064	6.13	102.5	4.8	.37	.4	.03	.84	.22	21
1	30	13.12	13.12	33.056	24.865	308.5	.092	6.12	102.3	4.8	.37	.4	.04	.70	.27	30
1	40	13.10	13.10	33.056	24.868	308.4	.123	6.10	101.9	4.8	.38	.5	.04	.76	.24	40
1	50	13.01	13.01	33.184	24.986	297.5	.153	5.56	92.8	6.1	.57	3.7	.08	.15	.19	50
1	61	12.76	12.75	33.229	25.071	289.6	.185	5.30	88.0	7.3	.68	5.5	.02	.10	.19	61
1	70	12.40	12.39	33.266	25.168	280.5	.211	5.14	84.7	8.2	.77	6.9	.00	.09	.15	70
	75 ISL	12.14	12.13	33.274	25.225	275.2	.225	5.06	82.9							76
1	85	11.62	11.61	33.305	25.346	263.9	.251	4.85	78.6	10.0	.92	9.5	.00	.06	.13	85
	100 ISL	10.74	10.73	33.481	25.642	236.0	.290	4.22	67.1							101
1	101	10.66	10.65	33.500	25.670	233.3	.293	4.15	66.0	15.8	1.26	15.5	.00	.02	.08	102
	125 ISL	10.02	10.00	33.679	25.920	210.0	.345	3.49	54.8							126
1	126	9.99	9.97	33.686	25.931	209.0	.348	3.46	54.3	23.0	1.60	20.7	.00	.01	.10	127
1	146	9.31	9.30				.387	3.09	47.8	28.1	1.82	24.2	.02	.00	.08	147
	150 ISL	9.19	9.18	33.798	26.149	188.6	.395	3.05	47.0							151
1	181	8.56	8.54	33.938	26.359	169.0	.451	2.86	43.5	33.8	1.97	26.9	.01			182
	200 ISL	8.32	8.30	33.973	26.422	163.4	.482	2.79	42.3							202
1	217	8.15	8.13	33.988	26.460	160.0	.509	2.72	41.0	38.3	2.11	28.3	.00			218
	250 ISL	7.70	7.67	34.026	26.557	151.2	.561	2.40	35.8							252
1	257	7.59	7.56	34.033	26.579	149.2	.572	2.30	34.2	46.1	2.29	31.2	.00			259

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 63 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 02.6 N	123 11.7 W	01/22/84	1919 GMT	3540 M	330	15 KT	330 04 09	1	1027.0 MB	12.6 C	11.6 C	7/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	12.93	12.93	32.726	24.645	328.6	.000	6.16	102.4							0
1	1	12.93	12.93	32.726	24.645	328.6	.003	6.16	102.4							1
1	10	12.92	12.92	32.732	24.653	328.0	.033	6.22	103.3	8.4	.41	.0	.16	.97	.28	10
	20 ISL	13.19	13.19	32.873	24.709	323.0	.065	6.05	101.1					.87	.38	20
1	26	13.32	13.32	32.971	24.758	318.4	.084	5.89	98.8	8.3	.45	.0	.13	.41	.44	26
	30 ISL	13.22	13.22	32.988	24.791	315.5	.097	5.80	97.2							30
1	41	12.97	12.96	33.084	24.917	303.7	.131	5.54	92.3	5.7	.46	.0	.20	.13	.21	41
	50 ISL	12.23	12.22	33.153	25.113	285.3	.158	5.23	85.9							50
1	55	11.80	11.79	33.193	25.225	274.7	.171	5.07	82.5	6.7	.58	2.2	.05	.06	.08	55
1	65	11.09	11.08	33.288	25.428	255.5	.197	4.80	76.9	9.3	.82	6.3	.01	.05	.08	65
	75 ISL	10.66	10.65	33.365	25.564	242.8	.223	4.55	72.3							76
1	77	10.61	10.61	33.376	25.581	241.2	.227	4.51	71.6	11.7	1.00	9.3	.00	.03	.08	77
1	91	10.37	10.36	33.494	25.716	228.7	.260	4.14	65.4	14.5	1.16	12.2	.01	.02	.06	91
	100 ISL	10.25	10.24	33.542	25.774	223.4	.281	3.98	62.7							101
1	106	10.13	10.12	33.569	25.814	219.6	.295	3.89	61.2	17.7	1.33	14.5	.00	.01	.06	107
1	121	9.59	9.58	33.648	25.967	205.4	.327	3.66	56.9	20.4	1.46	16.5	.01	.01	.03	122
	125 ISL	9.53	9.51	33.676	25.999	202.4	.335	3.57	55.4							126
1	146	9.25	9.23	33.828	26.164	187.1	.376	3.06	47.3	23.1	1.60	18.8	.00	.01	.03	147
	150 ISL	9.15	9.13	33.847	26.195	184.3	.383	3.02	46.5							151
1	166	8.75	8.73	33.911	26.308	173.7	.412	2.90	44.3	29.0	1.82	22.3	.00	.01	.05	167
1	185	8.47	8.45	33.957	26.388	166.4	.444	2.81	42.7	33.0	1.96	23.9	.00			186
	200 ISL	8.26	8.24	33.982	26.439	161.7	.468	2.72	41.1							202
1	235	7.84	7.81	34.019	26.531	153.5	.523	2.50	37.4	35.7	2.02	25.0	.00			236
	250 ISL	7.70	7.67	34.031	26.562	150.8	.546	2.41	35.9							252
1	274	7.47	7.45	34.045	26.604	147.0	.583	2.26	33.6	47.3	2.27	28.9	.00			276
	300 ISL	7.15	7.13	34.049	26.652	142.7	.620	2.10	31.0							303
1	334	6.71	6.68	34.050	26.714	137.1	.667	1.87	27.3	57.4	2.49	32.1	.00			336
	400 ISL	5.98	5.94	34.070	26.825	126.9	.754	1.30	18.7							404
1	408	5.90	5.86	34.074	26.839	125.6	.765	1.23	17.6	71.0	2.81	35.8	.00			411
1	483	5.37	5.33	34.150	26.963	114.3	.854	.70	9.9	84.1	3.00	38.6	.00			486
	500 ISL	5.27	5.23	34.167	26.988	112.1	.874	.61	8.7							504
1	556	5.07	5.02	34.220	27.054	106.2	.935	.44	6.2	93.0	3.12	40.4	.00			560

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 63 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
36 42.6 N	123 54.8 W	01/22/84	1325 GMT	3730 M	350 17 KT		2	1024.0 MB	12.1 C	10.9 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	13.22	13.22	32.684	24.557	337.1	.000	6.17	103.1							0
1	2	13.22	13.22	32.684	24.557	337.1	.007	6.17	103.1	2.4	.32	.1	.01	.24	.07	2
	10 ISL	13.21	13.21	32.684	24.558	337.2	.034	6.21	103.7							10
1	12	13.21	13.21	32.684	24.558	337.2	.040	6.21	103.8	2.4	.33	.0	.00	.21	.09	12
	20 ISL	13.22	13.22	32.683	24.556	337.6	.067	6.20	103.5							20
1	26	13.23	13.22	32.683	24.555	337.8	.087	6.17	103.1	2.4	.33	.0	.00	.23	.07	26
	30 ISL	13.22	13.21	32.684	24.558	337.6	.101	6.15	102.7							30
1	42	13.18	13.17	32.687	24.568	337.0	.141	6.08	101.5	2.5	.33	.1	.01	.25	.10	42
	50 ISL	12.75	12.74	32.781	24.726	322.2	.168	5.87	97.3							50
1	56	12.39	12.38	32.878	24.870	308.5	.186	5.67	93.2	4.6	.50	2.9	.04	.08	.18	56
1	72	11.69	11.68	33.238	25.280	269.8	.232	4.86	78.9	10.4	.87	9.7	.02	.06	.12	72
	75 ISL	11.46	11.46	33.271	25.348	263.5	.241	4.76	76.9							76
1	83	10.94	10.93	33.329	25.488	250.3	.261	4.56	72.9	13.1	1.07	13.0	.02	.06	.10	83
1	98	10.19	10.18	33.476	25.732	227.3	.296	4.05	63.7	18.2	1.33	17.5	.01	.02	.08	98
	100 ISL	10.10	10.09	33.497	25.765	224.3	.302	3.99	62.6							101
1	116	9.60	9.59	33.622	25.945	207.4	.337	3.65	56.7	23.0	1.55	21.1	.01	.01	.05	117
	125 ISL	9.41	9.40	33.681	26.022	200.2	.355	3.51	54.4							126
1	136	9.21	9.19	33.749	26.108	192.2	.377	3.35	51.7	27.0	1.70	23.4	.01	.00	.06	137
	150 ISL	9.03	9.01	33.815	26.188	184.9	.403	3.11	47.8							151
1	156	8.94	8.93	33.840	26.221	181.8	.414	3.03	46.5	30.3	1.83	25.4	.01	.00	.03	157
1	176	8.50	8.48	33.922	26.356	169.3	.449	3.08	46.8	33.2	1.88	26.1	.00	.01	.03	177
1	197	8.23	8.21	33.957	26.424	163.1	.484	3.08	46.5	35.1	1.91	26.7	.00			198
	200 ISL	8.20	8.18	33.961	26.432	162.4	.489	3.08	46.5							202
1	216	8.02	8.00	33.975	26.469	159.1	.514	3.15	47.4	36.8	1.91	27.0	.00			217
	250 ISL	7.57	7.55	33.978	26.537	153.0	.567	3.75	55.8							252
1	251	7.57	7.54	33.978	26.538	152.9	.568	3.76	55.9	37.4	1.79	25.6	.00			252
1	299	6.93	6.90	33.981	26.629	144.7	.641	3.28	48.1	45.7	2.01	29.0	.00			301
	300 ISL	6.92	6.89	33.981	26.631	144.5	.642	3.27	47.9							303
1	353	6.35	6.31	34.001	26.723	136.1	.716	2.35	34.0	57.1	2.33	33.8	.00			355
	400 ISL	5.84	5.81	34.018	26.801	129.1	.778	1.75	25.1							403
1	435	5.55	5.52	34.041	26.854	124.2	.823	1.39	19.7	72.1	2.74	39.0	.00			438
	500 ISL	5.44	5.40	34.141	26.948	116.1	.901	.72	10.2							504
1	517	5.43	5.38	34.168	26.971	114.1	.921	.58	8.2	84.0	3.01	41.9	.00			521
1	600	4.89	4.84	34.216	27.073	104.8	1.011	.41	5.7	96.0	3.11	43.4	.00			604

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 63 80

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
36 22.6 N	124 37.7 W	01/22/84	0738 GMT	4110 M	340 20 KT			1025.1 MB	13.0 C	11.1 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.57	14.57	33.065	24.574	335.4	.000	5.90	101.6							0
1	2	14.57	14.57	33.065	24.574	335.4	.007	5.90	101.6	2.2	.30	.1	.01	.21	.08	2
	10 ISL	14.53	14.52	33.066	24.584	334.7	.034	6.02	103.6							10
1	12	14.52	14.52	33.066	24.585	334.6	.040	6.04	103.9	2.4	.32	.1	.00	.21	.08	12
	20 ISL	14.53	14.53	33.066	24.583	334.9	.067	6.00	103.3							20
	30 ISL	14.54	14.54	33.065	24.581	335.5	.101	5.96	102.6							30
1	32	14.54	14.54	33.065	24.580	335.7	.107	5.95	102.4	2.3	.31	.0	.00	.21	.08	32
	50 ISL	14.56	14.55	33.065	24.578	336.4	.168	5.89	101.4							50
1	51	14.56	14.55	33.065	24.578	336.5	.170	5.89	101.4	2.2	.30	.0	.00	.22	.08	51
1	67	14.56	14.55	33.065	24.578	336.9	.224	5.89	101.4	2.3	.29	.0	.00	.21	.09	67
	75 ISL	14.55	14.54	33.065	24.580	336.9	.252	5.89	101.4							76
1	77	14.55	14.54	33.065	24.581	336.9	.257	5.89	101.4	2.3	.29	.0	.00	.21	.09	77
1	87	13.51	13.50	33.024	24.764	319.6	.290	5.61	94.5	3.7	.44	2.1	.03	.13	.11	87
	100 ISL	12.39	12.38	33.128	25.065	291.2	.331	5.32	87.5							101
1	102	12.27	12.26	33.146	25.102	287.7	.335	5.28	86.7	6.3	.66	5.9	.02	.07	.06	102
1	117	10.92	10.91	33.340	25.500	250.0	.378	4.71	75.2	11.6	.97	12.0	.00	.03	.05	118
	125 ISL	10.54	10.53	33.425	25.633	237.4	.397	4.56	72.2							126
1	141	10.02	10.00	33.577	25.841	217.8	.434	4.39	68.9	16.4	1.19	16.1	.00	.01	.02	142
	150 ISL	9.83	9.81	33.634	25.918	210.7	.452	4.39	68.6							151
1	162	9.58	9.56	33.698	26.008	202.3	.478	4.39	68.2	18.6	1.27	17.5	.00	.00	.02	163
1	182	9.01	9.00	33.796	26.177	186.6	.516	4.19	64.4	22.8	1.42	20.5	.00	.00	.01	183
	200 ISL	8.76	8.74	33.869	26.274	177.6	.549	3.82	58.4							202
1	207	8.70	8.68	33.892	26.301	175.1	.561	3.70	56.5	27.7	1.61	23.8	.00			208
1	232	8.52	8.50	33.951	26.375	168.5	.604	3.76	57.2	29.3	1.65	23.9	.00			233
	250 ISL	8.16	8.14	33.973	26.448	161.8	.634	3.63	54.7							252
1	261	7.91	7.88	33.982	26.492	157.6	.652	3.50	52.5	35.4	1.79	26.3	.00			263
1	296	7.35	7.32	33.998	26.585	149.1	.706	3.12	46.2	42.2	1.95	28.9	.00			298
	300 ISL	7.31	7.29	34.003	26.594	148.4	.711	3.04	44.9							303
1	346	6.87	6.84	34.040	26.684	140.2	.777	2.08	30.5	51.9	2.33	34.2	.00			348
	400 ISL	5.92	5.88	34.002	26.779	131.2	.851	2.07	29.7							403
1	410	5.75	5.71	33.996	26.795	129.6	.864	2.07	29.5	64.5	2.51	36.5	.00			413
1	485	5.46	5.42	34.112	26.923	118.2	.956	.91	12.9	79.1	2.83	40.6	.00			488
	500 ISL	5.41	5.37	34.134	26.947	116.2	.974	.76	10.8							504
1	564	5.23	5.19	34.213	27.030	108.9	1.046	.47	6.6	89.7	3.08	41.9	.00			568

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 63 90

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
36 02.6 N	125 20.5 W	01/22/84	0153 GMT	4493 M	020	16 KT	350 06 04	2	1025.1 MB	13.1 C	12.1 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.26	14.26	32.924	24.531	339.5	.000	5.92	101.2							0
1	1	14.26	14.26	32.924	24.531	339.5	.003	5.92	101.2	2.5	.31	.1	.01	.24	.06	1
	10 ISL	14.26	14.26	32.923	24.530	339.8	.034	5.97	102.1							10
1	12	14.26	14.26	32.923	24.530	339.9	.041	5.98	102.2	2.6	.33	.0	.00	.24	.06	12
	20 ISL	14.25	14.24	32.921	24.531	340.0	.068	5.97	102.1							20
	30 ISL	14.23	14.23	32.919	24.533	340.2	.102	5.96	101.9							30
1	32	14.23	14.22	32.918	24.533	340.2	.108	5.96	101.8	2.6	.33	.0	.01	.24	.08	32
	50 ISL	14.20	14.20	32.911	24.534	340.7	.170	5.94	101.4							50
1	51	14.20	14.19	32.911	24.534	340.7	.173	5.94	101.4	2.5	.33	.0	.00	.27	.06	51
1	66	14.12	14.11	32.904	24.546	339.9	.224	5.92	100.9	2.7	.34	.0	.01	.27	.06	66
1	74	13.50	13.49	33.028	24.769	318.8	.250	5.50	92.6	4.8	.51	3.0	.04	.12	.05	74
	75 ISL	13.26	13.25	33.041	24.826	313.4	.254	5.45	91.4							76
1	84	11.69	11.68	33.131	25.197	278.0	.279	5.18	84.0	8.2	.78	7.6	.05	.06	.05	84
1	99	10.79	10.78	33.351	25.531	246.5	.319	4.64	73.9	12.8	1.05	12.8	.01	.03	.04	99
	100 ISL	10.72	10.70	33.365	25.555	244.2	.322	4.58	72.9							101
1	112	10.17	10.15	33.465	25.728	228.0	.352	4.14	65.1	17.7	1.34	17.6	.01	.02	.03	113
	125 ISL	9.77	9.76	33.573	25.879	213.8	.379	3.83	59.7							126
1	137	9.47	9.45	33.675	26.009	201.7	.405	3.57	55.3	24.0	1.61	22.1	.01	.00	.02	138
	150 ISL	9.17	9.16	33.770	26.130	190.4	.430	3.25	50.1							151
1	157	9.02	9.00	33.816	26.191	184.7	.443	3.11	47.8	29.1	1.82	25.4	.06	.00	.02	158
1	175	8.60	8.59	33.894	26.317	173.0	.475	3.05	46.4	31.7	1.87	26.7	.01	.00	.02	176
1	200	8.34	8.32	33.935	26.390	166.4	.517	3.05	46.2	34.0	1.94	27.5	.00			201
1	224	8.03	8.01	33.969	26.463	159.8	.556	3.10	46.6	36.4	1.97	27.8	.00			225
	250 ISL	7.69	7.67	33.981	26.523	154.4	.597	3.83	57.2							252
1	253	7.66	7.63	33.982	26.528	154.0	.601	3.89	58.0	35.7	1.78	25.2	.00			254
1	287	7.20	7.17	33.995	26.604	147.1	.654	3.05	45.0	44.1	2.05	29.4	.03			289
	300 ISL	7.01	6.98	34.000	26.633	144.4	.672	2.84	41.8							303
1	336	6.52	6.49	34.015	26.711	137.2	.723	2.34	34.0	54.8	2.36	33.5	.01			338
1	398	5.99	5.95	34.047	26.805	128.7	.806	1.59	22.8	65.6	2.65	37.2	.00			401
	400 ISL	5.98	5.94	34.049	26.809	128.5	.808	1.57	22.5							403
1	471	5.48	5.44	34.115	26.922	118.2	.895	.88	12.5	78.4	2.92	40.9	.00			474
	500 ISL	5.35	5.31	34.147	26.963	114.5	.929	.70	9.8							504
1	548	5.24	5.20	34.205	27.022	109.4	.983	.52	7.3	87.8	3.11	42.4	.00			552

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 63 100

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
35 42.6 N	126 03.0 W	01/25/84	0455 GMT	4683 M	360	24 KT	340 06	0	1029.8 MB	14.2 C	13.1 C	0/8	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	14.01	14.01	32.933	24.588	334.0	.000	5.98	101.7	2.6	.36	.1	.00	.37	.09	0
1	10	14.02	14.02	32.933	24.587	334.4	.033	6.18	105.2	2.7	.36	.1	.00	.37	.10	10
	20 ISL	14.03	14.03	32.932	24.584	334.9	.067	6.12	104.1							20
1	26	14.03	14.03	32.931	24.583	335.2	.087	6.08	103.5	2.5	.36	.1	.00	.36	.10	26
	30 ISL	14.03	14.03	32.931	24.584	335.3	.100	6.06	103.1							30
1	41	14.03	14.02	32.932	24.585	335.4	.137	6.01	102.3	2.4	.41	.1	.00	.36	.13	41
	50 ISL	14.02	14.01	32.932	24.587	335.6	.167	6.00	102.2							50
1	56	14.02	14.01	32.931	24.587	335.6	.187	6.00	102.1	2.4	.41	.1	.00	.37	.08	56
1	72	12.80	12.79	33.075	24.945	301.9	.238	5.36	89.0	6.0	.67	4.9	.01	.11	.08	72
	75 ISL	12.52	12.51	33.121	25.033	293.5	.247	5.19	85.7							76
1	81	12.03	12.02	33.205	25.192	278.5	.264	4.89	79.9	10.0	.95	9.7	.01	.08	.06	81
1	96	10.54	10.53	33.430	25.637	236.3	.302	4.15	65.8	16.5	1.36	16.8	.00	.04	.07	96
	100 ISL	10.30	10.28	33.474	25.713	229.2	.312	4.02	63.4							101
1	116	9.73	9.71	33.595	25.903	211.4	.349	3.67	57.2	22.1	1.58	21.1	.00	.01	.04	117
	125 ISL	9.45	9.44	33.660	25.999	202.4	.366	3.47	53.8							126
1	136	9.15	9.13	33.739	26.110	192.0	.389	3.25	50.1	27.3	1.75	24.3	.00	.01	.02	137
	150 ISL	8.87	8.86	33.818	26.216	182.2	.414	3.11	47.6							151
1	155	8.78	8.76	33.843	26.250	179.0	.424	3.07	46.9	30.7	1.86	25.7	.00	.00	.02	156
1	175	8.32	8.30	33.913	26.376	167.2	.458	2.94	44.5	34.8	1.95	27.4	.00	.00	.02	176
1	196	8.02	8.00	33.960	26.457	159.9	.492	2.85	42.8	38.0	2.04	28.0	.00			197
	200 ISL	7.97	7.95	33.967	26.470	158.6	.499	2.82	42.4							202
1	216	7.77	7.75	33.992	26.520	154.2	.523	2.71	40.5	40.8	2.08	29.1	.00			217
	250 ISL	7.40	7.37	34.016	26.592	147.7	.575	2.61	38.8							252
1	252	7.38	7.36	34.016	26.594	147.5	.577	2.61	38.7	45.6	2.15	30.1	.00			253
1	300	6.82	6.79	34.029	26.683	139.6	.647	2.17	31.7	54.2	2.35	32.8	.00			302
1	355	6.15	6.12	34.044	26.782	130.5	.721	1.63	23.5	64.0	2.59	36.1	.01			357
	400 ISL	5.72	5.69	34.068	26.855	123.8	.778	1.21	17.3							403
1	438	5.44	5.40	34.094	26.910	118.9	.824	.92	13.0	79.7	2.89	40.1	.01			441
	500 ISL	5.14	5.10	34.142	26.983	112.4	.896	.65	9.1							504
1	523	5.06	5.02	34.162	27.009	110.1	.922	.58	8.1	92.0	3.08	41.9	.00			527
	600 ISL	4.81	4.76	34.247	27.105	101.6	1.003	.37	5.2							605
1	607	4.79	4.74	34.255	27.114	100.8	1.010	.36	5.0	101.	3.17	42.6	.00			611

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 67 49

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
36 49.2 N	121 59.1 W	01/20/84	1530 GMT	269 M	350	11 KT		1	1025.7 MB	9.2 C	7.3 C	1/8	CI

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	13.03	13.03	33.152	24.956	299.2	.030	6.12	102.2	5.4	.35	.4	.05	.77	.39	10

RV DAVID STARR JORDAN | CALCOFI CRUISE 8401 | STATION 67 50

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
36 47.2 N	122 03.4 W	01/20/84	1848 GMT	1110 M	090	16 KT	090 03 06	2	1026.8 MB	10.5 C	8.4 C	1/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	12.80	12.80	33.018	24.898	304.6	.000	6.17	102.4							0
1	1	12.80	12.80	33.018	24.898	304.6	.003	6.17	102.4	6.5	.39	.2	.07	.78	.29	1
	10 ISL	12.79	12.79	33.016	24.899	304.6	.030	6.22	103.3							10
1	11	12.79	12.78	33.016	24.899	304.6	.033	6.23	103.4	6.5	.43	.1	.06	.68	.32	11
1	20	12.82	12.81	33.019	24.896	305.2	.061	6.27	104.1	6.5	.44	.2	.06	.71	.37	20
	30 ISL	12.91	12.91	33.062	24.910	304.1	.091	6.08	101.2							30
1	31	12.92	12.92	33.065	24.912	304.0	.094	6.05	100.7	6.5	.48	.5	.11	.64	.35	31
1	40	12.93	12.93	33.287	25.081	288.1	.121	5.46	91.0	8.2	.65	4.0	.17	.30	.24	40
	50 ISL	12.63	12.62	33.330	25.174	279.3	.149	5.12	84.8							50
1	51	12.60	12.59	33.333	25.182	278.8	.152	5.10	84.5	10.0	.79	6.4	.06	.14	.20	51
1	61	12.22	12.21	33.377	25.290	268.8	.179	4.81	79.0	11.8	.92	8.6	.02	.08	.23	61
1	70	11.91	11.90	33.392	25.359	262.4	.203	4.66	76.1	12.6	1.02	10.2	.02	.13	.11	70
	75 ISL	11.68	11.67	33.416	25.421	256.6	.216	4.51	73.3							76
1	86	11.22	11.21	33.483	25.557	243.8	.243	4.19	67.4	16.3	1.23	13.6	.02	.06	.14	86
	100 ISL	10.75	10.74	33.607	25.738	226.9	.277	3.80	60.7							101
1	101	10.71	10.70	33.619	25.755	225.3	.280	3.77	60.1	20.4	1.46	17.1	.00	.03	.11	102
1	120	10.20	10.19	33.689	25.896	212.2	.322	3.49	55.0	22.9	1.62	19.8	.00	.02	.07	121
	125 ISL	10.09	10.07	33.708	25.931	209.0	.331	3.42	53.8							126
1	146	9.57	9.55	33.794	26.086	194.6	.374	3.15	49.0	27.1	1.79	23.3	.00	.00	.06	147
	150 ISL	9.46	9.45	33.808	26.114	192.0	.381	3.11	48.3							151
1	176	8.82	8.80	33.897	26.286	176.0	.429	2.94	45.0	32.5	1.94	25.9	.00			177
	200 ISL	8.43	8.41	33.961	26.397	165.8	.470	2.86	43.4							202
1	205	8.36	8.34	33.970	26.415	164.1	.478	2.84	43.0	35.7	2.05	27.6	.00			206
1	235	7.84	7.82	34.014	26.527	153.8	.526	2.50	37.4	42.8	2.20	30.0	.00			236
	250 ISL	7.65	7.62	34.027	26.565	150.4	.549	2.38	35.5							252
1	275	7.38	7.35	34.040	26.614	146.0	.586	2.22	32.9	48.2	2.34	32.0	.00			277
	300 ISL	7.11	7.08	34.054	26.662	141.7	.622	2.02	29.7							303
1	335	6.76	6.72	34.068	26.722	136.3	.670	1.73	25.3	57.6	2.61	35.1	.00			337
	400 ISL	6.20	6.17	34.081	26.806	128.9	.757	1.33	19.1							403
1	410	6.13	6.09	34.084	26.818	127.9	.770	1.27	18.3	67.5	2.78	38.0	.00			413
1	485	5.66	5.62	34.144	26.923	118.4	.862	.80	11.4	78.2	3.01	40.5	.00			488
	500 ISL	5.56	5.52	34.157	26.946	116.4	.880	.72	10.3							504
1	559	5.17	5.13	34.209	27.034	108.3	.946	.49	6.9	88.7	3.16	42.3	.00			563

RV DAVID STARR JORDAN | CALCOFI CRUISE 8401 | STATION 67 55

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
36 37.2 N	122 24.9 W	01/20/84	2228 GMT	2595 M	050	02 KT	050 02 06	1	1024.4 MB	13.2 C	10.5 C	4/8	AS

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	13.43	13.43	33.105	24.840	310.0	.000	6.11	102.8							0
1	1	13.43	13.43	33.105	24.840	310.0	.003	6.11	102.8	4.5	.35	.2	.07	.64	.25	1
	10 ISL	13.27	13.26	33.112	24.879	306.6	.031	6.27	105.2							10
1	11	13.26	13.26	33.112	24.881	306.4	.034	6.28	105.3	4.3	.38	.2	.06	.69	.28	11
	20 ISL	13.25	13.25	33.109	24.880	306.8	.062	6.23	104.5							20
1	21	13.25	13.25	33.109	24.880	306.8	.064	6.23	104.4	4.3	.38	.2	.07	.72	.29	21
	30 ISL	13.25	13.25	33.112	24.882	306.8	.092	6.10	102.2							30
1	32	13.25	13.24	33.112	24.883	306.8	.098	6.07	101.8	4.3	.39	.2	.08	.59	.36	32
1	42	13.26	13.26	33.119	24.885	306.8	.128	6.07	101.8	4.2	.39	.3	.09	.55	.27	42
	50 ISL	13.27	13.26	33.132	24.894	306.2	.154	6.00	100.7							50
1	52	13.27	13.26	33.134	24.896	306.1	.159	5.99	100.5	4.4	.40	.6	.11	.30	.35	52
1	62	12.87	12.86	33.270	25.080	288.8	.189	5.33	88.7	7.7	.65	5.1	.05	.08	.17	62
1	72	12.03	12.02	33.337	25.294	268.6	.216	4.89	80.0	10.0	.87	9.0	.03	.05	.16	72
	75 ISL	11.85	11.84	33.370	25.353	263.1	.225	4.75	77.4							76
1	87	11.43	11.42	33.472	25.510	248.3	.255	4.35	70.3	13.9	1.10	12.8	.02	.03	.10	87
	100 ISL	11.04	11.03	33.504	25.605	239.6	.287	4.21	67.5							101
1	101	11.00	10.99	33.506	25.615	238.7	.291	4.20	67.3	15.6	1.23	14.6	.01	.02	.09	102
1	122	9.97	9.95	33.659	25.913	210.6	.338	3.59	56.3	21.7	1.56	20.4	.00	.01	.09	123
	125 ISL	9.89	9.87	33.676	25.940	208.1	.343	3.53	55.3							126
1	147	9.40	9.38	33.808	26.124	191.0	.388	3.15	48.8	27.2	1.80	23.8	.01	.00	.05	148
	150 ISL	9.35	9.33	33.824	26.145	189.1	.393	3.10	48.0							151
1	177	8.85	8.83	33.937	26.313	173.5	.442	2.77	42.4	33.2	1.97	26.2	.00			178
	200 ISL	8.42	8.40	33.976	26.410	164.6	.481	2.78	42.1							202
1	207	8.30	8.28	33.981	26.432	162.5	.492	2.78	42.1	37.2	2.02	27.5	.00			208
1	237	7.96	7.94	34.013	26.508	155.7	.539	2.68	40.2	39.6	2.12	28.8	.00			238
	250 ISL	7.80	7.77	34.020	26.538	153.0	.560	2.62	39.2							252
1	277	7.46	7.44	34.031	26.595	147.9	.601	2.45	36.4	45.8	2.22	30.7	.01			279
	300 ISL	7.20	7.17	34.043	26.642	143.7	.634	2.22	32.7							303
1	337	6.79	6.76	34.063	26.714	137.2	.686	1.79	26.2	56.4	2.51	34.6	.00			339
	400 ISL	6.07	6.04	34.092	26.831	126.5	.769	1.18	16.9							403
1	411	5.95	5.92	34.096	26.849	124.8	.783	1.09	15.6	70.9	2.80	38.8	.00			414
1	485	5.41	5.37	34.114	26.929	117.6	.872	.85	12.0	80.3	2.96	40.8	.00			488
	500 ISL	5.31	5.27	34.125	26.951	115.7	.890	.79	11.1							504
1	559	4.95	4.91	34.191	27.044	107.0	.956	.52	7.3	92.7	3.14	42.8	.00			563

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 67 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
36 27.2 N	122 46.4 W	01/21/84	0159 GMT	2973 M	340	06 KT	020 02 06	2	1024.0 MB	13.0 C	11.0 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	13.17	13.17	32.896	24.730	320.5	.000	6.25	104.5							0
1	1	13.17	13.17	32.896	24.730	320.5	.003	6.25	104.5	5.6	.36	.2	.05	.81	.23	1
	10 ISL	13.13	13.13	32.964	24.791	315.0	.032	6.29	105.0							10
1	11	13.13	13.13	32.970	24.795	314.5	.035	6.29	105.1	5.1	.36	.2	.05	.82	.28	11
	20 ISL	13.17	13.17	33.019	24.827	311.8	.063	6.31	105.6							20
1	26	13.20	13.20	33.045	24.840	310.7	.081	6.33	106.0	4.7	.36	.1	.06	.87	.35	26
	30 ISL	13.21	13.21	33.061	24.850	309.8	.094	6.28	105.2							30
1	41	13.23	13.23	33.094	24.872	308.0	.128	6.15	103.0	4.5	.35	.1	.06	.71	.29	41
	50 ISL	13.24	13.23	33.105	24.880	307.5	.156	6.13	102.7							50
1	56	13.24	13.23	33.115	24.888	307.0	.174	6.11	102.4	4.3	.38	.1	.08	.55	.27	56
1	67	13.19	13.18	33.150	24.926	303.7	.207	5.86	98.1	5.1	.48	1.5	.16	.27	.31	67
	75 ISL	12.53	12.52	33.265	25.143	283.2	.231	5.21	86.2							76
1	76	12.47	12.46	33.274	25.162	281.3	.233	5.16	85.2	8.4	.76	6.6	.04	.08	.19	76
1	91	11.07	11.06	33.384	25.507	248.7	.273	4.55	73.0	12.8	1.11	12.8	.02	.06	.10	91
	100 ISL	10.56	10.54	33.474	25.668	233.5	.295	4.23	67.1							101
1	105	10.33	10.32	33.526	25.747	226.1	.308	4.07	64.3	17.7	1.37	17.2	.01	.02	.09	106
1	121	9.77	9.75	33.655	25.944	207.7	.343	3.74	58.4	22.3	1.58	20.5	.00	.01	.06	122
	125 ISL	9.68	9.67	33.677	25.974	204.8	.350	3.66	57.0							126
1	145	9.36	9.35	33.764	26.095	193.7	.390	3.28	50.8	27.0	1.79	23.8	.00	.00	.05	146
	150 ISL	9.31	9.29	33.777	26.115	191.9	.400	3.23	49.9							151
1	165	9.12	9.10	33.820	26.179	186.0	.428	3.11	47.9	29.3	1.88	24.9	.00	.00	.05	166
1	185	8.72	8.70	33.912	26.314	173.5	.464	2.94	44.9	32.8	1.99	26.2	.00			186
	200 ISL	8.51	8.49	33.953	26.379	167.6	.489	2.85	43.4							202
1	205	8.45	8.42	33.962	26.395	166.0	.497	2.83	43.0	35.3	2.06	27.5	.00			206
1	236	7.98	7.96	34.007	26.501	156.4	.547	2.63	39.5	40.3	2.17	29.0	.00			237
	250 ISL	7.80	7.77	34.022	26.539	153.0	.569	2.55	38.1							252
1	275	7.51	7.48	34.039	26.595	147.9	.607	2.39	35.5	45.9	2.31	31.0	.00			277
	300 ISL	7.21	7.18	34.050	26.646	143.4	.643	2.20	32.5							303
1	334	6.81	6.78	34.061	26.709	137.6	.691	1.90	27.8	54.9	2.54	34.4	.00			336
	400 ISL	6.11	6.08	34.097	26.829	126.7	.778	1.20	17.3							403
1	408	6.04	6.00	34.102	26.843	125.4	.789	1.12	16.1	69.8	2.95	38.5	.00			411
1	483	5.60	5.56	34.164	26.947	116.1	.879	.69	9.8	80.0	3.06	40.8	.00			486
	500 ISL	5.49	5.44	34.176	26.970	114.0	.899	.62	8.9							504
1	557	5.08	5.03	34.207	27.043	107.4	.962	.50	7.0	90.5	3.20	42.7	.00			561

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 67 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
36 07.2 N	123 29.1 W	01/21/84	0719 GMT	3540 M	230	07 KT		5	1023.7 MB	13.0 C	12.9 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	13.92	13.92	32.924	24.601	332.8	.000	5.98	101.5							0
1	1	13.92	13.92	32.924	24.601	332.8	.003	5.98	101.5	2.2	.35	.1	.00	.26	.09	1
	10 ISL	13.89	13.89	32.929	24.611	332.1	.033	6.06	102.8							10
1	11	13.89	13.89	32.930	24.612	332.0	.036	6.06	102.8	2.3	.35	.0	.00	.29	.07	11
	20 ISL	13.91	13.91	32.933	24.609	332.5	.066	6.03	102.3							20
1	26	13.93	13.92	32.934	24.607	332.9	.086	5.99	101.7	2.3	.35	.0	.00	.31	.08	26
	30 ISL	13.90	13.89	32.931	24.612	332.6	.100	5.99	101.7							30
1	41	13.81	13.81	32.927	24.626	331.5	.136	6.00	101.6	2.3	.35	.0	.00	.34	.08	41
	50 ISL	13.82	13.82	32.940	24.634	331.1	.166	6.01	101.9							50
1	57	13.83	13.83	32.951	24.641	330.6	.188	6.02	102.0	2.4	.35	.0	.00	.33	.08	57
1	66	13.88	13.87	32.987	24.659	329.0	.218	5.95	101.0	2.4	.35	.1	.01	.27	.07	66
	75 ISL	12.51	12.50	33.064	24.991	297.6	.247	5.53	91.3							76
1	77	12.22	12.21	33.084	25.063	290.8	.252	5.44	89.2	6.0	.61	4.9	.01	.09	.06	77
1	92	10.88	10.87	33.304	25.479	251.3	.292	4.75	75.8	11.9	1.02	12.0	.01	.04	.04	92
	100 ISL	10.41	10.40	33.403	25.638	236.4	.313	4.43	70.0							101
1	106	10.16	10.14	33.464	25.729	227.8	.328	4.23	66.5	17.2	1.28	16.6	.01	.02	.04	107
1	121	9.75	9.74	33.559	25.871	214.5	.361	3.95	61.6	20.8	1.48	19.4	.00	.01	.02	122
	125 ISL	9.66	9.65	33.584	25.905	211.3	.369	3.90	60.7							126
1	146	9.25	9.23	33.717	26.077	195.4	.412	3.66	56.5	24.8	1.63	22.0	.00	.00	.03	147
	150 ISL	9.21	9.20	33.731	26.094	193.9	.419	3.63	56.0							151
1	167	9.03	9.02	33.791	26.169	186.9	.452	3.52	54.1	27.3	1.72	23.2	.00	.00	.03	168
1	187	8.57	8.55	33.901	26.328	172.2	.487	3.45	52.5	30.7	1.78	24.6	.00			188
	200 ISL	8.40	8.38	33.940	26.385	166.9	.509	3.20	48.4							202
1	208	8.32	8.30	33.956	26.409	164.8	.522	3.02	45.7	35.2	1.97	27.0	.00			209
1	237	8.09	8.07	34.002	26.480	158.5	.569	2.75	41.4	39.3	2.09	28.4	.00			238
	250 ISL	7.95	7.93	34.022	26.517	155.2	.590	2.57	38.6							252
1	276	7.66	7.63	34.054	26.585	149.0	.630	2.23	33.3	45.9	2.28	31.1	.00			278
	300 ISL	7.45	7.42	34.070	26.628	145.2	.665	2.04	30.3							303
1	336	7.10	7.07	34.077	26.683	140.3	.716	1.81	26.7	53.3	2.52	33.9	.00			338
	400 ISL	6.13	6.10	34.061	26.799	129.6	.803	1.47	21.1							403
1	410	5.99	5.95	34.060	26.816	127.9	.816	1.41	20.2	67.9	2.73	38.1	.00			413
1	485	5.53	5.49	34.127	26.926	118.1	.907	.85	12.1	79.8	2.97	40.6	.00			488
	500 ISL	5.44	5.40	34.142	26.949	116.0	.925	.76	10.8							504
1	558	5.13	5.08	34.205	27.036	108.1	.990	.50	7.0	91.3	3.16	42.1	.00			562

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 67 80

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
35 47.2 N	124 11.7 W	01/21/84	1314 GMT	4110 M	360	16 KT		5	1022.7 MB	13.7 C	12.7 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.48	14.48	33.027	24.563	336.4	.000	5.95	102.3							0
1	2	14.48	14.48	33.027	24.563	336.4	.007	5.95	102.3	2.1	.30	.0	.01	.17	.07	2
	10 ISL	14.47	14.47	33.026	24.564	336.6	.034	5.98	102.7							10
1	12	14.47	14.47	33.026	24.564	336.7	.040	5.98	102.8	2.1	.32	.0	.00	.13	.10	12
	20 ISL	14.47	14.47	33.024	24.563	337.0	.067	5.98	102.8							20
	30 ISL	14.47	14.47	33.023	24.563	337.3	.101	5.99	102.9							30
1	33	14.47	14.46	33.022	24.563	337.4	.111	5.99	102.9	2.1	.32	.0	.00	.15	.07	33
	50 ISL	14.34	14.33	32.996	24.570	337.2	.169	5.93	101.6							50
1	53	14.32	14.31	32.991	24.571	337.1	.178	5.92	101.4	2.1	.32	.0	.00	.19	.10	53
1	69	14.27	14.26	32.983	24.576	337.1	.232	5.92	101.3	2.1	.31	.0	.00	.21	.09	69
	75 ISL	14.21	14.20	32.974	24.581	336.9	.253	5.91	100.9							76
1	78	14.18	14.17	32.968	24.582	336.8	.262	5.90	100.7	2.1	.32	.0	.00	.25	.11	78
1	88	14.01	14.00	32.961	24.613	334.1	.295	5.87	99.9	2.4	.35	.3	.02	.18	.14	88
	100 ISL	12.90	12.88	33.182	25.008	296.6	.334	5.69	94.7							101
1	104	12.53	12.52	33.254	25.135	286.6	.344	5.62	92.9	4.3	.46	2.8	.02	.08	.09	104
1	118	11.77	11.76	33.303	25.317	267.5	.386	5.37	87.4	6.2	.61	5.3	.01	.05	.06	119
	125 ISL	11.44	11.43	33.355	25.419	258.0	.403	5.23	84.5							126
1	142	10.61	10.59	33.513	25.690	232.3	.445	4.85	77.0	11.3	.91	11.4	.00	.02	.03	143
	150 ISL	10.26	10.25	33.569	25.793	222.6	.463	4.72	74.5							151
1	162	9.77	9.75	33.649	25.939	208.9	.489	4.53	70.7	16.6	1.17	15.8	.00	.01	.02	163
1	183	9.10	9.08	33.767	26.141	190.0	.531	4.11	63.2	22.5	1.45	20.1	.00	.01	.01	184
	200 ISL	8.81	8.78	33.855	26.256	179.3	.562	3.91	59.8							202
1	209	8.70	8.67	33.894	26.303	174.9	.578	3.79	57.8	27.6	1.63	22.9	.00			210
1	234	8.34	8.32	33.956	26.407	165.5	.620	3.08	46.6	34.2	1.90	26.6	.00			235
	250 ISL	8.08	8.06	33.988	26.470	159.6	.646	2.85	42.8							252
1	265	7.86	7.83	34.010	26.522	154.9	.669	2.71	40.6	40.4	2.07	29.0	.00			266
1	297	7.42	7.40	34.035	26.604	147.4	.719	2.38	35.3	46.7	2.22	31.1	.00			299
	300 ISL	7.38	7.36	34.036	26.611	146.8	.723	2.35	34.9							303
1	347	6.74	6.71	34.047	26.708	137.9	.790	1.89	27.6	55.4	2.46	34.2	.00			349
	400 ISL	6.25	6.22	34.067	26.788	130.7	.861	1.45	21.0							403
1	410	6.17	6.13	34.071	26.802	129.4	.874	1.38	19.9	65.5	2.68	37.3	.00			413
1	484	5.47	5.43	34.099	26.911	119.3	.966	.97	13.7	77.8	2.93	40.2	.00			487
	500 ISL	5.37	5.33	34.113	26.934	117.3	.985	.88	12.4							504
1	561	5.19	5.14	34.187	27.014	110.3	1.054	.54	7.6	87.3	3.10	42.0	.00			565

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 67 90

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
35 27.2 N	124 54.2 W	01/21/84	1919 GMT	4493 M	340	18 KT	330 04 05	1	1026.1 MB	13.9 C	12.4 C	4/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.10	14.10	32.870	24.521	340.4	.000	5.95	101.4							0
1	1	14.10	14.10	32.870	24.521	340.4	.003	5.95	101.4	1.9	.31	.0	.00	.19	.09	1
	10 ISL	14.09	14.08	32.870	24.525	340.4	.034	5.97	101.6							10
1	12	14.08	14.08	32.869	24.525	340.4	.041	5.97	101.7	2.1	.34	.0	.00	.19	.08	12
	20 ISL	14.08	14.08	32.870	24.527	340.4	.068	5.97	101.6							20
	30 ISL	14.07	14.07	32.871	24.529	340.5	.102	5.96	101.5							30
1	32	14.07	14.07	32.872	24.530	340.5	.108	5.96	101.5	2.1	.34	.0	.00	.20	.09	32
	50 ISL	14.08	14.07	32.875	24.531	340.8	.170	5.96	101.5							50
1	52	14.08	14.07	32.875	24.531	340.9	.176	5.96	101.5	2.1	.34	.0	.00	.23	.08	52
1	67	13.96	13.95	32.896	24.572	337.3	.227	5.85	99.4	2.6	.35	.4	.04	.20	.13	67
	75 ISL	13.50	13.49	32.996	24.744	321.2	.254	5.56	93.6							76
1	77	13.35	13.34	33.019	24.792	316.6	.260	5.50	92.3	4.3	.51	3.3	.02	.10	.08	77
1	87	11.69	11.68	33.141	25.205	277.4	.289	5.37	87.1	6.5	.67	5.7	.01	.06	.06	87
	100 ISL	10.85	10.83	33.285	25.470	252.4	.325	4.77	76.1							101
1	102	10.81	10.80	33.300	25.488	250.6	.328	4.70	74.9	12.0	1.01	12.2	.01	.03	.06	102
1	116	10.36	10.35	33.475	25.703	230.5	.364	4.55	71.9	14.5	1.12	14.0	.01	.02	.02	117
	125 ISL	10.04	10.03	33.545	25.812	220.3	.384	4.24	66.5							126
1	142	9.46	9.44	33.664	26.002	202.5	.420	3.52	54.6	24.3	1.64	22.0	.00	.00	.02	143
	150 ISL	9.31	9.30	33.723	26.071	196.0	.435	3.30	51.0							151
1	161	9.14	9.12	33.800	26.159	187.8	.457	3.07	47.3	29.0	1.83	24.8	.00	.00	.02	162
1	180	8.76	8.74	33.877	26.281	176.6	.491	2.95	45.1	32.1	1.91	26.3	.00	.00	.02	181
	200 ISL	8.38	8.36	33.931	26.381	167.3	.526	2.93	44.4							202
1	206	8.27	8.25	33.943	26.407	164.9	.535	2.92	44.1	34.7	2.01	27.4	.00			207
1	231	7.75	7.73	33.984	26.516	154.8	.575	3.14	46.9	39.1	1.99	27.6	.00			232
	250 ISL	7.57	7.55	34.013	26.565	150.4	.605	2.80	41.7							252
1	260	7.50	7.47	34.023	26.584	148.7	.620	2.57	38.2	44.6	2.19	30.0	.00			262
1	295	7.06	7.04	34.024	26.646	143.2	.671	2.30	33.8	50.2	2.31	32.2	.00			297
	300 ISL	6.99	6.96	34.022	26.654	142.4	.678	2.30	33.7							303
1	345	6.34	6.31	34.011	26.731	135.3	.740	2.25	32.5	58.4	2.44	34.1	.00			347
	400 ISL	5.91	5.88	34.037	26.807	128.5	.813	1.58	22.6							403
1	410	5.86	5.82	34.045	26.820	127.4	.826	1.43	20.4	69.2	2.77	37.9	.00			413
1	484	5.48	5.44	34.111	26.919	118.6	.916	.89	12.6	79.6	3.00	40.5	.00			487
	500 ISL	5.42	5.37	34.129	26.941	116.7	.935	.80	11.3							504
1	565	5.22	5.17	34.211	27.030	108.8	1.009	.52	7.3	89.2	3.17	42.0	.00			569

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 67 100

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
35 07.2 N	125 36.4 W	01/25/84	1043 GMT		360	25 KT	030 20	2	1029.1 MB	14.0 C	12.8 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	13.94	13.94	32.900	24.578	335.0	.000	6.01	102.1							0
1	2	13.94	13.94	32.900	24.578	335.0	.007	6.01	102.1	3.2	.36	.1	.00	.18	.10	2
1	10	13.96	13.96	32.900	24.574	335.6	.033	6.04	102.6	3.1	.37	.0	.00	.18	.09	10
	20 ISL	13.96	13.96	32.899	24.573	336.0	.067	6.03	102.5							20
1	27	13.97	13.96	32.899	24.573	336.2	.090	6.03	102.5	3.1	.37	.0	.00	.18	.09	27
	30 ISL	13.97	13.96	32.899	24.572	336.3	.101	6.02	102.3							30
1	41	13.98	13.98	32.903	24.573	336.6	.137	5.99	101.8	3.0	.38	.0	.00	.17	.11	41
	50 ISL	13.99	13.98	32.908	24.576	336.6	.168	5.98	101.7							50
1	56	13.99	13.98	32.912	24.578	336.5	.187	5.98	101.7	2.9	.38	.0	.00	.23	.09	56
1	71	14.02	14.01	32.963	24.611	333.8	.237	5.87	99.9	3.4	.40	.4	.05	.21	.11	71
	75 ISL	13.62	13.61	33.018	24.736	322.0	.252	5.62	96.9							76
1	81	12.92	12.91	33.105	24.944	302.2	.269	5.25	87.4	6.9	.72	5.8	.01	.09	.06	81
1	96	10.61	10.59	33.354	25.566	243.1	.310	4.46	70.8	14.6	1.20	14.4	.02	.04	.07	96
	100 ISL	10.29	10.28	33.393	25.650	235.1	.320	4.42	69.6							101
1	115	9.80	9.79	33.482	25.802	220.9	.356	4.34	67.7	17.8	1.35	17.1	.01	.01	.03	116
	125 ISL	9.61	9.60	33.565	25.899	211.9	.376	3.98	61.9							126
1	135	9.47	9.46	33.653	25.990	203.4	.398	3.56	55.2	24.3	1.70	22.3	.01	.00	.03	136
	150 ISL	9.25	9.23	33.739	26.095	193.7	.427	3.25	50.2							151
1	155	9.17	9.15	33.765	26.128	190.7	.437	3.18	49.0	28.1	1.85	25.1	.00	.00	.03	156
1	175	8.83	8.81	33.857	26.252	179.2	.474	2.96	45.3	31.5	1.97	26.9	.00	.00	.02	176
1	195	8.56	8.54	33.910	26.337	171.4	.509	2.88	43.8	34.0	2.06	27.8	.01			196
	200 ISL	8.50	8.47	33.927	26.360	169.3	.517	2.85	43.3							202
1	215	8.32	8.29	33.971	26.422	163.7	.542	2.75	41.6	36.9	2.10	28.5	.00			216
1	250	7.91	7.88	34.015	26.518	155.0	.597	2.65	39.7	41.2	2.18	29.7	.01			251
1	299	7.21	7.18	34.043	26.640	143.9	.671	2.16	31.9	50.0	2.41	33.0	.00			301
	300 ISL	7.20	7.17	34.043	26.642	143.7	.673	2.15	31.8							303
1	354	6.48	6.45	34.049	26.744	134.4	.747	1.74	25.2	60.4	2.60	35.9	.00			356
	400 ISL	6.06	6.02	34.083	26.826	126.9	.808	1.27	18.3							403
1	438	5.78	5.74	34.118	26.888	121.3	.855	.92	13.1	74.9	2.97	39.9	.00			441
	500 ISL	5.36	5.31	34.156	26.970	113.9	.928	.67	9.5							504
1	521	5.23	5.19	34.170	26.995	111.6	.952	.62	8.7	87.7	3.11	42.0	.00			525
	600 ISL	4.95	4.90	34.250	27.092	103.1	1.036	.37	5.2							605
1	605	4.94	4.89	34.255	27.097	102.6	1.041	.36	5.0	98.1	3.20	43.6	.00			609

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 70 51

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
36 10.9 N	121 43.6 W	01/20/84	0940 GMT	221 M	110	05 KT	320 03 09	1	1023.4 MB	12.9 C	10.0 C	2/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	13.51	13.51	33.168	24.873	306.9	.000	6.10	102.9							0
1	2	13.51	13.51	33.168	24.873	306.9	.006	6.10	102.9	4.1	.35	.2	.00	.41	.28	2
	10 ISL	13.51	13.51	33.166	24.871	307.3	.031	6.10	102.9							10
1	12	13.51	13.51	33.166	24.871	307.4	.037	6.10	102.9	4.0	.35	.2	.00	.39	.28	12
	20 ISL	13.32	13.32	33.204	24.939	301.1	.061	5.84	98.0							20
1	27	13.05	13.05	33.250	25.028	292.8	.082	5.53	92.4	6.8	.54	3.4	.15	.31	.23	27
	30 ISL	12.90	12.89	33.269	25.074	288.5	.091	5.40	90.0							30
1	42	12.26	12.26	33.343	25.255	271.6	.124	4.94	81.2	9.9	.79	8.0	.06	.13	.15	42
	50 ISL	11.86	11.86	33.386	25.364	261.4	.146	4.71	76.8							50
1	67	11.17	11.16	33.474	25.559	243.2	.188	4.32	69.5	14.5	1.11	13.5	.00	.04	.09	67
	75 ISL	10.91	10.90	33.527	25.647	234.9	.208	4.12	65.9							76
1	87	10.60	10.59	33.599	25.757	224.7	.234	3.87	61.5	18.9	1.34	17.2	.00	.02	.08	87
	100 ISL	10.32	10.31	33.666	25.857	215.5	.264	3.63	57.4							101
1	121	9.93	9.92	33.751	25.990	203.2	.308	3.32	52.0	26.7	1.64	21.4	.01	.02	.07	122
	125 ISL	9.85	9.84	33.765	26.015	200.9	.316	3.27	51.2							126
	150 ISL	9.30	9.29	33.849	26.171	186.6	.364	2.99	46.2							151
1	156	9.17	9.16	33.865	26.205	183.4	.376	2.93	45.2	36.2	1.98	27.1	.00	.01	.06	157
1	196	8.64	8.62	33.934	26.343	170.9	.446	2.72	41.5	36.3	2.03	27.2	.00	.00	.07	197
	200 ISL	8.60	8.58	33.940	26.354	169.9	.453									201

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 70 53

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
36 06.9 N	121 52.1 W	01/20/84	0641 GMT	814 M	340	24 KT			1023.0 MB	12.1 C	10.8 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	13.74	13.74	33.231	24.875	306.7	.000	6.03	102.2							0
1	2	13.74	13.74	33.231	24.875	306.7	.006	6.03	102.2	3.7	.32	.1	.00	.59	.26	2
	10 ISL	13.73	13.73	33.232	24.876	306.8	.031	6.05	102.6							10
1	12	13.73	13.73	33.232	24.877	306.8	.037	6.06	102.7	3.7	.35	.1	.02	.55	.22	12
	20 ISL	13.74	13.74	33.231	24.875	307.2	.061	6.11	103.6							20
1	26	13.75	13.74	33.231	24.874	307.5	.079	6.14	104.1	3.9	.35	.1	.01	.61	.21	26
	30 ISL	13.75	13.74	33.231	24.874	307.6	.092	6.11	103.6							30
1	42	13.75	13.75	33.232	24.874	308.0	.128	6.02	102.1	3.9	.36	.2	.02	.53	.28	42
	50 ISL	13.16	13.16	33.338	25.075	289.0	.153	5.34	89.5							50
1	56	12.70	12.69	33.419	25.229	274.4	.169	4.85	80.5	8.6	.76	7.9	.01	.07	.13	56
1	71	12.09	12.09	33.481	25.394	259.1	.209	4.50	73.8	11.2	.95	10.9	.01	.07	.10	71
	75 ISL	11.97	11.96	33.507	25.438	255.1	.220	4.39	71.7							76
1	81	11.79	11.78	33.533	25.491	250.1	.234	4.26	69.4	13.0	1.11	12.9	.01	.05	.10	81
1	96	10.96	10.95	33.510	25.624	237.7	.271	4.20	67.2	14.5	1.20	15.0	.00	.03	.09	96
	100 ISL	10.71	10.70	33.522	25.678	232.6	.281	4.16	66.3							101
1	115	9.93	9.92	33.602	25.875	214.1	.315	3.97	62.2	19.3	1.41	18.9	.00	.01	.06	116
	125 ISL	9.54	9.53	33.671	25.993	202.9	.336	3.78	58.7							126
1	136	9.21	9.19	33.758	26.115	191.5	.358	3.53	54.4	25.2	1.67	23.2	.00	.00	.04	137
	150 ISL	9.06	9.04	33.851	26.211	182.7	.383	3.23	49.6							151
1	155	9.02	9.01	33.881	26.241	179.9	.393	3.12	48.0	29.0	1.83	25.5	.00	.00	.03	156
1	176	8.59	8.57	33.975	26.383	166.8	.429	2.83	43.1	34.1	1.98	27.5	.00	.00	.02	177
1	196	8.49	8.47	33.999	26.418	163.8	.462	2.67	40.6	36.1	2.07	28.2	.00			197
	200 ISL	8.45	8.43	34.005	26.428	162.8	.468	2.65	40.2							202
1	217	8.22	8.20	34.022	26.477	158.5	.495	2.56	38.7	39.1	2.14	29.3	.00			218
1	250	7.47	7.45	34.034	26.595	147.5	.547	2.40	35.6	45.8	2.28	31.8	.00			252
1	299	7.13	7.10	34.080	26.680	140.0	.617	1.77	26.1	55.0	2.53	33.3	.00			301
	300 ISL	7.12	7.09	34.081	26.682	139.9	.618	1.76	26.0							303
1	355	6.62	6.58	34.106	26.771	131.9	.692	1.39	20.2	63.3	2.73	35.1	.01			357
	400 ISL	6.28	6.24	34.129	26.833	126.4	.751	1.11	16.0							403
1	439	6.03	5.99	34.151	26.883	122.0	.799	.89	12.8	75.0	2.99	38.5	.01			442
	500 ISL	5.70	5.66	34.194	26.959	115.4	.872	.63	8.9							504
1	522	5.58	5.53	34.211	26.987	112.9	.897	.55	7.8							526
	600 ISL	5.07	5.02	34.278	27.101	102.5	.981	.36	5.1							605
1	607	5.02	4.97	34.285	27.112	101.4	.989	.35	4.9	98.7	3.25	41.9	.00			612

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 70 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
35 52.9 N	122 21.9 W	01/20/84	0103 GMT	3068 M	340	19 KT	330 04 04	1	1024.0 MB	13.0 C	10.5 C	2/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	13.74	13.74	33.006	24.701	323.3	.000	6.06	102.6							0
1	2	13.74	13.74	33.006	24.701	323.3	.006	6.06	102.6	3.4	.35	.1	.01	.40	.09	2
	10 ISL	13.73	13.73	33.005	24.702	323.4	.032	6.16	104.3							10
1	11	13.73	13.73	33.005	24.702	323.5	.035	6.17	104.4	3.1	.39	.1	.01	.50	.10	11
	20 ISL	13.73	13.73	33.005	24.702	323.7	.065	6.15	104.1							20
	30 ISL	13.74	13.73	33.006	24.702	324.0	.097	6.13	103.8							30
1	32	13.74	13.73	33.006	24.702	324.0	.103	6.13	103.7	3.4	.40	.1	.01	.43	.15	32
	50 ISL	13.41	13.40	33.041	24.796	315.6	.161	6.10	102.6							50
1	51	13.40	13.39	33.042	24.800	315.2	.164	6.10	102.5	4.2	.39	.1	.02	.80	.24	51
1	67	11.94	11.93	33.155	25.169	280.3	.211	5.48	89.4	5.9	.61	4.5	.01	.09	.08	67
	75 ISL	11.42	11.41	33.280	25.363	262.1	.233	5.07	81.9							76
1	76	11.39	11.38	33.291	25.377	260.7	.235	5.04	81.3	8.8	.84	8.7	.01	.06	.06	76
1	86	10.90	10.89	33.427	25.571	242.4	.260	4.50	71.9	13.4	1.13	13.3	.00	.03	.04	86
	100 ISL	10.17	10.16	33.461	25.725	228.1	.294	4.29	67.4							101
1	101	10.15	10.13	33.462	25.729	227.6	.295	4.28	67.3	16.9	1.33	16.4	.00	.02	.04	101
1	114	9.67	9.66	33.620	25.931	208.6	.326	4.27	66.5	18.9	1.35	17.7	.00	.01	.02	115
	125 ISL	9.58	9.56	33.706	26.015	200.9	.347	3.90	60.6							126
1	140	9.50	9.49	33.795	26.096	193.5	.377	3.30	51.2	25.6	1.71	23.2	.00	.00	.02	141
	150 ISL	9.29	9.28	33.837	26.164	187.2	.396	3.18	49.2							151
1	160	9.06	9.04	33.872	26.228	181.3	.415	3.12	48.0	29.0	1.85	25.0	.00	.00	.02	161
1	180	8.81	8.79	33.924	26.309	173.9	.450	2.93	44.8	31.7	1.95	26.3	.00	.00	.01	181
	200 ISL	8.61	8.59	33.954	26.365	168.9	.484	2.84	43.3							202
1	205	8.55	8.53	33.961	26.378	167.7	.492	2.83	43.1	34.0	2.02	27.2	.00			206
1	230	8.10	8.08	34.006	26.481	158.2	.533	2.71	40.8	38.5	2.10	28.8	.00			231
	250 ISL	7.81	7.79	34.023	26.538	153.1	.564	2.59	38.7							252
1	257	7.71	7.69	34.027	26.556	151.4	.576	2.53	37.8	42.8	2.20	30.2	.00			259
1	294	7.14	7.11	34.046	26.652	142.6	.630	2.13	31.4	50.3	2.41	32.8	.00			296
	300 ISL	7.06	7.04	34.049	26.665	141.4	.638	2.07	30.4							303
1	344	6.55	6.52	34.074	26.755	133.3	.698	1.59	23.1	60.8	2.64	36.1	.00			346
	400 ISL	6.05	6.01	34.117	26.853	124.4	.771	1.04	15.0							403
1	413	5.94	5.91	34.125	26.873	122.5	.787	.94	13.5	72.6	2.93	39.3	.00			416
1	484	5.30	5.26	34.138	26.961	114.4	.870	.72	10.2	84.1	3.09	41.5	.00			487
	500 ISL	5.20	5.15	34.148	26.982	112.6	.889	.67	9.4							504
1	564	4.91	4.87	34.210	27.064	105.2	.958	.47	6.6	95.	3.22	42.6	.00			568

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 70 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
35 32.9 N	123 04.4 W	01/19/84	1817 GMT	3730 M	350	10 KT	350 03 04	1	1026.8 MB	14.5 C	11.4 C	7/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.11	14.11	33.103	24.700	323.4	.000	5.93	101.2							0
1	1	14.11	14.11	33.103	24.700	323.4	.003	5.93	101.2	2.8	.27	.0	.00	.34	.06	1
	10 ISL	14.09	14.09	33.103	24.704	323.3	.032	6.04	103.1							10
1	11	14.09	14.09	33.103	24.704	323.3	.035	6.05	103.2	2.8	.29	.0	.00	.32	.09	11
	20 ISL	14.09	14.09	33.103	24.705	323.5	.065	6.01	102.6							20
1	26	14.09	14.08	33.103	24.705	323.6	.084	5.99	102.2	2.8	.29	.0	.00	.32	.09	26
	30 ISL	14.07	14.07	33.103	24.708	323.4	.097	5.98	102.0							30
1	41	14.05	14.04	33.104	24.715	323.1	.132	5.96	101.6	2.8	.29	.0	.00	.32	.09	41
	50 ISL	14.05	14.05	33.105	24.714	323.5	.162	5.94	101.3							50
1	56	14.06	14.05	33.105	24.713	323.7	.180	5.93	101.1	2.7	.28	.0	.01	.32	.10	56
1	66	13.08	13.07	33.169	24.961	300.2	.211	5.55	92.7	4.2	.43	2.6	.03	.11	.12	66
1	75	12.61	12.60	33.282	25.141	283.4	.237	5.35	88.6	5.6	.53	4.2	.03	.08	.08	75
1	91	12.09	12.08	33.356	25.298	268.7	.281	5.16	84.5	6.8	.61	6.1	.01	.05	.07	91
	100 ISL	11.72	11.71	33.396	25.398	259.3	.306	4.93	80.2							101
1	104	11.58	11.57	33.410	25.436	255.8	.315	4.84	78.5	9.6	.79	9.2		.03	.06	104
1	119	10.99	10.98	33.476	25.593	241.1	.355	4.52	72.4	12.5	.98	12.7	.00	.02	.05	120
	125 ISL	10.69	10.68	33.516	25.677	233.2	.368	4.37	69.5							126
1	144	9.75	9.73	33.664	25.954	207.1	.411	3.81	59.4	20.8	1.42	19.9	.00	.01	.03	145
	150 ISL	9.62	9.61	33.695	25.999	203.0	.422	3.66	57.0							151
1	163	9.40	9.38	33.762	26.088	194.7	.448	3.36	52.0	24.5	1.74	22.6		.00	.03	164
1	183	8.82	8.80	33.888	26.279	176.8	.485	3.06	46.8	29.9	1.68	24.5				184
	200 ISL	8.60	8.58	33.926	26.343	171.0	.515	3.07	46.7							202
1	203	8.58	8.56	33.929	26.349	170.5	.520	3.07	46.7	32.2	1.87	26.3				204
1	233	8.16	8.14	33.975	26.448	161.4	.569	3.53	53.2	33.3	1.78	25.3				234
	250 ISL	7.87	7.84	33.973	26.491	157.4	.597	3.63	54.4							252
1	271	7.52	7.50	33.971	26.539	153.1	.630	3.76	55.9	37.3	1.86	25.8				273
	300 ISL	7.28	7.25	34.006	26.601	147.6	.673	3.05	45.0							303
1	332	7.08	7.05	34.052	26.666	141.9	.719	2.04	30.0	51.7	2.34	33.2				334
	400 ISL	6.36	6.33	34.089	26.792	130.5	.812	1.25	18.2							403
1	406	6.29	6.26	34.091	26.802	129.5	.820	1.22	17.6	65.6	2.74	37.6				409
1	480	5.67	5.63	34.133	26.913	119.3	.912	.78	11.1	77.4	3.01	40.3				483
	500 ISL	5.50	5.46	34.143	26.943	116.7	.935	.70	9.9							504
1	555	5.02	4.98	34.167	27.017	109.7	.998	.57	8.0	90.2	3.15	42.4				559

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 70 80

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
35 12.9 N	123 46.7 W	01/19/84	1155 GMT	4110 M	010	12 KT		1	1025.7 MB	13.8 C	10.1 C	7/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.09	14.09	32.999	24.624	330.6	.000	5.93	101.1							0
1	1	14.09	14.09	32.999	24.624	330.6	.003	5.93	101.1	2.2	.28	.2	.00	.22	.09	1
1	10	14.09	14.09	33.002	24.626	330.7	.033	5.99	102.1	2.4	.28	.1	.00	.23	.08	10
	20 ISL	14.19	14.18	33.049	24.642	329.4	.066	5.98	102.2							20
1	26	14.25	14.24	33.078	24.652	328.6	.085	5.98	102.3	2.5	.28	.0	.00	.29	.08	26
	30 ISL	14.25	14.24	33.078	24.652	328.7	.099	5.96	102.0							30
1	42	14.24	14.24	33.077	24.653	329.0	.138	5.92	101.3	2.6	.28	.0	.01	.30	.07	42
	50 ISL	14.24	14.23	33.077	24.654	329.2	.165	5.92	101.3							50
1	57	14.24	14.23	33.076	24.653	329.4	.187	5.92	101.3	2.7	.27	.0	.00	.29	.07	57
1	66	14.22	14.21	33.084	24.664	328.7	.216	5.91	101.1	2.6	.26	.0	.00	.31	.07	66
	75 ISL	13.50	13.49	33.053	24.788	317.0	.246	5.69	95.8							76
1	76	13.44	13.43	33.053	24.800	315.8	.249	5.67	95.4	3.5	.39	1.9	.02	.13	.11	76
1	91	12.60	12.59	33.298	25.156	282.3	.293	5.68	94.0	3.9	.38	2.2	.00	.08	.07	91
	100 ISL	12.46	12.45	33.414	25.272	271.5	.319	5.65	93.3							101
1	106	12.41	12.39	33.461	25.320	267.1	.334	5.61	92.6	4.0	.35	2.3	.00	.04	.06	106
1	121	11.76	11.75	33.479	25.456	254.4	.376	5.36	87.3	6.0	.50	5.2	.01	.02	.05	122
	125 ISL	11.52	11.51	33.470	25.492	251.0	.385	5.25	85.1							126
1	146	10.16	10.14	33.468	25.733	228.2	.436	4.50	70.7	14.8	1.19	15.0	.01	.01	.03	147
	150 ISL	10.02	10.00	33.502	25.782	223.7	.444	4.36	68.3							151
1	168	9.57	9.55	33.687	26.002	202.9	.483	3.75	58.3	22.0	1.46	21.0	.01	.00	.04	169
1	186	9.21	9.19	33.800	26.148	189.4	.518	3.44	53.1	25.6	1.64	23.5				187
	200 ISL	8.84	8.82	33.867	26.259	179.0	.544	3.24	49.6							202
1	206	8.69	8.67	33.891	26.302	175.0	.554	3.18	48.5	30.5	1.81	26.0	.01			207
1	237	8.22	8.19	33.998	26.458	160.6	.606	3.15	47.6	35.2	1.89	27.0				238
	250 ISL	7.99	7.97	34.016	26.507	156.1	.627	3.02	45.4							252
1	276	7.56	7.53	34.031	26.581	149.3	.667	2.68	39.9	43.8	2.09	30.0	.00			278
	300 ISL	7.24	7.21	34.040	26.633	144.6	.702	2.41	35.5							303
1	336	6.86	6.83	34.053	26.697	138.8	.753	1.99	29.1	54.2	2.40	34.0				338
	400 ISL	6.45	6.41	34.113	26.799	129.8	.839	1.23	17.8							403
1	409	6.40	6.36	34.123	26.813	128.6	.851	1.13	16.4	66.1	2.80	37.7				412
1	483	5.79	5.74	34.162	26.923	118.6	.942	.70	10.0	77.5	2.96	40.2				486
	500 ISL	5.68	5.64	34.174	26.945	116.7	.962	.63	8.9							504
1	555	5.44	5.40	34.214	27.006	111.3	1.025	.47	6.7	85.8	3.11	41.6				559

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 70 90

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 52.9 N	124 28.8 W	01/19/84	0532 GMT	4302 M	300	05 KT			1025.7 MB	13.5 C	10.0 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.55	15.55	33.298	24.540	338.6	.000	5.75	101.2							0
1	2	15.55	15.55	33.298	24.540	338.6	.007	5.75	101.2	2.3	.25	.0	.02	.13	.04	2
	10 ISL	15.54	15.54	33.298	24.543	338.6	.034	5.85	102.9							10
1	11	15.54	15.54	33.298	24.543	338.6	.037	5.86	103.1	2.5	.26	.0	.01	.16	.06	11
	20 ISL	15.55	15.54	33.298	24.542	339.0	.068	5.85	102.8							20
	30 ISL	15.56	15.55	33.298	24.540	339.6	.102	5.83	102.6							30
1	31	15.56	15.55	33.298	24.540	339.6	.105	5.83	102.6	2.5	.28	.0	.01	.15	.06	31
1	48	15.57	15.56	33.300	24.540	340.1	.162	5.75	101.2	2.5	.26	.0	.01	.16	.06	48
	50 ISL	15.57	15.56	33.301	24.541	340.1	.170	5.75	101.2							50
1	63	15.59	15.58	33.308	24.542	340.3	.213	5.76	101.4	2.5	.25	.0	.00	.16	.06	63
1	72	15.62	15.61	33.320	24.543	340.5	.243	5.73	100.9	2.3	.24	.0	.00	.16	.06	72
	75 ISL	15.53	15.52	33.330	24.571	339.5	.255	5.73	100.7							76
1	81	15.38	15.37	33.338	24.611	334.3	.274	5.72	100.3	2.5	.25	.0	.02	.17	.09	81
1	94	13.15	13.13	33.244	25.007	296.6	.315	5.66	94.7	4.0	.41	1.8	.02	.14	.16	94
	100 ISL	12.74	12.73	33.324	25.149	283.2	.333	5.59	92.8							101
1	107	12.50	12.48	33.420	25.271	271.8	.351	5.48	90.6	5.1	.48	3.3	.00	.08	.07	107
	125 ISL	10.99	10.97	33.433	25.561	244.0	.399	5.00	80.1							126
1	130	10.57	10.55	33.437	25.638	237.0	.412	4.82	76.5	11.9	.96	11.8	.00	.02	.03	131
1	148	9.98	9.96	33.616	25.878	214.5	.452	4.11	64.4	18.1	1.36	17.8	.00	.01	.02	149
	150 ISL	9.93	9.91	33.628	25.896	212.8	.456	4.08	63.8							151
1	166	9.51	9.50	33.725	26.040	199.3	.489	3.86	59.9	21.6	1.55	20.4	.00	.00	.02	167
1	191	8.95	8.93	33.858	26.236	181.1	.537	3.54	54.3	26.8	1.75	23.5	.01			192
	200 ISL	8.79	8.77	33.890	26.286	176.5	.553	3.45	52.8							202
1	215	8.56	8.54	33.928	26.352	170.4	.578	3.36	51.1	31.0	1.89	25.1	.00			216
1	246	8.18	8.15	33.980	26.450	161.5	.629	3.38	51.0	33.7	1.93	25.8	.00			247
	250 ISL	8.09	8.07	33.986	26.468	159.8	.636	3.33	50.2							252
1	266	7.77	7.75	34.009	26.533	153.8	.661	3.09	46.2	38.9	2.11	27.9	.00			267
	300 ISL	7.20	7.17	34.052	26.649	143.1	.712	2.28	33.6							302
1	301	7.18	7.15	34.053	26.652	142.7	.714	2.25	33.2	48.3	2.42	32.2	.00			303
1	360	6.58	6.55	34.074	26.751	133.9	.795	1.61	23.4	58.5	2.71	36.0	.00			362
	400 ISL	6.17	6.14	34.085	26.813	128.3	.847	1.35	19.5							403
1	431	5.88	5.84	34.090	26.853	124.6	.887	1.20	17.2	69.3	2.96	38.9	.00			434
	500 ISL	5.40	5.36	34.089	26.911	119.4	.971	.84	11.9							504
1	511	5.35	5.30	34.089	26.918	118.9	.983	.79	11.2	81.1	3.17	41.4	.00			514

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 70 100

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 32.9 N	125 10.8 W	01/18/84	2314 GMT	4398 M	320	10 KT	350 03 07	1	1025.7 MB	15.0 C	11.5 C	6/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.14	14.13	32.787	24.450	347.2	.000	6.00	102.2							0
1	2	14.14	14.13	32.787	24.450	347.2	.007	6.00	102.2	2.4	.31	.0	.01	.18	.03	2
	10 ISL	14.05	14.05	32.797	24.475	345.0	.035	6.00	102.1							10
1	12	14.04	14.04	32.799	24.479	344.7	.041	6.00	102.1	2.4	.34	.0	.00	.17	.08	12
	20 ISL	14.04	14.04	32.803	24.482	344.7	.069	6.02	102.3							20
	30 ISL	14.05	14.04	32.808	24.485	344.6	.104	6.03	102.6							30
1	32	14.05	14.04	32.809	24.486	344.6	.110	6.03	102.6	2.3	.35	.0	.00	.17	.08	32
	50 ISL	14.10	14.09	32.828	24.490	344.8	.173	5.98	101.8							50
1	52	14.11	14.10	32.829	24.490	344.8	.179	5.97	101.7	2.4	.35	.0	.00	.18	.09	52
1	67	14.14	14.13	32.925	24.558	338.7	.230	5.84	99.6	2.7	.41	.1	.10	.33	.15	67
	75 ISL	13.79	13.78	32.968	24.664	328.8	.257	5.67	96.0							76
1	77	13.69	13.68	32.979	24.692	326.2	.263	5.64	95.3	3.8	.50	1.8	.04	.10	.09	77
1	87	12.95	12.94	33.076	24.915	305.1	.294	5.63	93.8	4.6	.55	2.7	.01	.08	.06	87
	100 ISL	11.70	11.69	33.221	25.266	271.9	.333	5.22	84.8							101
1	102	11.56	11.55	33.237	25.304	268.3	.337	5.16	83.5	8.7	.84	7.8	.00	.03	.05	102
1	116	10.78	10.77	33.299	25.492	250.6	.376	4.68	74.5	12.6	1.16	12.9	.00	.04	.05	117
	125 ISL	10.49	10.48	33.393	25.617	239.0	.397	4.51	71.4							126
1	141	10.04	10.03	33.580	25.839	218.0	.434	4.26	66.9	17.7	1.39	17.0	.00	.01	.02	142
	150 ISL	9.78	9.76	33.633	25.926	210.0	.452	4.13	64.5							151
1	161	9.45	9.43	33.691	26.024	200.7	.475	3.90	60.4	22.2	1.61	20.4	.00	.00	.01	162
1	181	8.97	8.95	33.822	26.204	183.9	.514	3.09	47.4	29.7	1.97	25.8	.00	.00	.02	182
	200 ISL	8.62	8.60	33.891	26.313	173.9	.548	2.95	44.9							202
1	206	8.53	8.51	33.906	26.339	171.5	.558	2.90	44.1	34.1	2.10	27.5	.01			207
1	231	8.19	8.16	33.968	26.439	162.2	.599	2.79	42.1	37.6	2.19	28.6	.00			232
	250 ISL	7.92	7.90	33.995	26.500	156.7	.630	2.72	40.8							252
1	261	7.78	7.75	34.005	26.529	154.1	.646	2.68	40.1	41.9	2.27	29.7	.00			262
1	295	7.31	7.28	34.029	26.615	146.2	.698	2.45	36.2	47.8	2.42	31.8	.00			297
	300 ISL	7.25	7.22	34.031	26.626	145.2	.705	2.40	35.5							302
1	345	6.71	6.68	34.050	26.714	137.2	.769	1.86	27.1	57.0	2.66	34.9	.00			347
	400 ISL	6.30	6.27	34.078	26.791	130.5	.842	1.33	19.3							403
1	409	6.24	6.21	34.083	26.802	129.5	.855	1.26	18.2	66.1	2.91	37.8	.01			412
1	484	5.53	5.49	34.103	26.907	119.8	.947	.91	12.9	78.2	3.12	40.6	.01			487
	500 ISL	5.39	5.35	34.111	26.930	117.7	.967	.85	12.0							504
1	56~	4.90	4.86	34.150	27.018	109.5	1.038	.66	9.2	91.1	3.27	42.7	.00			567

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 73 50

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
35 38.6 N	121 15.3 W	01/17/84	0726 GMT	37 M	320	09 KT			1019.0 MB	11.2 C	8.9 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	12.95	12.95	33.270	25.063	288.8	.000	5.48	91.4							0
1	1	12.95	12.95	33.270	25.063	288.8	.003	5.48	91.4	7.3	.64	4.2		.34	.20	1
	10 ISL	12.97	12.97	33.271	25.061	289.2	.029	5.50	91.7							10
1	11	12.97	12.97	33.271	25.061	289.2	.032	5.50	91.8	7.4	.67	4.3		.33	.18	11
	20 ISL	12.95	12.94	33.281	25.073	288.3	.058	5.42	90.4							20
1	21	12.94	12.94	33.284	25.076	288.2	.060	5.41	90.2	7.6	.68	4.7		.32	.17	21
	30 ISL	12.87	12.86	33.312	25.113	284.8	.086	5.28	87.8							30
1	31	12.85	12.85	33.316	25.119	284.3	.089	5.26	87.6	8.4	.74	5.6		.24	.18	31

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 73 53

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
35 32.6 N	121 28.1 W	01/17/84	1039 GMT	704 M	070	09 KT	270 05 11	0	1019.3 MB	11.8 C	9.1 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.07	14.07	33.276	24.841	309.9	.000									0
1	7	14.07	14.07	33.276	24.841	310.1	.022	5.88	100.4	3.8	.39	.2	.00	.61	.25	7
	10 ISL	14.07	14.06	33.276	24.843	310.1	.031	5.90	100.7							10
	20 ISL	14.05	14.05	33.277	24.847	309.9	.062	5.98	101.9							20
1	22	14.05	14.04	33.277	24.847	309.9	.068	5.99	102.2	3.7	.39	.2	.00	.60	.22	22
	30 ISL	14.06	14.05	33.278	24.846	310.3	.093	6.07	103.6							30
1	37	14.07	14.07	33.278	24.844	310.7	.114	6.11	104.3	3.8	.39	.1	.02	.61	.25	37
	50 ISL	14.08	14.07	33.286	24.848	310.7	.155	5.98	102.1							50
1	52	14.08	14.08	33.287	24.849	310.7	.161	5.96	101.8	3.9	.40	.2	.07	.62	.29	52
1	63	13.66	13.65	33.379	25.007	295.9	.194	5.38	91.1	6.0	.60	3.7	.07	.19	.25	63
1	73	12.35	12.35	33.346	25.240	273.9	.222	4.98	82.0	8.6	.85	7.5	.00	.10	.17	73
	75 ISL	12.18	12.17	33.365	25.287	269.3	.229	4.87	80.0							76
1	88	11.54	11.53	33.510	25.520	247.5	.261	4.30	69.7	13.4	1.15	13.1	.00	.06	.09	88
	100 ISL	10.88	10.87	33.613	25.720	228.7	.291	3.88	62.1							101
1	102	10.76	10.74	33.632	25.756	225.2	.296	3.81	60.8	18.4	1.41	17.6	.00	.03	.13	103
1	117	10.19	10.18	33.752	25.947	207.3	.329	3.34	52.7	23.0	1.62	21.2	.00	.01	.07	118
	125 ISL	10.04	10.03	33.785	25.999	202.5	.344	3.22	50.6							126
1	143	9.75	9.73	33.828	26.082	195.0	.380	3.08	48.1	26.5	1.77	23.5	.00	.01	.07	144
	150 ISL	9.58	9.56	33.841	26.120	191.5	.393	3.04	47.3							151
1	163	9.23	9.22	33.867	26.197	184.3	.418	2.97	45.9	29.2	1.86	25.4	.00	.00	.05	164
1	184	8.75	8.73	33.938	26.329	172.1	.455	2.83	43.3	33.0	1.96	27.1	.00	.01	.04	185
	200 ISL	8.52	8.50	33.972	26.392	166.4	.482	2.79	42.5							202
1	202	8.49	8.47	33.975	26.398	165.8	.485	2.79	42.4	35.0	2.02	27.7	.02			203
1	232	7.89	7.87	34.015	26.520	154.5	.533	2.74	41.1	39.9	2.07	29.0				233
	250 ISL	7.68	7.65	34.037	26.569	150.1	.561	2.51	37.4							252
1	272	7.49	7.47	34.059	26.613	146.2	.594	2.17	32.2	47.7	2.31	31.9				274
	300 ISL	7.28	7.25	34.076	26.656	142.4	.634	1.93	28.5							303
1	332	7.03	7.00	34.091	26.704	138.3	.679	1.69	24.8	55.1	2.49	34.7				334
	400 ISL	6.17	6.13	34.134	26.852	124.6	.768	1.03	14.9							403
1	406	6.10	6.07	34.140	26.865	123.4	.776	.98	14.1	69.6	2.81	39.2				409
1	431	5.99	5.95	34.165	26.899	120.4	.806	.85	12.2	73.8	2.88	39.7				434
1	481	5.63	5.59	34.211	26.980	113.0	.864	.57	8.1	83.2	3.01	40.6				484
	500 ISL	5.50	5.46	34.226	27.007	110.6	.886	.54	7.6							504
1	554	5.18	5.14	34.256	27.070	104.9	.944	.44	6.2	91.4	3.09	42.5				558

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 73 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
35 18.6 N	121 57.7 W	01/17/84	1624 GMT	2222 M	350	12 KT	340 05 11	1	1019.6 MB	12.8 C	10.2 C	4/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	13.40	13.40	33.135	24.869	307.2	.000	6.04	101.6							0
1	1	13.40	13.40	33.135	24.869	307.2	.003	6.04	101.6	3.8	.39	.3		.60	.29	1
	10 ISL	13.39	13.39	33.134	24.871	307.3	.031	6.09	102.4							10
1	11	13.39	13.39	33.134	24.871	307.3	.034	6.09	102.4	3.8	.40	.3		.66	.27	11
	20 ISL	13.40	13.40	33.133	24.869	307.8	.061	6.10	102.5							20
1	26	13.41	13.41	33.133	24.867	308.2	.080	6.10	102.6	4.0	.40	.3		.60	.30	26
	30 ISL	13.41	13.41	33.133	24.866	308.3	.092	6.09	102.4							30
1	41	13.42	13.41	33.133	24.865	308.8	.126	6.06	102.0	3.8	.40	.4		.69	.26	41
	50 ISL	13.21	13.20	33.180	24.944	301.5	.154	5.72	95.8							50
1	56	12.96	12.96	33.216	25.020	294.3	.171	5.45	90.9	6.7	.65	4.5		.20	.20	56
1	67	12.14	12.13	33.270	25.221	275.4	.202	5.03	82.5	8.8	.85	7.9		.08	.15	67
	75 ISL	11.64	11.63	33.309	25.346	263.7	.224	4.83	78.3							76
1	77	11.55	11.54	33.318	25.369	261.6	.229	4.79	77.6	10.3	.99	10.4		.07	.13	77
1	91	10.89	10.88	33.409	25.559	243.7	.264	4.41	70.4	13.6	1.19	14.0		.04	.09	91
	100 ISL	10.51	10.50	33.452	25.659	234.4	.286	4.19	66.4							101
1	106	10.28	10.27	33.484	25.723	228.3	.301	4.04	63.7	17.7	1.41	17.7		.02	.09	107
1	121	9.82	9.80	33.611	25.901	211.7	.334	3.64	56.9	21.6	1.60	20.7		.00	.08	122
	125 ISL	9.73	9.71	33.637	25.936	208.4	.342	3.65	57.0							126
1	146	9.29	9.28	33.762	26.105	192.7	.384	3.83	59.2	23.2	1.57	21.1		.00	.03	147
	150 ISL	9.23	9.21	33.780	26.130	190.4	.392	3.80	58.6							151
1	168	8.92	8.90	33.863	26.244	179.9	.425	3.45	52.9	27.9	1.74	24.0		.00	.03	169
1	186	8.57	8.55	33.952	26.369	168.3	.456	2.80	42.6	34.6	1.97	27.4				187
	200 ISL	8.28	8.26	33.982	26.436	162.0	.479	2.76	41.7							202
1	206	8.17	8.14	33.988	26.458	160.0	.489	2.74	41.3	37.7	2.04	28.2				207
1	237	7.76	7.74	34.003	26.530	153.6	.537	2.78	41.6	41.4	2.12	29.1				238
	250 ISL	7.62	7.60	34.015	26.559	151.0	.557	2.63	39.2							252
1	276	7.37	7.34	34.039	26.615	146.0	.597	2.26	33.5	48.0	2.27	31.5				278
	300 ISL	7.10	7.07	34.046	26.658	142.1	.631	2.03	29.9							303
1	338	6.67	6.64	34.057	26.725	136.1	.683	1.71	24.9	58.2	2.51	34.9				340
	400 ISL	6.07	6.04	34.105	26.841	125.5	.765	1.11	15.9							403
1	411	5.98	5.95	34.115	26.860	123.7	.779	1.01	14.5	71.5	2.80	38.5				414
1	487	5.63	5.58	34.182	26.958	115.2	.869	.60	8.5	82.0	2.98	40.6				490
	500 ISL	5.53	5.49	34.190	26.976	113.6	.884	.55	7.8							504
1	561	4.97	4.93	34.206	27.054	106.2	.951	.43	6.0	92.7	3.08	42.6				565

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 73 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 58.6 N	122 39.9 W	01/17/84	2338 GMT	4110 M	340	10 KT	320 05 05	1	1020.3 MB	13.0 C	10.0 C	4/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.39	14.39	33.105	24.643	328.8	.000	5.94	101.9							0
1	1	14.39	14.39	33.105	24.643	328.8	.003	5.94	101.9	2.8	.34	.1	.00	.29	.06	1
	10 ISL	14.38	14.38	33.106	24.645	328.8	.033	5.97	102.4							10
1	11	14.38	14.38	33.106	24.645	328.8	.036	5.97	102.4	2.7	.36	.0	.00	.29	.06	11
	20 ISL	14.36	14.36	33.106	24.650	328.7	.066	5.96	102.2							20
	30 ISL	14.34	14.33	33.105	24.655	328.5	.099	5.95	102.0							30
1	31	14.33	14.33	33.105	24.655	328.5	.101	5.95	102.0	2.7	.36	.0	.00	.34	.05	31
1	50	14.33	14.32	33.106	24.657	328.8	.164	5.89	101.0	2.6	.36	.0	.00	.33	.07	50
1	65	14.32	14.31	33.106	24.660	329.0	.213	5.88	100.8	2.5	.35	.0	.00	.30	.08	65
1	75	14.15	14.14	33.129	24.713	324.3	.245	5.76	98.4	3.2	.40	.7	.07	.17	.08	75
1	85	13.52	13.51	33.236	24.925	304.3	.277	5.38	90.8	4.8	.56	3.2	.00	.10	.07	85
1	99	12.03	12.01	33.358	25.312	267.6	.316	4.77	78.0	8.9	.91	9.2	.02	.03	.06	99
	100 ISL	11.94	11.92	33.371	25.339	265.0	.320	4.71	77.0							101
1	113	11.39	11.37	33.484	25.529	247.2	.355	4.26	68.8	13.0	1.16	13.7	.01	.02	.04	114
	125 ISL	11.09	11.08	33.546	25.630	237.8	.383	4.04	64.9							126
1	138	10.79	10.77	33.598	25.725	229.0	.414	3.90	62.2	16.8	1.36	16.9	.01	.01	.03	139
	150 ISL	10.36	10.34	33.643	25.834	218.8	.440	3.83	60.5							151
1	156	10.14	10.12	33.669	25.892	213.4	.453	3.77	59.3	19.6	1.48	19.4	.01	.01	.03	157
1	177	9.75	9.73	33.779	26.044	199.3	.496	3.20	50.0	24.5	1.71	23.2	.00	.00	.02	178
	200 ISL	8.78	8.75	33.878	26.278	177.2	.540	3.55	54.2							202
1	201	8.74	8.72	33.881	26.287	176.4	.541	3.57	54.5	27.7	1.72	24.5	.00			202
1	226	8.46	8.44	33.929	26.367	169.1	.584	3.75	56.9	29.0	1.71	24.4	.02			227
	250 ISL	8.12	8.10	33.982	26.461	160.6	.624	3.29	49.6							252
1	256	8.04	8.01	33.993	26.482	158.6	.633	3.15	47.4	35.9	1.93	27.5	.02			257
1	288	7.54	7.51	34.027	26.581	149.5	.683	2.53	37.6	43.6	2.17	30.9	.01			290
	300 ISL	7.39	7.36	34.037	26.610	146.8	.701	2.35	34.9							302
1	337	6.96	6.93	34.063	26.690	139.5	.754	1.88	27.6	52.6	2.44	34.5	.03			339
	400 ISL	6.34	6.30	34.089	26.794	130.2	.839	1.27	18.4							403
1	401	6.33	6.29	34.089	26.796	130.0	.841	1.26	18.2	62.8	2.69	38.3	.03			404
1	474	5.64	5.60	34.126	26.912	119.4	.931	.82	11.7	76.6	2.90	41.1	.00			477
	500 ISL	5.43	5.39	34.141	26.949	115.9	.962	.71	10.1							504
1	551	5.07	5.03	34.173	27.017	109.8	1.019	.57	8.0	89.0	3.05	42.6	.00			555

RV DAVID STARR JORDAN

CALCOFI CRUISE 8401

STATION 73 80

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 38.6 N	123 21.9 W	01/18/84	0531 GMT	4014 M	340	09 KT			1022.0 MB	13.8 C	10.2 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.33	14.33	33.009	24.581	334.7	.000	5.92	101.4							0
1	2	14.33	14.33	33.009	24.581	334.7	.007	5.92	101.4	2.4	.35	.1	.00	.18	.07	2
	10 ISL	14.29	14.29	33.008	24.589	334.4	.033	5.94	101.6							10
1	12	14.29	14.28	33.008	24.590	334.2	.040	5.94	101.7	2.4	.37	.1	.00	.18	.07	12
	20 ISL	14.29	14.29	33.033	24.607	332.8	.067	5.94	101.8							20
	30 ISL	14.31	14.30	33.064	24.629	331.0	.100	5.95	101.9							30
1	32	14.31	14.30	33.070	24.634	330.6	.106	5.95	101.9	2.5	.37	.1	.00	.19	.11	32
	50 ISL	14.33	14.32	33.096	24.649	329.6	.166	5.93	101.7							50
1	51	14.33	14.33	33.097	24.650	329.6	.169	5.93	101.6	2.5	.38	.1	.00	.31	.07	51
1	66	14.27	14.26	33.109	24.673	327.8	.218	5.90	101.0	2.8	.38	.1	.00	.29	.09	66
	75 ISL	13.88	13.87	33.163	24.795	316.4	.248	5.71	96.9							76
1	76	13.84	13.83	33.167	24.808	315.2	.250	5.69	96.6	4.3	.47	1.5	.00	.20	.12	76
1	87	12.66	12.64	33.222	25.086	288.8	.283	5.43	90.0	5.2	.62	3.8	.00	.09	.10	87
	100 ISL	11.78	11.76	33.251	25.276	271.0	.320	5.19	84.4							101
1	101	11.75	11.73	33.252	25.282	270.4	.322	5.18	84.2	7.8	.80	7.1	.00	.06	.06	101
1	114	10.86	10.84	33.344	25.514	248.5	.358	4.67	74.5	12.2	1.09	12.6	.00	.03	.04	115
	125 ISL	10.64	10.63	33.444	25.630	237.7	.383	4.30	68.3							126
1	139	10.48	10.47	33.578	25.762	225.4	.417	3.90	61.8	18.3	1.40	18.0	.00	.02	.03	140
	150 ISL	10.07	10.05	33.646	25.886	213.8	.440	3.76	59.1							151
1	159	9.70	9.68	33.701	25.991	203.9	.459	3.67	57.2	22.7	1.59	21.3	.00	.01	.02	160
1	180	9.18	9.16	33.840	26.185	185.8	.500	3.37	52.0	27.1	1.75	24.0	.00	.00	.01	181
	200 ISL	8.87	8.84	33.917	26.295	175.7	.536	3.08	47.2							202
1	204	8.82	8.80	33.927	26.310	174.3	.543	3.03	46.4	31.4	1.90	26.4	.00			205
1	228	8.60	8.58	33.975	26.382	167.8	.584	2.79	42.5	34.6	2.00	27.9	.00			229
	250 ISL	8.30	8.27	34.002	26.449	161.7	.620	2.94	44.5							252
1	258	8.19	8.16	34.008	26.471	159.7	.632	3.00	45.3	36.8	1.98	28.0	.00			259
1	292	7.80	7.77	34.034	26.550	152.7	.687	2.74	41.0	41.6	2.10	29.6	.00			294
	300 ISL	7.73	7.70	34.042	26.566	151.2	.698	2.63	39.3							302
1	342	7.31	7.27	34.076	26.653	143.4	.760	2.02	29.9	50.7	2.44	32.9	.00			344
	400 ISL	6.33	6.30	34.065	26.776	131.9	.840	1.59	23.0							403
1	406	6.23	6.19	34.063	26.788	130.7	.848	1.55	22.4	64.2	2.64	37.1	.00			409
1	481	5.69	5.64	34.126	26.906	120.0	.942	.89	12.7	76.5	2.89	40.6	.00			484
	500 ISL	5.59	5.55	34.148	26.935	117.5	.965	.76	10.8							504
1	560	5.44	5.39	34.229	27.019	110.2	1.033	.47	6.7	86.6	3.06	42.2	.00			564

RV DAVID STARR JORDAN

CALCOFI CRUISE 8401

STATION 73 90

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 18.6 N	124 03.7 W	01/18/84	1105 GMT	3068 M	310	06 KT		2	1024.0 MB	13.0 C	9.7 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.61	15.61	33.307	24.533	339.3	.000	5.80	102.2							0
1	2	15.61	15.61	33.307	24.533	339.3	.007	5.80	102.2	2.1	.29	.1	.00	.11	.06	2
	10 ISL	15.61	15.61	33.307	24.533	339.5	.034	5.88	103.6							10
1	12	15.61	15.61	33.307	24.534	339.6	.041	5.89	103.7	2.1	.29	.1	.00	.12	.06	12
	20 ISL	15.61	15.61	33.307	24.534	339.8	.068	5.86	103.3							20
	30 ISL	15.61	15.61	33.306	24.534	340.1	.102	5.80	102.1							30
1	32	15.61	15.61	33.306	24.534	340.2	.108	5.78	101.8	2.0	.30	.1	.00	.12	.06	32
	50 ISL	15.64	15.64	33.306	24.528	341.3	.170	5.74	101.2							50
1	52	15.65	15.64	33.306	24.527	341.4	.176	5.74	101.2	2.0	.29	.1	.00	.12	.06	52
1	67	15.62	15.61	33.304	24.531	341.5	.227	5.75	101.3	2.0	.30	.1	.02	.11	.05	67
	75 ISL	15.61	15.59	33.303	24.534	341.4	.255	5.73	101.0							76
1	77	15.60	15.59	33.303	24.535	341.4	.261	5.73	100.9	2.0	.29	.1	.00	.13	.06	77
1	87	13.99	13.98	33.229	24.823	314.1	.294	5.70	97.1	3.4	.40	.7	.00	.20	.16	87
	100 ISL	13.03	13.02	33.229	25.018	296.1	.335	5.58	93.2							101
1	102	12.97	12.96	33.229	25.030	294.6	.339	5.57	92.9	4.4	.50	2.2	.00	.11	.12	102
1	116	12.13	12.11	33.349	25.287	270.4	.381	5.01	82.1	7.7	.78	7.1	.00	.05	.06	117
	125 ISL	11.79	11.78	33.409	25.395	260.3	.404	4.72	76.9							126
1	141	11.30	11.28	33.507	25.563	244.6	.445	4.25	68.5	13.9	1.17	13.9	.00	.02	.03	142
	150 ISL	11.04	11.03	33.553	25.645	237.0	.466	4.05	64.9							151
1	161	10.72	10.70	33.607	25.744	227.7	.492	3.83	61.0	18.1	1.41	17.5	.00	.01	.02	162
1	181	10.09	10.07	33.699	25.925	210.8	.536	3.55	55.8	21.9	1.58	20.4	.00	.01	.02	182
	200 ISL	9.61	9.58	33.789	26.076	196.7	.574	3.33	51.8							202
1	206	9.47	9.45	33.818	26.121	192.5	.586	3.26	50.6	26.6	1.76	23.4	.00			207
1	231	8.90	8.88	33.944	26.311	174.8	.631	2.87	44.0	32.2	1.95	26.4	.00			232
	250 ISL	8.64	8.61	33.995	26.392	167.4	.664	2.75	41.9							252
1	261	8.52	8.50	34.011	26.423	164.5	.682	2.71	41.2	36.5	2.05	27.8	.00			262
1	295	8.08	8.05	34.051	26.521	155.6	.737	2.48	37.3	41.1	2.15	29.5	.00			297
	300 ISL	8.02	7.99	34.055	26.534	154.5	.745	2.44	36.7							302
1	345	7.40	7.36	34.081	26.645	144.3	.812	1.99	29.5	50.0	2.37	32.9	.00			347
	400 ISL	6.69	6.66	34.108	26.763	133.5	.888	1.40	20.4							403
1	410	6.57	6.54	34.112	26.782	131.7	.902	1.30	18.9	63.4	2.67	36.9	.00			413
1	483	6.03	5.98	34.143	26.878	123.1	.994	.88	12.6	73.3	2.88	39.3	.00			486
	500 ISL	5.89	5.84	34.151	26.902	120.9	1.015	.80	11.4							504
1	562	5.36	5.31	34.187	26.994	112.4	1.088	.56	7.9	86.6	3.05	42.0	.00			566

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 73 100

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 58.6 N	124 45.4 W	01/18/84	1643 GMT	4302 M	360	07 KT	350 04 10	2	1025.7 MB	12.0 C	10.9 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.49	15.49	33.271	24.532	339.4	.000	5.76	101.2							0
1	3	15.49	15.49	33.271	24.532	339.4	.010	5.76	101.2	2.2	.30	.1	.00	.17	.04	3
	10 ISL	15.44	15.44	33.271	24.543	338.5	.034	5.87	103.0							10
1	11	15.44	15.44	33.271	24.544	338.5	.037	5.88	103.2	2.2	.31	.1	.00	.14	.07	11
	20 ISL	15.45	15.44	33.271	24.543	338.9	.068	5.83	102.4							20
1	28	15.45	15.45	33.271	24.542	339.2	.095	5.79	101.6	2.0	.30	.1	.00	.14	.07	28
	30 ISL	15.45	15.45	33.271	24.542	339.3	.102	5.79	101.6							30
1	44	15.46	15.46	33.271	24.540	339.9	.149			2.1	.30	.1	.00	.14	.08	44
	50 ISL	15.47	15.46	33.271	24.540	340.2	.170	5.77	101.4							50
1	57	15.47	15.46	33.271	24.539	340.4	.193	5.77	101.3	2.1	.30	.1	.00	.14	.07	57
1	64	15.36	15.35	33.268	24.561	338.5	.216	5.74	100.6	2.1	.30	.1	.01	.15	.10	64
1	73	13.45	13.44	33.229	24.933	303.1	.245	5.58	94.0	3.6	.49	1.3	.01	.20	.17	73
	75 ISL	13.25	13.24	33.239	24.982	298.5	.252	5.53	92.8							76
1	85	12.83	12.82	33.299	25.111	286.4	.280	5.31	88.3	5.0	.60	3.6	.01	.09	.12	85
1	98	12.15	12.14	33.357	25.288	269.9	.316	4.93	80.9	7.3	.81	7.1	.01	.06	.08	98
	100 ISL	12.06	12.05	33.366	25.312	267.6	.323	4.87	79.7							101
1	118	11.47	11.45	33.441	25.481	251.9	.371	4.42	71.5	11.5	1.07	12.1	.01	.02	.04	119
	125 ISL	11.25	11.24	33.482	25.552	245.3	.387	4.26	68.6							126
1	135	10.94	10.93	33.547	25.657	235.4	.412	4.03	64.5	15.3	1.28	15.6	.01	.02	.02	136
	150 ISL	10.62	10.61	33.608	25.762	225.8	.446	3.78	60.1							151
1	151	10.60	10.58	33.613	25.770	225.1	.448	3.76	59.7	17.8	1.43	17.8	.01	.01	.02	152
1	173	10.35	10.33	33.735	25.909	212.2	.496	3.30	52.2	21.5	1.62	20.9	.01			174
1	195	10.01	9.98	33.816	26.031	201.0	.541	3.04	47.7	24.2	1.73	22.6	.01			196
	200 ISL	9.91	9.89	33.840	26.065	197.9	.551	2.96	46.4							202
1	219	9.54	9.52	33.920	26.189	186.4	.588	2.69	41.8	29.1	1.89	25.1	.01			220
1	250	8.99	8.96	33.972	26.320	174.3	.643	2.67	41.0	32.2	1.97	26.4				251
1	292	8.24	8.21	34.026	26.479	159.7	.714	2.63	39.7	37.4	2.07	28.0				294
	300 ISL	8.14	8.11	34.039	26.503	157.5	.727	2.55	38.4							302
1	348	7.62	7.59	34.104	26.631	145.9	.799	1.92	28.6	48.4	2.35	31.9				350
	400 ISL	6.90	6.86	34.110	26.737	135.9	.873	1.54	22.5							403
1	412	6.73	6.69	34.111	26.761	133.9	.889	1.46	21.3	59.2	2.60	35.5	.00			415
1	482	6.02	5.98	34.137	26.873	123.6	.979	.92	13.2	72.3	2.86	38.7	.00			485
	500 ISL	5.85	5.81	34.143	26.900	121.1	1.001									503

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 77 48

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
35 07.3 N	120 42.4 W	01/17/84	0120 GMT	31 M	340	11 KT	290 03 06	1	1016.9 MB	12.8 C	10.0 C	5/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	13.57	13.57	33.421	25.056	289.7	.029	5.74	97.1	8.0	.65	3.7				10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 77 51

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
35 01.3 N	120 55.1 W	01/16/84	2206 GMT	240 M	320	20 KT	290 09 08	1	1017.6 MB	13.5 C	9.8 C	2/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.49	14.49	33.444	24.883	306.0	.000	5.86	101.0							0
1	1	14.49	14.49	33.444	24.883	306.0	.003	5.86	101.0	4.2	.40	.7		.58	.23	1
	10 ISL	14.48	14.48	33.440	24.883	306.3	.031	5.85	100.8							10
1	11	14.48	14.47	33.439	24.882	306.3	.034	5.85	100.8	3.9	.39	.7		.53	.25	11
	20 ISL	14.48	14.48	33.439	24.881	306.7	.061	5.88	101.3							20
1	21	14.48	14.48	33.439	24.881	306.7	.064	5.88	101.3	4.1	.39	.7		.54	.25	21
	30 ISL	14.49	14.49	33.439	24.879	307.2	.092	5.86	101.0							30
1	31	14.49	14.49	33.439	24.879	307.2	.095	5.86	101.0	4.0	.38	.7		.58	.24	31
1	41	14.45	14.44	33.436	24.887	306.8	.125	5.79	99.7	5.1	.40	1.1		.45	.31	41
1	50	13.09	13.08	33.448	25.176	279.4	.151	4.87	81.5	8.2	.77	7.1		.12	.14	50
1	60	12.06	12.05	33.498	25.414	256.9	.178	4.45	72.9	11.8	1.03	11.4		.08	.13	60
1	70	11.63	11.62	33.547	25.532	245.9	.203	4.22	68.6	13.6	1.15	13.4		.07	.10	70
	75 ISL	11.36	11.35	33.581	25.609	238.7	.216	4.05	65.5							76
1	85	10.91	10.90	33.644	25.738	226.5	.238	3.77	60.3	18.2	1.37	17.0		.05	.11	85
	100 ISL	10.57	10.56	33.699	25.840	217.1	.273	3.57	56.7							101
1	105	10.49	10.48	33.714	25.866	214.8	.284	3.52	55.8	21.1	1.53	19.5		.02	.08	106
1	124	10.06	10.05	33.800	26.008	201.7	.324	3.19	50.2	24.7	1.68	22.1		.01	.07	125
	125 ISL	10.05	10.03	33.803	26.013	201.3	.325	3.18	50.0							126
1	145	9.63	9.61	33.884	26.146	188.9	.364	2.87	44.7	29.4	1.86	24.3		.01	.07	146
	150 ISL	9.55	9.54	33.900	26.171	186.7	.373	2.82	43.8							151
1	176	9.21	9.19	33.965	26.277	17 .0	.421	2.59	40.0	33.2	1.97	26.3				177
	200 ISL	8.92	8.90	33.993	26.346	170.8	.462	2.45	37.6							202
1	207	8.85	8.82	33.996	26.360	169.6	.474	2.42	37.1	36.9	2.09	27.6				208

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 77 55

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 53.3 N	121 11.9 W	01/16/84	1715 GMT	556 M	330	21 KT	310 09 12	1	1019.6 MB	12.9 C	9.5 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	13.91	13.91	33.226	24.837	310.4	.000	6.05	102.9							0
1	1	13.91	13.91	33.226	24.837	310.4	.003	6.05	102.9	3.5	.36	.1	.00	.60	.23	1
1	10	13.90	13.90	33.228	24.840	310.3	.031	6.11	103.9	3.6	.36	.1	.04	.53	.20	10
	20 ISL	14.01	14.01	33.269	24.848	309.8	.062	6.00	102.3							20
1	21	14.02	14.02	33.271	24.849	309.8	.065	5.98	102.0	3.6	.37	.2	.02	.51	.26	21
	30 ISL	13.79	13.78	33.281	24.904	304.7	.093	5.76	97.7							30
1	31	13.75	13.75	33.284	24.914	303.9	.095	5.73	97.2	4.8	.46	1.7	.15	.25	.20	31
1	40	13.35	13.35	33.382	25.071	289.1	.122	5.25	88.4	6.7	.65	4.8	.07	.16	.19	40
1	50	12.51	12.50	33.432	25.277	269.8	.150	4.77	78.9	9.7	.88	8.6	.00	.06	.15	50
1	62	12.29	12.28	33.497	25.369	261.2	.181	4.52	74.4	11.3	1.00	10.6	.00	.05	.12	62
1	72	11.45	11.45	33.525	25.547	244.5	.207	4.21	68.1	15.0	1.18	13.7	.00	.06	.12	72
	75 ISL	11.34	11.33	33.549	25.587	240.8	.215	4.11	66.4							76
1	86	11.13	11.12	33.629	25.688	231.4	.240	3.83	61.6	18.8	1.35	16.2	.00	.05	.16	86
	100 ISL	10.58	10.57	33.686	25.829	218.3	.272	3.55	56.4							101
1	101	10.52	10.51	33.690	25.843	216.9	.275	3.52	55.9	21.3	1.53	19.2	.00	.03	.12	102
	125 ISL	9.75	9.73	33.822	26.077	195.0	.324	3.09	48.3							126
1	126	9.71	9.70	33.829	26.089	194.0	.326	3.07	47.9	26.0	1.74	23.6	.00	.00	.06	127
1	146	9.46	9.44	33.882	26.172	186.4	.364	2.91	45.2	28.4	1.86	24.8	.00	.01	.04	147
	150 ISL	9.41	9.40	33.890	26.185	185.3	.371	2.89	44.8							151
1	176	9.13	9.11	33.929	26.261	178.5	.419	2.80	43.2	30.7	1.92	26.0	.00			177
	200 ISL	8.88	8.86	33.963	26.329	172.5	.461	2.75	42.2							202
1	207	8.79	8.76	33.972	26.351	170.5	.472	2.74	41.9	32.9	1.98	27.0	.00			208
1	236	8.15	8.13	34.022	26.487	157.8	.520	2.63	39.7	38.5	2.09	29.0	.00			237
	250 ISL	7.90	7.88	34.032	26.532	153.7	.542	2.57	38.6							252
1	275	7.55	7.52	34.040	26.590	148.4	.580	2.43	36.2	44.7	2.21	30.9	.00			277
	300 ISL	7.29	7.26	34.058	26.640	144.0	.616	2.17	32.2							302
1	336	6.98	6.95	34.083	26.704	138.3	.667	1.75	25.7	54.5	2.50	34.5	.00			338
1	389	6.44	6.40	34.115	26.802	129.4	.739	1.23	17.8	64.6	2.73	37.3	.00			392
	400 ISL	6.32	6.28	34.118	26.820	127.7	.752	1.15	16.6							403
1	451	5.81	5.77	34.145	26.905	119.9	.815	.82	11.7	75.7	2.91	40.2	.00			454
	500 ISL	5.58	5.54	34.203	26.980	113.2	.872	.58	8.3							504
1	508	5.57	5.52	34.216	26.992	112.2	.882	.55	7.8	83.9	3.04	41.1	.01			512

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 77 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 43.3 N	121 32.9 W	01/16/84	1206 GMT	925 M	330	21 KT		1	1021.7 MB	10.3 C	10.0 C	3/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	13.91	13.91	33.276	24.875	306.7	.000	6.04	102.8							0
1	3	13.91	13.91	33.276	24.875	306.7	.009	6.04	102.8	4.7	.36	.1	.00	.85	.24	3
	10 ISL	13.92	13.91	33.281	24.878	306.7	.031	6.18	105.2							10
1	11	13.92	13.92	33.282	24.878	306.7	.034	6.19	105.3	4.5	.42	.1	.02	.82	.29	11
	20 ISL	13.94	13.94	33.287	24.877	307.1	.061	6.11	104.1							20
1	25	13.96	13.96	33.294	24.878	307.1	.076	6.02	102.5	4.4	.38	.1	.08	.80	.29	25
	30 ISL	13.99	13.99	33.312	24.886	306.4	.092	5.96	101.6							30
1	41	14.05	14.04	33.353	24.906	304.9	.125	5.82	99.3	4.9	.44	.9	.23	.31	.33	41
	50 ISL	13.71	13.70	33.341	24.968	299.3	.153	5.65	95.7							50
1	55	13.50	13.50	33.334	25.004	296.0	.167	5.56	93.8	6.5	.56	3.1	.21	.22	.19	55
1	69	13.24	13.23	33.363	25.079	289.2	.208	5.43	91.2	7.8	.65	4.3	.19	.24	.21	69
	75 ISL	12.90	12.89	33.388	25.167	280.9	.226	5.14	85.8							76
1	80	12.59	12.58	33.416	25.250	273.1	.239	4.89	81.0	10.3	.86	8.1	.00	.10	.18	80
1	93	11.65	11.64	33.558	25.538	245.9	.272	4.19	68.1	14.5	1.14	13.3	.00	.05	.11	93
	100 ISL	11.41	11.40	33.587	25.603	239.8	.290	4.04	65.3							101
1	113	11.11	11.10	33.615	25.680	232.9	.322	3.89	62.5	17.0	1.30	16.0	.00	.03	.09	114
	125 ISL	10.60	10.58	33.689	25.829	218.8	.348	3.61	57.3							126
1	132	10.26	10.25	33.739	25.926	209.7	.364	3.42	54.0	22.5	1.58	20.5	.00	.02	.08	133
	150 ISL	9.76	9.75	33.829	26.081	195.3	.400	3.07	48.0							151
1	152	9.72	9.71	33.838	26.094	194.0	.404	3.04	47.5	26.8	1.75	23.4	.01	.01	.07	153
1	170	9.59	9.57	33.884	26.152	188.9	.438	2.90	45.1	28.7	1.83	24.3	.02	.00	.06	171
1	190	9.08	9.05	33.960	26.295	175.5	.474	2.71	41.7	32.1	1.93	26.3	.00			191
	200 ISL	8.79	8.77	33.993	26.367	168.8	.492	2.61	39.9							202
1	210	8.53	8.51	34.020	26.428	163.1	.508	2.52	38.3	37.1	2.06	28.1	.00			211
1	244	8.08	8.06	34.040	26.512	155.6	.562	2.47	37.2	40.6	2.13	29.5	.00			245
	250 ISL	8.00	7.98	34.047	26.529	154.0	.572	2.42	36.3							252
1	292	7.44	7.42	34.087	26.642	143.8	.635	1.94	28.8	49.2	2.36	32.8	.00			294
	300 ISL	7.31	7.28	34.092	26.664	141.7	.646	1.84	27.3							302
1	345	6.59	6.55	34.117	26.783	130.6	.707	1.31	19.1	61.7	2.64	36.9				347
	400 ISL	6.15	6.11	34.147	26.865	123.4	.777	.94	13.5							403
1	428	6.01	5.97	34.162	26.894	120.8	.811	.81	11.6	73.4	2.86	39.8	.00			431
	500 ISL	5.57	5.53	34.220	26.994	111.9	.895	.49	7.0							504
1	509	5.52	5.47	34.228	27.008	110.7	.905	.46	6.5	85.6	3.02	41.4	.01			513
1	593	5.00	4.96	34.306	27.130	99.5	.993	.35	4.9	98.2	3.13	42.8	.00			597

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 77 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 23.3 N	122 14.8 W	01/16/84	0441 GMT	3918 M	300	12 KT			1021.7 MB	14.6 C	12.8 C		

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	13.94	13.94	33.125	24.751	318.5	.000	6.02	102.4							0
1	1		13.94	13.94	33.125	24.751	318.5	.003	6.02	102.4	3.3	.34	.2		.25	.08	1
1	10		13.95	13.95	33.252	24.847	309.6	.031	6.04	102.8	3.8	.36	.2	.01	.62	.19	10
	20	ISL	13.94	13.94	33.310	24.895	305.4	.062	6.04	102.8							20
	30	ISL	13.93	13.93	33.332	24.914	303.8	.093	6.04	102.8							30
1	31		13.93	13.93	33.333	24.915	303.8	.095	6.04	102.8	4.2	.37	.4	.09	.87	.24	31
	50	ISL	13.78	13.77	33.348	24.959	300.1	.153	5.72	97.1							50
1	51		13.76	13.76	33.348	24.961	299.9	.155	5.70	96.7	5.4	.49	2.0	.30	.19	.19	51
1	66		13.34	13.33	33.394	25.083	288.7	.199	5.29	89.0	6.9	.65	4.7	.20	.19	.21	66
	75	ISL	12.94	12.93	33.437	25.197	278.1	.226	4.90	81.7							76
1	76		12.90	12.89	33.439	25.207	277.1	.227	4.87	81.2	8.5	.81	7.4	.07	.13	.18	76
1	87		11.58	11.57	33.449	25.465	252.7	.256	4.49	72.8	11.7	1.05	11.9	.00	.06	.08	87
	100	ISL	11.36	11.35	33.552	25.586	241.5	.290	4.11	66.3							101
1	102		11.33	11.32	33.557	25.594	240.7	.293	4.07	65.7	14.7	1.22	14.7	.00	.06	.09	102
1	115		10.70	10.69	33.634	25.768	224.4	.326	3.75	59.7	18.1	1.40	17.8	.00	.03	.07	116
	125	ISL	10.47	10.45	33.704	25.863	215.6	.347	3.49	55.4							126
1	141		10.16	10.14	33.811	25.999	202.9	.381	3.13	49.3	24.4	1.68	22.1	.00	.01	.07	142
	150	ISL	9.89	9.87	33.841	26.069	196.4	.398	3.05	47.8							151
1	161		9.55	9.54	33.869	26.146	189.2	.420	3.00	46.7	27.0	1.77	24.4	.00	.01	.06	162
1	180		9.22	9.20	33.920	26.242	180.5	.455	2.89	44.6	30.0	1.87	25.7	.01	.00	.05	181
	200	ISL	8.75	8.73	33.981	26.364	169.1	.489	2.76	42.2							202
1	205		8.64	8.62	33.994	26.390	166.6	.498	2.73	41.6	34.2	1.97	27.5	.00			206
1	231		8.39	8.36	34.024	26.453	161.0	.540	2.63	39.9	37.0	2.04	28.5	.00			232
	250	ISL	8.12	8.10	34.030	26.498	157.0	.571	2.60	39.2							252
1	259		7.99	7.97	34.035	26.521	155.0	.585	2.59	38.9	40.2	2.10	29.5				261
1	295		7.64	7.61	34.103	26.626	145.4	.639	1.92	28.6	47.9	2.35	32.3	.00			297
	300	ISL	7.60	7.57	34.107	26.636	144.6	.646	1.88	28.0							302
1	345		7.17	7.14	34.123	26.709	138.1	.709	1.59	23.5	54.4	2.50	34.5	.00			347
	400	ISL	6.62	6.58	34.172	26.824	127.7	.783	1.01	14.7							403
1	409		6.52	6.48	34.179	26.842	125.9	.794	.92	13.4	66.2	2.77	37.9	.01			412
1	484		5.64	5.60	34.162	26.941	116.8	.885	.72	10.2	78.9	2.94	41.0	.01			487
	500	ISL	5.51	5.47	34.168	26.961	114.9	.904	.68	9.6							504
1	563		5.21	5.17	34.219	27.037	108.2	.974	.52	7.3	88.6	3.05	42.6	.00			567

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 77 80

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 03.3 N	122 56.5 W	01/15/84	2223 GMT	4092 M	210	15 KT	210 03	2	1021.3 MB	16.5 C	14.2 C	8/8	ST

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	14.62	14.62	33.359	24.791	314.8	.000	5.92	102.2							0
1	2		14.62	14.62	33.359	24.791	314.8	.006	5.92	102.2	3.0	.33	.1	.02	.50	.10	2
	10	ISL	14.56	14.56	33.358	24.802	313.9	.031	5.95	102.7							10
1	12		14.54	14.54	33.358	24.806	313.6	.038	5.96	102.8	2.8	.34	.2	.00	.45	.15	12
	20	ISL	14.42	14.42	33.345	24.822	312.4	.063	5.99	102.9							20
1	27		14.33	14.32	33.333	24.833	311.5	.084	6.00	103.0	2.8	.36	.1	.02	.72	.25	27
	30	ISL	14.32	14.32	33.333	24.833	311.5	.094	5.99	102.8							30
1	41		14.30	14.30	33.332	24.837	311.5	.128	5.94	101.9	2.7	.35	.1	.01	.78	.21	41
	50	ISL	14.30	14.29	33.335	24.841	311.4	.156	5.92	101.6							50
1	56		14.30	14.29	33.337	24.842	311.4	.174	5.91	101.4	2.8	.38	.1	.05	.48	.24	56
1	67		12.61	12.60	33.394	25.228	274.8	.206	4.77	79.0	8.9	.83	8.1	.01	.11	.16	67
	75	ISL	11.95	11.94	33.436	25.386	260.0	.228	4.49	73.4							76
1	76		11.92	11.91	33.439	25.395	259.1	.230	4.48	73.2	11.1	1.01	11.1	.00	.07	.16	76
1	91		11.14	11.12	33.542	25.618	238.1	.267	4.06	65.2	15.1	1.24	15.3	.00	.04	.09	91
	100	ISL	10.80	10.79	33.605	25.728	227.9	.289	3.82	60.9							101
1	105		10.65	10.63	33.639	25.781	222.9	.302	3.69	58.7	18.9	1.43	18.5	.01	.02	.06	106
1	119		10.34	10.32	33.714	25.893	212.5	.332	3.42	54.1	21.7	1.57	20.6	.00	.01	.05	120
	125	ISL	10.19	10.18	33.746	25.944	207.8	.344	3.31	52.2							126
1	144		9.69	9.67	33.848	26.108	192.6	.382	2.99	46.6	27.0	1.77	24.1	.00	.00	.04	145
	150	ISL	9.55	9.54	33.871	26.148	188.8	.393	2.93	45.6							151
1	164		9.26	9.24	33.919	26.234	180.9	.419	2.82	43.6	30.3	1.88	26.0	.01	.01	.04	165
1	185		8.92	8.91	33.974	26.330	172.1	.456	2.69	41.3	33.0	1.96	27.0	.00			186
	200	ISL	8.73	8.71	34.007	26.387	166.9	.481	2.61	39.9							202
1	204		8.67	8.65	34.013	26.400	165.7	.488	2.60	39.7	35.4	2.01	28.0	.00			205
1	233		8.08	8.05	34.022	26.498	156.6	.534	2.87	43.2	38.3	2.02	28.2	.00			234
	250	ISL	7.87	7.85	34.038	26.541	152.8	.561	2.71	40.6							252
1	272		7.67	7.65	34.060	26.588	148.7	.595	2.36	35.2	45.3	2.20	30.8	.01			274
	300	ISL	7.38	7.35	34.078	26.644	143.6	.635	2.05	30.4							302
1	331		7.04	7.01	34.091	26.701	138.5	.679	1.75	25.7	54.6	2.44	34.1	.00			333
	400	ISL	6.32	6.28	34.108	26.812	128.5	.771	1.22	17.6							403
1	404		6.27	6.24	34.109	26.819	127.9	.777	1.19	17.2	66.6	2.69	37.8	.00			407
1	479		5.49	5.45	34.116	26.921	118.3	.868	.88	12.5	79.6	2.87	40.7	.00			482
	500	ISL	5.45	5.41	34.148	26.953	115.6	.893	.77	11.0							504
1	552		5.34	5.29	34.226	27.028	109.1	.952	.48	6.8	87.9	3.03	41.8	.00			556

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 77 90

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 43.3 N	123 38.0 W	01/15/84	1556 GMT	4302 M	220	09 KT	200 03 11	2	1022.7 MB	14.5 C	12.8 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.15	14.15	33.237	24.795	314.3	.000	6.01	102.7							0
1	1	14.15	14.15	33.237	24.795	314.3	.003	6.01	102.7	2.8	.32	.0	.00	.39	.08	1
	10 ISL	14.14	14.14	33.239	24.797	314.4	.031	5.99	102.4							10
1	12	14.14	14.14	33.239	24.798	314.4	.038	5.99	102.4	2.8	.33	.0	.00	.40	.08	12
	20 ISL	14.17	14.17	33.254	24.804	314.0	.063	5.99	102.4							20
	30 ISL	14.20	14.19	33.286	24.823	312.4	.094	5.98	102.4							30
1	31	14.20	14.20	33.290	24.826	312.2	.097	5.98	102.4	2.8	.36	.0	.06	.55	.19	31
1	49	14.16	14.15	33.380	24.904	305.3	.152	5.69	97.4	3.9	.45	1.0	.51	.33	.32	49
	50 ISL	14.14	14.14	33.384	24.910	304.8	.156	5.68	97.1							50
1	64	13.71	13.70	33.392	25.007	295.9	.197	5.50	93.2	4.3	.53	2.8	.41	.13	.17	64
1	73	13.09	13.08	33.370	25.115	285.9	.223	5.24	87.7	6.0	.66	4.9	.14	.08	.20	73
	75 ISL	12.88	12.87	33.364	25.152	282.3	.230	5.16	86.0							76
1	83	12.22	12.21	33.361	25.278	270.5	.251	4.90	80.5	8.5	.85	8.1	.04	.07	.16	83
1	97	11.61	11.60	33.449	25.460	253.4	.287	4.53	73.5	11.0	1.03	11.4	.01	.04	.10	97
	100 ISL	11.51	11.49	33.472	25.497	249.9	.296	4.41	71.4							101
1	110	11.23	11.22	33.541	25.601	240.2	.322	4.06	65.4	14.3	1.23	14.8	.00	.02	.06	111
	125 ISL	10.86	10.85	33.614	25.724	228.9	.356	3.77	60.3							126
1	133	10.63	10.61	33.645	25.789	222.8	.375	3.66	58.2	18.4	1.45	18.4	.01	.01	.05	134
	150 ISL	10.03	10.01	33.693	25.930	209.7	.411	3.45	54.2							151
1	153	9.90	9.88	33.703	25.959	206.8	.417	3.43	53.7	22.3	1.63	21.4	.00	.00	.07	154
1	170	9.20	9.18	33.804	26.153	188.6	.451	3.57	55.1	24.5	1.67	22.3	.00	.00	.03	171
1	194	8.63	8.61	33.896	26.315	173.5	.494	4.18	63.7	25.2	1.53	21.4	.00			195
	200 ISL	8.55	8.53	33.911	26.339	171.3	.504	4.18	63.6							202
1	217	8.37	8.34	33.941	26.391	166.6	.533	4.18	63.3	27.2	1.57	22.0	.01			218
1	244	7.98	7.95	33.984	26.483	158.2	.576	3.65	54.8	33.6	1.76	25.2	.01			245
	250 ISL	7.87	7.85	33.983	26.498	156.7	.586	3.65	54.7							252
1	274	7.47	7.45	33.981	26.554	151.8	.624	3.66	54.3	37.2	1.82	26.6	.02			276
	300 ISL	7.06	7.03	33.986	26.616	146.5	.662	3.30	48.5							302
1	321	6.78	6.75	33.991	26.658	142.2	.693	2.85	41.6	48.4	2.13	31.4	.02			323
1	381	6.51	6.48	34.104	26.784	131.0	.774	1.37	19.9	60.5	2.60	36.8	.02			383
	400 ISL	6.34	6.30	34.124	26.822	127.6	.799	1.13	16.3							403
1	451	5.88	5.85	34.160	26.908	119.6	.862	.77	11.0	74.7	2.90	39.9	.02			454
	500 ISL	5.62	5.58	34.201	26.973	113.9	.919	.55	7.8							504
1	527	5.53	5.49	34.223	27.002	111.5	.950	.49	7.0	84.2	3.02	41.5	.02			531

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 77 100

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 23.3 N	124 19.4 W	01/15/84	1005 GMT	4206 M	230	09 KT		2	1022.0 MB	15.6 C	12.3 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.43	15.43	33.216	24.505	342.0	.000	5.80	101.7							0
1	2	15.43	15.43	33.216	24.505	342.0	.007	5.80	101.7	3.1	.29	.1	.00	.11	.05	2
	10 ISL	15.42	15.42	33.214	24.504	342.3	.034	5.86	102.8							10
1	12	15.42	15.42	33.214	24.504	342.4	.041	5.87	102.9	3.0	.30	.1	.00	.11	.03	12
	20 ISL	15.43	15.43	33.214	24.503	342.8	.068	5.86	102.7							20
	30 ISL	15.44	15.43	33.214	24.502	343.1	.103	5.84	102.5							30
1	32	15.44	15.43	33.215	24.502	343.2	.109	5.84	102.4	2.8	.29	.1	.00	.11	.04	32
	50 ISL	15.42	15.41	33.216	24.507	343.2	.171	5.79	101.6							50
1	52	15.42	15.41	33.216	24.508	343.2	.178	5.79	101.5	2.7	.29	.1	.00	.15	.05	52
1	67	15.42	15.41	33.213	24.506	343.9	.229	5.78	101.3	2.8	.29	.0	.00	.16	.05	67
	75 ISL	14.16	14.15	33.240	24.797	316.2	.256	5.78	98.8							76
1	77	13.90	13.89	33.248	24.857	310.5	.261	5.78	98.3	3.9	.37	.4	.05	.26	.15	77
1	87	13.51	13.50	33.251	24.939	302.9	.292	5.73	96.7	3.9	.40	.7	.04	.18	.16	87
	100 ISL	13.01	13.00	33.258	25.044	293.2	.332	5.68	94.8							101
1	102	12.95	12.93	33.261	25.060	291.8	.336	5.67	94.5	4.5	.46	1.7	.04	.11	.13	102
1	116	12.12	12.10	33.361	25.297	269.5	.378	5.21	85.4	6.9	.67	5.7	.03	.06	.06	117
	125 ISL	11.68	11.67	33.412	25.419	258.0	.401	4.95	80.4							126
1	141	10.99	10.97	33.509	25.620	239.1	.441	4.44	71.1	13.4	1.10	13.6	.01	.02	.03	142
	150 ISL	10.77	10.75	33.562	25.701	231.6	.462	4.16	66.4							151
1	161	10.51	10.49	33.633	25.801	222.3	.487	3.81	60.4	18.4	1.40	18.2	.00	.01	.02	162
1	181	9.93	9.91	33.775	26.011	202.6	.529	3.26	51.1	24.2	1.67	22.2	.00	.01	.02	182
	200 ISL	9.25	9.23	33.846	26.178	186.8	.566	3.30	50.9							202
1	206	9.05	9.03	33.862	26.222	182.7	.577	3.31	50.9	28.2	1.75	24.2	.01			207
1	232	8.65	8.63	33.943	26.349	171.1	.623	3.29	50.2	31.5	1.81	25.4	.00			233
	250 ISL	8.37	8.34	33.987	26.427	163.9	.653	3.18	48.2							252
1	262	8.20	8.18	34.008	26.469	160.0	.672	3.09	46.7	36.2	1.92	27.2	.01			263
1	296	7.84	7.81	34.030	26.541	153.6	.727	2.87	43.0	40.6	2.04	29.1	.03			298
	300 ISL	7.80	7.77	34.036	26.550	152.8	.732	2.80	41.9							302
1	346	7.35	7.32	34.091	26.659	143.0	.800	1.89	28.0	50.6	2.36	33.4	.03			348
	400 ISL	6.72	6.68	34.093	26.748	134.8	.875	1.48	21.6							403
1	411	6.59	6.55	34.093	26.765	133.3	.891	1.43	20.8	60.9	2.60	36.9	.03			414
1	486	5.97	5.93	34.161	26.899	121.1	.985	.77	11.0	74.1	2.86	39.9				489
	500 ISL	5.86	5.81	34.169	26.920	119.2	1.002	.73	10.5							504
1	566	5.35	5.30	34.188	26.997	112.1	1.079	.57	8.1	86.0	3.00	42.0	.02			570

RV DAVID STARR JORDAN CALCOFI CRUISE 8401 STATION 80 51

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 27.0 N	120 31.4 W	01/12/84	0638 GMT	73 M	250	03 KT			1019.3 MB	15.3 C	12.4 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.94	14.94	33.415	24.765	317.2	.000	5.72	99.5							0
1	1	14.94	14.94	33.415	24.765	317.2	.003	5.72	99.5	4.6	.38	.8	.00	.81	.19	1
	10 ISL	14.89	14.89	33.413	24.774	316.6	.032	5.72	99.4							10
1	11	14.88	14.88	33.413	24.775	316.5	.035	5.72	99.4	4.5	.40	.8	.00	.80	.19	11
1	20	14.81	14.80	33.418	24.796	314.8	.063	5.62	97.5	4.7	.42	1.2	.00	.66	.27	20
	30 ISL	14.74	14.73	33.421	24.813	313.5	.095	5.60	97.0							30
1	31	14.73	14.73	33.421	24.814	313.4	.097	5.60	97.0	5.1	.46	1.4	.00	.65	.25	31
1	41	14.61	14.60	33.426	24.845	310.8	.128	5.52	95.3	5.3	.49	1.9	.01	.55	.33	41
	50 ISL	14.55	14.55	33.427	24.857	309.8	.157	5.49	94.8							50
1	51	14.55	14.54	33.427	24.859	309.7	.159	5.49	94.7	5.5	.52	2.2	.03	.53	.29	51
1	60	14.31	14.30	33.430	24.912	304.9	.187	5.39	92.5	6.4	.57	2.9	.10	.39	.32	60

RV DAVID STARR JORDAN CALCOFI CRUISE 8401 STATION 80 55

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 19.0 N	120 48.1 W	01/12/84	1037 GMT	1415 M	340	05 KT			1019.0 MB	14.3 C	11.8 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.38	14.38	33.425	24.892	305.1	.000	5.76	99.0							0
1	2	14.38	14.38	33.425	24.892	305.1	.006	5.76	99.0	5.3	.44	1.5	.03	1.16	.18	2
	10 ISL	14.37	14.37	33.423	24.892	305.3	.031	5.72	98.4							10
1	12	14.37	14.37	33.423	24.893	305.3	.036	5.72	98.3	5.2	.44	1.5	.03	1.11	.17	12
	20 ISL	14.35	14.34	33.423	24.898	305.1	.061	5.74	98.6							20
1	27	14.33	14.32	33.422	24.902	304.9	.082	5.75	98.7	5.3	.44	1.4	.04	1.14	.21	27
	30 ISL	14.31	14.30	33.423	24.906	303.3	.092	5.71	98.1							30
1	42	13.92	13.91	33.427	24.991	296.8	.127	5.41	92.1	6.4	.56	3.6	.09	.52	.26	42
	50 ISL	13.04	13.03	33.443	25.181	278.9	.151	4.99	83.5							50
1	57	12.26	12.25	33.470	25.354	262.6	.169	4.63	76.2	10.3	.93	10.1	.03	.21	.14	57
1	67	11.57	11.56	33.526	25.527	246.3	.194	4.26	69.1	13.4	1.12	13.6	.00	.16	.12	67
	75 ISL	11.31	11.30	33.558	25.599	239.6	.214	4.10	66.2							76
1	77	11.27	11.26	33.564	25.611	238.4	.218	4.08	65.8	15.2	1.28	15.2	.00	.12	.13	77
1	92	10.49	10.48	33.650	25.817	219.1	.252	3.71	58.8	19.2	1.44	18.9	.00	.06	.09	92
	100 ISL	10.23	10.22	33.716	25.913	210.2	.270	3.49	55.0							101
1	106	10.09	10.08	33.763	25.973	204.6	.284	3.34	52.5	23.1	1.59	21.8	.00	.03	.08	107
1	121	9.86	9.85	33.824	26.059	196.7	.314	3.14	49.2	25.2	1.70	23.2	.00	.01	.07	122
	125 ISL	9.81	9.79	33.837	26.079	194.9	.321	3.07	48.0							126
1	146	9.52	9.50	33.888	26.167	186.9	.361	2.77	43.1	28.2	1.80	24.9	.00	.01	.07	147
	150 ISL	9.49	9.48	33.893	26.175	186.3	.368	2.79	43.3							151
1	166	9.38	9.36	33.913	26.209	183.3	.398	2.89	44.8	29.4	1.86	25.4	.00	.01	.05	167
1	186			33.967			.433	2.74	42.1	32.7	1.94	27.2	.00			187
	200 ISL	8.70	8.68	34.006	26.391	166.5	.457	2.63	40.1							202
1	206	8.57	8.55	34.015	26.418	164.0	.467	2.58	39.3	36.5	2.03	28.4	.00			207
1	236	8.22	8.20	34.054	26.501	156.5	.515	2.36	35.7	40.3	2.13	29.5	.00			237
	250 ISL	8.08	8.06	34.068	26.534	153.6	.537	2.25	33.8							252
1	276	7.82	7.79	34.087	26.587	148.9	.577	2.04	30.5	45.5	2.28	31.6	.00			278
	300 ISL	7.49	7.46	34.090	26.638	144.3	.612	1.89	28.1							302
1	336	6.99	6.96	34.096	26.712	137.5	.662	1.64	24.1	55.3	2.50	34.9	.00			338
	400 ISL	6.43	6.40	34.160	26.838	126.1	.747	.95	13.7							403
1	410	6.36	6.33	34.171	26.856	124.5	.760	.84	12.2	69.1	2.82	38.6	.00			413
1	486	5.82	5.78	34.221	26.965	114.8	.850	.56	8.0	80.2	2.98	40.8	.00			489
	500 ISL	5.73	5.69	34.230	26.983	113.1	.866	.52	7.4							504
1	561	5.38	5.34	34.272	27.059	106.3	.933	.37	5.2	89.6	3.09	42.2	.00			565

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 80 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 09.5 N	121 09.0 W	01/12/84	1435 GMT	2222 M	020	07 KT	280 04 08	1	1018.0 MB	13.0 C	12.3 C	3/8	CC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.22	14.22	33.417	24.919	302.5	.000	5.89	100.9							0
1	1	14.22	14.22	33.417	24.919	302.5	.003	5.89	100.9	4.1	.35	.6	.00	.68	.16	1
	10 ISL	14.21	14.21	33.416	24.919	302.7	.030	5.99	102.6							10
1	12	14.21	14.21	33.416	24.920	302.8	.036	6.00	102.8	4.1	.39	.6	.00	.55	.24	12
	20 ISL	14.23	14.22	33.415	24.917	303.2	.061	5.98	102.4							20
1	27	14.23	14.23	33.415	24.916	303.6	.081	5.93	101.6	4.1	.37	.6	.00	.62	.21	27
	30 ISL	14.22	14.21	33.414	24.918	303.5	.091	5.92	101.5							30
1	44	14.17	14.17	33.410	24.925	303.2	.133	5.89	100.8	4.2	.39	.6	.01	.53	.22	44
	50 ISL	13.62	13.61	33.405	25.035	294.0	.151	5.42	91.8							50
1	57	12.86	12.85	33.399	25.182	278.9	.171	4.89	81.5	8.5	.81	7.5	.04	.25	.24	57
1	67	11.79	11.78	33.558	25.511	247.8	.197	4.54	74.0	13.1	1.09	12.4	.01	.23	.21	67
	75 ISL	11.13	11.13	33.573	25.643	235.0	.217	3.96	63.6							76
1	78	10.97	10.96	33.578	25.676	232.3	.223	3.78	60.5	17.8	1.36	17.0	.00	.05	.16	78
1	92	10.34	10.33	33.643	25.836	217.3	.254	3.59	56.7	20.6	1.53	19.6	.00	.03	.10	92
	100 ISL	9.95	9.94	33.675	25.927	208.8	.272	3.51	55.0							101
1	107	9.68	9.66	33.698	25.991	202.8	.288	3.41	53.1	23.7	1.65	22.4	.00	.02	.09	108
1	122	9.53	9.52	33.726	26.037	198.7	.318	3.01	46.8	27.6	1.80	24.6	.00	.01	.09	123
	125 ISL	9.50	9.49	33.739	26.053	197.3	.323	2.98	46.3							126
1	147	9.20	9.18	33.871	26.205	183.2	.365	2.85	44.0	30.5	1.88	25.7	.00	.00	.06	148
	150 ISL	9.16	9.14	33.884	26.222	181.6	.370	2.81	43.4							151
1	166	8.91	8.90	33.952	26.314	173.2	.399	2.64	40.5	33.6	1.97	27.0	.00	.00	.06	167
2	184	8.62	8.60	34.001	26.398	165.4	.429	2.66	40.6	35.5	1.99	27.7	.00			185
	200 ISL	8.40	8.38	34.033	26.458	160.0	.455	2.56	38.8							202
2	204	8.34	8.32	34.038	26.471	158.8	.461	2.52	38.2	38.8	2.13	28.9	.00			205
2	234	7.77	7.74	34.053	26.568	149.9	.507	2.24	33.5	44.9	2.20	30.9	.00			235
	250 ISL	7.59	7.56	34.066	26.605	146.6	.531	2.10	31.2							252
2	274	7.38	7.36	34.087	26.650	142.6	.567	1.87	27.7							276
	300 ISL	7.11	7.08	34.101	26.700	138.2	.603	1.55	22.9							302
2	333	6.78	6.75	34.122	26.761	132.7	.647	1.16	17.0	62.5	2.64	36.5	.00			335
	400 ISL	6.41	6.38	34.203	26.875	122.7	.733	.75	10.8							403
2	407	6.38	6.34	34.211	26.886	121.7	.742	.72	10.4	72.0	2.84	38.7	.00			410
2	482	5.78	5.74	34.240	26.985	112.7	.829	.44	6.3	83.0	3.02	41.1	.00			485
	500 ISL	5.65	5.61	34.253	27.011	110.4	.849	.39	5.6							504
2	556	5.32	5.27	34.304	27.092	103.0	.909	.31	4.4	91.8	3.09	42.4	.00			560

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 80 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 09.5 N	121 09.0 W	01/12/84	1857 GMT	2222 M	010	07 KT	320 06 10	1	1018.6 MB	15.2 C	13.4 C	6/8	CC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.23	14.22	33.416	24.917	302.7	.000	5.93	101.6							0
1	1	14.23	14.22	33.416	24.917	302.7	.003	5.93	101.6	4.1	.37	.6	.04	.63	.12	1
1	10	14.18	14.18	33.416	24.927	302.0	.030	6.05	103.6	4.1	.39	.6	.04	.57	.22	10
	20 ISL	14.18	14.17	33.417	24.928	302.2	.060	5.98	102.4							20
1	26	14.17	14.17	33.417	24.929	302.3	.078	5.91	101.2	4.0	.41	.6	.04	.59	.25	26
	30 ISL	14.17	14.17	33.417	24.930	302.3	.091	5.91	101.2							30
1	40	14.12	14.12	33.407	24.933	302.3	.120	5.91	101.1	4.0	.45	.6	.04	.58	.23	40
	50 ISL	13.96	13.95	33.417	24.975	298.6	.151	5.78	98.5							50
1	56	13.86	13.86	33.422	24.998	296.5	.168	5.71	97.1	4.8	.48	1.7	.06	.39	.21	56
1	68	11.52	11.51	33.519	25.530	246.0	.200	4.08	66.1	14.3	1.17	13.9	.01	.11	.16	68
	75 ISL	11.35	11.34	33.624	25.644	235.3	.218	4.00	64.6							76
1	76	11.33	11.32	33.628	25.649	234.8	.220	3.99	64.4	15.4	1.27	15.1	.00	.08	.14	76
1	91	10.66	10.65	33.661	25.796	221.2	.254	3.67	58.4	18.8	1.43	18.3	.00	.13	.29	91
	100 ISL	10.33	10.32	33.680	25.867	214.5	.274	3.51	55.5							101
1	105	10.15	10.14	33.701	25.914	210.2	.286	3.44	54.2	24.0	1.69	22.9	.00	.01	.09	106
1	120	9.64	9.63	33.852	26.118	191.0	.316	3.34	52.1	24.0	1.72	22.9	.00	.01	.08	121
	125 ISL	9.59	9.58	33.875	26.144	188.7	.324	3.27	51.0							126
1	146	9.46	9.45	33.926	26.206	183.2	.364	2.94	45.7	27.8	1.83	24.7	.00	.00	.06	147
	150 ISL	9.38	9.36	33.938	26.229	181.1	.371	2.90	45.0							151
1	165	9.03	9.02	33.980	26.317	172.9	.398	2.76	42.5	31.4	1.93	26.5	.00	.01	.06	166
1	185	8.77	8.75	34.007	26.380	167.3	.431	2.57	39.3	34.0	1.99	27.6	.00			186
	200 ISL	8.56	8.54	34.034	26.434	162.4	.456	2.49	37.9							202
1	206	8.48	8.45	34.044	26.455	160.4	.465	2.47	37.5	37.3	2.07	28.6	.00			207
1	236	7.94	7.92	34.070	26.556	151.2	.512	2.43	36.5	41.4	2.14	29.9	.00			237
	250 ISL	7.82	7.80	34.079	26.580	149.1	.534	2.31	34.6							252
1	276	7.66	7.63	34.092	26.615	146.1	.572	2.03	30.3	46.9	2.32	31.9	.00			278
	300 ISL	7.33	7.30	34.112	26.678	140.4	.606	1.77	26.2							302
1	337	6.81	6.78	34.149	26.778	131.1	.656	1.38	20.2	58.0	2.58	35.8	.00			339
	400 ISL	6.47	6.44	34.208	26.871	123.1	.737	.85	12.3							403
1	410	6.44	6.40	34.216	26.881	122.2	.749	.78	11.3	69.6	2.83	38.5	.00			413
1	486	5.96	5.92	34.261	26.979	113.6	.838	.51	7.3	78.1	2.96	40.1	.00			489
	500 ISL	5.86	5.82	34.271	26.999	111.8	.854	.47	6.7							504
1	560	5.41	5.36	34.317	27.092	103.2	.919	.31	4.4	90.6	3.09	42.1	.00			564

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 80 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 09.5 N	121 09.0 W	01/13/84	0127 GMT	2222 M	010	05 KT	350 03 10	1	1017.6 MB	15.7 C	13.2 C	3/8	AS

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.25	14.25	33.416	24.912	303.2	.000	5.96	102.2							0
1	2	14.25	14.25	33.416	24.912	303.2	.006	5.96	102.2	3.9	.36	.5	.04	.65	.26	2
	10 ISL	14.20	14.20	33.414	24.921	302.6	.030	6.13	104.9							10
1	12	14.19	14.19	33.414	24.924	302.4	.036	6.14	105.1	4.1	.38	.5	.06	.71	.22	12
	20 ISL	14.12	14.11	33.409	24.936	301.5	.061	6.05	103.4							20
1	26	14.07	14.07	33.406	24.942	301.0	.078	5.94	101.5	4.1	.39	.6	.07	.73	.26	26
	30 ISL	14.06	14.06	33.405	24.943	301.1	.091	5.93	101.2							30
1	42	14.05	14.04	33.402	24.944	301.3	.126	5.89	100.6	4.1	.40	.6	.08	.55	.25	42
	50 ISL	13.36	13.36	33.422	25.101	286.6	.150	5.31	89.5							50
1	56	12.72	12.71	33.453	25.252	272.3	.166	4.82	80.1	9.3	.84	8.2	.08	.33	.30	56
1	66	11.55	11.54	33.550	25.549	244.2	.192	4.11	66.7	14.5	1.17	13.8	.02	.12	.20	66
	75 ISL	11.28	11.27	33.586	25.626	237.0	.214	3.95	63.6							76
1	77	11.27	11.26	33.589	25.631	236.6	.218	3.94	63.5	15.8	1.27	15.4	.01	.07	.13	77
1	94	10.58	10.56	33.656	25.806	220.2	.257	3.63	57.7	19.1	1.47	18.8	.00	.03	.11	94
	100 ISL	10.26	10.25	33.692	25.889	212.6	.271	3.49	55.1							101
1	107	9.93	9.92	33.733	25.977	204.2	.286	3.35	52.5	23.0	1.63	21.8	.00	.01	.08	108
1	122	9.63	9.61	33.780	26.064	196.2	.316	3.21	50.0	25.1	1.72	23.5	.00	.01	.06	123
	125 ISL	9.59	9.57	33.792	26.081	194.7	.321	3.18	49.4							126
1	147	9.27	9.25	33.894	26.212	182.5	.363	2.92	45.1	29.0	1.85	25.2	.00	.01	.06	148
	150 ISL	9.23	9.21	33.903	26.226	181.3	.368	2.90	44.8							151
1	167	8.99	8.97	33.954	26.304	174.1	.399	2.78	42.7	31.2	1.94	26.4	.01	.01	.05	168
1	188	8.60	8.58	34.022	26.418	163.6	.434	2.52	38.4	36.0	2.04	28.1	.01			189
	200 ISL	8.41	8.39	34.052	26.471	158.8	.453	2.35	35.7							202
1	207	8.31	8.29	34.065	26.497	156.4	.464	2.27	34.4	40.1	2.16	29.6	.01			208
1	237	7.79	7.77	34.076	26.583	148.6	.510	2.20	32.9	44.5	2.23	31.1	.00			238
	250 ISL	7.59	7.56	34.080	26.615	145.7	.529	1.92	28.7							252
1	277	7.23	7.20	34.090	26.674	140.3	.568	1.31	19.4	51.8	2.40	33.5	.00			279
	300 ISL	6.99	6.96	34.110	26.724	135.9	.600	1.25	18.3							302
1	338	6.66	6.63	34.149	26.799	129.1	.650	1.14	16.6	63.3	2.65	36.8	.00			340
	400 ISL	6.27	6.24	34.207	26.896	120.5	.727	.74	10.7							403
1	411	6.22	6.18	34.216	26.911	119.2	.741	.67	9.7	73.6	2.92	38.9	.00			414
1	486	5.86	5.82	34.246	26.980	113.4	.827	.50	7.2	80.9	2.99	40.4	.00			489
	500 ISL	5.79	5.74	34.254	26.995	112.1	.844	.49	7.0							504
1	559	5.48	5.43	34.293	27.064	106.0	.908	.45	6.4	89.0	3.07	41.8	.00			563

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 80 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 09.5 N	121 09.0 W	01/13/84	0638 GMT	2222 M	010	04 KT		1	1015.2 MB	14.8 C	13.0 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	14.28	14.28	33.420	24.909	303.4	.000	5.93	101.7	5.0	.39	.6	.00	.77	.21	0
	10 ISL	14.21	14.21	33.418	24.923	302.4	.030	6.06	103.8							10
1	11	14.20	14.20	33.418	24.924	302.4	.033	6.06	103.8	4.8	.39	.6	.00	.78	.13	11
	20 ISL	14.14	14.14	33.413	24.932	301.8	.061	5.97	102.2							20
1	26	14.12	14.11	33.410	24.936	301.6	.078	5.89	100.7	4.8	.43	.7	.00	.61	.20	26
	30 ISL	14.12	14.11	33.410	24.936	301.7	.091	5.88	100.6							30
1	41	14.11	14.11	33.410	24.937	302.0	.123	5.86	100.2	4.6	.41	.7	.00	.49	.22	41
	50 ISL	13.13	13.12	33.420	25.145	282.4	.150	5.19	87.0							50
1	57	12.31	12.30	33.450	25.329	265.0	.169	4.64	76.4	10.8	.93	9.8	.00	.25	.18	57
1	67	11.65	11.64	33.535	25.520	247.0	.194	4.18	67.9	14.0	1.16	13.3	.00	.14	.22	67
	75 ISL	11.24	11.23	33.586	25.633	236.4	.214	3.95	63.7							76
1	77	11.17	11.17	33.594	25.652	234.7	.218	3.92	63.1	16.4	1.31	15.8	.00	.06	.13	77
1	92	10.75	10.74	33.646	25.768	223.8	.252	3.69	58.8	19.0	1.44	18.2	.00	.04	.10	92
	100 ISL	10.37	10.36	33.657	25.843	216.9	.271	3.60	57.0							101
1	106	10.07	10.06	33.671	25.904	211.1	.285	3.53	55.5	21.7	1.58	20.6	.00	.03	.08	107
1	121	9.64	9.63	33.782	26.063	196.3	.315	3.21	50.0	25.7	1.73	23.1	.00	.01	.08	122
	125 ISL	9.56	9.55	33.806	26.095	193.3	.322	3.15	49.0							126
1	147	9.19	9.18	33.925	26.249	179.1	.363	2.86	44.1	30.4	1.91	25.6	.00	.01	.07	148
	150 ISL	9.15	9.13	33.935	26.263	177.8	.368	2.83	43.7							151
1	167	8.90	8.88	33.982	26.340	170.7	.398	2.66	40.8	33.6	1.99	26.9	.00	.01	.06	168
1	187	8.57	8.55	34.032	26.431	162.4	.431	2.44	37.2	36.5	2.08	28.0	.00			188
	200 ISL	8.45	8.43	34.049	26.463	159.6	.452	2.42	36.8							202
1	207	8.39	8.37	34.053	26.476	158.4	.463	2.41	36.6	38.8	2.15	29.1	.00			208
1	238	7.85	7.83	34.059	26.561	150.7	.511	2.38	35.7	42.7	2.18	30.3	.00			239
	250 ISL	7.74	7.71	34.069	26.585	148.6	.529	2.27	34.0							252
1	278	7.53	7.51	34.093	26.634	144.3	.571	1.96	29.2	48.4	2.36	32.7	.00			280
	300 ISL	7.28	7.25	34.101	26.676	140.5	.602	1.76	26.1							302
1	337	6.84	6.81	34.116	26.749	133.9	.652	1.44	21.1	57.4	2.58	35.7	.00			339
	400 ISL	6.38	6.35	34.192	26.870	123.1	.733	.84	12.2							403
1	411	6.32	6.29	34.206	26.889	121.4	.747	.75	10.9	70.5	2.88	38.4	.01			414
1	486	5.91	5.86	34.244	26.973	114.1	.835	.52	7.5	78.0	2.98	40.1	.01			489
	500 ISL	5.82	5.78	34.253	26.991	112.5	.851	.48	6.9							504
1	560	5.45	5.40	34.295	27.069	105.4	.916	.35	5.0	88.4	3.08	41.5	.01			564

RV DAVID STARR JORDAN

CALCOFI CRUISE 8401

STATION 80 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 49.0 N	121 50.6 W	01/13/84	1335 GMT	3730 M	340	12 KT	320 04 11	1	1013.2 MB	14.0 C	11.2 C	1/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.42	14.42	33.343	24.820	312.0	.000	5.96	102.5							0
1	1	14.42	14.42	33.343	24.820	312.0	.003	5.96	102.5	2.9	.34	.2	.00	.52	.22	1
	10 ISL	14.41	14.41	33.342	24.821	312.1	.031	5.97	102.6							10
1	11	14.41	14.41	33.342	24.821	312.1	.034	5.97	102.7	2.7	.35	.1	.00	.52	.20	11
	20 ISL	14.42	14.42	33.342	24.820	312.5	.062	5.96	102.4							20
1	26	14.43	14.42	33.342	24.818	312.9	.081	5.94	102.2	2.6	.35	.0	.00	.48	.21	26
	30 ISL	14.43	14.43	33.342	24.817	313.1	.094	5.93	102.0							30
1	41	14.44	14.44	33.343	24.816	313.5	.128	5.90	101.5	2.9	.35	.0	.00	.49	.21	41
	50 ISL	14.44	14.43	33.342	24.816	313.8	.156	5.91	101.7							50
1	58	14.44	14.43	33.342	24.816	314.0	.181	5.92	101.8	2.7	.35	.0	.00	.50	.21	58
1	67	14.44	14.43	33.342	24.817	314.1	.209	5.90	101.5	2.7	.34	.0	.00	.50	.20	67
	75 ISL	14.20	14.19	33.351	24.875	308.8	.235	5.75	98.4							76
1	77	14.15	14.14	33.353	24.886	307.8	.240	5.69	97.3	3.6	.45	1.2	.10	.25	.12	77
1	92	11.98	11.97	33.416	25.366	262.3	.282	4.62	75.5	10.1	.94	10.1	.01	.09	.14	92
	100 ISL	11.64	11.63	33.450	25.456	253.9	.304	4.40	71.5							101
1	107	11.55	11.54	33.475	25.491	250.6	.320	4.32	70.0	12.6	1.11	12.7	.00	.08	.09	107
1	122	10.93	10.91	33.574	25.681	232.9	.359	3.99	63.8	16.1	1.30	16.2	.00	.04	.09	123
	125 ISL	10.82	10.80	33.592	25.715	229.7	.365	3.93	62.7							126
1	146	9.99	9.97	33.736	25.971	205.7	.411	3.42	53.7	22.8	1.61	21.4	.00	.01	.04	147
	150 ISL	9.87	9.85	33.756	26.006	202.4	.419	3.35	52.4							151
1	166	9.44	9.42	33.827	26.132	190.6	.451	3.12	48.4	26.9	1.78	24.0	.00	.01	.02	167
1	187	8.99	8.97	33.881	26.247	180.0	.489	3.13	48.1	29.5	1.82	25.1	.00			188
	200 ISL	8.78	8.76	33.930	26.319	173.4	.512	3.01	46.0							202
1	209	8.65	8.63	33.961	26.363	169.3	.527	2.92	44.5	33.2	1.92	26.4	.00			210
1	238	8.21	8.19	33.993	26.455	160.9	.575	2.94	44.4	36.7	1.95	27.2	.00			239
	250 ISL	8.04	8.02	34.006	26.492	157.6	.595	2.86	43.0							252
1	277	7.67	7.64	34.032	26.566	150.8	.637	2.58	38.5	43.4	2.12	29.7	.00			279
	300 ISL	7.33	7.30	34.045	26.625	145.4	.670	2.31	34.1							302
1	336	6.82	6.79	34.060	26.707	137.9	.721	1.87	27.4	55.1	2.44	34.2	.00			338
	400 ISL	6.24	6.21	34.082	26.801	129.4	.807	1.37	19.7							403
1	410	6.17	6.13	34.085	26.813	128.3	.820	1.30	18.7	66.2	2.67	37.8	.00			413
1	484	5.66	5.62	34.135	26.917	119.1	.911	.83	11.8	77.8	2.88	40.1				487
	500 ISL	5.56	5.51	34.146	26.938	117.2	.930	.75	10.7							504
1	557	5.23	5.18	34.181	27.005	111.1	.995	.55	7.8	88.0	3.01	41.6				561

RV DAVID STARR JORDAN

CALCOFI CRUISE 8401

STATION 80 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 49.0 N	121 50.6 W	01/13/84	1852 GMT	3730 M	340	11 KT	330 04 11	1	1013.9 MB	14.2 C	11.8 C	1/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.48	14.48	33.339	24.804	313.5	.000	5.93	102.1							0
1	1	14.48	14.48	33.339	24.804	313.5	.003	5.93	102.1	2.9	.32	.2	.00	.55	.14	1
	10 ISL	14.43	14.43	33.339	24.814	312.7	.031	5.95	102.3							10
1	11	14.43	14.43	33.339	24.815	312.7	.034	5.95	102.4	2.8	.33	.2	.00	.50	.17	11
	20 ISL	14.44	14.44	33.338	24.813	313.1	.063	5.99	103.0							20
1	26	14.44	14.44	33.338	24.812	313.5	.081	6.00	103.2	2.8	.33	.0	.00	.48	.20	26
	30 ISL	14.44	14.44	33.338	24.812	313.6	.094	5.98	102.9							30
1	41	14.44	14.44	33.338	24.812	313.9	.128	5.91	101.7	2.8	.33	.0	.00	.49	.18	41
	50 ISL	14.44	14.43	33.338	24.813	314.1	.157	5.90	101.6							50
1	57	14.44	14.43	33.338	24.813	314.3	.178	5.90	101.5	2.8	.34	.0	.00	.50	.19	57
1	66	14.43	14.43	33.338	24.814	314.4	.206	5.89	101.3	2.7	.35	.0	.03	.51	.16	66
	75 ISL	14.35	14.34	33.340	24.833	312.8	.235	5.82	100.0							76
1	77	14.34	14.33	33.341	24.837	312.5	.240	5.81	99.7	3.1	.39	.5	.09	.30	.10	77
1	91	12.42	12.40	33.410	25.278	270.7	.281	4.69	77.4	9.5	.87	9.0	.03	.09	.15	91
	100 ISL	11.83	11.81	33.444	25.416	257.7	.306	4.43	72.3							101
1	106	11.60	11.59	33.464	25.473	252.4	.320	4.36	70.7	12.3	1.07	12.7	.02	.06	.10	106
1	121	10.78	10.76	33.583	25.715	229.6	.358	3.91	62.4	17.0	1.33	17.1	.01	.03	.08	122
	125 ISL	10.59	10.58	33.614	25.771	224.3	.366	3.80	60.4							126
1	146	9.66	9.64	33.778	26.059	197.2	.411	3.28	51.1	25.1	1.67	23.0	.01	.01	.04	147
	150 ISL	9.53	9.51	33.794	26.092	194.1	.419	3.26	50.6							151
1	165	9.13	9.11	33.848	26.199	184.1	.447	3.19	49.1	27.5	1.77	24.9	.04	.01	.03	166
1	185	8.91	8.89	33.938	26.305	174.4	.483	2.85	43.7	31.7	1.89	26.6	.00			186
	200 ISL	8.60	8.58	33.961	26.370	168.5	.509	3.00	45.7							202
1	205	8.50	8.48	33.963	26.388	166.8	.517	3.07	46.7	33.3	1.88	26.5	.00			206
1	235	8.05	8.02	33.994	26.481	158.3	.565	2.92	43.9	37.7	1.95	27.9	.00			236
	250 ISL	7.85	7.83	34.010	26.522	154.6	.589	2.78	41.6							252
1	275	7.55	7.52	34.032	26.583	149.1	.628	2.49	37.0	44.7	2.13	30.6	.00			277
	300 ISL	7.23	7.20	34.047	26.640	143.9	.664	2.21	32.6							302
1	336	6.77	6.74	34.064	26.718	136.8	.714	1.79	26.2	56.8	2.47	34.8	.00			338
	400 ISL	6.06	6.02	34.102	26.840	125.6	.798	1.10	15.9							403
1	410	5.96	5.92	34.107	26.857	124.0	.811	1.01	14.5	71.8	2.76	39.4	.00			413
1	485	5.42	5.38	34.149	26.957	115.0	.900	.66	9.3	82.8	2.95	41.6	.02			488
	500 ISL	5.34	5.30	34.162	26.977	113.3	.917	.60	8.5							504
1	558	5.15	5.10	34.224	27.048	107.0	.981	.41	5.8	92.0	3.06	43.1	.02			562

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 80 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 49.0 N	121 50.6 W	01/14/84	0140 GMT	3730 M	020	14 KT	350 03 11	1	1012.2 MB	10.4 C	10.1 C	1/8	CU

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	14.47	14.47	33.345	24.810	312.9	.000	5.93	102.1							0
1	2		14.47	14.47	33.345	24.810	312.9	.006	5.93	102.1	2.9	.33	.2	.00	.52	.18	2
	10	ISL	14.47	14.47	33.344	24.809	313.2	.031	5.94	102.3							10
1	12		14.47	14.47	33.344	24.809	313.3	.037	5.94	102.3	2.9	.33	.1	.00	.56	.16	12
	20	ISL	14.47	14.47	33.344	24.811	313.4	.063	5.93	102.1							20
	30	ISL	14.46	14.46	33.344	24.813	313.5	.094	5.92	101.8							30
1	33		14.46	14.46	33.345	24.813	313.5	.103	5.91	101.7	2.8	.33	.1	.00	.51	.15	33
	50	ISL	14.45	14.44	33.344	24.815	313.9	.157	5.89	101.4							50
1	52		14.45	14.44	33.343	24.815	313.9	.162	5.89	101.4	2.8	.34	.1	.01	.41	.11	52
1	68		14.41	14.40	33.343	24.823	313.6	.212	5.86	100.8	2.8	.34	.2	.04	.13	.15	68
	75	ISL	13.43	13.42	33.370	25.048	292.3	.234	5.26	88.7							76
1	78		13.04	13.03	33.385	25.137	283.9	.242	5.03	84.1	7.4	.71	6.2	.04	.10	.14	78
1	89		12.23	12.22	33.430	25.329	265.7	.272	4.59	75.5	10.4	.91	9.9	.01	.07	.10	89
	100	ISL	11.76	11.74	33.471	25.450	254.4	.302	4.36	71.0							101
1	104		11.64	11.62	33.484	25.483	251.4	.311	4.31	70.0	14.5	1.08	12.7	.01	.04	.08	104
1	117		10.95	10.94	33.565	25.670	233.8	.344	4.02	64.4	16.6	1.27	15.8	.01	.01	.04	118
	125	ISL	10.63	10.61	33.618	25.768	224.6	.362	3.82	60.7							126
1	142		10.02	10.00	33.730	25.960	206.6	.399	3.41	53.5	23.1	1.60	21.4	.01	.02	.03	143
	150	ISL	9.84	9.82	33.763	26.016	201.4	.415	3.32	51.9							151
1	162		9.59	9.57	33.808	26.093	194.3	.439	3.22	50.1	26.5	1.71	23.4	.01	.00	.03	163
1	182		9.08	9.06	33.887	26.237	180.8	.476	3.11	47.9	29.7	1.80	24.9	.00			183
	200	ISL	8.76	8.74	33.940	26.330	172.3	.508	3.05	46.6							202
1	208		8.64	8.62	33.958	26.363	169.3	.521	3.03	46.2	33.0	1.87	26.5	.00			209
1	233		8.25	8.23	33.993	26.450	161.3	.562	2.96	44.7	36.7	1.93	27.4	.00			234
	250	ISL	7.97	7.94	34.012	26.507	156.1	.590	2.83	42.5							252
1	262		7.79	7.76	34.024	26.543	152.8	.608	2.71	40.5	41.9	2.05	29.2	.00			263
1	297		7.30	7.27	34.053	26.635	144.3	.661	2.19	32.4	48.7	2.26	32.1	.00			299
	300	ISL	7.26	7.24	34.055	26.642	143.8	.665	2.16	31.9							302
	400	ISL	6.19	6.16	34.095	26.818	127.8	.800	1.23	17.8							403
1	411		6.09	6.06	34.099	26.834	126.4	.815	1.16	16.7	69.1	2.69	38.1	.00			414
1	486		5.53	5.49	34.159	26.951	115.7	.905	.71	10.1	81.8	2.96	40.4	.00			489
	500	ISL	5.45	5.41	34.174	26.973	113.7	.921	.64	9.1							504
1	565		5.14	5.09	34.253	27.073	104.7	.992	.40	5.6	93.7	3.03	42.4	.02			569

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 80 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 49.0 N	121 50.6 W	01/14/84	0636 GMT	3730 M	330	16 KT		1	1012.9 MB	14.0 C	10.5 C		

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	14.48	14.48	33.353	24.815	312.5	.000	5.91	101.8							0
1	1		14.48	14.48	33.353	24.815	312.5	.003	5.91	101.8	3.2	.33	.0	.00	.44	.18	1
1	10		14.46	14.46	33.351	24.817	312.5	.031	6.02	103.6	3.1	.34	.0	.00	.45	.18	10
	20	ISL	14.47	14.46	33.351	24.817	312.7	.063	6.00	103.3							20
	30	ISL	14.47	14.46	33.351	24.816	313.1	.094	5.98	103.0							30
1	31		14.47	14.46	33.351	24.816	313.2	.097	5.98	103.0	2.9	.34	.0	.00	.44	.19	31
1	50		14.47	14.46	33.351	24.817	313.7	.156	5.94	102.3	2.8	.34	.0	.00	.46	.17	50
1	66		14.47	14.46	33.351	24.817	314.1	.206	5.91	101.7	2.9	.33	.0	.00	.44	.16	66
	75	ISL	13.21	13.20	33.385	25.104	286.9	.234	5.13	86.0							76
1	76		13.11	13.10	33.389	25.126	284.8	.236	5.07	84.9	7.5	.70	5.8	.01	.10	.16	76
1	86		12.37	12.36	33.426	25.300	268.5	.263	4.66	76.8	10.2	.91	9.3	.00	.11	.13	86
1	100		11.52	11.51	33.513	25.526	247.2	.299	4.26	69.0	13.6	1.13	13.3	.00	.06	.08	100
1	115		10.73	10.72	33.610	25.743	226.8	.337	3.83	61.0	18.0	1.33	17.2	.01	.02	.06	116
	125	ISL	10.37	10.36	33.666	25.849	216.9	.358	3.64	57.6							126
1	140		9.89	9.87	33.748	25.996	203.1	.390	3.40	53.2	23.6	1.61	21.7	.01	.01	.04	141
	150	ISL	9.60	9.58	33.797	26.083	195.0	.409	3.25	50.6							151
1	159		9.32	9.30	33.840	26.162	187.6	.427	3.16	48.9	27.4	1.75	24.1	.01	.01	.03	160
1	178		8.67	8.65	33.931	26.336	171.2	.461	3.20	48.8	31.3	1.83	25.6	.02	.00	.02	179
	200	ISL	8.41	8.39	33.984	26.417	163.9	.498	3.03	45.9							202
1	203		8.39	8.37	33.987	26.424	163.3	.502	3.00	45.5	35.0	1.90	26.7	.02			204
1	228		7.97	7.95	34.013	26.507	155.7	.542	2.90	43.6	38.7	1.98	28.3	.02			229
	250	ISL	7.68	7.66	34.035	26.566	150.4	.576	2.63	39.2							252
1	259		7.59	7.56	34.042	26.585	148.6	.589	2.50	37.2	44.6	2.14	30.5	.01			260
1	293		7.18	7.15	34.062	26.660	141.9	.639	2.07	30.5	50.7	2.31	32.9	.01			295
	300	ISL	7.09	7.06	34.065	26.674	140.6	.649	2.00	29.4							302
1	343		6.60	6.57	34.082	26.754	133.3	.707	1.59	23.1	59.4	2.53	36.0	.01			345
	400	ISL	6.18	6.15	34.109	26.830	126.6	.782	1.17	16.8							403
1	407		6.14	6.10	34.112	26.838	125.9	.791	1.12	16.1	68.5	2.74	38.8	.01			410
1	481		5.58	5.54	34.166	26.950	115.8	.880	.72	10.2	79.7	2.91	41.2	.02			484
	500	ISL	5.47	5.42	34.184	26.979	113.2	.902	.63	9.0							504
1	560		5.16	5.12	34.246	27.064	105.5	.967	.41	5.8	92.3	3.05	42.7	.02			564

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 80 80

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 29.0 N	122 32.0 W	01/14/84	1428 GMT	4014 M	290	08 KT	330 05 11	1	1017.3 MB	13.8 C	10.9 C	1/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.45	14.45	33.289	24.772	316.5	.000	6.02	103.6							0
1	2	14.45	14.45	33.289	24.772	316.5	.006	6.02	103.6	3.2	.32	.0	.00	.38	.16	2
	10 ISL	14.44	14.44	33.290	24.774	316.6	.032	5.95	102.3							10
1	12	14.44	14.44	33.290	24.774	316.6	.038	5.94	102.2	3.2	.33	.0	.00	.41	.16	12
	20 ISL	14.45	14.45	33.292	24.774	316.9	.063	5.96	102.5							20
1	28	14.46	14.45	33.293	24.774	317.1	.088	5.97	102.7	3.1	.33	.0	.00	.37	.12	28
	30 ISL	14.47	14.47	33.298	24.775	317.1	.095	5.97	102.7							30
1	43	14.57	14.56	33.325	24.776	317.3	.136	5.94	102.4	2.9	.32	.0	.00	.36	.08	43
	50 ISL	14.41	14.41	33.295	24.786	314.5	.158	5.88	101.1							50
1	57	14.09	14.08	33.276	24.838	311.8	.180	5.83	99.5	3.6	.40	.7	.06	.43	.16	57
1	72	12.55	12.54	33.385	25.233	274.4	.223	4.77	78.9	8.7	.84	8.3	.01	.13	.16	72
	75 ISL	12.44	12.43	33.386	25.255	272.2	.232	4.75	78.4							76
1	82	12.29	12.28	33.388	25.285	269.7	.250	4.71	77.5	9.5	.90	9.2	.01	.13	.15	82
1	98	11.56	11.55	33.446	25.467	252.7	.292	4.37	70.8	12.4	1.09	12.5	.00	.08	.12	98
	100 ISL	11.44	11.42	33.464	25.504	249.3	.298	4.29	69.4							101
1	117	10.61	10.60	33.607	25.762	224.9	.339	3.75	59.6	18.6	1.39	17.9	.00	.01	.07	118
	125 ISL	10.36	10.34	33.658	25.846	217.2	.356	3.58	56.7							126
1	137	10.01	10.00	33.734	25.964	206.1	.382	3.34	52.4	23.1	1.63	21.5	.00	.01	.04	138
	150 ISL	9.66	9.64	33.823	26.094	194.0	.408	3.05	47.6							151
1	157	9.48	9.46	33.868	26.158	188.0	.421	2.91	45.2	28.3	1.81	24.8	.00	.01	.04	158
1	177	9.14	9.12	33.939	26.268	177.9	.458	2.69	41.5	31.5	1.93	26.3	.00	.01	.03	178
1	197	8.76	8.74	33.974	26.355	169.8	.492	2.66	40.7	34.0	1.99	27.6	.00			198
	200 ISL	8.69	8.67	33.980	26.372	168.3	.497	2.66	40.7							202
1	217	8.26	8.24	34.006	26.458	160.3	.525	2.69	40.7	37.6	2.05	28.4	.00			218
	250 ISL	7.58	7.56	34.004	26.556	151.2	.577	2.86	42.6							252
1	253	7.54	7.51	34.002	26.561	150.8	.581	2.87	42.7	42.1	2.06	29.6	.00			254
	300 ISL	6.99	6.96	34.020	26.653	142.5	.650	2.35	34.4							302
1	302	6.97	6.94	34.021	26.656	142.2	.653	2.31	33.9	50.8	2.27	32.7	.01			304
1	356	6.44	6.41	34.048	26.748	134.0	.727	1.66	24.1	60.2	2.54	36.2	.01			358
	400 ISL	6.01	5.97	34.074	26.824	127.0	.785	1.24	17.7							403
1	441	5.66	5.63	34.106	26.893	120.8	.836	.92	13.1	76.0	2.84	40.1	.01			444
	500 ISL	5.42	5.38	34.181	26.982	112.9	.905	.58	8.2							504
1	524	5.35	5.31	34.212	27.015	110.0	.932	.48	6.8	87.4	3.04	42.1	.01			528
	600 ISL	5.05	5.00	34.272	27.098	102.7	1.012	.35	4.9							605
1	610	5.01	4.96	34.276	27.106	101.9	1.022	.33	4.6	96.4	3.13	43.0	.01			614

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 80 90

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 09.0 N	123 13.3 W	01/14/84	2138 GMT	4014 M	300	06 KT	310 04 10	1	1020.3 MB	16.7 C	12.4 C	5/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.61	15.61	33.249	24.490	343.4	.000	5.77	101.6							0
1	1	15.61	15.61	33.249	24.490	343.4	.003	5.77	101.6	2.8	.27	.1	.00	.12	.04	1
	10 ISL	15.49	15.49	33.243	24.510	341.7	.034	5.85	102.8							10
1	11	15.48	15.48	33.241	24.512	341.6	.038	5.86	102.9	2.8	.27	.1	.00	.13	.05	11
	20 ISL	15.35	15.34	33.209	24.518	341.3	.068	5.85	102.4							20
1	26	15.25	15.24	33.184	24.520	341.2	.089	5.84	102.0	2.8	.28	.1	.00	.15	.07	26
	30 ISL	15.17	15.17	33.172	24.527	340.7	.103	5.85	102.0							30
1	41	14.95	14.94	33.132	24.545	339.3	.139	5.86	101.7	2.7	.29	.1	.00	.19	.09	41
	50 ISL	14.70	14.69	33.138	24.603	334.0	.170	5.90	101.9							50
1	56	14.53	14.52	33.153	24.652	329.5	.189	5.93	102.1	3.0	.31	.1	.00	.36	.10	56
1	66	14.22	14.21	33.193	24.748	320.6	.222	5.96	102.0	3.2	.32	.1	.01	.46	.10	66
	75 ISL	14.08	14.07	33.242	24.816	314.5	.251	5.89	100.5							76
1	76	14.06	14.05	33.246	24.822	313.9	.253	5.88	100.3	3.5	.36	.4	.15	.47	.10	76
1	91	12.92	12.90	33.287	25.085	289.1	.298	5.42	90.3	5.5	.53	3.5	.01	.10	.15	91
	100 ISL	12.36	12.34	33.289	25.197	278.7	.325	5.21	85.8							101
1	106	12.07	12.05	33.299	25.259	272.8	.340	5.10	83.5	7.3	.73	6.7	.00	.06	.08	106
1	120	11.36	11.35	33.438	25.498	250.3	.379	4.84	78.1	10.1	.89	10.1	.00	.04	.06	121
	125 ISL	11.19	11.17	33.468	25.552	245.3	.391	4.71	75.7							126
1	146	10.45	10.43	33.590	25.778	224.1	.441	4.03	63.8	17.3	1.31	17.1	.00	.02	.03	147
	150 ISL	10.31	10.30	33.618	25.823	219.8	.449	3.92	62.0							151
1	166	9.74	9.72	33.739	26.015	201.8	.483	3.57	55.7	22.7	1.55	21.4	.00	.01	.02	167
1	186	9.12	9.10	33.839	26.193	185.1	.521	3.51	54.1	26.7	1.66	23.4	.00			187
	200 ISL	8.88	8.85	33.899	26.279	177.2	.547	3.21	49.2							202
1	206	8.79	8.77	33.921	26.310	174.3	.557	3.08	47.1	31.2	1.84	25.9	.00			207
1	236	8.19	8.17	34.002	26.465	159.9	.607	2.93	44.2	36.3	1.93	27.8	.00			237
	250 ISL	8.07	8.04	34.036	26.511	155.8	.629	2.69	40.6							252
1	275	7.90	7.87	34.079	26.570	150.6	.668	2.24	33.6	43.4	2.19	30.5	.00			277
	300 ISL	7.61	7.58	34.081	26.614	146.1	.705	2.04	30.4							302
1	335	7.15	7.12	34.085	26.682	140.5	.755	1.85	27.3	52.6	2.40	34.0	.00			337
	400 ISL	6.32	6.29	34.097	26.803	129.4	.843	1.30	18.8							403
1	409	6.22	6.18	34.101	26.819	127.8	.855	1.22	17.6	66.4	2.68	37.9	.00			412
1	484	5.70	5.66	34.167	26.937	117.2	.946	.72	10.3	78.8	2.90	40.6	.00			487
	500 ISL	5.59	5.55	34.179	26.960	115.2	.965	.65	9.2							504
1	558	5.22	5.18	34.214	27.032	108.6	1.030	.49	6.9	88.9	3.01	42.3	.00			562

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 80 100

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 49.0 N	123 54.4 W	01/15/84	0409 GMT	4302 M	230	06 KT			1020.3 MB	15.8 C	12.3 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.60	15.60	33.251	24.493	343.1	.000	5.76	101.4							0
1	2	15.60	15.60	33.251	24.493	343.1	.007	5.76	101.4	1.8	.29	.1	.02	.13	.02	2
	10 ISL	15.61	15.61	33.249	24.490	343.7	.034	5.76	101.4							10
1	12	15.61	15.61	33.248	24.489	343.8	.041	5.76	101.4	1.7	.30	.1	.00	.11	.03	12
	20 ISL	15.60	15.60	33.247	24.491	343.8	.069	5.76	101.5							20
	30 ISL	15.59	15.58	33.247	24.494	343.9	.103	5.77	101.5							30
1	32	15.58	15.58	33.247	24.495	343.9	.110	5.77	101.5	1.7	.30	.0	.00	.12	.04	32
	50 ISL	15.57	15.56	33.242	24.495	344.5	.172	5.77	101.5							50
1	52	15.57	15.56	33.242	24.495	344.5	.178	5.77	101.5	1.6	.30	.0		.11	.05	52
1	65	15.56	15.55	33.244	24.498	344.6	.223	5.77	101.5	1.6	.30	.0	.01	.13	.05	65
1	75	14.90	14.89	33.173	24.588	336.2	.257	5.76	99.9	2.0	.34	.0	.08	.36	.19	75
1	86	14.23	14.21	33.211	24.761	320.0	.293	5.76	98.6	2.5	.38	.3	.13	.22	.15	86
1	100	13.44	13.42	33.247	24.951	302.2	.336	5.68	95.7	3.0	.43	1.2	.03	.12	.10	100
1	115	12.42	12.41	33.300	25.192	279.5	.379	5.21	85.9	5.6	.67	5.1	.01	.08	.06	115
	125 ISL	11.87	11.86	33.362	25.345	265.0	.408	4.92	80.2							126
1	139	11.27	11.25	33.456	25.529	247.9	.445	4.56	73.4	11.0	1.05	12.2	.01	.03	.04	140
	150 ISL	10.92	10.91	33.509	25.632	238.2	.471	4.32	69.1							151
1	159	10.65	10.63	33.558	25.719	230.0	.492	4.10	65.2	15.5	1.31	16.5	.00	.01	.02	160
1	179	10.00	9.98	33.719	25.956	207.8	.536	3.49	54.8	21.5	1.62	21.2	.00	.01	.01	180
	200 ISL	9.19	9.17	33.838	26.181	186.5	.577	3.60	55.6							202
1	203	9.09	9.07	33.852	26.209	183.9	.582	3.63	55.9	25.7	1.68	23.0	.00			204
1	228	8.71	8.69	33.948	26.344	171.5	.627	3.10	47.3	31.3	1.88	26.4	.00			229
	250 ISL	8.42	8.39	33.985	26.418	164.8	.664	3.17	48.0							252
1	258	8.31	8.29	33.992	26.440	162.8	.676	3.21	48.6	33.8	1.91	26.5	.00			259
1	291	7.69	7.67	34.032	26.563	151.4	.729	2.73	40.7	41.6	2.12	29.6	.00			293
	300 ISL	7.58	7.55	34.039	26.585	149.3	.742	2.60	38.8							302
1	341	7.08	7.04	34.060	26.673	141.4	.802	2.06	30.3	51.4	2.38	33.7	.01			343
	400 ISL	6.29	6.25	34.066	26.783	131.2	.882	1.55	22.4							403
1	407	6.21	6.18	34.067	26.793	130.2	.891	1.50	21.6	63.5	2.66	37.8	.01			409
1	481	5.96	5.92	34.164	26.902	120.7	.984	.77	11.0	73.0	2.92	40.4	.01			484
	500 ISL	5.85	5.81	34.180	26.929	118.4	1.007	.71	10.1							504
1	560	5.39	5.35	34.209	27.008	111.1	1.076	.51	7.2	86.1	3.06	42.2	.00			564

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 82 46

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 16.2 N	119 56.3 W	01/10/84	2340 GMT	552 M	260	07 KT	220 04 07	1	1021.3 MB	17.8 C	15.2 C	1/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.39	15.39	33.416	24.667	326.6	.000	5.93	104.1							0
1	1	15.39	15.39	33.416	24.667	326.6	.003	5.93	104.1	3.9	.29	.1	.00	.49	.21	1
	10 ISL	15.20	15.20	33.414	24.707	322.9	.032	5.98	104.4							10
1	11	15.18	15.18	33.414	24.710	322.7	.036	5.98	104.5	3.9	.32	.0	.03	.56	.26	11
	20 ISL	15.12	15.11	33.413	24.725	321.6	.065	5.93	103.4							20
1	21	15.10	15.10	33.413	24.727	321.4	.068	5.92	103.3	3.9	.34	.0	.00	1.13	.20	21
1	30	14.70	14.70	33.409	24.811	313.7	.096	5.62	97.3	4.2	.43	1.0	.14	.81	.37	30
1	41	14.31	14.30	33.413	24.899	305.6	.130	5.43	93.2	5.2	.54	2.6	.35	.36	.32	41
	50 ISL	14.04	14.03	33.417	24.958	300.3	.158	5.31	90.7							50
1	51	14.02	14.01	33.417	24.963	299.8	.160	5.30	90.4	5.7	.59	3.6	.29	.26	.20	51
1	61	13.62	13.61	33.427	25.052	291.6	.190	5.12	86.7	6.4	.68	5.0	.17	.17	.18	61
1	71	13.17	13.17	33.445	25.156	281.8	.218	4.88	81.8	7.6	.82	6.6	.07	.11	.16	71
	75 ISL	12.99	12.98	33.456	25.202	277.6	.230	4.80	80.2							76
1	86	12.50	12.49	33.492	25.326	266.0	.259	4.59	75.9	9.2	.93	9.2	.02	.11	.11	86
	100 ISL	11.67	11.66	33.577	25.548	245.1	.296	4.14	67.3							101
1	101	11.64	11.63	33.581	25.557	244.3	.297	4.12	67.0	13.9	1.21	13.8	.02	.07	.09	101
	125 ISL	10.29	10.27	33.772	25.946	207.6	.352	3.30	52.2							126
1	125	10.27	10.26	33.774	25.951	207.1	.353	3.29	52.0	21.9	1.60	20.8	.00	.01	.08	126
1	145	9.78	9.76	33.875	26.114	192.1	.393	2.94	46.0	26.3	1.80	23.6	.00	.01	.05	146
	150 ISL	9.69	9.67	33.892	26.143	189.4	.402	2.89	45.0							151
1	175	9.30	9.28	33.965	26.263	178.4	.448	2.63	40.7	30.6	1.95	26.0	.00			176
	200 ISL	9.08	9.05	34.031	26.352	170.4	.491	2.25	34.7							202
1	205	9.03	9.01	34.043	26.367	169.0	.500	2.18	33.5	35.8	2.13	28.0	.01			206
1	235	8.59	8.57	34.098	26.480	158.7	.549	1.88	28.7	40.6	2.30	30.1	.02			236
	250 ISL	8.40	8.38	34.119	26.526	154.6	.573	1.71	25.9							252
1	274	8.11	8.08	34.144	26.590	148.8	.610	1.45	21.9	48.3	2.51	32.0	.00			276
	300 ISL	7.76	7.73	34.162	26.656	142.8	.647	1.25	18.7							302
1	333	7.33	7.30	34.176	26.728	136.2	.693	1.06	15.7	60.1	2.73	34.1	.02			335
1	388	6.81	6.78	34.184	26.807	129.2	.765	.82	12.0	70.0	2.89		.00			390
	400 ISL	6.71	6.67	34.187	26.823	127.8	.781	.76	11.1							403
1	447	6.37	6.33	34.199	26.877	123.1	.840	.56	8.1	78.0	3.04		.02			450
	500 ISL	6.09	6.04	34.211	26.924	119.1	.904	.42	6.1							504
1	507	6.06	6.01	34.212	26.928	118.8	.912	.41	5.9	85.5	3.18		.00			510

RV DAVID STARR JORDAN

CALCOFI CRUISE 8401

STATION 83 40.6

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 13.5 N	119 24.7 W	01/11/84	0600 GMT	35 M	140	07 KT		0	1020.0 MB	14.3 C	13.3 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.42	15.42	33.379	24.631	329.9	.000	5.82	102.2							0
1	1	15.42	15.42	33.379	24.631	329.9	.003	5.82	102.2	3.6	.34	.4	.04	.48	.24	1
1	10	15.44	15.44	33.377	24.625	330.7	.033	5.82	102.2	3.6	.41	.4	.04	.53	.25	10
	20 ISL	15.33	15.33	33.376	24.649	328.8	.066	5.68	99.6							20
1	21	15.32	15.32	33.376	24.651	328.6	.069	5.67	99.3	3.9	.44	.7	.19	.57	.28	21

RV DAVID STARR JORDAN

CALCOFI CRUISE 8401

STATION 83 42

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 10.7 N	119 30.5 W	01/11/84	0332 GMT	152 M	290	17 KT		1	1020.3 MB	15.3 C	13.2 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.37	15.37	33.397	24.656	327.5	.000	5.80	101.7							0
1	2	15.37	15.37	33.397	24.656	327.5	.007	5.80	101.7	3.2	.38	.2	.00	.58	.10	2
	10 ISL	15.27	15.27	33.412	24.689	324.7	.033	5.80	101.5							10
1	13	15.23	15.23	33.417	24.704	323.4	.042	5.80	101.4	3.7	.40	.4	.01	.62	.17	13
	20 ISL	15.09	15.09	33.431	24.744	319.8	.065	5.71	99.7							20
1	22	15.05	15.04	33.433	24.755	318.7	.071	5.68	99.0	4.0	.42	.9	.03	.63	.17	22
	30 ISL	14.79	14.79	33.423	24.803	314.5	.097	5.50	95.4							30
1	31	14.76	14.76	33.422	24.809	313.9	.099	5.48	95.0	4.3	.48	1.7	.03	.49	.23	31
1	41	14.34	14.33	33.423	24.900	305.5	.130	5.31	91.2	5.2	.57	2.8	.06	.39	.18	41
	50 ISL	13.74	13.73	33.438	25.035	292.8	.158	5.06	85.8							50
1	52	13.64	13.63	33.441	25.060	290.5	.163	5.01	84.8	6.7	.70	4.9	.04	.30	.19	52
1	63	13.40	13.40	33.457	25.119	285.2	.194	4.92	82.9	7.7	.77	6.0	.06	.27	.13	63
1	72	12.69	12.68	33.475	25.275	270.5	.219	4.65	77.2	8.9	.90	8.3	.00	.11	.13	72
	75 ISL	12.47	12.46	33.488	25.328	265.5	.228	4.56	75.4							76
1	87	11.84	11.83	33.542	25.489	250.5	.258	4.27	69.7	12.1	1.09	12.1	.02	.04	.07	87
	100 ISL	11.42	11.41	33.607	25.619	238.4	.291	3.94	63.8							101
1	102	11.38	11.37	33.615	25.631	237.2	.294	3.91	63.2	15.2	1.30	15.3	.00	.02	.06	102
	125 ISL	10.78	10.77	33.714	25.815	220.2	.348	3.51	56.0							126
1	128	10.71	10.70	33.726	25.838	218.1	.355	3.47	55.3	19.9	1.53	19.1	.01	.01	.07	129

RV DAVID STARR JORDAN

CALCOFI CRUISE 8401

STATION 83 51

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 52.7 N	120 08.0 W	01/10/84	1711 GMT	108 M	320	18 KT	310 04 09	1	1023.7 MB	15.3 C	13.2 C	2/8	AC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.97	14.97	33.445	24.780	315.8	.000	5.75	100.1							0
1	1	14.97	14.97	33.445	24.780	315.8	.003	5.75	100.1	4.3	.38	.8	.00	.59	.18	1
	10 ISL	14.66	14.66	33.442	24.845	309.8	.031	5.68	98.2							10
1	11	14.63	14.63	33.442	24.852	309.2	.034	5.67	98.0	5.1	.47	1.8	.00	.56	.30	11
	20 ISL	14.32	14.32	33.443	24.919	303.1	.062	5.46	93.8							20
1	21	14.27	14.27	33.444	24.929	302.2	.065	5.43	93.2	6.2	.56	2.9	.02	.53	.31	21
	30 ISL	13.43	13.43	33.451	25.107	285.3	.091	4.97	83.9							30
1	31	13.35	13.35	33.453	25.126	283.7	.094	4.93	83.0	7.9	.76	6.2	.02	.33	.16	31
1	42	12.85	12.85	33.479	25.245	272.6	.124	4.72	78.7	9.5	.88	8.0	.02	.19	.14	42
	50 ISL	12.72	12.72	33.495	25.284	269.1	.146	4.65	77.3							50
1	52	12.71	12.70	33.499	25.290	268.6	.151	4.64	77.1	10.5	.95	8.9	.02	.20	.15	52
1	61	12.61	12.60	33.539	25.341	264.0	.175	4.57	75.8	10.9	.98	9.6	.02	.19	.15	61
	75 ISL	12.19	12.18	33.518	25.404	258.2	.212	4.41	72.5							76
1	76	12.16	12.15	33.514	25.406	258.0	.214	4.40	72.3	12.3	1.08	11.2	.02	.11	.14	76

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 83 55

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 44.8 N	120 24.7 W	01/10/84	1445 GMT	1011 M	350	18 KT	320 04 12	1	1025.1 MB	13.1 C	11.9 C	2/8	AS

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	14.94	14.94	33.429	24.776	316.2	.000	5.82	101.2							0
1	1		14.94	14.94	33.429	24.776	316.2	.003	5.82	101.2	3.7	.32	.5	.00	.46	.21	1
	10	ISL	14.92	14.92	33.429	24.778	316.2	.032	5.90	102.6							10
1	12		14.92	14.92	33.429	24.779	316.2	.038	5.91	102.7	3.6	.34	.4	.00	.44	.15	12
	20	ISL	14.93	14.93	33.428	24.776	316.7	.063	5.86	101.8							20
1	27		14.94	14.94	33.428	24.774	317.1	.085	5.81	101.0	3.5	.40	.4	.00	.49	.22	27
	30	ISL	14.92	14.92	33.430	24.781	316.5	.095	5.75	100.0							30
1	43		14.42	14.41	33.433	24.890	306.5	.135	5.41	93.1	5.3	.55	2.5	.03	.28	.18	43
	50	ISL	13.56	13.55	33.428	25.065	290.5	.156	5.13	86.8							50
1	57		12.75	12.75	33.424	25.223	275.1	.175	4.88	81.1	8.2	.80	6.9	.03	.25	.12	57
1	67		12.26	12.25	33.468	25.352	263.0	.202	4.63	76.2	9.7	.90	9.5	.02	.14	.15	67
	75	ISL	11.58	11.57	33.535	25.532	246.0	.223	4.30	69.8							76
1	77		11.44	11.43	33.550	25.570	242.4	.227	4.23	68.4	13.7	1.13	13.7	.02	.10	.11	77
1	91		10.69	10.68	33.672	25.799	220.9	.260	3.73	59.4	18.6	1.41	18.3	.01	.01	.06	91
	100	ISL	10.29	10.28	33.739	25.920	209.5	.280	3.44	54.3							101
1	106		10.09	10.07	33.772	25.981	203.8	.293	3.29	51.8	23.3	1.59	21.9	.00	.01	.06	107
1	122		9.92	9.91	33.798	26.029	199.6	.325	3.22	50.5	24.9	1.67	22.5	.00	.00	.05	123
	125	ISL	9.88	9.87	33.805	26.042	198.5	.331	3.20	50.1							126
1	147		9.50	9.48	33.869	26.156	188.0	.374	2.99	46.4	28.0	1.78	24.5	.00	.01	.04	148
	150	ISL	9.46	9.44	33.877	26.168	186.9	.379	2.96	46.0							151
1	165		9.23	9.21	33.917	26.237	180.6	.406	2.83	43.7	30.7	1.86	25.7	.00			166
1	185		8.85	8.83	33.974	26.342	170.9	.441	2.70	41.4	33.0	1.95	27.1	.00			186
	200	ISL	8.72	8.70	34.007	26.388	166.8	.467	2.56	39.2							202
1	207		8.67	8.65	34.019	26.405	165.3	.478	2.49	38.0	36.1	2.06	28.4	.01			208
1	238		8.24	8.22	34.083	26.521	154.7	.527	2.09	31.6	41.9	2.22	30.6	.01			239
	250	ISL	8.13	8.11	34.094	26.546	152.5	.546	2.00	30.2							252
1	275		7.93	7.90	34.106	26.587	148.9	.585	1.85	27.8	46.2	2.34	32.2	.01			277
	300	ISL	7.62	7.59	34.124	26.645	143.7	.621	1.65	24.5							302
1	336		7.14	7.11	34.151	26.735	135.5	.671	1.33	19.6	57.2	2.58	35.6	.00			338
	400	ISL	6.36	6.32	34.192	26.873	122.8	.754	.81	11.7							403
1	410		6.25	6.21	34.198	26.892	121.0	.766	.74	10.7	71.9	2.86	39.2	.00			413
1	486		5.70	5.66	34.237	26.993	112.0	.854	.47	6.7	82.7	3.03	41.1	.00			489
	500	ISL	5.61	5.57	34.246	27.011	110.3	.870	.44	6.2							504
1	559		5.29	5.24	34.288	27.083	103.9	.933	.35	4.9	91.9	3.12	42.6	.00			563

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 83 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 34.7 N	120 45.3 W	01/10/84	0939 GMT	1387 M	350	17 KT			1023.7 MB	13.0 C	11.3 C		

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	14.53	14.53	33.446	24.876	306.6	.000	5.97	103.0							0
1	2		14.53	14.53	33.446	24.876	306.6	.006	5.97	103.0	3.3	.36	.5	.00	.79	.25	2
1	10		14.52	14.52	33.445	24.878	306.7	.031	5.98	103.1	3.2	.34	.5	.00	.78	.26	10
1	20		14.53	14.53	33.445	24.876	307.2	.061	5.93	102.3	3.2	.36	.5	.00	.79	.28	20
	30	ISL	14.54	14.53	33.445	24.874	307.6	.092	5.90	101.8							30
1	31		14.54	14.54	33.445	24.874	307.7	.095	5.90	101.8	3.2	.35	.5	.00	.77	.26	31
1	42		14.54	14.53	33.445	24.875	307.9	.128	5.89	101.6	3.1	.35	.4	.00	.82	.25	42
	50	ISL	14.45	14.45	33.445	24.893	306.4	.154	5.83	100.3							50
1	51		14.45	14.44	33.445	24.895	306.3	.156	5.82	100.2	3.5	.37	.8	.02	.71	.27	51
1	62		12.62	12.61	33.479	25.292	268.6	.187	4.72	78.3	9.5	.86	8.8	.12	.37	.34	62
1	72		11.94	11.93	33.516	25.449	253.8	.213	4.38	71.6	11.9	1.08	11.9	.02	.13	.14	72
	75	ISL	11.77	11.76	33.530	25.493	249.7	.222	4.29	69.9							76
1	87		11.19	11.18	33.597	25.651	235.0	.250	3.99	64.2	15.6	1.26	15.4	.01	.15	.15	87
	100	ISL	10.40	10.39	33.729	25.894	212.1	.280	3.49	55.3							101
1	102		10.32	10.31	33.743	25.918	209.7	.283	3.44	54.4	21.6	1.55	20.3	.01	.04	.07	102
1	121		9.93	9.92	33.802	26.031	199.4	.324	3.23	50.6	24.3	1.67	22.3	.01	.01	.07	122
	125	ISL	9.86	9.85	33.815	26.053	197.4	.331	3.19	49.9							126
1	146		9.45	9.44	33.895	26.183	185.3	.372	2.95	45.8	28.3	1.82	24.7	.01	.01	.06	147
	150	ISL	9.37	9.36	33.909	26.207	183.2	.378	2.91	45.1							151
1	176		8.86	8.84	33.992	26.354	169.5	.424	2.65	40.6	33.3	1.97	26.9	.00			177
	200	ISL	8.51	8.49	34.041	26.448	161.1	.464	2.46	37.4							202
1	206		8.43	8.41	34.049	26.465	159.5	.473	2.42	36.7	37.7	2.10	28.7	.00			207
1	237		8.12	8.09	34.080	26.538	153.0	.521	2.20	33.2	41.7	2.19	30.1	.00			238
	250	ISL	7.94	7.92	34.093	26.574	149.8	.542	2.06	31.0							252
1	276		7.59	7.56	34.117	26.645	143.3	.580	1.77	26.4	49.1	2.45	32.8	.00			278
	300	ISL	7.30	7.28	34.138	26.702	138.1	.614	1.52	22.5							302
1	336		6.93	6.90	34.167	26.776	131.4	.662	1.18	17.3	59.8	2.65	36.0	.00			338
	400	ISL	6.46	6.43	34.210	26.874	122.8	.743	.79	11.5							403
1	410		6.40	6.36	34.216	26.887	121.7	.756	.75	10.9	70.1	2.86	38.6	.00			413
1	485		5.89	5.85	34.252	26.981	113.3	.843	.52	7.4	79.4	3.01	40.4	.00			488
	500	ISL	5.80	5.76	34.260	26.998	111.8	.861	.49	7.0							504
1	559		5.51	5.46	34.290	27.059	106.5	.925	.42	6.0	87.1	3.09	41.5	.00			563

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 83 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 14.8 N	121 26.6 W	01/10/84	0325 GMT	3730 M	350	12 KT			1024.7 MB	13.6 C	11.0 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.80	14.80	33.208	24.634	329.7	.000	5.90	102.2							0
1	1	14.80	14.80	33.208	24.634	329.7	.003	5.90	102.2	2.6	.35	.0	.00	.24	.04	1
	10 ISL	14.77	14.77	33.207	24.642	329.2	.033	6.03	104.4							10
1	11	14.76	14.76	33.207	24.642	329.2	.036	6.04	104.5	2.6	.31	.0	.00	.24	.05	11
	20 ISL	14.78	14.78	33.213	24.643	329.4	.066	5.99	103.8							20
1	27	14.80	14.79	33.217	24.643	329.6	.089	5.96	103.2	2.4	.30	.0	.00	.25	.04	27
	30 ISL	14.81	14.80	33.222	24.645	329.4	.099	5.95	103.1							30
1	42	14.84	14.84	33.243	24.654	329.0	.138	5.92	102.6	2.4	.32	.0	.00	.25	.05	42
	50 ISL	14.70	14.69	33.264	24.700	326.5	.165	5.90	102.1							50
1	57	14.59	14.58	33.273	24.732	321.9	.186	5.87	101.2	2.7	.33	.0	.00	.65	.05	57
1	68	13.70	13.69	33.250	24.899	306.3	.221	5.72	96.9	3.5	.41	1.0	.06	.43	.30	68
	75 ISL	13.21	13.20	33.332	25.062	290.9	.243	5.21	87.4							76
1	76	13.16	13.15	33.341	25.078	289.4	.245	5.16	86.5	6.4	.66	5.0	.06	.20	.16	76
1	92	11.61	11.60	33.426	25.443	254.9	.288	4.65	75.4	10.4	.96	10.9	.02	.06	.11	92
	100 ISL	11.16	11.15	33.464	25.553	244.5	.309	4.47	71.9							101
1	108	10.87	10.86	33.502	25.634	236.9	.327	4.31	68.9	13.9	1.19	14.7	.02	.04	.06	108
1	122	10.29	10.28	33.630	25.835	218.1	.361	3.79	59.8	19.4	1.45	18.9	.02	.02	.04	123
	125 ISL	10.25	10.24	33.651	25.859	215.9	.366	3.70	58.4							126
1	147	9.92	9.90	33.780	26.016	201.4	.413	3.24	50.8	24.5	1.68	22.2	.02	.01	.04	148
	150 ISL	9.83	9.81	33.783	26.034	199.7	.418	3.27	51.1							151
1	168	9.17	9.15	33.800	26.156	188.3	.454	3.46	53.3	26.2	1.72	23.4	.02	.01	.02	169
1	187	8.69	8.67	33.901	26.310	173.9	.488	3.16	48.2	30.8	1.85	25.8	.02			188
	200 ISL	8.45	8.43	33.962	26.394	166.1	.510	3.04	46.2							202
1	207	8.35	8.33	33.989	26.431	162.6	.521	2.98	45.1	34.7	1.89	27.0	.02			208
1	237	7.95	7.93	34.057	26.545	152.3	.568	2.40	36.0	41.8	2.17	30.0	.03			238
	250 ISL	7.81	7.79	34.059	26.567	149.9	.588	2.32	34.7							252
1	278	7.54	7.52	34.064	26.609	146.6	.630	2.24	33.3	46.6	2.28	31.5	.03			280
	300 ISL	7.34	7.31	34.072	26.645	143.5	.662	2.06	30.5							302
1	339	6.95	6.92	34.087	26.710	137.7	.716	1.69	24.8	55.2	2.51	34.6	.03			341
	400 ISL	6.29	6.26	34.103	26.811	128.6	.798	1.23	17.8							403
1	412	6.16	6.13	34.105	26.830	126.8	.814	1.15	16.6	68.1	2.77	38.1	.01			415
1	486	5.48	5.44	34.124	26.929	117.7	.903	.81	11.5	80.1	2.99	41.0	.01			489
	500 ISL	5.44	5.40	34.144	26.950	115.9	.920	.75	10.7							504
1	560	5.29	5.24	34.230	27.037	108.2	.987	.54	7.6	88.9	3.11	42.3	.01			564

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 83 80

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 54.7 N	122 07.7 W	01/09/84	2107 GMT	4014 M	360	10 KT	360 03 11	1	1025.7 MB	14.3 C	11.0 C	5/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.77	14.77	33.205	24.639	329.2	.000	5.99	103.7							0
1	1	14.77	14.77	33.205	24.639	329.2	.003	5.99	103.7	3.2	.30	.0	.00	.19	.05	1
1	10	14.74	14.73	33.204	24.646	328.8	.033	6.00	103.8	3.0	.31	.0	.00	.20	.04	10
	20 ISL	14.64	14.64	33.187	24.652	328.5	.066	6.01	103.7							20
1	26	14.61	14.60	33.182	24.656	328.3	.085	6.01	103.7	2.9	.32	.0	.00	.32	.09	26
	30 ISL	14.64	14.63	33.210	24.672	326.9	.099	6.00	103.5							30
1	40	14.71	14.71	33.287	24.716	323.0	.131	5.95	102.9	2.7	.32	.0	.00	.51	.10	40
	50 ISL	14.65	14.64	33.312	24.749	320.2	.163	5.91	102.1							50
1	56	14.61	14.60	33.333	24.773	318.1	.182	5.89	101.7	2.8	.33	.0	.03	.64	.24	56
1	66	14.32	14.31	33.343	24.842	311.7	.213	5.67	97.3	3.4	.42	.7	.21	.46	.19	66
1	75	12.67	12.66	33.355	25.187	278.9	.239	4.96	82.3	7.6	.75	6.6	.03	.15	.16	75
1	90	11.49	11.48	33.364	25.416	257.3	.279	5.11	82.7	8.2	.78	7.6	.02	.08	.10	90
	100 ISL	10.95	10.94	33.489	25.610	239.1	.305	4.44	71.0							101
1	106	10.73	10.72	33.562	25.706	230.1	.318	4.03	64.2	15.9	1.25	16.1	.02	.03	.07	106
1	120	10.26	10.25	33.660	25.864	215.3	.351	3.63	57.3	19.8	1.49	19.6	.01	.01	.06	121
	125 ISL	10.15	10.14	33.693	25.909	211.1	.361	3.49	55.0							126
1	145	9.68	9.66	33.805	26.075	195.6	.402	3.14	49.0	25.4	1.71	23.1	.01	.00	.05	146
	150 ISL	9.53	9.52	33.807	26.101	193.3	.412	3.23	50.1							151
1	166	9.05	9.04	33.813	26.184	185.6	.442	3.51	54.0	26.0	1.68	23.5	.01	.01	.03	167
1	186	8.67	8.65	33.915	26.323	172.6	.478	3.16	48.2	30.9	1.83	26.0	.00			187
	200 ISL	8.44	8.42	33.973	26.404	165.1	.501	3.18	48.2							202
1	205	8.37	8.35	33.989	26.427	163.0	.509	3.19	48.3	33.5	1.87	26.4	.01			206
1	234	8.03	8.01	34.023	26.506	155.9	.555	2.77	41.7	38.7	2.01	28.8	.02			235
	250 ISL	7.86	7.83	34.035	26.541	152.8	.580	2.62	39.3							252
1	274	7.59	7.56	34.047	26.590	148.5	.617	2.44	36.3	44.1	2.19	31.1	.02			276
	300 ISL	7.25	7.22	34.054	26.643	143.6	.655	2.20	32.5							302
1	334	6.81	6.78	34.063	26.711	137.4	.702	1.87	27.3	54.9	2.43	34.8	.01			336
	400 ISL	6.21	6.18	34.103	26.822	127.4	.790	1.22	17.6							403
1	406	6.16	6.12	34.108	26.832	126.5	.798	1.16	16.7	67.1	2.73	38.6	.01			409
1	481	5.50	5.46	34.191	26.979	112.9	.887	.55	7.8	83.0	2.99	41.5	.01			484
	500 ISL	5.38	5.34	34.210	27.010	110.2	.908	.50	7.1							504
1	554	5.15	5.10	34.257	27.075	104.4	.967	.37	5.2	93.3	3.13	42.5	.02			558

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 83 90

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 34.8 N	122 48.6 W	01/09/84	1441 GMT	3918 M	330	08 KT	330 04 12	2	1024.7 MB	14.2 C	10.3 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.47	16.47	33.384	24.399	352.1	.000	5.79	103.8							0
1	2	16.47	16.47	33.384	24.399	352.1	.007	5.79	103.8	2.4	.23	.0	.05	.10	.04	2
	10 ISL	16.46	16.46	33.384	24.400	352.3	.035	5.87	105.2							10
1	13	16.46	16.46	33.383	24.400	352.4	.046	5.90	105.7	2.2	.23	.0	.00	.11	.02	13
	20 ISL	16.47	16.47	33.383	24.398	352.8	.070	5.80	103.9							20
1	25	16.48	16.47				.087	5.71	102.4	2.2	.22	.0	.00	.10	.03	25
	30 ISL	16.48	16.47	33.383	24.397	353.2	.106	5.70	102.2							30
1	42	16.48	16.47	33.383	24.397	353.5	.148	5.68	101.8	2.5	.22	.0	.00	.11	.03	42
	50 ISL	16.48	16.47	33.384	24.398	353.7	.176	5.67	101.7							50
1	56	16.49	16.48	33.386	24.398	353.9	.197	5.67	101.7	2.4	.23	.0	.00	.11	.03	56
1	68	16.50	16.49	33.410	24.413	352.9	.239	5.66	101.5	2.4	.23	.0	.01	.17	.04	68
	75 ISL	16.20	16.19	33.410	24.484	346.1	.265	5.67	101.0							76
1	77	16.08	16.07	33.410	24.510	343.8	.270	5.67	100.8	2.2	.23	.0	.07	.31	.07	77
1	91	14.20	14.18	33.240	24.790	317.4	.316	5.80	99.2	2.8	.33	.0	.52	.28	.16	91
	100 ISL	14.08	14.07	33.395	24.933	304.0	.346	5.74	98.1							101
1	107	14.00	13.99	33.483	25.018	296.1	.365	5.66	96.6	3.3	.32	.7	.35	.11	.11	107
1	121	13.16	13.14	33.470	25.180	280.9	.408	5.40	90.5	4.9	.52	3.1	.14	.10	.07	122
	125 ISL	12.94	12.92	33.459	25.215	277.7	.418	5.32	88.8							126
1	145	11.72	11.71	33.423	25.420	258.4	.473	4.82	78.4	9.4	.85	9.6	.05	.05	.05	146
	150 ISL	11.51	11.49	33.437	25.470	253.7	.485	4.70	76.1							151
1	167	10.75	10.73	33.534	25.682	233.7	.527	4.32	68.8	14.2	1.14	14.6	.00	.02	.04	168
1	187	9.71	9.69	33.718	26.004	203.3	.570	4.09	63.8	19.8	1.35	18.7	.00			188
	200 ISL	9.41	9.39	33.776	26.097	194.6	.596	3.93	60.8							202
1	208	9.30	9.28	33.801	26.135	191.1	.611	3.80	58.7	23.6	1.56	21.5	.00			209
1	238	8.72	8.70	33.938	26.334	172.6	.665	3.06	46.7	31.2	1.85	25.9	.00			239
	250 ISL	8.55	8.52	33.976	26.391	167.4	.686	2.88	43.9							252
1	278	8.21	8.18	34.035	26.489	158.4	.731	2.59	39.1	37.9	2.02	28.7	.00			279
	300 ISL	7.94	7.91	34.066	26.553	152.6	.766	2.31	34.6							302
1	336	7.48	7.45	34.086	26.636	145.0	.820	1.91	28.4	48.4	2.31	32.5	.00			338
	400 ISL	6.45	6.41	34.060	26.757	133.7	.909	1.63	23.6							403
1	413	6.26	6.22	34.055	26.779	131.7	.925	1.58	22.8	62.2	2.56	36.3	.06			415
1	487	5.63	5.59	34.127	26.914	119.3	1.019	.86	12.2	76.5	2.86	39.8	.00			490
	500 ISL	5.54	5.50	34.139	26.935	117.5	1.034	.77	11.0							504
1	560	5.18	5.13	34.188	27.017	110.0	1.103	.54	7.6	88.4	3.00	41.6	.00			564

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LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 14.7 N	123 29.6 W	01/08/84	1335 GMT	4014 M	360	10 KT	300 06 15		1023.0 MB	14.9 C	13.5 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.57	16.57	33.419	24.403	351.7	.000	5.69	102.2							0
1	3	16.57	16.57	33.419	24.403	351.7	.011	5.69	102.2	2.0	.26	.0	.00	.09	.04	3
	10 ISL	16.56	16.56	33.418	24.404	351.8	.035	5.65	101.5							10
1	11	16.56	16.56	33.418	24.404	351.9	.039	5.65	101.5	1.8	.27	.0	.00	.10	.03	11
	20 ISL	16.57	16.57	33.419	24.403	352.4	.070	5.66	101.6							20
1	26	16.58	16.58	33.420	24.402	352.6	.091	5.66	101.7	1.8	.26	.0	.00	.10	.03	26
	30 ISL	16.57	16.57	33.427	24.408	352.1	.106	5.65	101.6							30
1	40	16.56	16.55	33.442	24.425	350.9	.140	5.64	101.3	1.8	.27	.0	.00	.12	.03	40
	50 ISL	16.56	16.55	33.437	24.421	351.5	.176	5.65	101.4							50
1	55	16.56	16.55	33.436	24.421	351.8	.193	5.65	101.5	1.7	.27	.1	.00	.12	.05	55
1	66	16.50	16.49	33.441	24.438	350.4	.231	5.65	101.3	1.7	.26	.1	.00	.16	.05	66
1	73	16.50	16.49	33.439	24.436	350.9	.256	5.64	101.2	2.3	.31	.6	.08	.15	.11	73
	75 ISL	16.43	16.42	33.442	24.454	350.6	.264	5.65	101.2							76
1	89	16.01	16.00	33.458	24.563	339.2	.311	5.69	101.1	1.8	.40	.0	.26	.29	.13	89
	100 ISL	14.18	14.17	33.293	24.834	313.4	.348	5.61	96.0							101
1	103	13.78	13.77	33.275	24.902	307.0	.356	5.58	94.7	3.0	.45	.8	.23	.26	.18	103
1	116	13.57	13.55	33.536	25.149	283.8	.394	5.37	90.8	3.9	.47	2.6	.13	.09	.12	116
	125 ISL	13.08	13.06	33.543	25.253	271.5	.420	5.22	87.4							126
1	140	12.02	12.00	33.555	25.468	253.8	.461	4.89	80.1	7.8	.79	8.4	.03	.05	.06	141
	150 ISL	11.30	11.28	33.566	25.610	240.4	.485	4.56	73.5							151
1	158	10.74	10.72	33.586	25.724	229.6	.504	4.25	67.7	14.2	1.19	14.9	.02	.02	.04	159
1	177	10.20	10.18	33.686	25.896	213.4	.546	3.68	58.0	19.1	1.52	19.4	.02			178
1	197	9.67	9.65	33.811	26.083	196.0	.587	3.21	50.0	24.4	1.71	23.0	.02			198
	200 ISL	9.59	9.57	33.829	26.110	193.5	.592	3.17	49.3							202
1	226	8.96	8.93	33.961	26.315	174.3	.640	2.88	44.2	30.3	1.89	25.9	.01			227
	250 ISL	8.62	8.59	34.022	26.417	164.9	.681	2.67	40.7							252
1	264	8.46	8.44	34.041	26.455	161.5	.703	2.56	38.9	35.6	2.10	28.2	.01			265
	300 ISL	7.91	7.88	34.074	26.565	151.5	.760	2.23	33.5							302
1	323	7.58	7.55	34.087	26.623	146.2	.794	2.01	29.9	46.1	2.30	31.9	.01			325
1	397	7.07	7.03	34.166	26.758	134.3	.897	1.18	17.4	56.4	2.62	35.3	.01			399
	400 ISL	7.05	7.01	34.169	26.763	133.8	.902	1.15	17.0							403
1	471	6.53	6.48	34.217	26.872	124.1	.994	.73	10.6	66.7	2.85	37.9	.01			474
	500 ISL	6.27	6.22	34.227	26.913	120.4	1.029	.63	9.0							504
1	546	5.80	5.75	34.230	26.976	114.5	1.083	.54	7.7	78.6	2.98	40.1	.01			550

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LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 14.7 N	123 29.6 W	01/08/84	1842 GMT	3942 M	020	09 KT	340 03 15	1	1026.1 MB	17.0 C	14.8 C	4/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.54	16.54	33.421	24.410	351.0	.000	5.70	102.3							0
1	1	16.54	16.54	33.421	24.410	351.0	.003	5.70	102.3	2.0	.25	.0	.00	.13	.04	1
	10 ISL	16.52	16.51	33.420	24.416	350.7	.035	5.77	103.5							10
1	11	16.51	16.51	33.420	24.416	350.7	.038	5.77	103.5	1.9	.25	.0	.00	.12	.04	11
	20 ISL	16.52	16.52	33.420	24.415	351.1	.070	5.73	102.7							20
1	26	16.53	16.52	33.420	24.415	351.4	.091	5.68	101.9	1.9	.24	.0	.00	.12	.03	26
	30 ISL	16.53	16.53	33.423	24.416	351.4	.105	5.67	101.8							30
1	41	16.54	16.54	33.432	24.420	351.4	.143	5.66	101.6	1.8	.23	.0	.00	.16	.04	41
	50 ISL	16.63	16.62	33.462	24.425	351.2	.176	5.64	101.6							50
1	56	16.66	16.66	33.478	24.428	351.1	.196	5.64	101.5	1.8	.23	.0	.00	.16	.05	56
1	65	16.63	16.61	33.471	24.432	351.0	.227	5.66	101.8	1.9	.23	.0	.00			65
	75 ISL	16.47	16.46	33.463	24.462	348.5	.263	5.58	100.1							76
1	76	16.46	16.45	33.462	24.464	348.3	.266	5.58	10 .0	1.8	.24	.0	.00	.22	.10	76
1	92	14.51	14.49	33.405	24.852	311.6	.318	5.83	100.5	2.3	.31	.0	.35	.27	.15	92
	100 ISL	13.74	13.73	33.355	24.974	300.1	.344	5.63	95.5							101
1	107	13.33	13.31	33.346	25.050	293.0	.363	5.43	91.3	4.0	.49	2.6	.07	.13	.15	107
1	121	13.27	13.25	33.565	25.232	276.1	.406	5.27	88.6	4.8	.52	4.1	.04	.09	.07	122
	125 ISL	13.07	13.06	33.561	25.268	272.1	.415	5.21	87.2							126
1	146	11.52	11.51	33.540	25.548	246.3	.471	4.66	75.5	10.6	.94	11.4	.01	.04	.05	147
	150 ISL	11.28	11.26	33.556	25.604	241.0	.480	4.51	72.8							151
1	165	10.43	10.41	33.643	25.823	220.2	.515	3.91	61.9	17.1	1.35	17.8	.00	.01	.03	166
1	186	9.87	9.85	33.757	26.008	203.0	.559	3.41	53.4	22.4	1.61	21.8	.00			187
	200 ISL	9.61	9.59	33.816	26.097	194.7	.587	3.22	50.0							202
1	206	9.50	9.48	33.840	26.133	191.4	.598	3.15	48.9	25.8	1.74	23.8	.00			207
1	236	8.87	8.84	33.976	26.342	172.0	.652	2.84	43.5	31.4	1.93	26.5	.00			237
	250 ISL	8.65	8.62	34.014	26.406	166.0	.676	2.69	41.1							252
1	275	8.33	8.30	34.055	26.486	158.7	.716	2.46	37.3	37.4	2.07	28.9	.00			276
	300 ISL	8.02	7.99	34.076	26.550	153.0	.756	2.27	34.2							302
1	334	7.65	7.62	34.090	26.616	147.1	.807	2.02	30.1	46.1	2.29	31.8	.01			336
	400 ISL	7.13	7.09	34.160	26.745	135.5	.900	1.27	18.6							403
1	409	7.06	7.03	34.169	26.761	134.1	.912	1.17	17.2	57.7	2.62	35.3	.03			411
1	482	6.42	6.37	34.206	26.877	123.6	1.006	.75	10.9	68.8	2.84	38.1	.01			485
	500 ISL	6.27	6.22	34.216	26.905	121.1	1.028	.67	9.7							504
1	555	5.85	5.80	34.250	26.985	113.8	1.093	.49	7.0	78.5	3.00	40.1	.01			559

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LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 14.7 N	123 29.6 W	01/09/84	0142 GMT	3918 M	010	08 KT			1022.0 MB	15.7 C	14.0 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.65	16.65	33.419	24.385	353.4	.000	5.68	102.2							0
1	1	16.65	16.65	33.419	24.385	353.4	.004	5.68	102.2	2.4	.23	.0	.01	.13	.02	1
	10 ISL	16.61	16.61	33.419	24.393	352.9	.035	5.66	101.8							10
1	12	16.60	16.60	33.419	24.395	352.8	.042	5.66	101.7	2.4	.27	.0	.00	.12	.03	12
	20 ISL	16.57	16.57	33.420	24.403	352.2	.071	5.65	101.5							20
1	26	16.56	16.55	33.421	24.408	352.0	.091	5.65	101.5	2.4	.25	.0	.00			26
	30 ISL	16.55	16.55	33.421	24.409	352.0	.106	5.65	101.5							30
1	40	16.55	16.54	33.421	24.410	352.3	.140	5.65	101.4	2.5	.25	.0	.00	.14	.04	40
	50 ISL	16.55	16.54	33.425	24.414	352.2	.176	5.65	101.4							50
1	56	16.55	16.54	33.428	24.416	352.2	.197	5.65	101.4	2.5	.25	.0	.00	.16	.03	56
1	64	16.56	16.55	33.439	24.423	351.8	.225	5.65	101.5	2.5	.25	.0	.00	.18	.04	64
	75 ISL	16.54	16.53	33.457	24.442	350.4	.264	5.67	101.7							76
1	77	16.53	16.52	33.460	24.445	350.2	.270	5.67	101.8	2.4	.26	.0	.01	.28	.08	77
1	90	16.06	16.04	33.452	24.549	340.6	.315	5.70	101.4	2.6	.28	.0	.12	.29	.15	90
	100 ISL	14.30	14.29	33.325	24.834	313.4	.349	5.57	95.5							101
1	106	13.33	13.31	33.279	24.998	297.9	.366	5.47	91.9	4.4	.49	1.9	.09	.18	.15	106
1	121	12.63	12.61	33.377	25.212	277.8	.412	5.24	86.8	6.2	.62	4.8	.04	.08	.09	122
	125 ISL	12.45	12.43	33.395	25.261	273.2	.421	5.17	85.4							126
1	146	11.36	11.34	33.494	25.542	246.7	.477	4.65	75.1	11.4	1.00	11.3	.01	.04	.05	147
	150 ISL	11.22	11.20	33.509	25.580	243.2	.486	4.55	73.2							151
1	165	10.66	10.64	33.582	25.736	228.6	.522	4.09	65.1	16.2	1.26	16.0	.00	.02	.03	166
1	186	9.87	9.85	33.757	26.007	203.0	.567	3.40	53.2	23.1	1.62	21.5	.00			187
	200 ISL	9.53	9.51	33.820	26.113	193.2	.594	3.25	50.4							202
1	205	9.43	9.41	33.836	26.142	190.5	.604	3.22	49.9	26.6	1.78	23.6	.00			206
1	235	8.99	8.97	33.942	26.295	176.3	.658	2.97	45.6	30.6	1.87	25.5	.00			236
	250 ISL	8.83	8.80	33.981	26.352	171.2	.685	2.83	43.4							252
1	275	8.57	8.54	34.030	26.431	164.1	.726	2.60	39.6	35.8	2.03	27.6	.00			276
	300 ISL	8.12	8.09	34.064	26.525	155.4	.767	2.32	34.9							302
1	335	7.51	7.48	34.099	26.642	144.5	.819	1.91	28.4	48.9	2.37	32.1	.00			337
	400 ISL	6.95	6.92	34.166	26.773	132.7	.909	1.20	17.6							403
1	410	6.90	6.86	34.174	26.787	131.5	.922	1.11	16.3	61.5	2.70	35.7	.00			412
1	483	6.44	6.39	34.227	26.892	122.3	1.015	.67	9.7	70.2	2.91	38.1	.00			486
	500 ISL	6.32	6.28	34.236	26.914	120.4	1.036	.60	8.7							504
1	557	5.93	5.88	34.258	26.982	114.2	1.103	.47	6.7	79.8	3.03	40.0	.00			561

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LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 14.7 N	123 29.6 W	01/09/84	0652 GMT	4014 M	310	06 KT		1	1025.4 MB	15.8 C	13.3 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	16.67	16.67	33.418	24.379	353.9	.000	5.64	101.5	2.6	.28	.1		.13	.02	0
1	9	16.56	16.55	33.418	24.405	351.7	.032	5.66	101.6	2.6	.30	.1		.09	.04	9
	10 ISL	16.56	16.55	33.418	24.405	351.8	.035	5.66	101.6							10
	20 ISL	16.55	16.55	33.418	24.407	351.9	.070	5.66	101.6							20
1	25	16.55	16.54	33.419	24.408	351.9	.088	5.66	101.6	2.6	.29	.0		.09	.04	25
	30 ISL	16.55	16.54	33.419	24.409	352.1	.106	5.66	101.6							30
1	41	16.54	16.54	33.419	24.410	352.3	.144	5.66	101.6	2.5	.31	.0	.01	.11	.05	41
	50 ISL	16.54	16.53	33.427	24.417	351.9	.176	5.65	101.5							50
1	57	16.54	16.53	33.434	24.422	351.7	.200	5.65	101.4	2.4	.32	.0	.02	.15	.05	57
1	66	16.55	16.54	33.442	24.426	351.6	.231	5.65	101.5	2.4	.28	.1	.00	.16	.07	66
	75 ISL	16.50	16.48	33.460	24.454	349.2	.264	5.63	101.0							76
1	76	16.49	16.48	33.462	24.456	349.0	.266	5.63	101.0	2.5	.29	.1	.00	.27	.11	76
1	91	14.74	14.73	33.378	24.781	318.4	.316	5.79	100.2	3.1	.39	.0	.38	.30	.18	91
	100 ISL	13.76	13.74	33.313	24.938	303.5	.345	5.59	94.8							101
1	105	13.35	13.34	33.292	25.003	297.4	.359	5.47	92.0	4.5	.52	2.0	.13	.16	.16	105
1	121	12.67	12.65	33.362	25.193	279.6	.408	5.27	87.4	5.9	.68	4.7	.07	.06	.11	122
	125 ISL	12.47	12.45	33.379	25.245	274.7	.418	5.19	85.7							126
1	147	11.19	11.17	33.498	25.576	243.5	.475	4.58	73.7	11.8	1.04	12.0	.02	.03	.05	148
	150 ISL	11.08	11.06	33.514	25.608	240.5	.482	4.50	72.2							151
1	165	10.52	10.50	33.599	25.773	225.0	.517	4.07	64.6	16.6	1.32	16.7	.01	.03	.02	166
1	187	9.87	9.85	33.704	25.965	207.0	.565	3.62	56.6	21.7	1.56	20.8	.01			188
	200 ISL	9.55	9.53	33.776	26.074	196.9	.591	3.44	53.5							202
1	206	9.42	9.40	33.809	26.122	192.4	.602	3.37	52.2	25.5	1.69	23.2	.01			207
1	237	8.97	8.94	33.953	26.307	175.3	.659	2.90	44.5	31.0	1.88	25.9	.00			238
	250 ISL	8.76	8.73	33.993	26.372	169.3	.682	2.76	42.2							252
1	276	8.36	8.33	34.048	26.477	159.6	.724	2.54	38.5	37.7	2.05	28.5	.00			277
	300 ISL	8.02	7.99	34.073	26.548	153.2	.762	2.34	35.2							302
1	336	7.58	7.55	34.092	26.627	146.0	.816	2.02	30.1	47.4	2.30	32.0	.00			338
	400 ISL	7.05	7.01	34.159	26.755	134.5	.906	1.26	18.5							403
1	410	6.98	6.94	34.169	26.772	133.0	.918	1.15	16.9	59.4	2.58	35.4	.00			412
1	483	6.44	6.39	34.227	26.892	122.3	1.012	.68	9.9	70.4	2.85	37.9	.00			486
	500 ISL	6.33	6.28	34.238	26.915	120.2	1.033	.61	8.8							504
1	556	6.01	5.96	34.270	26.981	114.4	1.099	.46	6.6	78.9	2.98	39.6	.01			560

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 87 33

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 53.4 N	118 29.7 W	01/05/84	1214 GMT	59 M	090	02 KT		1	1016.3 MB	17.1 C	11.4 C	1/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	15.68	15.68	33.384	24.578	335.2	.034	5.76	101.6	.9	.31	.1	.00			10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 87 35

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 48.7 N	118 37.6 W	01/05/84	1457 GMT	779 M	120	01 KT		1	1016.6 MB	16.9 C	14.5 C	1/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	15.97	15.97	33.408	24.532	339.3	.000	5.76	102.2	.4	.27	.0	.00	.24	.05	0
	10 ISL	15.96	15.96	33.408	24.533	339.5	.034	5.82	103.2							10
1	11	15.96	15.96	33.408	24.533	339.5	.037	5.82	103.3	.3	.27	.0	.00	.24	.06	11
	20 ISL	15.93	15.93	33.408	24.541	339.2	.068	5.84	103.7							20
1	22	15.92	15.92	33.408	24.542	339.1	.074	5.85	103.7	.1	.26	.0	.00	.29	.08	22
	30 ISL	15.36	15.35	33.383	24.650	329.0	.101	5.66	99.3							30
1	33	15.11	15.10	33.376	24.698	324.5	.111	5.58	97.3	.7	.38	.0	.69	1.24	.36	33
1	44	14.37	14.37	33.377	24.857	309.7	.145	5.32	91.4	1.7	.50	1.8	.47	.60	.36	44
	50 ISL	13.93	13.92	33.396	24.964	299.6	.164	5.18	88.2							50
1	55	13.59	13.58	33.416	25.050	291.6	.178	5.07	85.8	3.2	.63	4.4	.14	.32	.23	55
1	65	12.92	12.91	33.462	25.220	275.5	.207	4.80	80.1	5.1	.80	7.1	.04	.12	.16	65
	75 ISL	12.51	12.50	33.482	25.315	266.8	.234	4.62	76.4							76
1	77	12.46	12.45	33.484	25.327	265.6	.239	4.59	75.9	6.6	.91	9.3	.00	.08	.09	77
1	95	11.65	11.64	33.554	25.534	246.3	.285	4.24	68.9	10.0	1.07	13.0	.00	.03	.08	95
	100 ISL	11.46	11.45	33.585	25.593	240.8	.298	4.07	65.9							101
1	108	11.18	11.17	33.635	25.683	232.4	.318	3.80	61.2	13.6	1.31	16.3	.00	.02	.06	109
	125 ISL	10.66	10.64	33.729	25.849	216.9	.355	3.42	54.5							126
	150 ISL	9.96	9.94	33.854	26.068	196.6	.407	3.03	47.5							151
1	157	9.78	9.76	33.886	26.123	191.4	.421	2.95	46.1	22.4	1.74	23.5	.00	.00	.05	158
1	191	9.08	9.06	33.999	26.326	172.6	.482	2.65	40.8	29.2	1.92	26.0	.04	.00	.05	192
	200 ISL	8.96	8.94	34.020	26.361	169.5	.498	2.57	39.6							202
1	224	8.68	8.66	34.050	26.435	162.8	.537	2.40	36.6	33.5	1.97	27.7	.04			225
	250 ISL	8.30	8.28	34.084	26.513	155.7	.579	2.27	34.4							252
1	256	8.23	8.20	34.088	26.528	154.4	.588	2.24	33.9	37.9	2.13	29.7	.03			257
	300 ISL	7.93	7.90	34.141	26.614	146.9	.655	1.79	26.9							302
1	301	7.93	7.89	34.142	26.616	146.7	.656	1.78	26.7	44.0	2.32	31.9	.00			303
1	365	7.13	7.09	34.199	26.775	132.1	.745	1.09	16.1	56.1	2.63	35.3	.00			367
	400 ISL	6.85	6.81	34.228	26.836	126.7	.791	.86	12.6							403
1	447	6.54	6.50	34.263	26.905	120.6	.849	.64	9.3	67.7	2.88	38.0	.00			450
	500 ISL	6.12	6.07	34.307	26.996	112.3	.910	.43	6.2							504
1	527	5.90	5.86	34.328	27.040	108.4	.941	.35	5.0	81.1	3.04	39.5	.00			531
	600 ISL	5.47	5.42	34.363	27.121	101.2	1.017	.28	3.9							605
1	608	5.44	5.38	34.365	27.127	100.6	1.024	.27	3.8	90.2	3.13	40.0	.11			612

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 87 40

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 39.4 N	118 58.5 W	01/05/84	2305 GMT	686 M	240 01 KT		1	1015.9 MB	18.8 C	15.9 C	1/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.98	15.98	33.462	24.571	335.7	.000	5.82	103.4							0
1	2	15.98	15.98	33.462	24.571	335.7	.007	5.82	103.4	1.2	.33	.0	.27	.37	.05	2
	10 ISL	15.73	15.72	33.453	24.621	331.2	.033	5.81	102.6							10
1	13	15.65	15.65	33.452	24.637	329.8	.043	5.80	102.3	1.1	.34	.1	.08	.57	.13	13
	20 ISL	15.52	15.52	33.455	24.667	327.1	.066	5.76	101.3							20
1	22	15.48	15.48	33.455	24.677	326.2	.073	5.74	100.9	1.3	.35	.4	.15	.74	.18	22
	30 ISL	15.13	15.13	33.444	24.746	319.8	.099	5.66	98.8							30
1	32	15.05	15.04	33.442	24.762	318.4	.105	5.64	98.3	1.6	.43	.9	.23	.72	.27	32
1	42	14.86	14.86	33.432	24.795	315.6	.136	5.55	96.4	2.2	.44	.9	.42	.57	.32	42
	50 ISL	14.11	14.11	33.424	24.948	301.2	.161	5.54	94.6							50
1	53	13.81	13.80	33.423	25.011	295.3	.170	5.53	94.0	3.7	.63	3.7	.62	.38	.18	53
1	68P	12.53	12.52	33.444	25.282	269.8	.212	4.75	78.6	6.5	.87	8.0	.31	.30	.20	68
	75 ISL	12.27	12.26	33.460	25.344	264.0	.231	4.63	76.2							76
1	82P	12.12	12.11	33.479	25.388	260.0	.249	4.57	75.0	8.3	1.01	10.2	.18	.16	.18	82
	100 ISL	11.37	11.35	33.595	25.619	238.4	.294	4.05	65.5							101
2	122	10.49	10.47	33.753	25.898	212.2	.345	3.42	54.3	18.4	1.60	19.9	.10			123
	125 ISL	10.42	10.41	33.763	25.917	210.4	.350	3.39	53.7							126
2	148	9.94	9.92	33.841	26.061	197.2	.398	3.17	49.7	22.1	1.72	22.5	.06			149
	150 ISL	9.90	9.88	33.846	26.071	196.2	.401	3.15	49.4							151
2	177	9.30	9.28	33.923	26.230	181.5	.452	2.86	44.2	27.6	1.93	25.3	.06			178
	200 ISL	8.72	8.70	33.999	26.383	167.3	.492	2.54	38.9							202
2	207	8.56	8.54	34.021	26.424	163.4	.504	2.45	37.3	34.9	2.13	28.8	.06			208
2	238	8.22	8.20	34.086	26.527	154.1	.553	2.15	32.5	39.1	2.28	30.3	.00			239
	250 ISL	8.12	8.09	34.108	26.560	151.2	.571	2.00	30.2							252
2	276	7.92	7.90	34.145	26.618	146.0	.611	1.70	25.5	44.5	2.40	32.0	.01			278
	300 ISL	7.74	7.71	34.162	26.659	142.5	.645	1.53	22.9							302
2	337	7.43	7.40	34.178	26.716	137.5	.696	1.31	19.5	51.8	2.63	34.4	.01			339
	400 ISL	6.84	6.80	34.231	26.840	126.4	.780	.81	11.8							403
2	411	6.73	6.69	34.241	26.863	124.3	.794	.72	10.5	64.3	2.88	37.6	.01			414
2	489	6.06	6.01	34.311	27.007	111.2	.885	.38	5.5	77.3	3.10	39.5	.01			492
	500 ISL	5.98	5.94	34.319	27.022	109.7	.897	.35	5.0							504
2	565	5.65	5.60	34.355	27.093	103.6	.967	.25	3.6	87.3	3.20	39.6	.01			569

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 87 45

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 29.3 N	119 19.2 W	01/06/84	0430 GMT	1664 M	290 05 KT			1019.0 MB	15.8 C	14.3 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	15.85	15.85	33.481	24.613	331.6	.000	5.79	102.6	.9	.38	.2	.13	.34	.06	0
	10 ISL	14.97	14.97	33.446	24.782	315.8	.032	5.95	103.6							10
1	11	14.92	14.91	33.444	24.792	314.9	.035	5.96	103.6	.6	.34	.0	.00	.28	.09	11
1	20	14.71	14.71	33.439	24.833	311.3	.063	5.96	103.2	.6	.35	.0	.00	.45	.36	20
	30 ISL	14.33	14.33	33.445	24.918	303.5	.094	5.72	98.2							30
1	31	14.27	14.27	33.446	24.931	302.3	.097	5.68	97.5	2.8	.51	1.8	.41	.84	.32	31
1	42	12.78	12.77	33.465	25.250	272.1	.129	4.90	81.5	7.0	.85	7.1	.83	.41	.33	42
	50 ISL	11.83	11.82	33.521	25.475	250.9	.150	4.34	70.8							50
1	51	11.76	11.75	33.526	25.491	249.3	.152	4.30	70.0	11.0	1.10	12.5	.20	.24	.20	51
1	61	11.56	11.56	33.545	25.542	244.7	.176	4.22	68.5	12.0	1.29	13.5	.23	.19	.18	61
1	72	11.29	11.28	33.576	25.617	237.9	.203	4.05	65.3	13.6	1.28	15.0	.03	.14	.15	72
	75 ISL	11.11	11.10	33.596	25.666	233.2	.211	3.96	63.6							76
1	86	10.51	10.50	33.669	25.828	218.0	.235	3.66	58.1	17.8	1.50	18.7	.00	.05	.09	86
1	100	10.16	10.14	33.730	25.936	208.0	.266	3.47	54.7	20.1	1.58	20.4	.01	.07	.11	101
1	121	9.75	9.74	33.860	26.106	192.3	.308	3.08	48.1	23.8	1.81	23.4	.03	.00	.07	122
	125 ISL	9.67	9.65	33.879	26.135	189.6	.315	3.04	47.4							126
1	145	9.22	9.20	33.962	26.274	176.7	.352	2.88	44.5	28.6	1.94	25.7	.01	.00	.05	146
	150 ISL	9.14	9.13	33.975	26.296	174.7	.360	2.83	43.6							151
1	176	8.82	8.80	34.021	26.383	166.8	.405	2.58	39.5	32.3	2.04	27.4	.01			177
	200 ISL	8.53	8.51	34.038	26.442	161.6	.444	2.47	37.6							202
1	207	8.45	8.43	34.043	26.457	160.2	.455	2.43	36.9	35.5	2.13	28.7	.02			208
1	236	8.24	8.21	34.099	26.535	153.3	.500	2.05	31.0	40.0	2.27	30.3	.00			237
	250 ISL	8.11	8.08	34.116	26.567	150.5	.522	1.92	29.0							252
1	275	7.86	7.83	34.138	26.622	145.6	.560	1.72	25.8	45.3	2.43	32.2	.01			277
	300 ISL	7.54	7.51	34.164	26.689	139.5	.595	1.43	21.3							302
1	336	7.09	7.06	34.201	26.782	131.0	.643	1.03	15.2	58.0	2.72	35.8	.02			338
	400 ISL	6.54	6.50	34.252	26.896	120.7	.724	.64	9.3							403
1	408	6.49	6.45	34.257	26.908	119.7	.734	.61	8.9	69.1	2.97	38.3	.05			411
1	484	6.19	6.15	34.290	26.973	114.4	.822	.46	6.6	75.4	3.05	39.4	.02			487
	500 ISL	6.09	6.05	34.301	26.995	112.5	.841	.42	6.1							504
1	560	5.60	5.55	34.352	27.096	103.1	.906	.27	3.8	89.4	3.17	40.2	.02			564

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 87 50

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 19.4 N	119 39.8 W	01/06/84	1043 GMT	73 M	300	07 KT			1019.0 MB	14.2 C	12.9 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.89	14.89	33.441	24.795	314.3	.000	5.90	102.5							0
1	1	14.89	14.89	33.441	24.795	314.3	.003	5.90	102.5	1.0	.30	.1	.00	.47	.19	1
	10 ISL	14.69	14.68	33.435	24.834	310.8	.031	5.93	102.6							10
1	11	14.67	14.67	33.434	24.838	310.5	.034	5.93	102.6	.4	.32	.1	.00	.44	.21	11
	20 ISL	14.52	14.51	33.428	24.865	308.2	.062	5.94	102.4							20
1	21	14.50	14.49	33.428	24.870	307.8	.065	5.94	102.4	.3	.33	.2	.01	.55	.38	21
	30 ISL	14.09	14.09	33.428	24.955	299.9	.093	5.64	96.5							30
1	31	14.03	14.02	33.429	24.969	298.6	.095	5.60	95.6	1.8	.45	1.6	.60	.42	.27	31
1	42	12.54	12.53	33.452	25.286	268.6	.126	4.77	78.9	7.0	.84	7.9	.72	.27	.25	42
	50 ISL	11.64	11.64	33.522	25.509	247.6	.147	4.31	70.0							50
1	52	11.49	11.48	33.538	25.551	243.7	.152	4.23	68.5	12.1	1.12	13.3	.28	.15	.24	52
1	63	10.93	10.93	33.601	25.699	229.7	.178	3.93	62.9	14.7	1.29	16.2	.10	.04	.07	63

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 87 55

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 09.4 N	120 00.7 W	01/06/84	1525 GMT	1221 M	300	03 KT	300 03 09	2	1021.0 MB	14.6 C	13.0 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.72	14.72	33.438	24.829	311.1	.000	6.03	104.4							0
1	3	14.72	14.72	33.438	24.829	311.1	.009	6.03	104.4	.6	.33	.1	.10	.49	.19	3
	10 ISL	14.72	14.72	33.437	24.829	311.3	.031	6.02	104.2							10
1	13	14.72	14.71	33.436	24.829	311.5	.040	6.01	104.1	.5	.33	.2	.06	.48	.22	13
	20 ISL	14.72	14.72	33.437	24.828	311.8	.062	5.96	103.1							20
1	23	14.73	14.73	33.437	24.827	311.9	.071	5.93	102.7	.5	.34	.2	.03	.48	.22	23
	30 ISL	14.65	14.64	33.434	24.843	310.6	.093	5.87	101.4							30
1	33	14.61	14.61	33.433	24.849	310.1	.102	5.84	100.9	.7	.36	.3	.29	.50	.23	33
1	44	13.17	13.17	33.439	25.151	281.6	.135	5.21	87.4	4.1	.66	3.4	2.30	.30	.37	44
	50 ISL	12.55	12.55	33.458	25.288	268.7	.152	4.81	79.6							50
1	53	12.34	12.34	33.466	25.335	264.3	.159	4.66	76.8	7.4	.91	9.2	.47	.19	.24	53
1	63	12.03	12.02	33.470	25.397	258.6	.185	4.52	74.0	8.8	1.01	10.8	.15	.17	.22	63
1	73	11.28	11.28	33.508	25.565	242.8	.210	4.25	68.5	11.5	1.18	13.9	.06	.10	.18	73
	75 ISL	11.12	11.11	33.528	25.609	238.6	.216	4.16	66.8							76
1	88	10.42	10.41	33.641	25.822	218.6	.244	3.72	58.9	16.9	1.44	18.7	.01	.05	.08	88
	100 ISL	10.08	10.06	33.700	25.927	208.8	.271	3.55	55.8							101
1	102	10.04	10.02	33.708	25.940	207.7	.276	3.53	55.4	19.4	1.58	20.7	.00	.02	.08	103
1	122	9.89	9.87	33.751	25.999	202.5	.317	3.40	53.2	21.0	1.65	21.8	.00	.03	.11	123
	125 ISL	9.84	9.82	33.762	26.015	200.9	.322	3.37	52.6							126
1	147	9.35	9.33	33.868	26.179	185.8	.365	3.02	46.8	25.8	1.83	24.6	.00	.01	.07	148
	150 ISL	9.29	9.27	33.881	26.199	183.9	.370	2.98	46.0							151
1	177	8.78	8.76	33.989	26.364	168.6	.418	2.59	39.6	31.9	1.97	27.2	.00			178
	200 ISL	8.51	8.49	34.034	26.442	161.6	.456	2.37	36.1							202
1	208	8.43	8.41	34.043	26.461	159.9	.468	2.31	35.1	36.5	2.12	29.2	.01			209
1	238	8.10	8.08	34.080	26.540	152.9	.515	2.07	31.2	40.6	2.34	30.6	.05			239
	250 ISL	7.93	7.91	34.094	26.576	149.5	.534	1.95	29.3							252
1	277	7.55	7.52	34.123	26.655	142.3	.574	1.67	24.9	47.8	2.45	32.8	.00			279
	300 ISL	7.32	7.29	34.148	26.707	137.7	.605	1.44	21.4							302
1	336	7.01	6.98	34.183	26.778	131.3	.654	1.12	16.5	57.4	2.69	35.6	.00			338
	400 ISL	6.37	6.33	34.227	26.899	120.3	.734	.71	10.2							403
1	412	6.26	6.22	34.234	26.920	118.5	.749	.65	9.4	70.0	2.92	38.7	.00			415
1	487	5.82	5.78	34.273	27.006	110.9	.834	.46	6.6	78.3	3.03	40.2	.00			490
	500 ISL	5.75	5.71	34.280	27.021	109.6	.849	.44	6.2							504
1	562	5.42	5.37	34.314	27.088	103.7	.915	.36	5.1	86.3	3.11	41.5	.00			566

RV DAVID STARR JORDAN

CALCOFI CRUISE 8401

STATION 87 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
32 59.4 N	120 21.0 W	01/07/84	0406 GMT	739 M	300	10 KT			1020.7 MB	13.9 C	12.0 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.00	15.00	33.330	24.685	324.8	.000	5.93	103.2							0
1	1	15.00	15.00	33.330	24.685	324.8	.003	5.93	103.2	.6	.35	.0	.00	.18	.05	1
1	10	15.02	15.01	33.329	24.681	325.4	.032	5.99	104.3	.4	.31	.0	.00	.17	.07	10
	20 ISL	15.01	15.00	33.329	24.684	325.5	.065	5.94	103.4							20
1	24	15.00	15.00	33.329	24.685	325.5	.078	5.92	103.0	.4	.31	.0	.00	.21	.06	24
	30 ISL	14.94	14.93	33.326	24.697	323.9	.098	5.84	101.5							30
1	42	14.43	14.43	33.320	24.800	315.0	.135	5.65	97.2	.8	.39	.0	.80	.50	.19	42
	50 ISL	13.56	13.55	33.263	24.937	302.1	.161	5.54	93.6							50
1	56	12.87	12.86	33.238	25.055	291.0	.178	5.43	90.4	2.7	.56	3.0	.23	.30	.22	56
1	67	11.84	11.83	33.300	25.302	267.7	.208	5.03	81.9	5.5	.79	7.5	.08	.17	.15	67
	75 ISL	11.62	11.61	33.373	25.399	258.7	.230	4.69	76.0							76
1	76	11.61	11.60	33.379	25.405	258.1	.232	4.66	75.6	7.9	.96	10.5	.04	.14	.15	76
1	92	10.75	10.73	33.515	25.667	233.5	.271	4.14	66.0	12.8	1.26	15.5	.07	.07	.09	92
	100 ISL	10.45	10.44	33.540	25.738	226.8	.290	4.08	64.6							101
1	106	10.30	10.29	33.558	25.777	223.2	.303	4.04	63.8	14.7	1.33	17.2	.05	.04	.06	106
1	118	10.07	10.05	33.676	25.909	210.9	.331	3.66	57.5	18.5	1.50	19.7	.04	.01	.05	119
	125 ISL	9.93	9.91	33.722	25.969	205.3	.344	3.50	54.9							126
1	144	9.48	9.47	33.831	26.128	190.6	.383	3.14	48.8	24.4	1.75	23.9	.02	.00	.04	145
	150 ISL	9.35	9.33	33.859	26.171	186.5	.393	3.06	47.3							151
1	166	9.00	8.98	33.926	26.281	176.4	.423	2.86	44.0	28.4	1.88	26.1	.02	.00	.03	167
1	184	8.68	8.66	33.985	26.377	167.5	.453	2.68	40.9	31.7	1.99	27.3	.01			185
	200 ISL	8.47	8.45	34.024	26.440	161.8	.480	2.53	38.5							202
1	205	8.42	8.39	34.033	26.456	160.3	.488	2.49	37.8	34.9	2.06	28.8	.01			206
1	236	7.96	7.94	34.061	26.546	152.1	.536	2.29	34.4	39.8	2.16	30.5	.00			237
	250 ISL	7.75	7.72	34.077	26.590	148.1	.557	2.11	31.5							252
1	274	7.39	7.37	34.102	26.661	141.6	.592	1.78	26.4	48.0	2.39	33.2	.00			276
	300 ISL	7.06	7.04	34.114	26.716	136.7	.628	1.53	22.6							302
1	335	6.68	6.65	34.124	26.776	131.2	.675	1.26	18.4	58.8	2.67	36.5	.01			337
	400 ISL	6.22	6.18	34.173	26.876	122.3	.757	.80	11.6							403
1	409	6.16	6.12	34.180	26.889	121.2	.769	.75	10.8	70.0	2.84	39.1	.00			412
1	484	5.66	5.62	34.231	26.992	112.0	.856	.46	6.6	79.6	3.00	41.1	.00			487
	500 ISL	5.58	5.54	34.243	27.012	110.2	.874	.42	6.0							504
1	557	5.40	5.36	34.294	27.074	104.9	.935	.36	5.1	86.4	3.07	42.0	.00			561

RV DAVID STARR JORDAN

CALCOFI CRUISE 8401

STATION 87 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
32 39.4 N	121 02.0 W	01/07/84	1052 GMT	3918 M	330	11 KT		2	1021.0 MB	14.4 C	12.3 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	15.03	15.03	33.247	24.614	331.5	.000	5.87	102.2	.8	.33	.0	.10	.16	.08	0
	10 ISL	15.03	15.02	33.251	24.620	331.3	.033	5.98	104.0							10
1	11	15.02	15.02	33.251	24.620	331.3	.036	5.98	104.1	.7	.35	.0	.00	.17	.05	11
	20 ISL	15.03	15.03	33.259	24.625	331.1	.066	5.94	103.3							20
1	26	15.03	15.03	33.265	24.629	330.8	.086	5.89	102.5	.7	.34	.0		.17	.06	26
	30 ISL	15.02	15.02	33.268	24.635	330.5	.099	5.88	102.4							30
1	41	14.97	14.96	33.279	24.655	328.9	.135	5.87	102.0	.6	.35	.0	.00	.24	.07	41
	50 ISL	14.91	14.90	33.298	24.683	326.5	.165	5.84	101.3							50
1	56	14.85	14.84	33.311	24.705	324.5	.184	5.81	100.8	.6	.36	.0	.15	.44	.17	56
1	65	14.72	14.71	33.324	24.743	321.2	.213	5.77	99.8	.5	.38	.0	.46	.47	.25	65
	75 ISL	13.53	13.52	33.255	24.938	302.8	.245	5.57	94.0							76
1	76	13.43	13.42	33.251	24.955	301.2	.247	5.55	93.5	1.9	.51	1.5	.52	.31	.31	76
1	91	11.82	11.81	33.347	25.343	264.4	.289	4.97	80.9	6.0	.86	7.9	.15	.11	.12	91
	100 ISL	11.29	11.28	33.362	25.451	254.3	.313	4.87	78.5							101
1	106	11.07	11.05	33.374	25.500	249.6	.327	4.82	77.3	8.4	.99	10.7	.06	.08	.08	106
1	120	10.36	10.34	33.521	25.739	227.2	.363	4.27	67.5	13.6	1.29	15.9	.06	.03	.06	121
	125 ISL	10.24	10.23	33.568	25.795	221.9	.373	4.08	64.3							126
1	145	9.85	9.83	33.752	26.006	202.2	.416	3.34	52.3	20.9	1.67	22.0	.04	.01	.03	146
	150 ISL	9.72	9.70	33.785	26.053	197.8	.426	3.24	50.6							151
1	165	9.30	9.29	33.869	26.187	185.3	.455	3.04	47.0	25.9	1.85	24.8	.04	.00	.03	166
1	184	8.93	8.92	33.934	26.297	175.1	.489	2.94	45.1	28.5	1.92	26.0	.01			185
	200 ISL	8.65	8.63	33.946	26.351	170.2	.516	3.26	49.7							202
1	203	8.60	8.58	33.947	26.360	169.5	.521	3.31	50.4	28.9	1.85	25.3	.01			204
1	235	8.32	8.29	34.035	26.472	159.3	.574	2.53	38.3	35.1	2.09	28.6	.01			236
	250 ISL	8.16	8.13	34.058	26.515	155.5	.598	2.34	35.3							252
1	275	7.88	7.85	34.082	26.576	150.0	.636	2.13	31.9	41.8	2.28	31.0	.00			277
	300 ISL	7.60	7.57	34.105	26.634	144.8	.673	1.86	27.7							302
1	335	7.22	7.19	34.131	26.708	138.0	.722	1.50	22.2	52.1	2.54	34.2	.00			337
	400 ISL	6.63	6.59	34.164	26.816	128.4	.809	1.04	15.1							403
1	410	6.54	6.50	34.168	26.831	127.0	.822	.98	14.2	62.9	2.77	37.2	.00			413
1	485	5.92	5.88	34.205	26.940	117.2	.913	.62	8.9	73.9	2.95	39.7	.00			488
	500 ISL	5.83	5.79	34.215	26.958	115.5	.931	.57	8.1							504
1	560	5.61	5.57	34.264	27.025	109.8	.998	.42	6.0	81.1	3.08	41.0	.00			564

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 87 80

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 19.4 N	121 42.9 W	01/07/84	1755 GMT	3918 M	310	07 KT	300 05 12	2	1023.4 MB	16.0 C	13.9 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.31	15.31	33.241	24.549	337.8	.000	5.86	102.6							0
1	1	15.31	15.31	33.241	24.549	337.8	.003	5.86	102.6	.3	.29	.0	.00	.18	.02	1
	10 ISL	15.30	15.30	33.241	24.551	337.8	.034	5.84	102.2							10
1	11	15.30	15.30	33.241	24.551	337.8	.037	5.84	102.2	.0	.30	.0	.00	.16	.06	11
	20 ISL	15.26	15.26	33.244	24.563	337.0	.068	5.85	102.2							20
1	26	15.23	15.23	33.245	24.570	336.5	.087	5.85	102.2	.0	.30	.0	.00	.21	.05	26
	30 ISL	15.13	15.12	33.246	24.594	334.3	.101	5.85	102.0							30
1	41	14.83	14.83	33.256	24.666	327.8	.137	5.86	101.6	.0	.34	.0	.00	.31	.08	41
	50 ISL	14.75	14.74	33.281	24.704	324.5	.167	5.83	100.9							50
1	56	14.69	14.68	33.293	24.726	322.5	.186	5.80	100.3	.2	.35	.0	.00	.76	.21	56
1	66	14.42	14.41	33.285	24.777	318.0	.217	5.72	98.3	.5	.39	.0	.67	.58	.29	66
	75 ISL	13.52	13.51	33.247	24.935	303.1	.246	5.56	93.7							76
1	76	13.44	13.43	33.245	24.948	301.7	.248	5.54	93.3	1.6	.51	1.7	.36	.32	.24	76
1	92	11.88	11.87	33.327	25.315	267.1	.294	5.06	82.5	5.2	.85	7.3	.01	.13	.14	92
	100 ISL	11.50	11.49	33.439	25.472	252.3	.315	4.50	72.8							101
1	106	11.28	11.27	33.507	25.566	243.5	.329	4.17	67.2	11.4	1.18	14.1	.00	.06	.07	106
1	120	10.17	10.16	33.555	25.797	221.6	.364	4.18	65.8	14.2	1.34	16.9		.02	.06	121
	125 ISL	10.11	10.10	33.596	25.839	217.7	.374	4.08	64.1							126
1	145	9.84	9.83	33.715	25.978	204.9	.417	3.49	54.6	19.8	1.61	21.3	.04	.01	.05	146
	150 ISL	9.76	9.74	33.746	26.016	201.4	.426	3.37	52.7							151
1	166	9.40	9.38	33.830	26.141	189.7	.458	3.13	48.5	24.2	1.78	24.1	.04	.00	.05	167
1	184	8.88	8.86	33.863	26.250	179.5	.491	3.30	50.6	26.3	1.80	24.7	.04			185
	200 ISL	8.79	8.76	33.969	26.348	170.6	.519	2.77	42.3							202
1	204	8.78	8.76	33.995	26.370	168.6	.525	2.62	40.1	31.3	2.00	27.4	.01			205
1	235	8.19	8.17	34.020	26.479	158.5	.576	2.70	40.8	35.5	2.07	28.5	.00			236
	250 ISL	7.89	7.86	34.017	26.522	154.6	.600	2.69	40.4							252
1	274	7.44	7.42	34.011	26.582	149.1	.637	2.68	39.8	40.9	2.14	30.1	.01			276
	300 ISL	7.11	7.09	34.028	26.641	143.7	.674	2.34	34.5							302
1	335	6.76	6.73	34.059	26.714	137.1	.723	1.76	25.7	53.0	2.48	34.7	.04			337
	400 ISL	6.21	6.18	34.109	26.826	127.0	.809	1.08	15.6							403
1	409	6.15	6.11	34.117	26.841	125.7	.821	1.01	14.5	65.4	2.81	38.5	.03			412
1	485	5.80	5.76	34.197	26.948	116.3	.912	.59	8.4	75.2	2.97	40.5	.01			488
	500 ISL	5.72	5.68	34.212	26.970	114.3	.930	.53	7.6							504
1	559	5.41	5.36	34.268	27.053	106.9	.995	.39	5.5	84.0	3.11	41.6				563

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 87 90

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 59.4 N	122 23.6 W	01/08/84	0053 GMT	4110 M	310	07 KT	310 08 15	2	1043.0 MB	15.8 C	14.2 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.99	15.99	33.251	24.405	351.5	.000	5.76	102.2							0
1	2	15.99	15.99	33.251	24.405	351.5	.007	5.76	102.2	.1	.28	.0	.06	.14	.02	2
1	10	16.18	16.18	33.359	24.446	347.9	.035	5.74	102.3	.1	.27	.0	.00	.15	.03	10
	20 ISL	16.17	16.17	33.358	24.448	348.0	.070	5.72	102.0							20
1	25	16.16	16.16	33.357	24.449	348.0	.087	5.72	101.9	.1	.27	.0	.00	.16	.05	25
	30 ISL	16.16	16.16	33.358	24.450	348.1	.105	5.72	101.8							30
1	40	16.16	16.15	33.359	24.452	348.2	.139	5.71	101.7	.1	.28	.0	.00	.17	.05	40
	50 ISL	16.16	16.15	33.360	24.453	348.5	.174	5.70	101.5							50
1	53	16.16	16.15	33.360	24.453	348.5	.184	5.70	101.5	.2	.28	.0	.00	.19	.06	53
1	63	15.99	15.98	33.355	24.489	345.5	.219	5.72	101.5	.2	.27	.0	.00	.32	.06	63
1	72	15.42	15.41	33.283	24.560	338.9	.249	5.82	102.1	.2	.31	.0	.00	.47	.12	72
	75 ISL	15.04	15.03	33.257	24.622	333.0	.260	5.81	101.2							76
1	88	13.66	13.65	33.224	24.888	307.9	.301	5.78	97.8	1.2	.41	.3	.59	.31	.23	88
	100 ISL	13.18	13.17	33.322	25.061	291.8	.338	5.54	92.9							101
1	102	13.13	13.12	33.336	25.081	289.8	.342	5.50	92.1	2.2	.50	2.5	.16	.16	.17	102
1	116	12.07	12.06	33.372	25.314	267.8	.381	5.04	82.5	5.0	.78	7.0	.07	.09	.08	116
	125 ISL	11.35	11.34	33.413	25.479	252.2	.406	4.75	76.6							126
1	138	10.54	10.53	33.506	25.696	231.7	.438	4.30	68.2	12.2	1.19	14.9	.01	.03	.05	139
	150 ISL	10.27	10.25	33.648	25.854	216.9	.464	3.73	58.9							151
1	159	10.14	10.12	33.746	25.953	207.7	.484	3.36	52.9	20.4	1.64	21.3	.00	.00	.04	160
1	178	9.67	9.65	33.769	26.050	198.7	.522	3.37	52.5	22.3	1.67	22.4	.00			179
1	197	9.12	9.10	33.819	26.178	186.7	.559	3.32	51.1	25.1	1.76	24.2	.00			198
	200 ISL	9.06	9.04	33.834	26.199	184.9	.564	3.28	50.5							202
1	225	8.70	8.68	33.956	26.352	170.7	.609	2.91	44.4	30.6	1.93	26.7	.01			226
	250 ISL	8.30	8.27	34.022	26.466	160.2	.650	2.69	40.7							252
1	263	8.08	8.06	34.040	26.512	155.9	.670	2.60	39.2	37.1	2.08	29.1	.01			264
	300 ISL	7.33	7.31	34.040	26.620	145.3	.726	2.32	34.4							302
1	321	6.94	6.91	34.040	26.675	140.7	.757	2.15	31.5	49.1	2.32	32.9	.01			323
1	392	6.33	6.30	34.078	26.786	130.8	.852	1.38	20.0	60.5	2.61	37.0	.00			394
	400 ISL	6.27	6.23	34.086	26.801	129.5	.863	1.30	18.8							403
1	465	5.81	5.77	34.149	26.909	119.7	.944	.80	11.4	72.7	2.90	40.1	.00			468
	500 ISL	5.62	5.58	34.183	26.959	115.3	.985	.63	8.9							504
1	536	5.47	5.43	34.217	27.005	111.2	1.027	.52	7.4	81.9	3.00	41.3	.00			540

RV DAVID STARR JORDAN

CALCOFI CRUISE 8401

STATION 87 100

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
31 39.4 N	123 04.2 W	01/08/84	0715 GMT	4014 M				1022.7 MB	15.2 C	14.0 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.22	16.22	33.347	24.427	349.4	.000	5.74	102.4							0
1	1	16.22	16.22	33.347	24.427	349.4	.003	5.74	102.4	.4	.27	.0	.01	.15	.02	1
	10 ISL	16.22	16.22	33.349	24.428	349.5	.035	5.70	101.7							10
1	11	16.22	16.22	33.349	24.428	349.5	.038	5.70	101.7	.2	.27	.0	.01	.14	.04	11
	20 ISL	16.17	16.17	33.347	24.439	348.9	.070	5.71	101.7							20
1	26	16.11	16.10	33.335	24.445	348.5	.090	5.71	101.6	.2	.27	.0	.01	.14	.05	26
	30 ISL	16.04	16.03	33.312	24.443	348.8	.105	5.72	101.6							30
1	40	15.84	15.84	33.250	24.439	349.4	.139	5.75	101.7	.1	.28	.0	.00	.13	.07	40
	50 ISL	15.74	15.73	33.236	24.452	348.5	.175	5.76	101.7							50
1	56	15.60	15.59	33.205	24.459	348.0	.195	5.77	101.5	.1	.29	.0	.00	.27	.07	56
1	66	14.96	14.95	33.340	24.704	324.9	.228	5.81	101.0	.5	.31	.0	.04	.37	.17	66
1	75	14.31	14.30	33.344	24.847	311.6	.257	5.77	99.0	1.1	.35	.1	.34	.28	.17	75
1	90	13.51	13.50	33.330	25.000	297.3	.302	5.61	96.7	1.6	.43	1.4	.06	.16	.14	90
	100 ISL	12.98	12.96	33.359	25.129	285.2	.332	5.43	90.7							101
1	106	12.70	12.69	33.385	25.204	278.1	.348	5.26	87.3	3.7	.61	4.6		.08	.08	106
1	119	12.08	12.06	33.480	25.398	259.9	.385	4.40	72.1	9.3	1.00	11.1	.06	.02	.04	120
	125 ISL	11.77	11.75	33.489	25.462	253.9	.400	4.38	71.3							126
1	145	10.75	10.74	33.506	25.659	235.4	.449	4.30	68.5	12.4	1.21	14.8	.01	.02	.05	146
	150 ISL	10.64	10.62	33.521	25.691	232.5	.460	4.23	67.2							151
1	165	10.32	10.30	33.599	25.808	221.6	.495	3.90	61.6	16.6	1.42	18.3	.00	.02	.03	166
1	185	9.66	9.64	33.802	26.077	196.3	.536	3.25	50.6	23.4	1.71	23.0	.00			186
	200 ISL	9.19	9.17	33.878	26.213	183.5	.565	3.26	50.4							202
1	205	9.05	9.02	33.894	26.249	180.2	.574	3.27	50.3	26.7	1.77	24.4	.00			206
1	235	8.51	8.49	33.962	26.386	167.5	.626	3.52	53.5	29.1	1.78	24.6	.00			236
	250 ISL	8.25	8.22	33.984	26.443	162.3	.651	3.44	51.9							252
1	275	7.85	7.82	34.007	26.521	155.2	.690	3.18	47.6	37.0	1.96	27.3	.00			276
	300 ISL	7.48	7.45	34.013	26.578	149.9	.728	2.99	44.3							302
1	335	7.02	6.99	34.014	26.644	143.9	.780	2.65	38.9	46.5	2.17	31.3	.00			337
	400 ISL	6.27	6.23	34.065	26.785	130.9	.869	1.54	22.3							403
1	411	6.16	6.13	34.077	26.807	128.9	.883	1.36	19.6	63.1	2.64	37.6	.00			413
1	486	5.71	5.67	34.167	26.935	117.4	.976	.67	9.6	75.6	2.93	40.6	.00			489
	500 ISL	5.64	5.60	34.182	26.956	115.6	.992	.63	9.0							504
1	560	5.39	5.34	34.234	27.028	109.2	1.060	.46	6.5	84.1	3.06	41.7	.00			564

RV NEW HORIZON

CALCOFI CRUISE 8401

STATION 90 28

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
33 29.1 N	117 47. W	01/05/84	1226 GMT	187 M	060 03 KT		1	1014.9 MB	15.3 C	12.2 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	15.75	15.75	33.383	24.561	336.6	.000	5.77	102.0	2.2	.32	.2	.00	.20	.08	0
1	10	15.77	15.77	33.386	24.559	337.1	.034	5.79	102.4	2.2	.33	.1	.00	.20	.09	10
	20 ISL	15.59	15.59	33.384	24.599	333.6	.067	5.75	101.3							20
	30 ISL	15.41	15.40	33.383	24.639	330.1	.100	5.71	100.2							30
1	32	15.37	15.37	33.383	24.646	329.4	.107	5.70	100.0	2.4	.38	.1	.00	.59	.33	32
1	42	14.80	14.79	33.385	24.773	317.6	.139	5.35	92.7	3.3	.53	1.3	.11	.76	.48	42
	50 ISL	14.15	14.14	33.407	24.928	303.2	.164	5.10	87.3							50
1	58	13.56	13.55	33.433	25.069	289.9	.187	4.91	83.0	5.1	.75	5.2	.02	.19	.18	58
1	73	12.96	12.95	33.466	25.216	276.2	.229	4.67	78.0	6.7	.89	7.7	.02	.09	.12	73
	75 ISL	12.89	12.88	33.469	25.232	274.7	.236	4.65	77.5							76
1	89	12.49	12.48	33.495	25.330	265.7	.273	4.49	74.2	8.3	1.01	9.6	.02	.06	.08	89
	100 ISL	12.03	12.02	33.534	25.447	254.8	.302	4.26	69.7							101
1	108	11.66	11.64	33.574	25.549	245.3	.323	4.04	65.7	12.0	1.28	13.9	.03	.03	.05	109
	125 ISL	10.86	10.84	33.699	25.791	222.5	.362	3.50	56.0							126
1	134	10.43	10.41	33.776	25.926	209.7	.382	3.21	50.9	20.4	1.73	20.6	.10	.01	.04	135
	150 ISL	9.91	9.89	33.879	26.096	193.9	.414	2.91	45.6							151
1	160	9.66	9.64	33.936	26.181	185.9	.433	2.80	43.7	26.4	1.95	24.5	.00	.00	.02	161

RV NEW HORIZON CALCOFI CRUISE 8401 STATION 90 30

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
33 25.6 N	117 54.0 W	01/05/84	0903 GMT	603 M	080	08 KT		1	1017.3 MB	16.5 C	14.8 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	15.71	15.71	33.361	24.553	337.3	.000	5.82	102.7	2.9	.37	.2	.01	.36	.24	0
1	10	15.72	15.72	33.358	24.549	338.0	.034	5.90	104.2	2.6	.37	.2	.00	.40	.25	10
	20 ISL	15.66	15.66	33.353	24.558	337.5	.068	5.84	102.9							20
1	21	15.66	15.66	33.353	24.559	337.4	.071	5.83	102.8	2.4	.37	.2	.01	.60	.31	21
	30 ISL	15.48	15.47	33.374	24.616	332.3	.101	5.61	98.6							30
1	31	15.46	15.45	33.376	24.622	331.8	.104	5.58	98.0	2.6	.45	.5	.22	.59	.36	31
1	41	14.05	14.04	33.405	24.946	301.1	.135	5.17	88.3	3.8	.64	3.0	.02	.37	.32	41
	50 ISL	13.49	13.48	33.437	25.087	287.9	.162	4.91	82.9							50
1	52	13.43	13.42	33.443	25.103	286.4	.168	4.87	82.1	5.8	.77	5.7	.02	.17	.19	52
1	62	13.11	13.10	33.476	25.193	278.1	.196	4.69	78.6	6.8	.90	7.4	.00	.12	.15	62
1	72	12.70	12.69	33.471	25.270	271.0	.223	4.64	77.1	7.5	.94	8.4	.00	.09	.12	72
	75 ISL	12.58	12.57	33.479	25.299	268.3	.232	4.61	76.4							76
1	88	12.13	12.12	33.523	25.421	257.0	.265	4.47	73.4	9.0	1.06	10.6	.00	.05	.07	88
	100 ISL	11.60	11.59	33.566	25.554	244.6	.296	4.27	69.3							101
1	103	11.48	11.47	33.577	25.583	241.8	.302	4.22	68.3	12.0	1.21	13.4	.00	.03	.05	103
1	123	10.47	10.45	33.705	25.864	215.4	.350	3.61	57.2	18.2	1.57	18.9	.00	.01	.03	124
	125 ISL	10.42	10.41	33.719	25.882	213.7	.353	3.55	56.3							126
1	149	9.93	9.92	33.905	26.112	192.4	.403	2.85	44.7	24.9	1.91	23.5	.00	.01	.03	150
	150 ISL	9.92	9.90	33.908	26.116	191.9	.404	2.85	44.6							151
1	180	9.36	9.34	33.974	26.260	178.7	.460	2.70	41.8	28.9	2.04	25.4	.00			181
	200 ISL	8.99	8.97	34.014	26.351	170.4	.495	2.59	39.8							202
1	211	8.81	8.78	34.034	26.396	166.3	.513	2.51	38.4	33.1	2.14	27.2	.00			212
1	242	8.45	8.43	34.090	26.496	157.3	.563	2.15	32.7	37.9	2.28	29.0	.00			243
	250 ISL	8.36	8.33	34.102	26.519	155.2	.576	2.07	31.3							252
1	282	7.99	7.96	34.140	26.604	147.5	.625	1.75	26.3	44.2	2.47	31.2	.00			284
	300 ISL	7.77	7.74	34.159	26.652	143.2	.650	1.55	23.2							302
1	344	7.24	7.21	34.201	26.760	133.3	.711	1.09	16.1	56.1	2.81	34.8	.00			346
	400 ISL	6.74	6.71	34.244	26.863	124.1	.783	.73	10.7							403
1	420	6.58	6.55	34.257	26.895	121.2	.808	.64	9.3	67.9	3.01	37.6	.00			423
1	498	5.95	5.91	34.307	27.017	110.2	.898	.40	5.7	79.6	3.14	39.7	.02			501
	500 ISL	5.93	5.89	34.309	27.021	109.9	.900	.39	5.7							504
1	573	5.51	5.46	34.358	27.113	101.6	.977	.25	3.6	90.4	3.26	40.2	.02			577

RV NEW HORIZON CALCOFI CRUISE 8401 STATION 90 35

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
33 15.4 N	118 12. W	01/05/84	0320 GMT	260 M	330	08 KT	350 02 02		1017.3 MB	18.0 C	14.0 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.93	15.93	33.430	24.558	337.0	.000	5.69	100.9							0
1	1	15.93	15.93	33.430	24.558	337.0	.003	5.69	100.9	3.7	.34	.4	.00	.19	.08	1
	10 ISL	15.94	15.93	33.425	24.552	337.7	.034	5.76	102.1							10
1	11	15.94	15.93	33.425	24.552	337.8	.037	5.76	102.2	3.4	.35	.3	.00	.19	.08	11
	20 ISL	15.90	15.90	33.423	24.560	337.3	.067	5.75	102.0							20
	30 ISL	15.86	15.85	33.422	24.568	336.9	.101	5.74	101.7							30
1	32	15.85	15.85	33.422	24.570	336.8	.107	5.74	101.7	2.8	.34	.3	.01	.27	.12	32
1	47	15.64	15.63	33.428	24.623	332.1	.157	5.71	100.7	3.3	.37	.2	.02	.79	.41	47
	50 ISL	15.25	15.25	33.422	24.702	324.7	.168	5.57	97.4							50
1	58	14.20	14.19	33.405	24.915	304.5	.192	5.21	89.2	4.5	.62	3.0	.11	.43	.39	58
1	73	12.83	12.82	33.377	25.172	280.4	.236	5.03	83.7	5.9	.78	5.9	.04	.15	.24	73
	75 ISL	12.66	12.65	33.384	25.211	276.7	.242	4.99	82.7							76
1	89	11.80	11.79	33.448	25.423	256.7	.279	4.70	76.6	9.3	1.01	10.5	.01	.08	.15	89
	100 ISL	11.28	11.27	33.510	25.567	243.3	.307	4.48	72.1							101
1	108	10.97	10.95	33.557	25.661	234.5	.328	4.31	69.0	13.5	1.27	14.9	.02	.04	.08	109
	125 ISL	10.39	10.37	33.644	25.830	218.7	.365	3.98	62.9							126
1	135	10.06	10.04	33.696	25.928	209.6	.387	3.78	59.4	19.0	1.54	19.4	.00	.02	.03	136
	150 ISL	9.56	9.54	33.764	26.063	196.9	.417	3.57	55.6							151
1	155	9.41	9.40				.426									156
1	187	8.85	8.83	33.934	26.310	174.0	.485	3.19	48.9	29.4	1.91	25.6	.00	.00	.02	188
	200 ISL	8.65	8.63	33.976	26.375	168.0	.508	3.08	46.9							202
1	213	8.45	8.43	34.006	26.429	163.0	.529	2.98	45.3	34.2	2.07	27.6	.00	.00	.02	214

RV NEW HORIZON

CALCOFI CRUISE 8401

STATION 90 37

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 11.8 N	118 23.1 W	01/05/84	2050 GMT	1179 M	180	05 KT	210 03 09	1	1015.9 MB	18.0 C	15.6 C	6/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.90	15.90	33.415	24.552	337.5	.000	5.78	102.5							0
1	1	15.90	15.90	33.415	24.552	337.5	.003	5.78	102.5	2.9	.33	.2	.00	.26	.08	1
	10 ISL	15.85	15.85	33.414	24.562	336.9	.034	5.88	104.1							10
1	12	15.85	15.85	33.414	24.563	336.8	.040	5.90	104.5	2.7	.33	.2	.00	.26	.09	12
	20 ISL	15.83	15.83	33.415	24.568	336.5	.067	5.81	102.8							20
1	22	15.83	15.83	33.416	24.569	336.5	.074	5.78	102.3	2.2	.32	.2	.00	.27	.11	22
	30 ISL	15.85	15.84	33.418	24.567	336.9	.101	5.76	102.0							30
1	32	15.85	15.85	33.419	24.567	337.0	.107	5.76	102.0	2.0	.33	.2	.00	.42	.16	32
1	43	15.51	15.50	33.407	24.635	330.9	.144	5.66	99.5	2.6	.40	.2	.03	.96	.42	43
	50 ISL	14.52	14.51	33.362	24.815	313.9	.167	5.48	94.4							50
1	53	14.09	14.08	33.347	24.894	306.3	.176	5.39	92.1	3.6	.54	1.8	.09	.78	.57	53
1	63	13.04	13.03	33.356	25.115	285.6	.205	5.09	85.1	4.9	.75	5.1	.03	.36	.38	63
1	74	12.68	12.68	33.423	25.236	274.3	.236	4.83	80.2	6.5	.85	7.4	.02	.14	.20	74
	75 ISL	12.65	12.64	33.433	25.251	272.9	.239	4.78	79.3							76
1	89	12.17	12.16	33.540	25.426	256.5	.275	4.25	69.8	10.2	1.11	11.6	.01	.07	.13	89
	100 ISL	11.54	11.53	33.627	25.612	239.1	.304	3.82	62.0							101
1	105	11.27	11.26	33.657	25.684	232.2	.314	3.69	59.5	15.5	1.42	16.7	.00	.02	.05	105
1	124	10.25	10.23	33.719	25.913	210.8	.358	3.62	57.1	19.2	1.59	19.7	.00	.01	.03	125
	125 ISL	10.22	10.21	33.722	25.919	210.2	.360	3.61	57.0							126
1	150	9.44	9.42	33.863	26.160	187.6	.410	3.20	49.6	25.1	1.82	23.7	.00	.00	.02	151
1	181	8.89	8.87	34.002	26.357	169.4	.465	2.65	40.6	31.9	2.08	26.8	.00			182
	200 ISL	8.57	8.55	34.046	26.442	161.6	.496	2.49	38.0							202
1	212	8.39	8.36	34.060	26.481	158.0	.515	2.44	37.0	37.5	2.19	28.8	.00			213
1	243	7.98	7.95	34.056	26.540	152.9	.563	2.35	35.3	40.6	2.26	29.9	.00			244
	250 ISL	7.88	7.86	34.063	26.560	151.1	.574	2.26	33.9							252
1	284	7.46	7.43	34.104	26.653	142.6	.625	1.78	26.4	48.6	2.45	33.0	.00			286
	300 ISL	7.31	7.28	34.114	26.683	139.9	.647	1.63	24.2							302
1	346	6.95	6.92	34.141	26.754	133.6	.709	1.28	18.8	56.9	2.71	35.7	.00			348
	400 ISL	6.62	6.59	34.202	26.846	125.6	.780	.85	12.3							403
1	423	6.49	6.45	34.228	26.885	122.1	.808	.69	10.0	68.1	2.96	38.3	.00			426
	500 ISL	5.83	5.79	34.267	27.000	111.6	.898	.45	6.5							504
1	501	5.83	5.78	34.267	27.001	111.6	.899	.45	6.4	79.9	3.10	40.7	.00			504
1	578	5.46	5.41	34.310	27.080	104.7	.982	.32	4.5	86.9	3.18	41.8	.00			582

RV NEW HORIZON

CALCOFI CRUISE 8401

STATION 90 53

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 39.1 N	119 29.3 W	01/06/84	0527 GMT	1335 M	320	07 KT		1	1017.6 MB	15.0 C	14.2 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.82	14.82	33.419	24.793	314.5	.000	6.08	105.5							0
1	1	14.82	14.82	33.419	24.793	314.5	.003	6.08	105.5	3.9	.37	.0	.00	.40	.19	1
	10 ISL	14.70	14.70	33.418	24.818	312.4	.031	6.22	107.7							10
1	12	14.68	14.68	33.418	24.823	312.0	.037	6.23	107.8	3.6	.37	.0	.00	.42	.22	12
	20 ISL	14.59	14.59	33.414	24.839	310.7	.063	6.18	106.7							20
1	22	14.58	14.57	33.414	24.842	310.5	.068	6.16	106.3	3.4	.38	.0	.02	.52	.32	22
	30 ISL	14.55	14.55	33.412	24.845	310.4	.094	6.09	105.1							30
1	32	14.55	14.55	33.412	24.846	310.4	.099	6.07	104.7	3.2	.40	.2	.03	.51	.32	32
1	43	14.45	14.44	33.409	24.866	308.8	.133	5.92	101.9	3.3	.43	.7	.10	.43	.32	43
	50 ISL	14.00	13.99	33.405	24.958	300.4	.155	5.59	95.4							50
1	53	13.74	13.73	33.404	25.010	295.2	.163	5.43	92.1	4.9	.62	3.4	.28	.28	.24	53
1	63	12.34	12.33	33.462	25.333	264.8	.191	4.77	78.6	10.3	.99	9.8	.05	.14	.19	63
1	73	11.94	11.93	33.496	25.435	255.2	.217	4.52	73.9	12.0	1.13	11.9	.03	.11	.18	73
	75 ISL	11.81	11.80	33.506	25.468	252.2	.223	4.48	73.0							76
1	89	10.99	10.98	33.588	25.680	232.2	.256	4.18	67.0	16.3	1.37	15.8	.01	.07	.12	89
	100 ISL	10.38	10.37	33.686	25.863	215.0	.281	3.74	59.2							101
1	104	10.22	10.21	33.716	25.914	210.1	.289	3.61	56.9	21.6	1.64	19.8	.01	.04	.07	104
1	124	9.65	9.64	33.825	26.096	193.2	.331	3.39	52.8	26.0	1.81	22.8	.01	.02	.04	125
	125 ISL	9.63	9.62	33.827	26.100	192.9	.332	3.38	52.7							126
1	149	9.12	9.10	33.908	26.247	179.2	.377	2.98	45.9	30.1	1.95	24.9	.00	.02	.04	150
	150 ISL	9.10	9.08	33.911	26.253	178.8	.379	2.97	45.7							151
1	180	8.52	8.50	34.007	26.419	163.4	.430	2.60	39.5	36.8	2.17	27.7	.01			181
	200 ISL	8.27	8.25	34.043	26.485	157.4	.462	2.43	36.7							202
1	211	8.17	8.14	34.057	26.512	155.0	.479	2.35	35.5	40.8	2.29	29.3	.02			212
1	241	7.86	7.84	34.087	26.581	148.8	.524	2.19	32.8	44.9	2.38	30.9	.01			242
	250 ISL	7.78	7.76	34.094	26.598	147.4	.538	2.13	31.8							252
1	281	7.52	7.50	34.113	26.651	142.8	.584	1.90	28.3	49.9	2.48	32.4	.00			283
	300 ISL	7.31	7.28	34.127	26.693	139.0	.610	1.75	25.9							302
1	342	6.84	6.81	34.161	26.783	130.7	.666	1.43	20.9	60.8	2.74	35.7	.00			344
	400 ISL	6.50	6.46	34.208	26.868	123.4	.740	1.09	15.9							403
1	418	6.41	6.37	34.222	26.890	121.5	.763	1.00	14.5	70.0	2.95	37.9	.01			421
1	495	5.83	5.79	34.268	27.001	111.5	.852	.58	8.3	80.3	3.12	39.9	.01			498
	500 ISL	5.80	5.75	34.272	27.008	110.9	.857	.56	8.0							504
1	570	5.40	5.36	34.322	27.096	103.0	.932	.36	5.1	89.5	3.21	41.3	.00			574

RV NEW HORIZON CALCOFI CRUISE 8401 STATION 90 53

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 39.4 N	119 28.3 W	01/06/84	1237 GMT	1262 M	340	06 KT			1019.6 MB	14.3 C	13.1 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	14.95	14.95	33.436	24.777	316.0	.000	5.86	101.9	2.9	.39	.0	.00	.24	.13	0
	10 ISL	14.92	14.92	33.427	24.778	316.2	.032	5.95	103.4							10
1	11	14.92	14.92	33.426	24.778	316.2	.035	5.95	103.4	2.8	.39	.0	.00	.25	.12	11
	20 ISL	14.76	14.76	33.419	24.806	313.9	.063	5.93	102.8							20
1	21	14.75	14.74	33.418	24.809	313.6	.066	5.93	102.7	2.6	.39	.0	.00	.25	.12	21
	30 ISL	14.70	14.70	33.419	24.819	312.9	.094	5.94	102.8							30
1	31	14.70	14.70	33.420	24.820	312.9	.097	5.94	102.8	2.7	.39	.0	.00	.43	.29	31
1	42	14.63	14.62	33.417	24.834	311.9	.131	5.95	102.8	2.6	.39	.0	.01	.56	.37	42
	50 ISL	14.54	14.53	33.413	24.850	310.6	.157	5.87	101.3							50
1	52	14.52	14.52	33.412	24.853	310.3	.162	5.84	100.7	2.7	.42	.3	.05	.55	.38	52
1	63	13.96	13.95	33.406	24.967	299.7	.196	5.47	93.2	3.9	.58	2.6	.30	.29	.33	63
1	73	12.65	12.64	33.422	25.242	273.7	.224	4.85	80.4	8.0	.91	8.0	.07	.16	.19	73
	75 ISL	12.50	12.49	33.430	25.278	270.3	.231	4.77	78.8							76
1	89	11.81	11.79	33.501	25.464	252.9	.266	4.38	71.4	12.0	1.16	12.1	.02	.10	.18	89
	100 ISL	10.83	10.82	33.616	25.731	227.7	.294	3.89	62.1							101
1	104	10.54	10.53	33.654	25.811	220.0	.301	3.74	59.4	18.7	1.52	18.2	.01	.04	.09	104
1	124	9.80	9.79	33.783	26.038	198.8	.345	3.29	51.4	23.8	1.74	21.9	.01	.02	.07	125
	125 ISL	9.79	9.77	33.786	26.043	198.3	.346	3.28	51.3							126
1	150	9.20	9.18	33.891	26.221	181.7	.394	2.94	45.4	29.7	1.91	24.6	.01	.01	.05	151
1	181	8.68	8.66	33.983	26.376	167.6	.448	2.59	39.5	34.7	2.10	27.1	.01			182
	200 ISL	8.35	8.33	34.028	26.461	159.7	.479	2.37	35.9							202
1	213	8.17	8.15	34.051	26.506	155.6	.499	2.24	33.8	40.9	2.26	29.5	.01			214
1	243	8.03	8.01	34.069	26.542	152.7	.545	2.13	32.1	42.4	2.30	30.2	.01			244
	250 ISL	7.92	7.89	34.079	26.567	150.4	.556	2.04	30.6							252
1	284	7.29	7.27	34.131	26.698	138.3	.606	1.55	22.9	52.6	2.56	33.4	.01			286
	300 ISL	7.12	7.09	34.146	26.734	134.9	.627	1.40	20.6							302
1	345	6.73	6.70	34.176	26.810	128.2	.686	1.06	15.5	62.0	2.81	36.1	.00			347
	400 ISL	6.28	6.24	34.207	26.896	120.6	.755	.74	10.7							403
1	422	6.13	6.09	34.220	26.925	117.9	.782	.64	9.2	73.3	2.99	39.0	.00			425
1	499	5.83	5.78	34.275	27.007	111.0	.869	.44	6.3	79.8	3.08	40.1	.00			502
	500 ISL	5.82	5.78	34.276	27.009	110.8	.870	.44	6.3							504
1	575	5.43	5.38	34.324	27.095	103.2	.951	.31	4.4	88.2	3.16	41.4	.01			579

RV NEW HORIZON CALCOFI CRUISE 8401 STATION 90 53

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 39.6 N	119 28.8 W	01/06/84	1735 GMT	1316 M	340	07 KT	330 06 07	1	1021.0 MB	14.0 C	12.9 C	2/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	14.77	14.77	33.423	24.808	313.1	.000	5.89	102.1	3.2	.35	.0	.00	.23	.12	0
	10 ISL	14.78	14.77	33.422	24.806	313.6	.031	5.93	102.7							10
1	11	14.78	14.77	33.422	24.805	313.6	.034	5.93	102.8	2.8	.36	.0	.00	.25	.13	11
	20 ISL	14.68	14.68	33.418	24.823	312.3	.063	5.92	102.5							20
1	27	14.58	14.58	33.415	24.842	310.7	.084	5.92	102.2	2.8	.38	.0	.01			27
	30 ISL	14.54	14.54	33.414	24.850	309.9	.094	5.90	101.8							30
1	42	14.39	14.38	33.413	24.882	307.2	.130	5.71	98.2	3.6	.45	1.0	.13	.36	.27	42
	50 ISL	13.77	13.76	33.414	25.011	295.7	.155	5.39	91.4							50
1	58	13.04	13.04	33.414	25.158	281.3	.177	5.02	83.9	6.9	.78	6.3	.13	.17	.20	58
1	69	12.14	12.13	33.472	25.379	260.5	.207	4.55	74.7	11.0	1.01	10.5	.03	.12	.19	69
	75 ISL	11.74	11.73	33.507	25.481	250.8	.223	4.36	70.9							76
1	79	11.52	11.51	33.530	25.539	245.4	.232	4.25	68.9	13.6	1.23	13.6	.02	.09	.14	79
1	94	10.53	10.52	33.659	25.817	219.2	.267	3.72	59.0	19.1	1.51	18.3	.01	.04	.09	94
	100 ISL	10.25	10.24	33.702	25.898	211.6	.281	3.56	56.2							101
1	109	9.96	9.95	33.754	25.988	203.2	.300	3.38	53.0	23.3	1.71	21.4	.00	.02	.07	110
1	124	9.68	9.67	33.814	26.082	194.5	.330	3.21	50.1	25.9	1.80	22.7	.00	.02	.06	125
	125 ISL	9.67	9.66	33.816	26.085	194.3	.331	3.21	50.0							126
1	150	9.27	9.25	33.888	26.207	183.1	.379	2.98	46.1	28.8	1.92	24.6	.00	.01	.04	151
1	171	8.68	8.66	33.999	26.387	166.3	.415	2.58	39.4	35.0	2.11	27.6	.00	.01	.04	172
1	192	8.38	8.36	34.029	26.458	159.9	.449	2.39	36.2	38.3	2.21	28.8	.01			193
	200 ISL	8.25	8.23	34.044	26.489	157.0	.462	2.29	34.7							202
1	212	8.08	8.05	34.066	26.533	153.0	.480	2.15	32.4	42.4	2.32	30.3	.00			213
1	243	7.69	7.67	34.105	26.620	145.1	.526	1.86	27.8	47.6	2.45	32.1	.00			244
	250 ISL	7.61	7.59	34.110	26.635	143.8	.537	1.81	27.0							252
1	283	7.30	7.27	34.120	26.688	139.2	.584	1.62	24.0	52.6	2.56	33.7	.00			285
	300 ISL	7.17	7.14	34.127	26.712	137.1	.607	1.52	22.4							302
1	345	6.85	6.82	34.152	26.775	131.5	.667	1.23	18.0	60.1	2.75	35.8	.00			347
	400 ISL	6.49	6.45	34.204	26.866	123.6	.738	.85	12.3							403
1	420	6.36	6.32	34.223	26.898	120.7	.762	.72	10.4	70.9	2.99	38.7	.00			423
1	498	5.84	5.80	34.261	26.994	112.2	.852	.47	6.7	80.0	3.11	40.7	.00			501
	500 ISL	5.83	5.78	34.263	26.997	111.9	.855	.46	6.6							504
1	573	5.31	5.26	34.313	27.100	102.5	.933	.32	4.5	91.0	3.22	42.3	.00			577

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 90 53

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 39.6 N	119 28.5 W	01/07/84	0036 GMT	1316 M	270	08 KT	270 08 10	1	1018.3 MB	14.0 C	12.9 C	7/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	14.96	14.96	33.417	24.760	317.6	.000	5.89	102.5	2.7	.40	.3	.00	.26	.09	0
1	10	14.79	14.78	33.417	24.799	314.2	.031	6.03	104.5	2.6	.40	.3	.00	.34	.17	10
	20 ISL	14.73	14.72	33.414	24.809	313.5	.063	5.98	103.5							20
1	26	14.70	14.70	33.411	24.813	313.4	.081	5.91	102.3	2.6	.39	.2	.01	.44	.36	26
	30 ISL	14.66	14.66	33.410	24.821	312.7	.094	5.88	101.6							30
1	41	14.51	14.50	33.407	24.852	310.1	.128	5.78	99.6	2.7	.44	.7	.11	.45	.29	41
	50 ISL	14.33	14.33	33.405	24.886	307.0	.156	5.68	97.5							50
1	57	14.21	14.20	33.403	24.912	304.8	.177	5.60	95.9	3.5	.52	1.7	.25	.32	.27	57
1	67	13.12	13.11	33.409	25.139	283.4	.206	5.05	84.6	6.9	.78	6.2	.13	.18	.25	67
	75 ISL	12.09	12.08	33.476	25.390	259.5	.229	4.52	74.1							76
1	77	11.90	11.89	33.493	25.439	254.9	.233	4.42	72.2	12.0	1.13	11.9	.03	.12	.19	77
1	93	10.93	10.92	33.589	25.692	231.1	.272	3.98	63.7	16.5	1.39	16.3	.01	.06	.11	93
	100 ISL	10.59	10.57	33.639	25.791	221.8	.289	3.79	60.2							101
1	107	10.30	10.29	33.688	25.879	213.6	.305	3.61	57.0	20.7	1.61	19.5	.01	.03	.08	108
1	122	9.86	9.85	33.775	26.022	200.3	.336	3.31	51.8	24.7	1.74	22.0	.01	.02	.06	123
	125 ISL	9.80	9.79	33.785	26.039	198.7	.341	3.27	51.2							126
1	148	9.37	9.35	33.866	26.175	186.2	.386	3.01	46.6	28.9	1.91	24.3	.01	.01	.05	149
	150 ISL	9.33	9.31	33.873	26.186	185.1	.389	2.99	46.3							151
1	169	8.92	8.90	33.942	26.306	174.0	.423	2.76	42.3	32.5	2.03	26.3	.00	.01	.05	170
1	189	8.58	8.56	33.996	26.401	165.2	.457	2.50	38.1	36.5	2.16	28.0	.01			190
	200 ISL	8.41	8.39	34.018	26.444	161.3	.475	2.38	36.2							202
1	210	8.29	8.27	34.034	26.476	158.5	.491	2.30	34.8	39.9	2.25	29.2	.01			211
1	241	8.09	8.06	34.064	26.530	153.9	.539	2.16	32.5	42.5	2.30	30.1	.00			242
	250 ISL	7.93	7.91	34.075	26.562	150.9	.553	2.06	30.9							252
1	281	7.36	7.33	34.118	26.678	140.0	.599	1.66	24.6	52.1	2.55	33.3	.00			283
	300 ISL	7.12	7.10	34.139	26.728	135.6	.624	1.45	21.4							302
1	343	6.73	6.69	34.177	26.813	127.9	.681	1.05	15.3	61.0	2.82	36.6	.00			345
	400 ISL	6.32	6.29	34.207	26.890	121.2	.752	.74	10.7							403
1	419	6.21	6.17	34.215	26.911	119.3	.775	.67	9.7	72.4	3.00	39.0	.00			422
1	497	5.80	5.76	34.268	27.005	111.2	.864	.41	5.9	80.9	3.12	40.4	.00			500
	500 ISL	5.78	5.74	34.270	27.009	110.8	.868	.41	5.9							504
1	573	5.26	5.21	34.310	27.104	102.1	.946	.45	6.4	91.9	3.21	42.0	.00			577

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 90 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 24.6 N	119 58.1 W	01/07/84	0713 GMT	911 M	170	15 KT			1020.7 MB	14.0 C	12.7 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.95	14.95	33.342	24.706	322.8	.000	5.88	102.2							0
1	1	14.95	14.95	33.342	24.706	322.8	.003	5.88	102.2	3.5	.36	.3	.00	.16	.06	1
	10 ISL	14.91	14.91	33.358	24.726	321.2	.032	5.91	102.8							10
1	12	14.90	14.90	33.362	24.732	320.7	.038	5.92	102.8	3.4	.38	.3	.00	.16	.09	12
	20 ISL	14.81	14.81	33.383	24.767	317.6	.064	5.93	102.8							20
1	27	14.72	14.71	33.399	24.800	314.6	.086	5.94	102.8	3.1	.38	.3	.00	.21	.11	27
	30 ISL	14.69	14.68	33.402	24.810	313.8	.096	5.94	102.8							30
1	43	14.45	14.44	33.403	24.862	309.2	.136	5.96	102.6	3.1	.40	.3	.02	.44	.24	43
	50 ISL	14.12	14.12	33.389	24.918	304.0	.158	5.81	99.4							50
1	58	13.74	13.74	33.377	24.988	297.5	.181	5.61	95.2	4.4	.57	2.2	.33	.33	.30	58
1	69	13.34	13.33	33.393	25.083	288.8	.213	5.35	90.0	5.6	.71	4.3	.39	.16	.18	69
	75 ISL	13.06	13.05	33.403	25.147	282.8	.231	5.18	86.6							76
1	79	12.85	12.84	33.411	25.194	278.4	.241	5.06	84.3	7.6	.86	6.6	.17	.14	.21	79
1	94	11.39	11.38	33.481	25.525	247.1	.281	4.36	70.4	13.0	1.25	12.9	.03	.10	.15	94
	100 ISL	11.01	10.99	33.528	25.631	237.1	.296	4.16	66.6							101
1	109	10.62	10.61	33.601	25.756	225.4	.318	3.92	62.3	17.4	1.52	17.1	.02	.05	.08	110
1	125	10.28	10.27	33.708	25.898	212.2	.353	3.57	56.4	21.5	1.71	19.7	.01	.03	.06	126
1	150	9.48	9.46	33.848	26.142	189.4	.403	3.09	48.0	27.3	1.97	23.6	.01	.01	.04	151
1	171	9.04	9.02	33.934	26.280	176.6	.441	2.86	44.0	31.3	2.13	25.3	.01	.01	.04	172
1	192	8.63	8.61	33.976	26.378	167.5	.477	2.78	42.4	33.5	2.21	26.4	.01			193
	200 ISL	8.54	8.52	33.991	26.403	165.3	.490	2.72	41.4							202
1	213	8.44	8.42	34.013	26.436	162.3	.511	2.61	39.6	36.4	2.30	27.4	.01			214
1	244	8.10	8.07	34.058	26.523	154.5	.560	2.31	34.8	40.9	2.47	29.2	.01			245
	250 ISL	8.02	7.99	34.064	26.540	153.0	.570	2.24	33.8							252
1	284	7.61	7.58	34.094	26.624	145.5	.621	1.89	28.2	47.2	2.72	31.6	.01			286
	300 ISL	7.47	7.45	34.113	26.658	142.4	.644	1.72	25.6							302
1	346	7.10	7.07	34.159	26.747	134.4	.707	1.28	18.9	56.4	2.90	34.6	.01			348
	400 ISL	6.51	6.48	34.158	26.826	127.3	.778	.99	14.4							403
1	422	6.27	6.23	34.156	26.857	124.5	.806	.90	13.0	68.5	2.97	38.2	.00			425
	500 ISL	5.62	5.58	34.230	26.996	111.7	.898	.46	6.6							504
1	501	5.62	5.58	34.231	26.998	111.6	.898	.46	6.5	82.5	3.08	41.1	.00			504
1	576	5.26	5.21	34.294	27.091	103.4	.979	.30	4.2	91.6	3.10	42.3	.00			580

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LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 04.4 N	120 38.9 W	01/07/84	1306 GMT	3926 M	290	10 KT		1	1020.3 MB	14.8 C	12.9 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	15.74	15.74	33.448	24.615	331.5	.000	5.74	101.4	3.0	.34	.3	.00	.13	.06	0
1	10	15.77	15.77	33.445	24.605	332.7	.033	5.80	102.6	2.9	.36	.3	.00	.13	.05	10
	20 ISL	15.75	15.75	33.445	24.610	332.5	.066	5.76	101.9							20
1	24	15.74	15.74	33.445	24.612	332.5	.079	5.75	101.6	2.8	.34	.3	.00	.13	.05	24
	30 ISL	15.46	15.45	33.412	24.650	329.1	.100	5.79	101.7							30
1	38	15.06	15.06	33.368	24.702	324.3	.125	5.85	101.9	2.7	.36	.3	.00	.19	.10	38
	50 ISL	14.91	14.90	33.363	24.732	321.8	.165	5.86	101.8							50
1	53	14.86	14.85	33.357	24.739	321.2	.173	5.86	101.7	2.7	.36	.3	.01	.23	.13	53
1	63	14.20	14.19	33.350	24.873	308.7	.205	5.73	98.1	2.8	.45	.7	.20	.37	.28	63
1	72	13.47	13.46	33.334	25.011	295.7	.232	5.49	92.6	3.9	.57	2.9	.23	.18	.18	72
	75 ISL	13.20	13.19	33.342	25.072	290.0	.242	5.34	89.5							76
1	87	12.31	12.30	33.402	25.292	269.2	.274	4.77	78.5	8.9	.94	9.2	.04	.13	.20	87
	100 ISL	11.41	11.40	33.488	25.527	247.1	.309	4.31	69.6							101
1	101	11.38	11.37	33.491	25.535	246.3	.310	4.29	69.3	12.9	1.20	13.9	.02	.08	.14	101
1	115	10.76	10.75	33.581	25.716	229.3	.345	3.94	62.8	16.3	1.40	17.6	.02	.02	.05	116
	125 ISL	10.49	10.48	33.623	25.796	221.9	.367	3.79	60.1							126
1	139	10.15	10.13	33.687	25.906	211.8	.398	3.59	56.5	20.2	1.59	20.8	.01	.05	.09	140
	150 ISL	9.82	9.81	33.756	26.013	201.7	.420	3.39	53.0							151
1	158	9.59	9.57	33.808	26.093	194.2	.436	3.24	50.4	24.8	1.80	24.0	.01	.01	.04	159
1	178	9.21	9.19	33.895	26.223	182.1	.474	2.99	46.2	28.3	1.91	25.9	.01			179
1	197	8.83	8.81	33.958	26.333	172.0	.507	2.84	43.5	31.2	1.99	27.2	.00			198
	200 ISL	8.79	8.77	33.967	26.346	170.8	.512	2.81	43.0							202
1	226	8.49	8.46	34.021	26.435	162.7	.555	2.60	39.5	35.2	2.09	28.9	.00			227
	250 ISL	8.16	8.14	34.050	26.508	156.1	.594	2.45	37.0							252
1	265	7.96	7.93	34.061	26.547	152.6	.616	2.36	35.4	40.9	2.23	30.9	.01			266
	300 ISL	7.43	7.40	34.084	26.641	144.0	.669	1.97	29.2							302
1	323	7.12	7.09	34.097	26.695	139.0	.702	1.69	24.9	52.2	2.51	35.1	.00			325
1	395	6.58	6.55	34.162	26.821	127.8	.797	1.00	14.6	63.3	2.81	38.3	.00			397
	400 ISL	6.54	6.50	34.168	26.830	127.0	.804	.96	14.0							403
1	468	6.02	5.98	34.225	26.944	116.8	.887	.61	8.8	74.1	3.03	40.8	.01			471
	500 ISL	5.78	5.74	34.247	26.990	112.5	.923	.49	7.0							504
1	540	5.49	5.45	34.269	27.043	107.7	.968	.39	5.5	84.3	3.14	42.9	.01			544

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LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 04.9 N	120 31.1 W	01/07/84	1733 GMT	3926 M	320	07 KT	320 08 08	2	1022.7 MB	15.1 C	13.2 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.71	15.71	33.443	24.617	331.3	.000	5.73	101.2							0
1	1	15.71	15.71	33.443	24.617	331.3	.003	5.73	101.2	2.9	.32	.3	.00	.14	.06	1
	10 ISL	15.71	15.70	33.443	24.617	331.5	.033	5.74	101.4							10
1	11	15.71	15.70	33.443	24.617	331.5	.036	5.74	101.4	2.7	.32	.3	.00	.13	.06	11
	20 ISL	15.62	15.62	33.424	24.622	331.4	.066	5.76	101.6							20
1	26	15.57	15.57	33.412	24.625	331.3	.086	5.78	101.8	2.7	.32	.3	.00	.15	.06	26
	30 ISL	15.40	15.40	33.390	24.645	329.5	.099	5.80	101.7							30
1	39	15.02	15.01	33.348	24.697	324.8	.128	5.82	101.3	2.7	.33	.3	.00	.28	.14	39
	50 ISL	14.79	14.79	33.347	24.745	320.6	.164	5.80	100.5							50
1	55	14.70	14.69	33.347	24.765	318.8	.180	5.79	100.1	2.7	.36	.3	.06	.47	.29	55
1	68	13.20	13.19	33.297	25.037	293.0	.219	5.47	91.7	4.6	.55	3.2	.10	.23	.25	68
	75 ISL	12.61	12.60	33.333	25.180	279.6	.240	5.20	86.2							76
1	78	12.43	12.42	33.353	25.231	274.8	.247	5.09	84.0	7.0	.77	6.6	.03	.12	.18	78
1	93	11.47	11.46	33.480	25.510	248.5	.286	4.35	70.4	12.4	1.14	13.4	.01	.08	.13	93
	100 ISL	11.10	11.09	33.534	25.620	238.2	.304	4.12	66.1							101
1	112	10.59	10.58	33.615	25.772	223.9	.333	3.83	60.9	17.7	1.43	18.4	.01	.03	.07	113
	125 ISL	10.21	10.19	33.686	25.894	212.5	.361	3.59	56.6							126
1	131	10.04	10.02	33.718	25.948	207.5	.374	3.49	54.8	21.9	1.64	21.5	.01	.02	.05	132
1	150	9.55	9.53	33.801	26.094	193.9	.412	3.27	50.8	25.1	1.76	23.7	.01	.01	.04	151
1	169	9.22	9.20	33.900	26.225	181.8	.447	2.97	45.9	28.5	1.86	25.8	.00	.00	.03	170
1	189	8.87	8.85	33.978	26.342	171.0	.482	2.73	41.8	32.3	2.01	27.5	.01			190
	200 ISL	8.66	8.64	34.001	26.393	166.3	.501	2.67	40.8							202
1	208	8.51	8.49	34.013	26.426	163.3	.514	2.64	40.1	34.8	2.06	28.5	.01			209
1	241	8.07	8.05	34.058	26.527	154.0	.566	2.39	36.0	40.1	2.19	30.5	.01			242
	250 ISL	7.95	7.92	34.068	26.554	151.6	.580	2.29	34.4							252
1	288	7.46	7.43	34.102	26.652	142.8	.637	1.86	27.6	48.6	2.43	33.7	.00			290
	300 ISL	7.32	7.29	34.110	26.677	140.4	.653	1.72	25.5							302
1	342	6.88	6.85	34.139	26.762	132.8	.711	1.26	18.5	58.0	2.70	36.8	.01			344
	400 ISL	6.45	6.42	34.190	26.859	124.2	.785	.85	12.3							403
1	422	6.31	6.27	34.207	26.892	121.3	.813	.74	10.7	69.1	2.92	40.0	.00			425
	500 ISL	5.64	5.60	34.229	26.993	112.0	.903	.53	7.5							504
1	504	5.61	5.57	34.230	26.998	111.7	.907	.52	7.4	80.8	3.08	42.7	.00			507
1	584	5.22	5.17	34.287	27.091	103.4	.994	.33	4.7	91.5	3.17	43.3	.00			588

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 90 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 04.6 N	120 37.7 W	01/08/84	0039 GMT	3926 M	300	08 KT	350 08 08	2	1020.0 MB	15.0 C	13.2 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.80	15.80	33.452	24.603	332.6	.000	5.76	101.9							0
1	1	15.80	15.80	33.452	24.603	332.6	.003	5.76	101.9	3.7	.37	.0	.00	.17	.07	1
1	10	15.80	15.79	33.446	24.600	333.2	.033	5.80	102.6	3.5	.36	.0	.00	.16	.06	10
	20 ISL	15.82	15.82	33.461	24.606	332.9	.067	5.77	102.2							20
1	25	15.84	15.83	33.469	24.609	332.8	.083	5.76	102.0	3.5	.36	.0	.00	.15	.06	25
	30 ISL	15.60	15.59	33.437	24.638	330.2	.100	5.79	102.0							30
1	40	15.06	15.05	33.371	24.706	324.0	.132	5.84	101.8	3.3	.37	.0	.00			40
	50 ISL	14.79	14.79	33.364	24.758	319.5	.165	5.83	101.0							50
1	54	14.66	14.65	33.362	24.785	316.9	.177	5.82	100.6	3.3	.41	.3	.06	.63	.40	54
1	69	13.33	13.32	33.340	25.045	292.4	.222	5.41	91.0	5.0	.62	3.3	.19	.23	.22	69
	75 ISL	12.56	12.55	33.345	25.199	277.8	.240	5.15	85.2							76
1	79	12.16	12.15	33.356	25.285	269.6	.250	4.99	81.9	8.1	.89	7.7	.03	.13	.21	79
1	93	11.63	11.62	33.465	25.468	252.5	.287	4.46	72.4	11.7	1.13	12.1	.03	.10	.16	93
	100 ISL	11.32	11.31	33.510	25.560	243.9	.305	4.24	68.4							101
1	112	10.81	10.79	33.582	25.709	230.0	.334	3.93	62.7	16.9	1.43	17.2	.01	.05	.09	113
	125 ISL	10.33	10.31	33.662	25.854	216.3	.362	3.67	58.1							126
1	131	10.11	10.09	33.702	25.923	209.9	.376	3.56	56.0	21.5	1.65	20.8	.01	.02	.05	132
	150 ISL	9.64	9.63	33.805	26.081	195.1	.414	3.25	50.6							151
1	151	9.61	9.60	33.811	26.091	194.3	.416	3.23	50.3	25.3	1.79	23.6	.01	.01	.04	152
1	170	9.16	9.14	33.911	26.243	180.1	.452	2.96	45.6	29.4	1.96	26.0	.01	.01	.03	171
1	190	8.83	8.81	33.970	26.341	171.0	.486	2.81	43.0	32.6	2.05	27.1	.01			191
	200 ISL	8.69	8.67	33.985	26.376	167.9	.503	2.80	42.7							202
1	210	8.56	8.54	33.996	26.405	165.3	.520	2.79	42.5	34.5	2.05	27.7	.01			211
1	244	8.14	8.12	34.026	26.491	157.5	.574	2.67	40.3	37.8	2.13	29.0	.01			245
	250 ISL	8.06	8.03	34.033	26.510	155.8	.584	2.60	39.2							252
1	293	7.49	7.47	34.082	26.631	144.9	.649	2.04	30.3	47.6	2.41	32.9	.00			295
	300 ISL	7.43	7.40	34.089	26.646	143.5	.659	1.95	28.9							302
1	347	7.02	6.98	34.134	26.739	135.1	.724	1.36	20.0	56.3	2.70	35.9	.00			349
	400 ISL	6.61	6.58	34.167	26.820	128.0	.794	.98	14.2							403
1	431	6.41	6.37	34.185	26.862	124.3	.834	.83	12.0	68.0	2.93	39.2	.00			434
	500 ISL	6.04	5.99	34.248	26.960	115.6	.916	.52	7.5							504
1	516	5.95	5.91	34.262	26.981	113.8	.934	.47	6.7	78.4	3.11	40.9	.01			519
1	600	5.34	5.29	34.293	27.081	104.7	1.026	.32	4.5	89.0	3.20	42.9	.01			604

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LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 04.1 N	120 37.6 W	01/08/84	0535 GMT	3926 M	320	10 KT		2	1021.3 MB	15.0 C	13.5 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.71	15.71	33.431	24.607	332.3	.000	5.73	101.2							0
1	2	15.71	15.71	33.431	24.607	332.3	.007	5.73	101.2	3.0	.35	.0	.00	.11	.08	2
	10 ISL	15.74	15.74	33.431	24.601	333.1	.033	5.74	101.4							10
1	11	15.74	15.74	33.430	24.600	333.2	.036	5.74	101.4	2.8	.36	.0	.00	.13	.06	11
	20 ISL	15.63	15.63	33.429	24.623	331.9	.067	5.79	102.1							20
1	25	15.58	15.57	33.428	24.635	330.3	.083	5.82	102.5	2.8	.37	.0	.00	.17	.09	25
	30 ISL	15.37	15.36	33.403	24.662	327.9	.100	5.85	102.4							30
1	39	14.92	14.91	33.362	24.729	321.8	.128	5.89	102.3	2.7	.37	.0	.00	.24	.15	39
	50 ISL	14.39	14.38	33.368	24.847	310.8	.164	5.62	96.7							50
1	53	14.21	14.20	33.369	24.885	307.2	.172	5.54	94.9	3.8	.54	1.7	.24	.60	.40	53
1	67	12.63	12.62	33.316	25.165	280.9	.213	5.23	86.6	6.1	.74	5.5	.08	.18	.22	67
	75 ISL	12.09	12.09	33.368	25.306	267.6	.236	4.91	80.4							76
1	76	12.06	12.05	33.373	25.316	266.6	.238	4.88	79.9	8.6	.93	8.5	.04	.14	.21	76
1	90	11.56	11.55	33.469	25.485	250.8	.274	4.41	71.5	11.9	1.14	12.6	.03	.10	.14	90
	100 ISL	10.97	10.95	33.554	25.658	234.5	.299	4.05	64.8							101
1	108	10.48	10.46	33.626	25.801	221.1	.318	3.78	59.9	18.2	1.50	18.7	.02	.03	.07	109
	125 ISL	9.84	9.83	33.748	26.003	202.1	.353	3.40	53.2							126
1	127	9.78	9.76	33.762	26.025	200.0	.358	3.36	52.5	23.8	1.72	22.5	.01	.02	.04	128
1	145	9.53	9.51	33.810	26.104	192.8	.393	3.21	49.9	26.0	1.83	24.2	.01	.01	.04	146
	150 ISL	9.45	9.43	33.830	26.133	190.2	.402	3.16	49.0							151
1	164	9.19	9.17	33.894	26.225	181.7	.428	2.99	46.1	29.7	1.92	25.4	.02	.01	.03	165
1	183	8.84	8.82	33.960	26.332	171.8	.462	2.82	43.2	32.2	2.06	26.9	.02			184
	200 ISL	8.57	8.55	33.988	26.396	166.0	.490	2.79	42.5							202
1	201	8.56	8.54	33.989	26.399	165.7	.492	2.79	42.5	34.2	2.05	27.8	.02			202
1	234	8.00	7.98	34.028	26.513	155.2	.545	2.65	39.8	40.0	2.15	29.5	.01			235
	250 ISL	7.77	7.75	34.049	26.565	150.5	.570	2.41	36.1							252
1	280	7.40	7.37	34.087	26.649	142.9	.614	1.91	28.3	49.5	2.45	33.3	.00			282
	300 ISL	7.20	7.17	34.103	26.689	139.3	.642	1.68	24.8							302
1	332	6.93	6.90	34.125	26.744	134.4	.686	1.36	20.0	57.6	2.67	36.0	.00			334
	400 ISL	6.40	6.36	34.180	26.859	124.2	.773	.84	12.1							403
1	413	6.31	6.27	34.191	26.879	122.4	.790	.76	11.0	69.9	2.92	39.5	.00			416
1	494	5.94	5.90	34.263	26.983	113.3	.885	.44	6.3	78.5	3.10	40.8	.00			497
	500 ISL	5.90	5.86	34.266	26.991	112.6	.892	.42	6.1							504
1	573	5.35	5.31	34.277	27.066	105.7	.971	.33	4.7	88.8	3.13	42.9	.00			577

RV NEW HORIZON

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STATION 90 80

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 45.5 N	121 18.9 W	01/08/84	1248 GMT	3833 M	310	09 KT		1	1021.7 MB	14.8 C	13.6 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	16.04	16.04	33.283	24.419	350.1	.000	5.73	101.8	3.2	.30	.0	.00	.12	.05	0
1	10	16.06	16.06	33.281	24.413	351.0	.035	5.84	103.8	3.0	.31	.0	.00	.11	.04	10
	20 ISL	15.87	15.87	33.246	24.429	349.8	.070	5.83	103.1							20
1	24	15.78	15.78	33.231	24.438	349.0	.084	5.82	102.8	2.6	.30	.0	.00	.12	.06	24
	30 ISL	15.70	15.69	33.217	24.447	348.4	.105	5.81	102.4							30
1	38	15.58	15.58	33.212	24.468	346.6	.132	5.80	102.0	4.6	.31	.0	.00	.18	.08	38
	50 ISL	15.32	15.32	33.243	24.550	339.2	.174	5.82	101.8							50
1	52	15.27	15.26	33.249	24.567	337.6	.180	5.82	101.8	4.4	.32	.0	.00	.26	.12	52
1	66	14.50	14.49	33.261	24.741	321.4	.226	5.72	98.5	3.7	.40	.2	.18	.57	.35	66
	75 ISL	13.93	13.92	33.228	24.834	312.7	.255	5.67	96.5							76
1	76	13.89	13.87	33.225	24.843	311.9	.258	5.67	96.4	4.0	.45	.9	.10	.22	.18	76
1	90	12.50	12.48	33.221	25.116	286.0	.299	5.49	90.6	5.5	.58	3.4	.03	.11	.14	90
	100 ISL	11.73	11.72	33.295	25.319	266.9	.328	5.12	83.3							101
1	109	11.25	11.23	33.377	25.471	252.6	.350	4.80	77.2	11.0	.99	10.9	.01	.05	.07	109
	125 ISL	10.66	10.62	33.521	25.691	231.9	.390	4.46	70.9							126
1	127	10.57	10.56	33.541	25.718	229.4	.396	4.42	70.2	15.2	1.19	15.1	.01	.02	.05	128
1	145	10.16	10.14	33.646	25.872	215.1	.435	4.15	65.3	18.9	1.36	17.8	.01	.01	.02	146
	150 ISL	9.98	9.96	33.681	25.929	209.7	.445	4.02	63.1							151
1	164	9.45	9.44	33.787	26.099	193.8	.474	3.62	56.1	25.5	1.66	22.8	.01	.00	.01	165
1	183	9.12	9.10	33.878	26.224	182.1	.509	3.24	49.9	29.7	1.84	25.1	.01			184
	200 ISL	8.77	8.75	33.937	26.326	172.7	.539	3.07	46.9							202
1	202	8.73	8.71	33.943	26.337	171.7	.543	3.05	46.6	33.1	1.91	27.0	.01			203
1	235	8.45	8.43	34.030	26.448	161.6	.597	2.53	38.4	38.4	2.08	29.1	.01			236
	250 ISL	8.25	8.22	34.047	26.493	157.5	.622	2.43	36.7							252
1	282	7.78	7.75	34.064	26.576	150.0	.672	2.28	34.1	45.5	2.23	31.7	.00			284
	300 ISL	7.56	7.53	34.072	26.614	146.7	.698	2.14	31.8							302
1	334	7.19	7.16	34.087	26.678	140.8	.747	1.82	26.9	53.2	2.45	34.8	.00			336
	400 ISL	6.62	6.58	34.152	26.808	129.2	.836	1.09	15.8							403
1	415	6.50	6.46	34.168	26.836	126.6	.855	.93	13.5	67.5	2.80	39.1	.00			418
1	497	5.87	5.83	34.217	26.956	115.8	.954	.58	8.3	79.3	2.99	41.7	.00			500
	500 ISL	5.86	5.81	34.220	26.960	115.5	.958	.57	8.1							504
1	579	5.64	5.59	34.305	27.055	107.3	1.046	.34	4.8	87.2	3.09	42.8	.00			583

RV NEW HORIZON

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STATION 90 90

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 24.5 N	121 59.6 W	01/08/84	1853 GMT	3926 M	010	10 KT	350 07 08	2	1024.4 MB	15.2 C	14.0 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.13	16.13	33.260	24.380	353.8	.000	5.72	101.8							0
1	1	16.13	16.13	33.260	24.380	353.8	.004	5.72	101.8	4.2	.35	.0	.01	.11	.05	1
1	10	16.14	16.14	33.263	24.382	353.9	.035	5.72	101.8	3.6	.31	.0	.00	.12	.05	10
	20 ISL	16.11	16.10	33.255	24.383	354.2	.071	5.73	101.8							20
1	25	16.08	16.08	33.247	24.383	354.3	.088	5.73	101.8	3.5	.31	.0	.00	.12	.04	25
	30 ISL	16.04	16.04	33.243	24.389	353.9	.106	5.73	101.8							30
1	39	15.97	15.96	33.239	24.402	352.9	.138	5.74	101.8	4.6	.31	.0	.00	.18	.09	39
	50 ISL	15.92	15.91	33.232	24.408	352.7	.177	5.76	101.9							50
1	54	15.90	15.89	33.229	24.411	352.6	.190	5.76	102.0	4.5	.31	.0	.00	.19	.09	54
1	69	15.24	15.23	33.195	24.531	341.5	.242	5.76	100.6	3.6	.35	.0	.03	.24	.18	69
	75 ISL	14.42	14.41	33.189	24.702	325.7	.263	5.82	99.9							76
1	79	13.91	13.90	33.185	24.806	315.5	.275	5.83	99.1	4.4	.40	.3	.10	.27	.30	79
1	94	12.64	12.63	33.256	25.115	286.2	.320	5.43	89.9	4.4	.40	.3	.10	.11	.16	94
	100 ISL	12.19	12.18	33.297	25.233	275.1	.338	5.20	85.3							101
1	114	11.41	11.39	33.390	25.451	254.6	.373	4.73	76.4	11.1	1.02	10.7	.01	.05	.07	114
	125 ISL	10.90	10.89	33.468	25.603	240.3	.402	4.47	71.5							126
1	132	10.64	10.62	33.515	25.686	232.5	.419	4.35	69.1	15.7	1.23	15.2	.01	.02	.03	133
	150 ISL	10.13	10.12	33.603	25.842	218.0	.459	4.15	65.2							151
1	152	10.08	10.06	33.615	25.861	216.2	.464	4.12	64.7	19.1	1.38	18.2	.01	.01	.02	153
1	172	9.55	9.53	33.780	26.078	195.9	.505	3.68	57.2	24.5	1.61	21.8	.01	.00	.02	173
1	192	9.12	9.11				.542	3.41	52.5	28.4	1.73	24.0	.01			193
	200 ISL	8.98	8.96	33.905	26.268	178.3	.557	3.21	49.2							202
1	211	8.83	8.80	33.952	26.329	172.6	.576	2.95	45.2	33.2	1.92	26.7	.00			212
1	246	8.28	8.26	34.018	26.465	160.2	.634	2.71	41.0	38.3	2.06	28.6	.01			247
	250 ISL	8.20	8.17	34.025	26.483	158.5	.641	2.65	40.0							252
1	295	7.39	7.36	34.081	26.645	143.4	.709	1.97	29.2	50.4	2.36	33.3	.00			297
	300 ISL	7.34	7.31	34.086	26.655	142.5	.716	1.92	28.4							302
1	350	6.92	6.89	34.117	26.739	135.2	.785	1.44	21.1	58.7	2.61	36.1	.00			352
	400 ISL	6.35	6.31	34.140	26.833	126.5	.851	1.05	15.2							403
1	435	5.96	5.93	34.158	26.897	120.6	.894	.83	11.9	75.0	2.91	40.5	.00			438
	500 ISL	5.56	5.52	34.211	26.988	112.5	.970	.54	7.7							504
1	522	5.48	5.43	34.229	27.013	110.2	.994	.47	6.7	85.6	3.04	42.4	.00			525
	600 ISL	5.23	5.18	34.296	27.096	103.1	1.077	.31	4.3							605
1	608	5.22	5.17	34.303	27.104	102.5	1.086	.30	4.2	93.6	3.12	43.6	.01			612

RV NEW HORIZON

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STATION 90 100

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 04.8 N	122 39.2 W	01/09/84	0117 GMT	4307 M	340	07 KT	350 06 06	2	1022.0 MB	15.8 C	14.3 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.57	16.57	33.340	24.342	357.5	.000	5.68	102.0							0
1	2	16.57	16.57	33.340	24.342	357.5	.007	5.68	102.0	3.4	.34	.1	.00	.10	.05	2
	10 ISL	16.57	16.57	33.341	24.342	357.7	.036	5.68	102.0							10
1	11	16.57	16.57	33.341	24.342	357.8	.039	5.68	102.0	3.4	.35	.1	.00	.10	.04	11
	20 ISL	16.59	16.58	33.346	24.344	357.9	.072	5.66	101.7							20
1	21	16.59	16.58	33.347	24.344	357.9	.075	5.66	101.7	3.2	.34	.1	.00	.09	.04	21
	30 ISL	16.61	16.60	33.353	24.344	358.2	.107	5.66	101.7							30
1	35	16.62	16.61	33.356	24.345	358.4	.125	5.66	101.7	3.1	.35	.1	.00	.11	.04	35
1	50	16.60	16.60	33.354	24.346	358.7	.178	5.66	101.7	2.9	.35	.2	.00	.11	.05	50
1	64	16.53	16.52	33.355	24.365	357.3	.228	5.67	101.7	2.8	.35	.1	.00	.12	.05	64
1	73	15.83	15.81	33.229	24.428	351.5	.260	5.72	101.1	2.6	.40	.1	.00	.17	.08	73
	75 ISL	15.63	15.62	33.248	24.486	347.5	.268	5.74	101.1							76
1	88	14.79	14.78	33.353	24.751	321.2	.310	5.83	101.0	3.4	.42	.1	.09	.24	.16	88
	100 ISL	14.81	14.80	33.637	24.966	301.1	.349	5.71	99.1							101
1	107	14.82	14.81	33.770	25.066	291.7	.368	5.58	97.0	3.5	.40	.6	.12	.15	.18	107
	125 ISL	12.58	12.57	33.501	25.318	267.8	.420	5.07	84.0							126
1	126	12.38	12.36	33.475	25.337	266.0	.424	5.02	82.8	7.8	.80	6.9	.02	.07	.09	127
1	145	11.15	11.13	33.530	25.608	240.4	.472	4.26	68.5	14.4		14.1	.00	.04	.06	146
	150 ISL	11.07	11.05	33.574	25.657	235.9	.483	4.30	69.0							151
1	165	10.81	10.79	33.717	25.814	221.2	.517	4.47	71.4	15.0	1.18	13.9	.00	.01	.02	166
1	184	9.62	9.60	33.788	26.073	196.6	.557	3.93	61.2	22.6	1.58	19.8	.00			185
	200 ISL	9.06	9.03	33.874	26.232	181.7	.587	3.66	56.4							202
1	204	8.96	8.93	33.895	26.264	178.7	.594	3.62	55.6	28.0	1.76	22.9	.00			205
1	239	8.40	8.38	33.975	26.412	165.1	.654	3.52	53.4	32.9	1.88	24.8	.00			240
	250 ISL	8.20	8.17	33.994	26.458	160.8	.672	3.32	50.2							252
1	288	7.56	7.53	34.051	26.598	147.9	.732	2.47	36.8	45.6	2.33	30.6	.00			290
	300 ISL	7.45	7.42	34.070	26.628	145.3	.748	2.23	33.1							302
1	343	7.15	7.12	34.130	26.717	137.3	.809	1.46	21.5	55.5	2.68	34.5	.00			345
	400 ISL	6.57	6.53	34.162	26.823	127.7	.885	.96	14.0							403
1	429	6.27	6.23	34.172	26.869	123.5	.922	.83	12.0	70.3	2.99	38.7	.00			432
	500 ISL	5.87	5.82	34.216	26.955	115.9	1.006	.56	8.0							504
1	518	5.80	5.75	34.228	26.974	114.3	1.027	.51	7.3	81.4	3.14	40.6	.00			521
	600 ISL	5.52	5.47	34.298	27.063	106.7	1.118	.33	4.7							605
1	606	5.51	5.46	34.303	27.069	106.1	1.124	.32	4.5	88.6	3.23	41.7	.00			610

RV NEW HORIZON

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STATION 93 26.7

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 57.4 N	117 18.6 W	01/12/84	1116 GMT	66 M	100	08 KT	300 03 05	1	1016.3 MB	12.3 C	9.5 C	1/8	CS

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	15.85	15.85	33.430	24.575	335.5	.034	5.76	102.0							10

RV NEW HORIZON

CALCOFI CRUISE 8401

STATION 93 29

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 54.2 N	117 27.5 W	01/04/84	2208 GMT	688 M	350	10 KT	350 02 02	1		17.3 C	15.0 C	1/8	CC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	16.21	16.21	33.437	24.499	342.5	.000			3.7	.32	.0	.00			0
	10 ISL	16.05	16.05	33.431	24.531	339.8	.034									10
1	11	16.04	16.04	33.431	24.532	339.6	.037			3.6	.35	.1	.00			11
	20 ISL	16.03	16.02	33.430	24.536	339.6	.068									20
1	21	16.02	16.02	33.430	24.536	339.6	.071			3.6	.36	.1	.00			21
	30 ISL	16.01	16.00	33.429	24.540	339.6	.102									30
1	31	16.01	16.00	33.429	24.540	339.6	.105			2.6	.36	.0	.00			31
1	42	15.95	15.94	33.426	24.552	338.8	.142			2.5	.37	.0	.00			42
	50 ISL	14.71	14.70	33.386	24.793	316.0	.169									50
1	52	14.41	14.40	33.379	24.851	310.5	.175			4.3	.58	2.2	.16			52
1	62	13.66	13.66	33.368	24.998	296.7	.205			4.7	.67	3.4	.05			62
1	73	12.96	12.95	33.459	25.209	276.8	.236			6.8	.86	7.3	.02			73
	75 ISL	12.75	12.74	33.460	25.252	272.7	.242									76
1	88	11.65	11.64	33.475	25.473	252.0	.276			10.1	1.08	10.8	.00			88
	100 ISL	11.19	11.18	33.594	25.649	235.4	.306									101
1	104	11.10	11.09	33.629	25.692	231.4	.314			14.6	1.33	15.1	.00			104
1	123	10.42	10.41	33.686	25.857	216.1	.359			18.1	1.50	18.0	.00			124
	125 ISL	10.39	10.37	33.698	25.872	214.7	.362									126
1	149	9.98	9.96	33.886	26.089	194.5	.412			24.8	1.75	23.1	.00			150
	150 ISL	9.96	9.94	33.888	26.094	194.1	.413									151
1	180	9.37	9.35	33.960	26.248	179.9	.469			28.9	2.03	25.4	.00			181
	200 ISL	9.03	9.01	34.023	26.352	170.3	.504									202
1	211	8.86	8.84	34.055	26.404	165.5	.522			34.4	2.14	27.7	.00			212
1	242	8.47	8.44	34.110	26.509	156.0	.572			38.4	2.31	29.8	.02			243
	250 ISL	8.36	8.33	34.122	26.535	153.7	.585									252
1	283	7.93	7.90	34.158	26.628	145.2	.635			46.1	2.51	32.1	.02			285
	300 ISL	7.74	7.71	34.172	26.666	141.9	.659									302
1	344	7.29	7.26	34.199	26.752	134.1	.719			55.6	2.76	34.8	.00			346
	400 ISL	6.73	6.69	34.237	26.859	124.4	.792									403
1	421	6.53	6.49	34.251	26.898	120.9	.818			67.7	2.98	38.2	.02			424
1	499	5.82	5.77	34.303	27.031	108.7	.907			80.9	3.09	40.5	.00			502
	500 ISL	5.81	5.76	34.304	27.032	108.6	.908									504
1	576	5.34	5.29	34.349	27.125	100.3	.987			90.7		42.1	.00			580

RV NEW HORIZON CALCOFI CRUISE 8401 STATION 93 29

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 52.2 N	117 27.2 W	01/12/84	0837 GMT	607 M	040	08 KT	300 04 05	1	1016.6 MB	17.0 C	13.0 C	1/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	16.32	16.32	33.510	24.530	339.5	.000	5.66	101.2	3.5	.36	.0	.00	.19	.09	0
1	10	16.33	16.33	33.510	24.528	340.1	.034	5.66	101.2	3.4	.35	.0	.00	.19	.09	10
	20 ISL	16.32	16.32	33.510	24.531	340.1	.068	5.69	101.7							20
1	21	16.32	16.31	33.510	24.531	340.1	.071	5.69	101.8	3.4	.35	.0	.00	.19	.08	21
	30 ISL	16.34	16.34	33.509	24.525	340.9	.102	5.67	101.5							30
1	31	16.34	16.34	33.509	24.525	341.0	.105	5.67	101.4	3.4	.35	.0	.00	.21	.10	31
1	41	16.32	16.31	33.509	24.531	340.7	.139	5.66	101.2	3.4	.35	.0	.00	.24	.11	41
	50 ISL	14.74	14.73	33.394	24.793	316.0	.169	5.44	94.3							50
1	51	14.57	14.57	33.385	24.821	313.3	.172	5.42	93.5	4.7	.52	1.4	.07	.38	.38	51
1	61	13.24	13.23	33.383	25.094	287.5	.201	5.10	85.6	6.4	.74	4.9	.03	.19	.32	61
1	72	12.76	12.75	33.458	25.248	273.1	.232	4.78	79.5	8.9	.87	7.5	.01	.14	.19	72
	75 ISL	12.57	12.56	33.479	25.303	268.0	.241	4.69	77.6							76
1	87	11.86	11.85	33.541	25.484	250.9	.271	4.44	72.5	12.1	1.09	11.3	.01	.10	.05	87
	100 ISL	11.26	11.25	33.565	25.613	238.8	.304	4.40	71.0							101
1	102	11.20	11.19	33.567	25.626	237.7	.308	4.40	70.8	13.2	1.19	13.0	.01	.04	.06	102
1	122	10.53	10.52	33.672	25.827	218.9	.355	3.88	61.6	18.7	1.45	17.5	.01	.02	.04	123
	125 ISL	10.44	10.43	33.684	25.852	216.6	.361	3.83	60.7							126
1	147	9.75	9.73	33.790	26.052	197.8	.407	3.44	53.7	24.5	1.72	21.5	.01	.02	.03	148
	150 ISL	9.70	9.68	33.806	26.073	196.0	.412	3.38	52.7							151
1	178	9.27	9.26	33.946	26.252	179.4	.465	2.84	43.9	30.5	1.99	25.0	.01			179
	200 ISL	8.83	8.80	34.003	26.369	168.6	.503	2.69	41.1							202
1	208	8.67	8.65	34.016	26.403	165.5	.517	2.66	40.6	35.2	2.12	27.3	.00			209
1	239	8.35	8.33	34.044	26.475	159.2	.567	2.53	38.3	38.7	2.18	28.4	.00			240
	250 ISL	8.25	8.23	34.061	26.503	156.6	.584	2.39	36.1							252
1	279	7.98	7.95	34.103	26.578	149.9	.629	1.97	29.6	45.5	2.42	30.9	.01			281
	300 ISL	7.68	7.65	34.112	26.627	145.5	.660	1.80	26.8							302
1	340	7.10	7.06	34.122	26.719	137.0	.716	1.51	22.2	55.4	2.69	34.5	.00			342
	400 ISL	6.50	6.46	34.198	26.859	124.2	.795	.87	12.6							403
1	416	6.37	6.34	34.219	26.893	121.2	.815	.71	10.3	70.8	3.03	38.3	.00			419
1	494	5.97	5.93	34.261	26.978	113.8	.906	.48	6.9	78.5	3.15	40.1	.00			497
	500 ISL	5.94	5.89	34.265	26.986	113.1	.913	.47	6.7							504
1	569	5.59	5.54	34.318	27.071	105.5	.988	.35	5.0	87.0	3.23	41.3	.00			573

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LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 51.0 N	117 32.3 W	01/11/84	1234 GMT	817 M	00			1	1016.6 MB	15.5 C	13.8 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	16.32	16.32	33.515	24.533	339.3	.000	5.63	100.7	2.9	.33	.1	.00	.17	.10	0
1	10	16.36	16.36	33.514	24.525	340.4	.034	5.65	101.1	2.7	.34	.0	.00	.18	.09	10
	20 ISL	16.34	16.34	33.514	24.528	340.4	.068	5.72	102.3							20
1	21	16.34	16.34	33.514	24.529	340.4	.071	5.72	102.3	2.6	.33	.0	.00	.17	.09	21
	30 ISL	16.35	16.34	33.512	24.526	340.9	.102	5.68	101.6							30
1	31	16.35	16.35	33.512	24.525	341.0	.105	5.67	101.5	2.5	.33	.0	.00	.21	.11	31
1	41	16.34	16.34	33.512	24.527	341.2	.139	5.66	101.3	2.4	.33	.0	.00	.24	.10	41
	50 ISL	15.92	15.92	33.475	24.594	335.0	.170	5.57	98.8							50
1	51	15.86	15.85	33.469	24.604	334.1	.173	5.56	98.5	2.7	.38	.0	.04	.35	.32	51
1	62	14.35	14.34	33.362	24.852	310.7	.208	5.41	92.9	4.0	.52	1.7	.08	.31	.39	62
1	72	13.03	13.02	33.386	25.140	285.4	.238	5.06	84.6	5.9	.74	5.4	.02	.17	.25	72
	75 ISL	12.81	12.80	33.403	25.197	278.1	.247	4.97	82.7							76
1	87	12.26	12.25	33.468	25.352	263.5	.278	4.71	77.5	8.7	.95	8.9	.01	.08	.14	87
	100 ISL	11.34	11.33	33.537	25.577	242.3	.312	4.45	71.9							101
1	102	11.24	11.23	33.545	25.602	239.9	.316	4.42	71.2	11.7	1.16	12.8	.01	.04	.07	102
1	122	10.38	10.36	33.672	25.854	216.3	.364	3.83	60.6	18.1	1.51	18.1	.00	.01	.04	123
	125 ISL	10.30	10.29	33.693	25.883	213.6	.369	3.74	59.1							126
1	147	9.78	9.76	33.859	26.101	193.2	.414	3.09	48.3	24.9	1.82	22.9	.00	.00	.03	148
	150 ISL	9.72	9.70	33.871	26.121	191.4	.420	3.06	47.7							151
1	178	9.12	9.10	33.951	26.281	176.6	.471	2.90	44.7	29.6	1.99	24.9	.00			179
	200 ISL	8.77	8.75	34.004	26.378	167.8	.509	2.72	41.7							202
1	209	8.65	8.63	34.022	26.411	164.7	.524	2.64	40.3	34.2	2.11	27.1	.00			210
1	240	8.22	8.19	34.070	26.515	155.3	.573	2.28	34.5	39.6	2.24	29.1	.00			241
	250 ISL	8.12	8.09	34.083	26.541	153.0	.589	2.16	32.6							252
1	280	7.84	7.82	34.116	26.607	147.1	.635	1.85	27.7	45.5	2.46	31.1	.00			282
	300 ISL	7.63	7.60	34.126	26.647	143.5	.663	1.69	25.2							302
1	342	7.15	7.12	34.143	26.727	136.3	.722	1.38	20.4	56.6	2.68	34.1	.00			344
	400 ISL	6.58	6.54	34.176	26.832	126.8	.798	.96	14.0							403
1	418	6.42	6.38	34.189	26.863	124.0	.821	.84	12.2	69.0	2.94	37.5	.01			421
1	496	5.97	5.93	34.256	26.974	114.2	.913	.49	7.0	78.5	3.12	39.6	.00			499
	500 ISL	5.95	5.91	34.260	26.980	113.7	.918	.48	6.8							504
1	573	5.63	5.58	34.310	27.060	106.7	.999	.35	5.0	86.2	3.18	41.0	.00			577

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 93 30

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 52.7 N	117 30.5 W	01/11/84	1954 GMT	779 M	050	05 KT	310 04 06	1	1015.6 MB	15.4 C	13.5 C	1/8	AS

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.50	16.50	33.518	24.495	342.9	.000	5.71	102.5							0
1	1	16.50	16.50	33.518	24.495	342.9	.003	5.71	102.5	3.5	.34	.1	.00	.16	.09	1
	10 ISL	16.36	16.36	33.515	24.524	340.4	.034	5.79	103.6							10
1	12	16.35	16.34	33.514	24.528	340.2	.041	5.79	103.6	3.4	.35	.0	.00	.17	.09	12
	20 ISL	16.35	16.35	33.514	24.527	340.5	.068	5.76	103.1							20
1	22	16.35	16.35	33.514	24.527	340.5	.075	5.75	102.9	3.3	.35	.0	.00	.17	.08	22
	30 ISL	16.35	16.35	33.514	24.527	340.8	.102	5.71	102.1							30
1	32	16.35	16.35	33.514	24.527	340.9	.109	5.70	102.0	3.3	.33	.0	.00	.18	.09	32
1	42	16.34	16.33	33.515	24.530	340.9	.143	5.77	103.2	3.2	.35	.0	.00	.19	.09	42
	50 ISL	16.12	16.12	33.491	24.562	338.1	.170	5.66	100.9							50
1	52	16.08	16.07	33.486	24.569	337.5	.176	5.63	100.2	3.4	.36	.0	.02	.37	.30	52
1	62	14.50	14.49	33.381	24.833	312.5	.209	5.44	93.7	4.4	.53	1.6	.08	.34	.40	62
1	72	13.20	13.19	33.361	25.086	288.5	.239	5.15	86.4	6.4	.72	4.8	.03	.18	.32	72
	75 ISL	12.93	12.92	33.376	25.151	282.4	.248	5.08	84.7							76
1	88	12.20	12.19	33.462	25.359	262.9	.282	4.83	79.4	8.6	.90	8.4	.01	.08	.13	88
	100 ISL	11.52	11.51	33.526	25.537	246.2	.314	4.56	73.9							101
1	103	11.39	11.37	33.539	25.571	242.9	.320	4.50	72.7	12.1	1.11	12.1	.01	.05	.08	103
1	122	10.41	10.39	33.677	25.853	216.5	.366	3.83	60.6	18.9	1.56	18.2	.00	.02	.04	123
	125 ISL	10.33	10.32	33.693	25.878	214.1	.371	3.76	59.5							126
1	148	9.90	9.88	33.821	26.052	198.0	.419	3.30	51.7	24.6	1.75	21.9	.00	.00	.02	149
	150 ISL	9.87	9.85	33.828	26.063	197.0	.423	3.28	51.3							151
1	178	9.37	9.35	33.929	26.224	182.2	.476	2.97	46.0	29.4	1.98	24.6	.00			179
	200 ISL	8.89	8.87	33.999	26.355	170.0	.515	2.74	42.0							202
1	209	8.71	8.69	34.022	26.402	165.6	.530	2.65	40.5	35.1	2.19	27.1	.00			210
1	239	8.27	8.24	34.057	26.497	157.0	.578	2.43	36.8	39.3	2.21	28.8	.00			240
	250 ISL	8.15	8.12	34.075	26.530	154.0	.595	2.28	34.3							252
1	279	7.86	7.83	34.117	26.605	147.2	.640	1.86	27.9							281
	300 ISL	7.61	7.58	34.124	26.648	143.4	.669	1.70	25.4							302
1	341	7.10	7.07	34.129	26.724	136.6	.727	1.46	21.5	55.5	2.68	34.4	.00			343
	400 ISL	6.53	6.49	34.176	26.838	126.2	.804	.96	13.9							403
1	417	6.39	6.36	34.192	26.869	123.4	.826	.82	11.9	68.7	2.91	38.8	.00			420
1	494	5.96	5.92	34.261	26.979	113.6	.917	.48	6.9	78.0	3.13	40.6	.00			497
	500 ISL	5.92	5.88	34.267	26.989	112.8	.924	.46	6.6							504
1	570	5.52	5.47	34.336	27.094	103.4	.999	.34	4.8	88.5	3.21	41.5	.00			574

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 93 30

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 51.7 N	117 32.1 W	01/12/84	0049 GMT	797 M	310	10 KT	280 05 06	4	1013.5 MB	16.0 C	14.6 C	3/8	CS

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.51	16.51	33.512	24.489	343.5	.000	5.73	102.9							0
1	1	16.51	16.51	33.512	24.489	343.5	.003	5.73	102.9	3.5	.36	.0	.00	.18	.08	1
	10 ISL	16.41	16.41	33.509	24.510	341.8	.034	5.81	104.1							10
1	11	16.40	16.40	33.509	24.511	341.7	.038	5.81	104.1	3.5	.36	.0	.00	.19	.08	11
	20 ISL	16.36	16.35	33.508	24.520	341.2	.068	5.77	103.2							20
1	22	16.35	16.35	33.508	24.521	341.1	.075	5.75	102.9	3.4	.36	.0	.00	.21	.09	22
	30 ISL	16.36	16.36	33.507	24.519	341.6	.103	5.69	101.8							30
1	32	16.37	16.36	33.507	24.518	341.7	.109	5.68	101.7	3.5	.36	.0	.00	.23	.10	32
1	42	16.34	16.33	33.505	24.523	341.6	.143	5.70	102.0	3.6	.36	.0	.00	.25	.11	42
	50 ISL	15.63	15.62	33.455	24.646	330.1	.170	5.56	98.0							50
1	52	15.41	15.40	33.441	24.683	326.6	.176	5.52	96.9	4.1	.47	.5	.08	.42	.35	52
1	62	13.96	13.95	33.363	24.934	302.8	.208	5.35	91.1	5.4	.62	2.4	.06	.32	.35	62
1	73	13.09	13.08	33.407	25.144	283.1	.240	5.03	84.2	7.3	.80	5.5	.02	.20	.27	73
	75 ISL	12.90	12.89	33.410	25.185	279.2	.246	4.98	83.0							76
1	88	11.94	11.93	33.444	25.395	259.5	.280	4.73	77.3	10.2	1.03	9.8	.02	.09	.13	88
	100 ISL	11.32	11.31	33.540	25.584	241.7	.311	4.48	72.2							101
1	103	11.21	11.20	33.561	25.620	238.2	.317	4.42	71.2	13.3	1.19	12.9	.02	.04	.08	103
1	123	10.19	10.17	33.670	25.885	213.4	.364	3.83	60.3	20.0	1.54	18.8	.01	.02	.04	124
	125 ISL	10.14	10.12	33.680	25.901	211.9	.368	3.80	59.8							126
1	148	9.65	9.63	33.825	26.097	193.7	.415	3.40	53.0	25.2	1.77	22.1	.00	.01	.03	149
	150 ISL	9.62	9.60	33.835	26.109	192.5	.418	3.36	52.4							151
1	179	9.18	9.16	33.963	26.281	176.6	.472	2.83	43.7	31.1	2.03	25.2	.00			180
	200 ISL	8.90	8.88	34.006	26.360	169.5	.508	2.71	41.5							202
1	210	8.76	8.74	34.019	26.392	166.6	.525	2.67	40.8	34.7	2.13	26.9	.00			211
1	241	8.19	8.17	34.064	26.514	155.4	.574	2.36	35.6	40.4	2.27	28.8	.00			242
	250 ISL	8.10	8.07	34.078	26.539	153.1	.589	2.25	33.9							252
1	281	7.85	7.82	34.121	26.611	146.8	.636	1.88	28.2	46.9	2.48	31.3	.00			283
	300 ISL	7.67	7.64	34.134	26.647	143.6	.663	1.71	25.5							302
1	342	7.23	7.20	34.151	26.722	136.8	.722	1.38	20.4	55.4	2.74	34.2	.00			344
	400 ISL	6.57	6.53	34.178	26.834	126.7	.798	.96	13.9							403
1	418	6.38	6.35	34.188	26.867	123.6	.821	.84	12.2	69.1	3.02	37.6	.00			421
1	496	5.99	5.94	34.260	26.975	114.1	.913	.49	7.0	78.1	3.15	39.6	.00			499
	500 ISL	5.96	5.92	34.264	26.981	113.6	.918	.48	6.8							504
1	571	5.62	5.57	34.315	27.065	106.2	.996	.33	4.7	86.5	3.24	41.2	.00			575

RV NEW HORIZON CALCOFI CRUISE 8401 STATION 93 30

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 50.6 N	117 32.0 W	01/12/84	0622 GMT	865 M	040 07 KT		1	1017.3 MB	16.5 C	14.8 C	3/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.41	16.41	33.505	24.505	341.9	.000	5.71	102.3							0
1	1	16.41	16.41	33.505	24.505	341.9	.003	5.71	102.3	3.4	.36	.0	.00	.17	.09	1
	10 ISL	16.40	16.40	33.504	24.508	342.0	.034	5.77	103.3							10
1	12	16.40	16.39	33.504	24.508	342.0	.041	5.77	103.3	3.4	.36	.0	.00	.17	.08	12
	20 ISL	16.36	16.35	33.502	24.516	341.5	.068	5.75	102.8							20
1	22	16.35	16.35	33.502	24.518	341.4	.075	5.74	102.7	3.4	.34	.0	.00	.18	.09	22
	30 ISL	16.36	16.35	33.502	24.516	341.8	.103	5.77	103.2							30
1	32	16.36	16.36	33.503	24.516	341.9	.109	5.77	103.3	3.4	.34	.0	.00	.20	.10	32
1	43	16.33	16.33	33.503	24.523	341.6	.146	5.69	101.8	3.4	.36	.0	.00	.23	.10	43
	50 ISL	16.16	16.15	33.494	24.555	338.8	.171	5.64	100.6							50
1	53	16.10	16.09	33.490	24.568	337.7	.180	5.62	10 .0	3.5	.36	.0	.01	.37	.28	53
1	63	14.59	14.58	33.373	24.808	314.9	.213	5.47	94.4	4.6	.54	1.3	.09	.38	.36	63
1	74	13.30	13.29	33.387	25.086	288.6	.246	5.12	86.1	6.4	.72	4.7	.02	.21	.25	74
	75 ISL	13.20	13.19	33.389	25.108	286.5	.249	5.10	85.5							76
1	89	12.31	12.29	33.423	25.309	267.6	.287	4.89	80.5	8.5	.91	7.8	.02	.11	.14	89
	100 ISL	11.54	11.53	33.498	25.511	248.6	.317	4.61	74.7							101
1	104	11.32	11.31	33.524	25.572	242.9	.325	4.51	72.8	12.4	1.13	12.2	.01	.05	.08	104
1	124	10.53	10.51	33.629	25.794	222.1	.374	3.99	63.3	17.7	1.44	17.2	.00	.02	.04	125
	125 ISL	10.51	10.50	33.633	25.800	221.5	.375	3.98	63.1							126
1	150	9.85	9.83	33.794	26.039	199.2	.428	3.39	53.0	24.2	1.75	21.6	.00	.01	.02	151
1	181	9.01	8.99	33.927	26.279	176.8	.486	2.99	46.0	30.9	1.98	25.5	.00			182
	200 ISL	8.73	8.71	33.972	26.359	169.6	.519	2.89	44.2							202
1	212	8.60	8.58	33.992	26.395	166.3	.539	2.84	43.3	34.4	2.07	26.7	.00			213
1	243	8.23	8.21	34.047	26.495	157.2	.589	2.51	37.9	39.6	2.20	28.7	.00			244
	250 ISL	8.12	8.10	34.055	26.518	155.1	.600	2.43	36.6							252
1	283	7.63	7.60	34.085	26.614	146.4	.651	2.03	30.3	47.2	2.42	31.7	.00			285
	300 ISL	7.47	7.44	34.105	26.653	142.9	.675	1.82	27.0							302
1	345	7.12	7.09	34.159	26.745	134.7	.737	1.29	19.0	57.7	2.79	34.8	.00			347
	400 ISL	6.64	6.60	34.203	26.845	125.7	.809	.86	12.5							403
1	422	6.44	6.40	34.218	26.884	122.2	.836	.73	10.6	70.0	2.97	38.1	.00			425
1	500	5.78	5.74	34.284	27.020	109.7	.926	.40	5.7	82.7	3.16	40.6	.00			503
1	577	5.53	5.48	34.329	27.087	104.1	1.009	.31	4.4	88.4	3.23	41.5	.00			581

RV NEW HORIZON CALCOFI CRUISE 8401 STATION 93 35

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 40.7 N	117 52.1 W	01/11/84	0451 GMT	631 M	310 08 KT		1	1018.3 MB	16.3 C	15.0 C	2/8	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.25	16.25	33.442	24.494	343.0	.000	5.72	102.1							0
1	1	16.25	16.25	33.442	24.494	343.0	.003	5.72	102.1	3.4	.32	.1	.00	.12	.04	1
	10 ISL	16.27	16.27	33.444	24.491	343.5	.034	5.75	102.6							10
1	12	16.27	16.27	33.444	24.490	343.7	.041	5.75	102.7	3.3	.35	.1	.00	.13	.05	12
	20 ISL	16.17	16.17	33.444	24.513	341.8	.069	5.76	102.6							20
1	22	16.15	16.15	33.444	24.519	341.3	.075	5.76	102.6	3.2	.32	.1	.00	.12	.05	22
	30 ISL	16.15	16.15	33.445	24.518	341.6	.103	5.74	102.3							30
1	32	16.16	16.15	33.445	24.519	341.7	.109	5.74	102.3	3.2	.33	.1	.00	.14	.05	32
1	42	16.09	16.09	33.462	24.546	339.3	.143	5.77	102.7	3.3	.34	.1	.00	.16	.06	42
	50 ISL	16.03	16.02	33.470	24.568	337.5	.171	5.71	101.6							50
1	53	16.01	16.00	33.473	24.575	336.9	.180	5.69	101.1	3.4	.34	.1	.00	.25	.14	53
1	63	15.24	15.23	33.423	24.707	324.6	.213	5.65	98.8	3.4	.40	.4	.10	.55	.29	63
1	73	14.41	14.40	33.416	24.879	308.4	.245	5.35	92.0	5.3	.59	2.7	.19	.45	.22	73
	75 ISL	14.09	14.08	33.418	24.949	302.3	.252	5.24	89.5							76
1	88	12.23	12.22	33.426	25.325	266.1	.287	4.59	75.5	10.2	1.04	10.0	.02	.14	.23	88
	100 ISL	11.07	11.06	33.543	25.632	237.1	.319	4.06	65.2							101
1	104	10.84	10.83	33.579	25.700	230.6	.327	3.95	63.1	16.9	1.44	17.0	.01	.05	.08	104
1	123	10.35	10.34	33.649	25.840	217.7	.371	3.90	61.7	18.9	1.50	18.1	.01	.02	.04	124
	125 ISL	10.30	10.29	33.660	25.857	216.0	.375	3.86	60.9							126
1	149	9.47	9.45	33.830	26.129	190.5	.424	3.14	48.7	27.1	1.86	23.7	.01	.01	.02	150
	150 ISL	9.45	9.44	33.834	26.135	190.0	.426	3.13	48.6							151
1	180	8.84	8.82	33.956	26.329	172.0	.480	2.95	45.2	32.3	2.04	26.1	.01			181
	200 ISL	8.55	8.53	34.014	26.420	163.7	.513	2.69	41.0							202
1	210	8.43	8.41	34.035	26.455	160.5	.530	2.56	38.9	37.3	2.13	28.1	.01			211
1	241	8.04	8.02	34.064	26.536	153.2	.578	2.35	35.4	41.8	2.28	29.7	.01			242
	250 ISL	7.91	7.89	34.069	26.560	151.0	.592	2.26	34.0							252
1	281	7.50	7.47	34.088	26.635	144.3	.638	1.94	28.8	48.7	2.47	32.4	.01			283
	300 ISL	7.33	7.30	34.106	26.673	140.9	.665	1.73	25.6							302
1	342	7.00	6.97	34.147	26.752	133.9	.722	1.28	18.8	58.2	2.74	35.4	.01			344
	400 ISL	6.48	6.45	34.184	26.851	125.0	.798	.87	12.6							403
1	418	6.32	6.29	34.194	26.879	122.4	.820	.77	11.1	70.2	2.99	38.5	.01			421
1	495	5.80	5.76	34.245	26.987	112.8	.910	.47	6.7	80.3	3.12	40.7	.00			498
	500 ISL	5.77	5.73	34.249	26.993	112.2	.916	.45	6.5							504
1	571	5.52	5.47	34.309	27.072	105.4	.993	.30	4.3	87.7	3.19	41.6	.01			575

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 93 40

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 30.5 N	118 12.9 W	01/11/84	0054 GMT	1633 M	300	15 KT	300 06 06	1	1018.0 MB	17.0 C	15.1 C	7/8	CS

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.31	16.31	33.457	24.492	343.2	.000	5.71	102.1							0
1	1	16.31	16.31	33.457	24.492	343.2	.003	5.71	102.1	3.1	.36	.0	.00	.14	.06	1
	10 ISL	16.27	16.27	33.460	24.503	342.4	.034	5.74	102.6							10
1	12	16.26	16.26	33.460	24.505	342.3	.041	5.75	102.7	3.2	.36	.0	.00	.14	.06	12
	20 ISL	16.12	16.12	33.465	24.541	339.1	.068	5.79	103.2							20
1	22	16.09	16.09	33.466	24.549	338.4	.075	5.80	103.2	3.3	.36	.0	.00	.18	.07	22
	30 ISL	16.11	16.10	33.472	24.550	338.6	.102	5.76	102.6							30
1	32	16.11	16.10	33.473	24.551	338.6	.109	5.75	102.4	3.5	.36	.0	.00	.26	.12	32
1	42	16.05	16.04	33.482	24.572	336.9	.142	5.70	101.4	3.5	.39	.0	.00	.50	.21	42
	50 ISL	15.30	15.29	33.446	24.711	323.9	.169	5.54	97.0							50
1	52	15.05	15.05	33.436	24.757	319.5	.175	5.48	95.5	4.6	.49	1.3	.09	.64	.40	52
1	62	13.15	13.14	33.404	25.130	284.1	.205	4.95	82.9	8.4	.87	7.3	.05	.43	.39	62
1	72	12.06	12.05	33.450	25.376	260.9	.232	4.53	74.2	11.4	1.07	10.8	.02	.19	.21	72
	75 ISL	11.85	11.85	33.466	25.427	256.0	.241	4.45	72.6							76
1	87	11.36	11.35	33.525	25.564	243.2	.270	4.24	68.5	14.4	1.27	14.1	.01	.09	.12	87
	100 ISL	10.81	10.80	33.597	25.719	228.8	.301	3.96	63.3							101
1	102	10.75	10.74	33.605	25.735	227.2	.305	3.93	62.7	17.9	1.47	16.7	.00	.05	.08	102
1	122	9.95	9.93	33.734	25.975	204.7	.350	3.45	54.1	23.2	1.69	21.2	.00	.02	.03	123
	125 ISL	9.87	9.85	33.749	26.000	202.4	.355	3.40	53.2							126
1	147	9.29	9.28	33.859	26.181	185.5	.398	3.08	47.6	28.5	1.91	24.4	.00	.00	.02	148
	150 ISL	9.23	9.22	33.870	26.199	183.9	.403	3.06	47.3							151
1	177	8.76	8.74	33.947	26.335	171.4	.451	2.98	45.6	32.5	2.00	26.1	.00			178
	200 ISL	8.47	8.45	33.985	26.410	164.6	.490	2.87	43.6							202
1	209	8.38	8.36	33.999	26.434	162.4	.504	2.79	42.3	36.3	2.08	27.7	.00			210
1	239	8.14	8.12	34.079	26.533	153.5	.552	2.24	33.8	41.9	2.31	29.9	.00			240
	250 ISL	8.04	8.02	34.091	26.557	151.4	.569	2.14	32.2							252
1	279	7.74	7.71	34.105	26.614	146.4	.613	1.94	29.0	47.5	2.43	31.8	.00			281
	300 ISL	7.41	7.38	34.122	26.675	140.8	.642	1.66	24.6							302
1	340	6.77	6.74	34.162	26.795	129.6	.696	1.10	16.1	62.5	2.80	36.5	.00			342
	400 ISL	6.31	6.28	34.231	26.910	119.3	.771	.64	9.3							403
1	416	6.23	6.20	34.247	26.933	117.3	.790	.57	8.2	74.3	3.06	39.2	.00			419
1	492	5.83	5.79	34.289	27.017	109.9	.876	.40	5.7	82.1	3.12	40.3	.00			495
	500 ISL	5.79	5.75	34.294	27.026	109.1	.885	.39	5.5							504
1	567	5.42	5.37	34.321	27.094	103.2	.956	.32	4.5	90.0	3.22	41.7	.00			571

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 93 45

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 20.0 N	118 33.5 W	01/10/84	2049 GMT	1428 M	350	10 KT	310 06 06	1	1020.7 MB	16.0 C	14.9 C	6/8	CS

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.17	16.17	33.469	24.532	339.4	.000	5.72	102.0							0
1	1	16.17	16.17	33.469	24.532	339.4	.003	5.72	102.0	3.2	.35	.0	.00	.26	.08	1
	10 ISL	16.14	16.13	33.475	24.545	338.4	.034	5.82	103.6							10
1	11	16.13	16.13	33.475	24.546	338.3	.037	5.82	103.7	3.2	.35	.0	.00	.25	.10	11
	20 ISL	16.10	16.10	33.472	24.551	338.3	.068	5.79	103.0							20
1	21	16.10	16.10	33.471	24.551	338.3	.071	5.78	102.9	3.2	.35	.0	.00	.27	.10	21
	30 ISL	16.12	16.11	33.468	24.545	339.1	.102	5.72	101.9							30
1	31	16.12	16.12	33.468	24.544	339.2	.105	5.72	101.9	3.2	.35	.0	.00	.29	.11	31
1	41	16.04	16.04	33.462	24.557	338.3	.138	5.76	102.4	3.3	.35	.0	.00	.40	.20	41
	50 ISL	13.98	13.98	33.386	24.946	301.3	.168	5.26	89.7							50
1	51	13.78	13.77	33.383	24.985	297.6	.170	5.21	88.5	6.5	.71	3.7	.10	.60	.56	51
1	61	12.50	12.50	33.419	25.267	270.9	.198	4.76	78.7	9.5	.98	8.6	.03	.21	.28	61
1	71	11.73	11.72	33.465	25.450	253.7	.224	4.61	75.0	11.2	1.07	10.8	.01	.10	.17	71
	75 ISL	11.51	11.50	33.489	25.508	248.2	.235	4.48	72.5							76
1	86	11.13	11.12	33.546	25.623	237.5	.261	4.16	66.8	15.2	1.29	14.9	.00	.06	.09	86
	100 ISL	10.65	10.63	33.603	25.753	225.5	.294	4.06	64.6							101
1	101	10.63	10.62	33.605	25.757	225.1	.295	4.06	64.6	17.2	1.41	16.5	.00	.03	.06	101
1	120	10.04	10.02	33.729	25.956	206.5	.338	3.47	54.3	22.8	1.70	21.0	.00	.01	.03	121
	125 ISL	9.92	9.91	33.752	25.993	203.1	.348	3.38	52.9							126
1	145	9.46	9.45	33.843	26.141	189.3	.388	3.07	47.6	27.3	1.88	24.1	.00	.00	.02	146
	150 ISL	9.35	9.33	33.865	26.177	186.1	.396	3.03	46.9							151
1	175	8.82	8.80	33.973	26.345	170.4	.441	2.83	43.3	33.0	2.05	26.3	.00			176
	200 ISL	8.49	8.47	34.053	26.460	159.9	.482	2.47	37.5							202
1	205	8.44	8.42	34.065	26.477	158.3	.490	2.39	36.3	39.0	2.26	28.7	.00			206
1	236	8.09	8.07	34.105	26.561	150.8	.538	1.99	30.0	43.9	2.39	30.4	.00			237
	250 ISL	7.90	7.87	34.121	26.603	147.0	.559	1.83	27.5							252
1	275	7.53	7.51	34.144	26.674	140.5	.595	1.59	23.7	51.7	2.49	33.0	.00			277
	300 ISL	7.23	7.20	34.157	26.727	135.7	.629	1.37	20.3							302
1	336	6.85	6.81	34.171	26.792	129.9	.677	1.10	16.1	61.6	2.78	35.9	.00			338
	400 ISL	6.35	6.32	34.205	26.884	121.7	.758	.78	11.3							403
1	412	6.27	6.23	34.212	26.900	120.3	.773	.73	10.6	72.3	2.98	38.5	.00			415
1	489	5.69	5.65	34.241	26.997	111.7	.861	.46	6.6	82.1	3.11	40.7	.00			492
	500 ISL	5.63	5.59	34.249	27.010	110.4	.874	.43	6.2							504
1	566	5.39	5.34	34.315	27.093	103.2	.944	.34	4.8	90.4	3.22	4 .6	.01			570

RV NEW HORIZON CALCOFI CRUISE 8401 STATION 93 50

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 09.2 N	118 52.7 W	01/10/84	1627 GMT	1530 M	330	15 KT	310 06 06	1	1022.7 MB	14.8 C	13.5 C	7/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	15.95	15.95	33.468	24.582	334.6	.000	5.71	101.3	3.3	.33	.0	.00	.38	.16	0
1	10	15.96	15.95	33.466	24.579	335.2	.033	5.80	103.0	3.3	.32	.0	.00	.36	.17	10
	20 ISL	15.95	15.95	33.466	24.580	335.4	.067	5.76	102.2							20
1	21	15.95	15.95	33.466	24.580	335.5	.070	5.75	102.1	3.2	.32	.0	.00	.35	.17	21
	30 ISL	15.97	15.97	33.467	24.577	336.0	.101	5.72	101.6							30
1	31	15.97	15.97	33.467	24.577	336.0	.104	5.72	101.6	3.2	.32	.0	.00	.37	.14	31
1	42	15.96	15.96	33.468	24.580	336.1	.140	5.75	102.1	3.2	.32	.0	.00	.35	.16	42
	50 ISL	15.20	15.19	33.428	24.719	323.1	.167	5.54	96.9							50
1	58	14.13	14.13	33.397	24.923	303.8	.192	5.23	89.4	6.0	.63	3.2	.14	.50	.36	58
1	69	12.50	12.49	33.419	25.269	271.0	.223	4.69	77.5	9.6	.97	8.8	.03	.17	.23	69
	75 ISL	11.72	11.71	33.478	25.462	252.7	.240	4.34	70.6							76
1	78	11.45	11.44	33.506	25.534	245.9	.246	4.21	68.1	13.9	1.25	13.7	.01	.09	.18	78
1	94	10.89	10.88	33.580	25.692	231.1	.284	3.92	62.7	16.8	1.44	16.6	.00	.05	.09	94
	100 ISL	10.67	10.66	33.612	25.757	225.1	.299	3.81	60.6							101
1	113	10.23	10.22	33.690	25.892	212.5	.328	3.57	56.3	20.8	1.62	19.7	.00	.01	.05	114
	125 ISL	9.91	9.90	33.775	26.014	201.1	.352	3.33	52.1							126
1	134	9.67	9.66	33.843	26.106	192.5	.370	3.14	49.0	26.1	1.84	23.1	.00	.01	.03	135
	150 ISL	9.30	9.29	33.916	26.224	181.6	.400	2.91	45.1							151
1	161	9.07	9.05	33.952	26.290	175.4	.420	2.79	42.9	31.4	2.05	25.9	.00	.00	.03	162
1	192	8.53	8.51	34.017	26.426	163.0	.472	2.59	39.4	36.3	2.23	27.6	.00			193
	200 ISL	8.42	8.40	34.036	26.457	160.1	.485	2.49	37.8							202
1	223	8.15	8.13	34.083	26.535	153.0	.520	2.18	32.9	42.1		29.7	.00			224
	250 ISL	7.91	7.88	34.122	26.602	147.1	.561	1.84	27.6							252
1	258	7.85	7.82	34.130	26.617	145.7	.572	1.75	26.2	47.2		31.6	.00			259
	300 ISL	7.40	7.37	34.171	26.714	137.0	.632	1.33	19.7							302
1	309	7.30	7.27	34.177	26.733	135.3	.645	1.25	18.5	56.0		34.2	.00			311
1	367	6.73	6.70	34.197	26.827	126.9	.720	.94	13.7	64.7		36.7	.00			369
	400 ISL	6.53	6.49	34.217	26.871	123.1	.762	.78	11.3							403
1	453	6.24	6.20	34.254	26.938	117.3	.826	.56	8.1	74.7	3.06	38.8	.00			456
	500 ISL	5.89	5.85	34.289	27.010	110.8	.879	.42	6.0							504
1	541	5.60	5.55	34.319	27.070	105.3	.924	.34	4.8	87.2	3.19	40.8	.00			545
	600 ISL	5.30	5.25	34.351	27.132	99.8	.984	.33	4.7							605
1	628	5.19	5.14	34.362	27.154	98.0	1.011	.33	4.7	95.7	3.24	42.2	.00			632

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LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 59.9 N	119 13.8 W	01/10/84	1221 GMT	1596 M	310	17 KT		1	1021.7 MB	14.5 C	13.0 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.88	15.88	33.493	24.616	331.4	.000	5.71	101.2							0
1	1	15.88	15.88	33.493	24.616	331.4	.003	5.71	101.2	3.5	.30	.0	.00	.25	.09	1
	10 ISL	15.90	15.90	33.492	24.611	332.1	.033	5.75	102.0							10
1	11	15.91	15.90	33.492	24.611	332.2	.036	5.75	102.0	3.4	.33	.0	.00	.26	.10	11
	20 ISL	15.84	15.84	33.489	24.623	331.3	.066	5.73	101.5							20
1	21	15.83	15.83	33.489	24.625	331.2	.069	5.73	101.5	3.4	.34	.0	.00	.24	.10	21
	30 ISL	15.56	15.55	33.464	24.667	327.4	.099	5.76	101.4							30
1	31	15.52	15.52	33.461	24.673	326.9	.102	5.76	101.4	3.3	.37	.0	.00	.26	.10	31
1	41	15.04	15.04	33.428	24.753	319.5	.134	5.76	100.4	3.3	.40	.0	.05	.50	.31	41
	50 ISL	14.66	14.65	33.428	24.836	312.1	.163	5.52	95.5							50
1	56	14.16	14.15	33.428	24.941	302.0	.181	5.26	90.0	5.9	.63	3.4	.25	.31	.32	56
1	66	12.20	12.20	33.447	25.347	263.5	.209	4.59	75.4	10.7	1.06	10.0	.04	.14	.21	66
	75 ISL	11.68	11.67	33.470	25.463	252.6	.233	4.47	72.7							76
1	76	11.67	11.66	33.472	25.467	252.3	.235	4.47	72.6	12.1	1.15	11.7	.02	.11	.15	76
1	91	10.81	10.80	33.584	25.710	229.4	.271	4.02	64.2	16.6	1.42	16.3	.01	.05	.08	91
	100 ISL	10.58	10.57	33.618	25.776	223.3	.292	3.87	61.5							101
1	110	10.41	10.40	33.651	25.832	218.1	.315	3.73	59.0	19.7	1.57	18.7	.01	.04	.02	111
	125 ISL	9.89	9.88	33.747	25.995	202.9	.346	3.39	53.1							126
1	130	9.70	9.68	33.783	26.055	197.3	.356	3.27	51.0	25.2	1.75	22.5	.01	.01	.03	131
	150 ISL	9.34	9.32	33.853	26.169	186.8	.394	3.08	47.6							151
1	154	9.28	9.27	33.865	26.187	185.1	.402	3.05	47.2	28.9	1.88	24.3	.01	.00	.02	155
1	184	8.72	8.70	33.978	26.365	168.6	.455	2.71	41.4	34.1	2.07	27.1	.01			185
	200 ISL	8.58	8.56	34.013	26.414	164.3	.481	2.58	39.4							202
1	215	8.47	8.45	34.037	26.450	161.0	.505	2.46	37.4	37.7	2.17	28.2	.01			216
1	250	7.96	7.94	34.104	26.580	149.2	.559	1.99	29.9	44.9	2.39	30.8	.01			251
1	299	7.23	7.20	34.128	26.705	137.8	.631	1.51	22.3	54.5	2.62	33.9	.01			301
	300 ISL	7.22	7.19	34.128	26.706	137.7	.632	1.51	22.2							302
1	355	6.80	6.76	34.144	26.777	131.6	.705	1.20	17.6	61.0	2.78	36.0	.00			357
	400 ISL	6.45	6.42	34.171	26.844	125.6	.763	.91	13.2							403
1	440	6.17	6.13	34.202	26.906	120.1	.813	.68	9.8	73.3	3.02	38.9	.00			443
	500 ISL	5.80	5.75	34.250	26.991	112.5	.882	.47	6.7							504
1	526	5.65	5.60	34.272	27.027	109.2	.912	.41	5.8	84.2	3.19	40.6	.01			530
	600 ISL	5.26	5.21	3 .333	27.122	100.7	.989	.31	4.4							605
1	614	5.20	5.15	34.344	27.138	99.2	1.003	.31	4.4	95.0	3.29	42.1	.00			618

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LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 49.9 N	119 33.9 W	01/10/84	0809 GMT	1856 M	010	11 KT		1	1021.7 MB	14.4 C	12.8 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	15.80	15.80	33.400	24.564	336.3	.000	5.72	101.2	3.1	.33	.0	.00			0
1	10	15.81	15.81	33.398	24.559	337.1	.034	5.79	102.4	3.1	.33	.0	.01	.13	.06	10
	20 ISL	15.82	15.81	33.399	24.560	337.3	.067	5.77	102.1							20
1	25	15.82	15.81	33.400	24.560	337.4	.084	5.76	101.9	3.0	.32	.0	.00	.12	.05	25
	30 ISL	15.85	15.85	33.422	24.570	336.6	.101	5.74	101.6							30
1	39	15.91	15.90	33.462	24.588	335.3	.131	5.70	101.1	3.4	.33	.0	.00	.19	.10	39
	50 ISL	14.74	14.73	33.335	24.747	320.4	.167	5.67	98.2							50
1	54	14.24	14.23	33.286	24.816	313.8	.179	5.66	96.9	3.7	.45	.4	.12	.37	.29	54
1	64	13.22	13.21	33.237	24.986	297.8	.210	5.57	93.4	4.6	.54	1.8	.08	.24	.22	64
1	73	12.34	12.33	33.359	25.252	272.6	.235	5.11	84.2	7.5	.77	6.0	.02	.11	.15	73
	75 ISL	12.23	12.22	33.378	25.288	269.3	.242	5.06	83.1							76
1	88	11.80	11.79	33.450	25.425	256.5	.275	4.82	78.5	9.6	.91	9.1	.01	.07	.10	88
	100 ISL	11.13	11.12	33.535	25.614	238.8	.305	4.34	69.8							101
1	103	10.99	10.98	33.553	25.653	235.1	.312	4.25	68.1	14.6	1.26	14.4	.01	.03	.05	103
1	116	10.46	10.44	33.635	25.811	220.3	.343	4.11	65.1	17.4	1.36	16.6	.01	.02	.03	117
	125 ISL	10.19	10.17	33.682	25.894	212.5	.362	4.10	64.5							126
1	141	9.74	9.72	33.761	26.031	199.7	.395	4.07	63.5	21.3	1.48	18.7	.01	.00	.01	142
	150 ISL	9.52	9.50	33.798	26.097	193.6	.412	3.88	60.3							151
1	160	9.27	9.25	33.838	26.168	187.1	.432	3.65	56.4	25.4	1.68	21.8	.01	.00	.01	161
1	180	8.84	8.82	33.905	26.289	175.8	.468	3.49	53.4	29.1	1.80	23.8	.01			181
1	199	8.45	8.43	33.973	26.404	165.1	.500	3.38	51.3	32.7	1.86	25.1	.01			200
	200 ISL	8.43	8.41	33.975	26.407	164.8	.502	3.37	51.2							202
1	229	8.17	8.15	34.004	26.470	159.3	.548	3.11	46.9	36.2	1.98	26.6	.00			230
	250 ISL	7.90	7.87	34.026	26.528	154.1	.582	2.81	42.2							252
1	268	7.67	7.64	34.045	26.576	149.6	.608	2.53	37.7	43.9	2.24	29.8	.00			269
	300 ISL	7.35	7.32	34.087	26.655	142.6	.656	1.97	29.1							302
1	327	7.12	7.09	34.119	26.712	137.4	.694	1.53	22.5	55.0	2.61	34.1	.01			329
	400 ISL	6.51	6.47	34.175	26.840	126.0	.790	.91	13.2							403
1	402	6.50	6.46	34.176	26.842	125.8	.792	.90	13.1	67.1	2.93	37.6	.00			404
1	476	6.00	5.96	34.225	26.946	116.6	.882	.57	8.2	76.6	3.05	39.7	.00			479
	500 ISL	5.85	5.80	34.241	26.978	113.8	.910	.50	7.1							504
1	551	5.54	5.50	34.272	27.040	108.2	.966	.39	5.5	85.7	3.15	41.4	.01			555

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STATION 93 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 29.0 N	120 15.5 W	01/10/84	0217 GMT	3737 M	360	15 KT	350 06 06	1	1020.7 MB	13.9 C	12.1 C	5/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	16.02	16.02	33.301	24.437	348.4	.000	5.74	101.9	3.1	.36	.0	.00	.12	.06	0
1	10	16.03	16.03	33.300	24.435	348.9	.035	5.74	101.9	3.1	.36	.0	.02	.14	.04	10
	20 ISL	16.02	16.02	33.298	24.436	349.1	.070	5.73	101.8							20
1	26	16.02	16.01	33.298	24.437	349.2	.090	5.73	101.7	2.9	.35	.0	.01	.12	.05	26
	30 ISL	16.00	16.00	33.295	24.438	349.2	.105	5.73	101.8							30
1	42	15.88	15.87	33.263	24.442	349.2	.146	5.76	102.0	2.9	.36	.0	.02	.16	.07	42
	50 ISL	15.66	15.65	33.227	24.462	347.5	.174	5.80	102.1							50
1	57	15.48	15.47	33.202	24.484	345.6	.198	5.82	102.2	2.9	.39	.0	.01	.21	.10	57
1	73	15.28	15.27	33.212	24.537	341.1	.253	5.81	101.6	3.0	.38	.0	.02	.17	.12	73
	75 ISL	15.17	15.16	33.218	24.564	338.6	.260	5.81	101.3							76
1	83	14.80	14.79	33.255	24.673	328.4	.286	5.79	100.3	3.2	.42	.0	.11	.19	.14	83
1	99	14.36	14.35	33.447	24.915	305.7	.337	5.70	98.0	3.7	.42	.5	.10	.14	.13	99
	100 ISL	14.24	14.22	33.443	24.938	303.6	.341	5.67	97.2							101
1	120	12.35	12.33	33.360	25.253	273.8	.397	5.13	84.5	7.2	.77	5.9	.03	.08	.11	120
	125 ISL	12.04	12.03	33.395	25.338	265.8	.412	4.94	80.9							126
1	140	11.34	11.32	33.526	25.571	243.9	.451	4.44	71.6	12.9	1.16	12.5	.02	.04	.06	141
	150 ISL	10.77	10.75	33.580	25.715	230.2	.474	4.23	67.4							151
1	160	10.19	10.18	33.641	25.862	216.4	.497	4.04	63.6	18.7	1.43	17.8	.02	.01	.03	161
1	181	9.51	9.49	33.816	26.113	192.7	.540	3.67	57.0	23.9	1.69	21.7	.02			182
	200 ISL	9.06	9.03	33.886	26.240	180.9	.575	3.37	51.9							202
1	202	9.02	8.99	33.890	26.250	180.0	.578			26.0	1.71	22.3	.02			203
1	223	8.71	8.69	33.959	26.353	170.6	.615	3.08	47.0	31.7	1.96	26.0	.02			224
	250 ISL	8.39	8.37	34.006	26.438	162.9	.660	2.90	44.1							252
1	259	8.29	8.26	34.014	26.460	160.9	.674	2.86	43.3	36.6	2.12	27.7	.01			260
	300 ISL	7.57	7.54	34.042	26.589	149.0	.738	2.51	37.4							302
1	310	7.38	7.35	34.046	26.619	146.2	.753	2.40	35.6	46.8	2.32	31.2	.00			312
1	367	6.63	6.59	34.094	26.760	133.2	.832	1.51	22.0	59.8	2.68	35.7	.00			369
	400 ISL	6.33	6.30	34.122	26.821	127.6	.876	1.16	16.8							403
1	454	5.99	5.95	34.170	26.904	120.3	.943	.77	11.1	73.9	3.03	39.4	.00			457
	500 ISL	5.75	5.71	34.214	26.968	114.6	.997	.55	7.9							504
1	541	5.57	5.53	34.251	27.020	110.0	1.043	.43	6.1	84.0	3.15	41.3	.01			545
	600 ISL	5.33	5.28	34.298	27.086	104.2	1.106	.31	4.4							605
1	628	5.22	5.16	34.317	27.115	101.7	1.134	.29	4.1	93.1	3.25	42.5	.00			632

RV NEW HORIZON CALCOFI CRUISE 8401 STATION 93 80

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 09.5 N	120 55.1 W	01/09/84	2016 GMT	3926 M	360	10 KT	350 06 05	1	1023.7 MB	15.0 C	11.9 C	7/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	17.48	17.48	33.601	24.328	358.8	.000	5.56	101.8	2.7	.32	.1	.00	.09	.04	0
	10 ISL	17.49	17.49	33.603	24.326	359.3	.036	5.58	102.1							10
1	11	17.49	17.49	33.603	24.326	359.3	.039	5.58	102.2	2.6	.32	.1	.00	.09	.04	11
	20 ISL	17.50	17.50	33.604	24.325	359.7	.072	5.55	101.7							20
1	26	17.51	17.50	33.604	24.325	359.9	.093	5.53	101.3	2.6	.32	.1	.00	.09	.04	26
	30 ISL	17.50	17.50	33.604	24.326	360.0	.108	5.53	101.3							30
1	42	17.49	17.49	33.603	24.327	360.3	.151	5.55	101.6	2.6	.32	.1	.00	.10	.04	42
	50 ISL	17.50	17.49	33.603	24.327	360.6	.180	5.56	101.9							50
1	57			33.602			.204	5.57	102.0	2.6	.32	.1	.00	.10	.04	57
1	72	17.50	17.49	33.602	24.325	361.5	.258	5.55	101.6	2.6	.32	.0	.00	.10	.04	72
	75 ISL	17.47	17.46	33.597	24.329	360.1	.270	5.55	101.6							76
1	83	17.24	17.22	33.587	24.378	356.8	.298	5.59	101.8	2.6	.32	.0	.00	.12	.07	83
1	98	15.68	15.66	33.620	24.763	320.4	.348	5.79	102.3	2.8	.32	.0	.00	.19	.20	98
	100 ISL	15.58	15.57	33.637	24.797	317.3	.356	5.78	102.0							101
1	119	14.98	14.96	33.714	24.991	299.3	.413	5.56	96.9	3.5	.36	.4	.16	.13	.16	119
	125 ISL	14.42	14.40	33.680	25.084	290.5	.432	5.45	94.0							126
1	138	13.19	13.17	33.604	25.279	272.0	.470	5.22	87.6	5.7	.63	4.3	.01	.06	.10	139
	150 ISL	12.46	12.44	33.604	25.421	259.3	.501	5.06	83.7							151
1	159	11.94	11.92	33.604	25.521	249.2	.524	4.92	80.5	8.9	.85	8.6	.00	.04	.06	160
1	179	10.61	10.59	33.653	25.799	222.9	.571	4.43	70.4	15.1	1.24	14.7	.00	.01	.02	180
1	200	9.84	9.81	33.753	26.010	203.0	.616	4.04	63.2	20.4	1.56	18.9	.00			201
1	220	9.29	9.27	33.847	26.173	187.8	.655	3.78	58.4	24.4	1.65	21.5	.00			221
	250 ISL	8.88	8.85	33.985	26.348	171.7	.709	3.04	46.6							252
1	256	8.82	8.79	34.006	26.373	169.3	.718	2.90	44.4	32.5	1.98	25.8	.00			257
	300 ISL	8.04	8.01	34.046	26.523	155.0	.790	2.59	38.9							302
1	306	7.93	7.90	34.052	26.545	153.5	.800	2.57	38.6	41.2	2.23	29.2	.00			308
1	362	7.19	7.16	34.069	26.664	142.6	.882	2.00	29.5	50.8	2.46	32.8	.00			364
	400 ISL	6.87	6.84	34.101	26.733	136.4	.935	1.56	22.9							403
1	448	6.56	6.52	34.151	26.815	129.2	.999	1.05	15.3	64.3	2.84	37.3	.00			451
	500 ISL	6.21	6.17	34.208	26.906	121.0	1.064	.67	9.7							504
1	534	6.00	5.95	34.243	26.960	116.1	1.104	.50	7.2	76.6	3.14	39.9	.00			537
	600 ISL	5.62	5.57	34.296	27.051	108.0	1.178	.31	4.4							605
1	619	5.52	5.47	34.309	27.073	106.0	1.198	.29	4.1	86.9	3.20	41.8	.00			623

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LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 51.3 N	121 35.2 W	01/09/84	1339 GMT	4116 M	330	14 KT	330 06 06	6	1022.4 MB	15.5 C	13.8 C	7/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	17.34	17.34	33.558	24.328	358.8	.000	5.53	100.9	2.7	.35	.2	.00	.10	.04	0
1	9	17.35	17.35	33.553	24.322	359.7	.032	5.54	101.1	2.7	.35	.2	.00	.11	.03	9
	10 ISL	17.35	17.35	33.553	24.322	359.8	.036	5.54	101.1							10
	20 ISL	17.35	17.35	33.553	24.323	360.0	.072	5.54	101.1							20
1	25	17.35	17.34	33.553	24.323	360.1	.090	5.54	101.1	2.7	.34	.2	.01	.10	.04	25
	30 ISL	17.36	17.35	33.553	24.321	360.5	.108	5.54	101.2							30
1	40	17.38	17.37	33.553	24.318	361.2	.144	5.55	101.3	2.7	.33	.2	.00	.10	.04	40
	50 ISL	17.37	17.36	33.554	24.320	361.3	.180	5.56	101.5							50
1	54	17.37	17.36	33.554	24.321	361.3	.194	5.56	101.5	2.7	.33	.2	.00	.10	.05	54
1	69	17.36	17.35	33.554	24.323	361.6	.248	5.54	101.1	2.7	.32	.2	.01	.10	.05	69
	75 ISL	17.36	17.35	33.554	24.324	361.8	.271	5.55	101.2							76
1	79	17.36	17.34	33.554	24.324	361.9	.284	5.55	101.3	2.7	.34	.2	.01	.10	.03	79
1	93	15.42	15.40	33.451	24.691	327.1	.332	5.64	99.0	3.1	.40	.1	.07	.19	.19	93
	100 ISL	14.92	14.90	33.456	24.803	317.2	.356	5.51	95.8							101
1	113	14.30	14.28	33.464	24.941	303.6	.395	5.19	89.1	5.0	.62	2.8	.03	.14	.16	113
	125 ISL	13.28	13.27	33.481	25.164	282.6	.431	4.95	83.2							126
1	132	12.73	12.71	33.508	25.295	270.2	.452	4.75	78.9	8.6	.88	7.7	.01	.06	.09	133
	150 ISL	12.23	12.21	33.653	25.504	250.7	.497	3.86	63.6							151
1	152	12.18	12.16	33.672	25.528	248.5	.503	3.75	61.7	14.2	1.34	14.3	.01	.03	.04	153
1	171	11.35	11.33	33.741	25.737	228.9	.548	3.54	57.2	18.1	1.50	17.3	.01	.01	.03	172
1	191	10.68	10.66	33.857	25.947	209.2	.592	3.17	50.5	22.3	1.75	20.6	.01			192
	200 ISL	10.42	10.39	33.895	26.022	202.2	.610	3.07	48.6							202
1	211	10.13	10.11	33.935	26.103	194.6	.632	2.96	46.6	25.8	1.88	22.6	.01			212
1	246	9.57	9.54	34.045	26.284	178.0	.697	2.60	40.5	30.9	2.06	25.3	.01			247
	250 ISL	9.49	9.46	34.054	26.304	176.1	.704	2.56	39.8							252
1	294	8.68	8.65	34.128	26.491	158.8	.779	2.17	33.1	39.2	2.35	28.4	.00			296
	300 ISL	8.59	8.56	34.134	26.510	157.1	.788	2.11	32.1							302
1	349	7.86	7.82	34.171	26.649	144.4	.862	1.58	23.7	49.1	2.56	31.8	.00			351
	400 ISL	7.15	7.11	34.173	26.752	134.8	.933	1.22	17.9							403
1	433	6.74	6.70	34.174	26.809	129.7	.977	1.03	15.0	63.5	2.89	36.6	.00			436
	500 ISL	6.15	6.11	34.212	26.916	119.9	1.060	.66	9.5							504
1	519	6.03	5.98	34.226	26.944	117.4	1.082	.57	8.2	76.0	3.14	39.6	.00			522
	600 ISL	5.61	5.56	34.299	27.054	107.7	1.174	.33	4.7							605
1	604	5.60	5.54	34.303	27.059	107.2	1.178	.32	4.6	86.2	3.20	41.3	.00			608

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STATION 93 100

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 30.5 N	122 16.9 W	01/09/84	0720 GMT	4212 M	360	08 KT		1	1024.4 MB	15.6 C	14.8 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.92	16.92	33.429	24.327	358.9	.000	5.63	101.8							0
1	1	16.92	16.92	33.429	24.327	358.9	.004	5.63	101.8	2.7	.30	.2	.00	.11	.02	1
	10 ISL	16.93	16.93	33.428	24.326	359.3	.036	5.64	102.0							10
1	12	16.93	16.93	33.428	24.326	359.4	.043	5.64	102.0	2.6	.30	.2	.00	.11	.04	12
	20 ISL	16.93	16.93	33.428	24.326	359.6	.072	5.64	102.0							20
1	27	16.93	16.93	33.428	24.326	359.8	.097	5.64	102.0	2.7	.30	.2	.00	.11	.03	27
	30 ISL	16.94	16.93	33.428	24.325	360.0	.108	5.64	102.0							30
1	42	16.96	16.95	33.428	24.320	360.9	.151	5.63	101.9	2.7	.30	.2	.00	.12	.03	42
	50 ISL	16.97	16.97	33.432	24.321	361.2	.180	5.69	103.1							50
1	58	16.98	16.97	33.436	24.321	361.4	.208	5.73	103.8	2.7	.30	.2	.00	.13	.03	58
1	68	16.98	16.97	33.436	24.322	361.6	.244	5.63	101.9	2.7	.30	.2	.00	.13	.04	68
	75 ISL	16.99	16.98	33.439	24.322	361.8	.270	5.62	101.8							76
1	78	16.99	16.98	33.440	24.323	361.9	.280	5.62	101.8	2.7	.30	.2	.00	.13	.04	78
1	94	15.08	15.07	33.505	24.805	316.2	.334	5.88	102.6	2.9	.31	.2	.01	.17	.15	94
	100 ISL	14.84	14.83	33.540	24.885	308.8	.354	5.85	101.5							101
1	109	14.72	14.70	33.592	24.951	302.7	.380	5.75	99.6	3.3		.2	.12	.14	.17	109
1	124	14.39	14.37	33.714	25.115	287.5	.424	5.62	96.8	3.6	.35	.6	.10	.10	.16	124
	125 ISL	14.35	14.33	33.714	25.125	286.2	.429	5.61	96.5							126
1	149	13.09	13.07	33.709	25.379	262.8	.496	5.26	88.2	5.8	.58	4.5	.01	.04	.07	150
	150 ISL	13.04	13.02	33.707	25.388	262.0	.497	5.25	87.9							151
1	170	11.26	11.24	33.643	25.677	234.5	.547	4.68	75.4	12.0	1.05	11.7	.00	.02	.03	171
1	190	10.16	10.13	33.679	25.898	213.5	.592	3.91	61.6	19.5	1.52	18.8	.00			191
	200 ISL	9.81	9.79	33.733	25.998	204.1	.613	3.77	58.9							202
1	211	9.52	9.50	33.800	26.099	194.7	.635	3.70	57.5	24.1	1.69	21.3	.00			212
1	242	8.93	8.91	33.922	26.289	177.1	.692	3.41	52.3	29.1	1.82	23.9	.00			243
	250 ISL	8.78	8.75	33.944	26.331	173.2	.706	3.37	51.5							252
1	283	8.16	8.13	34.002	26.470	160.2	.760	3.17	47.8	36.4	1.99	26.6	.00			284
	300 ISL	7.85	7.82	34.020	26.530	154.8	.788	2.94	44.0							302
1	344	7.18	7.14	34.047	26.648	143.8	.854	2.24	33.0	49.9	2.43	32.1	.00			346
	400 ISL	6.62	6.58	34.095	26.763	133.4	.931	1.45	21.1							403
1	421	6.46	6.42	34.115	26.800	130.1	.958	1.20	17.4	63.7	2.84	37.5	.00			423
1	498	5.87	5.83	34.209	26.949	116.5	1.054	.58	8.3	77.1	3.11	40.5	.00			501
	500 ISL	5.86	5.82	34.211	26.953	116.2	1.056	.58	8.2							504
1	575	5.49	5.45	34.266	27.041	108.3	1.141	.41	5.8	85.9	3.20	41.9	.00			579

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STATION 97 29

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 17.4 N	117 04.5 W	01/12/84	1942 GMT	44 M	260	08 KT	270 04 07	1	1015.6 MB	17.5 C	13.9 C	6/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	15.58	15.58	33.437	24.641	329.3	.033	5.74	101.1							10

RV NEW HORIZON

CALCOFI CRUISE 8401

STATION 97 30

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 15.4 N	117 08.8 W	01/12/84	2118 GMT	48 M	250	11 KT	270 04 07	1	1013.9 MB	17.6 C	13.0 C	6/8	AC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	16.03	16.03	33.437	24.539	338.7	.000	5.80	103.1	3.5	.36	.0	.00	.16	.10	0
1	10	15.84	15.84	33.430	24.578	335.3	.034	5.78	102.3	3.4	.39	.0	.02	.20	.14	10
	20 ISL	15.79	15.79	33.430	24.589	334.6	.067	5.78	102.2							20
1	21	15.79	15.79	33.431	24.590	334.5	.070	5.78	102.2	3.4	.36	.0	.01	.24	.13	21
	30 ISL	15.80	15.79	33.431	24.589	334.8	.101	5.77	102.1							30
1	31	15.80	15.79	33.432	24.590	334.8	.104	5.77	102.1	3.4	.36	.0	.02	.29	.14	31
1	42	15.05	15.05	33.412	24.739	320.9	.140	5.41	94.3	5.2	.53	1.6	.30	.34	.25	42

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STATION 97 32

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 11.2 N	117 17.1 W	01/12/84	2312 GMT	1391 M	260	11 KT	270 08 10	2	1013.5 MB	17.5 C	13.2 C	8/8	AS

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	15.88	15.88	33.459	24.590	334.1	.033	5.76	102.1							10

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LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 05.4 N	117 29.5 W	01/13/84	0209 GMT	1391 M	260	10 KT	270 08 10	1	1013.5 MB	16.3 C	13.4 C	5/8	AS

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.22	16.22	33.467	24.520	340.6	.000	5.77	103.0							0
1	1	16.22	16.22	33.467	24.520	340.6	.003	5.77	103.0	3.3	.35	.0	.00	.20	.10	1
	10 ISL	16.18	16.18	33.465	24.528	340.1	.034	5.75	102.6							10
1	12	16.17	16.17	33.465	24.530	339.9	.041	5.75	102.5	3.3	.35	.0	.00	.19	.11	12
	20 ISL	16.04	16.04	33.458	24.553	338.0	.068	5.75	102.4							20
1	22	16.01	16.01				.074									22
	30 ISL	15.96	15.96	33.449	24.566	337.1	.102	5.76	102.2							30
1	32	15.95	15.94	33.447	24.567	337.0	.108	5.76	102.2	3.4	.35	.0	.00	.25	.13	32
1	42	15.15	15.14	33.406	24.714	323.3	.141	5.58	97.4	4.3	.47	.8	.15	.50	.40	42
	50 ISL	14.03	14.02	33.376	24.928	303.1	.166	5.33	90.9							50
1	52	13.79	13.78	33.375	24.977	298.4	.172	5.27	89.5	5.5	.64	3.3	.06			52
1	62	13.05	13.04	33.426	25.167	280.6	.201	4.98	83.3	7.3	.80	5.9	.04	.17	.21	62
1	73	12.78	12.78	33.498	25.274	270.6	.231	4.63	77.0	9.7	.94	8.3	.02	.11	.16	73
	75 ISL	12.69	12.68	33.509	25.301	268.1	.237	4.57	76.0							76
1	88	12.19	12.17	33.555	25.434	255.7	.270	4.34	71.3	12.0	1.12	11.2	.01	.07	.11	88
	100 ISL	11.90	11.89	33.580	25.507	249.0	.301	4.22	68.9							101
1	103	11.84	11.83	33.585	25.523	247.6	.308	4.19	68.4	13.7	1.21	12.7	.01	.06	.09	103
1	123	10.78	10.77	33.681	25.791	222.5	.357	3.76	60.0	18.5	1.48	17.6	.00	.04	.06	124
	125 ISL	10.70	10.69	33.688	25.810	220.7	.360	3.73	59.5							126
1	148	9.70	9.68	33.790	26.061	197.1	.409	3.39	52.9	25.0	1.78	22.5	.00	.02	.05	149
	150 ISL	9.65	9.63	33.798	26.075	195.7	.412	3.36	52.4							151
1	179	8.99	8.97	33.919	26.277	177.0	.466	2.97	45.6	30.7	1.97	25.5	.00			180
	200 ISL	8.62	8.60	33.981	26.383	167.2	.502	2.85	43.4							202
1	210	8.47	8.45	34.004	26.424	163.4	.519	2.79	42.4	35.5	2.10	27.2	.00			211
1	240	8.08	8.05	34.059	26.527	154.0	.566	2.39	36.0	41.0	2.27	29.4	.02			241
	250 ISL	7.95	7.93	34.069	26.554	151.7	.582	2.30	34.5							252
1	281	7.59	7.56	34.084	26.619	145.8	.629	2.06	30.7	46.8	2.42	31.5	.01			283
	300 ISL	7.36	7.33	34.088	26.654	142.7	.655	1.92	28.5							302
1	342	6.89	6.85	34.100	26.730	135.8	.714	1.59	23.3	56.3	2.67	34.6	.00			344
	400 ISL	6.35	6.31	34.158	26.848	125.1	.790	.98	14.2							403
1	418	6.21	6.17	34.180	26.883	122.0	.812	.80	11.5	70.5	2.99	38.9	.00			421
1	496	5.90	5.86	34.263	26.988	112.8	.903	.45	6.4	79.0	3.14	40.2	.00			499
	500 ISL	5.89	5.84	34.267	26.993	112.4	.908	.44	6.4							504
1	573	5.58	5.53	34.319	27.073	105.4	.987	.34	4.8	86.8	3.21	41.2	.00			577

RV NEW HORIZON CALCOFI CRUISE 8401 STATION 97 40

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 55.5 N	117 50.0 W	01/13/84	0607 GMT	817 M	270	04 KT	270 08 10	1	1013.5 MB	16.3 C	14.0 C	5/8	AS

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.26	16.26	33.442	24.492	343.2	.000	5.70	101.8							0
1	1	16.26	16.26	33.442	24.492	343.2	.003	5.70	101.8	2.9	.34	.0	.00	.09	.05	1
	10 ISL	16.20	16.20	33.439	24.503	342.4	.034	5.75	102.5							10
1	12	16.19	16.19	33.439	24.505	342.3	.041	5.75	102.5	2.7	.34	.1	.00	.09	.05	12
	20 ISL	16.17	16.17	33.440	24.511	342.0	.068	5.73	102.1							20
1	22	16.16	16.16	33.440	24.513	341.9	.075	5.72	101.9	2.6	.34	.2	.00	.11	.06	22
	30 ISL	16.06	16.06	33.443	24.539	339.7	.103	5.74	102.0							30
1	32	16.04	16.03	33.444	24.545	339.1	.109	5.74	102.0	3.2	.35	.2	.00	.12	.08	32
1	42	15.36	15.36	33.411	24.670	327.5	.142	5.69	99.8	3.3	.40	.1	.02	.37	.31	42
	50 ISL	14.36	14.35	33.338	24.830	312.4	.168	5.60	96.2							50
1	53	14.02	14.02	33.318	24.885	307.2	.177	5.56	96.8	4.4	.52	1.3	.10	.36	.30	53
1	63	13.42	13.41	33.332	25.020	294.6	.207	5.38	90.6	5.2	.62	2.8	.05	.28	.28	63
1	73	12.79	12.78	33.416	25.210	276.7	.235	5.16	85.8	6.9	.76	5.6	.02	.18	.19	73
	75 ISL	12.63	12.62	33.422	25.245	273.4	.242	5.09	84.5							76
1	89	11.75	11.74	33.447	25.432	255.9	.278	4.66	75.8	10.7	1.03	10.5	.01	.08	.14	89
	100 ISL	11.18	11.16	33.519	25.593	240.8	.306	4.27	68.7							101
1	104	11.02	11.01	33.544	25.641	236.2	.314	4.16	66.7	15.0	1.30	15.0	.00	.05	.08	104
1	124	10.25	10.23	33.676	25.880	213.9	.361	3.69	58.2	19.8	1.56	19.2	.00	.02	.04	125
	125 ISL	10.22	10.21	33.679	25.885	213.4	.363	3.69	58.2							126
1	150	9.44	9.42	33.807	26.117	191.7	.414	3.76	58.3	23.7	1.66	21.1	.00	.01	.02	151
1	181	8.80	8.78	33.925	26.311	173.7	.470	3.31	50.6	30.0	1.88	24.7	.00			182
	200 ISL	8.42	8.40	33.966	26.403	165.3	.502	3.32	50.3							202
1	212	8.21	8.19	33.986	26.450	160.9	.522	3.32	50.1	34.7	1.94	26.0	.00			213
1	243	7.91	7.88	34.040	26.538	153.0	.570	2.62	39.3	40.5	2.17	28.9	.00			244
	250 ISL	7.83	7.81	34.051	26.557	151.3	.581	2.49	37.3							252
1	283	7.51	7.48	34.092	26.637	144.1	.630	1.99	29.6	48.2	2.44	32.1	.00			285
	300 ISL	7.36	7.33	34.108	26.671	141.1	.654	1.78	26.3							302
1	346	6.96	6.93	34.142	26.753	133.8	.717	1.30	19.1	58.6	2.76	35.5	.00			348
	400 ISL	6.52	6.48	34.173	26.837	126.3	.787	.93	13.5							403
1	423	6.33	6.29	34.185	26.872	123.2	.817	.82	11.9	70.0	2.96	38.6	.00			426
	500 ISL	5.76	5.72	34.235	26.983	113.2	.907	.54	7.8							504
1	502	5.75	5.71	34.235	26.985	112.9	.909	.54	7.7	80.8	3.14	40.9	.00			505
1	579	5.32	5.27	34.296	27.085	104.0	.993	.34	4.8	91.1	3.23	42.5	.00			583

RV NEW HORIZON

CALCOFI CRUISE 8401

STATION 97 45

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 46.2 N	118 10.0 W	01/13/84	1000 GMT	1540 M	130	04 KT		1	1012.2 MB	16.2 C	12.8 C	1/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	15.95	15.95	33.443	24.562	336.5	.000	5.72	101.5	3.2	.34	.2	.00	.09	.05	0
1	10	15.89	15.89	33.441	24.575	335.6	.033	5.74	101.7	3.0	.34	.2	.00	.09	.05	10
	20 ISL	15.81	15.81	33.442	24.593	334.2	.067	5.75	101.8							20
1	21	15.81	15.80	33.442	24.594	334.1	.070	5.75	101.8	3.0	.34	.1	.00	.10	.06	21
	30 ISL	15.82	15.81	33.440	24.591	334.7	.101	5.76	101.9							30
1	31	15.82	15.81	33.440	24.591	334.7	.103	5.76	102.0	2.9	.34	.1	.00	.10	.07	31
1	41	15.76	15.76	33.458	24.618	332.5	.137	5.75	101.7	3.0	.35	.1	.00	.13	.11	41
	50 ISL	15.33	15.32	33.403	24.671	327.6	.167	5.77	101.0							50
1	52	15.20	15.19	33.389	24.689	326.0	.173	5.77	100.8	2.9	.37	.1	.01	.26	.21	52
1	62	14.18	14.18	33.339	24.868	309.1	.204	5.65	96.7	3.8	.47	.8	.13	.22	.24	62
1	72	12.71	12.70	33.378	25.195	278.1	.234	4.99	82.9	7.6	.82	6.4	.04	.12	.19	72
	75 ISL	12.42	12.41	33.396	25.266	271.4	.243	4.84	79.9							76
1	88	11.66	11.65	33.467	25.465	252.8	.276	4.44	72.1	12.0	1.11	11.8	.02	.08	.17	88
	100 ISL	11.00	10.99	33.536	25.637	236.5	.306	4.20	67.2							101
1	103	10.89	10.87	33.550	25.670	233.5	.312	4.15	66.3	15.1	1.29	15.3	.02	.05	.08	103
1	123	10.17	10.16	33.695	25.907	211.3	.358	3.51	55.3	21.4	1.61	20.3	.01	.02	.05	124
	125 ISL	10.13	10.12	33.703	25.919	210.1	.362	3.48	54.8							126
1	149	9.62	9.61	33.808	26.087	194.6	.411	3.17	49.4	25.4	1.81	23.4	.00	.01	.04	150
	150 ISL	9.60	9.59	33.812	26.093	194.0	.412	3.16	49.2							151
1	180	8.82	8.80	33.957	26.333	171.6	.467	2.81	43.0	32.2	2.01	26.5	.01			181
	200 ISL	8.45	8.43	34.006	26.429	162.8	.501	2.70	41.1							202
1	210	8.30	8.28	34.020	26.463	159.7	.517	2.67	40.4	37.4	2.12	28.0	.01			211
1	241	7.88	7.86	34.043	26.544	152.4	.565	2.55	38.2	41.3	2.22	29.5	.00			242
	250 ISL	7.74	7.72	34.051	26.570	150.0	.579	2.43	36.4							252
1	282	7.29	7.26	34.080	26.658	141.9	.626	1.95	28.8	50.7	2.46	32.7	.00			284
	300 ISL	7.11	7.08	34.099	26.699	138.3	.651	1.71	25.2							302
1	344	6.76	6.72	34.145	26.783	130.8	.710	1.20	17.5	60.8	2.79	36.1	.00			346
	400 ISL	6.44	6.41	34.187	26.858	124.3	.781	.86	12.4							403
1	420	6.34	6.30	34.199	26.882	122.2	.806	.78	11.3	70.0	2.98	38.5	.00			423
1	498	5.79	5.75	34.247	26.989	112.6	.897	.52	7.4	80.4	3.13	40.7	.00			501
	500 ISL	5.78	5.73	34.249	26.993	112.3	.900	.51	7.3							504
1	575	5.38	5.34	34.303	27.084	104.2	.981	.35	5.0	89.8	3.25	42.0	.00			579

RV NEW HORIZON

CALCOFI CRUISE 8401

STATION 97 50

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 36.1 N	118 29.6 W	01/13/84	1412 GMT	2368 M	140	04 KT	310 06 07	1	1012.2 MB	15.4 C	13.3 C	4/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	16.02	16.02	33.489	24.581	334.7	.000	5.72	101.7	3.4	.36	.3	.00	.13	.11	0
1	10	16.05	16.05	33.487	24.574	335.6	.033	5.73	101.9	3.4	.36	.3	.00	.13	.09	10
	20 ISL	16.02	16.02	33.487	24.580	335.4	.067	5.73	101.9							20
1	26	16.01	16.00	33.487	24.584	335.2	.087	5.73	101.8	3.4	.35	.3	.00	.13	.11	26
	30 ISL	15.98	15.97	33.484	24.589	333.8	.101	5.72	101.6							30
1	42	15.65	15.64	33.466	24.648	329.6	.140	5.69	100.4	3.4	.37	.3	.01	.31	.27	42
	50 ISL	15.18	15.17	33.446	24.739	321.2	.166	5.53	96.6							50
1	57	14.47	14.46	33.429	24.877	308.1	.188	5.29	91.1	5.5	.60	3.0	.13	.34	.38	57
1	67	12.60	12.60	33.423	25.251	272.6	.217	4.70	77.9	9.9	.94	8.6	.04	.22	.29	67
	75 ISL	11.93	11.92	33.454	25.405	258.1	.239	4.42	72.3							76
1	78	11.81	11.80	33.466	25.437	255.2	.245	4.36	71.0	12.3	1.17	12.2	.02	.14	.22	78
1	93	11.22	11.21	33.531	25.595	240.4	.282	4.04	65.0	15.0	1.34	15.3	.02	.08	.15	93
	100 ISL	10.84	10.83	33.586	25.705	230.1	.300	3.83	61.2							101
1	109	10.43	10.42	33.653	25.829	218.4	.319	3.60	57.0	20.1	1.60	19.3	.01	.04	.07	109
1	123	9.98	9.96	33.737	25.972	205.0	.350	3.36	52.7	23.5	1.74	21.5	.01	.01	.05	124
	125 ISL	9.94	9.92	33.746	25.986	203.7	.354	3.34	52.3							126
1	149	9.38	9.36	33.858	26.167	186.9	.401	3.07	47.6	28.3	1.93	24.1	.01	.01	.03	150
	150 ISL	9.36	9.34	33.861	26.171	186.5	.402	3.06	47.4							151
1	170	8.97	8.95	33.928	26.287	175.8	.439	2.90	44.5	31.2	2.02	25.5	.01	.01	.02	171
1	190	8.65	8.63	33.979	26.377	167.6	.473	2.82	43.0	34.1	2.15	26.9	.01			191
	200 ISL	8.52	8.50	34.007	26.419	163.7	.490	2.72	41.3							202
1	211	8.38	8.36	34.037	26.464	159.6	.507	2.61	39.6	37.6	2.16	28.0	.01			212
1	242	7.81	7.79	34.090	26.591	147.9	.555	2.59	38.8	42.0	2.21	29.4	.01			243
	250 ISL	7.73	7.70	34.097	26.609	146.3	.567	2.47	36.9							252
1	283	7.48	7.46	34.113	26.656	142.2	.615	1.87	27.8	49.5	2.48	32.0	.01			285
	300 ISL	7.33	7.30	34.126	26.690	139.3	.638	1.65	24.4							302
1	345	6.87	6.83	34.164	26.783	130.8	.699	1.17	17.1	61.0	2.78	35.9	.00			347
	400 ISL	6.28	6.24	34.202	26.892	121.0	.768	.75	10.9							403
1	421	6.07	6.04	34.216	26.929	117.5	.794	.64	9.2	75.5	3.03	39.6	.01			424
1	499	5.64	5.60	34.266	27.023	109.3	.882	.42	6.0	83.5	3.16	41.1	.00			502
	500 ISL	5.64	5.59	34.267	27.025	109.1	.883	.42	5.9							504
1	575	5.28	5.23	34.332	27.119	100.8	.962	.31	4.4	92.3	3.26	42.6	.00			579

RV NEW HORIZON CALCOFI CRUISE 8401 STATION 97 55

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 25.9 N	118 50.2 W	01/13/84	1824 GMT	1530 M	140 08 KT	330 05 07	1	1012.2 MB	16.6 C	14.6 C	1/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	15.71	15.71	33.365	24.557	337.0	.000	5.80	102.4	2.6	.37	.2	.00	.12	.07	0
1	10	15.65	15.65	33.361	24.567	336.3	.034	5.85	103.1	2.6	.38	.2	.00	.13	.08	10
	20 ISL	15.64	15.64	33.361	24.569	336.5	.067	5.82	102.6							20
1	27	15.64	15.63	33.361	24.571	336.5	.091	5.78	101.9	3.2	.34	.2	.00	.13	.08	27
	30 ISL	15.63	15.63	33.366	24.575	336.1	.101	5.78	101.8							30
1	41	15.62	15.62	33.385	24.593	334.9	.137	5.76	101.5	3.2	.34	.2	.00	.20	.09	41
	50 ISL	14.96	14.96	33.335	24.699	325.0	.168	5.70	99.1							50
1	57	14.25	14.25	33.305	24.827	312.9	.189	5.66	97.0	4.0	.46	.8	.13	.40	.35	57
1	67	13.07	13.06	33.342	25.097	287.4	.219	5.29	88.5	6.1	.68	4.5	.07	.16	.17	67
	75 ISL	12.36	12.35	33.375	25.260	271.9	.242	4.95	81.6							76
1	79	12.12	12.11	33.392	25.321	266.2	.252	4.81	78.9	9.7	.95	8.8	.02	.11	.20	79
1	93	11.47	11.45	33.492	25.520	247.6	.288	4.45	72.0	12.6	1.15	12.3	.01	.07	.11	93
	100 ISL	11.17	11.16	33.552	25.620	238.2	.306	4.41	70.9							101
1	109	10.84	10.82	33.617	25.730	227.9	.326	4.38	70.0	14.6	1.22	14.2	.01	.03	.06	109
1	123	10.14	10.12	33.701	25.917	210.2	.358	4.16	65.5	18.6	1.41	17.2	.01	.01	.05	124
	125 ISL	10.09	10.07	33.708	25.931	208.9	.362	4.14	65.1							126
1	150	9.52	9.50	33.810	26.106	192.7	.412	3.69	57.3	24.2	1.65	21.2	.01	.01	.02	151
1	171	9.10	9.08	33.909	26.251	179.3	.451	2.99	46.1	29.9	1.93	25.0	.01	.01	.03	172
1	191	8.78	8.76	33.986	26.361	169.1	.486	2.71	41.5	33.8	2.07	26.9	.01			192
	200 ISL	8.66	8.64	34.011	26.401	165.5	.501	2.59	39.6							202
1	212	8.50	8.47	34.036	26.446	161.4	.520	2.45	37.2	37.6	2.16	28.4	.02			213
1	242	8.01	7.99	34.075	26.549	151.9	.567	2.16	32.5	43.3	2.32	30.3	.01			243
	250 ISL	7.88	7.86	34.081	26.573	149.7	.579	2.09	31.3							252
1	283	7.42	7.39	34.098	26.654	142.4	.628	1.80	26.7	50.3	2.50	32.8	.01			285
	300 ISL	7.27	7.24	34.112	26.686	139.6	.652	1.65	24.5							302
1	345	6.94	6.91	34.147	26.760	133.1	.713	1.28	18.8	59.0	2.73	35.1	.01			347
	400 ISL	6.41	6.37	34.173	26.851	124.9	.784	.89	12.9							403
1	422	6.20	6.16	34.184	26.887	121.6	.812	.76	11.0	71.5	2.95	38.8	.00			425
1	499	5.69	5.64	34.250	27.004	111.0	.900	.46	6.6	82.3	3.12	40.9	.00			502
	500 ISL	5.68	5.64	34.251	27.006	110.9	.902	.46	6.5							504
1	575	5.28	5.23	34.297	27.091	103.3	.982	.34	4.8	91.3	3.21	42.3	.00			579

RV NEW HORIZON CALCOFI CRUISE 8401 STATION 97 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 15.5 N	119 10.3 W	01/13/84	2250 GMT	3737 M	250 11 KT	280 04 05	1	1010.2 MB	16.5 C	14.0 C	1/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.94	15.94	33.307	24.460	346.3	.000	5.73	101.6							0
1	1	15.94	15.94	33.307	24.460	346.3	.003	5.73	101.6	3.2	.37	.2	.00	.10	.04	1
	10 ISL	15.62	15.62	33.332	24.552	337.8	.034	5.85	103.1							10
1	12	15.57	15.56	33.335	24.566	336.5	.041	5.87	103.3	3.2	.37	.2	.00	.12	.06	12
	20 ISL	15.42	15.42	33.330	24.594	334.1	.068	5.86	102.9							20
1	27	15.35	15.35	33.324	24.605	333.2	.091	5.86	102.7	3.2	.38	.2	.00	.13	.07	27
	30 ISL	15.34	15.34	33.330	24.612	332.6	.101	5.86	102.6							30
1	43	15.24	15.23	33.361	24.659	328.5	.144	5.85	102.3	3.3	.41	.2	.00	.25	.15	43
	50 ISL	15.07	15.06	33.363	24.699	324.6	.167	5.82	101.4							50
1	58	14.69	14.68	33.366	24.782	317.3	.192	5.75	99.4	3.4	.47	.5	.14	.32	.27	58
1	68	13.75	13.74	33.341	24.960	300.4	.223	5.59	94.8	4.2	.60	2.1	.18			68
	75 ISL	13.13	13.12	33.279	25.036	293.4	.244	5.58	93.4							76
1	79	12.87	12.86	33.256	25.070	290.2	.255	5.57	92.7	5.3	.62	2.4	.03	.14	.19	79
1	94	12.24	12.23	33.401	25.304	268.2	.297	5.08	83.5	8.2	.83	6.7	.01	.09	.16	94
	100 ISL	11.96	11.95	33.433	25.383	260.9	.314	4.85	79.3							101
1	109	11.60	11.59	33.466	25.475	252.3	.335	4.56	74.0	12.3	1.15	11.6	.01	.08	.11	109
1	124	11.09	11.07	33.548	25.633	237.6	.374	4.19	67.3	15.5	1.34	15.0	.01	.05	.09	125
	125 ISL	11.07	11.05	33.551	25.639	237.0	.376	4.17	67.0							126
1	149	10.13	10.12	33.692	25.911	211.4	.430	3.72	58.5	21.3	1.63	19.8	.01	.01	.03	150
	150 ISL	10.11	10.09	33.697	25.919	210.7	.432	3.73	58.6							151
1	170	9.49	9.47	33.810	26.112	192.7	.472	3.97	61.6	23.4	1.63	20.2	.01	.01	.03	171
1	190	9.14	9.12	33.868	26.212	183.3	.510	3.90	60.1	25.5	1.70	21.4	.01			191
	200 ISL	8.92	8.90	33.907	26.278	177.2	.528	3.72	57.0							202
1	211	8.69	8.67	33.949	26.348	170.7	.547	3.49	53.3	30.5	1.88	24.3	.00			212
1	241	8.24	8.21	34.004	26.460	160.5	.596	3.17	47.9	35.6	2.01	26.4	.00			242
	250 ISL	8.12	8.09	34.015	26.487	158.1	.611	3.01	45.4							252
1	282	7.72	7.70	34.041	26.565	151.0	.661	2.44	36.4	43.8	2.29	30.2	.00			284
	300 ISL	7.50	7.47	34.053	26.606	147.3	.687	2.24	33.2							302
1	343	6.99	6.95	34.079	26.700	138.8	.749	1.83	26.9	53.9	2.57	34.0	.00			345
	400 ISL	6.40	6.37	34.118	26.810	128.8	.825	1.24	18.0							403
1	418	6.24	6.20	34.132	26.841	125.9	.848	1.07	15.4	67.5	2.88	38.3	.01			421
1	494	5.71	5.67	34.195	26.958	115.4	.939	.62	8.8	78.9	3.10	40.9	.00			497
	500 ISL	5.68	5.64	34.202	26.968	114.6	.946	.59	8.4							504
1	569	5.47	5.42	34.289	27.063	106.1	1.023	.39	5.5	87.0	3.23	42.1	.00			573

RV NEW HORIZON

CALCOFI CRUISE 8401

STATION 97 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 54.8 N	119 49.8 W	01/14/84	0456 GMT	3169 M	340	08 KT		1	1012.5 MB	15.1 C	12.4 C	7/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.98	16.98	33.540	24.400	351.9	.000	5.62	101.8							0
1	1	16.98	16.98	33.540	24.400	351.9	.004	5.62	101.8	2.9	.32	.3	.00	.08	.05	1
	10 ISL	16.99	16.99	33.538	24.396	352.6	.035	5.63	102.0							10
1	12	16.99	16.99	33.538	24.396	352.7	.042	5.63	102.0	2.9	.32	.3	.00	.07	.05	12
	20 ISL	17.00	17.00	33.538	24.395	353.2	.071	5.63	102.0							20
1	26	17.00	17.00	33.538	24.394	353.4	.091	5.62	101.9	2.8	.31	.3	.00	.08	.05	26
	30 ISL	17.00	17.00	33.540	24.395	353.4	.106	5.62	101.9							30
1	41	17.01	17.00	33.548	24.400	353.3	.144	5.62	101.9	2.7	.31	.2	.00	.08	.05	41
	50 ISL	17.01	17.00	33.548	24.401	353.5	.177	5.61	101.8							50
1	56	17.01	17.00	33.548	24.401	353.7	.197	5.61	101.7	2.6	.31	.2	.00	.08	.06	56
1	66	17.01	16.99	33.547	24.402	354.0	.232	5.60	101.5	2.5	.31	.2	.00	.08	.06	66
	75 ISL	16.99	16.98	33.546	24.406	353.9	.265	5.61	101.6							76
1	76	16.99	16.97	33.546	24.406	353.9	.267	5.61	101.7	2.5	.31	.2	.00	.10	.08	76
1	91	15.18	15.17	33.466	24.753	321.1	.318	5.67	99.1	3.0	.39	.2	.12	.19	.26	91
	100 ISL	14.52	14.50	33.481	24.908	306.5	.347	5.58	96.2							101
1	106	14.22	14.20	33.495	24.983	299.5	.364	5.49	94.1	4.1	.48	1.4	.04	.12	.18	106
1	121	13.48	13.46	33.489	25.131	285.6	.408	5.17	87.3	6.0	.66	4.2	.01	.09	.16	121
	125 ISL	13.14	13.13	33.489	25.198	279.3	.421	5.08	85.1							126
1	144	11.73	11.71	33.548	25.515	249.4	.472	4.58	74.5	11.3	1.04	11.0	.01	.05	.06	145
	150 ISL	11.46	11.44	33.594	25.602	241.2	.486	4.35	70.4							151
1	164	10.89	10.87	33.720	25.802	222.4	.519	3.77	60.3	18.0	1.45	17.0	.01	.01	.04	165
1	184	10.31	10.28	33.841	25.999	203.9	.561	3.32	52.5	22.7	1.71	20.8	.00			185
	200 ISL	9.84	9.81	33.917	26.137	191.0	.592	3.12	48.9							202
1	204	9.73	9.70	33.933	26.169	188.0	.600	3.08	48.1	27.0	1.86	23.2	.00			205
1	234	9.27	9.24	34.044	26.331	173.1	.654	2.62	40.5	31.9	2.03	25.3	.01			235
	250 ISL	9.09	9.07	34.089	26.395	167.4	.681	2.44	37.7							252
1	276	8.84	8.81	34.140	26.475	160.1	.723	2.20	33.7	37.8	2.25	28.2	.01			277
	300 ISL	8.53	8.50	34.167	26.544	153.8	.761	1.94	29.5							302
1	335	8.07	8.04	34.189	26.632	145.9	.814	1.57	23.7	47.3	2.58	31.7	.00			337
	400 ISL	7.32	7.28	34.230	26.774	133.1	.905	1.05	15.6							403
1	411	7.22	7.18	34.236	26.793	131.3	.919	.98	14.5	59.0	2.86	35.2	.00			413
1	487	6.75	6.70	34.299	26.907	121.2	1.015	.49	7.2	68.1	3.04	37.8	.00			490
	500 ISL	6.65	6.60	34.305	26.926	119.6	1.031	.47	6.8							504
1	561	6.09	6.04	34.313	27.005	112.3	1.102	.35	5.0	78.6	3.15	40.0	.00			565

RV NEW HORIZON

CALCOFI CRUISE 8401

STATION 97 80

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 36.1 N	120 30.6 W	01/14/84	1043 GMT	3926 M	270	15 KT		2	1015.2 MB	15.6 C	12.0 C	8/8	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.90	16.90	33.500	24.387	353.2	.000	5.60	101.3							0
1	1	16.90	16.90	33.500	24.387	353.2	.004	5.60	101.3	2.8	.29	.3	.00	.08	.06	1
	10 ISL	16.92	16.92	33.499	24.382	354.0	.035	5.66	102.4							10
1	11	16.93	16.92	33.499	24.381	354.1	.039	5.66	102.4	2.8	.29	.3	.00	.09	.05	11
	20 ISL	16.92	16.92	33.498	24.383	354.2	.071	5.65	102.2							20
1	26	16.91	16.91	33.498	24.385	354.3	.092	5.64	102.0	2.6	.29	.3	.00	.08	.05	26
	30 ISL	16.91	16.91	33.497	24.383	354.5	.106	5.63	101.9							30
1	41	16.92	16.92	33.497	24.381	355.1	.145	5.62	101.7	2.7	.29	.3	.00	.08	.06	41
	50 ISL	16.93	16.92	33.498	24.381	355.5	.177	5.61	101.6							50
1	55	16.93	16.92	33.498	24.381	355.6	.194	5.61	101.5	2.6	.29	.3	.00	.09	.05	55
1	70	16.79	16.77	33.474	24.397	354.5	.247	5.62	101.4	2.7	.30	.3	.00	.09	.07	70
	75 ISL	16.16	16.15	33.474	24.542	341.0	.266	5.71	101.4							76
1	80	15.53	15.52	33.474	24.682	327.6	.281	5.76	101.4	2.8	.34	.2	.04	.23	.27	80
1	94	14.39	14.38	33.465	24.923	304.9	.325	5.31	91.3	4.2	.54	1.8	.03	.17	.21	94
	100 ISL	14.00	13.99	33.466	25.005	297.2	.345	5.21	88.8							101
1	114	13.28	13.27	33.484	25.166	282.1	.384	5.01	84.2	6.3	.73	5.3	.02	.10	.14	114
	125 ISL	12.63	12.62	33.526	25.327	267.0	.415	4.71	78.1							126
1	133	12.18	12.17	33.572	25.449	255.5	.437	4.44	73.0	11.0	1.06	10.8	.01	.05	.06	134
	150 ISL	11.46	11.44	33.702	25.686	233.3	.478	3.83	62.0							151
1	152	11.36	11.34	33.719	25.717	230.3	.483	3.75	60.6	16.3	1.44	16.4	.01	.02	.05	153
1	172	10.58	10.56	33.792	25.914	211.8	.527	3.49	55.5	20.7	1.63	19.2	.01	.01	.02	173
1	192	10.11	10.09	33.887	26.068	197.5	.568	3.20	50.4	24.2	1.81	21.8	.00			193
	200 ISL	9.96	9.94	33.913	26.114	193.3	.583	3.12	49.0							202
1	212	9.75	9.73	33.947	26.176	187.6	.606	3.01	47.0	27.3	1.91	23.7	.00			213
1	247	9.14	9.11	34.046	26.354	171.1	.668	2.68	41.3	32.5	2.09	26.2	.01			248
	250 ISL	9.09	9.06	34.053	26.368	169.9	.674	2.65	40.8							252
1	296	8.39	8.36	34.117	26.527	155.3	.749	2.21	33.5	40.5	2.32	29.3	.00			298
	300 ISL	8.33	8.30	34.118	26.537	154.4	.755	2.18	33.1							302
1	351	7.56	7.53	34.123	26.654	143.6	.831	1.80	26.8	49.7	2.54	32.4	.00			353
	400 ISL	7.00	6.96	34.143	26.750	135.0	.899	1.37	20.2							403
1	436	6.66	6.62	34.167	26.814	129.2	.947	1.06	15.5	63.8	2.87	37.0	.01			439
	500 ISL	6.25	6.21	34.246	26.931	118.7	1.026	.60	8.7							504
1	523	6.12	6.08	34.272	26.968	115.3	1.053	.47	6.8	76.3	3.15	40.1	.00			526
	600 ISL	5.57	5.52	34.289	27.050	107.6	1.139	.26	3.6							605
1	610	5.50	5.45	34.291	27.061	106.9	1.150	.25	3.5	87.5	3.25	41.9	.00			614

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 97 90

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 16.3 N	121 10.3 W	01/14/84	1637 GMT	3832 M	310	09 KT	300 05 06	1	1017.6 MB	15.9 C	12.5 C	5/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	17.40	17.40	33.567	24.322	359.4	.000	5.59	102.1	2.6	.33	.0	.00	.08	.05	0
1	10	17.40	17.40	33.565	24.319	360.0	.036	5.54	101.2	2.6	.33	.0	.00	.09	.05	10
	20 ISL	17.40	17.40	33.565	24.320	360.2	.072	5.55	101.3							20
1	26	17.40	17.40	33.565	24.320	360.4	.093	5.55	101.4	2.6	.33	.0	.00	.07	.05	26
	30 ISL	17.40	17.40	33.565	24.320	360.6	.108	5.55	101.4							30
1	41	17.42	17.41	33.566	24.318	361.2	.147	5.55	101.4	2.6	.33	.0	.00	.08	.04	41
	50 ISL	17.42	17.41	33.566	24.318	361.5	.180	5.55	101.4							50
1	57	17.42	17.41	33.565	24.317	361.7	.205	5.55	101.4	2.6	.33	.0	.00	.09	.04	57
1	72	17.41	17.40	33.564	24.318	362.2	.259	5.54	101.2	2.6	.33	.0	.00	.08	.04	72
	75 ISL	17.35	17.33	33.557	24.329	361.3	.271	5.55	101.3							76
1	82	17.21	17.19	33.540	24.349	359.5	.295	5.57	101.4	2.6	.33	.0	.00	.11	.08	82
1	97	15.26	15.25	33.479	24.746	321.9	.346	5.59	97.9	3.0	.42	.1	.10	.20	.16	97
	100 ISL	15.01	14.99	33.480	24.803	316.8	.356	5.57	97.0							101
1	118	13.98	13.96	33.484	25.025	295.7	.410	5.31	90.5	4.7	.57	2.4	.03	.11	.14	118
	125 ISL	13.42	13.40	33.491	25.145	284.5	.432	5.11	86.1							126
1	138	12.47	12.45	33.530	25.362	264.0	.469	4.67	77.2	9.0	.95	8.7	.01	.05	.07	139
	150 ISL	11.92	11.90	33.613	25.532	248.0	.498	4.23	69.1							151
1	157	11.59	11.57	33.666	25.634	238.4	.516	3.98	64.6	14.8	1.32	14.4		.03	.06	158
1	178	10.42	10.40	33.734	25.895	213.7	.563	3.73	59.1	19.8	1.55	18.4	.00	.01	.03	179
1	199	10.01	9.99	33.850	26.056	198.7	.606	3.43	53.9	23.1	1.79	20.8	.01			200
	200 ISL	9.99	9.97	33.853	26.063	198.2	.608	3.42	53.7							202
1	220	9.45	9.43	33.908	26.195	185.8	.647	3.23	50.1	27.0	1.86	22.9	.00			221
	250 ISL	8.72	8.69	33.993	26.379	168.7	.700	3.00	45.8							252
1	254	8.63	8.61	34.002	26.399	166.8	.706	2.97	45.3	33.5	2.02	25.8	.00			255
	300 ISL	7.91	7.88	34.060	26.554	152.6	.780	2.50	37.5							302
1	305	7.85	7.82	34.063	26.565	151.5	.788	2.44	36.6	43.1	2.30	29.6	.00			307
1	361	7.24	7.21	34.101	26.682	141.0	.869	1.80	26.6	52.2	2.59	33.0	.00			363
	400 ISL	6.82	6.79	34.128	26.761	133.7	.923	1.38	20.2							403
1	446	6.39	6.35	34.164	26.847	125.9	.983	.95	13.8	66.9	2.96	37.6	.01			449
	500 ISL	6.11	6.06	34.219	26.927	118.8	1.049	.62	8.9							504
1	534	5.97	5.92	34.251	26.971	115.0	1.088	.48	6.9	77.5	3.11	39.6	.00			537
	600 ISL	5.61	5.56	34.297	27.052	107.8	1.162	.38	5.4							605
1	619	5.50	5.45	34.306	27.073	105.9	1.182	.35	5.0	86.9	3.27	41.4	.00			623

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 97 100

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
29 55.6 N	121 50.1 W	01/14/84	2303 GMT	4211 M	270	09 KT	310 05 06	2	1018.6 MB	17.0 C	13.6 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	17.31	17.31	33.559	24.337	358.0	.000	5.57	101.6							0
1	1	17.31	17.31	33.559	24.337	358.0	.004	5.57	101.6	2.6	.32	.3	.00	.09	.05	1
	10 ISL	17.30	17.29	33.554	24.336	358.4	.036	5.60	102.1							10
1	11	17.29	17.29	33.553	24.336	358.4	.039	5.60	102.1	2.5	.32	.3	.00	.09	.04	11
	20 ISL	17.28	17.28	33.550	24.337	358.6	.072	5.59	102.0							20
1	27	17.27	17.27	33.549	24.339	358.7	.096	5.58	101.7	2.5	.32	.1	.00	.08	.04	27
	30 ISL	17.27	17.27	33.549	24.339	358.7	.108	5.58	101.6							30
1	42	17.27	17.26	33.550	24.340	359.0	.150	5.57	101.5	2.5	.31	.1	.00	.09	.04	42
	50 ISL	17.27	17.26	33.550	24.341	359.2	.179	5.57	101.5							50
1	58	17.27	17.26	33.550	24.342	359.4	.207	5.57	101.5	2.5	.31	.1	.00	.09	.06	58
1	73	17.27	17.26	33.550	24.341	360.0	.261	5.56	101.3	2.5	.31	.1	.00	.09	.06	73
	75 ISL	17.05	17.04	33.562	24.403	354.1	.269	5.64	102.3							76
1	84	16.10	16.09	33.621	24.668	329.1	.299	5.91	105.3	2.6	.31	.1	.00	.19	.18	84
1	99	15.36	15.35	33.678	24.878	309.5	.347	5.77	101.3	2.8	.32	.0	.08	.23	.26	99
	100 ISL	15.34	15.32	33.689	24.891	308.2	.351	5.76	101.1							101
1	120	14.90	14.88	33.784	25.061	292.6	.409	5.59	97.3	3.5	.33	.5	.07	.12	.17	120
	125 ISL	14.55	14.53	33.750	25.110	288.0	.425	5.55	95.9							126
1	139	13.45	13.43	33.636	25.251	274.8	.466	5.32	89.8	5.4	.56	3.3	.01	.08	.11	140
	150 ISL	12.64	12.62	33.588	25.374	263.2	.494	4.88	80.9							151
1	160	11.93	11.91	33.585	25.507	250.6	.521	4.37	71.4	11.7	1.12	11.7	.01	.04	.06	161
1	180	11.06	11.03	33.758	25.803	222.7	.568	3.56	57.2	18.6	1.50	17.8	.00	.01	.03	181
	200 ISL	10.49	10.47	33.854	25.978	206.4	.610	3.25	51.5							202
1	201	10.46	10.44	33.858	25.986	205.6	.613	3.24	51.4	22.7	1.74	20.8	.00			202
1	222	9.80	9.77	33.902	26.134	191.8	.654	3.17	49.6	25.7	1.82	22.7	.00			223
	250 ISL	9.24	9.22	33.963	26.272	179.0	.706	3.02	46.7							252
1	258	9.17	9.14	33.988	26.304	176.1	.720	2.98	46.0	30.6	1.96	24.8	.00			259
	300 ISL	9.46	9.43	34.287	26.491	159.5	.791	1.35	21.0							302
1	308	9.53	9.50	34.344	26.524	156.6	.804	1.01	15.7	40.7	2.62	30.0	.00			310
1	365	8.54	8.50	34.345	26.684	142.0	.889	.76	11.6	49.3	2.88	32.4	.00			367
	400 ISL	7.89	7.85	34.333	26.772	133.8	.937	.63	9.5							403
1	451	7.04	6.99	34.320	26.884	123.2	1.003	.47	6.9	65.1	3.07	36.8	.00			454
	500 ISL	6.46	6.42	34.335	26.973	115.0	1.061	.33	4.8							504
1	539	6.11	6.06	34.350	27.031	109.6	1.104	.25	3.6	78.2	3.21	40.1	.00			542
	600 ISL	5.63	5.58	34.366	27.10	103.0	1.169	.26	3.7							605
1	625	5.48	5.43	34.369	27.125	101.1	1.195	.26	3.7	89.1	3.26	41.9	.00			629

RV NEW HORIZON

CALCOFI CRUISE 8401

STATION 100 30

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 41.2 N	116 46.8 W	01/17/84	0704 GMT	437 M	010	06 KT		2	1013.9 MB	14.2 C	12.1 C	8/8	NS

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.09	15.09	33.440	24.751	318.6	.000	5.79	101.0							0
1	1	15.09	15.09	33.440	24.751	318.6	.003	5.79	101.0	4.3	.41	.3	.01	.75	.61	1
	10 ISL	15.11	15.11	33.440	24.746	319.3	.032	5.83	101.7							10
1	11	15.12	15.11	33.440	24.746	319.3	.035	5.83	101.8	4.1	.42	.3	.01	.72	.38	11
	20 ISL	14.68	14.68	33.399	24.807	313.7	.064	5.76	99.6							20
	30 ISL	14.03	14.02	33.362	24.917	303.5	.094	5.59	95.4							30
1	32	13.89	13.88	33.357	24.943	301.1	.100	5.55	94.4	4.6	.54	1.5	.05	.68	.50	32
1	47	13.10	13.09	33.412	25.145	282.2	.144	5.16	86.4	6.5	.75	4.9	.02	.27	.37	47
	50 ISL	12.99	12.99	33.436	25.184	278.6	.153	5.04	84.1							50
1	57	12.82	12.81	33.485	25.257	271.9	.171	4.79	79.8	8.6	.91	7.5	.01	.19	.19	57
1	72	12.51	12.50	33.529	25.352	263.1	.211	4.58	75.8	10.3	1.01	9.4	.01	.11	.16	72
	75 ISL	12.44	12.43	33.544	25.378	260.8	.220	4.48	74.1							76
1	88	12.17	12.16	33.598	25.471	252.3	.252	4.18	68.7	13.1	1.24	12.4	.02	.06	.13	88
	100 ISL	11.89	11.88	33.623	25.543	245.7	.283	4.23	69.1							101
1	103	11.83	11.82	33.626	25.557	244.4	.289	4.25	69.4	14.6	1.32	13.8	.01	.05	.13	103
	125 ISL	11.14	11.13	33.663	25.712	230.0	.343	3.90	62.7							126
1	127	11.06	11.04	33.670	25.733	228.1	.348	3.84	61.7	17.8	1.47	16.5	.00	.04	.13	128
1	148	10.21	10.19	33.791	25.976	205.3	.393	3.37	53.2	23.5	1.71	20.8	.00	.01	.06	149
	150 ISL	10.16	10.14	33.799	25.990	204.0	.397	3.34	52.6							151
1	178	9.58	9.56	33.896	26.164	187.9	.452	2.98	46.4	28.5	1.90	23.8	.00	.01	.05	179
	200 ISL	9.22	9.20	33.946	26.261	179.0	.492	2.84	43.8							202
1	209	9.10	9.08	33.962	26.294	176.1	.508	2.80	43.1	32.4	2.04	25.5	.00	.01	.04	210
1	245	8.68	8.65	34.017	26.403	166.2	.569	2.63	40.1	36.5	2.14	27.3	.00			246
	250 ISL	8.59	8.56	34.025	26.423	164.4	.578	2.58	39.3							252
	300 ISL	7.74	7.71	34.088	26.600	148.0	.656	2.04	30.6							302
1	301	7.72	7.69	34.089	26.604	147.6	.658	2.03	30.3	47.4	2.41	31.3	.00			303
1	356	7.11	7.07	34.126	26.721	137.1	.736	1.57	23.1	55.8	2.65	34.3	.00			358
	400 ISL	6.71	6.67	34.164	26.805	129.4	.794	1.18	17.2							403
1	417	6.57	6.53	34.181	26.836	126.6	.817	1.02	14.8	66.2	2.89	37.1	.00			420

RV NEW HORIZON

CALCOFI CRUISE 8401

STATION 100 35

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 31.3 N	117 05.1 W	01/17/84	0231 GMT	1207 M	310	21 KT		2	1012.8 MB	15.0 C	14.6 C	8/8	NS

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.04	16.04	33.470	24.564	336.4	.000	5.74	102.1							0
1	2	16.04	16.04	33.470	24.564	336.4	.007	5.74	102.1	3.2	.34	.0	.00	.19	.08	2
	10 ISL	16.04	16.04	33.467	24.561	336.9	.034	5.77	102.6							10
1	13	16.04	16.04	33.466	24.560	337.1	.044	5.78	102.8	3.1	.34	.0	.00	.20	.07	13
	20 ISL	16.00	16.00	33.463	24.567	336.6	.067	5.79	102.8							20
1	23	15.98	15.98	33.463	24.572	336.3	.077	5.79	102.8	3.1	.33	.0	.00	.23	.08	23
	30 ISL	15.93	15.93	33.462	24.582	335.6	.101	5.77	102.4							30
1	33	15.91	15.91	33.461	24.586	335.3	.111	5.76	102.2	3.1	.33	.0	.00	.20	.08	33
1	43	15.82	15.81	33.458	24.604	333.8	.144	5.89	104.3	3.2	.34	.0	.00	.27	.10	43
	50 ISL	15.59	15.58	33.443	24.644	330.2	.168	5.85	103.0							50
1	59	15.06	15.05	33.410	24.736	321.7	.196	5.70	99.3	4.1	.42	.2	.06	.76	.39	59
1	69	14.04	14.03	33.358	24.912	305.1	.227	5.49	93.7	4.9	.52	1.3	.11	.64	.57	69
	75 ISL	13.47	13.46	33.360	25.032	293.9	.246	5.38	90.7							76
1	79	13.17	13.16	33.369	25.098	287.6	.257	5.32	89.2	5.9	.65	3.7	.05	.27	.40	79
1	95	12.37	12.36	33.441	25.311	267.6	.301	5.05	83.3	7.9	.83	7.1	.03	.16	.18	95
	100 ISL	12.03	12.01	33.459	25.390	260.2	.315	4.94	80.9							101
1	114	11.20	11.19	33.527	25.595	240.9	.352	4.55	73.2	12.9	1.14	12.3	.02	.06	.10	115
	125 ISL	10.94	10.93	33.625	25.719	229.6	.376	4.07	65.2							126
1	135	10.76	10.75	33.722	25.826	219.4	.400	3.63	57.9	19.2	1.54	18.1	.01	.02	.03	136
	150 ISL	10.31	10.29	33.786	25.956	207.3	.431	3.42	54.1							151
1	161	9.93	9.91	33.820	26.045	198.9	.454	3.36	52.7	24.4	1.77	21.5	.01	.01	.03	162
1	192	9.10	9.08	33.943	26.278	177.2	.512	3.00	46.2	30.4	1.97	24.7	.01			193
	200 ISL	8.94	8.92	33.969	26.324	173.0	.526	2.93	45.0							202
1	222	8.58	8.56	34.028	26.427	163.5	.562	2.75	41.9	35.9	2.10	26.7	.01			223
	250 ISL	8.22	8.20	34.076	26.519	155.1	.607	2.40	36.2							252
1	259	8.12	8.09	34.086	26.543	152.9	.620	2.28	34.4	42.1	2.28	29.1	.01			260
	300 ISL	7.43	7.40	34.116	26.666	141.6	.681	1.77	26.3							302
1	309	7.29	7.26	34.120	26.690	139.4	.694	1.67	24.7	53.0	2.56	33.0	.00			311
1	366	6.83	6.80	34.161	26.785	130.9	.771	1.19	17.4	60.8	2.81	35.5	.00			368
	400 ISL	6.56	6.53	34.195	26.849	125.2	.815	.91	13.3							403
1	452	6.20	6.16	34.250	26.940	117.1	.878	.57	8.2	74.2	3.03	38.6	.00			455
	500 ISL	5.98	5.94	34.291	27.000	111.9	.933	.42	6.0							504
1	539	5.83	5.78	34.317	27.041	108.3	.976	.36	5.2	82.6	3.17	40.1	.00			543
	600 ISL	5.53	5.48	34.347	27.101	103.1	1.040	.34	4.8							605
1	627	5.40	5.34	34.355	27.124	101.1	1.067	.33	4.7	90.5	3.20	40.7	.00			631

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 100 40

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 20.6 N	117 27.5 W	01/16/84	2213 GMT	1995 M	270	15 KT	310 03 10	2	1013.9 MB	16.3 C	14.6 C	8/8	NS

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	16.21	16.21	33.432	24.495	342.9	.000	5.74	102.4							0
1	1		16.21	16.21	33.432	24.495	342.9	.003	5.74	102.4	2.6	.35	.0	.00	.11	.05	1
	10	ISL	16.18	16.18	33.431	24.502	342.5	.034	5.81	103.5							10
1	11		16.18	16.18	33.431	24.502	342.5	.038	5.81	103.6	2.5	.35	.0	.00	.11	.06	11
	20	ISL	16.17	16.17	33.433	24.505	342.5	.069	5.81	103.6							20
1	21		16.17	16.17	33.433	24.506	342.5	.072	5.81	103.6	2.5	.35	.0	.00	.12	.06	21
1	30		16.17	16.16	33.432	24.506	342.8	.102	5.78	103.0	2.5	.35	.0	.00	.12	.08	30
1	40		16.17	16.16	33.433	24.507	343.0	.137	5.78	103.0	2.5	.34	.0	.00	.13	.07	40
1	50		15.86	15.85	33.443	24.585	335.9	.170	5.77	102.2	2.7	.37	.0	.00	.21	.12	50
1	59		15.73	15.72	33.462	24.630	331.9	.200	5.76	101.8	2.7	.38	.0	.00	.29	.25	59
1	69		14.95	14.94	33.377	24.734	322.2	.233	5.67	98.6	3.6	.46	.3	.08	.50	.44	69
	75	ISL	14.34	14.33	33.368	24.858	311.6	.253	5.59	95.9							76
1	84		13.54	13.53	33.355	25.013	295.9	.279	5.44	91.9	4.7	.61	2.8	.04	.20	.26	84
1	98		12.85	12.84	33.427	25.206	277.8	.319	5.14	85.6	6.7	.74	5.6	.02	.13	.18	98
	100	ISL	12.71	12.70	33.442	25.246	274.0	.326	5.06	83.7							101
1	117		11.69	11.68	33.550	25.523	247.8	.371	4.31	70.1	12.7	1.17	12.4	.00	.05	.07	118
	125	ISL	11.35	11.34	33.588	25.616	239.2	.390	4.13	66.7							126
1	141		10.70	10.69	33.661	25.789	223.0	.427	3.85	61.3	17.8	1.46	17.2	.00	.02	.05	142
	150	ISL	10.39	10.37	33.697	25.873	215.2	.446	3.71	58.8							151
1	170		9.72	9.70	33.782	26.052	198.4	.488	3.45	53.8	24.4	1.72	21.8	.00			171
1	200		8.95	8.93	33.917	26.282	176.9	.544	3.19	49.0	29.9	1.90	24.9	.00			201
1	230		8.52	8.49	34.012	26.424	163.8	.595	2.74	41.7	35.7	2.07	26.9	.00			231
	250	ISL	8.20	8.17	34.040	26.495	157.4	.627	2.59	39.1							252
1	270		7.90	7.88	34.054	26.549	152.4	.657	2.48	37.2	41.9	2.25	29.3	.00			271
	300	ISL	7.54	7.52	34.076	26.619	146.1	.703	2.17	32.4							302
1	329		7.25	7.22	34.094	26.676	141.0	.745	1.84	27.2	51.8	2.52	33.2	.00			331
	400	ISL	6.54	6.50	34.162	26.826	127.4	.840	1.02	14.8							403
1	403		6.52	6.48	34.165	26.831	126.9	.843	.99	14.4	65.9	2.87	37.3	.00			405
1	478		6.03	5.99	34.253	26.964	115.0	.934	.54	7.8	76.9	3.07	39.7	.00			481
	500	ISL	5.91	5.87	34.275	26.997	112.1	.959	.46	6.5							504
1	554		5.63	5.59	34.319	27.066	105.9	1.019	.34	4.8	85.9	3.17	41.1	.00			558

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 100 45

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 10.9 N	117 46.6 W	01/16/84	1810 GMT	1669 M	340	09 KT	320 03 08	1	1018.3 MB	16.0 C	13.8 C	7/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0		16.28	16.28	33.456	24.498	342.6	.000	5.71	102.0	2.7	.33	.1	.00	.09	.05	0
1	10		16.28	16.28	33.455	24.497	342.9	.034	5.72	102.2	2.7	.33	.1	.00	.09	.05	10
	20	ISL	16.26	16.26	33.456	24.503	342.8	.069	5.73	102.3							20
1	21		16.26	16.25	33.456	24.503	342.8	.072	5.73	102.3	2.7	.33	.1	.00	.07	.05	21
	30	ISL	16.26	16.25	33.455	24.503	343.0	.103	5.72	102.1							30
1	31		16.26	16.25	33.455	24.503	343.1	.106	5.72	102.1	2.7	.32	.1	.00	.08	.04	31
1	42		16.24	16.23	33.454	24.508	343.0	.143	5.73	102.3	2.7	.32	.1	.00	.12	.07	42
	50	ISL	15.93	15.92	33.446	24.572	337.2	.171	5.74	101.9							50
1	52		15.84	15.83	33.443	24.589	335.5	.177	5.75	101.8	2.8	.35	.1	.00	.16	.12	52
1	62		15.36	15.35	33.412	24.672	327.9	.210	5.80	101.7	2.8	.37	.1	.00	.25	.15	62
1	73		14.95	14.94	33.399	24.751	320.6	.246	5.85	101.7	2.6	.38	.1	.00	.33	.26	73
	75	ISL	14.87	14.86	33.391	24.763	319.6	.253	5.84	101.4							76
1	89		14.20	14.19	33.387	24.903	306.6	.296	5.66	96.9	3.7	.46	.9	.16	.25	.21	89
	100	ISL	13.27	13.26	33.535	25.208	277.8	.329	5.27	88.7							101
1	104		12.95	12.94	33.584	25.309	268.2	.339	5.14	85.9	6.7	.69	5.4	.02	.07	.11	104
1	123		11.30	11.28	33.579	25.619	238.9	.389	4.65	75.0	11.8	1.09	11.5	.02	.04	.06	124
	125	ISL	11.21	11.19	33.586	25.641	236.8	.393	4.59	73.9							126
1	150		10.03	10.01	33.742	25.969	206.0	.449	3.63	57.0	21.9	1.64	20.0	.00	.01	.03	151
1	180		9.02	9.01	33.921	26.273	177.4	.506	3.11	47.8	30.2	1.92	24.5	.00			181
	200	ISL	8.69	8.67	34.002	26.388	166.8	.540	2.83	43.3							202
1	212		8.55	8.52	34.036	26.438	162.2	.560	2.68	40.8	36.7	2.10	26.8	.00			213
1	243		8.00	7.98	34.085	26.559	151.1	.608	2.25	33.8	43.2	2.32	29.7	.00			244
	250	ISL	7.89	7.87	34.085	26.575	149.5	.619	2.20	33.0							252
1	283		7.46	7.43	34.087	26.639	143.9	.668	2.00	29.7	49.2	2.46	31.6	.00			285
	300	ISL	7.28	7.26	34.097	26.673	140.9	.692	1.83	27.1							302
1	344		6.88	6.85	34.134	26.758	133.3	.752	1.36	19.9	58.8	2.74	35.0	.00			346
	400	ISL	6.42	6.39	34.183	26.857	124.3	.824	.89	12.9							403
1	419		6.29	6.25	34.201	26.889	121.4	.848	.76	11.0	71.5	3.00	38.4	.00			422
1	497		5.92	5.88	34.269	26.990	112.6	.938	.48	6.9	79.1	3.14	39.8	.00			500
	500	ISL	5.91	5.87	34.272	26.995	112.3	.942	.47	6.8							504
1	572		5.60	5.56	34.326	27.075	105.2	1.021	.33	4.7	86.4	3.28	40.3	.00			576

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 100 50

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 59.4 N	118 07.0 W	01/16/84	1348 GMT	1715 M	340	12 KT	310 05 06	2	1018.3 MB	15.1 C	12.5 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	15.83	15.83	33.343	24.512	341.3	.000	5.74	101.6	2.8	.34	.2	.00	.09	.05	0
1	10	15.86	15.85	33.341	24.505	342.2	.034	5.87	103.9	2.7	.33	.2	.00	.09	.05	10
	20 ISL	15.84	15.84	33.339	24.507	342.4	.068	5.77	102.2							20
1	21	15.84	15.84	33.339	24.507	342.4	.072	5.76	101.9	2.7	.33	.2	.00	.10	.05	21
	30 ISL	15.85	15.85	33.339	24.506	342.8	.103	5.75	101.8							30
1	31	15.85	15.85	33.339	24.506	342.9	.106	5.75	101.8	2.8	.33	.2	.00	.10	.05	31
1	41	15.65	15.64	33.315	24.533	340.5	.140	5.81	102.4	2.8	.34	.2	.00	.14	.08	41
	50 ISL	15.44	15.43	33.309	24.576	336.7	.171	5.81	102.0							50
1	51	15.42	15.41	33.309	24.580	336.4	.173	5.81	101.9	2.9	.34	.2	.00	.20	.11	51
1	61	15.31	15.30	33.304	24.601	334.7	.207	5.81	101.7	2.9	.35	.2	.00	.25	.12	61
1	71	15.17	15.16	33.345	24.662	329.2	.240	5.82	101.6	2.9	.37	.2	.00	.29	.22	71
	75 ISL	15.13	15.12	33.346	24.671	327.9	.254	5.80	101.2							76
1	87	14.70	14.69	33.350	24.768	319.5	.292	5.74	99.3	2.8	.41	.2	.18	.29	.27	87
	100 ISL	13.14	13.13	33.320	25.066	291.6	.332	5.37	89.9							101
1	102	12.95	12.94	33.316	25.102	287.8	.337	5.32	88.7	5.7	.67	4.2	.04	.13	.18	102
1	121	12.01	11.99	33.570	25.481	252.1	.391	4.90	80.2	8.9	.87	8.8	.01	.05	.07	122
	125 ISL	11.85	11.83	33.582	25.520	248.5	.400	4.85	79.1							126
1	147	10.85	10.83	33.617	25.729	228.9	.453	4.40	70.3	14.7	1.20	14.2	.00	.02	.04	148
	150 ISL	10.71	10.70	33.635	25.767	225.3	.459	4.28	68.2							151
1	178	9.45	9.43	33.853	26.152	189.0	.517	3.07	47.6	27.6	1.90	24.2	.00			179
	200 ISL	8.98	8.96	33.947	26.301	175.2	.557	2.79	42.8							202
1	208	8.87	8.85	33.969	26.335	172.1	.571	2.75	42.1	32.6	2.04	26.7	.00			209
1	239	8.45	8.43	34.033	26.450	161.5	.622	2.50	38.0	37.4	2.17	28.5	.00			240
	250 ISL	8.29	8.26	34.046	26.486	158.3	.640	2.44	36.9							252
1	280	7.85	7.82	34.070	26.571	150.5	.686	2.25	33.7	43.7	2.36	30.5	.00			281
	300 ISL	7.53	7.50	34.084	26.628	145.3	.716	2.03	30.2							302
1	341	6.98	6.95	34.117	26.730	135.9	.774	1.54	22.6	56.5	2.65	34.8	.00			343
	400 ISL	6.61	6.57	34.199	26.845	125.6	.851	.90	13.1							403
1	417	6.53	6.49	34.221	26.873	123.1	.873	.75	10.9	67.9	2.94	37.9	.00			420
1	495	5.92	5.87	34.250	26.976	113.9	.964	.51	7.3	78.7	3.11	40.5	.00			498
	500 ISL	5.88	5.84	34.254	26.983	113.3	.970	.50	7.1							504
1	572	5.55	5.50	34.318	27.076	105.1	1.049	.34	4.8	87.7	3.28	41.8	.00			576

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 100 55

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 51.0 N	118 26.8 W	01/16/84	0937 GMT	2227 M	330	15 KT	320 04 05	1	1019.6 MB	15.0 C	12.4 C	7/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	16.70	16.70	33.512	24.444	347.7	.000	5.61	101.1	3.1	.34	.2		.05	.03	0
1	10	16.73	16.73	33.510	24.435	348.9	.035	5.65	101.9	3.1	.34	.2		.06	.03	10
	20 ISL	16.71	16.71	33.507	24.438	349.0	.070	5.68	102.3							20
1	26	16.69	16.69	33.504	24.440	349.0	.090	5.69	102.5	3.0	.33	.2		.06	.03	26
	30 ISL	16.52	16.51	33.477	24.460	347.2	.105	5.70	102.4							30
1	41	16.01	16.00				.142	5.74	101.9	3.0	.33	.2		.07	.03	41
	50 ISL	15.80	15.79	33.309	24.494	344.5	.173	5.77	102.0							50
1	56	15.70	15.70	33.268	24.485	345.6	.193	5.79	102.1	3.0	.34	.2		.13	.07	56
1	66	15.45	15.44	33.234	24.516	342.9	.228	5.81	101.9	3.0	.38	.2		.17	.12	66
	75 ISL	15.32	15.31	33.308	24.600	335.1	.259	5.78	101.3							76
1	76	15.31	15.30	33.314	24.608	334.4	.261	5.78	101.2	3.1	.38	.2		.19	.12	76
1	91	14.44	14.43	33.321	24.801	316.4	.310	5.72	98.4	3.3	.43	.6		.20	.15	91
	100 ISL	14.00	13.99	33.500	25.031	294.7	.339	5.37	91.7							101
1	106	13.76	13.74	33.606	25.164	282.2	.355	5.16	87.7	5.7	.62	4.2		.09	.12	106
1	121	13.06	13.04	33.606	25.306	269.0	.396	5.06	84.7	6.9	.71	5.7		.06	.11	121
	125 ISL	12.78	12.76	33.599	25.355	264.4	.408	5.01	83.4							126
1	146	11.41	11.39	33.592	25.610	240.6	.462	4.66	75.3	11.5	1.05	11.4		.03	.06	147
	150 ISL	11.19	11.18	33.602	25.656	236.0	.470	4.57	73.6							151
1	166	10.35	10.33	33.670	25.857	216.9	.507	4.21	66.6	17.2	1.37	15.0		.02	.02	167
1	186	9.65	9.63	33.773	26.056	198.3	.549	3.97	61.8	21.9	1.52	19.7				187
	200 ISL	9.23	9.21	33.842	26.178	186.9	.575	3.76	58.0							202
1	207	9.05	9.03	33.872	26.230	181.9	.588	3.64	56.0	26.9	1.74	22.8				208
1	237	8.73	8.70	33.955	26.347	171.3	.641	3.17	48.4	31.4	1.93	25.3				238
	250 ISL	8.54	8.51	33.984	26.399	166.6	.663	3.02	46.0							252
1	278	8.13	8.10	34.030	26.498	157.5	.708	2.74	41.3	38.7	2.15	28.3				279
	300 ISL	7.83	7.80	34.057	26.563	151.6	.742	2.44	36.5							302
1	339	7.35	7.32	34.091	26.658	142.9	.800	1.90	28.1	50.0	2.54	32.8				341
	400 ISL	6.79	6.75	34.143	26.778	132.1	.884	1.24	18.2							403
1	416	6.66	6.63	34.157	26.806	129.7	.904	1.10	16.0	62.9	2.85	36.8				418
1	494	6.10	6.06	34.254	26.956	116.1	1.000	.52	7.5	75.3	3.13	39.9				497
	500 ISL	6.05	6.01	34.260	26.967	115.0	1.007	.49	7.1							504
1	571	5.40	5.36	34.315	27.091	103.5	1.085	.31	4.4	89.3	3.23	42.0				575

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 100 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 41.1 N	118 48.2 W	01/16/84	0544 GMT	2962 M	330	19 KT		0	1020.7 MB	15.0 C	12.5 C	0/8	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.04	16.04	33.317	24.446	347.6	.000	5.71	101.4							0
1	2	16.04	16.04	33.317	24.446	347.6	.007	5.71	101.4	3.4	.34	.1		.10	.05	2
	10 ISL	16.08	16.08	33.316	24.437	348.8	.035	5.83	103.6							10
1	13	16.08	16.08	33.316	24.435	349.0	.045	5.85	104.0	3.4	.34	.1		.10	.05	13
	20 ISL	16.08	16.08	33.315	24.436	349.1	.070	5.83	103.7							20
1	28	16.06	16.06	33.315	24.439	349.1	.097	5.79	102.9	3.1	.33	.1		.10	.07	28
	30 ISL	16.07	16.06	33.315	24.439	349.2	.105	5.79	103.0							30
1	43	16.08	16.08	33.317	24.437	349.7	.149	5.83	103.6	2.8	.33	.1		.11	.04	43
	50 ISL	16.00	15.99	33.309	24.449	348.8	.174	5.83	103.4							50
1	58	15.91	15.90	33.300	24.463	347.7	.202	5.82	103.1	3.3	.34	.1		.18	.09	58
1	68	15.87	15.86	33.297	24.470	347.4	.236	5.80	102.7	3.3	.33	.1		.21	.10	68
	75 ISL	15.72	15.71	33.294	24.501	344.6	.261	5.80	102.4							76
1	79	15.60	15.58	33.292	24.528	342.2	.274	5.81	102.3	3.4	.37	.1		.25	.13	79
1	94	14.63	14.62	33.284	24.732	323.1	.324	5.82	100.5	3.5	.41	.2		.23	.25	94
	100 ISL	14.43	14.41	33.359	24.833	313.6	.344	5.67	97.5							101
1	109	14.15	14.14	33.461	24.970	300.8	.370	5.41	92.6	4.7	.56	2.2		.14	.20	109
1	123	13.18	13.16	33.477	25.181	280.9	.414	5.03	84.4	6.6	.74	5.4		.08	.15	124
	125 ISL	13.09	13.07	33.482	25.205	278.7	.418	5.00	83.7							126
1	149	11.72	11.70	33.611	25.567	244.5	.482	4.40	71.6	12.5	1.15	12.2		.01	.08	150
	150 ISL	11.69	11.67	33.616	25.576	243.7	.483	4.38	71.2							151
1	169	10.94	10.92	33.760	25.824	220.4	.528	3.67	58.8	18.6	1.50	17.8		.01	.03	170
1	190	10.35	10.33	33.872	26.015	202.5	.572	3.36	53.2	23.3	1.73	21.1				191
	200 ISL	10.07	10.04	33.913	26.096	195.0	.592	3.22	50.6							202
1	210	9.79	9.76	33.947	26.170	188.1	.611	3.08	48.2	26.7	1.86	23.2				211
1	241	9.09	9.07	34.034	26.351	171.3	.666	2.72	41.9	32.3	2.04	25.8				242
	250 ISL	8.84	8.81	34.032	26.390	167.3	.682	2.73	41.7							252
1	282	8.01	7.98	34.026	26.511	156.2	.733	2.77	41.6	39.1	2.14	28.3				283
	300 ISL	7.70	7.67	34.035	26.565	151.3	.761	2.58	38.5							302
1	342	7.18	7.15	34.066	26.663	142.4	.823	2.00	29.5	50.4	2.50	32.7				344
	400 ISL	6.65	6.61	34.112	26.772	132.6	.903	1.37	20.0							403
1	419	6.51	6.47	34.127	26.803	129.8	.927	1.20	17.4	63.3	2.84	37.1				421
1	495	5.95	5.90	34.208	26.939	117.5	1.021	.63	9.0	75.6	3.07	39.9				498
	500 ISL	5.92	5.87	34.213	26.947	116.7	1.027	.60	8.6							504
1	572	5.60	5.55	34.283	27.042	108.3	1.109	.38	5.4	84.2	3.21	41.3				576

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 100 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 20.8 N	119 29.0 W	01/15/84	2357 GMT	3262 M	330	12 KT	350 03 05	1	1019.6 MB	15.5 C	13.0 C	3/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.80	16.80	33.476	24.392	352.7	.000	5.65	102.0							0
1	1	16.80	16.80	33.476	24.392	352.7	.004	5.65	102.0	2.7	.32	.0		.11	.07	1
	10 ISL	16.81	16.81	33.473	24.387	353.6	.035	5.67	102.4							10
1	12	16.82	16.81	33.472	24.386	353.6	.042			2.7	.34	.0		.12	.05	12
	20 ISL	16.76	16.76	33.469	24.397	352.8	.071	5.69	102.6							20
1	27	16.71	16.71	33.467	24.408	352.1	.095	5.71	102.9	2.7	.32	.0		.12	.06	27
	30 ISL	16.71	16.71	33.467	24.407	352.3	.106	5.70	102.7							30
1	42	16.75	16.74	33.468	24.400	353.3	.148	5.67	102.2	2.7	.31	.0		.12	.07	42
	50 ISL	16.74	16.73	33.468	24.402	353.3	.176	5.67	102.2							50
1	57	16.73	16.72	33.468	24.405	353.3	.200	5.67	102.2	2.7	.32	.0		.12	.07	57
1	67	16.72	16.71	33.468	24.408	353.3	.236	5.64	101.6	2.6	.31	.0		.12	.08	67
	75 ISL	16.72	16.71	33.468	24.407	353.7	.265	5.66	102.1							76
1	77	16.73	16.71	33.468	24.407	353.8	.271	5.67	102.2	2.6	.31	.0		.13	.08	77
1	92	16.70	16.68	33.468	24.414	353.6	.324	5.67	102.1	2.6	.31	.0		.14	.09	92
	100 ISL	15.78	15.76	33.496	24.645	331.8	.352	5.61	99.3							101
1	107	14.95	14.93	33.522	24.848	312.4	.374	5.57	96.9	3.6	.42	.8		.19	.24	107
1	122	13.95	13.94	33.511	25.050	293.5	.419	5.16	88.0	5.6	.65	3.6		.14	.16	122
	125 ISL	13.61	13.59	33.518	25.127	286.2	.429	5.02	85.0							126
1	146	11.71	11.69	33.622	25.577	243.5	.486	4.20	68.4	13.7	1.20	13.0		.04	.06	147
	150 ISL	11.60	11.58	33.641	25.612	240.2	.494	4.12	66.8							151
1	166	11.22	11.20	33.737	25.756	226.9	.532	3.77	60.8	17.1	1.42	16.4		.02	.04	167
1	185	10.22	10.20	33.888	26.050	199.1	.573	3.25	51.3	23.9	1.73	21.1				186
	200 ISL	9.87	9.84	33.928	26.141	190.6	.601	3.13	49.1							202
1	205	9.79	9.77	33.933	26.158	189.1	.611	3.12	48.8	26.5	1.83	22.7				206
1	235	9.29	9.27	33.993	26.288	177.3	.666	2.93	45.3	30.2	1.95	24.6				236
	250 ISL	8.83	8.80	34.021	26.383	168.3	.692	2.75	42.2							252
1	275	8.08	8.05	34.065	26.532	154.2	.731	2.42	36.4	41.3	2.22	29.0				276
	300 ISL	7.73	7.70	34.102	26.613	146.8	.770	2.06	30.8							302
1	334	7.48	7.45	34.139	26.678	141.1	.819	1.61	23.9	51.8	2.58	33.0				336
	400 ISL	6.87	6.84	34.191	26.804	129.8	.908	.99	14.5							403
1	408	6.81	6.77	34.196	26.817	128.6	.918	.93	13.6	63.7	2.86	36.4				410
1	481	6.33	6.29	34.275	26.943	117.3	1.008	.52	7.5	74.2	3.08	38.7				484
	500 ISL	6.24	6.19	34.288	26.965	115.4	1.030	.46	6.6							504
1	554	6.06	6.01	34.305	27.003	112.4	1.092			79.5	3.16	39.6				558

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 100 80

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 01.3 N	120 07.7 W	01/15/84	1653 GMT	3926 M	010	17 KT	350 05 07	1	1023.0 MB	16.2 C	12.3 C	7/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	16.99	16.99	33.524	24.386	353.3	.000	5.57	100.9	2.8	.33	.0		.09	.06	0
1	10	17.00	17.00	33.522	24.381	354.1	.035	5.63	102.1	2.7	.33	.0		.10	.06	10
	20 ISL	17.00	16.99	33.522	24.383	354.2	.071	5.64	102.2							20
1	26	16.99	16.99	33.522	24.384	354.3	.092	5.64	102.2	2.7	.33	.0		.10	.06	26
	30 ISL	17.00	17.00	33.522	24.382	354.6	.106	5.63	102.1							30
1	41	17.02	17.02	33.522	24.377	355.5	.145	5.61	101.7	2.7	.33	.0		.10	.06	41
	50 ISL	17.02	17.01	33.522	24.378	355.6	.177	5.61	101.7							50
1	58	17.01	17.00	33.522	24.381	355.7	.205	5.61	101.7	2.7	.33	.0		.10	.07	58
1	68	17.01	17.00	33.521	24.381	356.0	.240	5.59	101.3	2.7	.32	.0		.10	.06	68
	75 ISL	17.00	16.99	33.520	24.383	356.1	.266	5.60	101.4							76
1	78	17.00	16.99	33.520	24.383	356.1	.276	5.60	101.5	2.7	.32	.0		.09	.06	78
1	92	15.09	15.08	33.543	24.833	313.5	.323	5.75	100.3	3.5	.36	.0		.20	.22	92
	100 ISL	14.63	14.62	33.584	24.964	301.2	.348	5.65	97.7							101
1	107	14.42	14.40	33.609	25.029	295.2	.368	5.52	95.1	4.7	.45	1.3		.13	.22	107
1	123	13.59	13.57	33.588	25.186	280.6	.414	5.24	88.7	5.6	.59	3.5		.10	.14	123
	125 ISL	13.38	13.37	33.581	25.221	277.2	.421	5.18	87.3							126
1	148	11.62	11.60	33.579	25.561	245.1	.482	4.51	73.2	12.0	1.09	11.4		.04	.06	149
	150 ISL	11.55	11.53	33.585	25.578	243.5	.486	4.46	72.4							151
1	169	10.98	10.96	33.697	25.769	225.6	.531	3.90	62.5	17.4	1.40	16.0		.02	.05	170
1	189	10.46	10.44	33.838	25.970	206.9	.574	3.27	51.9	22.8	1.76	20.4				190
	200 ISL	10.14	10.12	33.889	26.065	198.0	.596	3.10	48.9							202
1	209	9.88	9.86	33.923	26.135	191.4	.613	3.01	47.2	26.8	1.89	22.7				210
1	239	9.27	9.24	34.021	26.313	174.9	.668	2.70	41.8	31.9	2.03	25.2				240
	250 ISL	9.07	9.05	34.043	26.362	170.4	.687	2.63	40.5							252
1	280	8.60	8.57	34.082	26.466	160.8	.736	2.46	37.5	37.8	2.20	27.6				281
	300 ISL	8.28	8.25	34.102	26.532	154.9	.768	2.26	34.2							302
1	341	7.68	7.64	34.131	26.644	144.6	.830	1.80	26.9	49.0	2.52	31.6				343
	400 ISL	6.98	6.94	34.160	26.766	133.5	.912	1.23	18.0							403
1	418	6.79	6.76	34.167	26.796	130.7	.935	1.08	15.8	62.3	2.83	36.1				420
1	494	6.09	6.04	34.216	26.928	118.6	1.030	.63	9.1	74.3	3.07	38.8				497
	500 ISL	6.07	6.03	34.226	26.938	117.8	1.037	.60	8.6							504
1	569	5.89	5.84	34.310	27.028	110.0	1.116	.34	4.9	81.4	3.20	40.2				573

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 100 90

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
29 40.7 N	120 46.7 W	01/15/84	1057 GMT	3926 M	350	09 KT	320 05 06	1	1021.3 MB	15.9 C	12.0 C	2/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	17.21	17.21	33.547	24.350	356.7	.000	5.57	101.4	2.8	.34	.1		.09	.05	0
1	10	17.22	17.21	33.545	24.348	357.2	.036	5.56	101.2	2.8	.34	.1		.15	.07	10
	20 ISL	17.21	17.21	33.548	24.352	357.2	.071	5.57	101.3							20
1	26	17.21	17.21	33.550	24.354	357.2	.093	5.57	101.4	2.8	.33	.1		.10	.06	26
	30 ISL	17.22	17.21	33.548	24.351	357.6	.107	5.57	101.3							30
1	41	17.24	17.23	33.544	24.344	358.7	.146	5.56	101.2	2.8	.32	.1		.09	.06	41
	50 ISL	17.23	17.23	33.544	24.344	359.0	.179	5.57	101.5							50
1	56	17.23	17.22	33.544	24.345	359.0	.200	5.58	101.6	2.8	.33	.1		.09	.05	56
1	72	17.21	17.20	33.539	24.347	359.4	.257	5.57	101.4	2.8	.32	.1		.09	.07	72
	75 ISL	17.21	17.20	33.539	24.348	359.4	.269	5.57	101.3							76
1	82	17.20	17.19	33.539	24.349	359.5	.293	5.56	101.2	2.8	.32	.1		.07	.04	82
1	97	15.52	15.50	33.447	24.665	329.7	.344	5.59	98.3	3.6	.42	.1		.20	.15	97
	100 ISL	15.31	15.30	33.450	24.714	325.4	.355	5.54	97.1							101
1	118	14.35	14.33	33.468	24.934	304.4	.410	5.19	89.2	5.0	.63	2.5		.14	.16	118
	125 ISL	13.67	13.65	33.469	25.077	291.0	.433	5.09	86.3							126
1	137	12.50	12.48	33.486	25.322	267.7	.467	4.89	80.9	8.0	.87	7.2		.06	.10	138
	150 ISL	11.62	11.60	33.541	25.531	247.9	.500	4.51	73.2							151
1	157	11.21	11.19	33.587	25.641	237.5	.518	4.25	68.4	14.2	1.25	13.9		.03	.05	158
1	178	10.54	10.52	33.777	25.909	212.4	.565	3.52	55.9	20.9	1.58	18.6		.01	.03	179
1	198	9.83	9.80	33.856	26.092	195.2	.605	3.28	51.3	25.2	1.81	21.9				199
	200 ISL	9.78	9.75	33.863	26.105	194.0	.609	3.26	51.0							202
1	219	9.39	9.37	33.937	26.227	182.7	.645	3.05	47.3	28.7	1.93	23.9				220
	250 ISL	9.10	9.07	34.103	26.404	166.4	.699	2.38	36.6							252
1	254	9.08	9.05	34.122	26.423	164.7	.705	2.29	35.3	35.7	2.18	26.8				255
	300 ISL	8.41	8.38	34.174	26.569	151.0	.778	1.77	26.9							302
1	305	8.33	8.30	34.180	26.585	149.9	.786	1.73	26.2	44.2	2.52	30.0				307
1	361	7.92	7.88	34.233	26.689	140.8	.867	1.25	18.8	50.8	2.70	32.4				363
	400 ISL	7.57	7.53	34.257	26.758	134.7	.921	.95	14.2							403
1	447	7.13	7.08	34.277	26.838	127.6	.983	.67	9.9	62.4	2.98	35.8				450
	500 ISL	6.60	6.56	34.292	26.921	120.0	1.048	.51	7.4							504
1	535	6.28	6.23	34.302	26.971	115.4	1.089	.44	6.4	75.7	3.15	39.0				538
	600 ISL	5.84	5.78	34.335	27.054	108.0	1.162	.31	4.4							605
1	621	5.73	5.67	34.347	27.078	105.9	1.184	.27	3.9	85.6	3.25	40.9				625

RV NEW HORIZON CALCOFI CRUISE 8401 STATION 100 100

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
29 20.9 N	121 27.6 W	01/15/84	0453 GMT	4023 M	360	05 KT		1	1017.3 MB	16.2 C	12.5 C	7/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	17.97	17.97	33.685	24.274	364.1	.000	5.55	102.6							0
1	2	17.97	17.97	33.685	24.274	364.1	.007	5.55	102.6	2.6	.33	.2		.08	.06	2
	10 ISL	17.96	17.96	33.681	24.272	364.4	.036	5.51	101.8							10
1	13	17.96	17.96	33.681	24.273	364.5	.047	5.50	101.7	2.5	.33	.2		.08	.05	13
	20 ISL	17.97	17.96	33.682	24.273	364.8	.073	5.50	101.8							20
1	28	17.97	17.97	33.682	24.272	365.1	.102	5.51	101.9	2.5	.33	.2		.09	.05	28
	30 ISL	17.97	17.97	33.682	24.272	365.2	.109	5.51	101.8							30
1	43	17.99	17.99	33.682	24.268	366.1	.156	5.48	101.3	2.5	.32	.2		.09	.05	43
	50 ISL	17.99	17.98	33.682	24.269	366.3	.183	5.48	101.4							50
1	58	17.99	17.98	33.683	24.270	366.3	.211	5.49	101.5	2.5	.32	.2		.09	.05	58
1	73	18.03	18.01	33.700	24.274	366.5	.266	5.48	101.4	2.4	.32	.2		.08	.05	73
	75 ISL	18.03	18.01	33.699	24.274	366.6	.274	5.48	101.4							76
1	84	18.03	18.01	33.695	24.271	367.2	.306	5.48	101.4	2.4	.32	.1		.10	.06	84
1	99	15.91	15.89	33.486	24.609	335.1	.359	5.68	100.7	3.1	.37	.1		.18	.25	99
	100 ISL	15.76	15.75	33.473	24.631	333.1	.363	5.67	100.3							101
1	119	14.25	14.24	33.374	24.882	309.5	.423	5.42	92.9	4.1	.56	1.6		.13	.18	119
	125 ISL	13.86	13.84	33.390	24.976	300.6	.442	5.35	91.0							126
1	138	13.11	13.10	33.457	25.179	281.5	.482	5.15	86.3	6.2	.70	4.6		.07	.13	139
	150 ISL	12.39	12.37	33.510	25.362	264.3	.513	4.80	79.2							151
1	159	11.82	11.80	33.556	25.506	250.6	.537	4.49	73.2	11.7	1.10	11.4		.03	.06	160
1	179	10.76	10.74	33.663	25.781	224.6	.584	3.98	63.5	17.2	1.40	16.4		.02	.03	180
1	199	9.74	9.71	33.769	26.039	200.2	.627	3.61	56.3	23.2	1.70	21.0				200
	200 ISL	9.71	9.69	33.774	26.047	199.5	.628	3.60	56.1							202
1	220	9.23	9.21	33.871	26.201	185.1	.667	3.36	51.9	27.1	1.84	23.4				221
	250 ISL	8.65	8.62	33.967	26.370	169.5	.720	3.07	46.8							252
1	256	8.55	8.52	33.980	26.395	167.1	.730	3.02	45.9	33.2	2.00	25.9				257
	300 ISL	7.85	7.82	34.046	26.552	152.7	.800	2.54	38.1							302
1	306	7.76	7.73	34.051	26.568	151.1	.810	2.47	36.9	43.1	2.28	29.9				308
1	362	7.23	7.19	34.090	26.676	141.6	.892	1.88	27.8	51.3	2.55	33.0				364
	400 ISL	6.86	6.82	34.128	26.756	134.2	.944	1.40	20.5							403
1	448	6.41	6.37	34.176	26.854	125.4	1.007	.87	12.6	67.5	2.93	38.0				451
	500 ISL	6.01	5.96	34.207	26.931	118.3	1.070	.60	8.7							504
1	536	5.77	5.72	34.227	26.977	114.2	1.111	.51	7.3	79.3	3.12	40.7				539
	600 ISL	5.45	5.40	34.279	27.056	107.1	1.182	.38	5.4							605
1	623	5.37	5.32	34.300	27.083	104.9	1.207	.36	5.1	87.9	3.22	41.4				627

RV NEW HORIZON CALCOFI CRUISE 8401 STATION 103 29

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 09.0 N	116 21.0 W	01/17/84	1314 GMT	31 M	040	06 KT	290 05 05	1	1014.6 MB	11.9 C	10.4 C	1/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	15.19	15.19	33.459	24.743	319.5	.032	5.64	98.6	4.7	.46	.5	.05			10

RV NEW HORIZON CALCOFI CRUISE 8401 STATION 103 30

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 06.7 N	116 24.3 W	01/17/84	1507 GMT	64 M	030	05 KT	290 07 08	0	1015.6 MB	12.5 C	10.8 C	0/8	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	15.38	15.38	33.458	24.702	323.2	.000	5.73	100.5	4.1	.42	.3	.01	.42	.31	0
1	10	15.39	15.38	33.451	24.695	324.2	.032	5.71	100.2	4.2	.42	.3	.01	.43	.29	10
	20 ISL	13.93	13.93	33.459	25.012	294.2	.063	5.12	87.2							20
1	21	13.79	13.79	33.461	25.042	291.4	.066	5.05	85.8	6.4	.70	4.3	.03	.29	.37	21
	30 ISL	13.58	13.58	33.461	25.086	287.5	.092	4.51	76.3							30
1	31	13.56	13.56	33.461	25.090	287.1	.095	4.47	75.6	9.5	.96	7.8	.03	.19	.43	31
	50 ISL	13.49	13.49	33.535	25.161	280.9	.149	4.45	75.2							50
1	52	13.49	13.48	33.540	25.166	280.4	.154	4.45	75.2	9.6	.99	8.0	.04	.15	.35	52

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STATION 103 35

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 57.4 N	116 47.9 W	01/17/84	1846 GMT	1894 M	360	07 KT	300 08 08	0	1017.6 MB	15.2 C	12.9 C	0/8	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	16.02	16.02	33.472	24.569	335.9	.000	5.72	101.7	3.3	.34	.1	.00	.19	.11	0
1	10	15.97	15.97	33.467	24.576	335.4	.033	5.81	103.2	3.3	.34	.1	.00	.19	.09	10
	20 ISL	15.92	15.92	33.465	24.586	334.9	.067	5.76	102.1							20
1	21	15.92	15.92	33.465	24.587	334.8	.070	5.75	102.0	3.4	.33	.1	.00	.21	.09	21
	30 ISL	15.90	15.89	33.464	24.592	334.6	.101	5.75	101.9							30
1	31	15.90	15.89	33.464	24.592	334.6	.104	5.75	101.9	3.4	.33	.1	.00	.22	.09	31
1	42	15.87	15.87	33.461	24.595	334.6	.140	5.76	102.1	3.4	.33	.1	.00	.25	.11	42
	50 ISL	15.25	15.24	33.424	24.705	324.5	.167	5.60	98.0							50
1	57	14.57	14.56	33.406	24.839	311.8	.189	5.38	92.8	4.6	.54	1.4	.06	.30	.41	57
1	67	13.67	13.66	33.458	25.067	290.3	.219	4.97	84.2	6.5	.74	4.8	.02	.17	.22	67
	75 ISL	13.24	13.23	33.460	25.156	281.9	.242	4.90	82.3							76
1	78	13.12	13.11	33.460	25.179	279.9	.250	4.89	81.9	7.5	.80	6.2	.01	.13	.20	78
1	93	12.30	12.29	33.511	25.379	261.2	.290	4.56	75.1	10.4	1.01	9.7	.01	.07	.11	93
	100 ISL	11.88	11.86	33.563	25.499	249.8	.309	4.30	70.2							101
1	114	11.16	11.14	33.663	25.710	230.0	.341	3.84	61.8	16.7	1.39	16.0	.01	.02	.05	114
	125 ISL	10.67	10.65	33.715	25.837	218.1	.367	3.63	57.8							126
1	133	10.36	10.35	33.747	25.915	210.8	.385	3.52	55.7	21.3	1.62	19.7	.00	.01	.04	134
	150 ISL	9.87	9.86	33.822	26.057	197.6	.419	3.29	51.5							151
1	159	9.65	9.63	33.863	26.126	191.1	.437	3.17	49.4	26.4	1.81	22.8	.00	.01	.02	160
1	190	9.00	8.98	33.983	26.325	172.6	.493	2.86	44.0	32.1	1.99	25.3	.00			191
	200 ISL	8.94	8.91	34.006	26.354	170.1	.510	2.79	42.8							202
1	222	8.81	8.79	34.038	26.398	166.3	.547	2.65	40.6	34.5	2.08	26.6	.00			223
	250 ISL	8.29	8.26	34.051	26.489	158.0	.593	2.52	38.2							252
1	258	8.13	8.11	34.053	26.515	155.6	.604	2.48	37.4	40.1	2.18	28.7	.00			259
	300 ISL	7.56	7.53	34.098	26.635	144.6	.668	1.96	29.2							302
1	309	7.46	7.43	34.109	26.657	142.6	.681	1.83	27.2	49.9	2.47	32.4	.00			311
1	366	7.04	7.01	34.157	26.754	134.1	.760	1.28	18.8	57.7	2.71	35.1	.00			368
	400 ISL	6.75	6.71	34.186	26.817	128.5	.805	.99	14.5							403
1	452	6.33	6.29	34.230	26.908	120.2	.869	.65	9.4	71.5	3.00	38.7	.00			455
	500 ISL	6.03	5.99	34.270	26.977	114.0	.925	.47	6.7							504
1	539	5.83	5.78	34.300	27.027	109.7	.970	.38	5.4	81.5	3.14	40.7	.00			543
	600 ISL	5.57	5.52	34.340	27.091	104.1	1.034	.29	4.1							605
1	626	5.48	5.43	34.355	27.114	102.1	1.061	.27	3.8	89.3	3.24	41.8	.00			630

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STATION 103 40

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 46.5 N	117 07.7 W	01/17/84	2225 GMT	1735 M	330	10 KT	300 08 06	0	1016.6 MB	15.6 C	13.0 C	0/8	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.35	16.35	33.467	24.491	343.3	.000	5.77	103.2							0
1	2	16.35	16.35	33.467	24.491	343.3	.007	5.77	103.2	3.2	.32	.3	.00	.21	.09	2
	10 ISL	16.22	16.21	33.462	24.517	341.1	.034	5.84	104.3							10
1	13	16.19	16.18	33.461	24.523	340.6	.044	5.85	104.3	3.2	.32	.3	.00	.22	.10	13
	20 ISL	16.16	16.16	33.461	24.530	340.3	.068	5.81	103.6							20
1	23	16.15	16.15	33.461	24.532	340.1	.078	5.79	103.2	3.2	.32	.2	.00	.22	.11	23
	30 ISL	16.16	16.15	33.459	24.529	340.6	.102	5.79	103.2							30
1	33	16.16	16.16	33.459	24.528	340.9	.112	5.79	103.2	3.2	.32	.2	.00	.23	.12	33
1	43	16.15	16.14	33.460	24.532	340.7	.146	5.82	103.7	3.2	.32	.2	.00	.27	.11	43
	50 ISL	16.08	16.08	33.456	24.544	339.8	.170	5.80	103.2							50
1	54	16.02	16.01	33.452	24.557	338.7	.183	5.78	102.7	3.4	.33	.2	.00	.38	.26	54
1	64	15.69	15.68	33.438	24.620	333.0	.217	5.74	101.3	3.6	.37	.2	.03	.56	.41	64
1	74	15.42	15.41	33.429	24.672	328.3	.250	5.71	100.2	3.8	.40	.2	.07	.59	.43	74
	75 ISL	15.32	15.31	33.423	24.691	326.5	.254	5.68	99.5							76
1	89	14.05	14.03	33.399	24.944	302.7	.297	5.29	90.3	5.5	.63	2.9	.06	.32	.49	89
	100 ISL	13.30	13.28	33.469	25.151	283.2	.330	5.15	86.6							101
1	105	13.02	13.01	33.502	25.231	275.6	.343	5.09	85.1	7.2	.77	5.8	.01	.11	.18	105
1	124	11.63	11.62	33.563	25.545	246.0	.395	4.37	71.0	12.6	1.16	12.7	.01	.04	.08	125
	125 ISL	11.60	11.59	33.565	25.552	245.3	.396	4.36	70.7							126
1	150	10.44	10.42	33.687	25.856	216.8	.455	3.76	59.6	19.5	1.55	18.7	.00	.02	.06	151
1	181	9.28	9.26	33.882	26.202	184.3	.516	3.15	48.7	28.2	1.91	24.1	.00			182
	200 ISL	8.99	8.97	33.987	26.331	172.3	.550	2.81	43.2							202
1	211	8.87	8.85	34.034	26.386	167.3	.569	2.64	40.5	34.0	2.11	26.8	.00			212
1	242	8.34	8.32	34.079	26.503	156.5	.618	2.35	35.6	39.1	2.25	28.7	.00			243
	250 ISL	8.25	8.23	34.088	26.524	154.7	.631	2.28	34.4							252
1	282	7.97	7.94	34.115	26.588	149.0	.681	2.00	30.1	44.7	2.43	30.6	.00			284
	300 ISL	7.76	7.73	34.124	26.626	145.7	.706	1.87	27.9							302
1	344	7.23	7.19	34.141	26.716	137.4	.769	1.53	22.6	53.9	2.65	34.1	.00			346
	400 ISL	6.76	6.73	34.186	26.815	128.6	.843	1.04	15.2							403
1	419	6.62	6.58	34.202	26.847	125.7	.868	.88	12.8	65.4	2.93	37.3	.00			422
1	496	5.88	5.83	34.248	26.979	113.6	.959	.51	7.3	77.7	3.12	40.2	.00			499
	500 ISL	5.85	5.80	34.252	26.986	113.0	.964	.50	7.1							504
1	572	5.56	5.51	34.320	27.076	105.1	1.043	.33	4.7	86.3	3.22	41.4	.00			576

RV NEW HORIZON

CALCOFI CRUISE 8401

STATION 103 55

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 16.9 N	118 04.2 W	01/18/84	1033 GMT	2116 M	350	10 KT	320 06 07	1	1021.7 MB	14.5 C	11.6 C	6/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	15.83	15.83	33.354	24.520	340.5	.000	5.74	101.6	2.7	.36	.1	.00	.11	.07	0
1	10	15.86	15.86	33.351	24.513	341.5	.034	5.85	103.6	2.6	.36	.0	.00	.11	.05	10
	20 ISL	15.85	15.85	33.351	24.514	341.7	.068	5.82	103.0							20
1	26	15.85	15.85	33.351	24.515	341.8	.088	5.78	102.3	2.6	.35	.0	.00	.11	.05	26
	30 ISL	15.86	15.85	33.351	24.514	342.1	.102	5.78	102.3							30
1	41	15:87	15.87	33.351	24.510	342.7	.140	5.77	102.2	2.6	.34	.0	.00	.10	.06	41
	50 ISL	15.86	15.86	33.355	24.516	342.5	.171	5.76	102.0							50
1	57	15.86	15.85	33.358	24.520	342.3	.194	5.76	102.0	2.6	.35	.0	.00	.16	.09	57
1	72	15.62	15.61	33.386	24.595	335.6	.245	5.76	101.5	3.2	.36	.0	.00	.29	.21	72
	75 ISL	15.57	15.56	33.386	24.606	334.6	.256	5.77	101.6							76
1	83	15.45	15.44	33.425	24.663	329.5	.281	5.79	101.7	2.7	.37	.0	.00	.26	.16	83
1	98	13.66	13.65	33.367	24.999	297.6	.328	5.56	94.1	4.4	.51	1.8	.04	.16	.16	98
	100 ISL	13.55	13.54	33.384	25.034	294.4	.335	5.52	93.3							101
1	119	12.99	12.98	33.528	25.258	273.5	.388	5.17	86.4	6.4	.69	5.3	.01	.07	.14	119
	125 ISL	12.51	12.49	33.532	25.355	264.2	.405	4.98	82.4							126
1	138	11.46	11.44	33.536	25.556	245.3	.439	4.59	74.3	12.3	1.08	11.4	.01	.04	.07	139
	150 ISL	10.90	10.88	33.586	25.697	232.0	.467	4.38	70.1							151
1	159	10.53	10.51	33.639	25.803	222.0	.488	4.25	67.4	16.3	1.32	15.7	.00	.02	.04	160
1	180	9.64	9.62	33.776	26.060	197.9	.532	3.90	60.7	22.1	1.57	19.7	.00	.01	.01	181
1	200	9.12	9.10	33.885	26.229	182.0	.570	3.43	52.8	27.8	1.81	23.2	.00			201
1	221	8.76	8.73	33.929	26.322	173.4	.607	3.43	52.4	30.0	1.85	24.3	.00			222
	250 ISL	8.37	8.34	34.004	26.441	162.6	.656	3.04	46.0							252
1	257	8.28	8.26	34.020	26.466	160.2	.666	2.91	44.0	36.8	2.06	26.9	.00			258
	300 ISL	7.61	7.58	34.095	26.625	145.6	.733	2.08	30.9							302
1	308	7.48	7.45	34.104	26.650	143.2	.745	1.92	28.5	49.4	2.46	32.0	.00			310
1	365	6.77	6.73	34.134	26.773	132.0	.823	1.30	19.0	60.2	2.73	35.5	.00			367
	400 ISL	6.48	6.44	34.167	26.838	126.2	.868	1.00	14.5							403
1	452	6.17	6.13	34.223	26.923	118.6	.932	.65	9.4	73.9	3.01	38.7	.00			455
	500 ISL	5.94	5.90	34.272	26.990	112.7	.987	.44	6.3							504
1	539	5.78	5.74	34.309	27.040	108.4	1.031	.33	4.7	83.0	3.18	40.7	.00			543
	600 ISL	5.53	5.48	34.357	27.109	102.3	1.094	.29	4.1							605
1	627	5.41	5.36	34.375	27.137	99.8	1.121	.27	3.8	91.3	3.26	41.8	.00			631

RV NEW HORIZON

CALCOFI CRUISE 8401

STATION 103 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 06.4 N	118 24.9 W	01/18/84	1442 GMT	3414 M	340	08 KT	320 05 07	1	1022.4 MB	14.8 C	11.7 C	6/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	16.80	16.80	33.525	24.430	349.0	.000	5.61	101.3	2.7	.33	.0	.00	.09	.05	0
1	10	16.81	16.81	33.535	24.436	348.8	.035	5.64	101.9	2.7	.31	.0	.00	.09	.05	10
	20 ISL	16.81	16.81	33.534	24.436	349.0	.070	5.63	101.7							20
1	26	16.81	16.80	33.534	24.436	349.3	.090	5.63	101.7	2.7	.31	.0	.00	.08	.06	26
	30 ISL	16.81	16.81	33.534	24.435	349.6	.105	5.63	101.6							30
1	41	16.83	16.83	33.534	24.431	350.3	.143	5.62	101.5	2.7	.31	.0	.00	.08	.06	41
	50 ISL	16.83	16.82	33.533	24.432	350.6	.175	5.62	101.6							50
1	57	16.83	16.82	33.533	24.432	350.7	.199	5.63	101.7	2.7	.31	.0	.00	.09	.05	57
1	67	16.82	16.81	33.534	24.434	350.9	.233	5.64	101.9	2.7	.32	.0	.00	.08	.08	67
	75 ISL	16.59	16.58	33.511	24.471	347.6	.262	5.64	101.4							76
1	77	16.50	16.49	33.505	24.487	346.2	.268	5.64	101.2	2.8	.34	.0	.00	.12	.10	77
1	93	14.74	14.73	33.457	24.843	312.6	.321	5.45	94.4	3.8	.48	.8	.05	.21	.23	93
	100 ISL	14.24	14.23	33.482	24.968	300.8	.343	5.21	89.4							101
1	108	13.80	13.79	33.519	25.087	289.5	.366	4.98	84.6	6.3	.70	4.7	.02	.11	.16	108
1	122	12.77	12.75	33.576	25.340	265.7	.407	4.91	81.7	7.8	.79	6.8	.01	.07	.10	123
	125 ISL	12.56	12.54	33.580	25.382	261.7	.414	4.88	80.9							126
1	148	10.84	10.83	33.619	25.732	228.7	.471	4.51	72.0	14.4	1.16	13.5	.00	.02	.04	149
	150 ISL	10.77	10.75	33.625	25.749	227.0	.475	4.48	71.4							151
1	169	10.10	10.08	33.710	25.932	209.9	.517	4.12	64.8	19.2	1.39	17.2	.00	.01	.02	170
1	189	9.47	9.45	33.807	26.112	193.0	.557	3.86	59.9	23.5	1.61	20.5	.00			190
	200 ISL	9.17	9.15	33.861	26.203	184.5	.577	3.67	56.5							202
1	210	8.93	8.91	33.906	26.277	177.6	.595	3.47	53.2	28.9	1.80	23.4	.00			211
1	241	8.51	8.48	34.006	26.421	164.4	.648	2.80	42.6	35.2	2.03	26.8	.00			242
	250 ISL	8.40	8.37	34.026	26.454	161.4	.663	2.67	40.5							252
1	282	8.03	8.00	34.070	26.543	153.3	.713	2.34	35.2	42.1	2.26	29.4	.00			283
	300 ISL	7.81	7.78	34.081	26.585	149.5	.741	2.17	32.5							302
1	342	7.31	7.28	34.096	26.668	142.0	.802	1.80	26.6	51.5	2.48	32.9	.00			344
	400 ISL	6.69	6.65	34.152	26.798	130.1	.881	1.14	16.6							403
1	419	6.50	6.47	34.173	26.839	126.3	.906	.93	13.5	66.5	2.86	37.1	.00			422
1	496	6.01	5.97	34.236	26.953	116.2	.998	.55	7.9	77.0	3.03	39.5	.00			499
	500 ISL	5.99	5.94	34.239	26.959	115.7	1.003	.53	7.7							504
1	572	5.62	5.58	34.298	27.051	107.6	1.084	.34	4.8	86.1	3.17	40.6	.00			576

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 103 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
29 46.8 N	119 04.7 W	01/18/84	2053 GMT	3564 M	310	10 KT	330 04 07	1	1022.0 MB	16.5 C	12.6 C	7/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.74	16.74	33.485	24.413	350.8	.000	5.66	102.1							0
1	1	16.74	16.74	33.485	24.413	350.8	.003	5.66	102.1	2.6	.32	.0	.00	.10	.07	1
	10 ISL	16.63	16.63	33.478	24.434	349.0	.035	5.73	103.1							10
1	12	16.62	16.61	33.478	24.437	348.7	.042	5.74	103.2	2.6	.32	.0	.00	.11	.08	12
	20 ISL	16.60	16.60	33.477	24.440	348.8	.070	5.75	103.3							20
1	27	16.59	16.59	33.475	24.442	348.9	.094	5.75	103.4	2.6	.32	.1	.00	.11	.07	27
	30 ISL	16.59	16.59	33.475	24.441	349.0	.105	5.74	103.1							30
1	42	16.60	16.59	33.476	24.441	349.4	.146	5.69	102.3	2.6	.32	.1	.00	.13	.09	42
	50 ISL	16.60	16.59	33.476	24.442	349.5	.175	5.70	102.4							50
1	58	16.59	16.58	33.476	24.444	349.7	.202	5.70	102.5	2.6	.32	.1	.00	.12	.08	58
1	68	16.58	16.57	33.475	24.445	349.9	.237	5.69	102.3	2.6	.32	.1	.00	.12	.08	68
	75 ISL	16.58	16.57	33.476	24.445	350.0	.262	5.68	102.1							76
1	78	16.58	16.57	33.476	24.446	350.1	.272	5.68	102.1	2.6	.32	.1	.00	.12	.08	78
1	94	16.00	15.98	33.413	24.532	342.3	.327	5.75	102.1	2.7	.33	.1	.01	.23	.27	94
	100 ISL	15.19	15.17	33.422	24.719	325.7	.348	5.71	99.8							101
1	109	14.09	14.07	33.435	24.964	301.3	.375	5.61	95.9	4.2	.50	1.6	.08	.16	.18	109
1	124	13.45	13.43	33.570	25.200	279.2	.418	5.34	90.1	5.6	.60	3.8	.02	.08	.14	124
	125 ISL	13.36	13.35	33.570	25.217	277.4	.422	5.32	89.6							126
1	149	11.94	11.92	33.570	25.493	251.6	.487	4.90	80.1	9.5	.90	9.0	.01	.05	.08	150
	150 ISL	11.91	11.89	33.571	25.501	251.0	.488	4.89	79.8							151
1	170	10.90	10.87	33.611	25.717	230.5	.537	4.43	70.8	14.4	1.22	13.9	.01	.03	.06	171
1	190	10.12	10.10	33.704	25.923	211.1	.581	4.02	63.2	20.0	1.50	18.4	.00			191
	200 ISL	9.81	9.79	33.745	26.008	203.2	.601	3.87	60.4							202
1	211	9.50	9.47	33.792	26.097	194.9	.623	3.72	57.7	24.1	1.65	21.3	.00			212
1	242	8.67	8.65	33.957	26.357	170.5	.680	3.35	51.1	31.2	1.85	24.8	.00			243
	250 ISL	8.54	8.52	33.989	26.402	166.3	.693	3.18	48.4							252
1	283	8.14	8.11	34.076	26.531	154.4	.746	2.49	37.6	40.8	2.19	28.8	.00			284
	300 ISL	7.90	7.87	34.093	26.581	150.0	.772	2.26	33.8							302
1	344	7.32	7.29	34.105	26.674	141.5	.837	1.81	26.8	51.6	2.49	32.9	.00			346
	400 ISL	6.67	6.63	34.139	26.790	130.8	.913	1.24	18.1							403
1	422	6.45	6.41	34.154	26.831	127.1	.940	1.05	15.2	66.4	2.84	37.5	.00			424
1	498	5.87	5.83	34.219	26.957	115.6	1.033	.57	8.2	78.2	3.06	40.2	.00			501
	500 ISL	5.86	5.81	34.221	26.960	115.4	1.036	.56	8.0							504
1	575	5.55	5.51	34.293	27.055	107.1	1.119	.35	5.0	86.8	3.18	41.5	.00			579

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 103 80

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
29 27.5 N	119 43.5 W	01/19/84	0232 GMT	3737 M	360	08 KT	330 03 06	2	1021.3 MB	15.0 C	11.4 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.78	16.77	33.523	24.435	348.7	.000	5.66	102.1							0
1	1	16.78	16.77	33.523	24.435	348.7	.003	5.66	102.1	2.6	.31	.2	.00	.10	.04	1
	10 ISL	16.78	16.78	33.514	24.427	349.6	.035	5.71	103.1							10
1	12	16.78	16.78	33.514	24.427	349.7	.042	5.72	103.2	2.6	.31	.2	.00	.11	.05	12
	20 ISL	16.76	16.76	33.512	24.430	349.7	.070	5.73	103.3							20
1	27	16.74	16.73	33.508	24.433	349.7	.094	5.73	103.3	2.6	.31	.1	.00	.10	.05	27
	30 ISL	16.72	16.72	33.503	24.433	349.8	.105	5.72	103.0							30
1	42	16.67	16.67	33.487	24.432	350.2	.146	5.66	101.9	2.6	.31	.1	.00	.10	.06	42
	50 ISL	16.67	16.66	33.487	24.433	350.4	.175	5.65	101.8							50
1	57	16.67	16.66	33.488	24.435	350.5	.199	5.65	101.7	2.6	.31	.1	.00	.11	.06	57
1	67	16.68	16.67	33.491	24.435	350.7	.234	5.64	101.5	2.6	.30	.1	.00	.11	.06	67
	75 ISL	16.66	16.65	33.491	24.440	350.6	.263	5.67	102.1							76
1	77	16.66	16.64	33.491	24.441	350.6	.269	5.68	102.2	2.6	.31	.2	.00	.11	.06	77
1	92	15.10	15.08	33.620	24.891	308.0	.318	5.75	100.4	3.5	.34	.2	.06	.22	.30	92
	100 ISL	14.88	14.87	33.685	24.989	298.9	.343	5.71	99.3							101
1	108	14.82	14.80	33.727	25.035	294.8	.366	5.64	98.0	3.6	.34	.4	.11	.16	.22	108
1	123	14.28	14.26	33.733	25.154	283.8	.409	5.46	93.8	4.4	.43	1.8	.03	.11	.17	123
	125 ISL	14.04	14.02	33.713	25.189	280.4	.416	5.41	92.5							126
1	147	11.74	11.72	33.571	25.532	247.8	.475	4.84	78.8	10.1	.93	9.5	.01	.05	.06	148
	150 ISL	11.59	11.57	33.577	25.564	244.8	.481	4.75	77.1							151
1	167	10.87	10.85	33.646	25.749	227.5	.522	4.22	67.5	15.6	1.29	15.0	.00	.02	.05	168
1	187	10.20	10.18	33.717	25.921	211.4	.566	3.94	62.1	19.8	1.50	18.3	.00			188
	200 ISL	9.96	9.94	33.831	26.050	199.3	.592	3.49	54.8							202
1	208	9.83	9.81	33.904	26.128	192.0	.608	3.21	50.2	25.9	1.79	22.5	.00			209
1	238	9.10	9.08	34.018	26.337	172.5	.662	2.84	43.8	31.8	2.01	25.5	.00			239
	250 ISL	8.84	8.82	34.035	26.392	167.4	.683	2.77	42.4							252
1	279	8.32	8.29	34.055	26.489	158.5	.729	2.61	39.5	38.3	2.19	28.0	.00			280
	300 ISL	8.05	8.02	34.086	26.554	152.6	.763	2.32	34.9							302
1	339	7.65	7.61	34.141	26.656	143.3	.821	1.72	25.7	49.4	2.52	32.1	.00			341
	400 ISL	6.93	6.89	34.182	26.790	131.2	.904	1.08	15.8							403
1	415	6.77	6.73	34.189	26.817	128.6	.923	.96	14.0	63.4	2.85	36.5	.00			417
1	490	6.07	6.03	34.251	26.957	115.8	1.015	.52	7.5	76.1	3.09	39.6	.00			493
	500 ISL	6.00	5.96	34.258	26.972	114.5	1.027	.48	6.9							504
1	566	5.66	5.61	34.295	27.044	108.2	1.101	.35	5.0	84.2	3.20	41.2	.00			570

RV NEW HORIZON

CALCOFI CRUISE 8401

STATION 103 90

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
29 06.1 N	120 24.9 W	01/19/84	0826 GMT	4023 M	350	12 KT		2	1023.0 MB	15.3 C	11.5 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	17.10	17.10	33.542	24.373	354.5	.000	5.58	101.4	2.7	.32	.0	.00	.11	.07	0
1	10	17.12	17.12	33.543	24.368	355.3	.035	5.59	101.6	2.6	.32	.0	.00	.10	.06	10
	20 ISL	17.12	17.12	33.542	24.369	355.6	.071	5.62	102.1							20
1	26	17.12	17.11	33.541	24.370	355.7	.092	5.63	102.3	2.9	.31	.0	.00	.10	.07	26
	30 ISL	17.12	17.11	33.540	24.368	356.0	.107	5.62	102.0							30
1	41	17.13	17.13	33.540	24.365	356.7	.145	5.58	101.4	2.9	.32	.0	.00	.10	.06	41
	50 ISL	17.13	17.12	33.540	24.366	356.9	.178	5.60	101.8							50
1	57	17.13	17.12	33.540	24.366	357.1	.202	5.62	102.1	2.6	.32	.0	.00	.10	.06	57
1	67	17.13	17.12	33.540	24.366	357.4	.238	5.59	101.6	2.9	.31	.0	.00	.10	.06	67
	75 ISL	17.10	17.09	33.536	24.370	357.3	.267	5.61	101.8							76
1	78	17.09	17.08	33.534	24.371	357.3	.277	5.61	101.9	2.9	.33	.0	.00	.11	.07	78
1	93	15.12	15.10	33.435	24.744	322.0	.328	5.52	96.3	4.0	.46	.3	.09	.31	.25	93
	100 ISL	14.52	14.51	33.457	24.888	308.4	.351	5.28	91.0							101
1	108	14.04	14.02	33.496	25.021	295.9	.374	4.98	85.0	6.0	.70	4.2	.02	.13	.18	108
1	124	13.01	12.99	33.550	25.272	272.2	.419	4.52	75.6	9.1	.96	8.6	.02	.06	.14	124
	125 ISL	12.91	12.89	33.559	25.298	269.8	.423	4.47	74.7							126
1	149	11.51	11.49	33.712	25.684	233.4	.484	3.78	61.3	16.1	1.37	15.8	.00	.02	.06	150
	150 ISL	11.49	11.47	33.716	25.692	232.7	.486	3.77	61.0							151
1	169	10.81	10.79	33.820	25.895	213.7	.529	3.39	54.2	20.2	1.60	19.0	.00	.01	.03	170
1	190	10.24	10.21	33.904	26.060	198.3	.572	3.12	49.3	24.2	1.79	21.7	.00			191
	200 ISL	9.96	9.94	33.943	26.138	191.0	.591	3.03	47.5							202
1	211	9.69	9.67	33.984	26.215	183.8	.612	2.93	45.7	28.0	1.89	23.7	.00			212
1	242	9.37	9.34	34.069	26.334	173.0	.667	2.61	40.5	31.5	2.02	25.3	.01			243
	250 ISL	9.30	9.27	34.094	26.365	170.2	.681	2.49	38.6							252
1	283	8.98	8.95	34.177	26.482	159.7	.734	2.00	30.8	38.1	2.29	28.2	.00			284
	300 ISL	8.75	8.71	34.196	26.534	154.9	.762	1.80	27.6							302
1	344	8.11	8.08	34.219	26.649	144.4	.828	1.38	20.8	47.7	2.57	31.8	.00			346
	400 ISL	7.43	7.39	34.258	26.780	132.5	.905	.87	12.9							403
1	421	7.21	7.17	34.271	26.821	128.8	.932	.72	10.6	61.0	2.93	35.7	.00			423
1	497	6.60	6.56	34.298	26.926	119.5	1.027	.49	7.1	70.4	3.06	37.9	.00			500
	500 ISL	6.58	6.53	34.299	26.930	119.2	1.031	.48	7.0							504
1	574	6.05	6.00	34.334	27.027	110.5	1.116	.32	4.6	79.8	3.16	39.9	.00			578

RV NEW HORIZON

CALCOFI CRUISE 8401

STATION 103 100

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
28 46.2 N	121 02.9 W	01/19/84	1400 GMT	3545 M	350	12 KT	320 05 07	1	1022.0 MB	15.6 C	12.4 C	7/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	17.67	17.67	33.656	24.324	359.2	.000	5.51	101.3							0
1	1	17.67	17.67	33.656	24.324	359.2	.004	5.51	101.3	2.6	.31	.1	.00	.08	.04	1
	10 ISL	17.68	17.67	33.655	24.323	359.6	.036	5.52	101.4							10
1	11	17.68	17.67	33.655	24.322	359.7	.039	5.52	101.5	2.6	.31	.0	.00	.10	.03	11
	20 ISL	17.67	17.67	33.655	24.323	359.9	.072	5.53	101.6							20
1	27	17.67	17.67	33.655	24.324	360.2	.097	5.53	101.6	2.6	.31	.0	.00	.08	.04	27
	30 ISL	17.68	17.67	33.655	24.322	360.4	.108	5.53	101.6							30
1	42	17.70	17.69	33.655	24.318	361.2	.151	5.53	101.7	2.6	.32	.0	.00	.08	.04	42
	50 ISL	17.70	17.69	33.655	24.319	361.4	.180	5.54	101.8							50
1	57	17.70	17.69	33.655	24.319	361.6	.205	5.54	101.8	2.5	.32	.0	.00	.08	.04	57
1	67	17.70	17.69	33.654	24.318	362.1	.241	5.52	101.5	2.5	.31	.0	.00	.09	.04	67
	75 ISL	17.70	17.68	33.654	24.320	362.2	.271	5.53	101.7							76
1	78	17.69	17.68	33.654	24.320	362.2	.280	5.54	101.8	2.5	.32	.0	.00	.08	.04	78
1	93	17.57	17.56	33.613	24.318	362.9	.335	5.57	102.1	2.6	.32	.0	.00	.11	.09	93
	100 ISL	16.69	16.67	33.586	24.507	345.1	.361	5.55	100.0							101
1	108	15.57	15.56	33.556	24.738	323.1	.386	5.51	97.1	3.4	.44	.2	.14	.17	.17	108
1	123	13.90	13.88	33.447	25.012	297.1	.432	5.39	91.8	4.6	.54	1.9	.01	.10	.17	123
	125 ISL	13.70	13.68	33.452	25.058	293.4	.440	5.35	90.7							126
1	148	12.17	12.15	33.502	25.399	260.6	.504	4.81	79.0	8.8	.91	8.6	.01	.04	.06	149
	150 ISL	12.07	12.05	33.509	25.423	258.4	.509	4.77	78.1							151
1	168	11.01	10.99	33.604	25.691	232.9	.554	4.26	68.3	14.7	1.27	14.3	.01	.02	.04	169
1	188	10.09	10.07	33.736	25.953	208.2	.597	3.82	60.1	20.6	1.59	18.9	.00			189
	200 ISL	9.77	9.75	33.798	26.056	198.7	.621	3.66	57.1							202
1	208	9.60	9.58	33.838	26.115	193.1	.637	3.55	55.3	24.6	1.72	21.3	.00			209
1	239	8.94	8.92	34.010	26.356	170.6	.693	2.92	44.8	32.2	1.99	25.5	.01			240
	250 ISL	8.77	8.74	34.040	26.407	165.9	.712	2.81	43.0							252
1	279	8.38	8.35	34.082	26.501	157.4	.758	2.60	39.4	38.3	2.14	27.6	.01			280
	300 ISL	8.05	8.02	34.106	26.570	151.1	.791	2.31	34.8							302
1	338	7.52	7.49	34.141	26.674	141.5	.847	1.76	26.2	50.4	2.51	32.0	.00			340
	400 ISL	7.09	7.05	34.205	26.786	131.7	.932	1.07	15.7							403
1	413	7.02	6.99	34.217	26.804	130.1	.948	.95	14.0	60.6	2.83	35.6	.00			415
1	487	6.43	6.39	34.276	26.931	118.7	1.041	.50	7.3	70.8	3.06	38.4	.00			490
	500 ISL	6.33	6.28	34.283	26.950	117.0	1.056	.45	6.5							504
1	560	5.86	5.82	34.302	27.024	110.2	1.125	.34	4.9	80.6	3.16	40.4	.00			564

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 105 75

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
29 21.7 N	119 12.6 W	01/24/84	1837 GMT	3357 M	330	15 KT	320 07 07	1	1021.0 MB	17.4 C	15.5 C	3/8	CI

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.80	16.80	33.539	24.440	348.1	.000	5.62	101.5							0
1	1	16.80	16.80	33.539	24.440	348.1	.003	5.62	101.5	2.9	.36	.0	.00	.08	.03	1
	10 ISL	16.81	16.81	33.537	24.438	348.7	.035	5.62	101.5							10
1	11	16.81	16.81	33.537	24.438	348.7	.038	5.62	101.5	2.8	.36	.0	.00	.08	.05	11
	20 ISL	16.75	16.75	33.531	24.447	348.1	.070	5.64	101.7							20
1	26	16.71	16.71	33.527	24.454	347.6	.090	5.65	101.8	2.9	.33	.0	.00	.08	.04	26
	30 ISL	16.70	16.70	33.526	24.455	347.7	.104	5.65	101.7							30
1	41	16.69	16.69	33.523	24.455	348.0	.142	5.63	101.4	2.9	.36	.0	.00	.09	.05	41
	50 ISL	16.68	16.67	33.522	24.458	347.9	.174	5.64	101.6							50
1	57	16.66	16.65	33.521	24.463	347.8	.198	5.65	101.7	2.9	.36	.0	.00	.10	.05	57
1	72	16.57	16.56	33.513	24.478	346.9	.250	5.63	101.2	3.0	.36	.0	.00	.11	.07	72
	75 ISL	16.52	16.50	33.510	24.487	346.1	.261	5.63	101.0							76
1	82	16.41	16.40	33.503	24.506	344.5	.284	5.62	100.7	3.0	.37	.0	.00	.12	.09	82
1	97	14.94	14.93	33.596	24.906	306.7	.333	5.65	98.3	3.2	.41	.3	.09	.15	.20	97
	100 ISL	14.75	14.74	33.595	24.947	302.4	.343	5.62	97.5							101
1	117	13.94	13.93	33.589	25.113	287.4	.392	5.39	91.9	4.8	.55	2.4	.02	.10	.11	117
	125 ISL	13.34	13.32	33.580	25.229	276.4	.416	5.25	88.4							126
1	136	12.45	12.43	33.576	25.402	260.1	.446	5.01	82.8	7.8	.80	6.8	.01	.04	.07	137
	150 ISL	11.37	11.35	33.596	25.619	239.5	.480	4.61	74.5							151
1	156	10.91	10.89	33.616	25.717	230.2	.495	4.42	70.7	14.1	1.20	13.7	.00	.02	.03	157
1	177	9.99	9.96	33.732	25.968	206.6	.541	3.89	61.0	20.6	1.52	18.8	.00	.01	.01	178
1	197	9.53	9.50	33.912	26.186	186.2	.580	3.20	49.7	27.4	1.85	23.1	.00			198
	200 ISL	9.48	9.45	33.924	26.203	184.7	.585	3.16	49.1							202
1	217	9.22	9.20	33.961	26.273	178.2	.616	3.06	47.3	29.5	1.90	24.1	.01			218
	250 ISL	8.78	8.76	34.037	26.403	166.4	.673	2.73	41.8							252
1	253	8.75	8.72	34.043	26.413	165.5	.677	2.70	41.3	35.1	2.08	26.5	.00			254
	300 ISL	8.01	7.98	34.100	26.570	151.0	.752	2.18	32.8							302
1	303	7.95	7.92	34.102	26.581	150.1	.757	2.14	32.1	44.0	2.36	30.1	.00			305
1	360	6.89	6.86	34.117	26.742	134.9	.838	1.41	20.7	57.7	2.68	34.9	.00			362
	400 ISL	6.59	6.56	34.163	26.819	128.0	.890	1.02	14.9							403
1	446	6.41	6.37	34.217	26.886	122.2	.948	.70	10.1	69.7	2.97	37.8	.00			449
	500 ISL	6.02	5.98	34.237	26.952	116.4	1.012	.53	7.7							504
1	534	5.78	5.74	34.248	26.991	112.9	1.051	.48	6.9	80.4	3.15	40.3	.00			537
	600 ISL	5.42	5.37	34.307	27.083	104.7	1.123	.32	4.6							605
1	620	5.33	5.28	34.331	27.112	102.0	1.144	.28	4.0	91.3	3.24	41.9	.00			624

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 107 31

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 29.5 N	116 05.8 W	01/21/84	2219 GMT	18 M	300	12 KT	320 03 08	4	1016.6 MB	17.2 C	15.0 C	4/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	15.24	15.24	33.474	24.744	319.5	.032	5.71	99.9	4.5	.53	.6	.05	.84	.71	10

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 107 32

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 27.1 N	116 10.2 W	01/21/84	2012 GMT	205 M	290	08 KT	320 03 08	0	1016.6 MB	16.5 C	13.7 C	0/8	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	16.09	16.09	33.473	24.553	337.3	.000	5.72	101.8	3.1	.35	.2	.00	.20	.08	0
1	10	15.87	15.87	33.465	24.598	333.3	.033	5.79	102.6	3.2	.34	.2	.00	.27	.14	10
	20 ISL	15.30	15.30	33.448	24.712	322.8	.066	5.70	99.8							20
1	30	14.67	14.66	33.427	24.833	311.6	.098	5.53	95.6	4.5	.49	1.2	.02	.74	.41	30
1	40	14.23	14.22	33.398	24.903	305.1	.128	5.37	92.0	4.7	.55	1.8	.03	.67	.38	40
	50 ISL	13.64	13.63	33.474	25.084	288.2	.159	5.60	94.9							50
1	55	13.38	13.37	33.519	25.172	279.9	.172	5.64	95.0	6.9	.74	5.5	.01	.22	.23	55
1	69	12.95	12.94	33.556	25.287	269.3	.210	4.56	76.2	9.2	.98	8.9	.00	.24	.12	69
	75 ISL	12.55	12.54	33.589	25.391	259.6	.227	4.26	70.5							76
1	84	12.00	11.99	33.645	25.540	245.6	.249	3.94	64.5	14.5	1.29	14.1	.00	.13	.19	84
	100 ISL	11.47	11.46	33.754	25.723	228.5	.288	3.44	55.8							101
1	104	11.39	11.38	33.775	25.754	225.6	.296	3.36	54.4	19.4	1.57	18.0	.02	.08	.32	104
	125 ISL	10.74	10.73	33.872	25.946	207.8	.342	3.05	48.7							126
1	127	10.68	10.66	33.882	25.965	206.0	.347	3.02	48.2	23.6	1.79	21.3	.01	.02	.14	128
	150 ISL	10.15	10.13	33.999	26.149	188.9	.392	2.59	40.8							151
1	152	10.10	10.08	34.012	26.167	187.3	.396	2.54	40.0	28.9	2.02	24.3	.00	.01	.08	153

RV NEW HORIZON

CALCOFI CRUISE 8401

STATION 107 35

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
30 21.5 N	116 22.4 W	01/21/84	1644 GMT	1762 M	330 08 KT	320 03 07	0	1016.9 MB	16.1 C	14.2 C	0/8

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	16.25	16.25	33.470	24.516	340.9	.000	5.73	102.3	3.1	.38	.2	.00	.15	.08	0
1	10	16.25	16.25	33.469	24.514	341.4	.034	5.76	102.9	3.1	.37	.2	.00	.15	.08	10
	20 ISL	16.23	16.22	33.469	24.520	341.1	.068	5.76	102.8							20
1	21	16.22	16.22	33.469	24.521	341.1	.071	5.76	102.8	3.1	.36	.2	.00	.12	.06	21
	30 ISL	16.21	16.20	33.469	24.525	341.0	.102	5.73	102.3							30
1	31	16.21	16.20	33.469	24.525	341.0	.105	5.73	102.2	3.1	.36	.2	.00	.11	.07	31
1	42	16.14	16.13	33.469	24.541	339.9	.143	5.75	102.4	3.1	.36	.2	.00	.25	.09	42
	50 ISL	15.17	15.16	33.407	24.709	324.0	.170	5.62	98.2							50
1	52	14.92	14.92	33.395	24.754	319.8	.176	5.58	97.0	4.0	.49	.2	.04	.86	.48	52
1	62	14.06	14.05	33.395	24.937	302.5	.207	5.36	91.5	4.4	.59	1.9	.04	.26	.33	62
1	73	13.18	13.17	33.421	25.136	283.8	.239	5.15	86.4	5.9	.69	4.1	.02	.15	.20	73
	75 ISL	12.99	12.98	33.425	25.177	279.9	.245	5.11	85.6							76
1	88	12.04	12.03	33.464	25.391	259.9	.279	4.86	79.6	8.9	.92	8.8	.01	.08	.12	88
	100 ISL	11.42	11.40	33.543	25.568	243.2	.310	4.45	71.9							101
1	104	11.27	11.26	33.567	25.615	238.8	.319	4.32	69.6	13.6	1.24	13.7	.00	.04	.06	104
1	123	10.44	10.43	33.674	25.844	217.3	.364	3.81	60.4	19.1	1.52	18.8	.00	.01	.04	124
	125 ISL	10.41	10.40	33.685	25.857	216.1	.368	3.77	59.7							126
1	149	10.13	10.11	33.844	26.032	200.0	.418	3.26	51.3	23.4	1.75	22.0	.00	.01	.03	150
	150 ISL	10.11	10.10	33.848	26.037	199.5	.420	3.25	51.2							151
1	180	9.52	9.50	33.975	26.236	181.1	.477	2.87	44.6	28.8	1.94	25.1	.00			181
	200 ISL	9.12	9.09	34.039	26.351	170.5	.512	2.64	40.7							202
1	211	8.93	8.91	34.073	26.407	165.4	.530	2.49	38.2	34.5	2.14	27.8	.00			212
1	242	8.74	8.72	34.181	26.521	155.0	.579	1.79	27.4	40.6	2.39	30.4	.00			243
	250 ISL	8.57	8.54	34.178	26.546	152.3	.592	1.69	25.8							252
1	282	7.82	7.80	34.165	26.648	143.2	.640	1.48	22.2	48.0	2.57	32.5	.00			284
	300 ISL	7.59	7.56	34.165	26.682	140.5	.665	1.43	21.3							302
1	345	7.21	7.18	34.166	26.737	135.5	.727	1.31	19.4	55.6	2.76	35.1				347
	400 ISL	6.85	6.81	34.229	26.838	126.6	.799	.86	12.6							403
1	421	6.73	6.69	34.257	26.876	123.1	.826	.68	9.9	67.1	3.03	37.7	.02			424
1	498	6.25	6.21	34.304	26.977	114.3	.917	.41	5.9	75.6	3.17	39.7	.02			501
	500 ISL	6.24	6.19	34.306	26.980	114.1	.919	.40	5.8							504
1	573	5.82	5.77	34.349	27.067	106.3	1.000	.32	4.6	83.8	3.26	41.2	.02			577

RV NEW HORIZON

CALCOFI CRUISE 8401

STATION 107 40

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
30 11.3 N	116 41.9 W	01/21/84	1211 GMT	2640 M	330 10 KT		0	1017.6 MB	15.2 C	13.9 C	0/8

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	16.45	16.45	33.471	24.471	345.2	.000	5.65	101.3	3.1	.32	.3	.00	.06	.05	0
1	10	16.47	16.47	33.470	24.464	346.2	.034	5.75	103.1	3.0	.31	.3	.00	.06	.04	10
	20 ISL	16.46	16.45	33.469	24.468	346.1	.069	5.69	102.0							20
1	21	16.46	16.45	33.469	24.468	346.1	.072	5.68	101.8	3.0	.31	.3	.00	.06	.04	21
	30 ISL	16.48	16.47	33.469	24.463	346.9	.104	5.67	101.7							30
1	31	16.48	16.48	33.469	24.463	347.0	.107	5.67	101.7	2.9	.31	.2	.00	.05	.04	31
1	41	16.47	16.46	33.468	24.466	347.0	.141	5.65	101.3	2.7	.31	.2	.00	.11	.08	41
	50 ISL	16.45	16.44	33.469	24.470	346.9	.173	5.66	101.4							50
1	51	16.45	16.44	33.469	24.470	346.9	.176	5.66	101.4	2.6	.31	.2	.00	.08	.06	51
1	61	15.09	15.08	33.427	24.742	321.2	.209	5.73	99.9	3.3	.36	.2	.00	.18	.19	61
1	71	14.21	14.20	33.408	24.917	306.8	.240	5.60	95.9	3.8	.43	.7	.05	.20	.23	71
	75 ISL	13.97	13.96	33.410	24.968	300.3	.253	5.55	94.6							76
1	87	13.30	13.29	33.417	25.110	286.8	.288	5.34	89.8	5.3	.60	3.1	.02	.14	.21	87
	100 ISL	11.93	11.92	33.481	25.425	256.8	.324	4.88	79.7							101
1	102	11.77	11.76	33.491	25.462	253.3	.328	4.82	78.5	10.0	.97	9.5	.01	.06	.08	102
1	121	11.09	11.07	33.581	25.658	235.0	.376	4.34	69.7	13.9	1.26	13.9	.01	.03	.05	122
	125 ISL	10.94	10.93	33.605	25.703	230.9	.385	4.22	67.6							126
1	147	10.04	10.02	33.758	25.979	204.9	.433	3.53	55.5	22.4	1.68	20.9	.00	.01	.02	148
	150 ISL	9.94	9.93	33.774	26.007	202.3	.439	3.47	54.5							151
1	177	9.17	9.16	33.900	26.232	181.2	.491	3.08	47.5	29.2	1.94	25.0	.00			178
	200 ISL	8.86	8.84	33.949	26.322	173.1	.531	2.97	45.5							202
1	208	8.79	8.76	33.962	26.343	171.2	.545	2.93	44.8	32.5	2.02	26.6	.00			209
1	238	8.49	8.46	34.046	26.455	161.0	.595	2.52	38.3	37.3	2.13	28.2	.00			239
	250 ISL	8.36	8.34	34.082	26.503	156.7	.614	2.30	34.8							252
1	278	8.06	8.03	34.152	26.603	147.6	.657	1.80	27.1	45.5	2.47	31.6	.00			280
	300 ISL	7.82	7.79	34.168	26.652	143.2	.689	1.60	24.0							302
1	339	7.38	7.35	34.174	26.720	137.1	.743	1.36	20.2	54.2	2.71	34.4	.00			341
	400 ISL	6.81	6.77	34.222	26.837	126.6	.824	.88	12.9							403
1	415	6.69	6.65	34.236	26.865	124.1	.843	.77	11.2	66.6	2.99	37.9	.00			418
1	492	6.25	6.20	34.310	26.982	113.8	.934	.42	6.1	75.4	3.15	39.8	.00			495
	500 ISL	6.20	6.15	34.317	26.993	112.8	.943	.40	5.7							504
1	567	5.78	5.73	34.355	27.077	105.3	1.016	.30	4.3	84.9	3.23	41.4	.00			571

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
30 00.8 N	117 01.8 W	01/21/84	0808 GMT	1391 M	310	06 KT	300 05 07	0	1018.6 MB	15.0 C	13.3 C	0/8

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	16.44	16.44	33.473	24.475	344.8	.000	5.66	101.4	2.7	.35	.3	.00	.09	.05	0
1	10	16.45	16.44	33.472	24.472	345.4	.034	5.69	102.0	2.7	.34	.2	.00	.09	.04	10
	20 ISL	16.43	16.42	33.472	24.477	345.2	.069	5.70	102.1							20
1	21	16.42	16.42	33.472	24.477	345.2	.072	5.70	102.1	2.7	.35	.2	.00	.09	.05	21
	30 ISL	16.45	16.44	33.471	24.472	346.0	.104	5.67	101.7							30
1	31	16.45	16.44	33.471	24.472	346.1	.107	5.67	101.6	2.7	.34	.2	.00	.09	.04	31
1	42	16.42	16.42	33.471	24.478	345.9	.145	5.69	101.9	2.7		.2	.00	.11	.05	42
	50 ISL	16.40	16.40	33.469	24.481	345.8	.173	5.67	101.5							50
1	52	16.40	16.39	33.469	24.482	345.8	.179	5.66	101.4	2.6	.33	.2	.00	.12	.07	52
1	62	16.38	16.37	33.467	24.485	345.9	.213	5.66	101.3	2.6	.33	.2	.00	.13	.08	62
1	73	15.73	15.72	33.461	24.628	332.4	.251	5.74	101.4	3.1	.34	.2	.00	.21	.25	73
	75 ISL	15.46	15.45	33.447	24.678	327.8	.258	5.72	100.6							76
1	88	13.91	13.90	33.396	24.970	300.2	.298	5.52	94.0	4.3	.49	1.4	.03	.23	.24	88
	100 ISL	13.07	13.06	33.462	25.191	279.4	.334	5.22	87.3							101
1	103	12.93	12.92	33.479	25.232	275.5	.341	5.15	85.9	6.3	.71	5.1	.01	.10	.18	103
1	123	11.57	11.56	33.544	25.541	246.3	.395	4.77	77.4	10.3	.99	10.0	.01			124
	125 ISL	11.48	11.46	33.551	25.564	244.2	.399	4.72	76.4							126
1	149	10.24	10.22	33.678	25.883	214.1	.455	3.86	60.9	19.7	1.51	18.7	.00	.01	.03	150
	150 ISL	10.22	10.20	33.681	25.889	213.6	.456	3.84	60.6							151
1	180	9.50	9.48	33.820	26.117	192.3	.517	3.32	51.6	25.7	1.83	23.2	.01			181
	200 ISL	9.10	9.08	33.936	26.272	177.9	.554	3.02	46.4							202
1	211	8.92	8.90	33.996	26.348	170.9	.573	2.85	43.7	32.2	2.02	26.0	.01			212
1	242	8.63	8.60	34.100	26.476	159.2	.624	2.34	35.7	37.9	2.24	28.3	.00			243
	250 ISL	8.53	8.51	34.116	26.503	156.8	.637	2.23	33.9							252
1	282	8.15	8.12	34.155	26.593	148.7	.687	1.83	27.6	44.1	2.44	31.1	.00			284
	300 ISL	7.96	7.92	34.169	26.633	145.1	.712	1.65	24.9							302
1	344	7.49	7.45	34.196	26.722	137.1	.775	1.26	18.7	53.7	2.69	34.1	.00			346
	400 ISL	6.92	6.88	34.256	26.849	125.5	.848	.73	10.7							403
1	420	6.73	6.70	34.277	26.891	121.8	.873	.57	8.3	67.4	3.01	37.9	.00			423
1	497	6.32	6.28	34.310	26.972	114.8	.964	.39	5.6	74.2	3.10	39.5	.00			500
	500 ISL	6.30	6.26	34.311	26.976	114.5	.967	.38	5.6							504
1	574	5.83	5.78	34.343	27.061	106.9	1.050	.30	4.3	83.1	3.19	41.3	.00			578

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
29 51.2 N	117 20.9 W	01/21/84	0421 GMT	2415 M	340	09 KT		0	1019.0 MB	15.0 C	13.1 C	0/8

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	16.55	16.55	33.482	24.455	346.7	.000	5.68	102.0	2.7	.33	.3	.01	.10	.05	0
1	10	16.57	16.56	33.482	24.452	347.3	.035	5.79	104.0	2.7	.33	.3	.01	.10	.06	10
	20 ISL	16.44	16.44	33.471	24.472	345.7	.069	5.71	102.3							20
1	21	16.43	16.43	33.469	24.474	345.6	.073	5.70	102.1	2.6	.33	.3	.01	.12	.08	21
	30 ISL	16.41	16.41	33.464	24.475	345.8	.104	5.72	102.4							30
1	31	16.41	16.40	33.464	24.475	345.8	.107	5.72	102.4	2.6	.33	.3	.01	.13	.11	31
1	42	16.39	16.39	33.465	24.480	345.6	.145	5.71	102.2	2.6	.33	.3	.01	.13	.08	42
	50 ISL	16.39	16.38	33.462	24.480	345.9	.173	5.69	101.9							50
1	52	16.38	16.37	33.462	24.480	346.0	.179	5.69	101.9	2.6	.32	.3	.00	.14	.08	52
1	62	16.35	16.34	33.461	24.488	345.6	.214	5.69	101.8	2.5	.32	.3	.00	.14	.09	62
1	73	15.36	15.35	33.448	24.700	325.6	.251	5.72	100.3	3.2	.37	.3	.01	.25	.30	73
	75 ISL	15.16	15.15	33.448	24.744	321.7	.258	5.70	99.6							76
1	88	14.23	14.21	33.448	24.944	302.6	.297	5.56	95.3	4.0	.48	1.0	.05	.22	.32	88
	100 ISL	13.79	13.78	33.506	25.079	290.1	.334	5.41	92.0							101
1	104	13.67	13.65	33.523	25.118	286.4	.344	5.36	90.8	4.7	.55	2.5	.01	.14	.23	104
1	124	11.89	11.87	33.532	25.474	252.8	.401	4.89	79.8	9.4	.90	8.4	.00	.06	.11	125
	125 ISL	11.85	11.83	33.534	25.483	252.0	.402	4.87	79.5							126
1	149	10.37	10.35	33.654	25.842	218.1	.459	4.07	64.4	18.0	1.42	16.9	.00	.02	.03	150
	150 ISL	10.35	10.33	33.656	25.847	217.6	.461	4.06	64.2							151
1	180	9.66	9.64	33.772	26.053	198.5	.523	3.63	56.6	24.1	1.70	21.2	.00			181
	200 ISL	9.11	9.09	33.880	26.227	182.2	.561	3.24	49.8							202
1	212	8.81	8.79	33.945	26.325	173.0	.582	3.00	45.9	32.2	1.98	25.8	.00			213
1	243	8.44	8.42	34.048	26.464	160.3	.634	2.59	39.3	37.8	2.17	27.9	.00			244
	250 ISL	8.36	8.34	34.065	26.490	157.9	.645	2.49	37.7							252
1	284	7.98	7.95	34.122	26.591	148.7	.697	2.02	30.4	44.1	2.40	30.7	.00			285
	300 ISL	7.73	7.70	34.130	26.635	144.7	.721	1.84	27.5							302
1	345	7.11	7.07	34.148	26.738	135.3	.784	1.39	20.5	56.7	2.69	34.9	.00			347
	400 ISL	6.86	6.82	34.239	26.844	125.9	.856	.81	11.8							403
1	422	6.80	6.76	34.277	26.882	122.7	.884	.61	8.9	66.5	3.03	37.5	.00			425
1	500	6.19	6.15	34.311	26.990	113.1	.975	.39	5.6	76.5	3.17	39.9	.00			503
1	576	5.76	5.71	34.348	27.074	105.6	1.058	.27	3.9	84.5	3.24	41.4	.00			580

RV NEW HORIZON

CALCOFI CRUISE 8401

STATION 107 55

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
29 40.5 N	117 41.3 W	01/21/84	0032 GMT	3357 M	300	06 KT	320 05 05	0	1019.3 MB	16.2 C	13.3 C	0/8	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.59	16.59	33.479	24.445	347.7	.000	5.66	101.7							0
1	1	16.59	16.59	33.479	24.445	347.7	.003	5.66	101.7	2.9	.34	.0	.00	.13	.06	1
	10 ISL	16.52	16.51	33.476	24.459	346.6	.035	5.79	103.8							10
1	12	16.50	16.50	33.475	24.461	346.5	.042	5.79	103.9	2.9	.34	.0	.00	.13	.08	12
	20 ISL	16.47	16.47	33.474	24.468	346.2	.069	5.71	102.5							20
1	22	16.47	16.46	33.474	24.469	346.1	.076	5.69	102.0	2.8	.33	.0	.00	.13	.08	22
	30 ISL	16.48	16.47	33.474	24.467	346.6	.104	5.68	101.9							30
1	32	16.48	16.48	33.474	24.466	346.7	.111	5.68	101.9	2.6	.32	.0	.00	.14	.08	32
1	43	16.48	16.48	33.474	24.466	347.0	.149	5.69	102.1	2.5	.32	.0	.00	.15	.07	43
	50 ISL	16.48	16.47	33.474	24.466	347.2	.173	5.68	101.8							50
1	53	16.48	16.47	33.474	24.467	347.3	.183	5.67	101.7	2.5	.32	.0	.00	.15	.08	53
1	63	16.47	16.46	33.474	24.470	347.3	.218	5.67	101.7	2.5	.32	.0	.00	.16	.09	63
1	74	16.43	16.41	33.471	24.479	346.9	.256	5.68	101.8	2.5	.32	.0	.00	.16	.10	74
	75 ISL	16.29	16.28	33.466	24.506	344.2	.260	5.68	101.4							76
1	89	14.50	14.48	33.427	24.871	309.7	.305	5.66	97.5	3.5	.43	.4	.08	.22	.42	89
	100 ISL	13.63	13.62	33.444	25.063	291.5	.339	5.42	91.7							101
1	105	13.36	13.35	33.457	25.129	285.4	.352	5.30	89.2	5.3	.61	3.4	.02	.13	.21	105
1	124	12.08	12.06	33.531	25.438	256.3	.406	4.94	81.0	8.7	.85	8.0	.01	.07	.08	125
	125 ISL	12.04	12.03	33.532	25.445	255.6	.407	4.93	80.7							126
1	150	10.61	10.60	33.616	25.770	225.0	.468	4.21	66.9	16.6	1.36	15.9	.01	.02	.03	151
1	181	9.58	9.56	33.787	26.079	196.0	.533	3.55	55.2	24.3	1.74	21.5	.00			182
	200 ISL	9.19	9.17	33.876	26.211	183.7	.569	3.27	50.4							202
1	212	8.99	8.97	33.925	26.282	177.2	.591	3.11	47.8	30.0	1.93	24.8	.00			213
1	243	8.43	8.40	34.027	26.449	161.6	.643	2.71	41.1	36.6	2.12	27.3	.00			244
	250 ISL	8.38	8.35	34.056	26.480	158.8	.654	2.54	38.5							252
1	284	8.21	8.18	34.174	26.598	148.2	.706	1.71	25.9	44.6	2.49	30.6	.00			285
	300 ISL	8.00	7.97	34.198	26.648	143.7	.730	1.46	22.0							302
1	345	7.37	7.33	34.225	26.762	133.3	.792	1.02	15.1	56.7	2.82	34.6	.00			347
	400 ISL	6.91	6.88	34.268	26.859	124.6	.863	.66	9.7							403
1	422	6.77	6.73	34.281	26.890	122.0	.891	.57	8.3	67.5	3.06	37.2	.00			425
1	500	6.20	6.15	34.299	26.979	114.1	.982	.39	5.6	76.9	3.16	39.6	.00			503
1	576	5.72	5.67	34.350	27.080	105.1	1.066	.27	3.9	85.5	3.26	41.0	.00			580

RV NEW HORIZON

CALCOFI CRUISE 8401

STATION 107 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
29 32.4 N	118 02.3 W	01/20/84	2045 GMT	3737 M	340	10 KT	320 05 05	2	1020.0 MB	16.4 C	13.0 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.42	16.42	33.471	24.477	344.6	.000	5.69	101.9							0
1	1	16.42	16.42	33.471	24.477	344.6	.003	5.69	101.9	2.6	.33	.1	.00	.15	.08	1
	10 ISL	16.43	16.43	33.470	24.473	345.3	.034	5.70	102.1							10
1	12	16.44	16.44	33.470	24.473	345.4	.041	5.70	102.2	2.6	.33	.1	.00	.14	.08	12
	20 ISL	16.41	16.41	33.468	24.478	345.2	.069	5.74	102.8							20
1	27	16.39	16.38	33.467	24.482	345.0	.093	5.77	103.3	2.6	.33	.1	.00	.15	.09	27
	30 ISL	16.39	16.39	33.467	24.481	345.2	.104	5.77	103.2							30
1	42	16.43	16.42	33.468	24.475	346.2	.144			2.6	.33	.1	.00	.15	.08	42
	50 ISL	16.42	16.41	33.468	24.476	346.2	.173	5.75	103.0							50
1	58	16.41	16.40	33.468	24.479	346.2	.200	5.74	102.8	2.6	.33	.1	.00	.16	.08	58
1	73	16.41	16.40	33.467	24.479	346.7	.251	5.70	102.1	2.6	.33	.1	.00	.15	.09	73
	75 ISL	16.14	16.13	33.452	24.528	342.2	.259	5.72	101.9							76
1	84	15.07	15.06	33.416	24.740	322.1	.288	5.79	100.9	3.3	.42	.0	.06	.31	.37	84
1	99	14.52	14.50	33.560	24.970	300.6	.335	5.61	96.8	3.5	.43	.9	.11	.19	.24	99
	100 ISL	14.47	14.45	33.568	24.986	299.0	.339	5.59	96.4							101
1	120	13.62	13.60	33.623	25.206	278.6	.395	5.35	90.6	5.2	.56	3.1	.02	.10	.14	120
	125 ISL	13.24	13.22	33.613	25.275	272.0	.410	5.26	88.5							126
1	139	12.15	12.13	33.582	25.463	254.3	.448	4.99	82.0	8.3	.85	7.9	.02	.06	.10	140
	150 ISL	11.41	11.40	33.590	25.606	241.6	.474	4.74	76.7							151
1	160	10.76	10.74	33.597	25.730	229.1	.499	4.46	71.1	14.7	1.23	14.3	.01	.03	.04	161
1	180	9.80	9.78	33.738	26.005	203.1	.542	3.80	59.4	21.7	1.63	20.2	.00	.01	.02	181
	200 ISL	9.28	9.26	33.848	26.176	187.1	.580	3.47	53.7							202
1	201	9.26	9.24	33.853	26.183	186.5	.582	3.46	53.5	27.1	1.82	23.1	.01			202
1	222	8.86	8.84	33.924	26.302	175.4	.620	3.22	49.3	30.7	1.92	25.0	.00			223
	250 ISL	8.31	8.29	34.011	26.454	161.3	.667	2.78	42.1							252
1	258	8.18	8.15	34.030	26.490	158.0	.680	2.66	40.1	38.7	2.18	28.6	.00			259
	300 ISL	7.81	7.78	34.070	26.577	150.3	.745	2.28	34.1							302
1	308	7.75	7.72	34.073	26.587	149.4	.757	2.21	33.0	45.1	2.36	30.9	.00			310
1	365	7.05	7.01	34.128	26.730	136.3	.838	1.48	21.8	56.2	2.71	34.7	.00			367
	400 ISL	6.62	6.58	34.146	26.802	129.7	.885	1.17	17.0							403
1	451	6.13	6.09	34.181	26.894	121.3	.949	.82	11.8	72.2	3.02	39.3	.00			454
	500 ISL	6.01	5.96	34.264	26.976	114.1	1.006	.54	7.8							504
1	539	5.95	5.91	34.329	27.034	109.1	1.049	.38	5.5	80.9	3.22	40.6	.00			542
	600 ISL	5.61	5.56	34.374	27.113	102.1	1.114	.29	4.1							605
1	626	5.42	5.37	34.379	27.140	99.6	1.140	.25	3.5	90.5	3.29	42.4	.0			630

RV NEW HORIZON CALCOFI CRUISE 8401 STATION 107 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
29 11.9 N	118 40.5 W	01/20/84	1452 GMT	3169 M	340	20 KT	340 06 06	1	1019.3 MB	15.3 C	13.0 C	3/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.47	16.47	33.476	24.470	345.3	.000	5.68	101.9							0
1	2	16.47	16.47	33.476	24.470	345.3	.007	5.68	101.9	2.7	.34	.1	.00	.11	.08	2
	10 ISL	16.47	16.47	33.475	24.469	345.7	.035	5.73	102.7							10
1	12	16.47	16.47	33.475	24.469	345.7	.041	5.73	102.8	2.6	.32	.1	.00	.12	.08	12
	20 ISL	16.47	16.47	33.475	24.469	346.0	.069	5.70	102.3							20
1	27	16.47	16.47	33.475	24.469	346.3	.093	5.67	101.7	2.6	.32	.1	.00	.11	.07	27
	30 ISL	16.48	16.47	33.474	24.467	346.5	.104	5.67	101.7							30
1	42	16.50	16.49	33.473	24.462	347.4	.145	5.66	101.6	2.5	.32	.1	.00	.11	.08	42
	50 ISL	16.50	16.49	33.475	24.464	347.5	.173	5.66	101.6							50
1	57	16.50	16.49	33.476	24.465	347.6	.197	5.67	101.7	2.5	.32	.1	.00	.12	.06	57
1	72	16.49	16.47	33.477	24.469	347.7	.249	5.68	101.9	2.5	.33	.1	.00	.12	.07	72
	75 ISL	16.49	16.47	33.476	24.468	347.9	.260	5.68	101.9							76
1	82	16.49	16.47	33.473	24.466	348.3	.283	5.68	101.9	2.5	.33	.1	.00	.11	.09	82
1	97	14.95	14.94	33.572	24.885	308.6	.332	5.69	99.0	3.4	.36	.2	.06	.20	.31	97
	100 ISL	14.74	14.72	33.599	24.953	302.3	.343	5.65	97.9							101
1	118	13.69	13.68	33.676	25.231	276.1	.393	5.33	90.5	4.7	.54	3.0	.02	.08	.15	118
	125 ISL	13.01	12.99	33.634	25.338	266.1	.414	5.16	86.3							126
1	137	11.90	11.88	33.561	25.494	251.2	.446	4.88	79.7	9.3	.90	8.8	.01	.05	.06	138
	150 ISL	11.24	11.22	33.571	25.624	239.0	.477	4.68	75.4							151
1	157	10.93	10.91	33.598	25.700	231.9	.494	4.54	72.7	13.2	1.16	13.1	.00	.03	.04	158
1	177	10.05	10.03	33.751	25.972	206.3	.537	3.78	59.4	20.8	1.56	19.4	.00	.01	.01	178
1	197	9.44	9.42	33.856	26.156	189.0	.577	3.41	52.9	25.8	1.79	22.7	.00			198
	200 ISL	9.35	9.33	33.868	26.180	186.7	.582	3.38	52.4							202
1	217	8.90	8.88	33.934	26.303	175.2	.613	3.24	49.7	29.9	1.92	24.8	.01			218
	250 ISL	8.64	8.61	34.047	26.433	163.5	.669	2.67	40.7							252
1	253	8.63	8.60	34.054	26.440	162.9	.673	2.62	40.0	35.8	2.11	27.2	.01			254
	300 ISL	8.01	7.98	34.095	26.565	151.5	.748	2.26	34.1							302
1	302	7.98	7.95	34.095	26.571	151.0	.751	2.25	33.8	43.0	2.34	30.0	.00			304
1	359	7.38	7.35	34.157	26.707	138.7	.833	1.51	22.4	52.8	2.64	33.7	.00			361
	400 ISL	6.94	6.90	34.183	26.788	131.3	.889	1.12	16.5							403
1	445	6.49	6.45	34.204	26.866	124.2	.947	.81	11.8	67.9	2.96	38.0	.00			448
	500 ISL	6.04	5.99	34.233	26.948	116.8	1.012	.56	8.1							504
1	532	5.84	5.79	34.254	26.990	113.0	1.049	.47	6.7	79.6	3.13	40.6	.00			535
	600 ISL	5.60	5.55	34.324	27.074	105.7	1.124	.31	4.4							605
1	619	5.58	5.53	34.347	27.095	103.9	1.143	.28	4.0	86.7	3.23	41.8	.00			623

RV NEW HORIZON CALCOFI CRUISE 8401 STATION 107 80

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
28 51.1 N	119 21.9 W	01/20/84	0921 GMT	3926 M	340	22 KT	320 07 06	1	1020.0 MB	15.3 C	12.9 C	1/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.96	16.95	33.540	24.406	351.4	.000	5.59	101.3							0
1	1	16.96	16.95	33.540	24.406	351.4	.004	5.59	101.3	2.0	.33	.2	.00	.10	.07	1
	10 ISL	16.98	16.98	33.537	24.398	352.4	.035	5.70	103.3							10
1	12	16.98	16.98	33.537	24.398	352.5	.042	5.71	103.5	1.9	.32	.2	.00	.10	.06	12
	20 ISL	16.98	16.98	33.537	24.398	352.8	.070	5.69	103.0							20
1	27	16.98	16.98	33.537	24.398	353.0	.095	5.64	102.2	1.9	.32	.2	.00	.10	.06	27
	30 ISL	16.98	16.98	33.537	24.398	353.1	.106	5.63	102.1							30
1	42	16.98	16.97	33.536	24.398	353.5	.148	5.62	101.8	1.8	.32	.2	.00	.10	.07	42
	50 ISL	16.97	16.96	33.537	24.401	353.5	.176	5.62	101.9							50
1	57	16.96	16.95	33.537	24.403	353.5	.200	5.63	102.0	2.7	.32	.2	.00	.11	.05	57
1	73	16.40	16.39	33.502	24.508	344.0	.256	5.62	100.7	2.8	.34	.1	.00	.23	.15	73
	75 ISL	15.87	15.86	33.505	24.630	333.0	.264	5.48	97.2							76
1	83	14.06	14.04	33.513	25.030	294.4	.288	4.91	83.9	6.3	.73	4.3	.06	.32	.31	83
1	98	13.25	13.24	33.641	25.293	269.6	.330	3.85	64.8	11.6	1.20	11.7	.02	.14	.20	98
	100 ISL	13.18	13.16	33.657	25.321	267.0	.336	3.74	62.7							101
1	119	12.70	12.68	33.748	25.486	251.7	.384	3.12	51.9	15.9	1.50	16.3	.01	.05	.10	119
	125 ISL	12.52	12.51	33.771	25.538	246.9	.401	2.97	49.3							126
1	138	12.18	12.16	33.815	25.639	237.6	.433	2.73	44.9	19.5	1.71	19.0	.01	.01	.03	139
	150 ISL	11.94	11.92	33.867	25.725	229.7	.460	2.52	41.2							151
1	159	11.76	11.74	33.908	25.790	223.7	.481	2.39	39.0	22.4	1.87	21.2	.01	.01	.02	160
1	179	11.36	11.34	33.979	25.919	211.8	.524	2.36	38.2	24.2	1.94	22.4	.00	.01	.02	180
1	200	11.00	10.97	34.059	26.048	199.9	.567	2.18	35.0	26.3	2.07	23.9	.01			201
1	220	10.60	10.57	34.095	26.147	190.9	.606	2.16	34.4	28.2	2.08	24.8	.02			221
	250 ISL	9.71	9.69	34.121	26.319	174.9	.661	2.22	34.5							252
1	256	9.54	9.52	34.125	26.350	171.9	.671	2.22	34.6	33.1	2.17	26.4	.01			257
	300 ISL	8.86	8.82	34.197	26.517	156.6	.744	1.79	27.5							302
1	307	8.77	8.74	34.207	26.538	154.7	.755	1.70	26.0	41.7	2.40	29.5	.00			309
1	364	8.00	7.96	34.226	26.672	142.6	.840	1.27	19.1	49.9	2.61	32.3	.00			366
	400 ISL	7.54	7.50	34.244	26.754	135.1	.890	1.00	14.8							403
1	451	6.95	6.91	34.273	26.859	125.4	.956	.66	9.7	64.3	2.93	36.7	.00			454
	500 ISL	6.52	6.48	34.299	26.937	118.4	1.016	.46	6.7							504
1	539	6.25	6.20	34.317	26.987	113.9	1.061	.36	5.2	75.6	3.10	39.5	.00			542
	600 ISL	5.91	5.86	34.344	27.052	108.3	1.129	.30	4.3							605
1	626	5.81	5.75	34.353	27.072	106.5	1.157	.27	3.9	83.5	3.17	40.8	.00			630

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 107 90

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
28 31.9 N	120 00.4 W	01/20/84	0253 GMT	3737 M	350	20 KT		1	1019.6 MB	15.8 C	13.8 C	3/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	17.31	17.31	33.567	24.342	357.6	.000	5.61	102.3							0
1	2	17.31	17.31	33.567	24.342	357.6	.007	5.61	102.3	2.7	.32	.0	.00	.13	.08	2
	10 ISL	17.33	17.33	33.569	24.339	358.1	.036	5.66	103.4							10
1	12	17.33	17.33	33.569	24.339	358.2	.043	5.67	103.5	2.6	.32	.0	.00	.13	.08	12
	20 ISL	17.33	17.33	33.569	24.340	358.3	.072	5.66	103.2							20
1	27	17.33	17.32	33.569	24.341	358.5	.096	5.63	102.7	2.6	.32	.0	.00	.13	.08	27
	30 ISL	17.33	17.33	33.568	24.339	358.7	.107	5.62	102.6							30
1	42	17.35	17.35	33.568	24.334	359.6	.150	5.60	102.2	2.6	.32	.0	.00	.13	.08	42
	50 ISL	17.35	17.34	33.569	24.335	359.8	.179	5.61	102.5							50
1	57	17.35	17.34	33.569	24.336	359.9	.204	5.62	102.6	2.6	.32	.0	.00	.13	.07	57
1	72	15.25	15.24	33.451	24.727	323.0	.255	5.55	97.1	3.6	.46	.3	.10	.31	.33	72
	75 ISL	15.09	15.08	33.459	24.768	319.1	.265	5.48	95.6							76
1	82	14.88	14.87	33.485	24.834	313.0	.286	5.33	92.6	4.5	.55	1.4	.06	.25	.24	82
1	97	14.10	14.09	33.493	25.004	297.2	.332	5.08	86.9	5.5	.68	3.6	.03	.15	.19	97
	100 ISL	13.91	13.89	33.500	25.051	292.8	.342	5.00	85.1							101
1	118	12.91	12.89	33.554	25.295	269.9	.391	4.56	76.1	9.3	.99	8.9	.02	.08	.12	118
	125 ISL	12.57	12.55	33.581	25.382	261.8	.411	4.46	74.0							126
1	137	12.06	12.04	33.633	25.521	248.7	.443	4.28	70.2	13.2	1.24	13.0	.02	.04	.08	138
	150 ISL	11.52	11.50	33.712	25.683	233.5	.473	3.90	63.2							151
1	157	11.24	11.22	33.760	25.771	225.3	.490	3.66	59.0	18.1	1.52	17.4	.00	.02	.04	158
1	177	10.75	10.73	33.851	25.929	210.5	.533	3.24	51.7	21.6	1.71	20.0	.00	.01	.03	178
1	197	10.06	10.04	33.943	26.121	192.6	.573	2.99	47.0	26.0	1.89	22.7	.01			198
	200 ISL	9.98	9.96	33.959	26.146	190.2	.579	2.97	46.7							202
1	218	9.57	9.55	34.050	26.286	177.2	.612	2.86	44.5	30.9	2.07	25.1	.00			219
	250 ISL	8.93	8.90	34.114	26.441	162.9	.666	2.33	35.8							252
1	253	8.88	8.85	34.116	26.450	162.1	.671	2.28	35.0	36.7	2.21	27.5	.01			254
	300 ISL	8.30	8.27	34.149	26.566	151.7	.745	1.99	30.1							302
1	304	8.26	8.23	34.151	26.573	151.0	.752	1.97	29.8	42.8	2.38	29.7	.00			306
1	360	7.65	7.61	34.228	26.725	137.2	.832			53.6	2.71	33.3	.00			362
	400 ISL	7.33	7.29	34.272	26.804	130.1	.885	.96	14.2							403
1	447	7.00	6.96	34.309	26.881	123.4	.945	.51	7.5	64.6	3.01	36.5	.01			450
	500 ISL	6.54	6.49	34.325	26.956	116.7	1.009	.37	5.4							504
1	535	6.24	6.19	34.330	26.999	112.7	1.048	.34	4.9	75.6	3.17	39.3	.00			538
	600 ISL	5.79	5.74	34.349	27.071	106.3	1.120	.28	4.0							605
1	624	5.65	5.60	34.355	27.093	104.3	1.145	.27	3.8	85.6	3.23	41.3	.00			628

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 107 100

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
28 13.8 N	120 41.3 W	01/19/84	2042 GMT	4023 M	360	21 KT	360 06 05	2	1022.0 MB	16.7 C	13.4 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	18.14	18.14	33.809	24.328	358.9	.000	5.48	101.7							0
1	2	18.14	18.14	33.809	24.328	358.9	.007	5.48	101.7	2.6	.31	.0	.00	.08	.05	2
	10 ISL	18.14	18.14	33.809	24.326	359.3	.036	5.48	101.7							10
1	13	18.15	18.14	33.809	24.326	359.5	.047	5.48	101.7	2.6	.31	.0	.00	.08	.05	13
	20 ISL	18.14	18.14	33.809	24.327	359.6	.072	5.48	101.6							20
1	28	18.14	18.14				.100	5.47	101.5	2.6	.31	.0	.00	.08	.03	28
	30 ISL	18.15	18.14	33.810	24.328	359.9	.108	5.47	101.5							30
1	43	18.17	18.16	33.811	24.324	360.7	.154	5.46	101.4	2.6	.31	.0	.00	.08	.04	43
	50 ISL	18.17	18.16	33.812	24.324	360.9	.180	5.50	102.1							50
1	59	18.17	18.16	33.814	24.325	361.2	.212	5.53	102.7	2.6	.30	.0	.00	.08	.05	59
1	69	18.18	18.17	33.815	24.325	361.6	.248	5.48	101.8	2.6	.30	.0	.00	.08	.04	69
	75 ISL	18.17	18.16	33.816	24.327	361.5	.270	5.50	102.0							76
1	79	18.17	18.15	33.816	24.329	361.5	.284	5.51	102.3	2.6	.30	.0	.00	.08	.03	79
1	94	18.18	18.17	33.817	24.326	362.3	.338	5.52	102.5	2.6	.30	.0	.00	.08	.04	94
	100 ISL	17.17	17.15	33.690	24.474	348.3	.360	5.57	101.4							101
1	110	15.42	15.40	33.508	24.734	323.5	.393	5.62	98.7	3.1	.38	.0	.12	.16	.21	110
1	125	14.18	14.16	33.440	24.949	303.3	.439	5.46	93.5	3.9	.49	1.3	.05	.13	.16	125
1	149	12.97	12.95	33.622	25.335	266.9	.510	5.20	86.9	6.5	.62	4.8	.01	.05	.11	150
	150 ISL	12.93	12.91	33.625	25.346	265.9	.512	5.17	86.4							151
1	170	11.42	11.40	33.693	25.686	233.7	.563	4.24	68.6	13.8	1.18	13.4	.01	.02	.06	171
1	190	10.73	10.70	33.779	25.878	215.7	.607	3.92	62.5	18.4	1.43	17.1	.01			191
	200 ISL	10.22	10.20	33.797	25.979	206.1	.628	3.88	61.2							202
1	210	9.71	9.69	33.816	26.080	196.6	.648	3.85	60.1	22.7	1.57	20.1	.01			211
1	242	8.88	8.85	33.960	26.327	173.4	.707	3.46	53.0	29.7	1.79	23.5	.01			243
	250 ISL	8.73	8.70	33.989	26.373	169.2	.721	3.30	50.4							252
1	283	8.25	8.22	34.076	26.515	156.1	.774	2.63	39.8	38.9	2.12	27.9	.00			284
	300 ISL	8.03	8.00	34.101	26.569	151.2	.801	2.36	35.5							302
1	343	7.54	7.51	34.142	26.672	141.8	.864	1.79	26.6	49.9	2.48	32.3	.00			345
	400 ISL	7.00	6.96	34.212	26.803	129.9	.941	1.05	15.5							403
1	419	6.85	6.81	34.233	26.841	126.6	.965	.85	12.5	63.6	2.88	36.4	.00			421
1	494	6.45	6.41	34.301	26.948	117.2	1.057	.46	6.7	71.9	3.04	38.5	.00			497
	500 ISL	6.42	6.37	34.305	26.956	116.5	1.064	.45	6.5							504
1	569	5.98	5.93	34.342	27.042	108.8	1.142	.34	4.9	80.2	3.16	40.4	.00			573

RV NEW HORIZON CALCOFI CRUISE 8401 STATION 110 32

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
29 52.0 N	115 50.0 W	01/22/84	0659 GMT	51 M	340	10 KT		0	1016.3 MB	15.1 C	13.8 C	0/8	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	15.25	15.25	33.504	24.765	317.2	.000	5.69	99.6	5.2	.51	1.2	.10	.85	.62	0
1	10	15.17	15.17	33.506	24.783	315.7	.032	5.74	100.3	5.3	.56	1.4	.12	.88	.64	10
	20 ISL	14.90	14.90	33.522	24.856	309.1	.063	5.52	96.0							20
1	21	14.86	14.86	33.523	24.864	308.3	.066	5.49	95.4	6.2	.65	3.1	.25	.73	.80	21
	30 ISL	14.49	14.48	33.514	24.938	301.6	.093	5.08	87.5							30
1	31	14.45	14.45	33.513	24.945	300.9	.096	5.04	86.8	6.5	.73	4.4	.21	.60	.48	31
1	42	14.11	14.11	33.509	25.014	294.7	.129	5.01	85.7	6.6	.77	5.1	.16	.37	.47	42

RV NEW HORIZON CALCOFI CRUISE 8401 STATION 110 35

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
29 46.3 N	116 00.5 W	01/22/84	0920 GMT	1114 M	330	16 KT		1	1015.9 MB	15.8 C	13.4 C	5/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.14	16.14	33.469	24.539	338.7	.000	5.72	101.9							0
1	1	16.14	16.14	33.469	24.539	338.7	.003	5.72	101.9	2.7	.34	.2	.00	.12	.07	1
	10 ISL	16.16	16.16	33.469	24.535	339.3	.034	5.84	104.0							10
1	11	16.16	16.16	33.469	24.535	339.4	.037	5.84	104.1	2.6	.34	.2	.00	.12	.07	11
	20 ISL	15.76	15.75	33.468	24.626	331.0	.067	5.81	102.7							20
1	21	15.71	15.71	33.468	24.635	330.1	.071	5.80	102.5	3.3	.38	.2	.00	.25	.12	21
	30 ISL	15.70	15.69	33.474	24.645	329.6	.100	5.77	101.9							30
1	31	15.69	15.69	33.475	24.646	329.5	.103	5.77	101.9	3.3	.38	.2	.00	.33	.22	31
1	42	15.65	15.64	33.481	24.660	328.5	.139	5.77	101.8	3.4	.38	.2	.01	.40	.31	42
	50 ISL	15.53	15.53	33.477	24.684	326.5	.166	5.69	100.1							50
1	52	15.51	15.50	33.476	24.689	326.0	.172	5.67	99.8	3.5	.42	.2	.01	.55	.33	52
1	62	14.22	14.21	33.463	24.956	300.8	.203	5.22	89.5	5.1	.61	2.8	.07	.31	.38	62
1	72	13.68	13.67	33.473	25.075	289.7	.233	5.06	85.8	6.1	.70	4.4	.03	.16	.43	72
	75 ISL	13.36	13.35	33.482	25.148	282.7	.242	4.95	83.4							76
1	87	12.24	12.23	33.534	25.408	258.2	.274	4.52	74.4	10.4	1.03	10.3	.01	.06	.08	87
	100 ISL	11.82	11.81	33.605	25.543	245.7	.307	4.10	67.0							101
1	102	11.79	11.78	33.614	25.555	244.6	.311	4.06	66.2	13.5	1.26	13.8	.01	.05	.06	102
1	121	10.98	10.97	33.738	25.799	221.6	.357	3.56	57.1	18.7	1.53	18.2	.00	.02	.04	122
	125 ISL	10.83	10.81	33.757	25.842	217.7	.365	3.50	55.9							126
1	146	9.98	9.97	33.855	26.064	196.8	.409	3.23	50.7	24.7	1.76	21.9	.00	.02	.04	147
	150 ISL	9.88	9.86	33.868	26.092	194.3	.417	3.20	50.1							151
1	177	9.31	9.29	33.948	26.249	179.8	.467	3.00	46.4	29.5	1.93	24.5	.00			178
	200 ISL	8.97	8.95	34.006	26.348	170.7	.507	2.78	42.7							202
1	207	8.89	8.86	34.021	26.373	168.4	.519	2.71	41.6	33.9	2.06	26.3	.00			208
1	238	8.50	8.48	34.079	26.479	158.8	.570	2.39	36.3	38.5	2.22	28.3	.00			239
	250 ISL	8.42	8.39	34.113	26.519	155.2	.589	2.17	32.9							252
1	277	8.25	8.22	34.183	26.599	148.0	.630	1.65	25.0	45.2	2.50	31.0	.00			279
	300 ISL	8.05	8.02	34.209	26.650	143.6	.663	1.40	21.1							302
1	338	7.66	7.63	34.228	26.722	137.1	.717	1.12	16.7	54.2	2.72	33.9	.00			340
	400 ISL	7.01	6.97	34.258	26.838	126.7	.798	.73	10.7							403
1	414	6.86	6.82	34.264	26.863	124.4	.817	.66	9.7	65.5	2.98	37.1	.00			417
1	491	6.17	6.13	34.306	26.988	113.1	.907	.41	5.9	75.8	3.12	39.8	.00			494
	500 ISL	6.11	6.07	34.312	27.001	111.9	.918	.39	5.6							504
1	567	5.79	5.74	34.362	27.082	104.9	.990	.27	3.9	84.0	3.19	41.3	.00			571

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 110 40

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
29 36.9 N	116 19.7 W	01/22/84	1317 GMT	2980 M	330	20 KT	300 06 05	1	1015.2 MB	15.7 C	14.4 C	7/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	16.24	16.24	33.464	24.512	341.3	.000	5.69	101.6	2.7	.33	.2	.00	.15	.10	0
1	10	16.28	16.28	33.462	24.502	342.5	.034	5.73	102.4	2.6	.33	.2	.00	.16	.09	10
1	20	16.27	16.27	33.461	24.504	342.6	.068	5.75	102.7	2.6	.33	.2	.00	.16	.10	20
	30 ISL	16.27	16.27	33.461	24.505	342.9	.103	5.71	102.1							30
1	31	16.27	16.27	33.461	24.505	342.9	.106	5.71	102.0	2.6	.33	.2	.00	.16	.10	31
1	41	16.22	16.22	33.455	24.511	342.7	.140	5.71	101.9	2.6	.32	.2	.00	.18	.11	41
	50 ISL	16.19	16.18	33.452	24.518	342.4	.171	5.69	101.5							50
1	56	16.16	16.15	33.450	24.521	342.1	.191	5.68	101.2	2.6	.33	.2	.00	.20	.11	56
1	66	15.33	15.32	33.390	24.661	329.1	.225	5.68	99.5	2.7	.39	.3	.03	.35	.32	66
	75 ISL	14.47	14.46	33.358	24.822	313.9	.254	5.63	96.9							76
1	76	14.41	14.40	33.357	24.835	312.7	.256	5.62	96.6	3.5	.45	.8	.07	.32	.36	76
1	91	13.56	13.55	33.500	25.122	285.8	.301	5.33	90.1	4.7	.55	3.2	.03	.14	.19	91
	100 ISL	12.85	12.84	33.507	25.269	271.9	.327	5.01	83.5							101
,1	111	12.10	12.08	33.517	25.422	257.4	.355	4.57	75.0	9.9	1.01	10.2	.01	.07	.09	111
	125 ISL	11.54	11.52	33.659	25.638	237.2	.391	3.90	63.2							126
1	130	11.35	11.34	33.717	25.716	229.9	.404	3.67	59.3	16.5	1.44	17.0	.01	.02	.05	131
	150 ISL	10.32	10.30	33.807	25.970	205.9	.446	3.35	52.9							151
1	155	10.05	10.03	33.824	26.029	200.4	.457	3.31	52.0	23.1	1.72	21.6	.00	.01	.03	156
1	185	9.43	9.41	33.944	26.226	182.1	.514	2.97	46.1	28.1	1.91	24.5	.00			186
	200 ISL	9.28	9.26	34.001	26.295	175.8	.541	2.78	43.0							202
1	216	9.13	9.11	34.051	26.358	170.0	.568	2.58	39.8	32.4	2.09	26.6	.00			217
	250 ISL	8.52	8.50	34.097	26.490	158.0	.624	2.24	34.0							252
1	251	8.51	8.48	34.097	26.492	157.8	.625	2.23	33.9	38.3	2.24	28.7	.00			252
1	300	7.91	7.88	34.145	26.621	146.2	.701	1.75	26.3	46.3	2.50	31.8	.00			302
1	356	7.19	7.16	34.169	26.743	135.1	.779	1.28	18.9	56.1	2.72	34.8	.00			358
	400 ISL	6.71	6.68	34.205	26.836	126.6	.836	.92	13.4							403
1	441	6.34	6.30	34.243	26.916	119.3	.887	.64	9.3	71.3	3.03	38.8	.00			444
	500 ISL	5.96	5.92	34.294	27.005	111.4	.955	.42	6.1							504
1	527	5.82	5.78	34.314	27.039	108.4	.984	.37	5.3	81.5	3.20	40.8	.00			530
	600 ISL	5.47	5.42	34.360	27.119	101.3	1.061	.30	4.3							605
1	613	5.41	5.36	34.367	27.131	100.3	1.074	.29	4.1	90.4	3.26	42.1	.00			617

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 110 45

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
29 28.4 N	116 39.6 W	01/22/84	1721 GMT	501 M	340	16 KT	320 06 06	1	1018.0 MB	15.9 C	14.3 C	7/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.55	16.55	33.483	24.456	346.6	.000	5.67	101.9							0
1	1	16.55	16.55	33.483	24.456	346.6	.003	5.67	101.9	2.7	.32	.2	.00	.16	.08	1
	10 ISL	16.57	16.57	33.481	24.451	347.4	.035	5.72	102.7							10
1	11	16.57	16.57	33.481	24.450	347.5	.038	5.72	102.8	2.7	.32	.2	.00	.15	.08	11
	20 ISL	16.57	16.56	33.481	24.451	347.7	.069	5.72	102.7							20
	30 ISL	16.56	16.56	33.480	24.452	347.9	.104	5.71	102.6							30
1	32	16.56	16.55	33.480	24.453	347.9	.111	5.71	102.6	2.7	.31	.2	.00	.15	.07	32
1	47	16.56	16.55	33.477	24.451	348.6	.163	5.67	101.9	2.6	.31	.2	.00	.16	.08	47
	50 ISL	16.55	16.54	33.476	24.453	348.5	.174	5.67	101.9							50
1	58	16.52	16.51	33.472	24.457	348.4	.201	5.68	102.0	2.6	.32	.2	.00	.17	.08	58
1	73	15.16	15.15	33.439	24.738	322.0	.251	5.71	99.7	3.4	.37	.2	.01	.31	.38	73
	75 ISL	14.97	14.96	33.441	24.781	317.9	.258	5.69	99.1							76
1	89	13.97	13.95	33.472	25.017	295.7	.300	5.51	93.9	3.9	.47	1.7	.05	.20	.28	89
	100 ISL	13.38	13.36	33.511	25.167	281.6	.333	5.24	88.2							101
1	104	13.20	13.19	33.522	25.211	277.5	.343	5.14	86.3	6.4	.66	4.8	.01	.09	.18	104
	125 ISL	11.84	11.83	33.526	25.478	252.5	.400	4.59	74.9							126
1	129	11.56	11.54	33.533	25.536	247.0	.411	4.46	72.3	12.1	1.10	12.1	.01	.04	.07	130
1	149	10.55	10.54	33.687	25.835	218.7	.457	3.74	59.4	19.0	1.50	18.3	.00	.01	.04	150
	150 ISL	10.53	10.51	33.692	25.844	218.0	.459	3.72	59.1							151
1	180	9.51	9.49	33.860	26.147	189.6	.520	3.24	50.3	26.7	1.80	23.2	.00	.01	.03	181
	200 ISL	9.13	9.10	33.928	26.262	178.9	.557	3.05	47.0							202
1	211	8.95	8.93	33.956	26.312	174.2	.576	2.96	45.4	31.8	1.98	25.7	.00	.00	.02	212
1	247	8.23	8.20	34.041	26.490	157.7	.635	2.57	38.8	38.9	2.20	28.7	.00			248
	250 ISL	8.18	8.16	34.047	26.502	156.6	.641	2.52	38.1							252
	300 ISL	7.55	7.52	34.120	26.653	142.9	.715	1.78	26.6							302
1	304	7.50	7.47	34.124	26.663	142.0	.722	1.72	25.6	50.4	2.53	32.8	.00			306
1	359	6.88	6.85	34.178	26.792	130.2	.796	1.16	17.0	61.0	2.79	35.9	.00			361
	400 ISL	6.62	6.58	34.208	26.852	125.0	.848	.91	13.3							403
1	420	6.55	6.51	34.219	26.870	123.6	.874	.84	12.2	67.5	2.95	37.6	.00			423

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 110 50

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
29 18.2 N	117 00.1 W	01/22/84	2143 GMT	3545 M	330	10 KT	320 05 05	1	1016.6 MB	16.5 C	13.3 C	4/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	16.84	16.84	33.517	24.414	350.6	.000	5.66	102.3							0
1	1		16.84	16.84	33.517	24.414	350.6	.003	5.66	102.3	2.6	.32	.2	.00	.13	.08	1
	10	ISL	16.85	16.85	33.514	24.410	351.3	.035	5.69	102.9							10
1	12		16.85	16.85	33.514	24.410	351.4	.042	5.70	103.0	2.6	.31	.2	.00	.13	.07	12
	20	ISL	16.83	16.82	33.512	24.415	351.2	.070	5.75	103.9							20
1	22		16.82	16.82	33.512	24.416	351.1	.077	5.76	104.0	2.6	.31	.2	.00	.13	.08	22
	30	ISL	16.82	16.82	33.513	24.417	351.3	.105	5.69	102.8							30
1	32		16.82	16.82	33.513	24.417	351.3	.112	5.68	102.6	2.6	.31	.2	.00	.14	.09	32
1	42		16.81	16.80	33.513	24.421	351.3	.147	5.77	104.2	2.6	.31	.2	.00	.17	.08	42
	50	ISL	16.79	16.79	33.511	24.422	351.4	.176	5.72	103.3							50
1	58		16.78	16.77	33.509	24.424	351.5	.203	5.65	102.0	2.5	.31	.2	.00	.15	.10	58
1	68		15.44	15.43	33.426	24.666	328.7	.237	5.64	99.1	3.5	.46	.1	.02	.53	.52	68
	75	ISL	15.00	14.99	33.432	24.765	319.4	.260	5.56	96.8							76
1	78		14.89	14.88	33.439	24.795	316.6	.269	5.52	95.9	3.5	.47	.7	.04	.33	.42	78
1	94		13.91	13.90	33.467	25.025	295.1	.318	5.32	90.6	4.5	.57	2.6	.02	.18	.21	94
	100	ISL	13.42	13.41	33.469	25.126	285.7	.336	5.19	87.5							101
1	114		12.42	12.40	33.477	25.330	266.3	.374	4.86	80.2	8.5	.88	8.1	.01	.07	.14	114
	125	ISL	11.83	11.81	33.512	25.469	253.2	.403	4.56	74.4							126
1	134		11.41	11.40	33.551	25.576	243.2	.427	4.32	69.8	13.5	1.19	13.1	.00	.03	.06	135
	150	ISL	10.69	10.67	33.630	25.767	225.3	.463	4.00	63.7							151
1	159		10.31	10.29	33.681	25.873	215.3	.484	3.83	60.5	19.6	1.55	19.0	.00	.01	.06	160
1	190		9.60	9.58	33.843	26.119	192.4	.547	3.29	51.2	25.6	1.82	23.0	.00			191
	200	ISL	9.45	9.43	33.905	26.192	185.7	.565	3.11	48.2							202
1	221		9.19	9.17	34.027	26.330	173.0	.603	2.71	41.8	31.6	2.04	25.8	.00			222
	250	ISL	8.79	8.77	34.130	26.474	159.7	.651	2.13	32.7							252
1	257		8.69	8.66	34.144	26.501	157.2	.662	2.02	30.9	39.5	2.31	28.8	.00			258
	300	ISL	7.82	7.79	34.138	26.628	145.5	.727	1.78	26.6							302
1	308		7.65	7.62	34.129	26.645	143.8	.739	1.76	26.3	49.1	2.52	32.1	.00			310
1	364		6.98	6.95	34.140	26.749	134.5	.817	1.35	19.8	57.7	2.72	35.2	.00			366
	400	ISL	6.62	6.58	34.163	26.816	128.4	.864	1.05	15.4							403
1	451		6.21	6.17	34.211	26.907	120.2	.928	.68	9.8	72.0	3.02	39.4	.00			454
	500	ISL	5.97	5.92	34.274	26.989	112.8	.985	.46	6.6							504
1	539		5.81	5.76	34.321	27.046	107.8	1.027	.35	5.0	82.9	3.21	41.0	.00			542
	600	ISL	5.50	5.45	34.358	27.114	101.9	1.091	.31	4.4							605
1	626		5.37	5.32	34.364	27.134	100.1	1.118	.29	4.1	91.4	3.29	42.9	.00			630

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 110 55

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
29 08.2 N	117 21.2 W	01/23/84	0123 GMT	3498 M	330	13 KT	320 06 06	1	1016.9 MB	16.0 C	14.7 C	1/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0		16.62	16.62	33.483	24.440	348.1	.000	5.64	101.5	2.4	.32	.2	.00	.10	.06	0
1	10		16.65	16.65	33.481	24.431	349.3	.035	5.66	101.9	2.4	.32	.2	.00	.10	.06	10
	20	ISL	16.64	16.64	33.482	24.435	349.3	.070	5.66	101.9							20
1	21		16.64	16.64	33.482	24.435	349.3	.073	5.66	101.8	2.3	.31	.2	.00	.10	.05	21
	30	ISL	16.66	16.66	33.483	24.431	349.9	.105	5.66	101.9							30
1	31		16.66	16.66	33.483	24.431	350.0	.108	5.66	101.9	2.1	.30	.2	.00	.10	.05	31
1	42		16.65	16.65	33.485	24.436	349.9	.146	5.67	102.0	2.0	.29	.2	.00	.10	.05	42
	50	ISL	16.61	16.61	33.482	24.443	349.5	.175	5.65	101.7							50
1	52		16.60	16.60	33.481	24.444	349.4	.181	5.65	101.6	2.1	.29	.2	.00	.11	.06	52
1	62		16.58	16.57	33.475	24.445	349.6	.216	5.64	101.4	2.3	.29	.2	.00	.12	.07	62
1	73		16.54	16.53	33.473	24.453	349.3	.254	5.65	101.5	2.2	.29	.2	.00	.13	.08	73
	75	ISL	16.30	16.28	33.458	24.498	345.0	.262	5.68	101.4							76
1	88		14.73	14.72	33.403	24.802	316.2	.304	5.76	99.7	2.5	.36	.2	.04	.28	.34	88
	100	ISL	14.14	14.12	33.472	24.982	299.4	.342	5.56	95.2							101
1	103		14.03	14.02	33.489	25.017	296.1	.350	5.50	93.9	3.5	.45	1.6	.04	.22	.27	103
1	124		12.05	12.03	33.510	25.426	257.3	.407	4.94	80.9	8.3	.85	8.4	.02	.07	.11	124
	125	ISL	11.96	11.95	33.512	25.445	255.6	.411	4.91	80.2							126
1	149		10.90	10.88	33.580	25.691	232.6	.471	4.35	69.6	14.6	1.24	14.7	.01	.03	.05	150
	150	ISL	10.87	10.85	33.584	25.699	231.8	.472	4.33	69.2							151
1	180		9.65	9.62	33.807	26.083	195.6	.537	3.47	54.1	23.9	1.70	22.2	.00			181
	200	ISL	9.64	9.62	33.979	26.218	183.3	.574	2.85	44.5							202
1	211		9.64	9.62	34.047	26.272	178.4	.594	2.56	39.9	29.8	2.01	25.2	.01			212
1	242		9.13	9.10	34.139	26.427	164.1	.647	2.22	34.3	35.5	2.21	27.5	.00			243
	250	ISL	9.01	8.99	34.155	26.459	161.2	.660	2.12	32.6							252
1	283		8.59	8.56	34.197	26.559	152.1	.711	1.73	26.4	42.0	2.41	30.0	.00			284
	300	ISL	8.36	8.32	34.206	26.602	148.3	.737	1.58	24.0							302
1	343		7.81	7.77	34.219	26.694	140.0	.800	1.27	19.0	51.2	2.65	33.0	.00			345
	400	ISL	7.15	7.12	34.254	26.815	128.9	.876	.81	12.0							403
1	420		6.95	6.92	34.267	26.854	125.5	.901	.68	10.0	63.7	2.95	36.6	.00			422
1	496		6.34	6.29	34.308	26.969	115.2	.993	.45	6.5	73.8	3.09	39.0	.00			499
	500	ISL	6.31	6.26	34.310	26.974	114.7	.998	.44	6.4							504
1	572		5.85	5.80	34.336	27.053	107.7	1.078	.31	4.4	82.9	3.18	40.7	.00			576

RV NEW HORIZON

CALCOFI CRUISE 8401

STATION 110 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
28 58.0 N	117 36.3 W	01/23/84	0534 GMT	3690 M	340	15 KT		0	1019.3 MB	15.2 C	13.0 C	0/8	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.62	16.62	33.483	24.439	348.2	.000	5.66	101.8							0
1	1	16.62	16.62	33.483	24.439	348.2	.003	5.66	101.8	2.8	.37	.3	.00	.10	.06	1
	10 ISL	16.64	16.64	33.482	24.436	348.9	.035	5.73	103.2							10
1	12	16.64	16.64	33.482	24.435	348.9	.042	5.74	103.3	2.7	.37	.2	.00	.10	.05	12
	20 ISL	16.63	16.63	33.482	24.438	349.0	.070	5.72	102.9							20
1	27	16.62	16.62	33.482	24.440	349.0	.094	5.69	102.3	2.7	.37	.2	.00	.11	.06	27
	30 ISL	16.63	16.62	33.482	24.439	349.2	.105	5.69	102.4							30
1	43	16.65	16.64	33.482	24.434	350.1	.150	5.69	102.4	2.6	.37	.2	.00	.11	.05	43
	50 ISL	16.65	16.64	33.482	24.434	350.4	.175	5.76	103.6							50
1	58	16.65	16.64	33.482	24.434	350.6	.202	5.80	104.4	2.6	.37	.2	.00	.12	.05	58
1	69	16.63	16.62	33.481	24.439	350.5	.240	5.65	101.6	2.5	.37	.2	.00	.10	.06	69
	75 ISL	15.72	15.71	33.429	24.605	334.7	.262	5.74	101.4							76
1	79	15.13	15.12	33.404	24.717	324.2	.274	5.80	101.2	2.8	.40	.2	.00	.24	.32	79
1	95	14.47	14.46	33.469	24.909	306.2	.324	5.64	97.2	3.6	.43	.6	.07	.25	.34	95
	100 ISL	14.17	14.16	33.481	24.981	299.5	.340	5.53	94.8							101
1	110	13.58	13.56	33.500	25.118	286.6	.368	5.26	89.0	5.4	.63	3.6	.01	.19	.20	110
	125 ISL	12.54	12.53	33.541	25.356	264.1	.411	4.54	75.2							126
1	126	12.51	12.49	33.543	25.364	263.4	.412	4.52	74.8	9.7	1.02	9.7	.00	.08	.11	126
	150 ISL	11.57	11.55	33.694	25.659	235.8	.473	3.76	61.1							151
1	151	11.53	11.51	33.703	25.674	234.5	.477	3.73	60.5	16.2	1.43	15.9	.00	.02	.05	152
1	171	10.86	10.84	33.812	25.879	215.2	.521	3.38	54.1	20.8	1.65	19.4	.00	.01	.02	172
1	192	10.29	10.27	33.927	26.068	197.5	.564	2.98	47.1	24.8	1.84	22.2	.00			193
	200 ISL	10.04	10.02	33.961	26.137	191.1	.580	2.87	45.2							202
1	213	9.64	9.62	34.010	26.243	181.2	.604	2.72	42.4	29.0	1.98	24.7	.00			214
1	244	8.95	8.93	34.100	26.426	164.2	.657	2.34	36.0	35.2	2.17	27.4	.00			245
	250 ISL	8.87	8.84	34.113	26.449	162.1	.667	2.27	34.7							252
1	285	8.53	8.50	34.169	26.545	153.4	.722	1.86	28.3	41.1	2.37	29.7	.00			286
	300 ISL	8.36	8.33	34.188	26.587	149.7	.745	1.68	25.5							302
1	345	7.87	7.83	34.230	26.694	140.0	.811	1.21	18.2	50.5	2.67	32.9	.00			347
	400 ISL	7.35	7.31	34.272	26.802	130.4	.885	.76	11.3							403
1	423	7.17	7.13	34.287	26.840	127.0	.914	.62	9.2	61.6	2.94	36.2	.00			425
1	499	6.65	6.61	34.337	26.950	117.3	1.007	.36	5.3	70.1	3.08	38.3	.00			502
	500 ISL	6.64	6.60	34.337	26.951	117.2	1.008	.36	5.2							504
1	573	6.14	6.09	34.371	27.045	108.9	1.091	.24	3.5	78.8	3.17	39.9	.00			577

RV NEW HORIZON

CALCOFI CRUISE 8401

STATION 110 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
28 37.6 N	118 19.0 W	01/23/84	1105 GMT	3076 M	340	17 KT		1	1019.0 MB	15.9 C	13.8 C	1/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	17.39	17.39	33.581	24.334	358.2	.000	5.55	101.4							0
1	1	17.39	17.39	33.581	24.334	358.2	.004	5.55	101.4	2.5	.35	.0	.00	.09	.06	1
	10 ISL	17.41	17.41	33.579	24.328	359.1	.036	5.61	102.5							10
1	11	17.41	17.41	33.579	24.327	359.2	.039	5.61	102.5	2.5	.33	.0	.00	.09	.06	11
	20 ISL	17.41	17.40	33.579	24.330	359.3	.072	5.59	102.2							20
1	26	17.40	17.39	33.579	24.332	359.3	.093	5.57	101.8	2.3	.32	.0	.00	.10	.05	26
	30 ISL	17.40	17.40	33.579	24.331	359.5	.108	5.57	101.7							30
1	41	17.41	17.41	33.578	24.328	360.2	.147	5.56	101.6	2.4	.32	.0	.00	.10	.05	41
	50 ISL	17.41	17.40	33.576	24.327	360.6	.180	5.56	101.6							50
1	56	17.41	17.40	33.576	24.328	360.7	.201	5.56	101.6	2.4	.32	.0	.00	.10	.05	56
1	66	17.39	17.38	33.572	24.330	360.9	.237	5.56	101.6	2.4	.32	.0	.00	.10	.06	66
	75 ISL	17.19	17.18	33.550	24.360	358.3	.270	5.56	101.2							76
1	76	17.18	17.16	33.548	24.362	358.1	.272	5.56	101.1	2.3	.33	.0	.00	.14	.11	76
1	91	14.39	14.37	33.473	24.930	304.1	.322	5.17	88.9	4.6	.63	2.8	.03	.22	.31	91
	100 ISL	13.73	13.72	33.500	25.087	289.3	.350	4.91	83.3							101
1	106	13.51	13.49	33.523	25.151	283.4	.366	4.76	80.4	6.6	.85	6.4	.02	.13	.19	106
1	121	12.50	12.49	33.573	25.389	261.0	.406	4.50	74.5	9.6	1.00	9.7	.02	.07	.11	121
	125 ISL	12.30	12.29	33.598	25.447	255.5	.418	4.36	71.9							126
1	145	11.53	11.51	33.722	25.688	232.9	.468	3.72	60.4	15.7	1.40	16.1	.01	.03	.05	146
	150 ISL	11.32	11.30	33.750	25.749	227.2	.478	3.61	58.4							151
1	165	10.65	10.63	33.834	25.936	209.8	.512	3.32	52.9	20.9	1.64	19.9	.00	.01	.03	166
1	185	10.08	10.06	33.907	26.089	195.4	.552	3.05	48.0	24.8	1.83	22.3	.00			186
	200 ISL	9.89	9.86	33.988	26.186	186.5	.580	2.77	43.4							202
1	205	9.84	9.81	34.016	26.215	183.7	.590	2.67	41.8	28.1	1.97	24.3	.00			206
1	235	9.42	9.39	34.121	26.367	169.8	.642	2.20	34.2	33.2	2.16	26.7	.00			236
	250 ISL	9.21	9.18	34.157	26.430	164.1	.668	2.04	31.5							252
1	273	8.89	8.86	34.195	26.510	156.8	.704	1.84	28.3	39.2	2.40	28.8	.00			274
	300 ISL	8.55	8.52	34.223	26.585	150.0	.746	1.57	23.9							302
1	332	8.17	8.13	34.239	26.657	143.6	.793	1.28	19.3	48.5	2.62	31.6	.00			334
	400 ISL	7.30	7.26	34.247	26.790	131.5	.886	.89	13.1							403
1	406	7.23	7.19	34.247	26.800	130.6	.894	.86	12.7	59.8	2.84	35.1	.00			408
1	479	6.47	6.42	34.296	26.942	117.5	.985	.45	6.5	71.3	3.07	38.4	.00			482
	500 ISL	6.31	6.26	34.307	26.972	114.9	1.009	.38	5.5							504
1	552	6.03	5.98	34.327	27.023	11 .4	1.067	.30	4.3	79.3	3.16	39.9	.00			555

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 110 80

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
28 18.0 N	118 58.8 W	01/23/84	1648 GMT	3926 M	340	18 KT	350 09 06	2	1020.7 MB	16.0 C	13.7 C	5/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	17.02	17.02	33.556	24.403	351.7	.000	5.61	101.7							0
1	2	17.02	17.02	33.556	24.403	351.7	.007	5.61	101.7	2.6	.32	.0	.00	.13	.10	2
	10 ISL	17.04	17.04	33.554	24.397	352.5	.035	5.60	101.6							10
1	11	17.04	17.04	33.554	24.397	352.6	.039	5.60	101.6	2.6	.32	.0	.00	.13	.09	11
	20 ISL	17.04	17.04	33.553	24.396	353.0	.070	5.62	102.0							20
1	26	17.04	17.04	33.553	24.396	353.1	.091	5.64	102.3	2.6	.32	.0	.00	.13	.08	26
	30 ISL	17.04	17.04	33.553	24.396	353.3	.106	5.64	102.3							30
1	41	17.04	17.04	33.552	24.395	353.8	.144	5.63	102.1	2.6	.32	.0	.00	.14	.08	41
	50 ISL	17.04	17.04	33.553	24.397	353.9	.177	5.63	102.1							50
1	56	17.04	17.03	33.554	24.397	354.0	.197	5.62	102.0	2.6	.32	.0	.00	.13	.08	56
1	71	16.18	16.17	33.491	24.550	34 .0	.249	5.59	99.7	2.7	.37	.0	.04	.27	.21	71
	75 ISL	15.66	15.65	33.474	24.654	330.1	.263	5.57	98.4							76
1	81	14.95	14.94	33.463	24.802	316.1	.282	5.52	96.0	3.6	.46	.5	.09	.27	.36	81
1	97	13.89	13.88	33.516	25.067	291.2	.330	5.00	85.1	5.8	.71	4.4	.02	.15	.25	97
	100 ISL	13.65	13.63	33.523	25.123	286.0	.340	4.89	82.8							101
1	115	12.60	12.59	33.557	25.356	263.9	.380	4.43	73.5	10.0	1.05	10.1	.01	.07	.11	115
	125 ISL	11.93	11.91	33.592	25.512	249.2	.406	4.20	68.7							126
1	134	11.38	11.36	33.642	25.654	235.9	.429	3.99	64.5	14.9	1.33	15.0	.00	.02	.05	135
	150 ISL	10.60	10.58	33.798	25.914	211.3	.464	3.43	54.6							151
1	154	10.43	10.41	33.841	25.977	205.4	.473	3.29	52.2	22.6	1.70	20.6	.00	.00	.02	155
1	174	10.04	10.02	33.918	26.104	193.7	.513	3.04	47.8	25.9	1.83	22.4	.00	.00	.02	175
1	194	9.69	9.68				.549	2.84	44.3	28.7	1.96	24.1	.00			195
	200 ISL	9.61	9.58	34.031	26.265	178.8	.561	2.72	42.4							202
1	214	9.43	9.40	34.088	26.339	172.0	.585	2.48	38.5	32.4	2.10	25.8	.00			215
1	248	8.81	8.78	34.110	26.456	161.4	.642	2.43	37.2	36.7	2.19	27.3	.00			249
	250 ISL	8.78	8.75	34.113	26.463	160.7	.645	2.41	36.9							252
1	297	8.27	8.24	34.184	26.597	148.6	.719	1.78	26.9	44.2	2.47	30.3	.00			299
	300 ISL	8.25	8.22	34.187	26.603	148.1	.722	1.74	26.4							302
1	353	7.84	7.80	34.251	26.715	138.2	.798	1.09	16.3	52.1	2.75	33.1	.00			355
	400 ISL	7.37	7.33	34.274	26.801	130.6	.862	.79	11.7							403
1	436	7.01	6.97	34.283	26.858	125.4	.908	.65	9.6	63.9	2.98	36.3	.00			439
	500 ISL	6.53	6.49	34.305	26.941	118.1	.986	.45	6.6							504
1	521	6.39	6.34	34.313	26.966	115.8	1.010	.41	5.9	73.3	3.12	38.8	.00			524
	600 ISL	5.79	5.73	34.355	27.076	105.8	1.098	.27	3.9							605
1	604	5.76	5.70	34.357	27.082	105.3	1.102	.27	3.9	85.4	3.25	40.9	.00			608

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 110 90

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
27 57.4 N	119 37.5 W	01/23/84	2350 GMT	3926 M	330	23 KT	350 10 05	1	1016.9 MB	17.2 C	14.8 C	5/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	17.70	17.70	33.716	24.363	355.5	.000	5.51	101.4							0
1	2	17.70	17.70	33.716	24.363	355.5	.007	5.51	101.4	2.5	.32	.0	.00	.08	.06	2
	10 ISL	17.71	17.71	33.717	24.361	355.9	.036	5.52	101.5							10
1	13	17.71	17.71	33.717	24.362	356.0	.046	5.52	101.6	2.5	.31	.0	.00	.09	.05	13
	20 ISL	17.70	17.70	33.717	24.364	356.1	.071	5.53	101.8							20
1	28	17.69	17.69	33.717	24.366	356.1	.099	5.55	102.1	2.4	.31	.0	.00	.09	.05	28
	30 ISL	17.70	17.69	33.719	24.367	356.1	.107	5.55	102.1							30
1	43	17.73	17.72	33.730	24.369	356.4	.153	5.55	102.1	2.3	.31	.0	.00	.09	.05	43
	50 ISL	17.72	17.71	33.730	24.371	356.5	.178	5.56	102.3							50
1	59	17.71	17.70	33.730	24.374	356.5	.209	5.57	102.5	2.3	.31	.0	.00	.09	.03	59
1	74	17.68	17.67	33.727	24.380	356.5	.263	5.53	101.7	2.3	.31	.0	.00	.09	.06	74
	75 ISL	17.46	17.45	33.699	24.411	353.4	.267	5.56	101.6							76
1	84	15.80	15.79	33.515	24.654	330.4	.297	5.72	101.2	3.0	.35	.0	.00	.17	.18	84
1	99	14.68	14.67	33.440	24.841	312.8	.345	5.58	96.5	3.4	.44	.3	.14	.22	.27	99
	100 ISL	14.61	14.59	33.442	24.859	311.2	.349	5.54	95.7							101
1	120	13.59	13.58	33.519	25.131	285.7	.408	4.84	81.9	7.0	.79	5.8	.02	.12	.17	120
	125 ISL	13.26	13.25	33.546	25.218	277.5	.423	4.63	77.8							126
1	139	12.36	12.34	33.613	25.448	255.8	.461	4.16	68.6	12.0	1.16	12.0	.01	.05	.08	140
	150 ISL	11.67	11.65	33.639	25.598	241.6	.488	4.07	66.1							151
1	160	11.05	11.03	33.666	25.731	229.0	.512	4.02	64.5	15.9	1.34	15.9	.00	.02	.04	161
1	180	10.31	10.29	33.754	25.931	210.3	.556	3.69	58.3	20.3	1.54	19.2	.00	.01	.03	181
1	200	9.53	9.51	33.868	26.150	189.7	.595	3.41	53.0	25.3	1.75	22.3	.00			201
1	221	9.14	9.11	33.993	26.312	174.6	.633	3.07	47.3	30.2	1.92	24.6	.00			222
	250 ISL	8.71	8.68	34.086	26.453	161.6	.682	2.54	38.9							252
1	257	8.62	8.59	34.099	26.477	159.4	.693	2.42	36.9	36.9	2.16	27.5	.00			258
	300 ISL	8.04	8.01	34.176	26.625	145.9	.759	1.74	26.2							302
1	307	7.96	7.93	34.185	26.645	144.1	.770	1.64	24.6	46.9	2.51	31.4	.00			309
1	363	7.52	7.49	34.225	26.740	135.8	.848	1.12	16.7	53.9	2.73	33.5	.00			365
	400 ISL	7.20	7.16	34.239	26.798	130.7	.897	.89	13.2							403
1	449	6.77	6.72	34.258	26.872	124.0	.960	.67	9.8	65.2	2.94	36.6	.00			452
	500 ISL	6.36	6.32	34.296	26.956	116.5	1.021	.48	6.9							504
1	536	6.11	6.06	34.323	27.010	111.6	1.061	.38	5.5	76.9	3.12	39.4	.00			539
	600 ISL	5.77	5.72	34.355	27.078	105.6	1.131	.2[illegible]	4.1							605
1	623	5.68	5.63	34.362	27.095	104.1	1.155	.28	4.0	84.8	3.20	40.8	.00			627

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
27 37.2 N	120 16.5 W	01/24/84	0522 GMT	4023 M	010	23 KT		1	1019.3 MB	16.5 C	14.3 C	3/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	18.15	18.15	33.875	24.375	354.4	.000	5.51	102.3							0
1	1	18.15	18.15	33.875	24.375	354.4	.004	5.51	102.3	2.7	.33	.0	.00	.11	.07	1
	10 ISL	18.17	18.17	33.876	24.371	355.0	.035	5.51	102.3							10
1	12	18.17	18.17	33.876	24.371	355.1	.042			2.7	.32	.0	.00	.11	.07	12
	20 ISL	18.17	18.16	33.876	24.372	355.3	.071	5.50	102.2							20
1	27	18.16	18.16	33.875	24.374	355.4	.096	5.50	102.2	2.7	.31	.0	.00	.12	.05	27
	30 ISL	18.16	18.16	33.875	24.372	355.6	.107	5.49	102.1							30
1	42	18.19	18.18	33.874	24.367	356.5	.149	5.48	101.8	2.7	.33	.0	.00	.11	.07	42
	50 ISL	18.19	18.18	33.872	24.366	356.9	.178	5.50	102.1							50
1	58	18.19	18.18	33.872	24.366	357.2	.206	5.51	102.4	2.7	.34	.0	.00	.11	.05	58
1	73	18.18	18.17	33.872	24.367	357.6	.259	5.48	101.8	2.7	.31	.0	.00	.10	.05	73
	75 ISL	18.18	18.17	33.872	24.368	357.6	.267	5.48	101.8							76
1	83	18.17	18.16	33.872	24.371	357.6	.295	5.49	102.0	2.7	.31	.0	.00	.10	.06	83
1	98	18.17	18.16	33.871	24.370	358.2	.348	5.50	102.2	2.6	.31	.0	.00	.10	.06	98
	100 ISL	17.92	17.90	33.847	24.414	354.1	.357	5.49	101.5							101
1	119	15.54	15.52	33.673	24.835	314.2	.419	5.33	93.9	3.7	.48	.8	.09	.22	.20	119
	125 ISL	15.10	15.09	33.674	24.932	305.7	.439	5.24	91.5							126
1	138	14.30	14.28	33.675	25.106	288.8	.479	4.98	85.6	5.7	.65	3.7	.02	.13	.16	139
	150 ISL	13.21	13.19	33.678	25.331	267.4	.511	4.67	78.4							151
1	159	12.38	12.36	33.691	25.505	250.8	.535	4.41	72.8	10.8	1.02	10.5	.00	.05	.07	160
1	179	11.54	11.52	33.744	25.704	232.2	.583	4.03	65.4	14.8	1.28	14.5	.00	.02	.05	180
1	200	10.54	10.51	33.833	25.953	208.7	.629	3.71	58.9	20.2	1.53	18.4	.00			201
1	221	9.99	9.97	33.994	26.173	188.2	.670	3.21	50.4	26.6	1.86	22.7	.00			222
	250 ISL	9.52	9.49	34.135	26.361	170.7	.722	2.40	37.3							252
1	257	9.44	9.41	34.157	26.393	167.8	.734	2.22	34.5	33.8	2.18	26.5	.00			258
	300 ISL	8.76	8.73	34.235	26.562	152.4	.803	1.69	25.9							302
1	307	8.66	8.63	34.240	26.582	150.5	.814	1.64	25.1	43.2	2.48	30.0	.00			309
1	364	8.17	8.13	34.283	26.691	140.9	.897	1.07	16.2	49.6	2.68	32.0	.00			366
	400 ISL	7.79	7.75	34.295	26.758	135.0	.946	.83	12.4							403
1	451	7.24	7.20	34.309	26.847	126.9	1.014	.58	8.6	61.7	2.94	35.5	.00			454
	500 ISL	6.81	6.76	34.335	26.928	119.6	1.074	.38	5.6							504
1	540	6.50	6.45	34.356	26.986	114.3	1.120	.28	4.1	73.4	3.11	38.5	.00			543
	600 ISL	6.06	6.01	34.378	27.060	107.7	1.187	.27	3.9							605
1	628	5.88	5.82	34.384	27.089	105.1	1.217	.27	3.9	82.7	3.21	40.6	.00			632

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 60 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
37°36.8'N	123°36.5'W	01/23/84	1954 GMT	13 m	1215 - 1724 PST	1224 PST	1755 PST	634.9 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
1	100	16.2	14.4	15.3	0.21					0.90	0.23
11	33	22.9	24.2	23.5	0.21					0.81	0.29
14	21	21.3	21.8	21.5	0.21					0.72	0.32
21	11	18.4	18.6	18.5	0.21					0.68	0.48
35	1.8	5.2	4.6	4.9	0.13					0.48	0.37
55	0.23	0.52	0.51	0.52	0.09					0.07	0.19

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 60 95

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
36°25.6'N	126°09.7'W	01/24/84	2013 GMT	25 m	1233 - 1743 PST	1232 PST	1808 PST	166.3 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
2	100	0.90	0.70	0.8	0.12	3.0	0.40	0.1	0.01	0.21	0.06
21	33	4.1	3.1	3.6	0.14	2.7	0.39	0.1	0.00	0.17	0.08
28	21	2.3	2.4	2.4	0.12	2.6	0.40	0.0	0.01	0.17	0.08
39	11	2.7	2.6	2.7	0.12	2.7	0.39	0.0	0.01	0.17	0.10
68	1.8	0.82	1.3	1.1	0.11	2.4	0.39	0.0	0.00	0.20	0.09
105	0.23	0.08	0.10	0.09	0.07	8.1	0.85	7.5	0.01	0.14	0.18

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 63 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
37°02.6'N	123°11.7'W	01/22/84	1956 GMT	12 m	1218 - 1725 PST	1221 PST	1756 PST	478.4 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	24.9	21.9	23.4	0.21					1.00	0.40
9	33	22.6	21.7	22.1	0.22					0.92	0.41
12	21	18.0	17.4	17.7	0.22					0.91	0.43
17	11	14.0	13.7	13.8	0.19					0.84	0.51
31	1.8	2.3	2.1	2.2	0.12					0.39	0.40
50	0.23	0.17	0.19	0.18	0.09					0.10	0.20

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 67 50

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
36°47.2'N	122°03.4'W	01/20/84	2007 GMT	14 m	1223 - 1725 PST	1219 PST	1747 PST	502.6 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	14.0	14.4	14.2	0.19					0.85	0.33
10	33	16.6	15.1	15.8	0.20					0.77	0.34
14	21	15.5	14.3	14.9	0.18					0.86	0.29
20	11	15.3	12.0	13.7	0.20					0.83	0.41
38	1.8	3.4	5.0	4.2	0.16					0.78	0.49
58	0.23	0.25	0.23	0.24	0.10					0.10	0.23

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 67 90

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
35°27.2'N	124°54.2'W	01/21/84	1958 GMT	20 m	1225 - 1733 PST	1231 PST	1801 PST	134.5 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	1.9	2.3	2.1	0.17					0.18	0.10
15	33	2.7	2.6	2.7	0.17					0.17	0.10
21	21	2.5	2.5	2.5	0.16					0.17	0.10
29	11	2.7	2.5	2.6	0.16					0.18	0.10
52	1.8	1.2	1.2	1.2	0.13					0.23	0.10
82	0.23	0.06	0.09	0.07	0.07					0.07	0.07

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 70 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
35°32.9'N	123°04.4'W	01/19/84	1946 GMT	16 m	1213 - 1725 PST	1223 PST	1805 PST	173.4 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	2.5	1.6	2.1	0.14	2.3	0.28	0.1	0.01	0.29	0.07
12	33	5.5	4.5	5.0	0.16	2.5	0.31	0.1	0.00	0.26	0.09
16	21	4.0	4.4	4.2	0.15	2.3	0.30	0.0	0.00	0.26	0.09
23	11	4.2	4.3	4.2	0.15	2.3	0.29	0.0	0.00	0.28	0.09
43	1.8	1.5	2.1	1.8	0.11	4.1	0.45	2.1	0.03	0.29	0.09
66	0.23	0.17	0.22	0.20	0.08	11.2	1.41	11.2	0.01	0.10	0.12

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 72 100

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
34°16.0'N	124°59.3'W	01/18/84	2003 GMT	33 m	1215 - 1730 PST	1228 PST	1804 PST	146.4 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
1	100	1.2	1.3	1.3	0.10					0.13	0.06
23	33	2.0	2.1	2.0	0.13					0.15	0.06
33	21	2.0	1.9	1.9	0.11					0.14	0.07
47	11	2.3	2.1	2.2	0.11					0.13	0.09
85	1.8	0.40	0.47	0.44	0.07					0.10	0.11
131	0.23	0.05	0.05	0.05	0.06					0.02	0.04

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 73 65

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
35°07.4'N	122°18.9'W	01/17/84	1956 GMT	25 m	1215 - 1718 PST	1216 PST	1748 PST	312.3 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
1	100	5.1	4.9	5.0	0.13					0.28	0.12
19	33	5.3	5.1	5.2	0.13					0.28	0.19
26	21	4.9	4.9	4.9	0.12					0.29	0.16
38	11	4.7	4.5	4.6	0.11					0.29	0.18
67	1.8	1.8	1.6	1.7	0.09					0.38	0.33
103	0.23	0.08	0.09	0.09	0.09					0.05	0.09

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 77 54

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
34°53.3'N	121°07.1'W	01/16/84	1953 GMT	10 m	1210 - 1718 PST	1214 PST	1744 PST	416.7 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
1	100	8.8	7.9	8.4	0.16					1.00	0.24
8	33	22.5	22.1	22.3	0.20					0.88	0.36
11	21	20.4	19.5	20.0	0.22					0.91	0.28
15	11	18.0	18.1	18.0	0.19					0.90	0.28
27	1.8	3.9	3.9	3.9	0.14					0.51	0.47
41	0.23	0.36	0.34	0.35	0.10					0.10	0.21

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 77 85

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33°52.2'N	123°14.6	01/15/84	1954 GMT	16 m	1214 - 1721 PST	1221 PST	1753 PST	299.1 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	9.0	8.7	8.9	0.16	3.2	0.33	0.1	0.00	0.38	0.09
12	33	8.3	6.8	7.5	0.19	3.3	0.34	0.0	0.00	0.36	0.10
17	21	5.1	5.7	5.4	0.19	3.2	0.34	0.0	0.00	0.40	0.11
25	11	6.8	6.1	6.4	0.19	3.2	0.34	0.0	0.00	0.58	0.16
44	1.8	2.3	3.2	2.7	0.11	4.1	0.43	0.8	0.43	0.47	0.35
66	0.23	0.35	0.36	0.36	0.07	5.8	0.60	4.0	0.04	0.16	0.18

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 80 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
34°09.5'N	121°09.0'W	01/12/84	1940 GMT	15 m	1202 - 1720 PST	1214 PST	1740 PST	392.5 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	14.0	14.0	14.0	0.16					0.54	0.24
11	33	12.5	10.3	11.4	0.13					0.53	0.25
16	21	10.9	11.3	11.1	0.13					0.52	0.25
22	11	9.9	9.8	9.8	0.18					0.58	0.25
39	1.8	2.3	2.4	2.4	0.11					0.56	0.24
62	0.23	0.28	0.30	0.29	0.09					0.22	0.22

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 80 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33°49.0'N	121°50.6'W	01/13/84	1942 GMT	14 m	1207 - 1715 PST	1215 PST	1747 PST	235.1 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
1	100	3.3	3.5	3.4	0.12					0.46	0.17
11	33	10.5	6.8	8.7	0.13					0.47	0.16
15	21	5.7	7.0	6.3	0.14					0.46	0.19
21	11	7.4	6.2	6.8	0.14					0.47	0.24
38	1.8	2.1	2.1	2.1	0.09					0.49	0.21
58	0.23	0.44	0.61	0.52	0.13					0.48	0.23

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 80 90

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33°09.0'N	123°13.3'W	01/14/84	1957 GMT	25 m	1220 - 1721 PST	1221 PST	1754 PST	185.8 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	1.1	1.0	1.1	0.09					0.13	0.05
18	33	2.7	2.1	2.4	0.11					0.15	0.06
26	21	1.9	2.0	1.9	0.10					0.14	0.06
36	11	2.8	2.4	2.6	0.12					0.18	0.08
65	1.8	1.5	3.1	2.3	0.08					0.44	0.11
102	0.23	0.08	0.08	0.08	0.07					0.07	0.08

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 83 48

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33°55.6'N	119°55.5'W	01/10/84	1941 GMT	12 m	1201 - 1712 PST	1207 PST	1737 PST	543.4 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	16.9	16.7	16.8	0.19					0.88	0.17
9	33	20.6	14.7	17.6	0.19					0.90	0.20
12	21	16.4	18.0	17.2	0.21					0.92	0.24
18	11	18.8	17.2	18.0	0.20					0.98	0.22
32	1.8	6.1	6.0	6.1	0.13					0.61	0.30
50	0.23	0.82	0.93	0.87	0.12					0.37	0.31

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 83 80

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°54.7'N	122°07.7'W	01/09/84	2020 GMT	20 m	1233 - 1719 PST	1215 PST	1744 PST	184.2 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
1	100	2.5	2.3	2.4	0.13					0.19	0.03
14	33	2.4	2.0	2.2	0.14					0.19	0.04
20	21	2.4	2.9	2.7	0.15					0.27	0.06
31	11	3.6	2.9	3.3	0.14					0.38	0.06
53	1.8	2.8	2.5	2.7	0.11					0.58	0.16
82	0.23	0.08	0.10	0.09	0.07					0.11	0.18

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 83 100

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°14.7'N	123°29.6'W	01/08/84	1927 GMT	31 m	1200 - 1720 PST	1220 PST	1751 PST	127.1 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
1	100	0.72	0.71	0.71	0.09						
23	33	1.2	1.1	1.2	0.10					0.11	0.04
34	21	1.3	1.2	1.3	0.09					0.12	0.04
46	11	1.8	1.3	1.5	0.10					0.13	0.03
82	1.8	0.90	1.3	1.1	0.07					0.15	0.03
128	0.23	0.13	0.11	0.12	0.07					0.26	0.08
										0.09	0.08

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 85 55

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33°21.3'N	120°08.7'W	01/26/84	2003 GMT	8 m	1224 - 1734 PST	1221 PST	1752 PST	980.2 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
1	100	48.6	40.4	44.5	0.21	2.4	0.38	1.0	0.00	2.51	0.43
7	33	65.2	63.6	64.4	0.23	2.2	0.41	1.0	0.01	2.43	0.57
9	21	34.5	57.4	45.9	0.25	2.2	0.42	1.1	0.01	2.38	0.51
13	11	53.3	57.4	55.3	0.21	2.3	0.42	1.1	0.01	2.53	0.85
17	1.8	15.0	16.5	15.7	0.24	2.2	0.42	1.1	0.01	2.65	0.63
33	0.23	4.2	3.0	3.6	0.15	4.1	0.52	3.0	0.02	1.80	0.76

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 87 35

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33°48.7'N	118°37.6'W	01/05/84	1844 GMT	20 m	1120 - 1700 PST	1201 PST	1726 PST	243.2 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
1	100	2.0	3.4	2.7	0.17						
15	33	5.1	7.3	6.2	0.16					0.22	0.05
21	21	3.5	2.9	3.2	0.18					0.24	0.06
30	11	4.7	4.6	4.6	0.18					0.29	0.07
53	1.8	2.3	2.3	2.3	0.08					0.35	0.09
82	0.23	0.14	0.12	0.13	0.07					0.46	0.28
										0.07	0.08

RV DAVID STARR JORDAN — CALCOFI CRUISE 8401 — STATION 87 80

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°19.4'N	121°42.9'W	01/07/84	1929 GMT	24 m	1200 - 1721 PST	1213 PST	1744 PST	159.7 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
1	100	1.6	1.8	1.7	0.10						
18	33	1.4	1.2	1.3	0.11						
25	21	2.1	2.0	2.0	0.11						
37	11	2.6	1.3	2.0	0.12					0.19	0.05
65	1.8	2.9	1.5	2.2	0.07					0.21	0.07
99	0.23	0.12	0.15	0.14	0.07					0.66	0.23
										0.09	0.12

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 90 32

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33°21.0'N	118°02.5'W	01/05/84	1806 GMT	25 m	1100 - 1742 PST	1157 PST	1726 PST	381.0 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	2.3	2.4	2.4	0.19	2.0	0.33	0.2	0.00	0.24	0.08
19	33	4.8	5.7	5.3	0.10	1.9	0.33	0.2	0.00	0.25	0.09
26	21	7.1	6.6	6.8	0.14	1.8	0.33	0.2	0.00	0.24	0.09
38	11	8.7	10.1	9.4	0.16	3.3	0.51	1.1	0.08	1.24	0.59
67	1.8	0.63	1.1	0.87	0.08	5.8	0.81	6.1	0.04	0.17	0.25
105	0.23	0.08	0.16	0.12	0.07	13.3	1.27	14.5	0.01	0.02	0.06

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 90 53

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°39.3'N	119°29.1'W	01/06/84	1906 GMT	28 m	1200 - 1730 PST	1204 PST	1733 PST	284.3 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	7.7	3.6	5.7	0.11					0.20	0.06
21	33	4.7	2.6	3.7	0.13					0.49	0.20
29	21	1.6	7.4	4.5	0.12					0.61	0.40
42	11	4.5	4.9	4.7	0.14					0.51	0.28
75	1.8	0.36	0.43	0.40	0.09					0.08	0.11
117	0.23	0.05	0.05	0.05	0.08					0.02	0.07

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 90 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°04.2'N	120°38.8'W	01/07/84	1900 GMT	28 m	1145 - 1745 PST	1209 PST	1741 PST	229.4 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	2.7	2.9	2.8	0.16					0.13	0.06
21	33	2.3	2.2	2.3	0.15					0.15	0.06
29	21	3.5	3.4	3.4	0.13					0.17	0.07
42	11	3.9	3.6	3.8	0.16					0.25	0.11
75	1.8	1.2	1.1	1.2	0.10					0.24	0.20
117	0.23	0.04	0.03	0.03	0.10					0.03	0.07

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 90 90

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
31°23.8'N	121°59.4'W	01/08/84	1932 GMT	36 m	1202 - 1752 PST	1215 PST	1747 PST	186.8 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	0.85	1.1	1.0	0.12					0.11	0.06
27	33	2.0	1.7	1.8	0.11					0.14	0.06
39	21	3.8	2.3	3.1	0.11					0.18	0.08
54	11	3.1	2.3	2.7	0.14					0.19	0.10
97	1.8	0.30	0.44	0.44	0.09					0.11	0.19
152	0.23	0.02	0.02	0.02	0.07					0.01	0.02

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 93 30

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°52.5'N	117°30.4'W	01/11/84	1923 GMT	30 m	1150 - 1745 PST	1158 PST	1729 PST	239.0 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	2.4	2.2	2.3	0.17					0.18	0.09
23	33	2.9	3.3	3.1	0.18					0.20	0.11
32	21	4.8	4.9	4.9	0.18					0.21	0.10
45	11	3.6	3.3	3.4	0.17					0.22	0.10
82	1.8	0.54	0.58	0.56	0.11					0.16	0.18
126	0.23	0.04	0.04	0.04	0.09					0.02	0.05

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 93 48

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°14.9'N	118°43.5'W	01/10/84	1904 GMT	20 m	1135 - 1747 PST	1202 PST	1734 PST	252.3 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	1.2	1.1	1.2	0.16	3.6	0.36	0.3	0.00	0.24	0.10
14	33	4.0	3.7	3.9	0.15	3.6	0.36	0.2	0.00	0.24	0.09
20	21	5.1	5.3	5.2	0.19	3.6	0.36	0.1	0.00	0.23	0.09
29	11	6.5	4.7	5.6	0.19	3.6	0.35	0.1	0.00	0.25	0.09
52	1.8	2.9	2.9	2.9	0.14	5.5	0.67	3.3	0.09	0.41	0.31
80	0.23	0.27	0.27	0.27	0.08	14.3	1.27	14.1	0.00	0.07	0.13

RV NEW HORIZON

CALCOFI CRUISE 8401

STATION 93 80

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
31°10.4'N	120°54.5'W	01/09/84	1936 GMT	40 m	1203 - 1750 PST	1211 PST	1744 PST	155.9 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	1.4	1.2	1.3	0.12						
30	33	1.4	1.2	1.3	0.12					0.08	0.04
43	21	1.3	1.7	1.5	0.11					0.08	0.03
61	11	1.6	1.5	1.5	0.12					0.08	0.04
109	1.8	0.67	0.57	0.62	0.08					0.09	0.04
169	0.23	0.04	0.04	0.04	0.07					0.13	0.15
										0.02	0.04

RV NEW HORIZON

CALCOFI CRUISE 8401

STATION 97 29

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°17.5'N	117°05.0'W	01/12/84	1931 GMT	13 m	1150 - 1745 PST	1157 PST	1729 PST	554.2 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	16.4	15.0	15.7	0.20	4.2	0.40	0.2	0.03	0.63	0.26
9	33	16.4	16.8	16.6	0.20	4.0	0.40	0.2	0.04	0.66	0.29
14	21	20.6	21.7	21.1	0.21	4.1	0.40	0.2	0.04	0.69	0.30
20	11	16.7	16.0	16.3	0.24	3.9	0.45	0.1	0.04	0.71	0.28
36	1.8	9.5	8.5	9.0	0.19	5.3	0.59	1.7	0.26	0.63	0.84

RV NEW HORIZON

CALCOFI CRUISE 8401

STATION 97 55

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
31°26.1'N	118°50.1'W	01/13/84	1901 GMT	28 m	1158 - 1748 PST	1204 PST	1739 PST	175.4 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	1.3	1.2	1.3	0.15						
21	33	1.5	2.0	1.7	0.15					0.12	0.06
29	21	2.1	3.2	2.7	0.16					0.13	0.06
42	11	3.5	3.4	3.4	0.15					0.12	0.07
75	1.8	0.76	0.81	0.79	0.11					0.20	0.08
117	0.23	0.04	0.04	0.04	0.08					0.13	0.16
										0.02	0.06

RV NEW HORIZON

CALCOFI CRUISE 8401

STATION 97 92

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
30°11.2'N	121°19.9'W	01/14/84	1917 GMT	37 m	1157 - 1743 PST	1214 PST	1752 PST	172.1 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	1.7	1.5	1.6	0.13	2.7	0.33	0.1	0.00	0.09	0.05
27	33	1.4	1.7	1.5	0.12	2.7	0.33	0.1	0.00	0.10	0.07
42	21	1.3	1.8	1.5	0.13	2.7	0.32	0.1	0.00	0.10	0.05
53	11	1.7	1.6	1.6	0.11	2.6	0.32	0.1	0.00	0.10	0.06
96	1.8	1.1	1.1	1.1	0.09	3.8	0.52	1.2	0.05	0.21	0.22
149	0.23	0.02	0.03	0.02	0.07	14.6	1.28	14.4	0.01	0.03	0.05

RV NEW HORIZON

CALCOFI CRUISE 8401

STATION 100 45

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
31°11.2'N	117°46.0'W	01/16/84	1850 GMT	32 m	1205 - 1740 PST	1201 PST	1738 PST	155.8 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	0.71	0.83	0.77	0.15						
23	33	1.3	1.6	1.4	0.16					0.13	0.08
33	21	2.1	2.2	2.1	0.17					0.12	0.07
46	11	1.3	2.1	1.7	0.16					0.13	0.08
83	1.8	1.4	1.3	1.4	0.12					0.17	0.12
129	0.23	0.03	0.05	0.04	0.07					0.31	0.36
										0.02	0.04

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 100 80

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
30°02.4'N	120°06.7'W	01/15/84	1909 GMT	50 m	1152 - 1800 PST	1209 PST	1747 PST	133.3 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	0.15	0.16	0.15	0.14					0.10	0.05
38	33	1.3	1.1	1.2	0.15					0.11	0.06
53	21	1.7	1.7	1.7	0.14					0.10	0.06
74	11	1.5	1.7	1.6	0.13					0.11	0.07
136	1.8	0.04	0.04	0.04	0.09					0.06	0.09
210	0.23	0.01	0.00	0.01	0.07					0.00	0.03

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 103 35

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
30°57.8'N	116°49.0'W	01/17/84	1921 GMT	32 m	1158 - 1745 PST	1157 PST	1734 PST	168.3 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	0.57	0.59	0.58	0.15					0.19	0.09
24	33	1.9	1.1	1.5	0.18					0.19	0.09
35	21	1.8	2.2	2.0	0.18					0.21	0.10
48	11	4.8	3.2	4.0	0.16					0.38	0.31
87	1.8	0.17	0.15	0.16	0.09					0.08	0.12
135	0.23	0.03	0.01	0.02	0.07					0.01	0.03

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 103 68

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
29°52.4'N	118°56.5'W	01/18/84	1917 GMT	34 m	1154 - 1750 PST	1206 PST	1747 PST	201.09 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	0.93	0.63	0.78	0.13	2.7	0.32	0.1	0.00	0.10	0.07
26	33	1.9	1.5	1.7	0.14	2.7	0.32	0.1	0.00	0.13	0.08
37	21	2.2	2.1	2.2	0.14	2.6	0.32	0.1	0.00	0.14	0.09
51	11	3.1	2.4	2.7	0.13	2.7	0.36	0.1	0.00	0.30	0.21
92	1.8	1.4	0.93	1.2	0.09	2.8	0.37	0.1	0.08	0.22	0.30
143	0.23	0.11	0.08	0.10	0.09	6.3	0.67	4.8	0.02	0.08	0.11

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 105 75

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
29°21.5'N	119°12.5'W	01/24/84	1915 GMT	24 m	1147 - 1745 PST	1209 PST	1752 PST	148.7 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	0.13	0.15	0.14	0.14					0.09	0.05
18	33	1.5	1.9	1.7	0.16					0.09	0.05
25	21	2.1	1.9	2.0	0.17					0.08	0.05
37	11	1.8	2.1	1.9	0.15					0.08	0.05
66	1.8	1.5	1.6	1.5	0.15					0.08	0.05
101	0.23	1.2	1.1	1.1	0.09					0.16	0.18

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 107 32

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
30°27.5'N	116°09.8'W	01/21/84	1945 GMT	24 m	1215 - 1747 PST	1156 PST	1736 PST	365.1 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	3.4	3.2	3.3	0.14					0.19	0.08
18	33	6.9	7.8	7.4	0.20					0.44	0.25
25	21	7.7	8.7	8.2	0.18					0.63	0.30
37	11	6.6	7.4	7.0	0.18					0.70	0.36
66	1.8	0.64	0.69	0.67	0.09						
101	0.23	0.08	0.08	0.08	0.09					0.03	0.21

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 107 62

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
29°28.0'N	118°08.0'W	01/20/84	1917 GMT	24 m	1155 - 1744 PST	1204 PST	1746 PST	132.8 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	1.6	1.4	1.5	0.14	2.7	0.34	0.1	0.00	0.13	0.08
18	33	1.8	1.8	1.8	0.14	2.6	0.34	0.1	0.00	0.13	0.09
25	21	2.1	2.3	2.2	0.14	2.6	0.34	0.1	0.00	0.13	0.08
37	11	1.5	1.8	1.6	0.13	2.6	0.34	0.1	0.00	0.13	0.09
66	1.8	1.2	1.0	1.1	0.12	2.6	0.37	0.1	0.00	0.15	0.09
101	0.23	0.41	0.41	0.41	0.09	4.3	0.48	1.5	0.07	0.15	0.22

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 107 100

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
28°13.8'N	120°41.3'W	01/19/84	1956 GMT	28 m	1224 - 1756 PST	1213 PST	1758 PST	92.9 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	0.40	0.44	0.42	0.14					0.09	0.04
21	33	1.3	1.4	1.4	0.12					0.09	0.06
29	21	1.2	1.5	1.4	0.14					0.10	0.05
42	11	0.91	0.93	0.92	0.12					0.09	0.06
75	1.8	0.76	0.56	0.66	0.13					0.10	0.05
117	0.23	0.43	0.41	0.42	0.07					0.14	0.15

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 110 45

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
29°28.6'N	116°42.0'W	01/22/84	1912 GMT	26 m	1148 - 1746 PST	1158 PST	1742 PST	141.4 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	0.30	1.2	0.75	0.16					0.11	0.08
20	33	0.52	1.8	1.1	0.19					0.14	0.08
27	21	2.8	2.4	2.6	0.19					0.13	0.09
39	11	1.4	1.3	1.4	0.18					0.12	0.08
70	1.8	2.1	1.3	1.7	0.12					0.23	0.28
109	0.23	0.29	0.35	0.32	0.08					0.13	0.19

RV NEW HORIZON — CALCOFI CRUISE 8401 — STATION 110 80

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
28°19.2'N	118°59.0'W	01/23/84	1904 GMT	26 m	1147 - 1743 PST	1208 PST	1752 PST	170.7 mg C/m2

DEPTH m	LIGHT %	UPTAKE 1 mgC/m3	UPTAKE 2 mgC/m3	MEAN mgC/m3	DARK mgC/m3	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l
0	100	0.33	0.33	0.34	0.13					0.14	0.10
20	33	2.3	2.3	2.3	0.12					0.14	0.11
27	21	3.1	3.0	3.0	0.12					0.14	0.12
39	11	2.4	2.5	2.5	0.12					0.14	0.10
70	1.8	1.4	1.3	1.4	0.09					0.27	0.35
109	0.23	0.33	0.37	0.35	0.08					0.10	0.19

RV DAVID STARR JORDAN

CalCOFI Cruise 8401

MACROZOOPLANKTON BIOMASS
Net Mesh Size: 0.505 mm

Line	Sta.	Position	Date Mo/Day	Time (GMT) Start	Time (GMT) End	Water Volume Strained (m^3)	Max. Tow Depth (m)	Volume per 1000 m^3 Strained Total (cm^3)	Volume per 1000 m^3 Strained Small (cm^3)
60	50	37 56.8N 122 52.9W	1/23	1023	1037	111	43	99	99
60	52.5	37 51.8N 123 03.8W	1/23	1305	1315	173	84	81	81
60	55	37 46.8N 123 14.7W	1/23	1605	1620	293	125	41	41
60	60	37 36.8N 123 36.5W	1/23	2115	2137	435	215	48	48
60	70	37 16.8N 124 19.9W	1/24	0430	0453	430	218	44	44
60	80	36 56.8N 125 03.2W	1/24	1050	1112	433	219	81	58
60	90	36 36.8N 125 46.3W	1/24	1715	1737	415	218	60	60
60	100	36 16.8N 126 29.1W	1/24	2350	0012	460	204	15	15
63	50	37 22.6N 122 28.4W	1/23	0510	0513	56	22	90	90
63	52	37 18.6N 122 37.1W	1/23	0300	0310	176	86	142	142
63	55	37 12.6N 122 50.1W	1/22	2355	0017	414	208	97	97
63	60	37 02.6N 123 11.7W	1/22	2025	2047	413	222	77	77
63	70	36 42.6N 123 54.8W	1/22	1410	1432	402	213	147	147
63	80	36 22.6N 124 37.7W	1/22	0825	0847	415	220	97	97
63	90	36 02.6N 125 20.5W	1/22	0230	0252	416	215	99	58
67	49	36 49.2N 121 59.1W	1/20	1700	1709	173	84	52	52
67	55	36 37.2N 122 24.9W	1/20	2310	2332	382	218	94	94
67	60	36 27.2N 122 46.4W	1/21	0240	0302	391	214	164	164
67	70	36 07.2N 123 29.1W	1/21	0805	0827	398	219	138	138
67	80	35 47.2N 124 11.7W	1/21	1425	1447	415	215	48	48
67	90	35 27.2N 124 54.2W	1/21	2035	2057	430	218	144	40
67	100	35 07.2N 125 36.4W	1/25	1125	1147	450	214	162	162
70	51	36 10.9N 121 43.6W	1/20	1015	1037	401	217	62	62
70	53	36 06.9N 121 52.1W	1/20	0735	0748	429	218	145	145
70	60	35 52.9N 122 21.9W	1/20	0215	0237	411	225	37	37
70	70	35 32.9N 123 04.4W	1/19	1900	1922	418	218	96	96
70	80	35 12.9N 123 46.7W	1/19	1235	1257	419	215	196	162
70	90	34 52.9N 124 28.8W	1/19	0620	0642	405	215	47	47
70	100	34 32.9N 125 10.8W	1/18	2350	0012	413	216	19	19
73	50	35 38.6N 121 15.3W	1/17	0755	0759	74	29	40	40
73	53	35 32.6N 121 28.1W	1/17	1150	1212	425	215	190	190
73	60	35 18.6N 121 57.7W	1/17	1710	1732	404	220	52	52
73	70	34 58.6N 122 39.9W	1/18	0050	0112	399	219	68	68
73	80	34 38.6N 123 21.9W	1/18	0615	0637	424	217	146	80
73	90	34 18.6N 124 03.7W	1/18	1150	1212	413	218	36	36
73	100	33 58.6N 124 45.4W	1/18	1725	1747	389	216	8	8
77	48	35 07.3N 120 42.4W	1/17	0200	0203	56	21	107	107
77	51	35 01.3N 120 55.1W	1/16	2320	2344	456	221	53	53
77	55	34 53.3N 121 11.9W	1/16	1835	1857	417	217	96	96
77	60	34 43.3N 121 32.9W	1/16	1315	1337	469	206	111	111
77	70	34 23.3N 122 14.8W	1/16	0555	0617	407	214	145	145
77	80	34 03.3N 122 56.5W	1/15	2305	2327	407	218	162	162
77	90	33 43.3N 123 38.0W	1/15	1710	1732	435	210	239	239
77	100	33 23.3N 124 19.4W	1/15	1055	1118	434	221	83	44
80	51	34 27.0N 120 31.4W	1/12	0710	0718	153	74	117	117
80	55	34 19.0N 120 48.1W	1/12	1120	1139	414	221	138	138
80	60	34 09.5N 121 09.0W	1/12	1510	1532	414	216	232	232
"	"	" "	1/12	1535	1557	435	209	96	96
"	"	" "	1/12	1605	1626	415	208	125	125
"	"	" "	1/12	2105	2127	418	212	96	96

RV DAVID STARR JORDAN

CalCOFI Cruise 8401

MACROZOOPLANKTON BIOMASS
Net Mesh Size: 0.505 mm

Line	Sta.	Position	Date Mo/Day	Time (GMT) Start	Time (GMT) End	Water Volume Strained (m^3)	Max. Tow Depth (m)	Volume per 1000 m^3 Strained Total (cm^3)	Volume per 1000 m^3 Strained Small (cm^3)
80	60	34 09.5N 121 09.0W	1/12	2145	2207	417	212	91	91
"	"	" "	1/12	2220	2242	412	211	80	80
"	"	" "	1/13	0205	0226	419	195	167	167
"	"	" "	1/13	0235	0256	415	197	166	166
"	"	" "	1/13	0400	0422	416	198	161	161
"	"	" "	1/12	0745	0806	393	197	160	160
"	"	" "	1/13	0810	0832	360	205	145	145
"	"	" "	1/13	0838	0859	396	201	134	134
80	70	33 49.0N 121 50.6W	1/13	1400	1422	421	212	242	242
"	"	" "	1/13	1430	1452	432	223	190	190
"	"	" "	1/13	1455	1517	417	212	134	134
"	"	" "	1/13	2035	2056	409	219	210	210
"	"	" "	1/13	2105	2126	400	212	230	230
"	"	" "	1/13	2135	2156	404	219	183	183
"	"	" "	1/14	0200	0222	415	209	190	190
"	"	" "	1/14	0245	0307	428	186	145	145
"	"	" "	1/14	0325	0346	410	205	273	273
"	"	" "	1/14	0725	0746	409	212	203	203
"	"	" "	1/14	0800	0822	425	219	191	191
"	"	" "	1/14	0830	0851	417	205	218	218
80	80	33 29.0N 122 32.0W	1/14	1515	1537	429	208	147	147
80	90	33 09.0N 123 13.3W	1/14	2220	2242	425	218	63	40
80	100	32 49.0N 123 54.4W	1/15	0455	0517	412	215	53	53
82	46	34 16.2N 119 56.3W	1/11	0020	0042	419	219	72	72
83	40.6	34 13.5N 119 24.7W	1/11	0630	0635	79	36	140	140
83	42	34 10.7N 119 30.5W	1/11	0420	0435	275	145	58	58
83	51	33 52.7N 120 08.0W	1/10	1740	1755	325	142	34	34
83	55	33 44.8N 120 24.7W	1/10	1440	1504	428	219	42	42
83	60	33 34.7N 120 45.3W	1/10	1030	1052	386	224	111	111
83	70	33 14.8N 121 26.6W	1/10	0415	0437	410	219	59	59
83	80	32 54.7N 122 07.7W	1/9	2215	2238	418	225	43	43
83	90	32 34.8N 122 48.6W	1/9	1525	1547	394	220	15	15
83	100	32 14.7N 123 29.6W	1/8	1405	1425	387	218	54	54
"	"	" "	1/8	1435	1456	388	212	49	49
"	"	" "	1/8	1500	1522	404	205	59	59
"	"	" "	1/8	2030	2051	410	219	32	32
"	"	" "	1/8	2100	2121	408	193	34	34
"	"	" "	1/8	2130	2152	424	219	33	33
"	"	" "	1/9	0305	0327	400	205	305	275
"	"	" "	1/9	0345	0406	409	201	90	90
"	"	" "	1/9	0450	0512	434	219	83	83
"	"	" "	1/9	0740	0802	400	205	128	98
"	"	" "	1/9	0815	0837	414	216	87	87
"	"	" "	1/9	0845	0906	406	212	54	54
87	33	33 53.4N 118 29.7W	1/5	1300	1306	112	45	62	62
87	35	33 48.7N 118 37.6W	1/5	1755	1817	400	215	17	17
87	40	33 39.4N 118 58.5W	1/6	0020	0042	389	217	28	28
87	45	33 29.3N 119 19.2W	1/6	0715	0738	423	209	57	57
87	50	33 19.4N 119 39.8W	1/6	1135	1142	147	65	75	75
87	55	33 09.4N 120 00.7W	1/6	1650	1716	471	212	180	180

RV DAVID STARR JORDAN

CalCOFI Cruise 8401

MACROZOOPLANKTON BIOMASS
Net Mesh Size: 0.505 mm

Line	Sta.	Position	Date Mo/Day	Time (GMT) Start	Time (GMT) End	Water Volume Strained (m^3)	Max. Tow Depth (m)	Volume per 1000 m^3 Strained Total (cm^3)	Volume per 1000 m^3 Strained Small (cm^3)
87	60	32 59.4N 120 21.0W	1/7	0500	0522	416	217	142	91
87	70	32 39.4N 121 02.0W	1/7	1200	1222	372	220	62	62
87	80	32 19.4N 121 42.9W	1/7	1845	1907	426	212	190	190
87	90	31 59.4N 122 23.6W	1/8	0140	0202	413	218	36	36
87	100	31 39.4N 123 04.2W	1/8	0815	0836	401	222	55	55

RV NEW HORIZON

CalCOFI Cruise 8401

MACROZOOPLANKTON BIOMASS
Net Mesh Size: 0.505 mm

Line	Sta.	Position	Date Mo/Day	Time (GMT) Start	Time (GMT) End	Water Volume Strained (m^3)	Max. Tow Depth (m)	Volume per 1000 m^3 Strained Total (cm^3)	Volume per 1000 m^3 Strained Small (cm^3)
90	28	33 29.0N 117 47.6W	1/5	1245	1306	390	183	28	28
90	30	33 25.0N 117 54.0W	1/5	0942	1005	418	210	24	24
90	35	33 15.5N 118 13.0W	1/5	0526	0548	408	208	247	27
90	37	33 11.7N 118 23.5W	1/5	2146	2208	400	208	10	10
90	53	32 39.2N 119 30.1W	1/6	0558	0620	434	212	92	92
"	"	32 39.7N 119 30.8W	1/6	0627	0649	426	216	82	82
"	"	32 39.9N 119 30.9W	1/6	0656	0718	423	216	99	99
"	"	32 40.0N 119 28.3W	1/6	1415	1432	363	163	66	66
"	"	32 40.0N 119 28.4W	1/6	1445	1507	451	150	62	62
"	"	32 39.5N 119 27.8W	1/6	1508	1539	404	159	59	59
"	"	32 39.3N 119 29.8W	1/6	1926	1948	422	172	43	43
"	"	32 39.3N 119 30.3W	1/6	2000	2022	435	155	48	48
"	"	32 39.4N 119 31.5W	1/6	2031	2053	408	176	86	86
"	"	32 39.1N 119 27.8W	1/7	0212	0234	389	163	82	82
"	"	32 38.6N 119 28.4W	1/7	0246	0307	407	159	108	108
"	"	32 38.7N 119 28.2W	1/7	0315	0336	399	159	88	88
90	60	32 24.5N 119 58.2W	1/7	0745	0807	444	203	221	221
90	70	32 04.9N 120 38.1W	1/7	1405	1427	401	155	90	90
"	"	32 05.1N 120 38.7W	1/7	1435	1456	408	201	59	59
"	"	32 04.7N 120 38.7W	1/7	1510	1532	426	159	110	110
"	"	32 05.0N 120 38.8W	1/7	1925	1946	415	172	92	92
"	"	32 04.6N 120 39.4W	1/7	2000	2021	399	176	95	95
"	"	32 04.3N 120 38.5W	1/7	2032	2054	405	168	161	161
"	"	32 05.4N 120 37.9W	1/8	0210	0232	398	172	96	96
"	"	32 0[illegible] 5N 120 38.4W	1/8	0238	0300	428	159	91	91
"	"	32 05.5N 120 38.9W	1/8	0305	0326	439	155	118	118
"	"	32 04.3N 120 37.5W	1/8	0627	0648	404	193	921	287
"	"	32 04.0N 120 37.3W	1/8	0656	0716	392	208	156	156
"	"	32 04.8N 120 37.6W	1/8	0730	0752	398	181	138	138
90	80	31 45.6N 121 19.2W	1/8	1326	1348	410	203	24	24
90	90	31 23.6N 121 57.9W	1/8	1946	2008	418	204	29	29
90	100	31 05.5N 122 39.2W	1/9	0210	0232	401	195	47	47

RV NEW HORIZON

CalCOFI Cruise 8401

MACROZOOPLANKTON BIOMASS
Net Mesh Size: 0.505 mm

Line	Sta.	Position	Date Mo/Day	Time (GMT) Start	Time (GMT) End	Water Volume Strained (m^3)	Max. Tow Depth (m)	Volume per 1000 m^3 Strained Total (cm^3)	Volume per 1000 m^3 Strained Small (cm^3)
93	26.7	32 57.4N 117 18.6W	1/12	1125	1132	128	58	16	16
93	29	32 52.6N 117 27.2W	1/12	0915	0937	412	212	27	27
93	30	32 51.5N 117 31.9W	1/11	0820	0842	394	155	127	46
"	"	32 51.3N 117 32.6W	1/11	0852	0914	417	181	38	38
"	"	32 50.9N 117 32.9W	1/11	0920	0942	405	213	15	15
"	"	32 51.1N 117 31.4W	1/11	1403	1425	436	159	30	30
"	"	32 50.9N 117 31.5W	1/11	1436	1458	449	150	18	18
"	"	32 51.0N 117 31.1W	1/11	1504	1525	440	150	20	20
"	"	32 53.7N 117 30.6W	1/11	2025	2046	408	172	24	24
"	"	32 53.1N 117 30.2W	1/11	2052	2114	438	172	18	18
"	"	32 52.5N 117 29.6W	1/11	2121	2143	421	205	26	26
"	"	32 52.0N 117 32.1W	1/12	0200	0222	426	163	33	33
"	"	32 52.3N 117 32.8W	1/12	0228	0249	430	159	47	47
"	"	32 52.5N 117 33.0W	1/12	0256	0318	438	159	46	46
93	35	32 40.8N 117 52.8W	1/11	0517	0539	432	209	58	58
93	40	32 30.2N 118 13.9W	1/11	0120	0142	435	194	7	7
93	45	32 20.1N 118 34.4W	1/10	2121	2143	410	208	7	7
93	50	32 08.9N 118 52.5W	1/10	1655	1717	416	218	7	7
93	55	31 59.9N 119 14.3W	1/10	1300	1322	437	193	92	92
93	60	31 50.2N 119 33.6W	1/10	0840	0902	399	211	25	25
93	70	31 29.0N 120 15.8W	1/10	0252	0314	390	210	56	56
93	80	31 09.8N 120 54.5W	1/9	2047	2109	433	202	9	9
93	90	30 51.3N 121 35.7W	1/9	1415	1437	444	191	9	9
93	100	30 30.7N 122 17.2W	1/9	0755	0817	421	201	36	36
97	29	32 17.0N 117 05.1W	1/12	1955	2000	94	38	53	53
97	30	32 15.4N 117 08.4W	1/12	2129	2134	95	36	74	74
97	32	32 11.1N 117 17.8W	1/12	2320	2342	413	209	10	10
97	35	32 05.2N 117 29.3W	1/13	0243	0305	406	200	22	22
97	40	31 55.4N 117 50.7W	1/13	0634	0656	432	210	63	63
97	45	31 47.1N 118 09.8W	1/13	1030	1052	432	207	51	51
97	50	31 35.8N 118 29.6W	1/13	1450	1512	435	194	46	46
97	55	31 25.0N 118 49.2W	1/13	1915	1937	422	210	26	26
97	60	31 15.3N 119 10.9W	1/13	2317	2339	401	217	40	40
97	70	30 54.6N 119 49.8W	1/14	0520	0542	412	214	27	27
97	80	30 35.1N 120 31.8W	1/14	1115	1137	422	204	26	26
97	90	30 16.5N 121 11.0W	1/14	1709	1731	427	215	28	28
97	100	29 55.6N 121 50.7W	1/14	2328	2350	420	206	43	43
100	30	31 41.2N 116 47.2W	1/17	0728	0750	410	216	29	29
100	35	31 31.5N 117 07.3W	1/17	0316	0338	434	197	18	18
100	40	31 20.4N 117 28.4W	1/16	2244	2306	418	209	19	19
100	45	31 11.3N 117 46.4W	1/16	1900	1922	425	216	19	19
100	50	30 59.0N 118 07.3W	1/16	1420	1442	396	202	68	50
100	55	30 51.0N 118 27.1W	1/16	1005	1027	383	208	26	26
100	60	30 41.1N 118 48.8W	1/16	0609	0631	394	218	18	18
100	70	30 20.4N 119 30.2W	1/16	0029	0051	438	193	14	14
100	80	30 01.8N 120 07.2W	1/15	1717	1739	418	213	14	14
100	90	29 40.8N 120 47.4W	1/15	1120	1142	414	208	27	27
100	100	29 21.6N 121 27.8W	1/15	0520	0542	419	212	55	31
103	29	31 09.2N 116 21.3W	1/17	1320	1323	54	20	131	131
103	30	31 06.6N 116 25.0W	1/17	1515	1521	125	48	32	32

RV NEW HORIZON

CalCOFI Cruise 8401

MACROZOOPLANKTON BIOMASS
Net Mesh Size: 0.505 mm

Line	Sta.	Position	Date Mo/Day	Time (GMT) Start	Time (GMT) End	Water Volume Strained (m^3)	Max. Tow Depth (m)	Volume per 1000 m^3 Strained Total (cm^3)	Volume per 1000 m^3 Strained Small (cm^3)
103	35	30 58.8N 116 50.3W	1/17	1930	1952	416	216	10	10
103	40	30 50.7N 116 58.3W	1/17	2256	2318	415	213	7	7
103	45	30 37.1N 117 27.9W	1/18	0354	0416	419	209	31	31
103	50	30 24.9N 117 49.3W	1/18	0746	0808	439	201	36	36
103	55	30 17.2N 118 04.9W	1/18	1100	1122	403	205	37	37
103	60	30 06.6N 118 25.7W	1/18	1510	1532	450	187	16	16
103	70	29 46.8N 119 05.3W	1/18	2119	2141	415	208	12	12
103	80	29 27.6N 119 43.6W	1/19	0308	0330	429	193	21	21
103	90	29 06.7N 120 25.5W	1/19	0853	0915	406	211	57	57
103	100	28 46.9N 121 03.4W	1/19	1430	1452	434	189	12	12
107	31	30 29.6N 116 05.5W	1/21	2226	2228	54	14	111	111
107	32	30 25.5N 116 11.5W	1/21	2026	2045	349	172	17	17
107	35	30 21.4N 116 22.6W	1/21	1710	1732	402	212	17	17
107	40	30 11.3N 116 42.4W	1/21	1240	1302	432	190	23	23
107	45	30 01.0N 117 02.4W	1/21	0835	0857	417	201	19	19
107	50	29 51.1N 117 20.7W	1/21	0450	0512	428	197	26	26
107	55	29 39.9N 117 42.1W	1/21	0100	0122	407	206	12	12
107	60	29 32.5N 118 02.0W	1/20	2113	2135	424	205	5	5
107	70	29 12.0N 118 40.9W	1/20	1525	1547	467	189	9	9
107	80	28 51.1N 119 23.3W	1/20	0955	1017	422	216	9	9
107	90	28 32.2N 120 00.8W	1/20	0330	0352	452	191	13	13
107	100	28 16.1N 120 43.3W	1/19	2116	2138	418	211	17	17
110	32.4	29 52.1N 115 50.0W	1/22	0707	0712	87	36	81	81
110	35	29 47.1N 116 01.5W	1/22	0945	1007	405	204	32	32
110	40	29 37.2N 116 20.4W	1/22	1350	1412	459	187	13	13
110	45	29 28.4N 116 40.1W	1/22	1745	1807	390	214	10	10
110	50	29 18.9N 117 00.5W	1/22	2210	2232	407	215	15	15
110	55	28 09.6N 117 20.0W	1/23	0205	0227	430	197	42	42
110	60	28 56.8N 117 38.0W	1/23	0600	0622	417	206	31	31
110	70	28 37.9N 118 19.7W	1/23	1135	1157	409	215	34	34
110	80	28 18.1N 118 59.1W	1/23	1715	1737	437	217	9	9
110	90	27 58.8N 119 38.3W	1/24	0025	0047	440	197	11	11
110	100	27 37.7N 120 16.9W	1/24	0545	0607	435	211	16	16

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