UNIVERSITY OF CALIFORNIA SCRIPPS INSTITUTION OF OCEANOGRAPHY

data report

PHYSICAL, CHEMICAL AND BIOLOGICAL DATA

CalCOFI Cruise 8410
18 October - 10 November 1984

SIO Reference 85-1
28 February 1985

UNIVERSITY OF CALIFORNIA

SCRIPPS INSTITUTION OF OCEANOGRAPHY

PHYSICAL, CHEMICAL AND BIOLOGICAL DATA

CalCOFI Cruise 8410
18 October - 10 November 1984

SIO Reference 85-1
28 February 1985

Approved for distribution:

W. A. Nierenberg, Director

CONTENTS

INTRODUCTION

The data in this report were collected during Cruise 8410* 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, 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 Marine Life Research Group (MLRG), the Southwest Fisheries Center, National Marine Fisheries Service (NMFS), the Physical and Chemical Oceanographic Data Facility (PACODF), 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. Wormley Standard Seawater batch P-90 was used on RV *David Starr Jordan*, and batch P-92 was used on RV *New Horizon*. 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

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

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 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 earlier CalCOFI data reports. The changes were noted in the 8401 cruise data report (SIO Ref. 84-18) and are repeated 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. Chlorophylll-*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.

LITERATURE CITED

Anderson, G. C., compiler, 1971. "Oxygen Analysis," Marine Technician's Handbook, SIO Ref. No. 71-8, Sea Grant Pub. No. 9.

Atlas, E. L., J. C. Callaway, R. D. Tomlinson, L. I. Gordon, L. Barstow and P. K. Park, 1971. *A Practical Manual for Use of the Technicon^{R} AutoAnalyzer^{R} in Sea Water Nutrient Analysis*; Revised. Oregon State University Technical Report 215, Reference No. 71-22.

Bryden, H. L., 1973. New polynomials for thermal expansion, adiabatic temperature gradient and potential temperature of seawater. *Deep-Sea Res., 20*: 401-408.

Carpenter, J. H., 1965. The Chesapeake Bay Institute technique for the Winkler dissolved oxygen method. *Limnol. Oceanogr., 10*: 141-143.

Eber, L. E., and R. P. Hewitt, 1979. Conversion algorithms for the CalCOFI Station Grid. *CalCOFI Rep. Vol. XX*: 135-137.

Fofonoff, N. P., 1977. Computation of potential temperature of seawater for an arbitrary reference pressure. *Deep-Sea Res., 24*: 489-491.

Holm-Hansen, O., C. J. Lorenzen, R. W. Holmes, and J. D. H. Strickland, 1965. Fluorometric determination of chlorophyll. *J. Cons. perm. int. Explor. Mer, 30*: 3-15.

Klein, Hans T., 1973. A new technique for processing physical oceanographic data. SIO Ref. No. 73-14.

Kramer, D., M. J. Kalin, E. G. Stevens, J. R. Thrailkill, and J. R. Zweifel, 1972. Collecting and processing data on fish eggs and larvae in the California Current region. *NOAA Technical Report NMFS CIRC-370*: 38 pp.

Lean, D. R. S., and B. K. Burnison, 1979. An evaluation of errors in the ^{14}C method of primary production measurement. *Limnol. Oceanogr., 24*: 799-998.

Lewis, E. L., 1980. The Practical Salinity Scale 1978 and its antecedents. *IEEE J. of Oceanic Eng.*, Vol. OE-5: 3-8.

Matthews, D. J., 1939. Tables of the velocity of sound in pure water and seawater for use in echo-sounding and sound-ranging. Second Edition. Hydrographic Department, Admiralty, H. D. 282, 52 pp.

Millero, F. J., C. T. Chen, A. Bradshaw, and K. Schleicher, 1980. A new high pressure equation of state for seawater. *Deep-Sea Res., 27A*: 255-264.

UNESCO, 1973. International Oceanographic Tables, Vol. 2, National Institute of Oceanography of Great Britain; and UNESCO, Paris; p. 141.

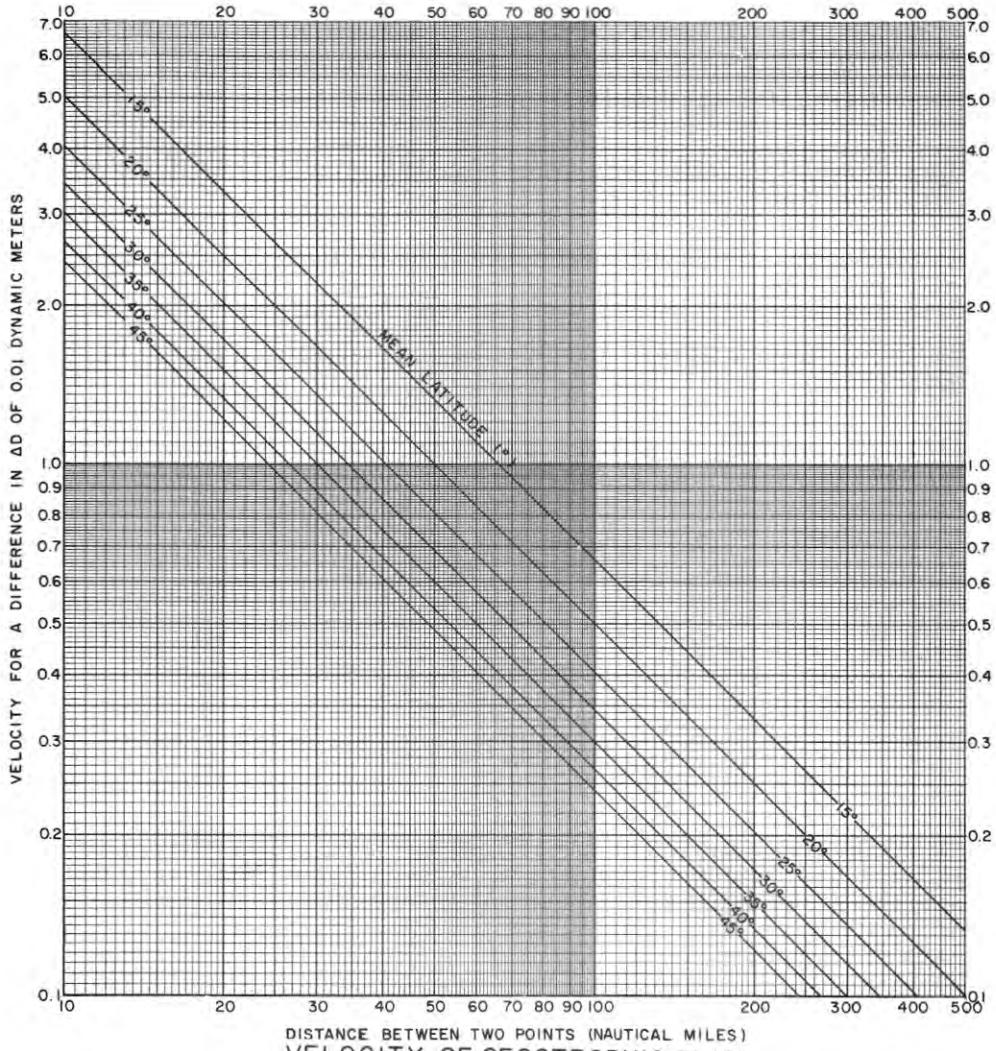
UNESCO, 1981,a. Background papers and supporting data on the Practical Salinity Scale 1978. *UNESCO Tech. Pap. in Mar. Sci., No. 37.*

UNESCO, 1981,b. Background papers and supporting data on the International Equation of State 1980. *UNESCO Tech. Pap. in Mar. Sci., No. 38.*

Venrick, E. L. and T. L. Hayward, 1984. Determination of chlorophyll on the 1984 CalCOFI surveys. *CalCOFI Rep., Vol. 25.*

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

Yentsch, C. S. and D. W. Menzel, 1963. A method for the determination of phytoplankton chlorophyll and phaeophytin by fluorescence. *Deep-Sea Res., 10*: 221-231.



VELOCITY OF GEOSTROPHIC FLOW
(NAUTICAL MILES PER DAY)

cm/sec	0	1	2	3	4	5	6	7	8	9
0	KNOTS / N.M./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 / 23.31	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 8410

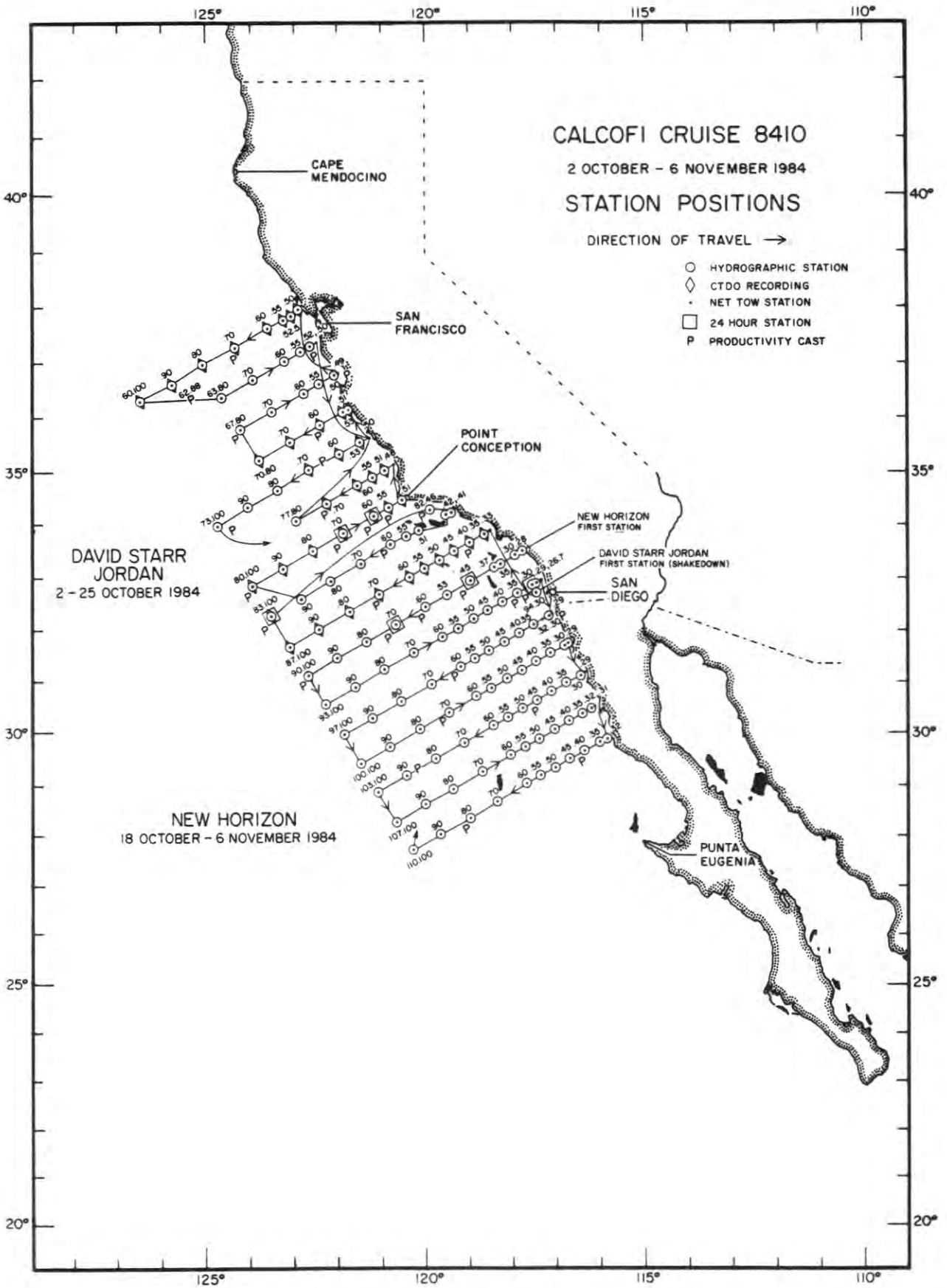

CALCOFI CRUISE 8410
2 OCTOBER - 6 NOVEMBER 1984
STATION POSITIONS
DIRECTION OF TRAVEL →
HYDROGRAPHIC STATION
CTDO RECORDING
NET TOW STATION
24 HOUR STATION
P PRODUCTIVITY CAST
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
NEW HORIZON FIRST STATION
DAVID STARR JORDAN FIRST STATION (SHAKEDOWN)
SAN DIEGO
PUNTA EUGENIA
DAVID STARR JORDAN
2 - 25 OCTOBER 1984
NEW HORIZON
18 OCTOBER - 6 NOVEMBER 1984
125°
120°
115°
110°
40°
35°
30°
25°
20°

FIGURE 1

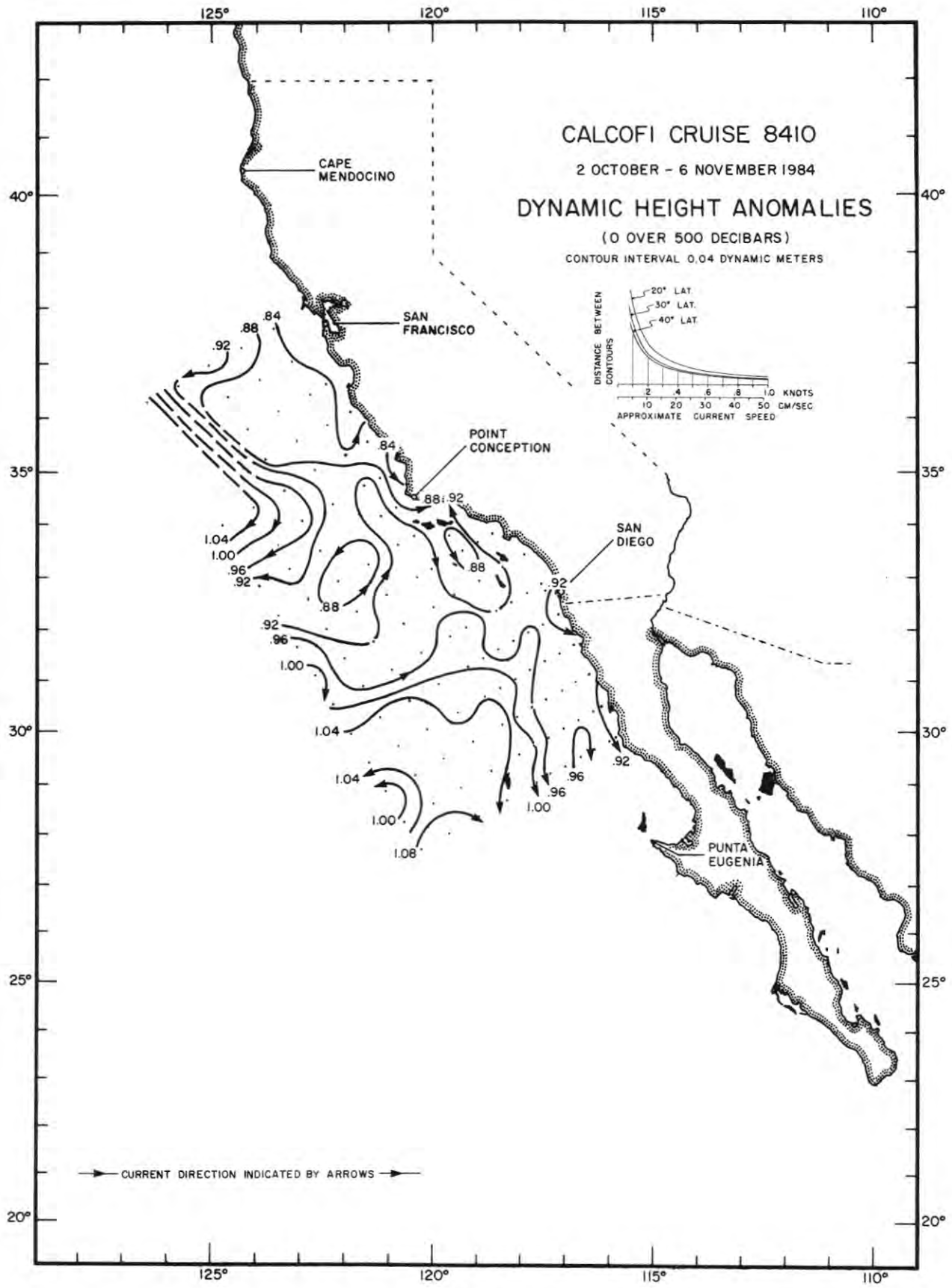

CALCOFI CRUISE 8410
2 OCTOBER - 6 NOVEMBER 1984
DYNAMIC HEIGHT ANOMALIES
(0 OVER 500 DECIBARS)
CONTOUR INTERVAL 0.04 DYNAMIC METERS
20° LAT.
30° LAT.
40° LAT.
DISTANCE BETWEEN CONTOURS
2 4 6 8 1.0 KNOTS
10 20 30 40 50 CM/SEC
APPROXIMATE CURRENT SPEED
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
125°
120°
115°
110°
40°
35°
30°
25°
20°
.84
.88
.92
1.04
1.00
.96
1.08
CURRENT DIRECTION INDICATED BY ARROWS

FIGURE 2

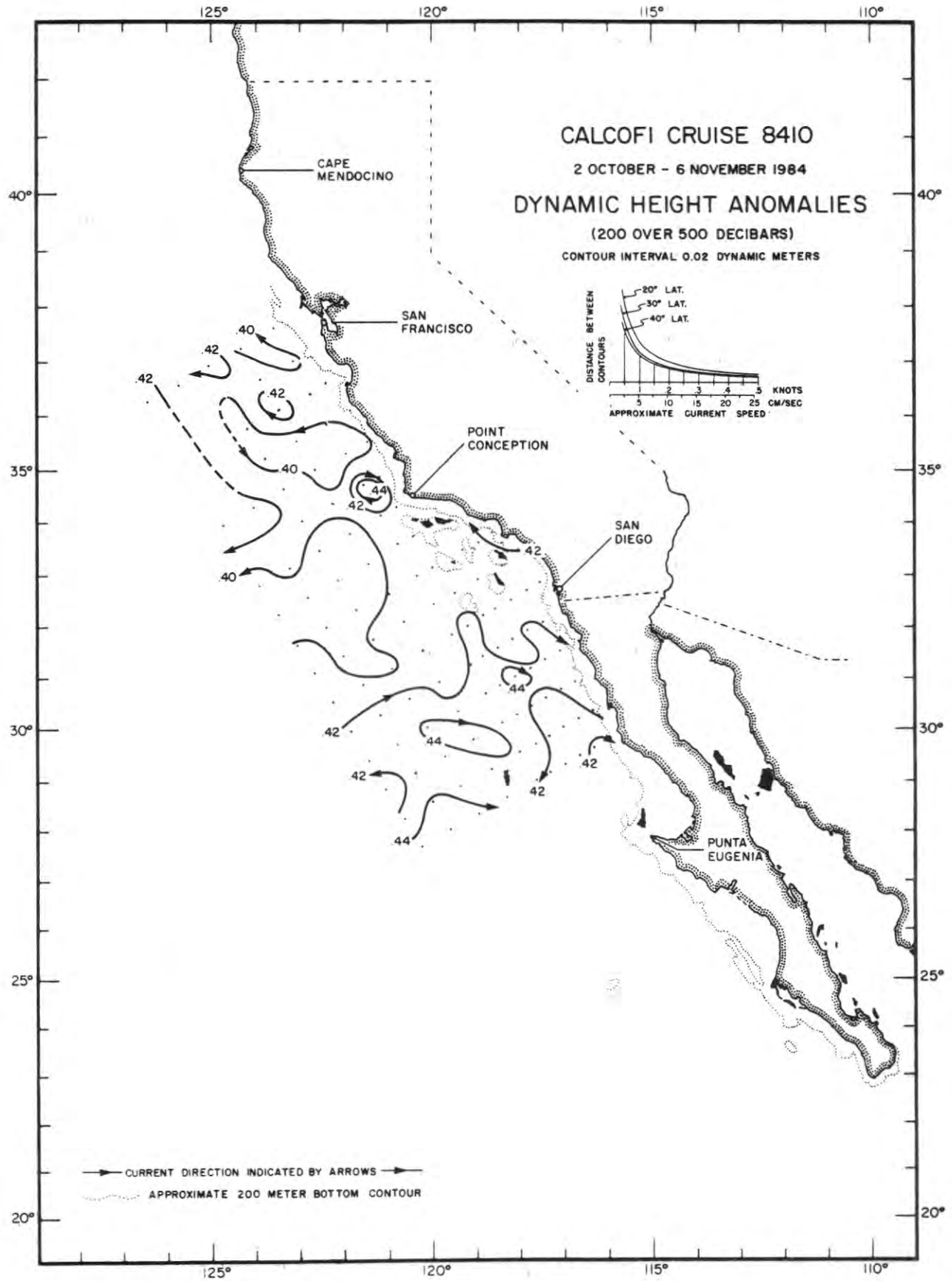

CALCOFI CRUISE 8410
2 OCTOBER - 6 NOVEMBER 1984
DYNAMIC HEIGHT ANOMALIES
(200 OVER 500 DECIBARS)
CONTOUR INTERVAL 0.02 DYNAMIC METERS
20° LAT.
30° LAT.
40° LAT.
DISTANCE BETWEEN CONTOURS
KNOTS
CM/SEC
APPROXIMATE CURRENT SPEED
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
125°
120°
115°
110°
40°
35°
30°
25°
20°
CURRENT DIRECTION INDICATED BY ARROWS
APPROXIMATE 200 METER BOTTOM CONTOUR

FIGURE 3

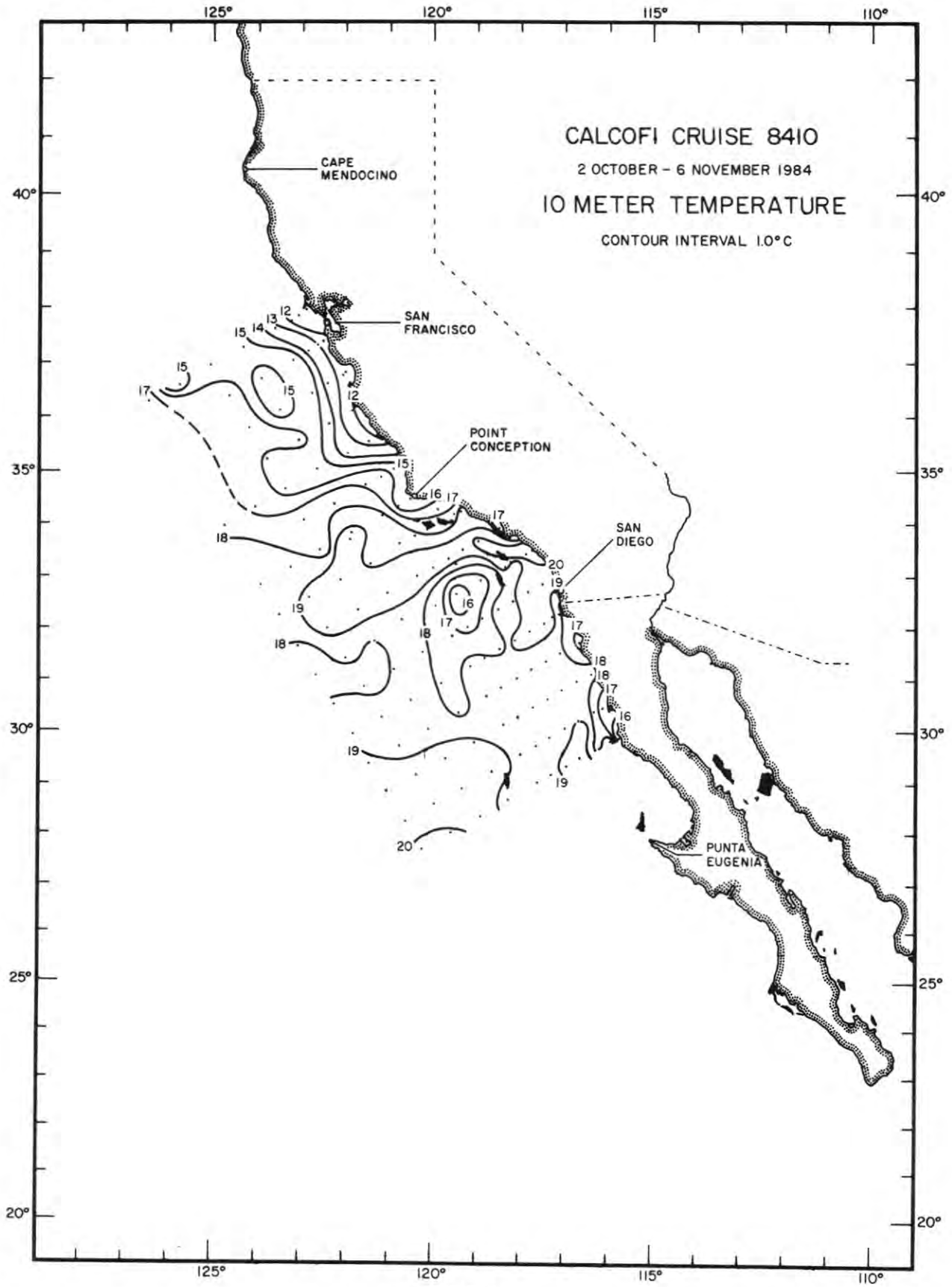

CALCOFI CRUISE 8410
2 OCTOBER - 6 NOVEMBER 1984
10 METER TEMPERATURE
CONTOUR INTERVAL 1.0°C
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
125°
120°
115°
110°
40°
35°
30°
25°
20°

FIGURE 4

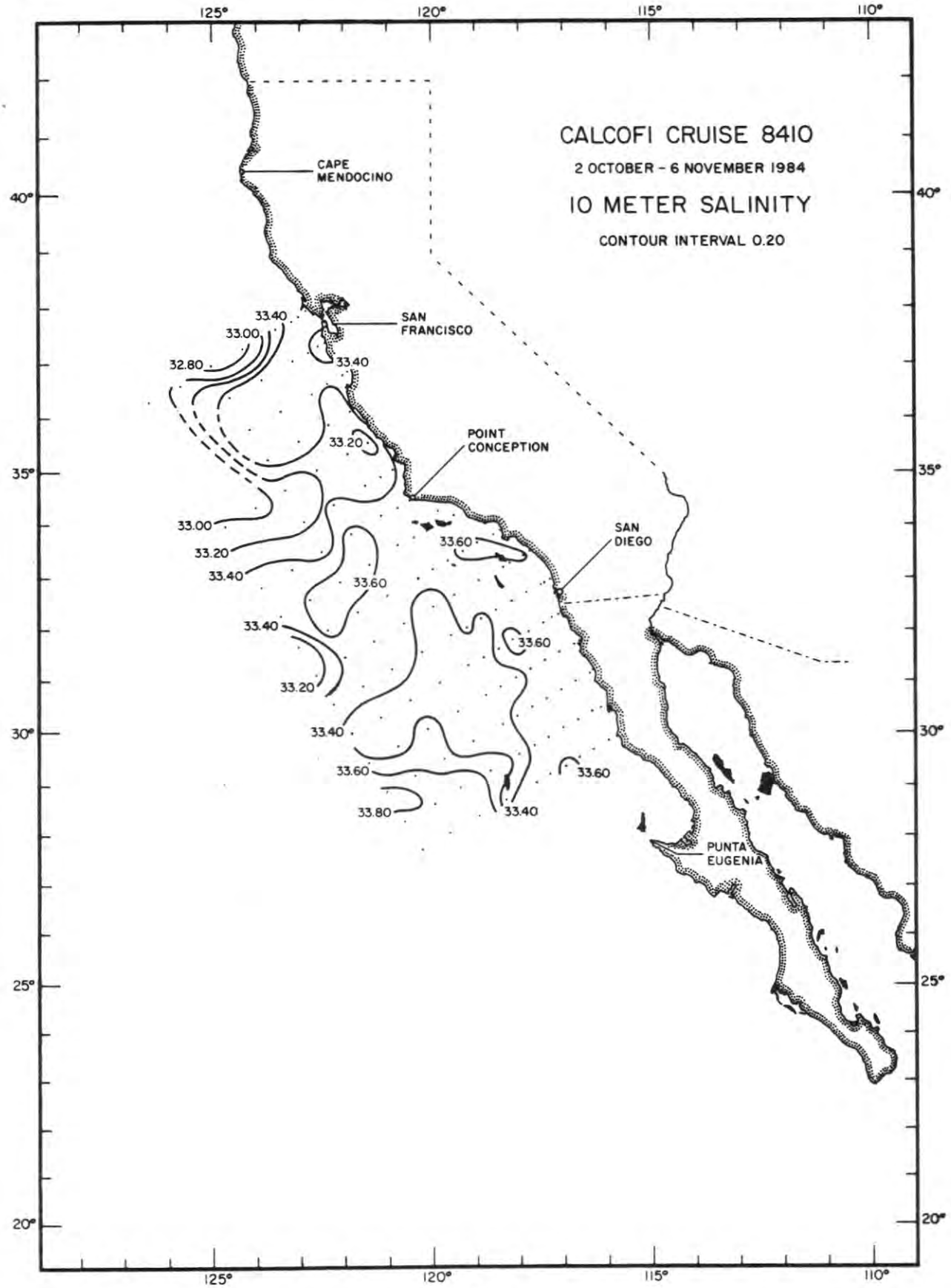

CALCOFI CRUISE 8410
2 OCTOBER - 6 NOVEMBER 1984
10 METER SALINITY
CONTOUR INTERVAL 0.20
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
125°
120°
115°
110°
40°
35°
30°
25°
20°
33.40
33.00
32.80
33.40
33.20
33.00
33.20
33.40
33.60
33.60
33.40
33.20
33.60
33.40
33.60
33.80
33.40
33.60

FIGURE 5

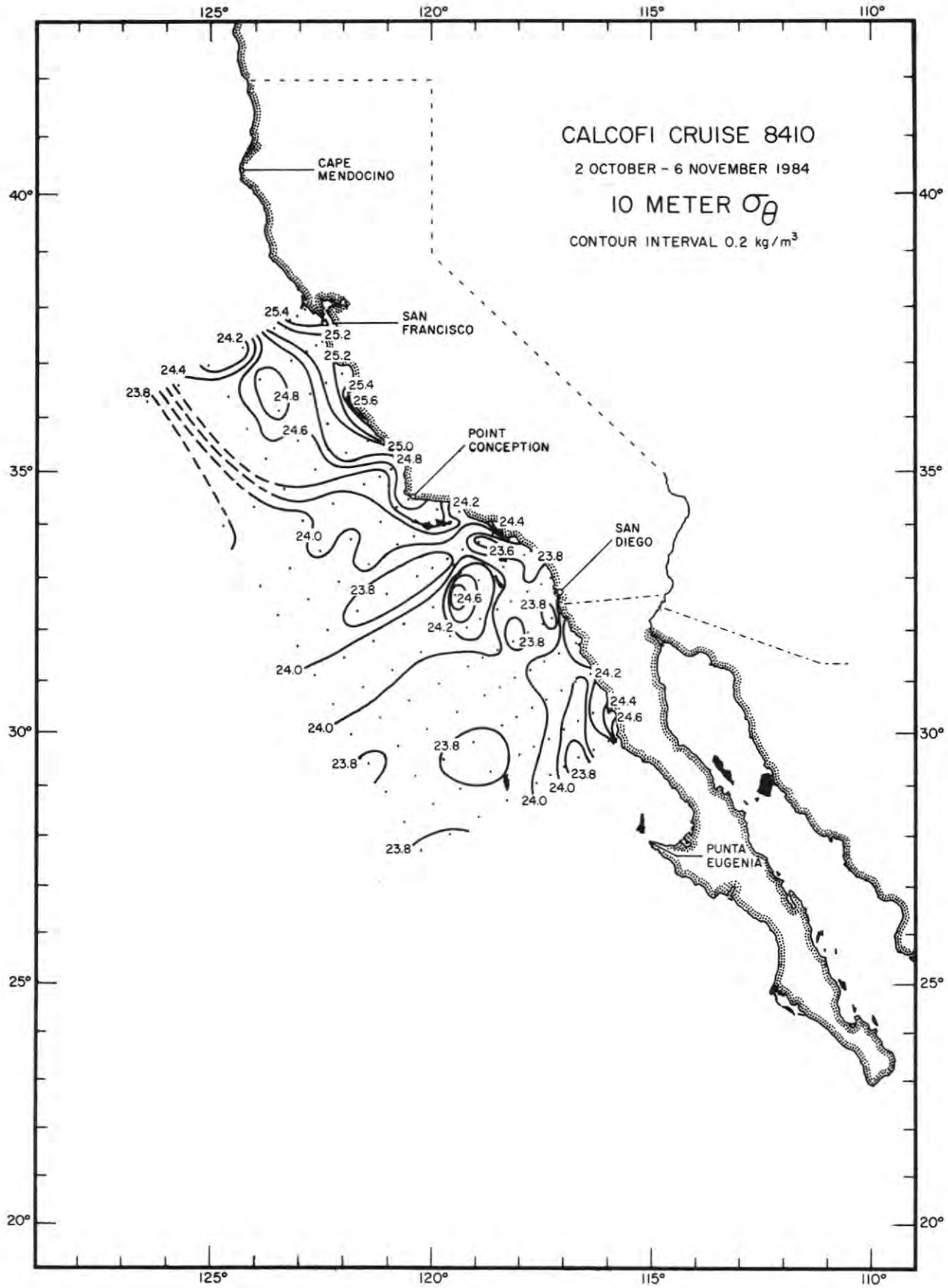

CALCOFI CRUISE 8410
2 OCTOBER - 6 NOVEMBER 1984
10 METER σ_θ
CONTOUR INTERVAL 0.2 kg/m^3
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
125°
120°
115°
110°
40°
35°
30°
25°
20°
25.4
25.2
24.2
25.2
24.4
25.4
23.8
24.8
25.6
24.6
25.0
24.8
24.2
24.4
24.0
23.6
23.8
23.8
24.6
23.8
24.2
23.8
24.0
24.2
24.4
24.0
24.6
23.8
23.8
24.0
23.8
24.0
23.8

FIGURE 6

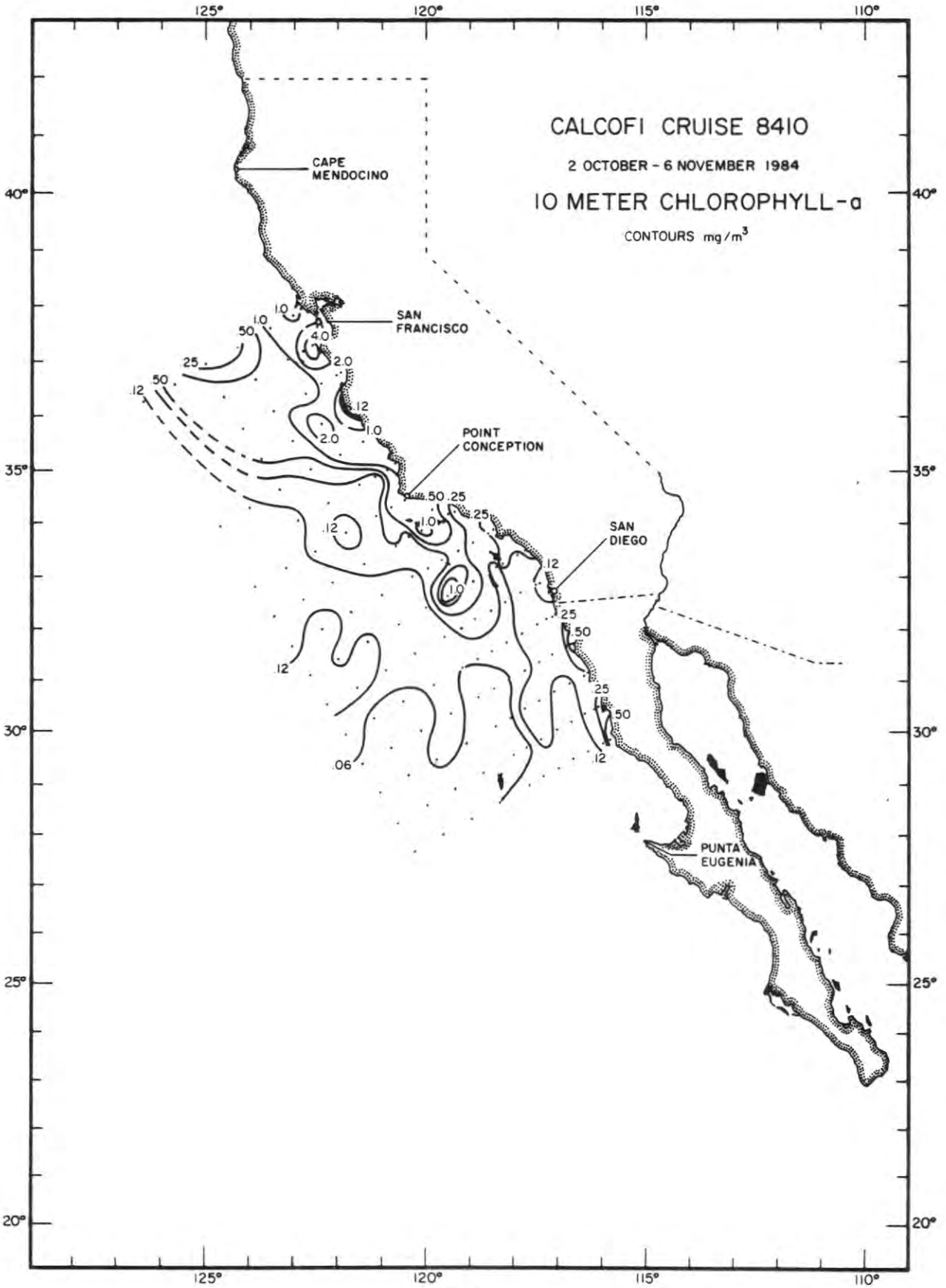

CALCOFI CRUISE 8410
2 OCTOBER - 6 NOVEMBER 1984
10 METER CHLOROPHYLL-a
CONTOURS mg/m3
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
125°
120°
115°
110°
40°
35°
30°
25°
20°

FIGURE 7

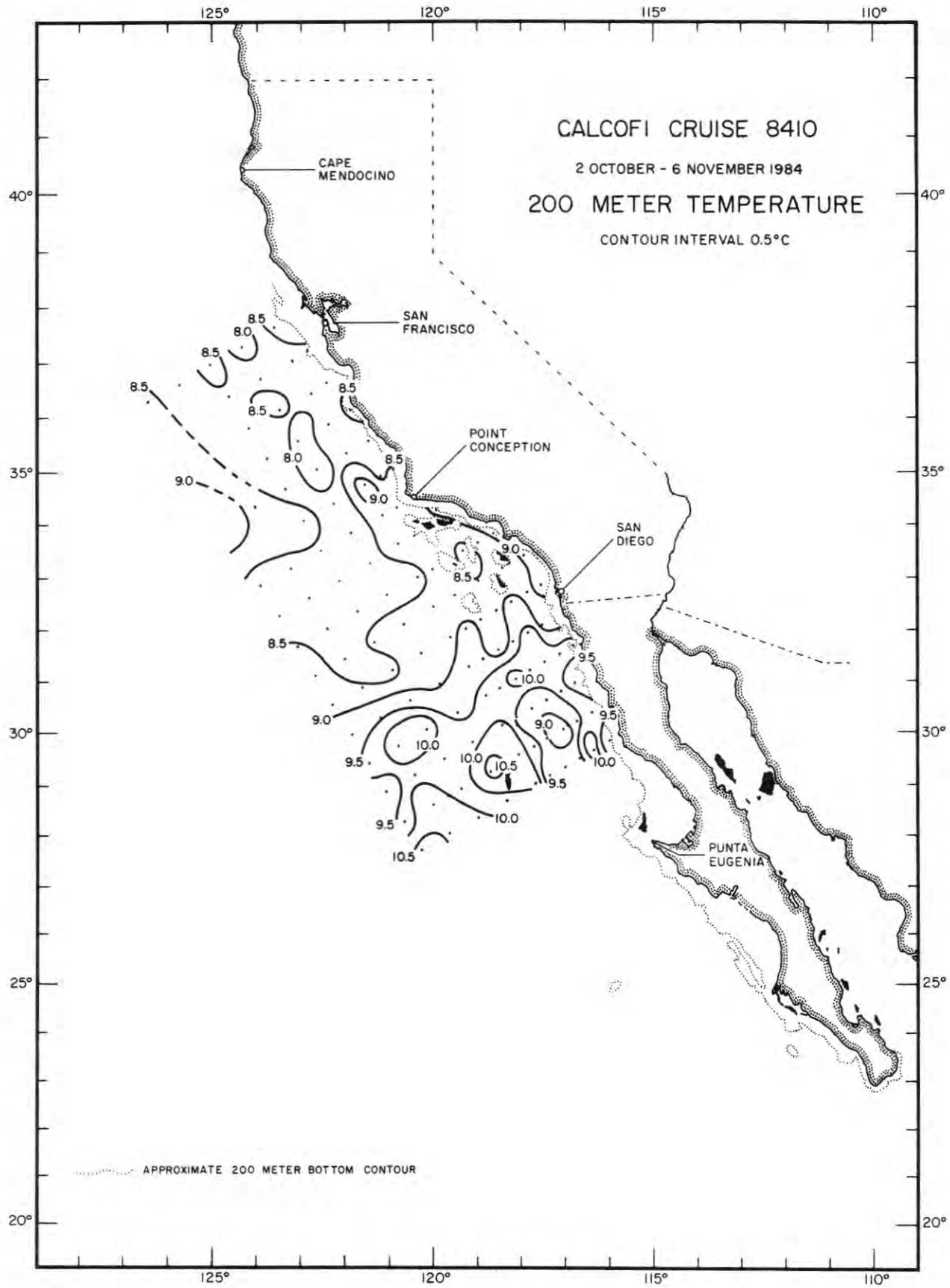

CALCOFI CRUISE 8410
2 OCTOBER - 6 NOVEMBER 1984
200 METER TEMPERATURE
CONTOUR INTERVAL 0.5°C
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
APPROXIMATE 200 METER BOTTOM CONTOUR
125°
120°
115°
110°
40°
35°
30°
25°
20°

FIGURE 8

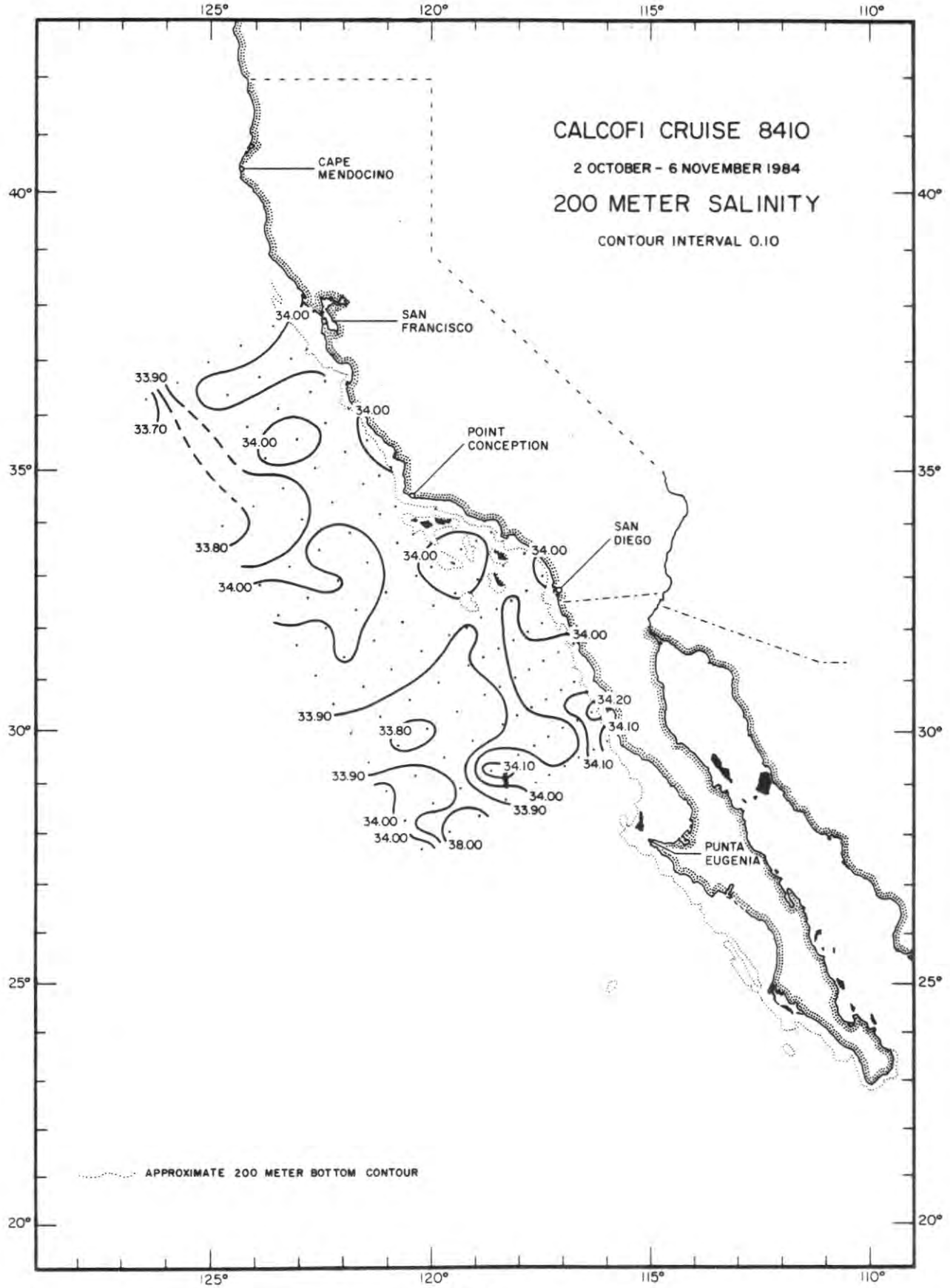

CALCOFI CRUISE 8410
2 OCTOBER - 6 NOVEMBER 1984
200 METER SALINITY
CONTOUR INTERVAL 0.10
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
APPROXIMATE 200 METER BOTTOM CONTOUR
125°
120°
115°
110°
40°
35°
30°
25°
20°
34.00
33.90
33.70
33.80
34.20
34.10
38.00

FIGURE 9

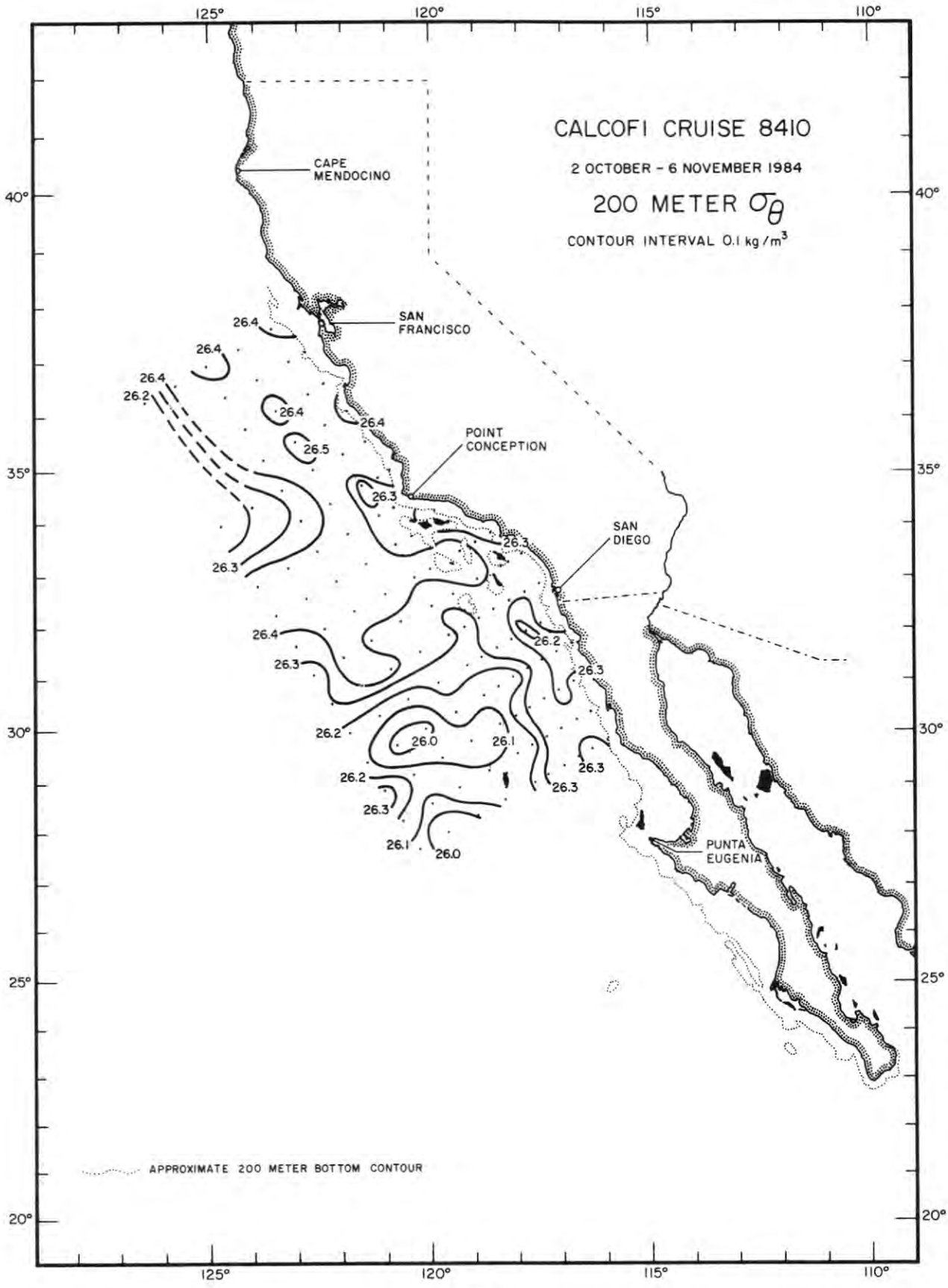

CALCOFI CRUISE 8410
2 OCTOBER - 6 NOVEMBER 1984
200 METER σ_θ
CONTOUR INTERVAL 0.1 kg/m^3
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
APPROXIMATE 200 METER BOTTOM CONTOUR
125°
120°
115°
110°
40°
35°
30°
25°
20°
26.4
26.2
26.5
26.3
26.0
26.1

FIGURE 10

PERSONNEL

Cruise 8410

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*

Metoyer, Jack D. (in charge)	Biological Technician, NMFS
Abramenkoff, Dimitry N.	Biological Technician, NMFS
Ambrose, David A.	Fishery Biologist, NMFS
Bliss, Kenneth A.	Oceanographer, NMFS
Camiel, Jeffrey M.	Volunteer, Catalina Marine Lab, USC
Costello, James P.	Staff Research Associate, SIO
Cummings, Sherry L.	Staff Research Associate, SIO
Hamer, Sharon R.	Biological Technician, NMFS
Sandknop, Elaine M.	Biological Technician, NMFS
Sosa-Jimenez, Francisco	Student, CICESE
Weiss, Al R.	Volunteer
Wells, James A.	Marine Technician, SIO

RV *New Horizon*

Hemingway, George T. (in charge)	Asst. to the Director, MLRG, SIO
Bos, David L.	Staff Research Associate, SIO
Field, Timothy J.	Marine Technician, SIO
Flerx, William C.	Fishery Biologist, NMFS
Frank, Billy H.	Volunteer
Gleason, Jan	Volunteer
Hernandez-Cordero, Patricia	Investigador Titular, INP, Mexico City
Kadar, Denise E.	Volunteer
Kemper, Cecelia A.	Staff Research Associate, SIO
Mead, Richard V.	Marine Technician, SIO
Povey, Paul M.	Volunteer
Ruiz-Villanueva, Lilia	Investigador Titular, INP, Mexico City
Rusnak, Nicholas M.	Volunteer

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 60 50

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 58.4 N	122 53.5 W	19/10/84	0258 GMT	47 M	170	06 KT			1022.1 MB	13.0 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	11.79	11.79	33.566	25.515	245.4	.000	4.71	76.8							0
1	1	11.79	11.79	33.566	25.515	245.8	.002	4.71	76.8	26.7	1.50	16.1	.35	1.05	.23	1
	10 ISL	11.55	11.55	33.568	25.561	241.7	.024	4.61	74.8							10
1	11	11.54	11.54	33.568	25.564	241.4	.027	4.60	74.6	25.2	1.51	16.1	.33	1.01	.62	11
	20 ISL	11.52	11.52	33.571	25.570	241.1	.049	4.50	72.9							20
1	21	11.52	11.52	33.571	25.570	241.1	.051	4.49	72.8	25.1	1.49	16.6	.30	.89	.55	21
	30 ISL	11.32	11.32	33.621	25.645	234.2	.072	3.60	58.0							30
1	31	11.29	11.28	33.627	25.656	233.1	.074	3.50	56.5	26.4	1.66	19.2	.05	.22	.45	31
1	41	10.40	10.39	33.706	25.875	212.5	.096	2.76	43.7	32.8	1.86	22.1	.09	.01	.60	41

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 60 52.6

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 51.2 N	123 04.1 W	19/10/84	0447 GMT	85 M	150	11 KT			1021.1 MB	11.0 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	11.77	11.77	33.576	25.527	245.1	.000	4.73	77.1							0
1	1	11.77	11.77	33.576	25.527	244.7	.002	4.73	77.1	27.2	1.62	16.6	.33	.93	.50	1
	10 ISL	11.64	11.64	33.583	25.557	242.0	.024	4.65	75.5							10
1	11	11.63	11.63	33.584	25.560	241.8	.027	4.64	75.4	27.6	1.56	16.9	.33	.95	.56	11
	20 ISL	11.55	11.55	33.585	25.575	240.5	.048	4.57	74.1							20
1	21	11.55	11.54	33.586	25.576	240.5	.051	4.56	74.0	27.3	1.62	17.0	.30	1.04	.62	21
	30 ISL	11.54	11.54	33.586	25.578	240.5	.073	4.46	72.3							30
1	31	11.54	11.54	33.587	25.578	240.5	.075	4.45	72.2	27.3	1.62	17.0	.27	.89	.63	31
1	41	11.51	11.51	33.588	25.585	240.2	.098	4.46	72.3	27.0	1.61	17.0	.25	.72	.60	41
	50 ISL	10.46	10.45	33.613	25.792	220.6	.120	3.86	61.1							50
1	51	10.37	10.37	33.616	25.809	219.9	.121	3.81	60.3	19.1	1.49	19.2	.01	.05	.16	51
1	61	10.13	10.12	33.663	25.888	211.7	.142	3.70	58.2	20.9	1.57	20.6	.00	.04	.14	61
	75 ISL	9.68	9.68	33.783	26.056	196.0	.172	3.10	48.8							75
1	77	9.63	9.62	33.800	26.079	193.9	.175	3.00	46.7	28.0	1.81	23.8	.04	.02	.16	77

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 60 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 46.3 N	123 13.9 W	19/10/84	0711 GMT	130 M	150	16 KT			1018.9 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	12.18	12.18	33.444	25.347	262.3	.000	5.46	89.7							0
1	1	12.18	12.18	33.444	25.347	261.8	.003	5.46	89.7	10.5	1.02	10.4	.22	1.20	.33	1
	10 ISL	11.97	11.97	33.473	25.409	256.1	.026	5.30	86.7							10
1	11	11.94	11.94	33.476	25.417	255.4	.028	5.28	86.3	11.9	1.04	11.7	.20	1.08	.45	11
	20 ISL	11.64	11.64	33.507	25.498	247.9	.051	5.08	82.5							20
1	21	11.61	11.61	33.509	25.504	247.3	.053	5.06	82.2	13.9	1.19	13.6	.20	.80	.32	21
	30 ISL	11.61	11.60	33.513	25.509	247.1	.076	4.91	79.7							30
1	31	11.61	11.60	33.514	25.510	247.1	.078	4.90	79.5	14.4	1.23	13.8	.21	.94	.15	31
1	41	11.51	11.51	33.516	25.529	245.5	.102	4.84	78.4	14.5	1.24	14.1	.20	.61	.31	41
	50 ISL	11.38	11.38	33.510	25.548	243.9	.125	4.66	75.2							50
1	51	11.37	11.36	33.509	25.549	243.7	.127	4.64	74.9	14.5	1.23	14.5	.13	.35	.27	51
1	61	10.65	10.64	33.540	25.702	229.4	.150	4.38	69.7	15.8	1.31	16.5	.05	.10	.23	61
1	72	10.27	10.26	33.640	25.846	215.9	.175	3.74	59.0	20.2	1.52	19.5	.02	.02	.14	72
	75 ISL	10.28	10.27	33.659	25.859	214.8	.182	3.61	57.0							75
1	87	10.31	10.30	33.710	25.895	211.6	.206	3.39	52.3	24.3	1.68	21.1	.07	.03	.19	87
	100 ISL	9.72	9.71	33.799	26.062	195.9	.234	3.09	48.3							101
1	101	9.63	9.61	33.809	26.087	193.6	.237	3.08	48.0	28.2	1.79	23.7	.02	.02	.15	102

RV DAVID STARR JORDAN CALCOFI CRUISE 8410 STATION 60 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
37 37.9 N	123 35.7 W	19/10/84	1145 GMT	3292 M	130 07 KT			1017.6 MB	14.0 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	13.30	13.30	33.327	25.038	291.5	.000	5.73	96.3							0
1	1	13.30	13.30	33.327	25.038	291.2	.003	5.73	96.3	6.3	.61	5.2	.24	1.17	.31	1
	10 ISL	13.23	13.23	33.346	25.066	288.7	.029	5.79	97.1							10
1	11	13.23	13.23	33.348	25.069	288.5	.032	5.79	97.2	6.3	.62	5.6	.26	1.08	.62	11
	20 ISL	13.19	13.19	33.353	25.080	287.7	.039	5.78	96.9							20
1	25	13.17	13.17	33.358	25.088	287.1	.072	5.77	96.7	6.5	.68	5.7	.27	1.12	.65	25
	30 ISL	13.04	13.04	33.400	25.147	284.7	.086	5.64	94.3							30
1	41	12.76	12.75	33.359	25.171	279.5	.117	5.36	89.1	7.6	.76	7.6	.30	.56	.35	41
	50 ISL	11.74	11.73	33.506	25.480	253.4	.141	4.39	71.4							50
1	56	11.11	11.11	33.608	25.673	232.1	.155	3.79	60.9	19.3	1.33	17.1	.32	.10	.22	56
1	71	10.78	10.78	33.669	25.779	222.3	.189	3.44	54.9	22.5	1.50	19.0	.01	.02	.19	71
	75 ISL	10.67	10.66	33.683	25.811	219.3	.199	3.39	53.9							75
1	81	10.51	10.50	33.699	25.851	215.7	.211	3.34	53.0	24.5	1.58	20.3	.00	.00	.21	81
1	95	10.15	10.14	33.724	25.932	208.3	.242	3.29	51.8	25.1	1.65	21.8	.00	.00	.21	96
	100 ISL	10.06	10.05	33.735	25.957	205.0	.252	3.25	51.1							101
1	114	9.81	9.79	33.773	26.029	199.4	.281	3.11	48.6	26.8	1.73	23.3	.00	.00	.13	115
	125 ISL	9.70	9.69	33.800	26.068	195.9	.302	3.06	47.8							126
1	135	9.59	9.58	33.826	26.106	192.5	.322	3.01	46.8	28.2	1.78	24.3	.00	.01	.11	136
	150 ISL	9.30	9.28	33.866	26.186	185.2	.350	2.82	43.6							151
1	155	9.19	9.18	33.881	26.214	182.5	.359	2.75	42.4	31.2	1.90	26.4	.00	.01	.10	156
1	174	8.94	8.92	33.935	26.297	174.9	.393	2.61	40.1	34.1	2.03	27.4	.00	.00	.09	175
1	194	8.71	8.69	33.969	26.360	169.3	.427	2.51	38.3	36.3	2.05	28.2	.00			195
	200 ISL	8.62	8.60	33.981	26.383	167.2	.437	2.48	37.7							201
1	213	8.43	8.41	34.005	26.431	162.8	.458	2.42	36.7	38.7	2.08	29.0	.00			214
1	248	8.00	7.98	34.042	26.525	154.4	.515	2.47	37.1	42.7	2.15	30.1	.00			250
	250 ISL	7.99	7.95	34.041	26.527	154.1	.517	2.47	37.1							252
1	297	7.31	7.28	34.028	26.615	146.3	.588	2.43	35.9	47.9	2.21	31.4	.00			299
	300 ISL	7.25	7.22	34.031	26.625	145.6	.592	2.41	35.6							302
1	350	6.34	6.31	34.030	26.747	133.9	.662	1.92	27.8	60.7	2.48	35.5	.00			352
	400 ISL	5.99	5.95	34.097	26.846	126.9	.727	1.39	19.9							403
1	435	5.86	5.83	34.149	26.902	123.0	.770	1.06	15.2	75.3	2.94	39.3	.00			438
	500 ISL	5.40	5.35	34.182	26.985	112.5	.845	.68	9.6							504
1	519	5.25	5.21	34.187	27.006	110.6	.867	.61	8.6	87.1	3.04	41.3	.00			523
	600 ISL	4.72	4.67	34.214	27.089	103.0	.953	.52	7.3							604
1	603	4.70	4.65	34.215	27.092	102.7	.957	.52	7.2	99.2	3.12	43.1	.00			608

RV DAVID STARR JORDAN CALCOFI CRUISE 8410 STATION 60 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
37 16.4 N	124 20.2 W	19/10/84	1743 GMT	3931 M	350 04 KT	270 01 03	1	1018.9 MB	16.5 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	15.40	15.40	32.735	24.118	379.6	.000	5.96	104.1							0
1	2	15.40	15.40	32.735	24.118	378.9	.008	5.96	104.1	1.2	.29	.1	.00	.21	.38	2
	10 ISL	15.27	15.27	32.725	24.160	375.1	.038	6.00	104.5							10
1	11	15.26	15.26	32.727	24.165	374.6	.041	6.00	104.6	1.2	.29	.1	.00	.23	.13	11
	20 ISL	15.10	15.10	32.758	24.224	369.3	.075	6.03	104.8							20
1	26	14.94	14.94	32.793	24.278	364.4	.097	6.05	104.8	1.2	.29	.0	.00	.38	.10	26
	30 ISL	14.85	14.84	32.821	24.327	359.7	.111	6.07	105.0							30
1	41	14.15	14.15	32.873	24.514	342.2	.149	6.14	104.7	1.5	.34	.1	.02	.44	.22	41
	50 ISL	12.45	12.44	32.771	24.775	317.5	.180	6.23	102.4							50
1	56	11.40	11.39	32.724	24.934	302.3	.198	6.28	101.0	2.4	.47	1.0	.15	.38	.30	56
1	66	10.73	10.72	32.772	25.090	287.7	.227	6.03	95.6	4.0	.58	3.3	.03	.21	.17	66
	75 ISL	10.55	10.54	32.800	25.143	282.8	.253	5.95	94.0							75
1	77	10.55	10.54	32.810	25.152	282.0	.258	5.94	93.8	5.3	.60	5.0	.01	.14	.12	77
1	92	10.55	10.54	33.107	25.383	260.4	.299	5.59	88.3	8.6	.87	9.3	.20	.08	.10	92
	100 ISL	10.57	10.56	33.297	25.528	246.8	.320	5.08	80.5							101
1	106	10.58	10.57	33.435	25.633	237.0	.336	4.70	74.6	16.2	1.31	17.6	.02	.06	.13	107
1	121	9.83	9.81	33.489	25.804	220.9	.370	4.39	68.5	20.5	1.45	19.9	.01	.03	.09	122
	125 ISL	9.62	9.61	33.521	25.862	215.4	.378	4.29	66.7							126
1	145	8.74	8.72	33.723	26.162	187.1	.418	3.68	56.1	28.3	1.68	24.7	.00	.01	.04	146
	150 ISL	8.68	8.67	33.757	26.198	183.9	.427	3.54	53.9							151
1	166	8.59	8.56	33.847	26.284	175.8	.456	3.14	47.8	33.4	1.88	27.7	.00	.00	.04	167
1	186	8.10	8.08	33.928	26.420	163.2	.490	3.00	45.2	36.6	1.88	27.9	.03			187
	200 ISL	7.82	7.80	33.949	26.478	157.9	.512	3.40	50.9							201
1	205	7.74	7.72	33.952	26.492	156.6	.520	3.55	53.3	35.6	1.77	26.6	.00			206
1	235	7.36	7.34	33.968	26.559	150.5	.566	3.45	51.1	39.9	1.84	27.8	.00			236
	250 ISL	7.17	7.15	33.980	26.594	147.3	.589	3.12	46.0							252
1	274	6.94	6.92	34.006	26.647	142.6	.624	2.47	36.2	49.7	2.17	32.1	.00			276
	300 ISL	6.88	6.85	34.056	26.695	138.4	.660	1.91	28.3							302
1	333	6.84	6.81	34.118	26.750	133.7	.705	1.35	19.8							335
	400 ISL	6.27	6.23	34.149	26.851	124.8	.791	.99	14.3							403
1	406	6.21	6.17	34.150	26.859	124.0	.799	.98	14.1	70.1	2.75	38.5	.00			409
1	480	5.74	5.70	34.196	26.955	115.5	.887	.62	8.8	79.5	2.94	40.5	.00			483
	500 ISL	5.62	5.58	34.209	26.979	113.4	.910	.55	7.8							504
1	552	5.36	5.31	34.239	27.036	108.4	.968	.41	5.8	88.0	3.04	41.7	.00			556

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 60 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
36 57.7 N	125 04.3 W	19/10/84	2353 GMT	4206 M	350 17 KT	300 04 05	2	1018.0 MB	16.2 C	14.7 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	15.66	15.66	32.695	24.052	385.2	.000	5.89	103.5							0
1	1	15.66	15.66	32.695	24.052	385.1	.004	5.89	103.5	.8	.28	.0	.00	.22	.06	1
	10 ISL	15.67	15.66	32.705	24.058	384.8	.038	5.98	105.0							10
1	11	15.67	15.67	32.706	24.059	384.7	.042	5.98	105.1	.8	.28	.0	.00	.22	.08	11
	20 ISL	15.69	15.69	32.741	24.081	383.0	.077	5.96	104.8							20
1	26	15.71	15.71	32.764	24.094	381.8	.099	5.95	104.7	.8	.28	.0	.00	.36	.07	26
	30 ISL	15.54	15.54	32.843	24.193	372.5	.115	5.94	104.2							30
1	40	14.87	14.86	33.059	24.507	342.9	.150	5.92	102.6	1.4	.37	.4	.12	.60	.29	40
	50 ISL	13.83	13.83	33.230	24.856	309.8	.183	5.77	98.0							50
1	56	13.11	13.11	33.335	25.059	290.6	.201	5.58	93.4	3.9	.62	5.1	.63	.25	.28	56
1	70	11.08	11.07	33.385	25.506	248.2	.238	4.61	73.9	11.0	1.13	14.3	.02	.06	.09	70
	75 ISL	10.81	10.80	33.486	25.633	236.3	.251	4.22	67.3							75
1	80	10.69	10.68	33.577	25.724	227.8	.262	3.90	62.1	18.0	1.42	18.9	.02	.03	.06	80
1	95	10.43	10.42	33.730	25.888	212.5	.295	3.20	50.7	23.7	1.62	22.1	.01	.02	.07	95
	100 ISL	10.35	10.34	33.752	25.919	209.6	.306	3.10	49.1							101
1	113	10.16	10.15	33.776	25.972	204.9	.334	3.00	47.3	25.7	1.72	23.5	.01	.01	.07	114
	125 ISL	9.98	9.97	33.807	26.022	200.4	.357	2.87	45.1							126
1	134	9.83	9.82	33.821	26.063	196.6	.376	2.78	43.5	28.1	1.82	24.8	.01	.01	.03	135
	150 ISL	9.55	9.54	33.859	26.139	189.7	.406	2.68	41.6							151
1	153	9.50	9.49	33.867	26.154	188.3	.412	2.66	41.3	30.1	1.90	25.9	.00	.00	.03	154
1	173	9.26	9.24	33.913	26.229	181.5	.449	2.54	39.3	31.3	1.94	26.8	.00	.00	.03	174
1	193	9.02	9.00	33.967	26.309	174.3	.484	2.38	36.6	34.1	1.99	27.8	.00			194
	200 ISL	8.92	8.90	33.986	26.340	171.4	.496	2.32	35.6							201
1	211	8.76	8.74	34.011	26.385	167.3	.515	2.24	34.3	36.9	2.13	28.7	.00			212
1	246	8.48	8.45	34.060	26.468	160.0	.572	2.07	31.5	40.5	2.16	29.8	.00			247
	250 ISL	8.44	8.41	34.064	26.477	159.1	.579	2.05	31.1							252
1	293	8.03	8.00	34.101	26.568	151.2	.646			44.6	2.29	31.5	.00			295
	300 ISL	7.97	7.94	34.105	26.580	150.2	.656	1.80	27.1							302
1	347	7.58	7.55	34.123	26.651	143.9	.725	1.60	23.8	47.7	2.42	33.1	.00			349
	400 ISL	7.02	6.99	34.115	26.724	137.4	.800	1.46	21.5							403
1	430	6.69	6.66	34.113	26.767	133.5	.840	1.36	19.8	57.7	2.63	36.1	.00			433
	500 ISL	6.01	5.98	34.162	26.896	121.7	.930	.83	11.9							504
1	511	5.90	5.86	34.172	26.917	119.7	.943	.74	10.6	70.7	2.90	39.6	.00			515
1	594	5.32	5.27	34.231	27.035	108.9	1.037	.45	6.4	82.7	3.04	41.6	.00			598

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 60 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
36 35.7 N	125 46.1 W	20/10/84	0617 GMT	4434 M	340 19 KT			1020.2 MB	16.3 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	14.89	14.89	33.173	24.589	334.0	.000	5.96	103.4							0
1	1	14.89	14.89	33.173	24.589	334.0	.003	5.96	103.4	1.9	.34	.2	.07	.66	.16	1
	10 ISL	14.90	14.90	33.195	24.604	334.4	.033	6.01	104.2							10
1	11	14.90	14.90	33.173	24.587	334.4	.037	6.01	104.3	2.0	.36	.2	.07	.62	.22	11
	20 ISL	14.87	14.87	33.198	24.613	332.3	.067	6.01	104.3							20
	30 ISL	14.81	14.81	33.240	24.657	328.3	.100	6.02	104.3							30
1	31	14.81	14.80	33.245	24.663	327.9	.103	6.02	104.3	2.4	.35	.4	.10	.78	.15	31
	50 ISL	14.66	14.66	33.350	24.775	317.7	.164	5.79	100.1							50
1	51	14.66	14.65	33.357	24.781	317.1	.167	5.78	99.9	2.8	.43	1.4	.20	.44	.26	51
1	66	14.07	14.06	33.418	24.953	301.2	.213	5.47	93.4	4.8	.62	4.3	.27	.27	.22	66
	75 ISL	12.11	12.10	33.471	25.383	260.2	.239	4.72	77.5							75
1	76	11.97	11.96	33.476	25.414	257.3	.241	4.67	76.4	10.9	1.10	13.4	.05	.24	.29	76
1	86	11.00	10.99	33.496	25.607	239.0	.265	4.35	69.7	14.2	1.26	16.2	.01	.12	.19	86
	100 ISL	10.24	10.23	33.583	25.807	220.3	.299	3.96	62.5							101
1	101	10.23	10.21	33.597	25.813	219.7	.300	3.95	62.2	18.8	1.33	19.0	.01	.05	.07	101
1	114	9.69	9.68	33.739	25.998	202.3	.329	3.50	54.6	23.8	1.64	22.4	.00	.01	.06	115
	125 ISL	9.43	9.41	33.779	26.097	193.1	.350	3.29	50.9							126
1	135	9.23	9.21	33.830	26.169	186.4	.369	3.14	48.5	28.8	1.82	24.6	.00	.00	.04	136
	150 ISL	8.94	8.93	33.878	26.251	178.8	.396	2.96	45.5							151
1	155	8.85	8.83	33.890	26.276	176.6	.405	2.92	44.7	31.3	1.93	26.2	.01	.00	.03	156
1	179	8.44	8.42	33.934	26.373	167.6	.447	2.90	44.0	34.1	1.97	27.4	.00	.01	.05	180
	200 ISL	8.21	8.19	33.996	26.457	160.3	.481	2.65	40.0							201
1	206	8.16	8.14	34.012	26.477	158.2	.490	2.57	38.8	37.5	2.04	29.0	.00			207
1	231	7.99	7.97	34.030	26.517	154.8	.529	2.42	36.4	40.5	2.20	29.7	.00			232
	250 ISL	7.55	7.52	34.007	26.564	150.4	.559	2.76	41.1							252
1	259	7.31	7.29	33.996	26.589	148.2	.573	2.92	43.2	43.6	2.16	29.6	.01			261
1	294	6.91	6.88	34.016	26.660	141.7	.623	2.38	34.9	51.0	2.35	32.2	.01			296
	300 ISL	6.86	6.83	34.021	26.671	140.7	.631	2.29	33.5							302
1	343	6.52	6.49	34.055	26.744	134.2	.690	1.69	24.5	59.4	2.63	35.6	.01			345
	400 ISL	5.83	5.80	34.074	26.846	124.8	.764	1.23	17.6							403
1	406	5.77	5.73	34.077	26.857	123.8	.772	1.19	17.0	72.3	2.88	39.1	.00			409
1	479	5.76	5.72	34.204	26.959	115.1	.859	.59	8.4	79.6	3.02	40.7	.00			482
	500 ISL	5.69	5.65	34.225	26.984	112.9	.883	.54	7.7							504
1	555	5.39	5.34	34.248	27.040	108.1	.944	.40	5.7	88.6	3.16	41.5	.00			559

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 60 100

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
36 17.5 N	126 28.8 W	20/10/84	1224 GMT	4572 M	340	18 KT			1020.2 MB	16.2 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	17.48	17.48	32.838	23.742	414.7	.000	5.77								0
1	1	17.48	17.48	32.838	23.742	414.7	.004			1.0	.28	.0	.00	.11	.05	1
	10 ISL	17.46	17.45	32.836	23.748	414.5	.041	5.76	104.9							10
1	11	17.46	17.45	32.836	23.748	414.5	.045	5.76	104.9	1.3	.28	.0	.00	.11	.05	11
	20 ISL	17.46	17.46	32.835	23.745	415.0	.083	5.75	104.8							20
1	26	17.47	17.47	32.835	23.743	415.4	.107	5.75	104.8	1.0	.23	.0	.01	.11	.06	26
	30 ISL	17.47	17.47	32.836	23.744	415.5	.124	5.71	104.1							30
1	41	17.47	17.46	32.837	23.746	415.7	.170	5.63	102.6	1.0	.25	.0	.00	.10	.06	41
	50 ISL	17.53	17.52	32.931	23.805	413.3	.207	5.67	103.4							50
1	56	17.56	17.55	32.991	23.843	406.9	.231	5.69	103.9	1.2	.28	.0	.00	.12	.08	56
1	71	14.62	14.61	32.876	24.420	352.1	.288	6.05	104.2	2.1	.28	.0	.01	.17	.12	71
	75 ISL	14.13	14.12	32.885	24.529	341.7	.303	6.12	104.3							75
1	81	13.62	13.61	32.909	24.653	330.3	.322	6.18	104.3	2.7	.28	.0	.01	.31	.18	81
1	96	12.50	12.49	32.978	24.927	304.2	.369	6.19	102.1	3.1	.34	.0	.21	.22	.20	96
	100 ISL	12.33	12.32	32.986	24.965	300.6	.382	6.14	100.9							101
1	116	11.90	11.88	33.002	25.061	291.9	.428	5.90	96.0	3.1	.44	1.1	.03	.07	.12	116
	125 ISL	11.57	11.55	33.023	25.136	284.8	.456	5.74	92.8							126
1	135	11.17	11.16	33.062	25.239	275.2	.485	5.55	89.0	6.4	.76	6.1	.01	.02	.05	136
	150 ISL	10.50	10.49	33.159	25.441	256.1	.523	5.28	83.5							151
1	155	10.24	10.22	33.212	25.519	248.8	.537	5.17	81.3	10.3	.91	10.4	.02	.01	.03	156
1	175	9.38	9.36	33.336	25.758	225.2	.584	4.60	71.0	17.5	1.31	16.6	.01	.01	.02	176
1	194	8.82	8.80	33.596	26.051	198.6	.624	4.24	64.8	22.6	1.42	20.2	.01			195
	200 ISL	8.64	8.62	33.654	26.125	191.6	.636	4.12	62.6							201
1	213	8.27	8.25	33.754	26.258	179.1	.660	3.87	58.4	29.1	1.66	24.1	.01			214
1	249	7.68	7.66	33.897	26.458	160.5	.720	3.61	53.8	36.0	1.79	26.8	.00			250
	250 ISL	7.66	7.64	33.900	26.463	160.0	.722	3.60	53.6							252
1	297	6.96	6.93	33.959	26.609	146.6	.795	3.08	45.2	45.7	1.98	30.2	.00			299
	300 ISL	6.92	6.90	33.961	26.615	146.1	.799	3.05	44.8							302
1	352	6.35	6.32	33.987	26.712	137.2	.872	2.57	37.2	55.9	2.22	33.4	.00			354
	400 ISL	5.80	5.75	34.031	26.793	129.8	.937	2.14	30.5							403
1	434	5.43	5.39	34.011	26.846	124.5	.980	1.84	26.0	72.3	2.56	38.4	.00			437
	500 ISL	4.80	4.76	34.042	26.943	115.8	1.059	1.30	18.1							504
1	517	4.70	4.66	34.058	26.967	113.5	1.079	1.16	16.1	87.5	2.83	42.0	.00			521
1	594	4.98	4.94	34.231	27.073	104.8	1.163									598

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 63 50

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 22.8 N	122 28.7 W	21/10/84	1947 GMT	34 M	350	38 KT	300 04 05	1	1019.0 MB	14.5 C	12.3 C	7/8	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	12.66	12.66	33.228	25.088	286.6	.029	5.23	86.7	14.2	1.15	10.4	.47	2.11	.38	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 63 52

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 18.8 N	122 37.0 W	21/10/84	1747 GMT	86 M	340	12 KT	310 03 04	2	1018.0 MB	14.9 C	12.6 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	0	12.98	12.98	33.092	24.921	302.3	.000	5.94	99.0	15.9	1.14	8.6	.50	4.66	1.20	0
1	10	12.87	12.87	33.228	25.047	290.6	.030	5.82	96.9	11.3	1.02	7.6	.41	4.13	1.33	10
1	20	12.90	12.90	33.412	25.184	277.8	.058	5.50	91.7	4.5	.72	6.1	.17	2.69	1.19	20
1	30	12.15	12.14	33.445	25.355	261.7	.085	4.93	80.9	8.9	.98	10.1	.22	1.10	1.23	30
1	40	11.31	11.30	33.514	25.565	242.0	.113	4.32	69.7	12.1	1.19	14.1	.13	.51	.93	40
1	50	10.67	10.66	33.628	25.768	222.9	.133	3.69	58.7	17.4	1.40	17.7	.09	.25	.58	50

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 63 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 12.5 N	122 50.5 W	21/10/84	1508 GMT	303 M	350	17 KT	330 05 05	1	1017.7 MB	13.8 C	11.8 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	13.47	13.47	33.443	25.094	285.9	.000	6.01	101.4							0
1	1	13.47	13.47	33.443	25.094	285.9	.003	6.01	101.4	1.3	.48	2.4	.13	3.44	1.78	1
	10 ISL	13.47	13.47	33.442	25.094	286.1	.029	6.13	103.4							10
1	11	13.47	13.47	33.442	25.094	286.1	.031	6.13	103.4	1.0	.48	2.4	.13	3.65	1.19	11
	20 ISL	13.48	13.48	33.441	25.090	286.8	.057	6.08	102.6							20
1	21	13.48	13.48	33.441	25.090	286.8	.060	6.07	102.5	1.0	.48	2.5	.13	3.73	1.20	21
	30 ISL	13.47	13.47	33.443	25.094	286.7	.086	6.03	101.8							30
1	31	13.47	13.46	33.443	25.094	286.6	.088	6.03	101.8	.6	.49	2.7	.13	3.52	1.03	31
1	41	12.19	12.18	33.453	25.354	262.1	.116	4.84	79.5	5.9	.99	10.6	.14	.66	.69	41
1	50	11.38	11.37	33.509	25.548	243.9	.138	4.43	71.6	9.9	1.13	14.2	.07	.17	.24	50
1	60	10.90	10.89	33.602	25.707	228.9	.162	3.99	63.8	13.4	1.24	16.5	.02	.06	.20	60
1	71	10.67	10.66	33.636	25.775	222.7	.186	3.74	59.5	15.3	1.39	18.0	.00	.04	.14	71
	75 ISL	10.40	10.39	33.651	25.833	217.2	.196	3.73	59.0							75
1	86	9.77	9.76	33.690	25.970	204.4	.218	3.69	57.6	19.6	1.50	21.3	.00	.01	.25	86
1	100	9.65	9.63	33.734	26.025	199.5	.248	3.61	56.2	21.3	1.58	22.3	.00	.01	.12	101
1	118	9.27	9.26	33.782	26.124	190.4	.283	3.45	53.3	23.5	1.69	23.1	.00	.00	.08	119
	125 ISL	9.17	9.16	33.823	26.172	185.9	.296	3.29	50.8							126
1	143	8.95	8.94	33.936	26.295	174.6	.329	2.86	43.9	28.9	1.89	25.7	.00	.00	.08	144
	150 ISL	8.89	8.88	33.956	26.320	172.3	.340	2.94	43.5							151
1	178	8.65	8.63	33.994	26.389	166.2	.388	2.74	41.8	32.0	2.01	27.1	.00			179
	200 ISL	8.34	8.32	34.020	26.457	160.1	.424	2.71	41.1							201
1	212	8.19	8.17	34.031	26.488	157.3	.442	2.69	40.6	35.5		28.5	.00			213
1	250	7.98	7.95	34.051	26.536	153.4	.502	2.44	36.7	38.9		29.9	.00			252

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 63 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 02.2 N	123 11.8 W	21/10/84	1108 GMT	2468 M	340	17 KT			1017.9 MB	14.0 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	15.41	15.41	33.498	24.718	321.6	.000	5.81	102.0							0
1	2	15.41	15.41	33.488	24.718	321.6	.006	5.81	102.0	.0	.35	.7	.03	1.11	.22	2
	10 ISL	15.41	15.41	33.488	24.717	322.0	.032	5.81	102.0							10
1	11	15.41	15.41	33.489	24.718	322.0	.035	5.81	102.0	.0	.37	.6	.03	.89	.45	11
	20 ISL	15.42	15.42	33.488	24.716	322.4	.064	5.85	102.8							20
1	27	15.42	15.42	33.488	24.716	322.7	.087	5.88	103.3	.0	.34	.6	.03	.92	.33	27
	30 ISL	15.31	15.31	33.485	24.738	320.7	.097	5.82	102.0							30
1	41	14.94	14.93	33.480	24.815	313.6	.131	5.61	97.5	.1	.41	2.1	.07	.69	.37	41
	50 ISL	12.59	12.59	33.517	25.326	268.3	.158	4.80	79.5							50
1	56	11.11	11.11	33.511	25.597	239.3	.172	4.28	68.7	10.6	1.16	14.7	.02	.15	.17	56
1	71	10.57	10.56	33.601	25.764	223.7	.207	3.91	62.1	14.1	1.35	17.5	.01	.04	.11	71
	75 ISL	10.32	10.31	33.636	25.811	219.4	.216	3.93	62.0							75
1	79	10.13	10.12	33.639	25.847	216.0	.224	3.94	62.0	15.9	1.46	18.8	.01	.04	.09	79
1	94	9.82	9.81	33.687	25.959	205.5	.256	3.61	56.4	19.1	1.58	20.9	.00	.01	.07	94
	100 ISL	9.75	9.74	33.725	26.001	201.8	.269	3.43	53.5							101
1	115	9.52	9.51	33.796	26.094	193.2	.299	3.14	48.8	22.5	1.73	23.2	.00	.00	.05	116
	125 ISL	9.19	9.18	33.811	26.159	187.1	.318	3.24	50.0							126
1	134	8.84	8.83	33.822	25.223	181.1	.335	3.38	51.7	25.6	1.75	24.1	.00	.00	.04	135
	150 ISL	8.36	8.34	33.861	26.328	171.3	.362	3.35	50.7							151
1	154	8.28	8.26	33.876	26.352	169.1	.369	3.34	50.5	28.8	1.84	25.4	.00	.01	.03	155
1	174	8.43	8.42	33.994	26.421	163.0	.402	2.66	40.4	32.6	2.01	27.6	.00	.00	.03	175
1	193	8.32	8.30	34.033	26.469	158.8	.433	2.43	36.8	35.3	2.10	28.6	.00			194
	200 ISL	8.22	8.20	34.043	26.493	156.7	.444	2.36	35.7							201
1	214	8.00	7.98	34.056	26.535	152.8	.465	2.26	34.0	39.1	2.15	29.8	.00			215
1	247	7.66	7.64	34.065	26.593	147.7	.516	2.14	31.9	42.5	2.25	30.8	.00			249
	250 ISL	7.63	7.61	34.067	26.598	147.2	.520	2.11	31.5							252
1	297	7.19	7.16	34.104	26.691	138.9	.587	1.55	22.9	50.4	2.48	33.6	.00			299
	300 ISL	7.16	7.14	34.106	26.696	138.6	.591	1.53	22.5							302
1	352	6.79	6.76	34.127	26.765	132.7	.661	1.23	18.0	57.3	2.63	35.6	.00			354
	400 ISL	6.38	6.35	34.155	26.842	125.8	.724	.96	13.9							403
1	434	6.12	6.08	34.178	26.893	121.1	.765	.79	11.4	69.2	2.91	38.4	.00			437
	500 ISL	5.80	5.76	34.225	26.971	114.4	.843	.56	7.9							504
1	517	5.73	5.69	34.236	26.988	112.9	.863	.51	7.3	77.9	2.99	39.9	.00			521
1	600	5.33	5.28	34.277	27.069	105.8	.954	.37	5.2	85.9	3.10	41.1	.00			605

RV DAVID STARR JORDAN CALCOFI CRUISE 8410 STATION 63 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
36 42.1 N	123 55.0 W	21/10/84	0503 GMT	3840 M	350	22 KT			1018.1 MB	15.3 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
	0 ISL	14.90	14.90	33.532	24.841	310.0	.000	5.96								0
1	2	14.90	14.90	33.532	24.841	310.0	.006			.0	.41	4.5	.13	.60	.21	2
1	10	14.89	14.89	33.502	24.841	310.2	.031	5.95	103.4	.0	.41	4.5	.13	.57	.26	10
	20 ISL	14.90	14.90	33.531	24.839	310.8	.062	5.94	103.3							20
1	25	14.91	14.91	33.531	24.838	311.0	.077	5.93	103.1	.0	.41	4.5	.13	.57	.25	25
	30 ISL	14.90	14.90	33.496	24.835	311.0	.093	5.90	102.6							30
1	40	14.89	14.89	33.532	24.842	311.0	.124	5.84	101.5	.0	.40	4.5	.14	.57	.27	40
	50 ISL	14.03	14.02	33.475	25.006	295.7	.155	5.42	92.5							50
1	55	13.45	13.45	33.470	25.119	285.0	.168	5.15	86.9	3.5	.72	6.5	.21	.30	.36	55
1	70	11.31	11.30	33.547	25.590	240.3	.208	4.16	67.1	11.4	1.19	15.3	.03	.15	.30	70
	75 ISL	10.89	10.88	33.529	25.652	234.5	.220	4.24	67.7							75
1	80	10.61	10.60	33.515	25.690	231.0	.231	4.33	68.8	12.3	1.31	17.2	.02	.10	.16	80
1	95	9.86	9.85	33.631	25.909	213.4	.264	3.82	59.7	18.3	1.49	20.5	.01	.04	.10	95
	100 ISL	9.68	9.66	33.664	25.965	205.2	.275	3.70	57.7							101
1	114	9.35	9.34	33.737	26.075	194.9	.304	3.46	53.5	22.7	1.68	22.8	.01	.00	.05	115
	125 ISL	9.23	9.21	33.796	26.142	188.8	.324	3.24	50.1							126
1	134	9.14	9.13	33.841	26.191	184.3	.342	3.07	47.3	26.2	1.79	24.9	.01	.00	.04	135
	150 ISL	8.90	8.89	33.892	26.268	177.2	.370	2.88	44.2							151
1	154	8.84	8.83	33.902	26.286	175.6	.377	2.85	43.6	29.0	1.89	26.2	.01	.01	.03	155
1	174	8.64	8.62	33.953	26.359	169.0	.412	2.81	42.8	31.0	1.94	26.8	.01	.01	.03	175
1	194	8.44	8.42	33.995	26.422	163.3	.445	2.60	39.5	33.4	1.97	27.6	.01			195
	200 ISL	8.35	8.33	34.005	26.444	161.3	.455	2.59	39.2							201
1	214	8.12	8.10	34.021	26.491	157.0	.476	2.57	38.7	36.3	2.06	28.3	.01			215
1	249	7.50	7.47	34.023	26.583	148.6	.531	2.63	39.1	41.4	2.12	29.5	.02			251
	250 ISL	7.49	7.47	34.023	26.584	148.5	.532	2.62	39.0							252
1	299	7.32	7.29	34.078	26.652	142.8	.603	1.95	28.9	47.4	2.34	32.1	.01			301
	300 ISL	7.31	7.28	34.079	26.654	142.6	.605	1.94	28.7							302
1	354	6.78	6.75	34.114	26.755	133.6	.679	1.37	20.0	56.8	2.57	35.0	.01			356
	400 ISL	6.26	6.22	34.116	26.826	127.1	.739	1.12	16.1							403
1	439	5.89	5.84	34.119	26.877	122.5	.787	.98	14.0	70.5	2.81	38.5	.00			441
	500 ISL	5.58	5.54	34.172	26.956	115.5	.860	.68	9.6							504
1	522	5.50	5.46	34.194	26.983	113.1	.886	.58	8.2	80.8	3.03	40.5	.00			526
	600 ISL	5.10	5.05	34.248	27.073	105.0	.971	.35	5.0							604
1	603	5.09	5.04	34.250	27.076	104.8	.973	.35	4.9	91.0	3.12	41.4	.00			607

RV DAVID STARR JORDAN CALCOFI CRUISE 8410 STATION 63 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
36 22.9 N	124 38.2 W	20/10/84	2323 GMT	4100 M	350	18 KT	340 08 07	1	1019.5 MB	17.2 C	13.8 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
	0 ISL	15.33	16.33	33.482	24.506	341.9	.000	5.81	103.9							0
1	1	15.33	16.33	33.482	24.506	341.9	.003	5.81	103.9	1.9	.26	.3	.00	.96	.11	1
	10 ISL	15.32	16.32	33.480	24.507	342.0	.034	5.77	103.2							10
1	11	15.32	16.32	33.480	24.508	342.0	.037	5.77	103.2	1.9	.27	.3	.00	.80	.29	11
	20 ISL	16.31	16.30	33.479	24.510	342.1	.068	5.85	104.6							20
1	26	16.29	16.29	33.478	24.512	342.1	.089	5.90	105.4	1.9	.27	.3	.00	.82	.31	26
	30 ISL	16.28	16.27	33.475	24.513	342.1	.103	5.86	104.7							30
1	41	16.23	16.22	33.467	24.519	341.9	.140	5.75	102.6	1.4	.27	.3	.02	.85	.31	41
	50 ISL	13.85	13.84	33.402	24.986	297.6	.169	5.26	89.4							50
1	55	12.50	12.49	33.399	25.252	272.2	.183	4.98	82.3	7.7	.90	9.6	.07	.28	.39	55
1	70	10.94	10.93	33.439	25.574	241.9	.221	4.51	72.1	13.4	1.22	14.6	.02	.16	.17	70
	75 ISL	10.74	10.73	33.491	25.648	234.8	.234	4.30	68.6							75
1	81	10.64	10.63	33.552	25.713	228.8	.247	4.08	64.9	16.5	1.36	16.8	.01	.05	.17	81
1	96	10.43	10.42	33.690	25.857	215.4	.280	3.51	55.5	20.2	1.52	19.6	.00	.03	.11	96
	100 ISL	10.30	10.29	33.721	25.904	211.0	.289	3.36	53.1							101
1	114	9.80	9.79	33.792	26.045	197.9	.319	3.03	47.4	24.9	1.80	23.5	.00	.01	.10	115
	125 ISL	9.43	9.42	33.813	26.121	190.8	.339	3.08	47.8							126
1	134	9.15	9.13	33.825	26.177	185.6	.357	3.13	48.2	28.0	1.88	25.1	.00	.00	.06	135
	150 ISL	8.85	8.83	33.872	26.261	177.9	.385	3.07	47.1							151
1	154	8.79	8.78	33.887	26.282	175.9	.393	3.06	46.8	31.2	1.92	26.0	.00	.00	.05	155
1	174	8.51	8.50	33.969	26.390	165.0	.427	2.66	40.4	34.8	2.07	27.6	.00	.00	.05	175
1	194	8.34	8.32	34.026	26.461	159.6	.459	2.39	36.2	38.6	2.17	29.0	.01			195
	200 ISL	8.29	8.27	34.032	26.474	158.5	.469	2.42	36.7							201
1	213	8.18	8.16	34.037	26.495	156.7	.482	2.51	37.9	39.6	2.20	29.1	.01			214
1	248	7.84	7.81	34.085	26.583	148.8	.543	1.96	29.4	46.0	2.35	31.3	.01			250
	250 ISL	7.82	7.80	34.086	26.587	148.5	.546	1.94	29.1							252
1	299	7.31	7.28	34.129	26.693	139.0	.616	1.48	21.9	53.4	2.59	34.1	.01			301
	300 ISL	7.30	7.27	34.129	26.695	138.8	.617	1.47	21.8							302
1	353	6.77	6.74	34.149	26.785	130.7	.688	1.14	16.7	61.8	2.75	36.4	.00			355
	400 ISL	6.49	6.46	34.183	26.849	125.2	.749	.89	12.7							403
1	436	6.32	6.29	34.210	26.893	121.4	.793	.71	10.3	71.0	2.96	38.5	.00			439
	500 ISL	5.88	5.84	34.242	26.974	114.1	.869	.51	7.3							504
1	518	5.76	5.72	34.252	26.997	112.1	.889	.47	6.7	81.4	3.11	40.6	.00			522
	600 ISL	5.41	5.36	34.318	27.093	103.7	.978	.30	4.2							604
1	604	5.40	5.35	34.322	27.097	103.4	.981	.29	4.1	90.2	3.20	41.8	.00			608

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 67 49

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
36 49.1 N	121 59.4 W	18/10/84	1711 GMT	415 M	130	05 KT	320 02 05	1	1026.5 MB	13.7 C	10.5 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
1	10	12.36	12.35	33.472	25.336	263.1	.026	5.24	86.4	12.5	.91	9.3	.19	.79	1.19	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 67 50

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
36 47.3 N	122 03.1 W	18/10/84	1541 GMT	200 M	350	08 KT	310 04 07	1	1025.1 MB	13.0 C	11.0 C	7/8	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	12.33	12.33	33.435	25.312	265.0	.000	5.11	84.2							0
1	1	12.33	12.33	33.435	25.312	265.1	.003	5.11	84.2	10.5	.89	9.0	.15	.88	.59	1
	10 ISL	12.34	12.34	33.435	25.310	265.5	.027	5.24	86.3							10
1	11	12.34	12.34	33.436	25.311	265.5	.029	5.25	86.5	10.4	.90	9.1	.15	1.12	.55	11
	20 ISL	12.31	12.31	33.459	25.334	263.5	.053	5.01	82.6							20
1	21	12.31	12.31	33.461	25.337	263.3	.055	4.98	82.0	10.9	.91	9.9	.09	.74	.54	21
	30 ISL	12.24	12.23	33.474	25.360	261.3	.079	4.78	78.7							30
1	31	12.23	12.22	33.475	25.363	261.1	.081	4.76	78.3	11.5	.94	10.5	.09	.59	.30	31
1	41	11.46	11.45	33.510	25.534	245.0	.107	4.27	69.1	13.8	1.16	13.8	.02	.12	.20	41
	50 ISL	11.34	11.33	33.540	25.579	240.8	.129	4.12	66.6							50
1	51	11.34	11.33	33.543	25.582	240.6	.131	4.12	66.5	15.0	1.18	14.6	.01	.06	.20	51
1	61	10.99	10.98	33.605	25.693	230.3	.154	4.11	65.9	15.8	1.25	16.4	.00	.04	.18	61
1	71	10.78	10.77	33.629	25.749	225.2	.177	3.93	62.7	17.9	1.32	17.3	.00	.03	.15	71
	75 ISL	10.70	10.69	33.646	25.777	222.6	.187	3.83	61.0							75
1	86	10.48	10.47	33.695	25.853	215.6	.210	3.56	56.5	21.0	1.45	19.3	.00	.02	.15	86
	100 ISL	10.06	10.05	33.767	25.980	203.7	.240	3.20	50.3							101
1	105	9.90	9.89	33.792	26.027	199.4	.251	3.08	48.3	26.6	1.67	22.8	.02	.01	.12	106
	125 ISL	9.51	9.50	33.853	26.140	189.0	.289	2.90	45.1							126
1	131	9.41	9.39	33.868	26.169	186.4	.301	2.87	44.5	29.8	1.84	25.2	.00	.01	.11	132
	150 ISL	9.09	9.07	33.920	26.261	177.9	.335	2.68	41.3							151
1	156	8.99	8.98	33.936	26.289	175.4	.346	2.61	40.1	33.0	1.95	26.9	.02	.00	.09	157

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 67 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
36 37.5 N	122 24.7 W	18/10/84	1215 GMT	2469 M	360	11 KT			1024.9 MB	13.4 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	13.79	13.79	33.410	25.003	294.5	.000	5.78								0
1	1	13.79	13.79	33.410	25.003	294.6	.003			5.3	.49	3.1	.17	1.61	.54	1
	10 ISL	13.79	13.79	33.410	25.002	294.9	.029	5.73	97.3							10
1	11	13.80	13.79	33.409	25.001	295.0	.032	5.73	97.3	5.3	.52	3.2	.18	1.17	.77	11
	20 ISL	13.81	13.81	33.411	25.000	295.4	.059	5.76	97.9							20
1	21	13.81	13.81	33.412	25.000	295.4	.062	5.76	97.9	5.3	.52	3.2	.18	1.21	.69	21
1	30	13.80	13.80	33.412	25.002	295.4	.088	5.71	97.0	5.3	.52	3.2	.18	1.05	.82	30
1	40	13.69	13.68	33.400	25.017	294.3	.117	5.69	96.4	5.4	.54	3.4	.18	1.03	.69	40
	50 ISL	12.30	12.30	33.345	25.248	272.4	.146	5.18	85.3							50
1	55	11.57	11.56	33.332	25.376	260.3	.159	4.93	79.9	9.6	.95	10.5	.16	.35	.37	55
1	65	10.82	10.81	33.360	25.533	245.6	.184	4.80	76.5	12.7	1.13	13.5	.03	.26	.23	65
1	74	10.62	10.61	33.478	25.660	233.7	.206	4.40	69.9	15.2	1.26	15.9	.01	.13	.14	74
	75 ISL	10.62	10.61	33.500	25.676	232.2	.209	4.31	68.5							75
1	89	10.70	10.69	33.688	25.810	219.8	.239	3.51	55.9	19.5	1.46	19.0	.01	.04	.13	89
	100 ISL	10.39	10.38	33.736	25.900	211.5	.264	3.44	54.5							101
1	108	10.10	10.09	33.744	25.958	206.1	.282	3.39	53.3	23.2	1.59	21.3	.00	.01	.09	109
	125 ISL	9.72	9.71	33.807	26.070	195.7	.315	3.20	50.0							126
1	127	9.67	9.66	33.815	26.084	194.4	.319	3.18	49.6	26.0	1.75	23.3	.00	.00	.07	128
	150 ISL	9.22	9.20	33.869	26.200	183.7	.362	3.13	48.2							151
1	152	9.17	9.16	33.873	26.211	182.8	.366	3.12	48.1	29.7	1.85	25.2	.00	.00	.05	153
1	192	8.34	8.32	33.932	26.388	166.3	.418	3.12	47.2	34.4	1.89	27.2	.00			193
	200 ISL	8.34	8.32	33.993	26.436	162.1	.448	2.83	42.9							201
1	212	8.34	8.31	34.019	26.456	160.4	.467	2.63	39.8	37.4	2.03	28.6	.00			213
1	247	7.89	7.87	34.039	26.539	152.9	.523	2.49	37.3	42.0	2.15	30.0	.00			249
	250 ISL	7.86	7.83	34.043	26.547	152.5	.527	2.49	37.3							252
1	297	7.22	7.20	34.043	26.638	144.0	.597	2.34	34.6	48.9	2.26	32.5	.00			299
	300 ISL	7.20	7.17	34.050	26.647	143.2	.601	2.30	33.9							302
1	353	6.80	6.77	34.191	26.813	128.1	.672	1.50	22.0	59.4	2.55	36.0	.00			355
	400 ISL	6.56	6.52	34.196	26.850	124.3	.732	1.13	16.4							403
1	437	6.36	6.32	34.191	26.872	123.4	.778	.97	14.0	69.9	2.80	38.5	.00			440
	500 ISL	5.84	5.80	34.231	26.947	116.7	.853	.83	11.8							504
1	520	5.68	5.63	34.208	26.973	114.3	.877	.80	11.4	80.6	3.01	40.7	.00			524
	600 ISL	5.35	5.30	34.272	27.062	106.4	.965	.58	8.2							604
1	603	5.35	5.30	34.274	27.065	106.2	.967	.57	8.1	89.6	3.08	41.9	.00			607

RV DAVID STARR JORDAN CALCOFI CRUISE 8410 STATION 67 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
36 25.9 N	122 45.7 W	18/10/84	0810 GMT	2880 M	350	20 KT			1024.2 MB	14.0 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	15.01	15.01	33.446	24.772	315.5	.303	5.79	100.9							0
1	1	15.01	15.01	33.446	24.772	315.6	.303	5.79	100.9	3.4	.36	1.3	.05	.73	.31	1
	10 ISL	15.01	15.01	33.446	24.773	315.7	.332	5.81	101.2							10
1	11	15.01	15.01	33.446	24.773	315.7	.335	5.81	101.2	3.3	.36	1.4	.05	.75	.29	11
	20 ISL	15.03	15.03	33.446	24.773	317.3	.363	5.84	101.7							20
1	21	15.03	15.03	33.447	24.770	317.4	.366	5.84	101.8	3.3	.36	1.3	.05	.75	.25	21
	30 ISL	15.02	15.02	33.443	24.768	317.5	.395	5.78	100.6							30
1	31	15.02	15.02	33.447	24.772	317.5	.398	5.77	100.5	3.6	.36	1.3	.05	.74	.26	31
1	40	13.95	13.95	33.439	24.993	295.6	.125	5.39	91.9	5.6	.57	4.3	.10	.63	.37	40
	50 ISL	11.82	11.81	33.509	25.468	257.3	.154	4.72	77.3							50
1	55	10.98	10.98	33.462	25.583	240.6	.165	4.39	70.3	14.0	1.13	14.6	.03	.18	.24	55
1	66	11.03	11.02	33.618	25.697	233.1	.191	3.78	60.6	17.2	1.30	17.3	.01	.11	.19	65
1	74	10.85	10.84	33.648	25.751	225.1	.209	3.69	59.0	18.4	1.35	17.7	.01	.04	.22	74
	75 ISL	10.82	10.81	33.652	25.760	224.2	.212	3.67	58.6							75
1	89	10.48	10.47	33.681	25.842	215.7	.242	3.51	55.7	20.7	1.43	19.7	.01	.03	.12	89
	100 ISL	10.24	10.23	33.695	25.894	212.0	.267	3.48	54.9							101
1	107	10.09	10.08	33.707	25.929	208.8	.282	3.46	54.4	22.8	1.54	20.9	.00	.01	.08	108
	125 ISL	9.68	9.65	33.780	25.056	197.1	.318	3.21	50.1							126
1	127	9.62	9.61	33.793	26.073	195.4	.322	3.18	49.5	26.2	1.64	23.1	.00	.01	.09	128
	150 ISL	9.09	9.07	33.865	26.218	182.0	.365	3.12	48.1							151
1	151	9.06	9.05	33.868	26.225	181.4	.367	3.12	48.3	30.2	1.77	25.0	.00	.00	.05	152
1	180	8.40	8.38	33.897	26.344	173.5	.413	3.23	49.0	32.8	1.79	26.4	.01			181
	200 ISL	8.08	8.05	33.941	26.434	162.2	.451	3.09	46.4							201
1	209	7.97	7.95	33.966	26.469	158.9	.465	3.00	45.1	37.9	1.94	28.1	.00			210
1	243	7.72	7.69	34.007	26.540	152.7	.519	2.78	41.5	41.8	2.08	29.3	.00			244
	250 ISL	7.66	7.64	34.022	26.559	151.0	.529	2.63	39.2							252
1	291	7.37	7.34	34.102	26.664	141.5	.593	1.74	25.8	52.1	2.36	33.6	.00			293
	300 ISL	7.30	7.27	34.113	26.683	139.9	.602	1.62	24.0							302
1	345	6.99	6.95	34.156	26.760	133.1	.663	1.20	17.6	59.9	2.59	36.0	.00			347
	400 ISL	6.70	6.66	34.188	26.826	127.6	.735	.94	13.7							403
1	427	6.56	6.52	34.199	26.853	125.3	.769	.86	12.5	68.6	2.80	37.8	.00			430
	500 ISL	6.09	6.04	34.232	26.940	117.5	.858	.59	8.5							504
1	509	6.03	5.98	34.237	26.952	116.6	.869	.56	8.0	78.4	2.97	40.0	.00			513
1	592	5.64	5.59	34.288	27.041	108.8	.962	.37	5.3	87.0	3.07	41.6	.00			596

RV DAVID STARR JORDAN CALCOFI CRUISE 8410 STATION 67 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
36 07.2 N	123 29.5 W	18/10/84	0132 GMT	3566 M	340	14 KT	340 09 08	1	1022.2 MB	14.8 C	11.0 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	14.53	14.53	33.476	24.898	304.6	.300	5.77	99.6							0
1	1	14.53	14.53	33.476	24.898	304.6	.303	5.77	99.6	4.4	.47	2.0	.09	1.13	.32	1
	10 ISL	14.54	14.54	33.478	24.899	304.7	.330	5.80	100.1							10
1	11	14.54	14.54	33.478	24.899	304.7	.333	5.80	100.1	5.1	.50	2.1	.09	.95	.54	11
	20 ISL	14.55	14.54	33.477	24.897	305.2	.361	5.78	99.8							20
1	26	14.55	14.55	33.476	24.896	305.5	.379	5.77	99.6	5.0	.49	2.2	.09	1.19	.34	26
	30 ISL	14.42	14.42	33.488	24.932	303.3	.391	5.72	98.4							30
1	41	13.68	13.68	33.477	25.078	288.5	.123	5.35	90.7	6.5	.64	5.0	.09	.60	.39	41
	50 ISL	12.27	12.26	33.522	25.392	258.8	.149	4.54	74.8							50
1	56	11.42	11.41	33.566	25.585	240.5	.163	4.04	65.3	14.1	1.26	15.1	.04	.27	.32	56
1	72	10.93	10.92	33.645	25.735	225.5	.200	3.66	58.6	17.6	1.41	17.6	.00	.10	.18	72
	75 ISL	10.72	10.71	33.647	25.773	223.0	.208	3.68	58.7							75
1	82	10.35	10.34	33.651	25.841	216.6	.222	3.73	59.0	19.4	1.45	18.9	.00	.03	.12	82
1	96	10.23	10.21	33.723	25.919	209.5	.254	3.35	52.8	21.8	1.59	20.7	.00	.00	.09	97
	100 ISL	10.17	10.16	33.737	25.939	207.7	.261	3.30	51.9							101
1	116	9.89	9.88	33.789	26.027	199.7	.294	3.14	49.2	25.0	1.66	22.3	.00	.00	.08	117
	125 ISL	9.76	9.74	33.813	26.069	195.9	.312	3.08	48.1							126
1	136	9.59	9.57	33.838	26.116	191.5	.333	3.04	47.3	27.0	1.77	23.6	.00	.00	.06	137
	150 ISL	9.39	9.37	33.852	26.161	187.6	.359	3.05	47.3							151
1	155	9.31	9.29	33.860	26.179	185.9	.369	3.06	47.3	28.6	1.84	24.8	.00	.00	.05	156
1	173	9.03	9.01	33.944	26.290	175.6	.401	2.58	39.7	32.5	1.98	27.0	.00	.00	.04	174
1	184	8.89	8.87	33.956	26.322	172.8	.420	2.51	38.5	32.7	2.00	27.2	.00			185
1	199	8.72	8.70	33.978	26.366	168.8	.446	2.48	37.9	34.7	2.05	27.6	.00			200
	200 ISL	8.70	8.68	33.982	26.371	168.4	.448	2.47	37.7							201
1	227	8.43	8.41	34.047	26.465	159.9	.492	2.22	33.7	38.2	2.14	28.9	.00			228
	250 ISL	8.18	8.16	34.068	26.519	155.1	.528	2.17	32.7							252
1	267	8.00	7.97	34.074	26.551	152.2	.555	2.14	32.2	43.0	2.28	30.3	.01			269
	300 ISL	7.70	7.67	34.093	26.610	147.1	.604	1.91	28.5							302
1	310	7.61	7.58	34.098	26.627	145.6	.618	1.82	27.1	48.0	2.39	32.1	.00			312
1	378	7.06	7.03	34.148	26.744	135.2	.715	1.30	19.1	57.9	2.63	34.9	.00			381
	400 ISL	6.90	6.86	34.162	26.778	132.3	.743	1.16	17.0							403
1	451	6.53	6.49	34.189	26.849	125.0	.809	.89	12.9	65.8	2.75	36.8	.00			454
	500 ISL	6.22	6.18	34.210	26.906	120.9	.870	.70	10.1							504
1	529	6.05	6.01	34.221	26.937	118.3	.905	.62	8.9	74.6	2.89	38.4	.00			533

RV DAVID STARR JORDAN CALCOFI CRUISE 8410 STATION 67 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
35 47.5 N	124 12.0 W	17/10/84	1838 GMT	3658 M	340	15 KT	340 09 08	1	1020.5 MB	16.5 C	12.3 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
	0 ISL	16.32	16.32	33.480	24.507	341.9	.000	5.58	99.8							0
1	1	16.32	16.32	33.480	24.507	341.8	.003	5.58	99.8	4.8	.29	.5	.01	.75	.14	1
	10 ISL	16.29	16.29	33.479	24.514	341.4	.034	5.79	103.4							10
1	11	16.28	16.28	33.479	24.514	341.4	.037	5.80	103.6	4.4	.29	.5	.01	.71	.21	11
	20 ISL	16.28	16.28	33.478	24.515	341.6	.068	5.78	103.2							20
1	27	16.28	16.27	33.477	24.515	341.8	.092	5.76	102.9	4.3	.29	.5	.01	.72	.25	27
	30 ISL	16.27	16.26	33.476	24.516	341.8	.102	5.75	102.7							30
1	42	16.23	16.23	33.472	24.522	341.7	.143	5.70	101.7	4.0	.29	.5	.01	.92	.19	42
	50 ISL	14.27	14.26	33.411	24.905	305.2	.169	5.34	91.6							50
1	57	12.52	12.51	33.403	25.251	272.3	.189	4.99	82.5	9.9	.83	9.4	.06	.32	.36	57
1	72	11.36	11.35	33.470	25.521	246.9	.228	4.49	72.5	14.2	1.16	14.9	.01	.17	.17	72
	75 ISL	11.19	11.19	33.484	25.562	243.1	.236	4.43	71.2							75
1	82	10.88	10.87	33.511	25.639	235.9	.252	4.32	69.0	17.1	1.31	17.1	.00	.10	.13	82
1	97	9.92	9.91	33.585	25.862	214.9	.285	3.98	62.3	22.5	1.42	19.9	.00	.02	.04	97
	100 ISL	9.80	9.79	33.612	25.903	211.0	.293	3.88	60.6							101
1	116	9.43	9.42	33.738	26.063	196.2	.326	3.41	52.9	28.1	1.68	23.6	.00	.00	.03	117
	125 ISL	9.25	9.24	33.788	26.131	189.8	.343	3.22	49.8							126
1	135	9.04	9.02	33.833	26.201	183.3	.362	3.08	47.3	32.1	1.83	26.0	.00	.00	.02	136
	150 ISL	8.65	8.64	33.865	26.286	175.4	.388	3.12	47.5							151
1	155	8.53	8.51	33.874	26.313	173.0	.397	3.13	47.6	34.2	1.87	26.8	.00	.00	.02	156
1	173	8.29	8.27	33.916	26.382	166.6	.428	3.09	46.7	35.3	1.87	27.3	.00	.00	.02	174
2	195	8.08	8.06	33.946	26.438	161.7	.463	3.06	46.1	37.2	1.90	27.9	.00			196
	200 ISL	8.02	8.00	33.956	26.454	160.2	.472	3.03	45.5							201
2	215	7.85	7.83	33.984	26.501	155.9	.495	2.89	43.3	40.5	1.97	28.7	.00			216
2	250	7.48	7.46	34.031	26.592	147.8	.548	2.39	35.5	46.8	2.13	31.2	.00			251
2	299	6.87	6.84	34.024	26.671	140.7	.619	2.21	32.4	53.1	2.28	33.2	.00			301
	300 ISL	6.86	6.83	34.025	26.674	140.5	.620	2.20	32.2							302
2	355	6.32	6.29	34.065	26.777	131.1	.695	1.46	21.1	65.1	2.60	37.0	.00			357
	400 ISL	5.98	5.94	34.107	26.854	124.2	.753	1.03	14.8							403
2	438	5.73	5.70	34.143	26.914	118.8	.799	.77	11.0	78.0	2.86	40.2	.00			441
	500 ISL	5.33	5.29	34.194	27.003	110.9	.870	.51	7.3							504
2	521	5.20	5.16	34.209	27.030	108.3	.893	.46	6.5	90.4	3.06	42.1	.00			525
	600 ISL	4.78	4.73	34.258	27.117	100.4	.975	.32	4.5							604
2	603	4.77	4.72	34.259	27.120	100.2	.978	.32	4.5	100.5	3.09	43.3	.00			607

RV DAVID STARR JORDAN CALCOFI CRUISE 8410 STATION 70 51

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
36 09.9 N	121 43.9 W	16/10/84	1205 GMT	190 M	340	04 KT			1014.9 MB	13.5 C	09.0 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	11.14	11.14	33.575	25.642	234.1	.000	4.66	74.9							0
1	1	11.14	11.14	33.575	25.642	233.8	.002	4.66	74.9	17.4	1.19	15.2	.05	.07	.18	1
	10 ISL	11.07	11.07	33.593	25.669	231.4	.023	4.36	70.0							10
1	11	11.06	11.06	33.595	25.671	231.2	.025	4.34	69.7	17.7	1.22	16.0	.03	.06	.15	11
	20 ISL	11.05	11.04	33.600	25.678	230.8	.046	4.21	67.6							20
1	21	11.04	11.04	33.600	25.678	230.8	.048	4.20	67.4	17.8	1.25	16.0	.03	.06	.15	21
	30 ISL	10.93	10.93	33.614	25.709	228.0	.069	4.00	64.0							30
1	31	10.92	10.92	33.616	25.713	227.7	.071	3.98	63.7	17.8	1.26	16.8	.02	.07	.14	31
1	41	10.77	10.77	33.652	25.767	222.8	.094	3.77	60.2	19.5	1.32	17.7	.01	.04	.15	41
	50 ISL	10.63	10.62	33.671	25.808	219.1	.114	3.70	58.9							50
1	51	10.62	10.61	33.672	25.811	218.9	.116	3.70	58.9	20.6	1.33	19.4	.00	.04	.14	51
1	61	10.44	10.43	33.683	25.850	215.3	.137	3.63	57.5	21.3	1.45	19.0	.00	.03	.11	61
1	72	10.26	10.25	33.737	25.923	208.6	.160	3.41	53.8	21.3	1.44	19.0	.00	.03	.11	72
	75 ISL	10.22	10.21	33.746	25.938	207.3	.167	3.40	53.6							75
1	86	10.11	10.10	33.764	25.971	204.4	.189	3.35	52.7	24.5	1.51	21.2	.00	.02	.12	86
	100 ISL	10.03	10.02	33.779	25.995	202.4	.219	3.33	52.2							101
1	105	10.00	9.98	33.785	26.007	201.4	.229	3.31	52.0	25.7	1.58	21.8	.00	.01	.12	106
	125 ISL	9.58	9.57	33.846	26.123	193.7	.268	3.12	48.5							126
1	131	9.43	9.41	33.868	26.166	185.6	.280	3.04	47.2	30.0	1.73	24.3	.00	.01	.10	132
	150 ISL	9.06	9.04	33.925	26.270	177.1	.314	2.82	43.3							151
1	156	8.95	8.93	33.942	26.301	174.2	.324	2.74	42.1	34.4	1.86	26.2	.00	.00	.09	157

RV DAVID STARR JORDAN CALCOFI CRUISE 8410 STATION 70 53

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
36 06.8 N	121 51.9 W	16/10/84	1452 GMT	905 M	340	12 KT	320 03 06	1	1014.9 MB	13.2 C	11.3 C	5/8	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	12.13	12.13	33.359	25.290	267.1	.000	5.22	85.6							0
1	1	12.13	12.13	33.359	25.290	267.2	.003	5.22	85.6	9.1	.84	8.6	.08	.53	.27	1
	10 ISL	12.13	12.13	33.357	25.290	267.5	.027	5.28	86.7							10
1	11	12.13	12.13	33.357	25.289	267.5	.029	5.29	86.8	9.1	.89	8.7	.08	.54	.25	11
	20 ISL	12.13	12.13	33.357	25.289	267.9	.053	5.33	87.4							20
1	26	12.14	12.13	33.355	25.287	268.1	.069	5.35	87.8	9.1	.87	8.9	.08	.53	.27	26
	30 ISL	11.89	11.89	33.356	25.334	263.7	.080	5.19	84.6							30
1	39	11.26	11.26	33.375	25.464	251.6	.103	4.75	76.5	11.2	1.11	13.2	.04	.15	.15	39
	50 ISL	10.71	10.71	33.452	25.623	235.7	.130	4.36	69.4							50
1	55	10.53	10.53	33.495	25.687	230.7	.141	4.22	66.9	15.0	1.27	16.3	.01	.04	.15	55
1	70	10.17	10.16	33.641	25.864	214.2	.174	3.77	59.4	20.6	1.43	19.3	.00	.02	.09	70
	75 ISL	10.05	10.04	33.669	25.906	210.2	.186	3.69	58.0							75
1	80	9.95	9.94	33.690	25.939	207.2	.195	3.64	57.1	22.4	1.51	20.4	.00	.00	.08	80
1	94	9.79	9.78	33.774	26.032	198.7	.226	3.34	52.2	25.0	1.61	22.3	.00	.01	.06	95
	100 ISL	9.73	9.71	33.791	26.056	196.5	.237	3.23	50.5							101
1	113	9.57	9.56	33.821	26.105	192.1	.262	3.02	47.3	26.7	1.70	23.7	.02	.02	.05	114
	125 ISL	9.46	9.45	33.847	26.143	188.7	.285	2.94	45.6							126
1	133	9.38	9.36	33.866	26.172	186.1	.300	2.90	44.9	29.4	1.81	24.9	.00	.00	.05	134
	150 ISL	9.10	9.09	33.921	26.260	178.1	.331	2.78	42.8							151
1	153	9.06	9.04	33.931	26.275	176.7	.336	2.76	42.5	32.4	1.89	26.1	.00	.00	.03	154
1	173	8.88	8.87	33.967	26.331	171.7	.371	2.65	40.6	33.7	1.93	26.7	.00			174
1	193	8.68	8.66	33.984	26.376	167.8	.404	2.74	41.9	35.5	1.94	27.4	.00			194
	200 ISL	8.65	8.63	33.988	26.385	167.1	.416	2.71	41.3							201
1	214	8.58	8.56	33.998	26.403	165.6	.439	2.60	39.6	36.9	1.99	28.1	.00			215
1	248	8.06	8.03	34.052	26.525	154.4	.495	2.31	34.8	42.2	2.13	29.9	.00			250
	250 ISL	8.04	8.02	34.054	26.528	154.1	.497	2.30	34.6							252
1	298	7.69	7.66	34.091	26.609	147.1	.570	1.98	29.6	48.7	2.25	32.2	.04			300
	300 ISL	7.67	7.64	34.093	26.615	146.6	.572	1.95	29.2							302
1	353	6.83	6.80	34.145	26.773	131.9	.646	1.27	18.6	61.7	2.55	35.8	.02			355
	400 ISL	6.22	6.19	34.149	26.857	124.2	.706	1.06	15.3							403
1	436	5.89	5.85	34.153	26.902	120.1	.750	1.00	14.3	74.4	2.73	39.5	.00			439
	500 ISL	5.73	5.69	34.234	26.986	112.8	.825	.78	11.2							504
1	517	5.71	5.67	34.258	27.008	111.0	.844	.72	10.3	85.6	2.91	40.1	.00			521
1	596	5.29	5.24	34.327	27.114	101.5	.927	.39	5.5	95.0	3.02	41.3	.02			600

RV DAVID STARR JORDAN CALCOFI CRUISE 8410 STATION 70 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
35 52.2 N	122 23.1 W	16/10/84	2125 GMT	3108 M	240	19 KT	240 04 05	2	1012.5 MB	14.4 C	11.2 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	14.32	14.31	33.380	24.870	307.4	.000	5.87	100.8							0
1	1	14.32	14.31	33.380	24.870	307.2	.003	5.87	100.8	4.1	.47	2.4	.01	2.37	.43	1
	10 ISL	14.21	14.21	33.387	24.897	304.9	.031	5.88	100.7							10
1	11	14.20	14.20	33.388	24.900	304.6	.034	5.88	100.7	4.3	.50	2.7	.02	2.03	.53	11
	20 ISL	14.08	14.08	33.373	24.915	301.4	.061	5.84	99.7							20
1	21	14.06	14.06	33.402	24.941	301.0	.064	5.83	99.6	5.0	.52	3.3	.04	1.69	.47	21
	30 ISL	13.75	13.75	33.358	24.972	298.3	.091	5.77	98.0							30
1	31	13.72	13.71	33.355	24.976	298.0	.093	5.77	97.8	5.1	.55	3.7	.05	2.05	.61	31
1	41	13.46	13.46	33.378	25.046	291.6	.123	5.75	97.0	6.0	.60	4.2	.08	2.26	.57	41
	50 ISL	13.18	13.17	33.374	25.100	285.6	.149	5.70	95.6							50
1	55	12.97	12.96	33.367	25.137	283.3	.163	5.68	94.8	6.9	.69	5.6	.09	1.92	.54	55
1	65	12.25	12.24	33.352	25.264	271.3	.190	5.40	88.8	8.2	.84	7.9	.08	1.35	.45	65
1	75	10.70	10.70	33.427	25.605	238.9	.216	4.58	72.9	13.5	1.24	15.2	.00	.07	.09	75
1	90	10.10	10.09	33.589	25.836	217.3	.250	3.92	61.6	19.5	1.46	19.3	.00	.02	.06	90
	100 ISL	9.76	9.75	33.667	25.954	206.2	.272	3.68	57.4							101
1	109	9.51	9.50	33.720	26.036	198.5	.291	3.53	54.3	25.2	1.63	22.2	.00	.01	.04	110
	125 ISL	9.26	9.24	33.793	26.135	189.5	.321	3.22	49.8							126
1	129	9.20	9.19	33.810	26.157	187.4	.329	3.15	48.6	28.4	1.78	24.7	.00	.01	.03	130
	150 ISL	8.79	8.77	33.889	26.285	175.6	.367	2.97	45.4							151
1	153	8.73	8.71	33.900	26.303	173.9	.372	2.96	45.2	32.3	1.90	26.5	.00	.00	.03	154
1	183	8.26	8.24	33.952	26.415	163.7	.423	3.20	48.4	34.5	1.86	26.3	.00			184
	200 ISL	8.13	8.11	33.981	26.458	159.9	.450	3.06	46.1							201
1	215	8.00	7.98	33.999	26.491	157.0	.474	2.88	43.3	38.3	1.97	28.4	.00			216
1	248	7.41	7.39	34.012	26.587	148.1	.524	2.69	39.9	44.5	2.10	30.2	.00			249
	250 ISL	7.38	7.35	34.013	26.592	147.6	.527	2.66	39.5							252
1	296	6.95	6.92	34.048	26.680	139.9	.594	2.08	30.5	53.1	2.34	33.1	.00			298
	300 ISL	6.93	6.90	34.054	26.688	139.2	.599	2.02	29.6							302
1	351	6.67	6.64	34.128	26.781	131.0	.668	1.28	18.7	62.2	2.63	35.4	.00			353
	400 ISL	6.33	6.29	34.170	26.860	124.0	.730	.88	12.8							403
1	434	6.05	6.01	34.184	26.906	119.8	.772	.73	10.5	74.4	2.90	38.8	.00			437
	500 ISL	5.41	5.37	34.238	27.028	113.6	.849	.59	8.4							504
1	518	5.28	5.23	34.171	26.991	112.0	.873	.57	8.3	85.5	3.00	41.3	.00			522
	600 ISL	5.41	5.35	34.316	27.092	103.8	.958	.33	4.7							604
1	603	5.41	5.36	34.321	27.095	103.5	.960	.32	4.5	91.0	3.13	40.8	.00			607

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 73 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
35 33.4 N	123 03.7 W	17/10/84	0411 GMT	3742 M	320	30 KT			1009.0 MB	16.0 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	16.53	16.53	33.502	24.475	344.8	.000	5.71	102.6							0
1	2	16.53	16.53	33.502	24.475	344.9	.007	5.71	102.6	1.9	.28	.4	.01	.78	.16	2
	10 ISL	16.54	16.53	33.502	24.474	345.1	.034	5.82	104.5							10
1	12	16.54	16.54	33.502	24.474	345.2	.041	5.83	104.7	2.5	.29	.3	.01	.82	.16	12
	20 ISL	16.55	16.55	33.501	24.471	345.9	.069	5.80	104.2							20
1	27	16.56	16.56	33.501	24.468	346.4	.093	5.77	103.7	2.4	.27	.3	.01	.63	.28	27
	30 ISL	16.56	16.56	33.496	24.465	346.4	.104	5.76	103.6							30
1	42	16.56	16.55	33.502	24.471	346.5	.145	5.72	102.8	2.0	.28	.2	.02	.65	.25	42
	50 ISL	16.15	16.14	33.484	24.551	339.2	.173	5.64	100.5							50
1	56	15.45	15.44	33.456	24.687	326.3	.192	5.58	98.0	3.3	.41	2.2	.10	.57	.31	56
1	71	10.98	10.97	33.419	25.549	244.1	.234	4.60	73.6	17.4	1.10	14.1	.03	.24	.22	71
	75 ISL	10.78	10.78	33.510	25.655	234.2	.245	4.37	69.7							75
1	81	10.52	10.52	33.553	25.742	226.0	.258	4.12	65.4	16.8	1.32	17.4	.01	.12	.13	81
1	96	9.84	9.83	33.670	25.942	207.3	.290	3.71	58.0	22.1	1.50	21.0	.00	.04	.09	96
	100 ISL	9.59	9.58	33.690	25.999	201.9	.299	3.69	57.4							101
1	115	8.87	8.85	33.756	26.167	186.1	.329	3.66	56.0	26.9	1.63	23.5	.00	.02	.05	116
	125 ISL	8.72	8.71	33.816	26.237	179.7	.347	3.47	52.9							126
1	135	8.65	8.64	33.876	26.295	174.3	.365	3.23	49.2	30.9	1.73	25.6	.00	.02	.06	136
	150 ISL	8.41	8.40	33.925	26.370	167.4	.390	3.04	46.1							151
1	155	8.33	8.32	33.939	26.394	165.2	.398	2.98	45.1	35.1	1.88	27.2	.00	.05	.05	156
1	175	8.18	8.16	34.015	26.477	157.7	.431	2.60	39.2	38.6	2.01	28.5	.01	.03	.05	176
1	194	7.92	7.90	34.028	26.525	153.3	.460	2.56	38.4	41.3	2.06	29.2	.02			195
	200 ISL	7.89	7.87	34.043	26.542	151.9	.469	2.42	36.3							201
1	214	7.84	7.82	34.077	26.576	148.8	.490	2.08	31.2	44.8	2.22	30.9	.01			215
1	249	7.43	7.41	34.082	26.639	143.3	.541	1.95	28.9	49.1	2.34	32.3	.00			250
	250 ISL	7.42	7.40	34.084	26.641	143.1	.543	1.94	28.7							252
1	298	7.15	7.12	34.134	26.721	135.2	.610	1.40	20.6	55.9	2.51	34.2	.00			300
	300 ISL	7.13	7.11	34.136	26.724	135.9	.613	1.38	20.4							302
1	353	6.76	6.73	34.169	26.802	129.1	.682	1.01	14.8	63.3	2.74	36.2	.00			355
	400 ISL	6.40	6.37	34.202	26.875	122.6	.742	.76	11.1							403
1	437	6.13	6.09	34.225	26.929	117.7	.786	.62	8.9	74.8	2.91	38.7	.00			440
	500 ISL	5.66	5.62	34.244	27.003	111.2	.858	.47	6.7							504
1	520	5.53	5.48	34.251	27.025	109.2	.881	.44	6.2	86.0	3.05	41.0	.00			524
	600 ISL	5.24	5.19	34.330	27.123	100.6	.964	.30	4.2							604
1	604	5.23	5.18	34.335	27.127	100.2	.968	.29	4.1	94.1	3.14	41.9	.00			608

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 70 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
35 13.2 N	123 46.9 W	17/10/84	1147 GMT	4023 M	330	23 KT			1016.0 MB	15.0 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	15.91	15.91	33.465	24.588	334.1	.000	5.77	102.3							0
1	1	15.91	15.91	33.465	24.588	334.1	.003	5.77	102.3	2.0	.31	.5	.01	.53	.16	1
	10 ISL	15.91	15.91	33.464	24.587	334.4	.033	5.81	103.1							10
1	12	15.92	15.91	33.464	24.587	334.5	.040	5.82	103.2	2.0	.32	.5	.01	.53	.21	12
	20 ISL	15.93	15.93	33.464	24.583	335.1	.067	5.84	103.6							20
1	26	15.94	15.94	33.463	24.581	335.5	.087	5.85	103.8	1.3	.32	.4	.01	.50	.19	26
	30 ISL	15.94	15.93	33.465	24.537	335.6	.100	5.83	103.4							30
1	41	15.93	15.92	33.463	24.584	335.7	.137	5.78	102.5	1.6	.30	.4	.11	.53	.17	41
	50 ISL	13.73	13.72	33.168	24.830	312.4	.166	5.83	98.7							50
1	56	12.17	12.16	33.041	25.038	292.6	.184	5.86	96.0	4.2	.59	3.4	.29	.28	.35	56
1	70	10.40	10.39	33.320	25.574	241.7	.221	4.94	78.0	12.0	1.00	12.1	.03	.15	.66	70
	75 ISL	10.01	10.00	33.366	25.677	232.0	.234	4.85	76.0							75
1	81	9.78	9.77	33.411	25.749	225.2	.247	4.74	73.9	14.9	1.22	14.9	.01	.04	.08	81
1	96	10.21	10.20	33.490	25.895	211.7	.279	3.48	54.9	21.3	1.49	20.2	.00	.02	.09	96
	100 ISL	10.04	10.03	33.717	25.945	207.1	.288	3.47	54.5							101
1	113	9.32	9.31	33.738	26.082	194.3	.315	3.44	53.2	26.5	1.68	23.4	.00	.01	.04	114
	125 ISL	8.94	8.93	33.758	26.158	187.2	.338	3.46	53.0							126
1	134	8.74	8.72	33.783	26.209	182.5	.355	3.47	53.0	28.8	1.73	24.4	.00	.01	.03	135
	150 ISL	8.63	8.61	33.889	26.310	173.2	.383	2.92	44.5							151
1	154	8.61	8.60	33.917	26.334	171.0	.390	2.77	42.2	34.2	2.01	27.5	.00	.00	.04	155
1	173	8.43	8.41	33.972	26.405	164.5	.421	2.67	40.5	36.4	2.02	28.3	.00	.01	.03	174
1	194	8.32	8.30	34.010	26.452	160.5	.455	2.44	36.9	37.7	2.05	29.1	.00			195
	200 ISL	8.19	8.17	34.009	26.470	158.8	.465	2.51	37.8							201
1	213	7.88	7.86	33.999	26.509	155.2	.485	2.70	40.5	39.7	2.04	29.0	.00			214
1	247	7.34	7.32	33.994	26.583	148.5	.536	2.86	42.3	43.8	2.06	29.8	.01			248
	250 ISL	7.28	7.26	33.994	26.591	147.8	.542	2.84	41.9							252
1	296	6.65	6.63	34.010	26.689	138.7	.608	2.26	32.9	53.7	2.28	33.4	.01			298
	300 ISL	6.62	6.59	34.013	26.697	138.1	.613	2.19	31.9							302
1	350	6.22	6.19	34.061	26.786	130.1	.680	1.38	19.9	64.3	2.66	37.2	.01			352
	400 ISL	5.79	5.76	34.097	26.870	122.5	.743	.96	13.7							403
1	432	5.54	5.53	34.123	26.919	118.0	.782	.81	11.5	77.9	2.90	40.4	.00			435
	500 ISL	5.17	5.13	34.189	27.017	109.2	.859	.52	7.3							504
1	513	5.11	5.07	34.203	27.035	107.6	.873	.48	6.7	89.7	3.07	42.0	.00			517
1	593	4.81	4.76	34.267	27.122	100.0	.956	.29	4.0	99.1	3.15	42.8	.00			597

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 73 50

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
35 38.9 N	121 15.6 W	16/10/84	0455 GMT	34 M	330	12 KT			1014.9 MB	13.0 C	11.5 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
1	10	11.79	11.79	33.365	25.359	260.9	.026	4.97	80.9	10.9	.89	9.9	.06	.57	.46	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 73 50

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
35 38.2 N	121 15.3 W	22/10/84	0806 GMT	34 M	010	05 KT			1018.5 MB	11.8 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
1	10	11.44	11.44	33.139	25.248	271.4	.027	5.79	93.4	3.0	.71	5.8	.07	1.95	.24	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 73 53

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
35 32.8 N	121 28.4 W	22/10/84	1056 GMT	700 M	340	11 KT			1018.0 MB	14.0 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	12.97	12.97	33.156	24.970	297.6	.000	5.95	99.2							0
1	1	12.97	12.97	33.156	24.970	297.6	.003	5.95	99.2	.0	.48	1.9	.06	1.39	.43	1
	10 ISL	12.94	12.93	33.153	24.976	297.4	.030	6.00	100.0							10
1	11	12.93	12.93	33.152	24.976	297.3	.033	6.01	100.1	.0	.44	1.7	.06	1.50	.44	11
1	20	12.87	12.87	33.152	24.988	295.4	.059	6.09	101.3	.0	.48	2.0	.07	1.55	.49	20
	30 ISL	12.74	12.74	33.152	25.014	294.3	.089	5.95	98.8							30
1	31	12.73	12.72	33.151	25.015	294.1	.091	5.94	98.5	.0	.48	2.2	.07	1.77	.47	31
1	40	12.67	12.67	33.152	25.027	293.2	.118	5.94	98.4	.2	.50	2.3	.07	1.76	.48	40
	50 ISL	12.66	12.66	33.153	25.031	293.4	.148	5.94	98.4							50
1	51	12.66	12.66	33.151	25.029	293.4	.150	5.94	98.4	.3	.50	2.5	.07	1.81	.46	51
1	61	12.44	12.44	33.155	25.074	289.3	.179	5.94	97.9	.8	.53	2.9	.08	2.01	.55	61
1	72	11.93	11.92	33.188	25.197	277.8	.213	5.72	93.3	2.4	.69	5.1	.08	1.92	.48	72
	75 ISL	11.74	11.73	33.173	25.222	275.5	.219	5.68	92.2							75
1	86	11.09	11.08	33.165	25.332	265.1	.248	5.43	87.0	4.6	.65	9.0	.05	.86	.36	86
	100 ISL	10.31	10.30	33.454	25.696	230.8	.284	4.49	70.9							101
1	102	10.18	10.17	33.512	25.761	224.6	.289	4.32	68.0	13.0	1.31	17.2	.01	.11	.38	103
1	120	9.52	9.51	33.660	25.988	205.3	.328	3.74	58.1	19.8	1.58	21.4	.00	.09	.35	121
	125 ISL	9.34	9.33	33.696	26.045	198.0	.337	3.71	57.4							126
1	145	8.70	8.69	33.837	26.257	179.1	.375	3.61	55.1	24.6	1.68	23.5	.00	.05	.34	146
	150 ISL	8.64	8.62	33.868	26.291	175.0	.383	3.46	52.7							151
1	175	8.44	8.42	33.988	26.416	163.5	.426	2.66	40.4	32.9	1.97	27.8	.00			176
	200 ISL	8.08	8.06	34.020	26.495	156.3	.466	2.63	39.6							201
1	205	8.00	7.98	34.020	26.507	155.3	.473	2.62	39.4	36.4	2.06	28.9	.00			206
1	234	7.63	7.61	34.022	26.563	150.3	.517	2.76	41.1	38.4	2.06	28.9	.00			235
	250 ISL	7.40	7.37	34.048	26.617	145.3	.541	2.73	40.5							252
1	273	7.11	7.08	34.090	26.691	138.5	.574	2.58	38.0	44.5	2.15	30.6	.00			275
	300 ISL	7.01	6.98	34.098	26.712	137.0	.611	2.24	33.0							302
1	332	6.95	6.91	34.118	26.736	135.1	.654	1.80	26.4	52.0	2.43	33.6	.00			334
	400 ISL	6.38	6.35	34.130	26.821	127.7	.744	1.31	19.0							403
1	405	6.33	6.29	34.131	26.829	126.9	.751	1.29	18.7	62.2	2.63	35.6	.00			408
1	480	5.48	5.44	34.185	26.978	113.1	.841	.97	13.5	75.2	2.85	39.9	.00			483
	500 ISL	5.42	5.38	34.187	26.986	112.4	.864	.88	12.5							504
1	552	5.26	5.22	34.191	27.009	110.8	.922	.65	9.2	82.4	2.97	41.1	.00			556

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 73 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
35 19.1 N	121 57.4 W	22/10/84	1545 GMT	2377 M	330	12 KT	320 04 05	1	1019.2 MB	14.9 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	13.54	13.54	33.321	24.985	296.2	.000	6.08	102.7	.0	.43	1.8	.08	2.16	.75	0
1	10	13.52	13.52	33.319	24.987	296.3	.029	6.19	104.5	.0	.45	1.8	.08	1.93	.35	10
1	20	13.40	13.40	33.316	25.009	294.4	.059	6.15	103.6	.1	.48	2.2	.09	1.32	.75	20
1	30	12.72	12.71	33.360	25.179	278.5	.087	5.64	93.6	2.9	.69	5.6	.19	1.11	1.00	30
1	40	12.36	12.35	33.352	25.243	272.7	.115	5.58	91.9	3.7	.77	6.6	.23	.84	.90	40
1	50	11.99	11.98	33.375	25.331	264.6	.142	5.36	87.6	5.8	.87	8.5	.23	.57	.85	50
1	60	11.77	11.76	33.399	25.391	259.0	.168	5.24	85.3	6.7	.95	9.9	.22	.56	.52	60
1	70	11.60	11.59	33.418	25.437	254.9	.193	5.04	81.8	7.7	.99	10.7	.18	.41	.45	70
	75 ISL	11.26	11.25	33.446	25.520	247.1	.207	4.79	77.2							75
1	85	10.57	10.56	33.513	25.696	230.5	.229	4.32	68.6	11.6	1.30	16.8	.04	.06	.17	85
1	99	9.92	9.91	33.615	25.886	212.6	.262	3.95	61.8	16.3	1.50	20.0	.02	.04	.37	100
	100 ISL	9.91	9.89	33.618	25.891	212.2	.264	3.94	61.7							101
1	119	9.50	9.48	33.694	26.019	200.4	.304	3.70	57.4	20.3	1.63	21.9	.01	.01	.36	120
	125 ISL	9.34	9.32	33.717	26.063	196.4	.315	3.63	56.2							126
1	144	8.86	8.84	33.799	26.203	183.3	.351	3.39	51.9	25.1	1.71	23.8	.00	.01	.06	145
	150 ISL	8.81	8.79	33.832	26.237	180.2	.362	3.27	49.9							151
1	174	8.66	8.64	33.948	26.352	169.7	.404	2.86	43.6	29.3	1.89	26.1	.00			175
	200 ISL	8.20	8.18	33.978	26.444	161.3	.447	3.01	45.4							201
1	204	8.12	8.10	33.978	26.456	160.1	.453	3.04	45.8	32.3	1.91	26.7	.00			205
1	234	7.56	7.54	34.010	26.563	150.2	.499	2.88	42.9	37.8	2.02	28.3	.00			235
	250 ISL	7.35	7.33	34.019	26.601	146.8	.523	2.72	40.3							252
1	272	7.11	7.08	34.030	26.644	143.1	.556	2.46	36.2	44.3	2.15	30.7	.00			274
	300 ISL	6.81	6.78	34.047	26.698	138.1	.595	2.09	30.6							302
1	332	6.47	6.44	34.065	26.758	132.7	.638	1.70	24.7	55.0	2.46	34.6	.00			334
	400 ISL	5.74	5.70	34.084	26.866	122.8	.725	1.34	19.1							403
1	405	5.69	5.65	34.086	26.874	122.1	.731	1.32	18.8	67.8	2.64	38.1	.00			408
1	481	5.43	5.39	34.183	26.982	112.6	.820	.69	9.8	78.0	2.86	40.0	.00			484
	500 ISL	5.36	5.32	34.231	27.005	110.6	.842	.59	8.4							504
1	556	5.16	5.12	34.241	27.060	105.9	.902	.47	6.5	85.4	2.99	41.4	.00			560

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 73 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
35 01.4 N	122 39.5 W	22/10/84	2255 GMT	4114 M	340	18 KT	320 05 05	1	1018.8 MB	17.2 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
	0 ISL	15.66	15.66	33.215	24.452	347.0	.000	5.88	103.6							0
1	1	15.66	15.66	33.215	24.452	347.0	.000	5.88	103.6	.0	.31	.0	.00	.30	.15	1
	10 ISL	15.65	15.65	33.214	24.453	347.2	.035	5.97	105.3							10
1	11	15.65	15.65	33.214	24.453	347.2	.038	5.98	105.4	.0	.27	.0	.00	.26	.19	11
	20 ISL	15.66	15.65	33.218	24.455	347.6	.069	5.97	105.3							20
1	27	15.66	15.65	33.214	24.453	347.7	.093	5.97	105.2	.0	.28	.0	.00	.27	.19	27
	30 ISL	15.65	15.64	33.216	24.457	347.5	.104	5.95	104.9							30
1	41	15.62	15.61	33.226	24.470	346.5	.142	5.89	103.7	.0	.28	.0	.00	.36	.21	41
	50 ISL	15.33	15.32	33.242	24.547	339.4	.173	5.85	102.5							50
1	57	15.12	15.11	33.343	24.672	327.8	.196	5.81	101.3	.0	.35	.5	.18	.27	.26	57
1	71	11.49	11.49	33.102	25.211	276.4	.238	5.59	90.3	1.6	.71	6.9	.04	.16	.16	71
	75 ISL	11.15	11.14	33.126	25.293	268.7	.250	5.46	87.6							75
1	81	10.95	10.94	33.195	25.381	260.4	.265	5.23	83.5	5.6	.90	10.5	.02	.08	.12	81
1	96	10.42	10.41	33.513	25.721	228.3	.301	4.20	66.4	12.1	1.22	16.8	.01	.04	.06	96
	100 ISL	10.17	10.16	33.563	25.803	223.6	.311	4.05	63.8							101
1	114	9.44	9.43	33.669	26.008	201.3	.341	3.74	58.3	19.5	1.49	21.8	.01	.01	.04	115
	125 ISL	9.33	9.32	33.751	26.089	193.8	.362	3.44	53.2							126
1	136	9.22	9.20	33.801	26.147	188.5	.384	3.13	48.3	24.7	1.68	24.7	.00	.01	.02	137
	150 ISL	9.04	9.02	33.855	26.227	181.2	.409	2.84	43.6							151
1	154	8.97	8.95	33.880	26.249	179.1	.417	2.79	42.8	27.7	1.79	26.0	.00	.00	.02	155
1	175	8.52	8.50	33.901	26.335	171.2	.453	3.10	47.1	28.9	1.80	25.9	.00	.01	.02	176
1	195	7.85	7.83	33.927	26.456	159.8	.486	3.18	47.6	33.4	1.78	27.2	.00			196
	200 ISL	7.84	7.82	33.947	26.473	158.3	.494	3.17	47.5							201
1	216	7.81	7.79	33.985	26.509	155.2	.519	3.11	46.5	34.5	1.81	27.4	.00			217
	250 ISL	7.39	7.36	34.000	26.581	149.0	.571	2.85	42.2							252
1	251	7.38	7.35	33.996	26.579	149.9	.572	2.84	42.1	40.4	1.93	29.3	.02			252
1	299	6.77	6.74	34.022	26.684	139.4	.642	2.31	33.7	49.1	2.13	32.3	.01			301
	300 ISL	6.76	6.73	34.023	26.686	139.3	.643	2.30	33.6							302
1	354	6.32	6.29	34.061	26.773	131.4	.716	1.58	22.5	58.7	2.39	35.8	.01			356
	400 ISL	5.90	5.87	34.090	26.851	126.4	.775	1.14	16.3							403
1	436	5.59	5.55	34.115	26.909	119.1	.819	.88	12.5	74.0	2.71	39.9	.00			439
	500 ISL	5.18	5.14	34.174	27.004	110.4	.892	.57	8.0							504
1	518	5.08	5.04	34.191	27.029	108.2	.912	.51	7.2	86.5	2.83	41.5	.00			522
1	596	4.74	4.69	34.257	27.121	100.0	.993	.35	4.9	96.4	2.97	42.7	.00			600

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 73 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 39.0 N	123 21.6 W	23/10/84	0439 GMT	4114 M	340	14 KT			1019.5 MB	16.1 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	16.16	16.15	32.971	24.152	378.9	.000	5.66	100.6							0
1	1	16.16	16.16	32.971	24.152	378.6	.004	5.66	100.6	.0	.26	.0	.00	.11	.07	1
	10 ISL	15.76	15.76	33.173	24.397	352.5	.037	5.89	104.0							10
1	11	15.74	15.74	33.192	24.417	350.6	.040	5.91	104.3	.0	.28	.0	.00	.24	.09	11
	20 ISL	15.85	15.85	33.368	24.527	340.5	.071	5.92	104.8							20
1	26	15.99	15.99	33.444	24.554	338.1	.091	5.93	105.3	.0	.23	.0	.00	.52	.19	26
	30 ISL	15.96	15.95	33.434	24.555	338.0	.105	5.90	104.7							30
1	41	15.86	15.85	33.412	24.561	337.9	.142	5.83	103.2	.0	.23	.0	.01	.42	.22	41
	50 ISL	15.56	15.55	33.357	24.585	335.8	.173	5.87	103.4							50
1	56	15.16	15.15	33.291	24.622	332.5	.192	5.90	103.0	.0	.27	.0	.03	.28	.25	56
1	72	12.66	12.65	32.943	24.869	309.1	.243	6.24	103.2	.0	.29	.0	.12	.16	.19	72
	75 ISL	12.39	12.38	32.943	24.921	304.8	.253	6.18	101.6							75
1	82	12.00	11.99	32.945	24.995	297.2	.273	6.02	98.2	.0	.35	.6	.04	.09	.14	82
1	98	11.47	11.45	32.944	25.094	288.2	.320	5.90	95.1	.0	.40	1.6	.03	.06	.13	98
	100 ISL	11.41	11.40	32.950	25.109	286.8	.327	5.88	94.6							101
1	116	10.96	10.94	33.048	25.266	272.1	.373	5.61	89.5	2.1	.63	5.4	.01	.03	.07	117
	125 ISL	10.52	10.51	33.164	25.433	256.4	.399	5.33	84.3							126
1	136	9.95	9.93	33.333	25.662	236.7	.423	4.94	77.2	8.6	.98	12.4	.00	.01	.04	137
	150 ISL	9.59	9.57	33.468	25.828	219.2	.454	4.70	72.9							151
1	156	9.45	9.43	33.524	25.894	213.0	.468	4.57	70.8	13.6	1.27	16.9	.01	.00	.08	157
1	176	8.79	8.77	33.740	26.168	187.2	.507	3.68	56.2	24.3	1.70	24.2	.01	.01	.03	177
1	196	8.36	8.34	33.849	26.320	173.0	.543	3.36	50.9	28.8	1.69	25.9	.01			197
	200 ISL	8.26	8.24	33.870	26.350	170.2	.550	3.31	50.0							201
1	216	7.93	7.90	33.938	26.454	160.4	.575	3.16	47.4	32.9	1.82	27.3	.01			217
	250 ISL	7.47	7.44	33.953	26.532	151.6	.629	2.96	44.0							252
1	251	7.46	7.44	33.976	26.552	151.6	.630	2.96	43.9	37.9	1.99	29.6	.01			252
1	300	6.81	6.78	33.975	26.641	143.5	.704	2.65	38.7	45.6	2.15	32.1	.02			302
1	354	6.39	6.35	34.030	26.741	134.5	.778	1.83	26.5	55.3	2.46	35.9	.02			356
	400 ISL	6.01	5.97	34.053	26.808	128.6	.839	1.40	20.2							403
1	437	5.72	5.68	34.070	26.857	124.1	.886	1.16	16.5	69.4	2.70	39.7	.00			440
	500 ISL	5.34	5.30	34.133	26.953	115.4	.961	.74	10.5							504
1	518	5.25	5.21	34.154	26.980	113.0	.982	.64	9.0	81.2	2.96	42.1	.00			522
	600 ISL	4.95	4.91	34.234	27.079	104.3	1.071	.37	5.2							604
1	601	4.95	4.90	34.235	27.080	104.2	1.071	.37	5.2	91.0	3.02	42.8	.00			605

RV DAVID STARR JORDAN CALCOFI CRUISE 8410 STATION 73 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 19.0 N	124 03.1 W	23/10/84	1018 GMT	3292 M	350 16 KT			1020.0 MB	17.0 C	14.5 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	16.86	16.85	32.877	23.920	397.7	.000	5.72	103.0							0
1	1		16.86	16.86	32.877	23.920	397.7	.004	5.72	103.0	.0	.30	.0	.00	.10	.08	1
	10	ISL	16.86	16.86	32.877	23.918	398.2	.040	5.79	104.3							10
1	11		16.86	16.86	32.876	23.918	398.2	.044	5.80	104.4	.0	.29	.0	.00	.11	.07	11
	20	ISL	16.88	16.88	32.874	23.912	399.1	.080	5.92	106.7							20
1	21		16.88	16.88	32.873	23.911	399.2	.083	5.93	106.8	.0	.28	.0	.00	.11	.09	21
	30	ISL	16.84	16.83	32.868	23.918	398.8	.120	5.79	104.1							30
1	31		16.83	16.83	32.868	23.919	398.8	.123	5.77	103.8	.0	.29	.0	.00	.14	.09	31
1	41		16.65	16.64	32.887	23.978	393.5	.163	5.80	104.0	.0	.29	.0	.00	.19	.09	41
	50	ISL	16.56	16.56	32.896	24.005	391.2	.198	5.80	103.8							50
1	51		16.55	16.54	32.897	24.008	391.0	.202	5.80	103.8	.0	.29	.0	.00	.17	.08	51
1	61		16.13	16.12	32.931	24.107	381.7	.240	5.91	104.9	.0	.26	.0	.00	.22	.14	61
1	72		16.04	16.03	32.932	24.153	377.8	.282	5.86	103.8	.0	.29	.0	.00	.22	.11	72
	75	ISL	15.55	15.54	32.955	24.279	365.7	.294	5.94	104.2							75
1	86		13.82	13.81	33.063	24.730	322.8	.331	6.19	105.0	.0	.26	.0	.01	.17	.19	86
	100	ISL	13.33	13.32	33.170	24.913	305.8	.376	6.01	101.0							101
1	101		13.33	13.32	33.173	24.916	305.5	.378	6.00	100.8	.0	.29	.0	.03	.11	.17	101
1	121		12.47	12.45	33.232	25.131	285.4	.436	5.71	94.2	.0	.40	1.9	.03	.07	.12	121
	125	ISL	12.08	12.06	33.235	25.207	278.2	.449	5.59	91.4							126
1	144		10.41	10.39	33.300	25.559	244.8	.500	4.97	78.5	8.2	.98	12.3	.01	.01	.04	145
	150	ISL	10.14	10.13	33.367	25.656	235.6	.513	4.79	75.2							151
1	174		9.45	9.43	33.671	26.009	202.5	.566	4.11	63.7	16.2	1.31	18.6	.01			175
	200	ISL	8.92	8.90	33.818	26.208	183.8	.616	3.69	56.6							201
1	203		8.87	8.85	33.829	26.225	182.3	.622	3.66	56.0	22.6	1.58	22.2	.01			204
1	233		8.35	8.32	33.941	26.395	166.6	.673	3.57	54.1	27.6	1.71	24.4	.01			234
	250	ISL	8.05	8.02	33.969	26.462	160.4	.702	3.48	52.4							252
1	271		7.70	7.68	33.986	26.525	154.6	.734	3.32	49.6	34.0	1.83	26.2	.01			272
	300	ISL	7.29	7.26	34.037	26.602	147.6	.778	2.87	42.4							302
1	329		6.91	6.88	34.019	26.663	142.0	.821	2.39	35.0	46.8	2.17	31.7	.00			331
	400	ISL	6.05	6.01	34.025	26.781	131.1	.917	1.84	26.4							403
1	402		6.03	6.00	34.025	26.783	130.9	.919	1.83	26.3	58.9	2.44	35.8	.00			404
1	476		5.77	5.73	34.136	26.903	120.4	1.013	.83	11.8	70.6	2.80	39.4	.00			479
	500	ISL	5.65	5.61	34.162	26.940	117.1	1.042	.65	9.2							504
1	550		5.33	5.28	34.234	27.011	110.6	1.099	.49	6.9	81.6	2.95	41.3	.00			554

RV DAVID STARR JORDAN CALCOFI CRUISE 8410 STATION 73 100

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 58.9 N	124 45.2 W	23/10/84	1542 GMT	4339 M	350 18 KT	330 04 05	1	1020.0 MB	17.1 C	14.2 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	17.89	17.89	33.030	23.793	409.9	.000	5.49	100.9							0
1	2		17.89	17.89	33.030	23.793	409.9	.008	5.49	100.9	.0	.28	.0	.00	.07	.03	2
	10	ISL	17.87	17.86	33.028	23.797	409.8	.041	5.64	103.7							10
1	11		17.86	17.86	33.028	23.797	409.8	.045	5.65	103.8	.0	.29	.0	.00	.07	.02	11
	20	ISL	17.89	17.89	33.029	23.791	410.8	.082	5.64	103.7							20
1	21		17.90	17.89	33.028	23.789	410.9	.086	5.64	103.7	.0	.28	.0	.00	.07	.02	21
	30	ISL	17.89	17.89	33.029	23.794	410.8	.123	5.59	102.8							30
1	31		17.88	17.88	33.030	23.795	410.7	.127	5.59	102.8	.0	.27	.0	.00	.07	.03	31
1	40		17.90	17.89	33.030	23.791	411.3	.164	5.59	102.8	.0	.28	.0	.00	.07	.03	40
1	50		17.92	17.91	33.040	23.795	411.3	.205	5.57	102.5	.0	.28	.0	.00	.08	.03	50
1	60		17.85	17.84	33.048	23.818	409.4	.246	5.60	102.9	.0	.26	.0	.00	.09	.03	60
1	70		15.85	15.84	33.032	24.248	368.6	.284	6.03	106.5	.0	.27	.0	.00	.14	.05	70
	75	ISL	15.13	15.12	33.012	24.414	352.9	.303	6.09	106.0							75
1	84		14.25	14.24	33.040	24.623	333.1	.333	6.18	105.7	.0	.27	.0	.00	.15	.14	84
1	99		13.18	13.17	33.050	24.850	311.7	.381	6.02	100.7	.0	.34	.0	.11	.18	.20	99
	100	ISL	13.09	13.08	33.047	24.866	310.2	.385	6.01	100.4							101
1	118		12.06	12.05	33.016	25.040	293.9	.438	5.86	95.7	.0	.46	1.7	.02	.08	.17	118
	125	ISL	11.77	11.75	33.030	25.106	287.7	.463	5.76	93.6							126
1	141		11.24	11.22	33.119	25.273	272.1	.506	5.45	87.5	2.9	.70	5.8	.01	.05	.09	142
	150	ISL	10.92	10.91	33.221	25.407	259.5	.529	5.18	82.7							151
1	170		10.19	10.17	33.485	25.741	228.0	.578	4.48	70.5	11.4	1.15	14.6	.01			171
1	199		9.20	9.17	33.739	26.104	193.9	.639	3.71	57.2	20.7	1.51	21.2	.01			200
	200	ISL	9.18	9.15	33.746	26.112	193.1	.641	3.69	56.9							201
1	228		8.71	8.69	33.915	26.318	173.9	.692	3.35	51.1	26.0	1.71	24.3	.01			229
	250	ISL	8.28	8.25	33.976	26.433	163.3	.729	3.30	50.0							252
1	267		7.95	7.92	33.997	26.498	157.3	.756	3.27	49.1	34.5	1.83	26.4	.00			268
	300	ISL	7.42	7.39	34.014	26.588	149.5	.807	3.11	46.2							302
1	324		7.09	7.06	34.001	26.624	145.7	.843	2.92	43.0	41.9	2.00	29.4	.00			326
1	397		6.41	6.38	34.062	26.764	133.1	.944	1.79	25.9	55.9	2.46	35.3	.00			399
	400	ISL	6.38	6.34	34.063	26.769	132.6	.948	1.76	25.5							403
1	474		5.72	5.68	34.097	26.871	123.3	1.043	1.33	19.0	67.6	2.71	38.3	.00			477
	500	ISL	5.52	5.48	34.139	26.912	119.5	1.075	1.17	16.6							504
1	541		5.25	5.21	34.158	26.984	113.0	1.123	.90	12.7	80.9	2.90	40.6	.00			545

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 77 48

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
35 38.8 N	120 43.2 W	13/10/84	0403 GMT	31 M	330	07 KT			1021.2 MB	16.2 C	14.1 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	10	15.00	15.00	33.449	24.777	315.3	.332	5.79	100.9	7.3	.56	1.7	.21	1.36	1.00	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 77 51

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
35 01.4 N	120 54.8 W	13/10/84	0619 GMT	238 M	330	12 KT			1022.1 MB	16.5 C	15.0 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	15.57	15.57	33.374	24.594	333.5	.000	5.97	105.1							0
1	1	15.57	15.57	33.374	24.594	333.5	.003	5.97	105.1	3.0	.29	.2	.00	.97	.58	1
	10 ISL	15.55	15.55	33.372	24.599	333.3	.033	6.05	106.4							10
1	11	15.54	15.54	33.372	24.599	333.3	.037	6.05	106.5	2.2	.29	.2	.00	.99	.54	11
	20 ISL	15.37	15.36	33.370	24.637	330.0	.067	6.04	105.9							20
1	21	15.34	15.34	33.370	24.643	329.5	.070	6.04	105.9	2.6	.36	.4	.02	1.39	.75	21
	30 ISL	14.96	14.95	33.263	24.644	323.0	.099	5.95	103.5							30
1	31	14.92	14.92	33.360	24.726	321.8	.102	5.94	103.2	3.1	.41	.9	.08	1.21	.75	31
1	41	12.55	12.54	33.135	25.038	292.2	.133	5.67	93.7	4.7	.64	3.7	.19	.49	.43	41
	50 ISL	12.35	12.34	33.469	25.336	264.1	.158	4.78	78.8							50
1	51	12.33	12.32	33.494	25.359	261.9	.160	4.70	77.5	9.1	.97	10.4	.03	.14	.35	51
1	61	11.74	11.73	33.585	25.542	244.8	.185	4.26	69.4	13.3	1.15	13.6	.01	.06	.21	61
1	71	11.36	11.35	33.627	25.644	235.3	.209	3.98	64.3	14.9	1.25	15.5	.01	.05	.16	71
	75 ISL	11.17	11.15	33.646	25.693	231.6	.219	3.86	62.1							75
1	86	10.74	10.73	33.690	25.803	223.4	.243	3.60	57.4	18.6	1.44	18.6	.00	.03	.10	86
	100 ISL	10.45	10.43	33.734	25.889	212.5	.274	3.42	54.2							101
1	105	10.38	10.36	33.746	25.912	210.5	.286	3.38	53.5	22.0	1.57	20.4	.01	.03	.10	106
1	124	10.10	10.09	33.783	25.987	203.6	.325	3.25	51.1	23.8	1.65	21.7	.01	.02	.09	125
	125 ISL	10.10	10.08	33.784	25.989	203.6	.326	3.25	51.1							126
1	144	9.95	9.93	33.797	26.025	200.5	.365	3.17	49.7	24.9	1.71	22.3	.05	.01	.12	145
	150 ISL	9.85	9.83	33.810	26.052	198.0	.377	3.12	48.8							151
1	174	9.20	9.18	33.917	26.242	183.3	.422	2.77	42.8	32.0	1.90	25.6	.02			175
	200 ISL	8.58	8.55	34.011	26.414	164.3	.467	2.46	37.5							201
1	204	8.49	8.47	34.024	26.438	162.0	.473	2.42	36.8	38.2	2.05	28.4	.00			205

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 77 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
34 52.8 N	121 11.3 W	13/10/84	1002 GMT	565 M	360	15 KT			1021.5 MB	17.0 C	15.0 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	16.66	16.66	33.290	24.283	363.1	.000	5.76	103.6							0
1	1	16.66	16.65	33.290	24.283	363.1	.004	5.76	103.6	1.1	.29	.0	.00	.17	.10	1
	10 ISL	16.64	16.64	33.287	24.285	363.2	.036	5.81	104.5							10
1	11	16.64	16.64	33.287	24.285	363.2	.040	5.82	104.6	1.2	.29	.0	.00	.18	.10	11
	20 ISL	16.35	16.34	33.274	24.343	358.0	.072	5.88	105.0							20
1	21	16.31	16.31	33.273	24.351	357.3	.076	5.88	105.0	1.2	.29	.0	.00	.37	.13	21
	30 ISL	16.08	16.07	33.290	24.417	351.2	.108	5.84	103.7							30
1	31	16.05	16.04	33.295	24.428	350.3	.111	5.83	103.6	1.3	.30	.0	.02	.46	.28	31
1	40	15.38	15.37	33.367	24.632	331.0	.141	5.82	102.1	2.4	.37	.1	.07	1.16	.46	40
	50 ISL	13.54	13.54	33.327	24.991	297.1	.173	5.59	94.4							50
1	51	13.42	13.41	33.325	25.014	294.8	.176	5.57	93.8	4.4	.56	2.8	.22	.65	.53	51
1	60	13.41	13.40	33.375	25.055	291.2	.202	5.49	92.5	4.8	.60	3.5	.22	.56	.57	60
1	70	12.41	12.40	33.372	25.250	272.8	.230	5.15	85.0	6.3	.76	6.5	.09	.27	.40	70
	75 ISL	12.08	12.07	33.398	25.332	265.1	.244	5.02	82.2							75
1	85	11.69	11.68	33.456	25.449	254.1	.269	4.81	78.2	9.3	.96	10.5	.03	.14	.24	85
1	100	11.25	11.23	33.500	25.566	243.3	.306	4.46	71.8	11.8	1.11	13.1	.02	.07	.14	100
1	117	10.40	10.38	33.721	25.888	212.9	.347	3.51	55.6	20.2	1.47	19.0	.00	.02	.08	118
	125 ISL	10.14	10.13	33.764	25.966	205.7	.363	3.42	53.8							126
1	142	9.66	9.65	33.815	26.086	194.5	.395	3.20	49.9	25.2	1.66	22.5	.00	.01	.06	143
	150 ISL	9.46	9.44	33.942	26.141	189.4	.412	3.12	48.4							151
1	172	8.92	8.91	33.912	26.281	175.4	.453	2.97	45.6	30.7	1.81	25.2	.00			173
	200 ISL	8.40	8.38	33.974	26.412	164.4	.500	3.00	45.5							201
1	201	8.38	8.36	33.976	26.416	164.1	.502	3.00	45.5	34.6	1.90	26.1	.00			202
1	230	7.98	7.96	33.997	26.493	157.1	.548	3.11	46.7	37.2	1.94	26.9	.00			231
	250 ISL	7.75	7.73	34.016	26.541	152.8	.580	2.88	43.0							252
1	268	7.54	7.52	34.030	26.583	149.0	.607	2.59	38.5	43.8	2.10	29.7	.00			270
	300 ISL	7.02	6.99	34.037	26.662	141.7	.653	2.25	33.0							302
1	317	6.73	6.70	34.037	26.700	138.1	.677	2.09	30.5	54.2	2.43	33.2	.00			319
1	374	6.18	6.14	34.048	26.782	130.8	.753	1.69	24.3	63.4	2.57	36.1	.00			376
	400 ISL	5.99	5.95	34.061	26.816	127.8	.787	1.45	20.8							403
1	430	5.82	5.78	34.080	26.853	124.5	.825	1.19	17.0	71.3	2.80	38.7	.00			433
1	492	5.54	5.50	34.129	26.927	118.1	.900	.83	11.8	78.7	2.91	40.3	.00			495
	500 ISL	5.50	5.46	34.135	26.936	117.3	.910	.80	11.3							504

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 77 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 44.0 N	121 32.9 W	13/10/84	1426 GMT	914 M	350	15 KT			1020.8 MB	17.1 C	15.8 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	15.94	15.94	33.359	24.271	364.3	.000	5.68	102.7							0
1	1	15.94	15.94	33.359	24.271	364.3	.004	5.68	102.7	1.6	.25	.0	.00	.24	.08	1
	10 ISL	16.91	16.91	33.358	24.277	364.1	.036	5.73	103.5							10
1	11	16.91	16.91	33.357	24.276	364.1	.040	5.73	103.6	1.4	.25	.0	.00	.24	.08	11
	20 ISL	16.93	16.93	33.325	24.248	364.8	.073	5.76	104.2							20
1	21	16.93	16.93	33.357	24.271	364.9	.076	5.77	104.3	1.5	.28	.0	.00	.27	.07	21
	30 ISL	14.62	14.62	33.288	24.735	320.9	.107	5.91	102.0							30
1	31	14.37	14.36	33.287	24.789	315.8	.110	5.92	101.7	3.5	.43	.0	.05	1.79	.31	31
1	41	12.94	12.94	33.411	25.175	279.3	.140	5.26	87.8	6.7	.70	1.9	.14	.87	.35	41
	50 ISL	12.28	12.27	33.521	25.389	259.1	.164	4.71	77.6							50
1	56	12.04	12.04	33.572	25.474	251.2	.179	4.45	72.9	11.8	.98	7.3	.03	.25	.26	56
1	65	11.69	11.68	33.606	25.567	242.5	.201	4.28	69.6	13.0	1.08	9.0	.02	.13	.16	65
1	75	11.31	11.30	33.632	25.657	234.1	.225	4.03	65.0	15.0	1.18	10.4	.01	.06	.13	75
1	90	11.01	11.00	33.664	25.735	226.9	.259	3.87	62.1	17.0	1.32	11.5	.01	.05	.11	90
	100 ISL	10.80	10.79	33.691	25.795	221.5	.283	3.69	59.0							101
1	109	10.62	10.61	33.714	25.844	217.1	.303	3.54	56.3	20.0	1.43	13.3	.01	.02	.07	110
	125 ISL	10.44	10.43	33.738	25.894	212.6	.337	3.42	54.2							126
1	127	10.42	10.41	33.742	25.901	212.0	.342	3.41	54.0	21.4	1.49	14.1	.01	.01	.07	128
	150 ISL	10.06	10.04	33.804	26.012	201.9	.389	3.24	51.0							151
1	153	10.00	9.99	33.814	26.029	200.3	.395	3.22	50.6	24.3	1.63	16.1	.02	.00	.05	154
1	182	9.58	9.56	33.892	26.160	188.3	.451	3.00	46.7	28.0	1.74	17.6	.01			183
	200 ISL	9.31	9.29	33.945	26.246	180.5	.484	2.82	43.7							201
1	212	9.16	9.14	33.974	26.293	176.2	.505	2.72	42.0	32.0	1.86	20.7	.00			213
1	246	9.00	8.97	34.004	26.343	172.1	.564	2.60	40.3	33.3	1.94	21.8	.00			247
	250 ISL	8.96	8.93	34.010	26.354	171.0	.572	2.57	39.5							252
1	294	8.52	8.49	34.074	26.473	160.5	.645	2.28	34.7	38.6	2.09	25.5	.00			296
	300 ISL	8.48	8.45	34.080	26.484	159.5	.654	2.24	34.1							302
1	348	8.14	8.11	34.112	26.561	152.9	.729	1.98	29.9	44.2	2.22	28.2	.00			350
	400 ISL	7.64	7.60	34.137	26.654	144.6	.807	1.79	26.7							403
1	431	7.31	7.27	34.145	26.708	139.8	.851	1.68	24.9	54.5	2.47	32.2	.00			434
	500 ISL	6.65	6.60	34.174	26.823	131.6	.944	1.32	19.2							504
1	514	6.52	6.48	34.145	26.816	130.0	.962	1.24	18.0	65.1	2.64	35.6	.00			517
1	596	5.90	5.85	34.215	26.951	117.7	1.064	.79	11.3	78.8	2.87	38.8	.00			600

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 77 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 22.8 N	122 15.2 W	13/10/84	2124 GMT	4023 M	350	20 KT	340 07 07	1	1021.4 MB	19.5 C	17.0 C	2/8	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	17.84	17.84	33.480	24.148	376.0	.000	5.68	104.6	1.7	.25	.1	.00	.19	.08	0
1	10	17.84	17.84	33.475	24.145	375.5	.037	5.73	105.5	1.6	.26	.0	.00	.20	.07	10
1	19	17.37	17.37	33.429	24.222	369.6	.071	5.41	106.0	1.6	.26	.0	.00	.27	.11	19
	20 ISL	17.24	17.24	33.431	24.255	366.5	.075	5.32	105.9							20
1	28	16.20	16.20	33.450	24.512	342.2	.103	5.87	104.7	1.2	.27	.0	.00	.44	.21	28
	30 ISL	16.03	16.03	33.449	24.550	338.6	.110	5.86	104.2							30
1	38	15.30	15.29	33.384	24.663	328.0	.136	5.83	102.1	1.5	.34	.3	.08	.76	.56	38
	50 ISL	12.86	12.85	33.036	24.901	305.5	.175	6.01	100.0							50
1	52	12.51	12.51	32.992	24.935	302.3	.180	6.04	99.6	2.6	.45	1.0	.20	.43	.40	52
1	61	11.87	11.86				.207									61
1	71	11.41	11.40	32.948	25.107	286.3	.236	5.85	94.2	3.4	.53	2.4	.03	.12	.34	71
	75 ISL	11.11	11.10	32.986	25.190	282.0	.248	5.79	92.7							75
1	85	10.51	10.50	32.952	25.269	271.0	.274	5.63	88.9	5.4	.75	6.8	.01	.06	.14	85
	100 ISL	10.43	10.41	33.172	25.456	253.7	.315	5.20	82.1							101
1	105	10.40	10.39	33.245	25.516	248.0	.326	5.03	79.4	11.0	1.04	12.5	.01	.03	.04	105
1	123	10.06	10.05	33.584	25.839	217.7	.370	4.04	63.4	19.4	1.52	20.0	.01	.01	.05	124
	125 ISL	10.02	10.00	33.630	25.858	215.9	.373	3.98	62.5							126
1	147	9.37	9.35	33.744	26.079	195.3	.419	3.41	52.8	26.3	1.71	23.9	.01	.00	.03	148
	150 ISL	9.28	9.27	33.763	26.107	192.6	.425	3.37	52.1							151
1	175	8.59	8.57	33.910	26.332	171.5	.470	3.16	48.1	31.3	1.83	25.9	.01			176
	200 ISL	8.10	8.08	33.982	26.462	159.5	.511	3.13	47.2							201
1	203	8.06	8.04	33.986	26.472	158.5	.516	3.13	47.1	36.4	1.93	27.2	.01			204
1	238	7.67	7.65	34.018	26.554	151.2	.570	2.79	41.6	41.8	2.08	29.4	.01			239
	250 ISL	7.53	7.50	34.028	26.583	148.7	.588	2.63	39.1							252
1	285	7.14	7.11	34.054	26.659	141.8	.640	2.13	31.4	49.7	2.33	32.7	.00			287
	300 ISL	7.01	6.99	34.067	26.686	139.5	.660	1.93	28.4							302
1	338	6.73	6.70	34.096	26.747	134.0	.712	1.48	21.6	58.9	2.59	35.7	.00			340
	400 ISL	6.26	6.23	34.135	26.841	125.7	.793	1.02	14.7							403
1	419	6.11	6.08	34.144	26.867	123.4	.817	.92	13.2	70.9	2.83	39.2	.00			422
1	498	5.51	5.47	34.171	26.963	114.7	.910	.64	9.1	81.4	3.00	41.4	.00			501
	500 ISL	5.50	5.46	34.173	26.966	114.4	.913	.63	9.0							504
1	577	5.03	4.99	34.247	27.080	104.0	.997	.36	5.1	93.9	3.15	42.9	.00			581

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 77 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 03.6 N	122 56.5 W	14/10/84	0315 GMT		350	23 KT			1020.3 MB	17.5 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
	0 ISL	17.76	17.76	33.118	23.892	400.4	.000	5.63	103.3							0
1	1	17.76	17.76	33.118	23.892	400.4	.004	5.63	103.3	2.6	.32	.0	.00	.10	.02	1
1	10	17.75	17.75	33.118	23.893	400.6	.040	5.62	103.1	2.6	.32	.0	.00	.11	.03	10
	20 ISL	17.75	17.75	33.121	23.895	400.8	.080	5.63	103.3							20
1	26	17.75	17.75	33.121	23.895	400.9	.104	5.64	103.5	2.4	.33	.0	.00	.09	.03	26
	30 ISL	17.13	17.12	33.102	24.029	398.3	.120	5.78	104.7							30
1	41	15.25	15.25	33.061	24.424	350.9	.160	6.14	107.2	2.6	.32	.0	.00	.20	.08	41
	50 ISL	14.40	14.39	33.031	24.585	335.7	.191	6.16	105.7							50
1	56	13.97	13.96	33.016	24.662	328.5	.211	6.17	104.9	2.8	.37	.0	.01	.43	.25	56
1	71	12.68	12.67	33.031	24.934	302.9	.258	5.82	96.3	3.9	.53	.7	.14	.53	.36	71
	75 ISL	12.42	12.41	33.027	24.980	298.6	.271	5.76	94.8							75
1	81	12.14	12.13	33.024	25.030	293.9	.287	5.68	93.0	4.7	.63	2.1	.04	.33	.31	81
1	96	11.56	11.55	33.076	25.179	280.0	.330	5.44	88.0	6.7	.75	4.4	.03	.15	.15	96
	100 ISL	11.41	11.40	33.103	25.228	275.5	.343	5.38	86.8							101
1	115	10.94	10.93	33.251	25.427	256.8	.384	5.05	80.7	10.1	.97	8.6	.03	.06	.09	116
	125 ISL	10.74	10.72	33.417	25.593	241.3	.407	4.56	72.6							126
1	136	10.47	10.46	33.636	25.786	223.1	.434	3.96	62.8	17.9	1.38	15.2	.03	.04	.07	137
	150 ISL	9.94	9.92	33.722	25.951	207.6	.463	3.59	56.2							151
1	156	9.67	9.66	33.726	26.015	201.6	.476	3.49	54.4	24.9	1.73	20.4	.02	.01	.03	157
1	176	8.95	8.93	33.810	26.198	184.4	.514	3.41	52.3	28.3	1.81	22.1	.02	.00	.03	177
1	196	8.72	8.70	33.878	26.286	175.3	.550	3.21	49.0	30.5	1.85	23.6	.02			197
	200 ISL	8.64	8.62	33.893	26.310	174.1	.557	3.19	48.6							201
1	216	8.34	8.32	33.951	25.403	165.5	.584	3.09	46.8	34.7	1.98	25.7	.01			217
	250 ISL	8.19	8.16	34.043	26.499	157.0	.639	2.52	38.1							252
1	251	8.19	8.16	34.044	26.500	156.9	.640	2.51	37.9	39.6	2.15	28.9	.01			252
1	299	7.60	7.57	34.089	26.622	145.9	.714	1.93	28.8	48.3	2.41	32.8	.01			301
	300 ISL	7.58	7.55	34.089	26.623	145.8	.715	1.93	28.7							302
1	355	6.60	6.56	34.033	26.716	137.1	.792	1.61	23.4	58.4	2.62	36.3	.01			357
	400 ISL	6.19	6.15	34.095	26.819	127.8	.852	1.13	16.3							403
1	437	5.98	5.94	34.164	26.900	120.3	.898	.74	10.6	74.7	3.04	40.9	.01			440
	500 ISL	5.50	5.46	34.204	26.990	112.2	.971	.47	6.7							504
1	520	5.37	5.33	34.214	27.014	110.0	.994	.43	6.1	85.8	3.18	43.0	.01			524
	600 ISL	5.16	5.11	34.299	27.106	102.0	1.078	.30	4.2							604
1	602	5.16	5.11	34.301	27.108	101.9	1.080	.30	4.2	93.6	3.29	43.7	.01			606

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 80 51

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 27.0 N	120 31.3 W	12/10/84	2151 GMT	70 M	320	22 KT	320 06 06	1	1019.1 MB	19.5 C	14.5 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
	0 ISL	15.38	15.38	33.488	24.725	321.2	.000	5.66	99.3							0
1	1	15.38	15.38	33.488	24.725	321.0	.003	5.66	99.3	4.6	.51	1.3	.20	.83	.48	1
	10 ISL	15.10	15.10	33.486	24.785	315.6	.032	5.63	98.3							10
1	11	15.05	15.05	33.486	24.795	314.6	.035	5.63	98.2	4.9	.54	1.8	.25	.81	.55	11
	20 ISL	14.37	14.37	33.487	24.941	301.0	.063	5.40	92.8							20
1	21	14.30	14.30	33.487	24.956	299.6	.065	5.37	92.2	5.3	.53	1.8	.26	.64	.66	21
	30 ISL	13.93	13.93	33.496	25.041	291.7	.092	5.14	87.6							30
1	31	13.90	13.89	33.497	25.048	291.1	.095	5.12	87.2	6.8	.66	4.4	.28	.48	.63	31
1	41	13.38	13.37	33.515	25.169	279.8	.123	4.85	81.7	8.9	.83	6.6	.24	.33	.63	41
1	50	12.95	12.95	33.541	25.273	270.1	.148	4.62	77.2	10.4	.93	8.4	.21	.25	.71	50

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 80 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 18.5 N	120 49.0 W	12/10/84	1757 GMT	785 M	340	16 KT	320 05 06	1	1021.0 MB	17.9 C	14.7 C	3/8	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	15.96	15.96	33.466	24.578	335.1	.000	5.91	104.9							0
1	1	15.96	15.96	33.466	24.578	335.0	.003	5.91	104.9	2.3	.30	.2	.00	.74	.31	1
	10 ISL	15.94	15.94	33.464	24.581	334.8	.033	5.96	105.8							10
1	11	15.94	15.94	33.466	24.583	334.8	.037	5.97	105.9	2.8	.32	.0	.00	.75	.34	11
	20 ISL	15.77	15.77	33.462	24.617	331.9	.067	6.05	107.1							20
1	26	15.56	15.55	33.461	24.666	327.4	.086	6.11	107.6	1.8	.35	.0	.00	1.33	.47	26
	30 ISL	15.33	15.33	33.481	24.730	321.4	.100	5.98	104.8							30
1	40	14.54	14.53	33.493	24.911	304.4	.130	5.60	96.6	4.6	.56	2.0	.24	1.55	.98	40
	50 ISL	13.12	13.12	33.337	25.083	293.3	.160	5.46	91.4							50
1	55	12.48	12.47	33.277	25.161	290.9	.174	5.39	89.0	5.3	.72	6.2	.13	.51	.67	55
1	70	11.70	11.69	33.413	25.415	257.1	.214	4.80	78.0	9.0	.97	11.2	.03	.19	.37	70
	75 ISL	11.44	11.43	33.457	25.497	249.3	.228	4.61	74.6							75
1	80	11.24	11.23	33.495	25.564	243.1	.239	4.45	71.7	12.3	1.14	13.8	.02	.05	.12	80
1	95	10.86	10.85	33.605	25.717	228.8	.274	3.91	62.5	16.4	1.29	16.9	.01	.12	.20	95
	100 ISL	10.68	10.67	33.632	25.770	223.9	.287	3.82	60.7							101
1	113	10.23	10.21	33.692	25.895	212.2	.316	3.67	57.9	19.6	1.44	19.5	.00	.01	.37	114
	125 ISL	9.89	9.88	33.755	26.000	202.4	.340	3.51	55.0							126
1	132	9.71	9.70	33.791	26.060	196.8	.354	3.42	53.4	23.8	1.58	21.8	.00	.01	.05	133
	150 ISL	9.38	9.36	33.849	26.160	187.6	.388	3.27	50.6							151
1	152	9.34	9.33	33.855	26.170	186.8	.393	3.24	50.2	27.0	1.70	23.4	.00	.00	.04	153
1	172	9.11	9.09	33.897	26.240	180.4	.429	2.76	42.5	28.9	1.74	24.5	.00	.00	.04	173
1	192	8.79	8.77	33.954	26.336	171.6	.464	2.56	39.2	32.2	1.86	26.1	.00			193
	200 ISL	8.68	8.65	33.974	26.368	168.6	.478	2.58	39.4							201
1	212	8.54	8.52	34.000	26.411	164.8	.497	2.63	40.0	35.2	1.94	27.7	.00			213
1	246	8.17	8.15	34.062	26.515	155.3	.551			40.4	2.11	30.0	.00			247
	250 ISL	8.13	8.10	34.069	26.528	154.2	.558	2.31	34.8							252
1	295	7.61	7.59	34.119	25.643	143.8	.626	1.77	26.4	48.9	2.36	32.4	.00			297
	300 ISL	7.54	7.51	34.119	25.653	142.9	.633	1.74	25.9							302
1	350	6.86	6.83	34.113	26.744	134.6	.702	1.48	21.7	57.9	2.52	35.4	.00			352
	400 ISL	6.62	6.58	34.171	26.822	127.8	.768	1.08	15.8							403
1	432	6.55	6.51	34.216	26.867	123.9	.808	.83	12.1	68.0	2.77	37.9	.00			435
	500 ISL	6.17	6.13	34.271	26.961	115.7	.889	.51	7.4							504
1	514	6.09	6.04	34.280	26.979	114.2	.906	.47	6.8	77.0	2.97	39.5	.00			518
1	595	5.70	5.65	34.338	27.050	108.1	.995	.35	5.0	85.1	3.07	40.9	.00			599

RV DAVID STARR JORDAN CALCOFI CRUISE 8410 STATION 80 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 09.4 N	121 09.8 W	11/10/84	1747 GMT	2212 M	350	16 KT	330 09 07	5	1016.0 MB	18.3 C	15.4 C	8/8	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	18.26	18.25	33.544	24.094	381.1	.000	5.44	101.1							0
1	1	18.26	18.25	33.544	24.094	381.1	.004	5.44	101.1	2.7	.26	.0	.00	.12	.08	1
	10 ISL	18.24	18.24	33.543	24.100	380.9	.038	5.60	104.0							10
1	11	18.24	18.23	33.543	24.100	380.9	.042	5.61	104.2	2.6	.26	.0	.00	.12	.09	11
1	20	18.24	18.24	33.545	24.100	381.1	.076	5.62	104.3	2.0	.25	.0	.00	.13	.09	20
1	30	18.19	18.18	33.549	24.117	379.9	.114	5.55	102.9	2.0	.25	.0	.01	.14	.07	30
1	40	17.99	17.98	33.546	24.164	375.8	.151	5.61	103.7	2.4	.25	.0	.00	.23	.15	40
1	50	16.64	16.63	33.486	24.439	349.8	.188	5.86	105.4	3.0	.32	.0	.03	1.01	.42	50
1	60	15.76	15.76	33.449	24.611	333.7	.222	5.89	104.1	3.2	.37	.4	.13	.20	.60	60
1	70	14.53	14.52	33.413	24.853	310.9	.254	5.89	101.6	3.3	.42	1.1	.20	.57	.49	70
	75 ISL	13.80	13.79	33.373	24.975	299.3	.270	5.75	97.6							75
1	85	12.63	12.62	33.346	25.187	279.2	.298	5.37	89.0	5.7	.71	6.5	.16	.21	.37	85
1	99	11.84	11.83	33.513	25.466	252.9	.339	4.75	77.5	10.1	.99	11.6	.03	.09	.17	99
	100 ISL	11.76	11.75	33.524	25.490	250.6	.338	4.69	76.4							101
1	118	10.71	10.70	33.634	25.766	224.7	.382	4.03	64.2	16.2	1.26	16.8	.01	.03	.08	119
	125 ISL	10.42	10.40	33.678	25.852	215.6	.397	3.84	60.8							126
1	143	9.76	9.74	33.787	26.049	198.1	.435	3.44	53.7	23.4	1.55	21.7	.00	.00	.05	144
	150 ISL	9.59	9.57	33.813	26.097	193.7	.448	3.36	52.3							151
1	173	9.14	9.12	33.884	26.226	181.8	.491	3.16	48.7	28.3	1.78	24.4	.00			174
	200 ISL	8.67	8.65	33.977	26.372	168.3	.538	2.80	42.8							201
1	201	8.66	8.64	33.980	26.376	167.9	.540	2.79	42.6	33.6	1.91	26.9	.00			202
1	232	8.30	8.28	34.066	26.500	156.7	.590	2.30	34.8	39.6	2.11	29.0	.00			233
	250 ISL	8.09	8.07	34.071	26.535	153.1	.618	2.22	33.4							252
1	271	7.84	7.81	34.074	26.574	150.0	.651	2.17	32.5	43.6	2.21	30.5	.00			273
	300 ISL	7.45	7.42	34.080	26.636	144.4	.693	1.95	29.0							302
1	330	7.07	7.04	34.095	26.700	138.6	.735	1.68	24.7	53.8	2.45	33.9	.00			332
	400 ISL	6.70	6.66	34.180	26.820	128.1	.828	1.07	15.6							403
1	403	6.69	6.65	34.185	26.825	127.7	.833	1.04	15.2	63.5	2.71	36.9	.00			406
1	477	6.36	6.32	34.247	26.918	119.7	.926	.63	9.1	71.2	2.91	38.5	.00			480
	500 ISL	6.25	6.21	34.261	26.942	117.6	.951	.55	8.0							504
1	548	6.03	5.98	34.280	26.986	113.9	1.007	.47	6.8	77.2	3.03	39.6	.00			552

RV DAVID STARR JORDAN CALCOFI CRUISE 8410 STATION 80 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 09.4 N	121 09.4 W	11/10/84	2220 GMT	2212 M	330	16 KT	330 08 08	1	1016.0 MB	20.0 C	16.2 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	18.33	18.33	33.543	24.076	382.8	.000	5.58	103.8							0
1	1	18.33	18.33	33.543	24.076	382.9	.004	5.58	103.8	2.2	.26	.1	.00	.14	.06	1
	10 ISL	18.32	18.32	33.541	24.076	383.1	.038	5.62	104.4							10
1	11	18.32	18.32	33.540	24.076	383.1	.042	5.62	104.5	2.1	.26	.1	.00			11
	20 ISL	18.28	18.28	33.540	24.086	382.5	.077	5.64	104.8							20
1	25	18.26	18.26	33.539	24.092	382.2	.095	5.66	105.1	2.1	.26	.1	.00	.25	.04	25
	30 ISL	17.88	17.87	33.523	24.173	374.6	.115	5.71	105.3							30
1	41	16.70	16.69	33.478	24.420	351.4	.154	5.83	105.0	2.8	.30	.0	.02	.71	.29	41
	50 ISL	15.51	15.50	33.435	24.656	329.1	.185	5.89	103.5							50
1	56	14.70	14.69	33.416	24.818	313.8	.204	5.92	102.4	3.2	.42	.6	.16	.51	.33	56
1	71	12.57	12.56	33.418	25.253	272.5	.247	5.16	85.4	6.2	.82	4.3	.07	.17	.27	71
	75 ISL	12.20	12.19	33.444	25.345	263.9	.259	4.99	82.0							75
1	80	11.89	11.88	33.476	25.428	255.0	.271	4.82	78.7	9.1	.97	11.0	.02	.12	.19	80
1	95	11.30	11.29	33.559	25.602	239.9	.308	4.40	71.0	12.7	1.12	13.8	.02	.05	.14	95
	100 ISL	11.10	11.09	33.585	25.658	234.6	.321	4.27	68.5							101
1	115	10.57	10.56	33.656	25.808	220.6	.356	3.92	62.3	17.4	1.33	17.4	.02	.02	.07	116
	125 ISL	10.28	10.27	33.702	25.893	212.7	.377	3.72	58.7							126
1	134	10.02	10.00	33.744	25.971	205.4	.396	3.55	55.7	21.6	1.51	20.4	.02	.01	.05	135
	150 ISL	9.60	9.59	33.803	26.087	194.6	.428	3.36	52.3							151
1	154	9.50	9.48	33.819	26.116	191.9	.436	3.32	51.6	25.0	1.66	22.6	.01	.00	.04	155
1	174	9.02	9.01	33.902	26.258	179.7	.473	3.10	47.7	29.1	1.78	24.9	.01	.00	.05	175
1	193	8.72	8.70	33.957	26.350	173.3	.506	2.85	43.5	33.0	1.90	26.5	.00			194
	200 ISL	8.64	8.62	33.973	26.374	168.0	.517	2.78	42.4							201
1	214	8.50	8.48	34.001	26.417	164.2	.540	2.64	40.1	35.2	1.98	27.6	.00			215
1	249	8.15	8.12	34.084	26.537	153.3	.596	2.07	31.2	42.4	2.21	30.1	.01			250
	250 ISL	8.12	8.10	34.084	26.541	153.0	.598	2.06	31.1							252
1	297	7.36	7.33	34.079	26.647	143.2	.668	1.96	29.0	49.2	2.38	32.3	.00			299
	300 ISL	7.33	7.30	34.081	26.654	142.7	.672	1.93	28.6							302
1	352	6.84	6.81	34.138	26.766	132.5	.743	1.28	18.7	59.6	2.61	35.6	.00			354
	400 ISL	6.50	6.46	34.208	26.868	123.4	.805	.81	11.8							403
1	434	6.31	6.27	34.252	26.927	118.1	.846	.58	8.4	72.6	2.92	38.6	.00			437
	500 ISL	6.06	6.02	34.277	26.979	113.9	.922	.48	6.9							504
1	517	6.00	5.96	34.279	26.988	113.2	.942	.45	6.5	78.6	3.00	39.8	.00			521
1	599	5.64	5.59	34.317	27.065	106.6	1.031	.32	4.6	86.6	3.08	40.8	.00			603

RV DAVID STARR JORDAN CALCOFI CRUISE 8410 STATION 80 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 39.1 N	121 39.9 W	12/10/84	0552 GMT	2212 M	330	21 KT	330 08 08		1018.0 MB	17.5 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
1	0	18.21	18.21	33.546	24.107	379.8	.000	5.56	103.2	2.9	.27	.0	.00	.19	.09	0
	10 ISL	18.21	18.20	33.546	24.109	380.0	.338	5.79	107.4							10
1	11	18.21	18.20	33.545	24.109	380.0	.342	5.80	107.6	2.5	.27	.0	.00	.17	.08	11
	20 ISL	18.21	18.21	33.532	24.098	380.5	.676	5.75	106.7							20
1	25	18.22	18.21	33.545	24.107	380.7	.395	5.70	105.8	2.3	.26	.0	.00	.19	.10	25
	30 ISL	17.83	17.83	33.535	24.194	372.6	.114	5.72	105.3							30
1	40	16.86	16.85	33.505	24.402	353.0	.153	5.78	104.5	3.4	.29	.0	.03	.91	.26	40
	50 ISL	16.03	16.02	33.446	24.549	339.3	.185	5.84	103.8							50
1	55	15.55	15.54	33.421	24.637	331.0	.201	5.87	103.3	3.6	.38	.3	.14	1.05	.47	55
1	70	13.10	13.09	33.443	25.170	280.5	.246	5.16	86.4	5.6	.71	5.8	.15	.37	.41	70
	75 ISL	12.73	12.72	33.455	25.252	272.7	.261	5.01	83.3							75
1	81	12.50	12.49	33.474	25.312	267.2	.276	4.87	80.5	8.8	.89	9.5	.38	.25	.33	81
1	95	12.11	12.10	33.574	25.463	253.1	.313	4.43	72.7	9.3	1.02	11.4	.03	.12	.26	95
	100 ISL	11.85	11.84	33.590	25.516	248.2	.326	4.37	71.3							101
1	115	11.08	11.06	33.585	25.663	234.4	.363	4.25	68.2	12.2	1.22	14.9	.02	.06	.10	116
	125 ISL	10.73	10.72	33.627	25.757	225.6	.385	4.06	64.7							126
1	136	10.35	10.34	33.693	25.875	214.7	.410	3.79	59.9	17.7	1.43	18.5	.01	.02	.05	137
	150 ISL	9.82	9.80	33.779	26.033	199.8	.439	3.44	53.9							151
1	156	9.59	9.57	33.817	26.100	193.5	.451	3.30	51.4	23.1	1.69	22.5	.01	.00	.05	157
1	176	9.16	9.14	33.900	26.235	181.0	.488	3.02	46.6	27.9	1.81	24.5	.01	.00	.07	177
1	196	8.76	8.74	33.983	26.363	169.1	.523	2.70	41.3	31.5	1.94	26.6	.01			197
	200 ISL	8.73	8.71	33.995	26.378	167.8	.530	2.65	40.4							201
1	215	8.64	8.62	34.029	26.418	164.2	.554	2.48	37.8	35.4	2.05	27.9	.01			216
	250 ISL	8.30	8.28	34.066	26.500	157.0	.611	2.23	33.7							252
1	252	8.28	8.26	34.067	26.503	156.7	.613	2.22	33.6	39.5	2.19	29.3	.01			253
	300 ISL	7.58	7.55	34.092	26.627	146.9	.687	2.12	31.6							302
1	301	7.56	7.53	34.072	26.614	146.6	.689	2.12	31.6	45.6	2.32	31.3	.01			303
1	355	6.93	6.90	34.120	26.740	135.2	.764	1.46	21.4	56.7	2.60	35.0	.01			357
	400 ISL	6.68	6.64	34.180	26.822	127.9	.823	1.01	14.7							403
1	438	6.56	6.52	34.228	26.876	123.3	.871	.73	10.6	66.6	2.88	37.8	.00			441
	500 ISL	6.31	6.26	34.259	26.934	118.5	.946	.55	7.9							504
1	521	6.22	6.17	34.265	26.950	117.1	.971	.52	7.5	73.9	3.01	38.9	.00			525
	600 ISL	5.81	5.75	34.333	27.033	109.9	1.061	.36	5.2							604
1	602	5.80	5.74	34.303	27.034	109.8	1.063	.36	5.1	82.4	3.12	40.8	.00			606

RV DAVID STARR JORDAN CALCOFI CRUISE 8410 STATION 80 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 09.4 N	121 09.9 W	12/10/84	0954 GMT	2212 M	350	18 KT	330 08 08	1	1020.0 MB	17.0 C	14.8 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	18.15	18.15	33.549	24.125	378.1	.000	5.38	99.7							0
1	1	18.15	18.15	33.549	24.126	378.1	.004	5.38	99.7	2.5	.27	.1	.00	.14	.09	1
	10 ISL	18.14	18.14	33.549	24.127	378.3	.338	5.51	102.1							10
1	11	18.14	18.14	33.548	24.126	378.4	.341	5.52	102.3	2.5	.27	.1	.00	.17	.08	11
	20 ISL	18.15	18.15	33.549	24.126	378.7	.676	5.60	103.8							20
1	26	18.15	18.15	33.549	24.126	378.9	.398	5.63	104.4	1.6	.26	.1	.00	.17	.09	26
	30 ISL	18.07	18.07	33.546	24.144	377.4	.114	5.62	104.0							30
1	41	17.86	17.85	33.538	24.190	373.4	.154	5.60	103.2	2.4	.26	.0	.00	.28	.09	41
	50 ISL	16.90	16.89	33.492	24.384	355.2	.188	5.76	104.1							50
1	55	16.22	16.22	33.466	24.520	342.3	.204	5.81	103.7	3.4	.34	.1	.08	1.02	.24	55
1	71	13.44	13.43	33.408	25.074	289.7	.255	5.38	90.7	5.3	.63	4.5	.23	.39	.42	71
	75 ISL	13.27	13.26	33.435	25.129	284.5	.267	5.28	88.7							75
1	79	13.19	13.18	33.461	25.166	281.1	.277	5.19	87.1	6.1	.74	6.1	.12	.25	.31	79
1	94	12.30	12.29	33.541	25.402	259.9	.318	4.67	76.9	9.5	.92	10.1	.05	.15	.21	94
	100 ISL	11.97	11.96	33.547	25.469	252.7	.334	4.56	74.6							101
1	114	11.30	11.28	33.563	25.606	239.9	.370	4.37	70.5	13.0	1.12	14.0	.02	.06	.15	115
	125 ISL	10.80	10.79	33.622	25.741	227.2	.394	4.13	66.3							126
1	134	10.40	10.38	33.684	25.860	216.0	.415	3.91	61.9	18.7	1.38	18.2	.01	.01	.06	135
	150 ISL	9.86	9.84	33.764	26.014	201.6	.448	3.58	55.9							151
1	152	9.79	9.77	33.775	26.035	199.7	.452	3.53	55.2	23.0	1.53	21.2	.01	.01	.03	153
1	172	9.15	9.13	33.871	26.213	182.9	.490	3.18	49.0	28.2	1.76	24.4	.01	.00	.03	173
1	193	8.86	8.84	33.928	26.304	174.6	.527	3.17	48.6	30.7	1.81	25.5	.01			194
	200 ISL	8.69	8.67	33.956	26.354	170.0	.540	3.05	46.5							201
1	211	8.41	8.39	33.999	26.430	162.9	.559	2.92	42.8	35.4	1.97	27.6	.01			212
1	246	7.81	7.79	34.047	26.557	151.2	.612	2.42	36.2	42.7	2.14	30.1	.01			247
	250 ISL	7.77	7.75	34.054	26.568	150.2	.619	2.36	35.4							252
1	294	7.45	7.43	34.111	26.659	142.1	.684	1.83	27.2	50.7	2.39	32.7	.01			296
	300 ISL	7.39	7.35	34.115	26.672	141.0	.692	1.77	26.3							302
1	348	6.82	6.79	34.145	26.775	131.7	.757	1.38	20.2	60.2	2.64	35.7	.01			350
	400 ISL	6.57	6.53	34.204	26.855	124.6	.824	1.04	15.2							403
1	429	6.48	6.44	34.237	26.893	121.4	.860	.90	13.1	70.1	2.86	38.1	.00			432
	500 ISL	6.06	6.02	34.279	26.981	113.7	.943	.68	9.8							504
1	511	6.00	5.95	34.284	26.993	112.7	.955	.66	9.5	78.0	3.02	39.6	.00			514
1	591	5.62	5.57	34.326	27.074	105.6	1.042	.54	7.7	86.4	3.12	40.9	.00			595

RV DAVID STARR JORDAN CALCOFI CRUISE 8410 STATION 80 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 49.5 N	121 52.4 W	10/10/84	1240 GMT	3658 M	320	17 KT			1014.0 MB	18.0 C	15.5 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
		ISL	19.17	19.16	33.624	23.929	396.8	.000	5.38	101.7							0
1	1		19.17	19.16	33.624	23.929	396.9	.004	5.38	101.7	1.5	.23	.0	.00	.18	.06	1
	10	ISL	19.17	19.16	33.622	23.928	397.3	.040	5.41	102.2							10
1	11		19.17	19.16	33.622	23.928	397.3	.044	5.41	102.3	2.0	.23	.0	.00	.09	.06	11
	20	ISL	19.18	19.17	33.610	23.917	397.9	.079	5.41	102.3							20
1	27		19.19	19.18	33.622	23.924	398.3	.107	5.41	102.3	1.4	.22	.0	.00			27
	30	ISL	18.76	18.76	33.619	24.029	388.4	.119	5.53	103.8							30
1	41		16.58	16.57	33.582	24.527	341.2	.159	5.83	104.8	2.5	.30	.0	.00	.50	.14	41
	50	ISL	13.99	13.99	33.485	25.021	294.3	.188	5.47	93.2							50
1	56		12.52	12.51	33.456	25.293	268.3	.204	5.12	84.7	7.8	.77	7.0	.22	.97	.23	56
1	71		11.42	11.42	33.503	25.535	245.6	.242	4.43	71.6	12.2	1.09	13.0	.03	.25	.24	71
	75	ISL	11.27	11.26	33.535	25.588	240.6	.253	4.26	68.7							75
1	82		11.07	11.06	33.586	25.665	233.5	.269	4.03	64.7	15.2	1.27	16.0	.02	.11	.16	82
1	97		10.33	10.32	33.661	25.852	216.0	.302	3.64	57.5	19.9	1.46	19.7	.01	.03	.05	97
	100	ISL	10.15	10.14	33.675	25.895	212.0	.309	3.60	56.7							101
1	115		9.44	9.43	33.735	26.060	196.4	.341	3.51	54.4	24.6	1.62	22.2	.01	.00	.02	116
	125	ISL	9.24	9.23	33.773	26.122	190.7	.359	3.40	52.5							126
1	135		9.10	9.08	33.816	26.178	185.5	.379	3.27	50.3	28.0	1.76	24.3	.00	.01	.01	136
	150	ISL	8.79	8.78	33.883	26.279	176.2	.405	3.10	47.5							151
1	155		8.70	8.68	33.907	26.313	173.0	.415	3.04	46.4	31.6	1.85	25.9	.00	.00	.02	156
1	175		8.50	8.49	33.984	26.403	164.7	.448	2.75	41.8	35.0	1.96	27.3	.00	.00	.02	176
2	195		8.301	8.281	34.002	26.448	160.8	.480	2.70	40.9	36.5	2.00	27.8	.00			196
	200	ISL	8.26	8.24	34.009	26.461	159.7	.489	2.66	40.2							201
2	214		8.174	8.112	34.027	26.493	156.8	.510	2.54	38.3	39.0	2.08	28.6	.00			215
2	249		7.635	7.611	34.053	26.587	148.3	.563	2.30	34.3	45.3	2.19	30.8	.00			250
	250	ISL	7.62	7.60	34.054	26.590	148.0	.566	2.29	34.2							252
2	297		7.222	7.194	34.072	26.661	141.8	.634	1.95	28.8	51.0	2.36	32.8	.01			299
	300	ISL	7.20	7.17	34.075	26.667	141.4	.638	1.91	28.2							302
2	350		6.826	6.794	34.137	26.767	132.4	.706	1.25	18.3	59.7	2.63	35.8	.00			352
	400	ISL	6.44	6.40	34.178	26.852	124.9	.771	.87	12.7							403
2	433		6.186	6.148	34.199	26.901	120.4	.811	.72	10.4	72.6	2.87	38.7	.01			476
	500	ISL	5.71	5.66	34.245	26.998	111.7	.889	.46	6.6							504
2	515		5.616	5.572	34.256	27.018	109.9	.906	.42	6.0	83.5	3.06	40.7	.00			519
	600	ISL	5.41	5.36	34.332	27.103	102.7	.996	.28	4.0							604
2	601		5.411	5.361	34.332	27.104	102.7	.997	.28	4.0	90.3	3.13	41.5	.00			605

RV DAVID STARR JORDAN CALCOFI CRUISE 8410 STATION 80 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 49.0 N	121 50.5 W	10/10/84	1735 GMT	3658 M	330	14 KT	300 06 06	1	1016.4 MB	19.2 C	14.0 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
		ISL	19.16	19.16	33.621	23.929	396.9	.000	5.37	101.5							0
1	1		19.16	19.16	33.621	23.929	396.9	.004	5.37	101.5	1.7	.21	.0	.01	.11	.03	1
	10	ISL	19.15	19.14	33.620	23.932	397.0	.040	5.43	102.5							10
1	11		19.15	19.14	33.620	23.932	397.0	.044	5.43	102.6	1.8	.21	.0	.00	.11	.03	11
	20	ISL	19.16	19.15	33.620	23.930	397.5	.079	5.42	102.5							20
1	26		19.16	19.16	33.620	23.928	397.8	.103	5.42	102.4	1.7	.20	.0	.00	.12	.02	26
	30	ISL	18.77	18.76	33.618	24.027	388.6	.119	5.55	104.2							30
1	41		16.88	16.87	33.567	24.445	349.0	.159	5.80	104.9	2.9	.25	.0	.00	.41	.22	41
	50	ISL	13.97	13.97	33.435	24.985	297.6	.189	5.50	93.8							50
1	56		12.28	12.27	33.409	25.303	267.4	.205	5.17	85.1	7.9	.79	7.4	.16	.68	.49	56
1	70		11.41	11.40	33.551	25.576	241.7	.240	4.18	67.6	13.4	1.12	14.3	.03	.18	.28	70
	75	ISL	11.19	11.18	33.571	25.632	236.5	.253	4.07	65.5							75
1	79		11.05	11.04	33.581	25.664	233.4	.262	4.03	64.7	15.5	1.26	16.0	.01	.11	.16	79
1	96		10.36	10.34	33.655	25.843	216.7	.300	3.66	57.9	19.9	1.45	19.5	.01	.03	.06	96
	100	ISL	10.17	10.16	33.672	25.888	212.5	.309	3.61	56.9							101
1	112		9.68	9.67	33.719	26.007	201.4	.335	3.52	54.9	23.7	1.60	21.7	.01	.01	.04	113
	125	ISL	9.25	9.24	33.766	26.114	191.4	.360	3.41	52.7							126
1	132		9.06	9.04	33.797	26.170	186.2	.374	3.33	51.2	27.4	1.72	24.1	.01	.00	.03	133
	150	ISL	8.86	8.84	33.892	26.276	176.5	.406	3.00	46.0							151
1	152		8.84	8.83	33.904	26.283	175.4	.409	2.96	45.3	31.3	1.84	25.7	.01	.00	.03	153
1	171		8.55	8.54	33.965	26.381	166.9	.442	2.78	42.3	34.4	1.94	27.1	.01	.00	.03	172
1	189		8.30	8.28	33.990	26.439	161.6	.471	2.68	40.6	36.5	1.97	27.8	.01			190
	200	ISL	8.13	8.11	34.004	26.475	158.3	.489	2.64	39.8							201
1	210		7.99	7.97	34.015	26.505	155.5	.504	2.60	39.1	39.5	2.04	28.7	.01			211
1	243		7.67	7.64	34.050	26.580	148.9	.554	2.22	33.1	45.0	2.21	30.7	.00			244
	250	ISL	7.57	7.55	34.052	26.595	147.5	.565	2.16	32.1							252
1	290		7.06	7.03	34.066	26.679	139.9	.623	1.82	26.8	54.9	2.40	33.7	.01			292
	300	ISL	6.95	6.93	34.078	26.703	137.8	.636	1.69	24.8							302
2	347		6.55	6.51	34.140	26.807	128.3	.699	1.09	15.9	64.1	2.74	37.3	.01			349
	400	ISL	6.25	6.21	34.193	26.888	121.2	.765	.75	10.9							403
2	430		6.11	6.07	34.215	26.924	118.2	.801	.65	9.4	73.8	2.94	39.3	.01			433
	500	ISL	5.73	5.69	34.253	27.002	111.3	.881	.45	6.4							504
2	514		5.65	5.61	34.260	27.016	110.1	.897	.42	6.0	82.6	3.06	40.9	.00			513
2	598		5.31	5.26	34.304	27.094	103.4	.986	.30	4.2	90.0	3.14	41.9	.01			602

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 90 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 48.8 N	121 51.9 W	10/10/84	2221 GMT	3658 M	330	37 KT	320 06 06	1	1014.9 MB	21.0 C	17.0 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	19.41	19.41	33.626	23.868	402.9	.000	5.37	102.0							0
1	1	19.41	19.41	33.626	23.868	402.6	.004	5.37	102.0	2.2	.22	.0	.01	.10	.02	1
	10 ISL	19.31	19.31	33.624	23.893	403.7	.040	5.46	103.5							10
1	11	19.30	19.30	33.624	23.895	403.5	.044	5.47	103.7	2.4	.22	.0	.00	.09	.03	11
	20 ISL	19.26	19.25	33.623	23.905	399.7	.080	5.50	104.2							20
1	26	19.23	19.22	33.622	23.913	399.2	.104	5.53	104.7	1.9	.23	.0	.00	.14	.00	25
	30 ISL	19.91	18.90	33.591	23.971	393.7	.120	5.63	105.8							30
1	41	17.08	17.07	33.599	24.423	351.1	.160	5.74	104.2	2.8	.26	.0	.01	.33	.28	41
	50 ISL	13.75	13.74	33.440	25.037	292.7	.190	5.34	90.6							50
1	55	12.08	12.07	33.435	25.337	264.1	.203	5.07	83.1	9.0	.83	8.2	.14	.62	1.00	55
1	70	11.02	11.01	33.457	25.573	241.9	.241	4.50	72.1	13.6	1.14	13.9	.02	.13	.40	70
	75 ISL	11.06	11.05	33.538	25.629	236.8	.253	4.20	67.4							75
1	79	11.11	11.10	33.594	25.663	233.6	.262	4.01	64.4	16.0	1.29	15.8	.02	.08	.37	79
1	95	10.41	10.40	33.648	25.829	218.1	.295	3.71	58.7	20.2	1.46	19.1	.01	.03	.08	95
	100 ISL	10.17	10.16	33.666	25.883	213.0	.310	3.65	57.5							101
1	114	9.65	9.64	33.721	26.014	200.8	.340	3.49	54.4	23.9	1.63	21.8	.01	.00	.05	115
	125 ISL	9.48	9.47	33.779	26.087	194.0	.360	3.29	51.0							126
1	134	9.37	9.36	33.822	26.139	189.3	.375	3.14	48.6	27.0	1.77	24.1	.01	.00	.04	135
	150 ISL	9.04	9.03	33.833	26.201	183.6	.407	3.17	48.8							151
1	154	8.95	8.93	33.836	26.218	182.1	.415	3.19	48.9	29.1	1.81	24.8	.01	.00	.03	155
1	173	8.63	8.62	33.932	26.342	170.5	.448	2.99	45.6	32.4	1.91	26.2	.01	.00	.04	174
1	194	8.38	8.35	33.989	26.426	162.9	.483	2.73	41.4	35.7	2.05	27.7	.00			195
	200 ISL	8.30	8.28	34.001	26.448	161.9	.493	2.70	40.8							201
1	214	8.11	8.09	34.022	26.493	156.8	.515	2.64	39.8	39.1	2.10	28.5	.00			215
1	249	7.69	7.67	34.044	26.572	149.7	.568	2.35	35.1	44.0	2.18	30.4	.00			250
	250 ISL	7.67	7.65	34.045	26.576	149.4	.570	2.33	34.8							252
1	297	7.14	7.11	34.091	26.688	139.3	.639	1.73	25.5	53.5	2.45	33.8	.00			299
	300 ISL	7.11	7.08	34.094	26.694	138.8	.642	1.70	25.0							302
1	352	6.69	6.65	34.139	26.788	133.4	.712	1.16	16.9	62.6	2.63	36.4	.00			354
	400 ISL	6.33	6.30	34.185	26.871	123.0	.773	.80	11.6							403
1	436	6.09	6.05	34.217	26.927	117.9	.817	.61	8.8	76.1	2.90	39.4	.00			439
	500 ISL	5.73	5.68	34.259	27.007	113.9	.890	.41	5.9							504
1	519	5.63	5.58	34.269	27.027	109.1	.911	.38	5.4	84.5	3.06	41.0	.00			523
	600 ISL	5.29	5.24	34.314	27.104	102.5	.996	.29	4.1							604
1	602	5.28	5.23	34.315	27.105	102.4	.998	.29	4.1	91.7	3.13	42.1	.00			606

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 80 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 48.8 N	121 50.7 W	11/10/84	0532 GMT	3658 M	270	09 KT	320 06 06	1	1015.0 MB	19.0 C	16.5 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	19.31	19.31	33.608	23.880	401.4	.000	5.37	101.8							0
1	1	19.31	19.31	33.608	23.880	401.6	.004	5.37	101.8	1.7	.23	.0	.00	.07	.04	1
	10 ISL	19.33	19.33	33.609	23.876	402.2	.040	5.40	102.3							10
1	11	19.33	19.33	33.609	23.876	402.2	.044	5.40	102.4	1.8	.25	.0	.01	.08	.03	11
	20 ISL	19.29	19.29	33.609	23.887	401.5	.080	5.42	102.7							20
1	25	19.27	19.25	33.608	23.892	401.3	.100	5.43	102.8	1.9	.25	.0	.00	.08	.04	25
	30 ISL	19.12	19.12	33.636	23.951	395.8	.120	5.53	104.4							30
1	41	17.84	17.84	33.641	24.272	365.6	.162	5.65	104.2	2.2	.28	.0	.00	.29	.13	41
	50 ISL	14.73	14.73	33.532	24.900	305.7	.192	5.46	94.6							50
1	55	13.12	13.11	33.516	25.222	275.2	.206	5.29	88.5	6.4	.68	4.9	.28	.92	.60	55
1	71	11.92	11.91	33.551	25.482	250.7	.248	4.38	71.6	11.3	1.07	12.3	.04	.23	.39	71
	75 ISL	11.66	11.65	33.572	25.545	244.7	.259	4.20	68.3							75
1	81	11.34	11.33	33.602	25.628	237.0	.272	4.00	64.6	14.5	1.22	15.1	.02	.12	.29	81
1	95	10.43	10.42	33.660	25.835	217.5	.304	3.67	58.1	19.7	1.48	19.3	.02	.04	.08	95
	100 ISL	10.12	10.11	33.668	25.895	211.9	.316	3.66	57.6							101
1	115	9.44	9.43	33.706	26.035	198.6	.347	3.63	56.3	23.3	1.62	21.8	.02	.00	.04	116
	125 ISL	9.26	9.25	33.779	26.123	190.6	.366	3.37	52.1							126
1	135	9.13	9.11	33.860	26.208	182.7	.385	3.08	47.5	28.5	1.82	24.9	.02	.01	.02	136
	150 ISL	8.80	8.79	33.923	26.309	173.3	.411	2.97	45.5							151
1	154	8.72	8.70	33.936	26.333	171.1	.419	2.96	45.2	31.8	1.89	26.2	.01	.01	.03	155
1	174	8.52	8.50	33.984	26.401	165.0	.452	2.77	42.1	34.9	1.98	27.1	.01	.00	.04	175
1	193	8.20	8.18	34.022	26.479	157.8	.483	2.60	39.3	37.9	2.07	28.4	.01			194
	200 ISL	8.12	8.10	34.031	26.499	155.1	.494	2.56	38.7							201
1	213	7.97	7.95	34.041	26.528	153.4	.513	2.50	37.6	40.9	2.13	29.2	.02			214
1	248	7.54	7.51	34.069	26.614	145.7	.565	2.13	31.7	46.5	2.29	31.5	.01			249
	250 ISL	7.51	7.49	34.070	26.618	145.3	.569	2.11	31.4							252
1	298	7.02	6.99	34.090	26.704	137.7	.637	1.75	25.7	54.0	2.49	34.0	.00			300
	300 ISL	7.00	6.97	34.092	26.708	137.4	.640	1.73	25.4							302
1	353	6.59	6.56	34.146	26.805	128.6	.710	1.09	15.9	62.9	2.75	37.0	.00			355
	400 ISL	6.35	6.32	34.183	26.867	123.4	.769	.81	11.7							403
1	437	6.19	6.15	34.208	26.908	119.8	.814	.68	9.8	71.8	2.95	38.8	.00			440
	500 ISL	5.83	5.79	34.255	26.991	112.5	.887	.47	6.8							504
1	521	5.70	5.66	34.271	27.020	109.9	.911	.42	6.0	81.8	3.11	40.9	.00			525
	600 ISL	5.24	5.19	34.325	27.117	101.1	.994	.29	4.2							604
1	606	5.21	5.16	34.328	27.124	100.5	1.000	.29	4.1	94.1	3.21	42.4	.00			610

RV DAVID STARR JORDAN CALCOFI CRUISE 8410 STATION 80 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 29.3 N	122 33.3 W	10/10/84	0610 GMT	4068 M	340	16 KT	350 08 08	1	1015.8 MB	17.5 C	15.2 C	2/8	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	17.64	17.64	33.330	24.081	382.3	.000	5.64	103.4							0
1	1	17.64	17.64	33.330	24.081	382.4	.004	5.64	103.4	2.3	.28	.0	.00	.13	.05	1
	10 ISL	17.65	17.65	33.340	24.087	382.8	.038	5.70	104.5							10
1	11	17.65	17.65	33.330	24.080	382.8	.042	5.71	104.7	2.1	.28	.0	.00	.13	.05	11
	20 ISL	17.52	17.52	33.346	24.123	379.0	.376	5.73	104.9							20
1	26	17.32	17.31	33.358	24.182	373.6	.399	5.75	104.8	1.6	.31	.0	.00	.14	.05	26
	30 ISL	17.19	17.18	33.284	24.155	368.3	.114	5.77	104.8							30
1	39	16.35	16.34	33.373	24.420	351.3	.146	5.85	104.6	1.5	.27	.0	.00	.25	.09	39
	50 ISL	12.98	12.97	32.959	24.819	313.4	.183	6.15	102.5							50
1	54	11.89	11.88	32.855	24.946	301.2	.194	6.22	101.2	3.1	.43	.5	.10	.50	.41	54
1	69	11.84	11.83	33.032	25.094	287.6	.238	5.75	93.5	4.6	.54	3.0	.04	.20	.23	69
	75 ISL	11.66	11.65	33.135	25.207	276.9	.255	5.52	89.4							75
1	79	11.50	11.49	33.190	25.279	270.1	.266	5.38	87.0	6.8	.71	5.9	.02	.09	.13	79
1	94	10.34	10.33	33.277	25.552	244.3	.304	4.92	77.6	12.0	1.01	11.8	.01	.02	.06	94
	100 ISL	10.08	10.07	33.363	25.662	233.9	.320	4.74	74.4							101
1	113	9.72	9.71	33.557	25.874	214.1	.350	4.34	67.5	17.7	1.32	17.4	.01	.01	.03	114
	125 ISL	9.32	9.31	33.665	25.024	199.9	.374	3.91	60.4							126
1	132	9.08	9.06	33.722	26.108	192.1	.388	3.65	56.1	25.8	1.64	22.9	.00	.00	.03	133
	150 ISL	8.65	8.63	33.844	26.271	175.8	.421	3.27	49.8							151
1	152	8.61	8.60	33.858	26.287	175.4	.425	3.23	49.2	31.1	1.81	25.5	.00	.00	.02	153
1	172	8.65	8.63	33.966	26.367	168.2	.459	2.78	42.4	34.7	1.95	27.0	.00	.00	.03	173
1	191	8.50	8.48	34.021	26.433	162.2	.490	2.52	38.3	37.2	2.04	28.0	.00			192
	200 ISL	8.40	8.37	34.039	26.463	159.6	.505	2.44	37.0							201
1	211	8.25	8.23	34.053	26.497	156.5	.522	2.36	35.7	40.3	2.14	29.0	.00			212
1	245	7.64	7.62	34.071	26.601	146.9	.573	2.04	30.4	47.0	2.30	31.8	.00			246
	250 ISL	7.58	7.56	34.077	26.614	145.7	.581	1.98	29.5							252
1	293	7.25	7.22	34.131	26.704	137.8	.642	1.49	22.0	54.5	2.53	34.1	.00			295
	300 ISL	7.19	7.17	34.136	26.716	136.7	.651	1.43	21.1							302
1	347	6.81	6.78	34.158	26.794	129.8	.714	1.07	15.7	62.7	2.69	36.5	.00			349
	400 ISL	6.34	6.31	34.216	26.894	120.8	.780	.72	10.5							403
1	430	6.11	6.07	34.245	26.948	115.9	.816	.57	8.2	76.4	2.96	39.4	.00			433
	500 ISL	5.77	5.72	34.300	27.035	109.3	.894	.38	5.4							504
1	513	5.71	5.67	34.310	27.049	107.1	.909	.36	5.1	84.8	3.12	40.6	.00			517
1	596	5.31	5.26	34.358	27.135	99.5	.994	.29	4.1	93.7	3.16	41.7	.00			600

RV DAVID STARR JORDAN CALCOFI CRUISE 8410 STATION 80 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 39.6 N	123 13.9 W	09/10/84	2350 GMT	4206 M	340	14 KT	350 07 07	1	1016.5 MB	19.5 C	16.0 C	2/8	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	18.67	18.66	33.471	23.938	395.9	.000	5.52	103.3							0
1	1	18.67	18.66	33.471	23.938	396.0	.004	5.52	103.3	1.4	.24	.0	.00	.10	.01	1
	10 ISL	18.68	18.67	33.471	23.936	396.6	.040	5.53	103.5							10
1	11	18.68	18.68	33.470	23.935	396.6	.043	5.53	103.5	1.1	.23	.0	.00	.09	.03	11
	20 ISL	18.52	18.52	33.467	23.971	393.5	.079	5.55	103.5							20
1	26	18.42	18.42	33.465	23.995	391.5	.102	5.56	103.5	1.0	.23	.0	.00	.10	.03	26
	30 ISL	18.16	18.15	33.453	24.051	386.3	.118	5.61	104.0							30
1	41	16.99	16.98	33.381	24.277	365.0	.159	5.81	105.2	1.0	.25	.0	.00	.23	.09	41
	50 ISL	15.24	15.23	33.256	24.577	335.5	.191	6.03	105.4							50
1	56	14.14	14.13	33.192	24.763	319.9	.210	6.11	104.4	2.1	.36	.2	.22	.68	.34	56
1	71	12.75	12.74	33.142	25.006	296.1	.256	5.74	95.2	3.5	.56	3.4	.31	.53	.41	71
	75 ISL	12.52	12.51	33.177	25.076	289.4	.269	5.61	92.6							75
1	80	12.31	12.30	33.222	25.153	282.2	.282	5.46	89.8	4.8	.64	4.9	.13	.27	.33	80
1	95	11.48	11.47	33.339	25.375	261.4	.322	5.09	82.3	8.0	.86	9.1	.09	.11	.14	95
	100 ISL	11.25	11.24	33.351	25.449	254.4	.336	4.96	79.8							101
1	115	10.64	10.63	33.478	25.657	234.9	.374	4.55	72.3	13.5	1.14	14.3	.08	.02	.06	116
	125 ISL	10.21	10.20	33.555	25.791	222.3	.396	4.24	66.7							126
1	134	9.80	9.79	33.629	25.919	210.3	.416	3.94	61.5	20.4	1.42	19.3	.06	.00	.04	135
	150 ISL	9.20	9.19	33.748	26.109	192.4	.448	3.61	55.7							151
1	154	9.07	9.05	33.778	26.154	188.2	.456	3.54	54.4	25.9	1.65	23.1	.06	.00	.03	155
1	174	8.67	8.65	33.890	26.304	174.2	.492	3.19	48.6	31.0	1.79	25.6	.06	.00	.03	175
1	194	8.35	8.33	33.960	26.407	164.6	.520	2.97	45.0	34.3	1.89	26.9	.08			195
	200 ISL	8.27	8.25	33.969	26.427	162.9	.535	3.02	45.6							201
1	214	8.08	8.06	33.980	26.464	159.6	.558	3.15	47.4	35.7	1.91	26.7	.08			215
1	248	7.56	7.54	34.007	26.562	150.6	.613	2.85	42.4	41.9	2.04	28.9	.07			249
	250 ISL	7.54	7.52	34.010	26.567	150.1	.614	2.82	41.9							252
1	296	7.17	7.14	34.053	26.653	142.5	.681	2.12	31.3	50.1	2.29	32.4	.07			298
	300 ISL	7.12	7.10	34.055	26.662	141.8	.687	2.08	30.6							302
1	353	6.44	6.41	34.073	26.768	132.1	.759	1.54	22.3	60.9	2.57	36.2	.03			355
	400 ISL	6.02	5.99	34.108	26.850	124.6	.820	1.07	15.3							403
1	435	5.77	5.76				.862	.78	11.1	75.7	2.88	39.7	.03			437
	500 ISL	5.30	5.26	34.191	27.004	113.7	.937	.52	7.3							504
1	518	5.20	5.15	34.206	27.028	108.5	.956	.48	6.8	87.9	3.06	41.8	.01			521
	600 ISL	4.83	4.79	34.280	27.129	99.5	1.042	.30	4.2							604
1	602	4.83	4.78	34.281	27.130	99.3	1.044	.30	4.2	98.1	3.14	43.1	.01			606

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 80 100

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 49.2 N	123 55.1 W	09/10/84	1650 GMT	4389 M	350	15 KT	320 06 09	1	1019.0 MB	19.6 C	16.1 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	18.60	18.60	33.453	23.937	395.1	.000	5.51	103.0							0
1	2	18.60	18.60	33.453	23.937	395.1	.008	5.51	103.0	1.4	.29	.0	.00	.09	.04	2
	10 ISL	18.60	18.59	33.451	23.941	395.1	.040	5.55	103.7							10
1	12	18.59	18.59	33.451	23.942	395.1	.047	5.56	103.9	1.4	.27	.0	.00	.09	.04	12
	20 ISL	18.51	18.51	33.458	23.967	393.9	.079	5.57	103.9							20
1	27	18.40	18.40	33.462	23.997	391.3	.106	5.58	103.9	1.5	.30	.0	.00	.09	.00	27
	30 ISL	18.34	18.34	33.460	24.011	390.1	.118	5.58	103.7							30
1	41	18.12	18.12	33.454	24.060	385.8	.160	5.56	103.0	1.2	.31	.0	.00	.26	.05	41
	50 ISL	15.54	15.54	33.282	24.531	341.0	.194	5.93	104.3							50
1	57	13.52	13.52	33.209	24.903	305.6	.215	6.11	103.1	2.6	.41	.9	.10	.43	.14	57
1	70	12.47	12.46	33.238	25.133	283.9	.254	5.47	90.3	4.7	.67	5.8	.08	.42	.35	70
	75 ISL	12.09	12.08	33.244	25.212	276.5	.269	5.33	87.3							75
1	81	11.69	11.68	33.262	25.299	268.3	.284	5.21	84.6	7.5	.84	9.0	.03	.29	.31	81
1	96	10.79	10.78	33.427	25.591	242.8	.322	4.71	75.1	12.8	1.12	14.3	.02	.07	.11	96
	100 ISL	10.56	10.54	33.471	25.666	235.7	.332	4.54	72.0							101
1	115	9.86	9.84	33.617	25.898	211.8	.367	3.93	61.4	20.7	1.50	20.2	.01	.02	.04	116
	125 ISL	9.53	9.52	33.708	26.023	200.1	.387	3.57	55.4							126
1	135	9.25	9.24	33.791	26.134	189.7	.407	3.24	50.0	28.1	1.75	24.7	.01	.00	.03	136
	150 ISL	8.99	8.97	33.847	26.219	181.9	.434	3.02	46.6							151
1	155	8.91	8.89	33.860	26.243	179.7	.443	2.98	45.7	31.0	1.87	26.1	.00	.00	.02	156
1	174	8.53	8.51	33.939	26.364	168.5	.475	2.91	44.3	34.3	1.90	26.7	.00	.00	.01	175
1	194	8.16	8.14	33.992	26.462	159.4	.509	2.85	43.0	37.5	1.97	27.7	.00			195
	200 ISL	8.06	8.04	34.003	26.485	157.3	.518	2.80	42.2							201
1	214	7.85	7.83	34.021	26.531	153.1	.540	2.67	40.0	40.8	2.06	29.1	.00			215
1	249	7.40	7.37	34.038	26.609	145.1	.592	2.35	34.8	46.8	2.20	31.1	.01			250
	250 ISL	7.38	7.35	34.038	26.612	145.8	.594	2.34	34.7							252
1	297	6.67	6.64	34.042	26.713	135.6	.661	1.94	28.3	56.1	2.39	34.2	.00			299
	300 ISL	6.63	6.60	34.043	26.719	135.0	.664	1.91	27.8							302
1	351	5.98	5.94	34.059	26.824	125.3	.731	1.31	18.3	68.6	2.68	38.1	.00			353
	400 ISL	5.65	5.62	34.109	26.896	119.8	.792	.95	13.6							403
1	434	5.50	5.46	34.140	26.939	115.1	.832	.78	11.1	80.8	2.92	40.6	.00			437
	500 ISL	5.13	5.09	34.195	27.027	108.3	.906	.50	7.0							504
1	517	5.04	5.00	34.208	27.048	106.4	.923	.45	6.3	91.8	3.06	42.1	.00			520
	600 ISL	4.76	4.71	34.271	27.145	97.7	1.009	.28	3.9							604
1	601	4.76	4.71	34.272	27.147	97.6	1.009	.28	3.9	101.7	3.15	43.1	.00			605

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 92 46

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 15.8 N	119 53.7 W	07/10/84	2030 GMT	540 M	300	08 KT	300 01 01	4	1020.8 MB	17.2 C	16.2 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	16.73	16.73	33.468	24.404	352.3	.000	5.95	107.2							0
1	1	16.73	16.73	33.468	24.404	351.6	.004	5.95	107.2	3.5	.32	.0	.00	.51	.18	1
	10 ISL	16.33	16.33	33.470	24.498	342.9	.035	6.10	109.1							10
1	11	16.27	16.27	33.470	24.510	341.7	.038	6.11	109.2	2.9	.31	.0	.00	.56	.23	11
1	20	15.63	15.62	33.470	24.655	329.1	.068	6.19	109.2	3.5	.33	.0	.03	2.14	.77	20
	30 ISL	14.59	14.59	33.484	24.892	309.4	.103	5.78	99.9							30
1	31	14.50	14.50	33.449	24.885	306.6	.103	5.73	98.8	4.4	.47	1.8	.14	1.08	.70	31
1	41	13.63	13.62	33.499	25.106	285.9	.132	5.14	87.1	6.5	.65	5.1	.09	.26	.29	41
	50 ISL	13.12	13.11	33.531	25.233	274.0	.158	4.82	80.8							50
1	51	13.09	13.08	33.533	25.241	273.3	.160	4.80	80.4	8.7	.78	7.7	.03	.16	.19	51
1	60	12.79	12.78	33.546	25.311	266.8	.184	4.71	78.4	8.9	.85	8.6	.02	.09	.27	60
1	69	12.17	12.16	33.580	25.457	253.1	.208	4.36	71.7	11.5	.94	11.3	.02	.07	.15	69
	75 ISL	11.92	11.92	33.595	25.514	247.7	.223	4.24	69.3							75
1	84	11.71	11.70	33.611	25.567	242.9	.249	4.13	67.2	14.0	1.04	13.4	.01	.05	.16	84
1	100	11.32	11.33	33.651	25.671	233.4	.282	3.84	62.0	16.2	1.14	15.3	.01	.01	.13	100
1	119	10.87	10.85	33.691	25.783	223.1	.328	3.60	57.6	18.7	1.27	17.3	.01	.01	.10	120
	125 ISL	10.72	10.70	33.711	25.825	219.2	.340	3.51	55.9							126
1	143	10.23	10.22	33.750	25.963	205.4	.379	3.20	50.5	23.0	1.46	20.9	.01	.01	.08	144
	150 ISL	10.09	10.08	33.836	25.007	202.3	.393	3.10	48.7							151
1	174	9.71	9.69	33.884	26.133	190.8	.440	2.81	43.9	27.3	1.63	23.7	.00			175
	200 ISL	9.48	9.46	33.929	26.206	184.4	.489	2.69	41.7							201
1	204	9.45	9.43	33.935	26.216	183.5	.496	2.67	41.4	30.5	1.71	25.1	.00			205
1	238	8.86	8.84	34.034	26.388	167.6	.555	2.26	34.6	36.9	1.90	27.7	.00			239
	250 ISL	8.67	8.64	34.060	26.439	162.9	.576	2.11	32.3							252
1	288	8.15	8.12	34.115	26.561	151.7	.636	1.71	25.8	46.9	2.15	30.8	.01			290
	300 ISL	8.03	8.00	34.123	26.586	149.6	.653	1.62	24.4							302
1	348	7.56	7.53	34.142	26.669	142.2	.723	1.28	19.1	57.0	2.34	33.2	.01			350
	400 ISL	6.96	6.92	34.176	26.781	132.1	.795	.84	12.3							403
1	407	6.87	6.83	34.181	26.798	130.5	.804	.77	11.3	73.3	2.59	35.1	.00			410

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 83 40.4

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 13.0 N	119 23.5 W	08/10/84	0023 GMT	37 M	300	13 KT	300 02 02	4	1018.0 MB	17.5 C	16.5 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	18.40	18.40	33.528	24.047	385.7	.000	5.67	105.6							0
1	1	18.40	18.40	33.528	24.047	385.6	.004	5.67	105.6	3.4	.29	.0	.00	.22	.07	1
	10 ISL	18.36	18.35	33.525	24.057	385.0	.039	5.75	106.9							10
1	11	18.35	18.35	33.524	24.057	385.0	.042	5.76	107.2	3.3	.27	.0	.00	.21	.08	11
	20 ISL	17.29	17.29	33.484	24.284	363.6	.376	5.95	108.5							20
1	21	17.14	17.13	33.479	24.317	360.5	.379	5.97	108.5	3.3	.31	.0	.00	.43	.26	21
	30 ISL	15.40	15.40	33.447	24.689	325.3	.711	5.86	102.9							30
1	31	15.200	15.195	33.446	24.732	321.2	.713	5.85	102.3	4.4	.45	.0	.25	1.22	.66	31

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 83 42

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
34 10.6 N	119 31.0 W	08/10/84	0212 GMT	176 M	280	14 KT	300 02 02	4	1018.0 MB	17.5 C	15.5 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	17.87	17.87	33.517	24.168	374.0	.000	5.75	106.0							0
1	1	17.87	17.87	33.517	24.168	374.0	.004	5.75	106.0	3.2	.32	.0	.00	.37	.15	1
	10 ISL	17.86	17.86	33.519	24.173	373.9	.037	5.84	107.5							10
1	11	17.86	17.86	33.519	24.173	373.9	.041	5.84	107.5	3.2	.28	.0	.00	.36	.22	11
	20 ISL	17.29	17.29	33.510	24.305	361.7	.074	5.84	106.4							20
1	21	17.21	17.21	33.508	24.322	360.1	.078	5.84	106.3	3.4	.31	.0	.00	.69	.31	21
	30 ISL	16.42	16.41	33.483	24.487	344.6	.110	5.83	104.5							30
1	31	16.33	16.33	33.479	24.504	343.0	.113	5.83	104.3	3.8	.35	.0	.08	1.10	.43	31
1	41	15.18	15.18	33.407	24.707	324.0	.146	6.10	106.6	2.9	.32	.0	.02	.79	.51	41
	50 ISL	13.74	13.74	33.348	24.966	299.4	.176	5.93	100.5							50
1	51	13.63	13.62	33.345	24.987	297.5	.177	5.90	99.8	3.7	.46	1.2	.08	.76	.41	51
1	61	13.08	13.07	33.354	25.105	286.5	.206	5.57	93.2	5.2	.60	3.8	.20	.44	.44	61
1	71	12.42	12.41	33.462	25.318	266.4	.233	5.00	82.5	7.7	.80	8.0	.06	.24	.33	71
	75 ISL	12.21	12.20	33.507	25.393	259.3	.245	4.77	78.4							75
1	86	11.81	11.80	33.595	25.536	245.9	.271	4.30	70.1	12.4	1.04	12.1	.02	.06	.14	86
	100 ISL	11.48	11.47	33.633	25.628	237.5	.306	4.05	65.6							101
1	105	11.38	11.36	33.640	25.651	235.3	.317	4.00	64.7	15.2	1.20	14.6	.03	.04	.11	105
	125 ISL	10.49	10.47	33.758	25.902	211.8	.363	3.39	53.8							126
1	128	10.329	10.314	33.781	25.947	207.6	.370	3.29	52.0	22.4	1.53	20.1	.01	.00	.08	129
	150 ISL	9.61	9.59	33.897	26.160	187.7	.412	2.90	45.1							151
1	152	9.55	9.53	33.909	26.179	185.9	.417	2.87	44.6	28.8	1.90	24.4	.02	.00	.09	153

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 83 51

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
33 52.8 N	120 37.8 W	08/10/84	0819 GMT	112 M	290	16 KT			1018.0 MB	17.5 C	15.5 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	17.30	17.30	33.539	24.301	361.7	.000	5.72	104.3							0
1	1	17.30	17.30	33.539	24.301	361.4	.004	5.72	104.3	2.2	.26	.0	.00	1.13	.22	1
	10 ISL	17.16	17.16	33.510	24.334	358.5	.036	5.78	105.1							10
1	11	17.15	17.14	33.510	24.338	358.2	.039	5.79	105.2	2.4	.29	.0	.01	1.40	.40	11
	20 ISL	16.29	16.29	33.508	24.535	339.7	.071	5.70	101.9							20
1	21	16.21	16.20	33.508	24.555	337.8	.074	5.69	101.5	3.8	.41	.8	.10	1.69	.55	21
	30 ISL	15.99	15.99	33.481	24.583	335.4	.105	5.62	99.9							30
1	31	15.97	15.96	33.479	24.588	335.0	.108	5.61	99.6	4.0	.44	1.5	.11	1.31	.59	31
1	41	14.76	14.75	33.509	24.876	307.8	.140	5.33	92.4	6.1	.61	3.8	.16	.70	.42	41
	50 ISL	13.14	13.13	33.532	25.231	274.2	.166	4.90	82.1							50
1	51	13.01	13.00	33.535	25.259	271.5	.168	4.86	81.3	9.1	.85	7.9	.14	.24	.32	51
1	61	12.27	12.27	33.576	25.433	255.1	.195	4.52	74.5	11.7	1.02	11.2	.07	.13	.26	61
	75 ISL	11.66	11.65	33.620	25.583	241.2	.231	4.20	68.4							75
1	77	11.63	11.62	33.624	25.593	240.3	.235	4.18	67.9	14.8	1.19	13.9	.06	.09	.18	77

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 83 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
33 45.6 N	120 25.4 W	08/10/84	1136 GMT	950 M	330	17 KT			1018.0 MB	17.0 C	16.0 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	18.24	18.24	33.530	24.089	381.6	.000	5.47	101.6							0
1	1	18.24	18.24	33.530	24.089	381.6	.004	5.47	101.6	2.3	.25	.4	.01	.20	.06	1
	10 ISL	18.24	18.24	33.529	24.088	381.9	.038	5.62	104.4							10
1	11	18.24	18.24	33.530	24.089	382.0	.042	5.63	104.5	2.3	.25	.4	.00	.21	.07	11
	20 ISL	18.25	18.25	33.529	24.086	382.6	.076	5.58	103.6							20
1	22	18.26	18.25	33.528	24.085	382.7	.084	5.57	103.4	1.7	.24	.4	.00	.22	.07	22
	30 ISL	17.75	17.75	33.512	24.195	372.5	.114	5.67	104.3							30
1	31	17.67	17.67	33.508	24.211	371.0	.118	5.69	104.5	2.0	.29	.4	.00	.40	.13	31
1	41	16.42	16.42	33.407	24.428	350.5	.153	5.94	106.4	2.5	.29	.5	.00	1.03	.24	41
	50 ISL	15.19	15.19	33.311	24.630	331.5	.185	6.04	105.5							50
1	56	14.55	14.54	33.301	24.765	319.0	.204	6.10	105.1	2.8	.35	.4	.04	.59	.50	56
1	65	14.06	14.05	33.456	24.984	298.1	.231	5.69	97.2	4.5	.51	3.0	.19	.47	.29	65
1	75	12.66	12.65	33.517	25.313	265.9	.259	4.91	81.5	9.4	.84	8.7	.09	.23	.27	75
1	90	11.97	11.96	33.563	25.482	251.2	.298	4.50	73.6	11.0	.98	11.7	.03	.13	.18	90
	100 ISL	11.80	11.79	33.580	25.526	247.3	.324	4.39	71.5							101
1	110	11.67	11.65	33.596	25.564	243.8	.347	4.29	69.8	13.0	1.07	13.2	.02	.10	.14	110
	125 ISL	10.96	10.94	33.662	25.744	227.0	.384	3.88	62.1							126
1	129	10.73	10.71	33.685	25.803	221.4	.393	3.75	59.8	18.3	1.32	17.6	.01	.05	.08	130
	150 ISL	9.77	9.75	33.796	26.054	197.8	.437	3.31	51.8							151
1	153	9.64	9.62	33.813	26.089	194.5	.443	3.26	50.3	25.2	1.67	22.6	.01	.02	.06	154
1	183	9.12	9.10	33.912	26.250	179.6	.499	2.98	45.9	30.3	1.77	25.2	.01			184
	200 ISL	8.79	8.77	33.987	26.362	169.3	.528	2.69	41.2							201
1	213	8.56	8.53	34.040	26.440	162.1	.550	2.45	37.3	37.5	2.01	27.8	.00			214
1	247	8.19	8.17	34.101	26.543	152.7	.603	1.85	27.9	43.3	2.20	30.2	.00			248
	250 ISL	8.15	8.13	34.104	26.552	151.9	.608	1.82	27.5							252
1	296	7.60	7.57	34.141	26.663	141.9	.676	1.59	23.7	51.3	2.40	32.3	.00			298
	300 ISL	7.56	7.53	34.145	26.671	141.2	.681	1.56	23.2							302
1	350	7.08	7.05	34.182	26.768	132.5	.749	1.12	16.5	59.5	2.63	35.2	.00			352
	400 ISL	6.40	6.36	34.152	26.836	126.3	.814	.97	14.1							403
1	434	6.00	5.97	34.139	26.877	122.5	.857	.91	13.1	72.1	2.76	38.7	.00			437
	500 ISL	5.97	5.92	34.257	26.975	114.1	.939	.54	7.7							504
1	519	5.95	5.91	34.289	27.003	111.8	.957	.43	6.2	79.8	3.01	39.8	.00			523
	600 ISL	5.63	5.57	34.289	27.044	105.6	1.044	.32	4.5							604
1	603	5.61	5.55	34.329	27.079	105.4	1.047	.32	4.6	87.5	3.09	40.9	.00			607

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 93 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 36.5 N	120 47.0 W	08/10/84	1602 GMT	1646 M	340	12 KT	350 06 05	2	1017.8 MB	17.8 C	15.2 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	18.60	18.60	33.540	24.007	389.4	.000	5.50	102.8							0
1	1	18.60	18.60	33.540	24.007	389.4	.004	5.50	102.8		.24	.0	.00	.25	.10	1
	10 ISL	18.60	18.60	33.536	24.004	389.7	.039	5.54	103.5							10
1	12	18.60	18.60	33.541	24.008	389.8	.047	5.55	103.8		.24	.0	.00	.25	.08	12
	20 ISL	18.28	18.27	33.532	24.082	392.9	.373	5.62	104.5							20
1	21	18.24	18.23	33.531	24.091	392.1	.381	5.63	104.5		.25	.0	.00	.26	.10	21
	30 ISL	18.16	18.16	33.530	24.109	390.7	.116	5.59	103.7							30
1	32	18.15	18.14	33.530	24.113	390.4	.123	5.58	103.6		.25	.0	.00	.36	.05	32
1	42	18.10	18.09	33.525	24.122	389.9	.161	5.60	103.7		.25	.0	.00	.32	.11	42
	50 ISL	15.75	15.74	33.395	24.572	337.1	.190	5.95	105.2							50
1	56	13.92	13.91	33.347	24.930	303.1	.209	6.09	103.7		.45	1.0	.07	.46	.32	56
1	66	12.90	12.89	33.379	25.159	281.4	.238	5.44	90.7		.67	5.8	.17	.30	.40	66
	75 ISL	12.46	12.45	33.429	25.283	269.8	.263	5.16	85.2							75
1	77	12.41	12.40	33.439	25.301	268.1	.268	5.12	84.5		.82	8.6	.07	.16	.32	77
1	92	11.76	11.75	33.504	25.474	251.9	.307	4.72	76.9		1.00	11.6	.02	.13	.14	92
	100 ISL	11.51	11.49	33.540	25.550	244.9	.327	4.54	73.6							101
1	112	11.14	11.12	33.595	25.660	234.7	.355	4.27	68.6		1.17	14.6	.01	.05	.07	112
	125 ISL	10.44	10.43	33.683	25.851	216.7	.385	3.77	59.7							126
1	131	10.12	10.11	33.724	25.938	208.5	.399	3.54	55.7		1.49	19.9	.00	.01	.05	132
	150 ISL	9.66	9.64	33.794	26.070	195.2	.437	3.29	51.3							151
1	155	9.57	9.55	33.809	26.097	193.8	.447	3.26	50.7		1.65	22.6	.00	.01	.03	156
1	184	8.96	8.94	33.913	26.277	177.0	.503	3.01	46.2		1.81	25.2	.00			185
	200 ISL	8.73	8.71	33.949	26.340	171.3	.528	2.97	45.3							201
1	214	8.57	8.54	33.969	26.382	167.5	.552	2.94	44.7		1.99	26.3	.00			215
1	249	8.12	8.10	34.016	26.487	158.1	.605	2.72	41.0		2.32	28.0	.00			250
	250 ISL	8.10	8.07	34.017	26.491	157.8	.610	2.71	40.9							252
1	297	7.26	7.23	34.060	26.646	143.2	.681	2.13	31.5		2.30	32.0	.01			299
	300 ISL	7.22	7.19	34.062	26.653	142.6	.685	2.10	31.0							302
1	381	6.33	6.29	34.096	26.801	129.2	.795	1.27	18.4		2.65	37.0	.00			383
	400 ISL	6.20	6.17	34.109	26.828	126.9	.820	1.14	16.4							403
1	434	6.04	6.01	34.138	26.871	123.1	.863	.93	13.4		2.85	39.7	.02			437
	500 ISL	5.94	5.90	34.238	26.964	115.2	.941	.53	7.7							504
1	516	5.92	5.88	34.261	26.985	113.4	.959	.46	6.6		3.01	39.7	.00			519
1	630	5.49	5.44	34.299	27.068	106.2	1.051	.35	5.0		3.18	41.2	.00			604

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 93 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 14.0 N	121 26.2 W	08/10/84	2201 GMT	3794 M	350	14 KT	350 06 06	2	1018.9 MB	19.0 C	17.2 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	18.75	18.75	33.651	24.055	384.9	.000	5.51	103.4							0
1	1	18.75	18.75	33.651	24.055	384.9	.004	5.51	103.4	2.9	.22	.0	.00	.13	.05	1
	10 ISL	18.74	18.74	33.651	24.057	385.0	.038	5.55	104.1							10
1	11	18.74	18.74	33.651	24.057	385.0	.042	5.55	104.1	2.7	.25	.0	.00	.13	.05	11
	20 ISL	18.74	18.74	33.652	24.058	385.3	.077	5.55	104.1							20
1	21	18.74	18.74	33.652	24.058	385.3	.081	5.55	104.1	2.7	.22	.0	.00	.13	.05	21
	30 ISL	18.72	18.72	33.653	24.064	385.0	.116	5.50	103.3							30
1	31	18.72	18.71	33.653	24.065	385.0	.119	5.49	102.9	2.4	.25	.0	.00	.14	.07	31
1	40	14.97	14.97	33.543	24.857	307.6	.150	6.04	105.2	4.2	.36	.0	.00	.45	.23	40
	50 ISL	12.89	12.88	33.554	25.296	268.9	.179	5.30	88.4							50
1	56	12.33	12.32	33.545	25.399	258.3	.195	4.68	77.2	10.1	.92	7.8	.19	.55	.39	56
1	66	11.54	11.53	33.571	25.567	242.4	.220	4.26	69.1	13.0	1.11	12.1	.06	.25	.34	66
	75 ISL	11.04	11.03	33.646	25.716	229.5	.241	3.78	60.7							75
1	76	11.01	11.00	33.651	25.725	227.5	.243	3.75	60.1	17.1	1.31	15.9	.02	.12	.20	76
1	90	10.63	10.62	33.688	25.822	219.6	.274	3.58	57.3	19.2	1.43	17.9	.01	.05	.15	90
	100 ISL	10.31	10.30	33.727	25.907	211.8	.296	3.44	54.4							101
1	110	10.00	9.99	33.770	25.994	202.7	.318	3.30	51.8	23.5	1.61	21.1	.01	.01	.06	111
	125 ISL	9.61	9.60	33.825	26.101	192.7	.347	3.14	48.9							126
1	130	9.48	9.47	33.844	26.139	189.3	.357	3.08	47.8	27.1	1.73	23.5	.00	.00	.05	131
	150 ISL	9.08	9.07	33.916	26.260	178.1	.393	2.82	43.5							151
1	155	8.99	8.97	33.934	26.289	175.4	.402	2.76	42.6	31.4	1.85	25.9	.00	.00	.03	156
1	185	8.42	8.41	34.005	26.432	162.2	.453	2.58	39.2	36.8	2.00	28.6	.00			186
	200 ISL	8.25	8.23	34.023	26.473	159.6	.477	2.53	38.2							201
1	213	8.12	8.10	34.034	26.501	156.0	.497	2.46	37.1	40.3	2.08	33.0	.00			214
1	249	7.73	7.70	34.087	26.601	147.0	.551	1.99	29.7	46.6	2.28	32.5	.00			250
	250 ISL	7.71	7.68	34.089	26.605	146.7	.553	1.97	29.5							252
1	296	7.15	7.12	34.122	26.711	137.1	.619	1.52	22.4	55.6	2.50	35.4	.01			298
	300 ISL	7.09	7.06	34.121	26.719	136.4	.624	1.50	22.1							302
1	351	6.37	6.34	34.106	26.802	129.7	.691	1.24	18.3	64.9	2.68	39.0	.01			353
	400 ISL	6.29	6.26	34.193	26.883	121.8	.753	.87	12.5							403
1	433	6.23	6.20	34.245	26.931	117.6	.792	.64	9.2	74.3	2.91	41.0	.00			436
	500 ISL	5.85	5.81	34.290	27.016	110.2	.859	.53	7.6							504
1	515	5.75	5.71	34.296	27.033	108.7	.885	.52	7.4	83.5	3.04	42.8	.00			519
1	597	5.39	5.34	34.334	27.108	102.2	.971	.30	4.2	91.3	3.12	44.1	.00			601

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 83 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
32 54.4 N	122 37.4 W	09/10/84	0331 GMT	4100 M	320	14 KT			1018.2 MB	18.1 C	17.2 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	19.16	19.15	33.664	23.962	393.8	.000	5.46	103.2							0
1	2	19.16	19.16	33.664	23.962	393.8	.008	5.46	103.2	2.0	.24	.0	.00	.11	.04	2
	10 ISL	19.14	19.14	33.662	23.965	393.7	.039	5.51	104.2							10
1	12	19.13	19.13	33.662	23.965	393.7	.047	5.53	104.5	1.9	.24	.0	.00	.11	.03	12
	20 ISL	19.13	19.12	33.671	23.976	393.1	.079	5.60	105.9							20
1	22	19.12	19.12	33.673	23.978	392.9	.086	5.62	106.2	1.9	.22	.0	.00	.13	.03	22
	30 ISL	16.45	16.45	33.492	24.487	344.6	.116	6.10	109.3							30
1	32	15.75	15.75	33.461	24.622	331.8	.122	6.19	109.4	3.3	.33	.0	.00	.38	.13	32
1	42	14.24	14.23	33.457	24.948	301.0	.156	5.91	101.3	4.1	.47	1.1	.15	1.43	.53	42
	50 ISL	12.97	12.96	33.479	25.223	274.9	.177	5.23	87.4							50
1	56	12.23	12.23	33.535	25.386	259.5	.193	4.73	77.8	10.1	.95	10.0	.13	.34	.43	56
1	66	11.69	11.69	33.546	25.519	247.0	.218	4.34	70.6	12.7	1.14	13.4	.04	.23	.35	66
	75 ISL	11.09	11.09	33.577	25.653	235.8	.243	4.23	67.9							75
1	76	11.05	11.04	33.546	25.636	235.0	.242	4.22	67.7	13.9	1.17	14.2	.03	.13	.18	76
1	91	10.30	10.29	33.630	25.833	217.6	.275	3.85	60.8	18.9	1.39	18.1	.01	.03	.12	91
	100 ISL	9.92	9.91	33.645	25.909	210.5	.295	3.85	60.4							101
1	109	9.58	9.57	33.659	25.976	204.2	.315	3.86	60.0	22.4	1.52	20.5	.01	.00	.03	110
	125 ISL	9.10	9.09	33.753	26.128	190.0	.346	3.61	55.5							126
1	129	9.00	8.99	33.784	26.169	186.2	.355	3.51	53.9	27.3	1.69	23.4	.01	.00	.03	130
	150 ISL	8.80	8.79	33.894	26.286	175.4	.392	3.06	46.9							151
1	155	8.77	8.76	33.916	26.308	173.5	.401	2.96	45.3	31.9	1.85	26.1	.01	.00	.03	156
1	185	8.37	8.35	33.977	26.418	163.5	.451	2.86	43.3	35.4	1.96	27.2	.01			186
	200 ISL	8.20	8.18	33.994	26.457	160.0	.475	2.86	43.2							201
1	215	8.04	8.02	34.010	26.494	156.7	.499	2.86	43.0	38.1	2.01	28.1	.01			216
1	250	7.65	7.62	34.079	26.606	146.5	.552	2.17	32.4	45.7	2.24	30.9	.01			251
1	299	7.11	7.09	34.122	26.716	136.7	.622	1.52	22.4	54.5	2.52	34.1	.01			301
	300 ISL	7.11	7.08	34.123	26.717	136.5	.623	1.51	22.3							302
1	354	6.66	6.62	34.174	26.819	127.4	.694	.99	14.4	64.2	2.75	36.8	.01			356
	400 ISL	6.35	6.32	34.213	26.891	121.1	.751	.73	10.6							403
1	438	6.14	6.10	34.243	26.942	116.6	.797	.59	8.5	74.7	2.95	39.1	.01			441
	500 ISL	5.80	5.76	34.282	27.016	110.1	.867	.40	5.8							504
1	520	5.69	5.65	34.294	27.039	108.2	.889	.36	5.1	83.5	3.08	40.6	.00			524
	600 ISL	5.34	5.29	34.342	27.120	101.0	.972	.27	3.8							604
1	602	5.34	5.28	34.344	27.122	100.9	.974	.27	3.8	90.6	3.20	41.7	.00			606

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 93 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
32 34.5 N	122 48.9 W	09/10/84	0903 GMT	4280 M	300	12 KT			1017.3 MB	18.0 C	17.9 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	19.31	19.30	33.637	23.903	399.3	.000	5.47	103.7							0
1	1	19.31	19.30	33.637	23.903	399.3	.004	5.47	103.7	1.6	.20	.0	.00	.09	.02	1
	10 ISL	19.23	19.23	33.639	23.901	398.1	.043	5.47	103.5							10
1	11	19.22	19.22	33.635	23.923	397.8	.044	5.47	103.5	1.9	.20	.0	.00	.09	.02	11
1	20	18.91	18.91	33.579	23.963	396.6	.079	5.51	103.6	1.7	.21	.0	.00	.11	.03	20
	30 ISL	18.60	18.59	33.568	24.031	388.2	.119	5.53	103.4							30
1	31	18.57	18.56	33.567	24.037	387.6	.122	5.53	103.3	1.3	.19	.0	.00	.20	.08	31
1	40	14.55	14.55	33.354	24.801	314.9	.154	6.26	108.3	2.4	.36	.0	.00	.56	.22	40
	50 ISL	12.93	12.92	33.293	25.086	287.9	.184	5.95	99.2							50
1	55	12.69	12.68	33.281	25.125	284.4	.199	5.62	93.2	4.7	.62	4.9	.13	.70	.39	55
1	64	11.81	11.80	33.310	25.314	266.5	.223	5.24	85.3	7.3	.82	8.9	.04	.42	.38	64
1	74	11.20	11.19	33.336	25.447	254.0	.248	4.99	80.2	10.1	.97	11.4	.02	.15	.19	74
	75 ISL	11.14	11.13	33.347	25.466	252.3	.252	4.95	79.4							75
1	88	10.70	10.69	33.475	25.644	235.6	.283	4.50	71.6					.06	.09	88
	100 ISL	10.37	10.36	33.589	25.790	221.9	.311	4.10	64.9							101
1	109	10.14	10.12	33.651	25.878	213.6	.329	3.90	61.4	20.0	1.43	19.6	.01	.01	.04	109
	125 ISL	9.48	9.46	33.707	26.031	199.4	.363	3.91	60.6							126
1	128	9.35	9.34	33.716	26.060	196.7	.370	3.91	60.5	24.4	1.61	22.3	.02	.00	.03	129
	150 ISL	9.03	9.02	33.859	26.222	181.6	.411	3.30	50.7							151
1	151	9.02	9.00	33.867	26.231	180.8	.413	3.26	50.1	29.4	1.77	25.0	.01	.00	.03	152
1	181	8.58	8.56	33.971	26.381	167.0	.465	3.05	46.4	34.0	1.90	27.0	.01			182
	200 ISL	8.30	8.28	34.011	26.456	161.1	.496	2.81	42.5							201
1	210	8.15	8.13	34.026	26.490	157.1	.512	2.68	40.4	38.7	2.02	28.6	.02			211
1	244	7.70	7.68	34.061	26.583	148.6	.563	2.35	35.1	44.4	2.18	30.6	.30			245
	250 ISL	7.62	7.60	34.064	26.598	147.3	.573	2.30	34.3							252
1	291	7.11	7.08	34.080	26.683	139.7	.632	1.98	29.2	52.3	2.35	33.4	.01			293
	300 ISL	7.01	6.99	34.085	26.700	138.0	.644	1.91	28.0							302
1	346	6.60	6.56	34.126	26.789	130.0	.706	1.51	22.0	61.8	2.63	36.7	.02			348
	400 ISL	6.39	6.35	34.199	26.875	122.6	.774	1.08	15.6							403
1	427	6.30	6.26	34.234	26.914	119.3	.807	.89	12.9	72.3	2.90	38.6	.00			430
	500 ISL	5.78	5.74	34.274	27.012	110.5	.890	.55	7.9							504
1	510	5.71	5.67	34.278	27.023	109.4	.901	.52	7.4	83.1	3.06	40.8	.02			513
1	591	5.34	5.29	34.337	27.115	101.3	.987	.42	5.9	91.5	3.15	41.9	.00			595

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 83 100

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 14.7 N	123 29.3 W	05/10/84	1324 GMT	4114 M	340	10 KT	340 04 10	1	1020.0 MB	20.9 C	18.3 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
	0															0
	1 ISL	18.47	18.47	33.446	23.965	393.6	.000	5.50	102.5							1
1	1	18.47	18.47	33.446	23.965	393.3	.004	5.50	102.5	1.1	.24	.0	.00	.10	.03	10
1	10	18.38	18.38	33.444	23.988	391.6	.339	5.59	104.0	.7	.26	.0	.00	.10	.04	20
	20 ISL	18.36	18.36	33.444	23.993	391.4	.378	5.60	104.1							25
1	25	18.35	18.35	33.443	23.995	391.4	.398	5.60	104.1	.7	.24	.0	.00	.12	.04	30
	30 ISL	18.07	18.06	33.434	24.059	385.5	.117	5.63	104.1							40
1	40	17.52	17.51	33.419	24.181	374.2	.155	5.72	104.7	.7	.24	.0	.00	.32	.10	50
	50 ISL	14.44	14.43	33.241	24.739	321.1	.190	5.85	100.6							55
1	55	13.03	13.02	33.203	24.998	295.4	.205	5.91	98.7	2.7	.49	3.0	.28	.71	.33	63
1	63	12.38	12.37	33.239	25.152	281.9	.228	5.47	90.1	4.4	.67	6.4	.05	.48	.37	75
1	75	11.61	11.61	33.308	25.349	263.4	.261	5.15	83.2	7.5	.88	10.4	.01	.17	.20	89
1	89	10.73	10.72	33.376	25.561	243.5	.296	4.83	76.9	11.3	1.02	12.4	.01	.04	.06	101
	100 ISL	10.34	10.33	33.457	25.692	231.2	.323	4.48	70.7							104
1	104	10.23	10.23				.331	4.37	68.8	15.2	1.19	15.6	.00	.02	.03	119
1	118	9.66	9.64	33.592	25.912	213.5	.364	4.13	64.3	19.3	1.39	19.0	.00	.01	.02	126
	125 ISL	9.44	9.43	33.657	25.999	202.4	.377	3.89	60.3							143
1	142	8.97	8.95	33.824	26.205	183.1	.410	3.22	49.4	28.2	1.75	25.0	.00	.00	.02	151
	150 ISL	8.80	8.78	33.879	26.274	176.5	.424	3.02	46.2							164
1	163	8.56	8.54	33.946	26.365	168.2	.447	2.79	42.5	34.3	1.94	27.4	.00	.00	.03	182
1	181	8.31	8.29	33.975	26.426	162.7	.477	2.75	41.6	36.3	1.97	27.9	.01			201
	200 ISL	7.97	7.95	34.017	26.510	155.0	.507	2.73	41.0							204
1	203	7.91	7.89	34.022	26.522	153.9	.511	2.73	41.0	39.1	2.02	28.7	.00			232
1	231	7.39	7.37	34.019	26.595	147.1	.553	2.67	39.6	44.8	2.11	29.9	.00			252
	250 ISL	7.09	7.07	34.013	26.632	143.7	.581	2.63	38.7							272
1	270	6.82	6.80	34.011	26.668	140.6	.610	2.53	37.0	50.9	2.21	31.8	.00			302
	300 ISL	6.55	6.52	34.033	26.721	135.8	.651	2.07	30.1							332
1	330	6.33	6.30	34.066	26.777	130.8	.691	1.53	22.1	62.8	2.56	36.3	.00			403
	400 ISL	5.74	5.71	34.146	26.915	118.2	.775	.79	11.3							406
1	403	5.71	5.68	34.150	26.921	117.6	.782	.77	11.0	77.1	2.87	39.7	.00			480
1	477	5.25	5.21	34.210	27.024	108.4	.865	.48	6.8	88.2	3.04	41.5	.00			504
	500 ISL	5.11	5.07	34.225	27.053	105.8	.890	.43	6.0							554
1	550	4.81	4.77	34.251	27.108	100.9	.942	.37	5.2	97.2	3.13	42.7	.00			

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 83 100

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 14.9 N	123 29.8 W	05/10/84	2256 GMT	4114 M	310	07 KT			1019.5 MB	18.7 C	16.0 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	18.96	18.96	33.445	23.844	406.9	.000	5.49	103.3	1.3	.27	.0	.00	.09	.02	0
1	10	18.42	18.42	33.442	23.977	392.7	.040	5.65	105.2	1.2	.25	.0	.00	.09	.03	10
	20 ISL	18.40	18.40	33.441	23.982	392.5	.079	5.64	105.0							20
1	26	18.39	18.38	33.441	23.985	392.4	.102	5.64	104.9	.9	.25	.0	.00	.13	.03	26
	30 ISL	18.04	18.04	33.436	24.065	384.7	.118	5.75	106.2							30
1	41	16.41	16.41	33.390	24.410	352.3	.158	5.76	106.7	1.1	.28	.0	.00	.32	.12	41
	50 ISL	13.92	13.92	33.253	24.855	309.9	.189	5.80	98.6							50
1	55	12.74	12.73	33.221	25.069	289.7	.203	5.64	93.6	3.9	.59	4.4	.20	.53	.39	55
1	66	12.04	12.04	33.269	25.239	273.7	.234	5.22	85.4	6.6	.77	8.3	.04	.23	.25	66
	75 ISL	11.45	11.44	33.324	25.392	259.3	.258	5.02	81.1							75
1	76	11.41	11.40	33.328	25.403	258.2	.260	5.01	80.9	9.4	.95	11.1	.01	.13	.14	76
1	91	10.87	10.86	33.466	25.606	239.2	.297	4.78	76.3	11.0	.97	11.7	.01	.04	.06	91
	100 ISL	10.41	10.40	33.512	25.723	228.3	.319	4.55	71.9							101
1	106	10.13	10.12	33.538	25.791	221.9	.332	4.38	68.9	15.9	1.21	15.8	.00	.01	.03	106
1	119	9.58	9.57	33.654	25.973	204.7	.361	3.90	60.6	22.1	1.50	20.6	.00	.01	.02	120
	125 ISL	9.41	9.40	33.691	26.030	199.5	.373	3.77	58.3							126
1	145	8.96	8.95	33.803	26.189	184.6	.412	3.35	51.4	28.8	1.74	24.4	.00	.00	.02	146
	150 ISL	8.90	8.88	33.831	26.222	181.6	.420	3.22	49.4							151
1	164	8.72	8.70	33.906	26.309	173.5	.445	2.89	44.1	33.1	1.90	26.8	.00	.00	.02	165
1	186	8.29	8.27	33.976	26.429	162.4	.482	2.79	42.2	36.4	1.99	27.9	.00			187
	200 ISL	8.10	8.08	33.999	26.476	158.2	.504	2.84	42.8							201
1	205	8.05	8.03	34.005	26.489	157.0	.512	2.85	42.9	39.0	2.00	28.1	.00			206
1	236	7.66	7.64	34.049	26.580	148.7	.559	2.35	35.1	44.5	2.18	30.8	.00			237
	250 ISL	7.34	7.32	34.038	26.617	145.3	.580	2.37	35.2							252
1	274	6.81	6.78	34.016	26.674	140.0	.615	2.46	36.0	51.7	2.26	32.3	.00			276
	300 ISL	6.53	6.50	34.035	26.726	135.3	.653	2.13	30.9							302
1	333	6.31	6.28	34.074	26.785	130.1	.694	1.58	22.8	63.2	2.60	36.6	.00			335
	400 ISL	5.81	5.77	34.115	26.882	121.4	.775	1.08	15.5							403
1	406	5.77	5.73	34.119	26.890	120.6	.786	1.05	15.0	74.6	2.84	39.3	.00			409
1	490	5.38	5.34	34.198	27.000	113.9	.871	.59	8.3	85.2	3.01	41.1	.00			493
	500 ISL	5.26	5.22	34.214	27.027	108.4	.893	.51	7.2							504
1	553	4.89	4.85	34.243	27.093	102.4	.949	.41	5.7	96.0	3.11	42.4	.00			557

RV DAVID STARR JORDAN CALCOFI CRUISE 8410 STATION 93 100

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 14.8 N	123 29.8 W	06/10/84	0622 GMT	4114 M	310	39 KT			1021.1 MB	18.8 C	16.2 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	18.48	18.48	33.416	23.943	395.8	.000	5.51	102.7							0
1	1	18.48	18.48	33.416	23.943	395.5	.004	5.51	102.7	1.8	.27	.0	.00	.10	.02	1
	10 ISL	18.38	18.38	33.409	23.961	394.1	.039	5.55	103.3							10
1	11	18.38	18.38	33.408	23.962	394.0	.043	5.56	103.4	1.5	.28	.0	.00	.09	.03	11
	20 ISL	18.37	18.37	33.404	23.963	394.5	.079	5.63	104.7							20
1	26	18.37	18.35	33.401	23.963	394.8	.102	5.66	105.3	1.1	.28	.0	.00	.10	.04	26
	30 ISL	18.33	18.32	33.401	23.973	394.0	.118	5.63	104.6							30
1	41	18.21	18.20	33.399	23.998	391.7	.161	5.54	102.7	1.2	.27	.0	.00	.18	.07	41
	50 ISL	15.08	15.07	33.366	24.698	328.1	.194	6.02	105.0							50
1	54	13.74	13.73	33.326	24.949	301.1	.206	6.15	104.3	2.5	.45	1.4	.15	.67	.35	54
1	65	12.72	12.72	33.313	25.143	282.9	.238	5.35	98.8	4.9	.72	6.6	.03	.56	.34	65
1	75	11.43	11.42	33.322	25.394	259.1	.265	5.06	91.7	8.6	.93	10.6	.01	.20	.20	75
1	91	10.86	10.85	33.406	25.561	243.5	.305	4.72	85.3	11.9	1.13	13.5	.01	.06	.08	91
	100 ISL	10.53	10.52	33.501	25.693	231.1	.327	4.44	80.5							101
1	105	10.36	10.35	33.544	25.757	225.1	.337	4.32	78.3	15.3	1.21	15.4	.01	.02	.03	105
1	119	9.64	9.63	33.589	25.913	210.5	.370	4.12	74.1	20.0	1.40	19.0	.00	.01	.03	120
	125 ISL	9.48	9.47	33.632	25.972	205.0	.381	3.96	71.5							126
1	143	9.13	9.12	33.791	26.154	188.0	.417	3.36	61.7	27.3	1.71	24.1	.00	.01	.02	144
	150 ISL	9.01	8.99	33.839	26.211	182.7	.430	3.15	58.4							151
1	162	8.78	8.77	33.910	26.302	174.3	.452	2.84	53.4	32.5	1.89	26.8	.00	.00	.03	163
1	183	8.39	8.37	33.981	26.418	163.4	.487	2.66	50.3	36.4	1.97	27.9	.00			184
	200 ISL	8.17	8.15	33.998	26.465	159.2	.514	2.76	51.7							201
1	203	8.13	8.11	33.999	26.472	158.6	.519	2.78	51.9	37.6	1.96	27.9	.00			204
1	233	7.65	7.63	34.049	26.581	148.5	.565	2.38	45.5	44.6	2.12	30.3	.00			234
	250 ISL	7.30	7.28	34.038	26.622	144.8	.593	2.45	46.2							252
1	272	6.88	6.86	34.016	26.663	141.0	.622	2.55	47.4	50.1	2.17	31.4	.00			274
	300 ISL	6.64	6.61	34.043	26.717	136.2	.660	2.10	39.7							302
1	331	6.47	6.44	34.086	26.775	131.1	.702	1.47	27.8	60.9	2.52	36.0	.01			333
	400 ISL	5.81	5.78	34.121	26.887	121.0	.789	.95	17.9							403
1	404	5.77	5.73	34.123	26.893	120.3	.794	.93	17.5	74.5	2.79	39.1	.01			407
1	477	5.35	5.31	34.210	27.013	109.5	.877	.57	10.7	85.1	3.08	41.0	.00			480
	500 ISL	5.19	5.15	34.228	27.046	106.5	.902	.56	10.5							504
1	548	4.82	4.78	34.250	27.105	101.0	.953	.54	10.1	95.5	3.07	42.5	.00			552

RV DAVID STARR JORDAN CALCOFI CRUISE 8410 STATION 83 100

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 14.7 N	123 29.9 W	06/10/84	1134 GMT	4114 M	330	36 KT	320 35 09	1	1021.5 MB	20.0 C	17.8 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	18.51	18.51	33.434	23.953	395.1	.000	5.43	101.3							0
1	1	18.51	18.51	33.434	23.953	394.9	.004	5.43	101.3	1.5	.21	.0	.00	.11	.02	1
	10 ISL	18.42	18.41	33.420	23.961	394.1	.039	5.60	104.3							10
1	11	18.41	18.41	33.418	23.962	394.1	.043	5.61	104.4	1.4	.21	.0	.00	.10	.03	11
	20 ISL	18.39	18.38	33.410	23.962	394.4	.079	5.59	103.9							20
1	26	18.37	18.37	33.405	23.962	394.5	.102	5.55	103.2	1.4	.21	.0	.00	.10	.03	26
	30 ISL	18.20	18.20	33.390	23.991	391.9	.118	5.57	103.2							30
1	41	17.14	17.13	33.322	24.197	372.7	.160	5.69	103.3	1.9	.21	.0	.00	.20	.10	41
	50 ISL	15.07	15.06	33.252	24.613	333.2	.192	5.93	103.4							50
1	56	13.66	13.65	33.236	24.895	305.2	.211	6.09	103.0	2.4	.40	1.6	.17	.66	.36	56
1	66	12.05	12.05	33.249	25.221	275.3	.240	5.28	86.4	6.5	.72	7.7	.02	.29	.24	66
	75 ISL	11.48	11.47	33.327	25.389	259.6	.264	5.02	81.2							75
1	76	11.45	11.44	33.333	25.398	258.7	.266	5.01	81.0	9.3	.89	10.7	.02	.16	.18	76
1	91	10.45	10.44	33.488	25.597	233.6	.303	4.55	72.0	14.7	1.15	15.8	.01	.05	.06	91
	100 ISL	9.97	9.95	33.527	25.811	219.9	.324	4.40	69.0							101
1	105	9.79	9.78	33.546	25.853	215.8	.334	4.32	67.4	18.4	1.32	17.4	.01	.00	.03	105
1	119	9.66	9.65	33.597	25.993	202.8	.365	3.72	57.9	23.2	1.52	21.8	.01	.01	.02	120
	125 ISL	9.53	9.52	33.732	26.042	198.3	.376	3.58	55.6							126
1	144	9.03	9.02	33.821	26.193	184.3	.413	3.24	49.8	29.4	1.72	24.9	.01	.00	.03	145
	150 ISL	8.93	8.92	33.849	26.230	180.8	.423	3.15	48.3							151
1	164	8.73	8.71	33.913	26.313	173.2	.448	2.95	45.1	32.9	1.85	26.9	.01	.00	.03	165
1	183	8.49	8.47	33.968	26.393	165.9	.480	2.77	42.1	35.8	1.93	27.9	.01			184
	200 ISL	8.21	8.19	33.992	26.455	161.2	.508	2.86	43.2							201
1	203	8.15	8.13	33.995	26.465	159.3	.513	2.88	43.4	37.0	1.92	27.9	.01			204
1	233	7.66	7.64	34.039	26.575	149.4	.559	2.54	37.9	43.2	2.08	29.8	.01			234
	250 ISL	7.32	7.29	34.022	26.608	146.1	.584	2.68	39.6							252
1	271	6.93	6.91	33.998	26.642	143.0	.615	2.85	41.8	47.8	2.09	30.6	.01			273
	300 ISL	6.69	6.67	34.027	26.698	138.0	.655	2.40	34.9							302
1	330	6.52	6.49	34.075	26.759	132.7	.696	1.74	25.3	59.8	2.47	35.5	.01			332
	400 ISL	5.79	5.75	34.121	26.888	120.8	.785	1.09	15.5							403
1	403	5.76	5.72	34.123	26.895	120.2	.789	1.07	15.3	74.5	2.78	39.2	.01			406
1	476	5.29	5.25	34.188	27.003	110.4	.872	.86	12.1	84.6	2.96	41.0	.00			479
	500 ISL	5.13	5.09	34.208	27.037	107.3	.899	.75	10.6							504
1	548	4.81	4.76	34.245	27.104	101.2	.949	.49	6.8	96.3	3.07	42.5	.00			552

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 87 33

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 53.2 N	118 29.7 W	03/10/84	0928 GMT	59 M	180	04 KT	180 02 07	1	1015.5 MB	19.8 C	19.0 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
1	10	16.56	16.56	33.442	24.423	350.1	.035	6.21	111.5	2.9	.39	.8	.03	1.97	.43	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 87 35

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 49.5 N	118 37.6 W	03/10/84	1223 GMT	650 M	310	05 KT			1015.0 MB	19.5 C	15.9 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	19.10	19.10	33.538	23.883	401.5	.000	5.68	107.2	2.3	.29	.9	.00	.20	.06	0
	10 ISL	19.09	19.09	33.490	23.845	401.8	.040	5.66	106.8							10
1	11	19.09	19.09	33.536	23.881	401.8	.044	5.66	106.8	2.3	.27	.8	.00	.21	.06	11
	20 ISL	16.44	16.44	33.443	24.450	347.8	.378	6.22	111.4							20
1	21	16.14	16.14	33.438	24.515	341.6	.381	6.27	111.7	2.3	.31	.8	.00	.32	.14	21
1	30	14.80	14.80	33.438	24.812	313.5	.110	6.14	106.5	3.4	.38	1.0	.01	.73	.29	30
1	41	14.21	14.21	33.459	24.954	300.4	.144	5.72	98.0	4.1	.51	1.3	.43	1.11	.48	41
	50 ISL	13.66	13.65	33.487	25.091	287.6	.171	5.34	90.5							50
1	52	13.56	13.55	33.492	25.115	285.3	.176	5.27	89.1	5.4	.61	5.0	.15	.45	.37	52
1	62	13.21	13.20	33.513	25.201	277.3	.204	5.01	84.1	6.5	.78	7.2	.06	.22	.36	62
1	71	12.72	12.71	33.568	25.342	264.1	.228	4.51	75.0	9.5	.88	10.2	.03	.12	.21	71
	75 ISL	12.57	12.56	33.579	25.378	260.8	.240	4.46	73.9							75
1	97	12.33	12.32	33.591	25.434	255.7	.270	4.31	71.1	10.9	.99	12.1	.03	.07	.19	97
	100 ISL	12.16	12.15	33.616	25.487	251.0	.304	4.12	67.7							101
1	102	12.14	12.13	33.618	25.492	250.6	.307	4.10	67.4	12.2	1.06	15.2	.01	.05	.15	102
1	121	11.85	11.83	33.631	25.558	244.8	.357	3.99	65.1	13.5	1.13	18.0	.01	.04	.11	122
	125 ISL	11.75	11.73	33.637	25.581	242.6	.365	3.95	64.4							126
1	146	10.99	10.98	33.695	25.764	225.6	.415	3.66	58.7	17.9	1.33	20.8	.02	.02	.08	147
	150 ISL	10.81	10.80	33.712	25.809	221.3	.424	3.60	57.5							151
1	175	9.70	9.68	33.845	26.104	193.5	.476	3.16	49.3	25.9	1.81	21.8	.01			176
	200 ISL	9.19	9.17	33.960	26.277	177.5	.522	2.80	43.2							201
1	205	9.14	9.12	33.979	26.300	175.4	.530	2.73	42.1	31.5	1.89	24.9	.01			206
1	235	8.90	8.88	34.062	26.404	165.1	.581	2.35	36.1	36.2	2.07	26.5	.01			236
	250 ISL	8.77	8.74	34.101	26.454	161.5	.606	2.16	33.0							252
1	273	8.55	8.52	34.149	26.527	155.0	.643	1.89	28.8	41.6	2.25	29.8	.01			275
	300 ISL	8.25	8.22	34.169	26.588	149.5	.686	1.69	25.5							302
1	332	7.86	7.83	34.177	26.653	143.7	.731	1.48	22.2	49.8	2.41	32.0	.00			334
	400 ISL	7.11	7.07	34.231	26.803	130.0	.824	.88	13.0							403
1	406	7.05	7.01	34.236	26.816	128.8	.832	.83	12.2	62.4	2.72	35.8	.00			409
1	491	6.43	6.39	34.272	26.928	118.8	.924	.55	8.0	72.8	2.90	37.7	.01			494
	500 ISL	6.28	6.23	34.282	26.956	116.3	.947	.49	7.1							504
1	556	5.84	5.79	34.312	27.036	109.1	1.010	.36	5.2	84.1	3.04	39.3	.00			560

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 87 40

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 39.5 N	118 58.4 W	03/10/84	1708 GMT	801 M	300	10 KT	320 02 08	1	1015.0 MB	20.0 C	17.0 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
1	0	20.67	20.67	33.607	23.523	435.5	.000	5.35	104.0	2.0	.24	.2	.00	.12	.05	0
1	10	20.61	20.61	33.609	23.542	434.1	.043	5.38	104.5	1.8	.21	.2	.00	.13	.04	10
1	20	20.62	20.62	33.603	23.535	435.1	.087	5.48	106.4	1.5	.21	.1	.00	.14	.04	20
1	30	17.52	17.52	33.500	24.241	368.0	.127	5.87	107.5	2.1	.26	.1	.00	.37	.18	30
1	40	13.48	13.47	33.301	24.983	297.5	.160	5.94	100.2	3.3	.49	2.0	.09	.98	.54	40
	50 ISL	13.03	13.02	33.333	25.098	285.8	.189	5.61	93.7							50
1	51	13.00	12.99	33.336	25.107	285.0	.192	5.57	93.0	4.4	.62	4.7	.16	.63	.46	51
1	61	12.35	12.34	33.422	25.299	267.9	.219	5.16	85.0	6.6	.77	7.8	.04	.27	.35	61
1	71	12.04	12.03	33.473	25.398	258.7	.246	4.88	79.9	7.9	.91	9.6	.02	.16	.26	71
	75 ISL	11.96	11.95	33.507	25.440	254.8	.257	4.62	75.6							75
1	86	11.67	11.66	33.589	25.557	243.9	.283	4.01	65.2	12.3	1.09	13.2	.04	.21	.21	86
1	100	10.86	10.85	33.662	25.761	224.8	.316	3.83	61.2	17.4	1.31	17.0	.01	.08	.14	100
1	119	10.33	10.31	33.726	25.904	211.5	.359	3.51	55.5	20.7	1.47	19.9	.01	.03	.08	120
	125 ISL	10.21	10.20	33.743	25.937	208.5	.371	3.45	54.4							126
1	144	9.85	9.84	33.803	26.045	198.6	.410	3.27	51.2	24.2	1.61	21.8	.01	.01	.08	145
	150 ISL	9.73	9.71	33.821	26.080	195.3	.421	3.21	50.2							151
1	174	9.22	9.20	33.908	26.231	181.3	.467	2.95	45.6	29.2	1.79	24.7	.02			175
	200 ISL	8.84	8.81	34.020	26.380	167.6	.512	2.60	39.8							201
1	204	8.79	8.77	34.036	26.401	165.7	.518	2.54	38.9	34.9	1.99	27.1	.01			205
1	234	8.45	8.42	34.129	26.526	154.2	.566	2.34	35.3	40.7	2.20	29.6	.01			235
	250 ISL	8.32	8.29	34.147	26.560	151.3	.591	1.89	28.7							252
1	273	8.16	8.13	34.156	26.592	148.7	.626	1.75	26.4	44.3	2.31	31.0	.01			275
	300 ISL	7.95	7.92	34.168	26.633	145.1	.669	1.55	23.4							302
1	332	7.69	7.66	34.181	26.681	140.9	.711	1.34	20.3	51.3	2.49	33.3	.01			334
	400 ISL	7.21	7.17	34.212	26.774	132.9	.804	1.03	15.2							403
1	407	7.16	7.12	34.216	26.785	131.9	.814	1.00	14.8	59.3	2.72	35.6	.01			410
1	482	6.42	6.38	34.262	26.922	118.5	.907	.61	8.8	71.4	2.93	38.1	.00			485
	500 ISL	6.28	6.24	34.272	26.947	117.2	.929	.55	7.9							504
1	555	5.99	5.94	34.330	27.007	111.9	.992	.43	6.2	80.1	3.16	39.3	.00			559

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 87 45

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 29.6 N	119 18.8 W	03/10/84	2210 GMT	1719 M	300	15 KT	290 04 04	1	1014.9 MB	19.0 C	16.2 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	19.11	19.11	33.637	23.954	394.5	.000	5.52	104.2							0
1	1	19.11	19.11	33.637	23.954	394.5	.004	5.52	104.2	2.9	.27	.2	.00	.25	.09	1
	10 ISL	19.09	19.09	33.575	23.911	394.3	.039	5.67	107.0							10
1	11	19.09	19.09	33.639	23.960	394.2	.043	5.69	107.4	2.8	.30	.1	.00	.26	.08	11
	20 ISL	15.34	15.34	33.534	24.745	319.7	.375	5.97	104.7							20
1	21	14.92	14.92	33.499	24.833	311.4	.378	5.98	104.0	3.9	.45	1.3	.04	.72	.27	21
1	30	13.37	13.37	33.491	25.151	281.2	.505	5.41	91.1	6.8	.72	5.3	.17	.95	.38	30
1	40	12.61	12.61	33.512	25.318	265.6	.532	4.96	82.3	8.8	.86	8.3	.18	.72	.31	40
	50 ISL	11.94	11.94	33.568	25.490	249.4	.558	4.50	73.7							50
1	54	11.73	11.72	33.590	25.546	244.1	.568	4.37	71.2	12.5	1.07	12.7	.06	.35	.31	54
1	64	11.30	11.29	33.615	25.645	235.0	.591	4.24	68.4	13.5	1.20	14.5	.03	.19	.18	64
1	74	10.95	10.94	33.648	25.734	226.7	.614	3.96	63.4	15.7	1.26	16.0	.02	.11	.12	74
	75 ISL	10.91	10.90	33.652	25.743	225.8	.617	3.92	62.8							75
1	89	10.53	10.52	33.694	25.843	216.6	.647	3.60	57.2	19.2	1.38	18.5	.02	.05	.11	89
	100 ISL	10.11	10.10	33.746	25.957	206.0	.672	3.45	54.3							101
1	107	9.85	9.83	33.782	26.029	199.3	.687	3.38	52.9	23.3	1.62	21.5	.00	.01	.08	108
	125 ISL	9.49	9.47	33.847	26.139	189.1	.721	3.15	48.9							126
1	127	9.45	9.44	33.854	26.151	188.0	.725	3.12	48.4	27.5	1.76	23.6	.00	.01	.05	128
	150 ISL	9.11	9.09	33.935	26.270	177.1	.767	2.88	44.3							151
1	152	9.08	9.06	33.944	26.281	176.1	.770	2.85	43.9	31.1	1.86	25.4	.00	.00	.05	153
1	182	8.66	8.64	34.067	26.445	161.0	.821	2.31	35.3	37.6	2.07	28.1	.01			183
	200 ISL	8.41	8.39	34.083	26.496	155.4	.849	2.26	34.3							201
1	212	8.26	8.24	34.085	26.519	154.3	.868	2.24	33.9	40.9	2.15	29.3	.01			213
1	247	8.04	8.02	34.140	26.596	147.6	.920	1.75	26.3	45.7	2.36	31.2	.05			248
	250 ISL	8.02	8.00	34.143	26.601	147.2	.925	1.73	26.0							252
1	296	7.78	7.75	34.171	26.660	142.3	.992	1.49	22.3	53.1	2.48	32.5	.04			298
	300 ISL	7.75	7.72	34.174	26.666	141.8	.997	1.46	21.8							302
1	351	7.34	7.31	34.208	26.753	134.2	.068	1.04	15.4	57.5	2.63	34.8	.01			353
	400 ISL	6.98	6.94	34.229	26.820	128.3	.732	.81	12.0							403
1	435	6.73	6.69	34.241	26.863	124.6	.777	.71	10.4	67.4	2.82	37.1	.01			438
	500 ISL	6.33	6.28	34.259	26.939	118.0	.855	.54	7.8							504
1	518	6.21	6.17	34.278	26.961	116.0	.877	.50	7.2	76.2	2.98	39.0	.00			522
1	600	5.69	5.63	34.329	27.068	106.4	.967	.33	4.7	87.8	3.11	40.1	.00			604

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 87 50

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 18.9 N	119 39.4 W	04/10/84	0210 GMT	73 M	300	18 KT	300 05 05	1	1014.9 MB	19.0 C	16.0 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
	0 ISL	19.88	19.88	33.594	23.723	416.8	.000	5.41	103.6							0
1	1	19.88	19.88	33.594	23.723	416.6	.004	5.41	103.6	2.4	.24	.5	.03	.14	.05	1
1	10	19.78	19.78	33.595	23.749	414.4	.041	5.60	107.1	2.4	.26	.5	.03	.15	.06	10
	20 ISL	18.02	18.02	33.560	24.167	374.9	.381	5.77	106.8							20
1	21	17.83	17.82	33.556	24.210	370.8	.384	5.79	106.7	2.3	.27		.04	.38	.16	21
	30 ISL	16.80	16.79	33.478	24.395	353.3	.117	5.95	107.4							30
1	31	16.70	16.69	33.471	24.414	351.7	.120	5.96	107.4	2.5	.34		.05	.72	.26	31
1	41	15.17	15.17	33.473	24.759	319.0	.154	5.92	103.5	3.6	.42		.08	.88	.62	41
	50 ISL	13.78	13.78	33.484	25.063	290.2	.182	5.51	93.7							50
1	51	13.66	13.65	33.486	25.089	287.7	.184	5.46	92.5	5.1	.57		.15	.66	.38	51

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 87 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 09.1 N	120 00.1 W	04/10/84	0555 GMT	1210 M	320	13 KT			1016.0 MB	18.7 C	15.9 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	19.72	19.72	33.595	23.765	412.5	.000	5.36	102.4							0
1	1	19.72	19.72	33.595	23.765	412.5	.004	5.36	102.4	1.6	.27		.04	.16	.04	1
	10 ISL	19.72	19.72	33.595	23.766	412.7	.041	5.47	104.5							10
1	11	19.72	19.72	33.596	23.766	412.8	.045	5.48	104.7	1.7	.26		.03	.17	.04	11
	20 ISL	19.72	19.72	33.535	23.720	413.1	.083	5.53	105.6							20
1	26	19.72	19.72	33.596	23.766	413.3	.107	5.60	107.0	1.6	.25		.04	.16	.04	26
	30 ISL	18.75	18.74	33.532	23.965	394.4	.123	5.79	108.4							30
1	41	15.71	15.70	33.395	24.581	336.0	.163	6.18	109.1	2.3	.31		.03	.35	.12	41
	50 ISL	13.99	13.98	33.330	24.901	305.6	.192	6.00	102.2							50
1	56	13.25	13.24	33.316	25.042	292.4	.210	5.76	96.7	3.6	.55		.10	.75	.41	56
1	66	12.72	12.71	33.367	25.186	278.8	.238	5.33	88.5	5.5	.72		.08	.50	.34	66
	75 ISL	12.19	12.18	33.455	25.356	262.8	.263	4.89	80.3							75
1	76	12.14	12.13				.265	4.85	79.6	5.7	.96		.04	.23	.29	76
1	90	11.30	11.29	33.598	25.632	235.8	.300	4.12	66.5	14.1	1.19		.01	.08	.14	90
	100 ISL	10.85	10.83	33.670	25.770	223.9	.324	3.78	60.4							101
1	106	10.63	10.62	33.730	25.831	218.2	.336	3.65	58.1	18.4	1.38		.00	.02	.07	106
1	119	10.06	10.04	33.760	25.977	204.5	.369	3.43	53.9	21.9	1.56		.00	.01	.05	120
	125 ISL	9.87	9.86	33.791	26.033	199.3	.377	3.34	52.3							126
1	147	9.25	9.23	33.915	26.232	180.7	.419	2.97	45.9	29.1	1.82		.00	.00	.05	148
	150 ISL	9.16	9.15	33.928	26.256	178.5	.424	2.92	45.1							151
1	166	8.79	8.77	33.994	26.367	168.1	.452	2.68	41.0	34.1	1.97		.00	.00	.04	167
1	186	8.84	8.82	34.035	26.391	166.3	.485	2.49	38.2	35.3	2.03		.00			187
	200 ISL	8.64	8.62	34.057	26.439	161.9	.508	2.40	36.5							201
1	205	8.55	8.52	34.063	26.459	160.0	.516	2.36	35.9	37.9	2.09		.00			206
1	237	7.93	7.91	34.101	26.582	148.8	.565	1.97	29.6	45.0	2.29		.00			238
	250 ISL	7.88	7.86	34.115	26.600	147.2	.585	1.90	28.5							252
1	278	7.78	7.75	34.119	26.619	145.9	.623	1.81	27.1	48.1	2.36		.00			278
	300 ISL	7.64	7.61	34.132	26.649	143.3	.657	1.66	24.8							302
1	335	7.43	7.39	34.152	26.695	139.4	.707	1.43	21.2	55.0	2.52		.00			337
	400 ISL	7.15	7.11	34.179	26.757	134.5	.796	1.17	17.2							403
1	408	7.11	7.07	34.191	26.764	133.8	.807	1.14	16.8	59.5	2.63		.00			411
1	482	6.63	6.58	34.214	26.856	125.9	.902	.85	12.4	67.5	2.88		.00			485
	500 ISL	6.50	6.45	34.226	26.883	123.5	.925	.77	11.2							504
1	553	6.11	6.07	34.270	26.968	115.8	.989	.51	7.3	78.2	2.98		.00			557

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 87 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 59.2 N	120 20.8 W	04/10/84	1039 GMT	728 M	310	13 KT			1015.9 MB	18.9 C	16.0 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	19.83	19.83	33.477	23.645	423.9	.000	5.44	104.0	2.0	.25	.1		.09	.02	0
1	10	19.80	19.80	33.487	23.662	422.7	.042	5.48	104.8	1.6	.24	.1		.10	.03	10
1	20	19.58	19.57	33.519	23.745	415.1	.384	5.64	107.4	1.6	.22	.0		.09	.04	20
1	29	19.08	19.08	33.443	24.063	385.1	.720	5.81	107.5	1.5	.27	.0		.16	.06	29
	30 ISL	17.84	17.83	33.435	24.115	380.1	.724	5.87	108.1							30
1	39	15.96	15.95	33.394	24.524	341.4	.956	6.34	112.5	1.1	.31	.0		.25	.11	39
	50 ISL	14.66	14.65	33.343	24.770	318.2	1.193	6.24	107.9							50
1	54	14.38	14.37	33.328	24.818	313.7	1.205	6.21	106.7	2.5	.37	.8		.60	.28	54
1	64	13.72	13.71	33.341	24.966	299.8	1.235	6.01	101.9	3.6	.49	2.4		.60	.36	64
1	74	13.18	13.17	33.320	25.058	291.2	1.265	5.74	96.2	4.5	.58	3.8		.56	.36	74
	75 ISL	13.09	13.08	33.325	25.080	289.2	1.268	5.68	95.1							75
1	89	12.05	12.04	33.426	25.360	262.8	1.306	4.98	81.5	8.5	.86	9.8		.20	.25	89
	100 ISL	11.11	11.10	33.562	25.639	236.4	1.334	4.36	70.1							101
1	108	10.55	10.54	33.655	25.810	220.2	1.352	4.02	63.8	18.3	1.37	17.8		.02	.04	108
	125 ISL	9.83	9.81	33.781	26.031	199.4	1.388	3.74	58.5							126
1	127	9.76	9.75	33.792	26.051	197.6	1.393	3.73	58.3	22.1	1.47	20.5		.01	.02	128
	150 ISL	9.35	9.34	33.861	26.173	186.4	1.436	3.55	55.0							151
1	153	9.31	9.29	33.867	26.185	185.3	1.443	3.53	54.6	25.9	1.59	22.4		.00	.02	154
1	183	8.69	8.67	33.955	26.352	169.9	1.495	3.24	49.5	31.7	1.75	24.9				184
	200 ISL	8.38	8.36	33.990	26.426	163.0	1.524	3.01	45.6							201
1	214	8.16	8.13	34.011	26.478	158.3	1.546	2.82	42.5	38.0	1.94	27.6				215
1	248	7.70	7.68	34.040	26.567	150.2	1.598	2.54	37.9	43.6	2.11	29.5				249
	250 ISL	7.67	7.65	34.041	26.573	149.7	1.602	2.52	37.5							252
1	296	7.16	7.13	34.074	26.671	140.9	1.669	1.99	29.3	51.9	2.33	32.7				298
	300 ISL	7.13	7.10	34.078	26.678	140.2	1.674	1.94	28.6							302
1	351	6.77	6.73	34.134	26.773	131.8	1.743	1.29	18.9	61.4	2.59	35.9				353
	400 ISL	6.51	6.47	34.187	26.849	125.2	1.806	.94	13.6							403
1	435	6.36	6.32	34.221	26.896	121.2	1.850	.78	11.3	71.2	2.86	38.2				438
	500 ISL	6.12	6.08	34.272	26.968	115.0	1.926	.56	8.1							504
1	517	6.06	6.01	34.283	26.985	113.6	1.945	.52	7.5	78.1	2.98	39.6				520
1	598	5.67	5.62	34.326	27.068	106.4	1.039	.34	4.8	86.6	3.08	40.7				602

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 87 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 39.2 N	121 02.4 W	04/10/84	1630 GMT	3749 M	300	09 KT	320 03 09	2	1018.0 MB	19.1 C	15.2 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	19.80	19.80	33.470	23.649	423.5	.000	5.32	101.7							0
1	1	19.80	19.80	33.470	23.649	423.5	.004	5.32	101.7	2.3	.29	.0	.00	.09	.02	1
	10 ISL	19.81	19.80	33.469	23.647	424.1	.042	5.36	102.4							10
1	11	19.81	19.80	33.469	23.647	424.1	.046	5.36	102.5	1.8	.28	.0	.00	.09	.02	11
	20 ISL	19.79	19.78	33.508	23.682	421.1	.385	5.41	103.3							20
1	21	19.78	19.78	33.515	23.688	420.6	.389	5.41	103.4	2.0	.26	.0	.00	.09	.02	21
	30 ISL	19.56	19.55	33.553	23.776	412.6	.726	5.39	102.7							30
1	32	19.47	19.46	33.557	23.802	410.1	.734	5.39	102.6	1.9	.24	.0	.00	.14	.03	32
1	41	18.67	18.66	33.534	23.987	392.8	1.173	5.55	103.9	1.4	.24	.0	.00	.21	.05	41
	50 ISL	15.51	15.50	33.275	24.534	343.7	1.204	6.01	105.6							50
1	56	13.58	13.57	33.198	24.883	307.5	1.222	6.19	104.4	3.2	.41	.4	.03	.85	.23	55
1	66	13.29	13.28	33.376	25.079	289.0	1.252	5.63	94.5	4.9	.65	3.9	.21	.71	.33	66
	75 ISL	12.30	12.29	33.321	25.231	274.7	1.278	5.29	87.0							75
1	77	12.09	12.08	33.335	25.258	272.2	1.283	5.24	85.8	7.2	.78	7.7	.08	.55	.08	77
1	93	10.93	10.91	33.378	25.528	246.7	1.326	4.84	77.3	11.7	1.04	12.4	.02	.13	.14	93
	100 ISL	10.71	10.70	33.446	25.620	238.1	1.342	4.59	73.1							101
1	112	10.51	10.50	33.562	25.745	226.5	1.369	4.19	66.4	16.6	1.31	16.6	.01	.05	.08	112
	125 ISL	10.14	10.13	33.675	25.896	212.3	1.398	3.76	59.2							126
1	131	9.96	9.94	33.723	25.965	205.9	1.412	3.58	56.1	22.8	1.56	21.0	.01	.01	.04	132
	150 ISL	9.40	9.39	33.838	26.147	188.9	1.448	3.24	50.3							151
1	155	9.25	9.24	33.864	26.191	184.7	1.458	3.18	49.1	27.8	1.78	24.6	.01	.00	.03	156
1	200P	8.43	8.41	33.998	26.418	163.8	1.539	2.96	44.9	35.7	2.02	27.5	.01			201
1	235P	7.90	7.87	34.041	26.540	152.7	1.591	2.65	39.7	41.8	2.12	29.4	.00			235
	250 ISL	7.69	7.66	34.053	26.579	149.1	1.614	2.49	37.2							252
1	288P	7.26	7.23	34.079	26.662	141.7	1.670	2.06	30.4	50.4	2.37	32.9	.00			290
	300 ISL	7.18	7.15	34.094	26.684	139.7	1.686	1.90	28.0							302
1	346P	6.92	6.88	34.153	26.768	132.4	1.749	1.30	19.1	60.2	2.69	35.9	.00			348
	400 ISL	6.49	6.45	34.195	26.858	124.3	1.818	.98	14.2							403
1	430P	6.25	6.21	34.215	26.905	120.0	1.855	.88	12.7	71.9	2.94	38.7	.01			433
	500 ISL	5.86	5.82	34.280	27.007	111.1	1.936	.61	8.8							504
1	522P	5.74	5.70	34.299	27.036	108.4	1.959	.55	7.9	83.2	3.10	40.5	.00			525
1	579P	5.307	5.259	34.335	27.118	100.9	1.020	.43	6.1	90.5	3.12	41.6	.00			583

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 87 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 19.9 N	121 43.0 W	04/10/84	2258 GMT	4100 M	340	13 KT	340 04 04	1	1017.5 MB	19.8 C	15.6 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
1	0	19.74	19.74	33.521	23.702	418.5	.000	5.39	102.9	1.3	.22	.0	.00	.09	.02	0
	10 ISL	19.69	19.69	33.520	23.716	417.5	.042	5.66	108.0							10
1	11	19.69	19.68	33.520	23.717	417.5	.046	5.67	108.2	1.7	.24	.0	.00	.09	.02	11
1	20	19.68	19.68	33.520	23.719	417.6	.083	5.61	107.0	1.6	.23	.0	.00	.10	.02	20
	30 ISL	18.25	18.24	33.419	24.004	393.7	.124	5.73	106.3							30
1	31	18.02	18.02	33.404	24.047	385.6	.127	5.74	106.0	1.5	.23	.0	.00	.20	.06	31
1	40	14.54	14.53	33.212	24.695	325.3	.159	6.27	108.0	1.9	.31	.0	.00	.28	.09	40
	50 ISL	13.18	13.17	33.140	24.919	303.8	.191	6.04	101.1							50
1	51	13.14	13.14	33.138	24.925	303.3	.194	6.02	100.7	2.9	.44	1.7	.08	.56	.25	51
1	61	12.66	12.65	33.211	25.076	289.2	.223	5.60	92.8	4.3	.60	4.3	.11	.59	.33	61
1	72	11.78	11.77	33.298	25.310	267.0	.254	5.16	84.0	7.4	.81	8.6	.00	.31	.28	72
	75 ISL	11.80	11.79	33.348	25.346	263.8	.262	5.08	82.7							75
1	87	11.96	11.95	33.517	25.448	254.4	.293	4.80	78.5	8.9	.94	10.8	.00	.22	.26	87
	100 ISL	11.16	11.15	33.587	25.650	235.4	.325	4.32	69.6							101
1	102	11.04	11.02	33.591	25.675	233.0	.329	4.27	68.5	13.6	1.18	14.9	.00	.08	.09	102
1	122	9.77	9.75	33.642	25.933	208.6	.375	3.88	60.6	20.5	1.45	19.5	.00	.01	.05	123
	125 ISL	9.69	9.67	33.655	25.964	205.7	.383	3.79	59.1							126
1	146	9.23	9.22	33.858	26.190	184.6	.422	3.10	47.9	27.6	1.75	24.4	.00	.01	.03	147
	150 ISL	9.15	9.14	33.877	26.218	182.1	.429	3.05	47.1							151
1	175	8.65	8.63	33.964	26.365	168.4	.473	2.89	44.1	32.4	1.89	26.4	.00			176
	200 ISL	8.20	8.18	34.023	26.480	157.9	.513	2.64	39.9							201
1	204	8.14	8.12	34.030	26.495	156.5	.519	2.60	39.2	37.9	2.08	28.5	.00			205
1	235	7.76	7.74	34.067	26.580	148.8	.566	2.22	33.2	43.7	2.19	30.4	.00			236
	250 ISL	7.57	7.55	34.074	26.613	145.9	.589	2.10	31.3							252
1	272	7.31	7.28	34.083	26.658	141.8	.621	1.93	28.6	49.9	2.36	32.4	.00			274
	300 ISL	7.01	6.99	34.108	26.719	135.3	.660	1.59	23.3							302
1	332	6.70	6.67	34.141	26.787	130.2	.702	1.18	17.2	61.0	2.66	36.2	.00			334
	400 ISL	6.16	6.12	34.193	26.900	120.0	.787	.73	10.5							403
1	404	6.12	6.09	34.196	26.906	119.5	.793	.71	10.2	72.9	2.90	38.7	.00			407
1	480	5.68	5.64	34.271	27.021	109.2	.879	.42	6.0	82.8	3.06	40.9	.00			493
	500 ISL	5.60	5.56	34.287	27.044	107.2	.901	.37	5.3							504
1	553	5.45	5.40	34.321	27.090	103.4	.957	.30	4.3	88.1	3.17	41.2	.00			557

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 87 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 59.2 N	122 23.8 W	05/10/84	0500 GMT	4114 M	350	10 KT			1018.5 MB	18.5 C	15.1 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	19.46	19.46	33.680	23.898	399.9	.000	5.40	102.7							0
1	1	19.46	19.46	33.680	23.898	399.9	.004	5.40	102.7	2.0	.21	.0	.00	.16	.03	1
	10 ISL	19.45	19.45	33.679	23.898	400.2	.040	5.45	103.5							10
1	11	19.45	19.45	33.679	23.898	400.2	.044	5.45	103.6	2.0	.25	.0	.00	.15	.03	11
	20 ISL	19.46	19.46	33.678	23.895	400.9	.080	5.48	104.2							20
1	26	19.47	19.47	33.677	23.892	401.3	.104	5.50	104.6	1.4	.24	.0	.00	.15	.04	26
	30 ISL	18.64	18.63	33.631	24.069	394.6	.120	5.72	107.0							30
1	41	15.93	15.93	33.527	24.632	331.2	.159	6.20	110.1	2.0	.32	.0	.00	.56	.19	41
	50 ISL	14.18	14.18	33.480	24.976	298.5	.187	6.02	103.2							50
1	56	13.32	13.32	33.465	25.142	282.8	.204	5.76	96.9	5.1	.64	4.7	.11	.95	.49	56
1	65	12.55	12.54	33.464	25.293	268.6	.222	5.30	87.7	7.4	.83	7.9	.16	.55	.42	65
1	75	11.44	11.43	33.483	25.518	247.3	.255	4.61	74.5	12.1	1.10	13.1	.05	.32	.25	75
1	90	10.71	10.70	33.596	25.737	226.8	.290	4.04	64.3	17.1	1.30	16.9	.01	.13	.13	90
	100 ISL	10.38	10.37	33.654	25.839	217.2	.313	3.73	59.1							101
1	106	10.23	10.22	33.683	25.887	212.8	.325	3.60	56.8	21.0	1.50	19.9	.00	.04	.35	106
1	119	9.83	9.81	33.769	26.022	200.1	.354	3.34	52.2	24.2	1.62	21.8	.00	.01	.34	120
	125 ISL	9.70	9.68	33.794	26.064	195.3	.365	3.26	50.9							126
1	145	9.30	9.29	33.859	26.179	185.7	.403	3.05	47.2	28.4	1.76	24.3	.00	.00	.04	146
	150 ISL	9.23	9.21	33.859	26.199	183.9	.412	3.01	46.5							151
1	165	8.98	8.97	33.901	26.263	178.0	.440	2.90	44.5	31.8	1.86	25.8	.02	.00	.04	166
1	185	8.54	8.52	33.973	26.389	166.3	.474	2.78	42.3	35.9	1.94	26.9	.01			186
	200 ISL	8.28	8.26	33.996	26.446	161.1	.498	2.78	42.1							201
1	203	8.24	8.22	33.998	26.455	160.3	.503	2.78	42.0	37.8	1.98	27.7	.01			204
1	232	7.90	7.88	34.033	26.533	153.2	.543	2.67	40.0	41.6	2.06	28.6	.01			233
	250 ISL	7.66	7.64	34.048	26.579	149.1	.576	2.49	37.2							252
1	272	7.38	7.35	34.064	26.633	144.3	.609	2.21	32.8	48.7	2.27	31.2	.01			274
	300 ISL	7.10	7.07	34.094	26.695	138.6	.648	1.79	26.4							302
1	332	6.82	6.79	34.131	26.763	132.4	.691	1.32	19.3	60.9	2.66	35.1	.00			334
	400 ISL	6.23	6.20	34.206	26.900	120.1	.777	.69	10.0							403
1	405	6.19	6.15	34.211	26.910	119.2	.783	.66	9.5	73.6	2.88	38.3	.01			408
1	479	5.75	5.71	34.272	27.014	109.9	.866	.44	6.3	82.7	3.03	40.0	.00			481
	500 ISL	5.62	5.58	34.290	27.044	107.3	.890	.39	5.6							504
1	550	5.34	5.30	34.326	27.106	101.7	.943	.31	4.4	92.5	3.11	41.4	.00			554

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 87 100

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
31 39.1 N	123 04.0 W	05/10/84	1142 GMT	4114 M	340 10 KT			1018.1 MB	19.0 C	16.1 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	18.07	18.07	33.175	23.863	403.4	.000	5.53	102.1	2.0	.28	.0	.00	.10	.33	0
	10 ISL	17.99	17.99	33.174	23.878	402.1	.040	5.67	104.5							10
1	11	17.99	17.98	33.174	23.879	402.0	.044	5.68	104.7	2.0	.27	.0	.00	.11	.02	11
	20 ISL	17.97	17.96	33.241	23.936	396.9	.080	5.76	106.2							20
1	26	17.95	17.95	33.328	24.005	390.4	.104	5.80	107.0	1.8	.27	.0	.00	.18	.05	26
	30 ISL	17.46	17.46	33.238	24.093	382.2	.119	5.83	106.5							30
1	40	16.04	16.03	33.148	24.316	361.1	.156	5.91	104.9	1.9	.29	.0	.00	.23	.25	40
	50 ISL	14.93	14.92	33.031	24.472	345.6	.192	5.99	103.8							50
1	55	14.47	14.47	32.985	24.534	340.8	.208	6.01	103.2	2.4	.34	.0	.06	.37	.26	55
1	66	13.56	13.55	32.930	24.680	327.0	.245	5.99	100.9	2.8	.41	.3	.41	.36	.30	65
	75 ISL	12.85	12.84	32.955	24.849	311.1	.274	5.96	99.0							75
1	77	12.73	12.72	32.975	24.879	308.2	.280	5.95	98.6	3.2	.42	1.0	.08	.19	.25	77
1	92	12.08	12.07	33.038	25.054	291.9	.325	5.71	93.3	4.3	.53	2.9	.03	.10	.12	92
	100 ISL	11.46	11.45	33.060	25.185	279.6	.348	5.52	89.1							101
1	107	11.02	11.01	33.106	25.300	268.7	.366	5.34	85.4	8.5	.79	7.9	.01	.05	.08	107
1	121	10.83	10.82	33.423	25.580	242.4	.405	4.80	76.6	11.5	.99	11.5	.01	.03	.06	122
	125 ISL	10.77	10.76	33.458	25.628	237.9	.413	4.69	74.7							126
1	146	9.91	9.90	33.582	25.863	215.9	.461	4.06	63.5	19.2	1.42	19.1	.01	.01	.05	147
	150 ISL	9.82	9.80	33.612	25.902	212.2	.469	3.94	61.5							151
1	165	9.46	9.45	33.731	25.053	198.0	.500	3.47	53.8	24.9	1.63	22.6	.01	.00	.04	166
1	186	8.91	8.89	33.826	26.216	182.8	.540	3.17	48.6	29.6	1.79	25.3	.01			187
	200 ISL	8.62	8.60	33.912	26.329	172.3	.565	3.11	47.4							201
1	205	8.52	8.50	33.939	26.365	168.9	.573	3.09	47.0	32.7	1.85	26.2	.01			206
1	234	8.01	7.99	33.980	26.475	158.8	.621	3.51	52.8	35.0	1.80	25.6	.00			235
	250 ISL	7.81	7.79	34.004	26.522	154.5	.646	3.18	47.6							252
1	275	7.54	7.52	34.032	26.584	148.9	.683	2.47	36.7	45.5	2.15	30.4	.00			276
	300 ISL	7.14	7.11	34.042	26.649	142.9	.720	2.13	31.4							302
1	333	6.60	6.57	34.049	26.728	135.7	.767	1.84	26.8	58.4	2.43	34.6	.00			335
	400 ISL	5.85	5.81	34.090	26.857	123.7	.853	1.15	16.5							403
1	406	5.80	5.77	34.095	26.867	122.9	.860	1.10	15.7	73.3	2.78	38.8	.00			408
1	477	5.47	5.43	34.172	26.969	113.8	.949	.64	9.1	82.7	2.98	40.6	.01			480
	500 ISL	5.41	5.37	34.203	27.001	111.1	.971	.53	7.5							504
1	549	5.34	5.30	34.276	27.067	105.4	1.024	.34	4.8	90.3	3.13	41.6	.00			553

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 90 28

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
33 29.0 N	117 46.2 W	19/10/84	0004 GMT	71 M	250 14 KT		0	1016.2 MB	19.5 C	17.8 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
	0 ISL	20.26	20.25	33.437	23.503	438.6	.000	5.46	105.2							0
1	1	20.26	20.25	33.437	23.503	437.5	.004	5.46	105.2	1.8	.33	.0	.02	.29	.01	1
	10 ISL	20.26	20.25	33.582	23.614	427.3	.043	5.48	105.7							10
1	11	20.26	20.26	33.598	23.625	426.2	.047	5.48	105.7	1.7	.29	.0	.00	.28	.03	11
	20 ISL	18.46	18.45	33.419	23.950	395.5	.385	6.08	113.3							20
1	22	17.93	17.92	33.375	24.047	386.3	.392	6.21	114.5	2.2	.42	.0	.02	.60	.13	22
	30 ISL	15.51	15.51	33.383	24.615	333.9	.121	6.23	109.5							30
1	32	14.98	14.98	33.374	24.725	322.0	.127	6.23	108.4	3.2	.39	.0	.01	.94	.17	32
	50 ISL	13.68	13.67	33.430	25.019	294.3	.183	5.59	94.7							50
1	52	13.55	13.54	33.434	25.048	291.6	.188	5.48	92.6	4.8	.71	3.3	.25	.75	.26	52

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 90 30

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
33 24.7 N	117 54.7 W	19/10/84	0252 GMT	607 M	260 20 KT	300 03 04	0	1017.0 MB	19.7 C	18.0 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
1	0	20.16	20.16	33.619	23.668	421.7	.000	5.45	105.0	1.7	.31	.1	.01	.16	.04	0
1	10	20.16	20.16	33.669	23.692	419.8	.042	5.49	105.7					.16	.04	10
1	19	18.32	18.32	33.526	24.066	384.4	.078	5.89	109.5	2.0	.31	.0	.00	.25	.03	19
	20 ISL	17.95	17.95	33.511	24.145	376.9	.082	5.96	110.0							20
1	29	15.08	15.08	33.460	24.769	317.7	.113	6.36	110.9	3.0	.43	.0	.00	.36	.20	29
	30 ISL	14.93	14.92	33.461	24.803	314.4	.116	6.35	110.6							30
1	39	14.24	14.24	33.475	24.960	299.7	.144	5.99	102.7	3.6	.51	.0	.01	.54	.37	39
1	48	13.54	13.53	33.483	25.111	285.5	.170	5.40	91.3	4.8	.67	3.2	.06	.47	.40	48
	50 ISL	13.38	13.38	33.493	25.151	281.8	.176	5.28	89.0							50
1	58	12.93	12.92	33.528	25.269	270.7	.197	4.96	82.8	6.9	.89	7.4	.04	.25	.30	58
1	68	12.66	12.65	33.549	25.338	264.5	.224	4.81	79.9	7.9	.96	8.5	.03	.18	.21	68
	75 ISL	12.36	12.35	33.565	25.408	257.7	.243	4.66	76.9							75
1	82	12.06	12.05				.260									82
1	96	11.52	11.51	33.612	25.602	239.8	.294	4.18	67.8	13.1	1.17	13.6	.01	.06	.08	96
	100 ISL	11.32	11.31	33.628	25.653	235.1	.305	4.08	65.9							101
1	114	10.71	10.70				.336									114
	125 ISL	10.35	10.34	33.734	25.906	211.4	.360	3.61	57.0							126
1	137	10.05	10.03	33.784	25.998	202.9	.385	3.42	53.7					.00	.03	139
	150 ISL	9.76	9.74	33.832	26.083	195.1	.411	3.29	51.4							151
1	164	9.50	9.49	33.881	26.164	187.6	.438	3.17	49.3	26.6	1.80	23.1	.01			165
1	191	9.22	9.20	33.973	26.283	176.7	.487	2.86	44.2	30.2	1.96	25.1	.01			192
	200 ISL	9.06	9.04	33.990	26.322	173.2	.503	2.83	43.5							201
1	219	8.76	8.74	34.024	26.396	165.4	.535	2.73	41.8	34.3	2.07	26.8	.01			220
	250 ISL	8.60	8.58	34.119	26.495	157.6	.585	2.17	33.1							252
1	256	8.58	8.55	34.135	26.511	156.2	.594	2.06	31.4	39.6	2.29	29.0	.00			257
	300 ISL	7.99	7.96	34.154	26.615	146.2	.651	1.71	25.6							302
1	310	7.85	7.82	34.160	26.642	144.4	.676	1.66	24.9	48.1	2.52	31.9	.01			312
1	379	7.37	7.33	34.188	26.734	135.5	.772	1.24	18.4	54.0	2.64	33.6	.00			381
	400 ISL	7.12	7.08	34.210	26.786	131.7	.801	1.03	15.2							403
1	450	6.52	6.48	34.256	26.911	120.1	.856	.58	8.4	70.7	2.99	38.2	.01			453
	500 ISL	6.13	6.09	34.301	26.989	113.0	.922	.45	6.4							504
1	525	5.99	5.95	34.311	27.015	110.8	.951	.39	5.5	81.2	3.11	39.9	.01			529

RV NEW HORIZON CALCOFI CRUISE 8410 STATION 90 35

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
33 14.6 N	118 15.0 W	19/10/84	0646 GMT	315 M	280	15 KT	300 02 05		1016.0 MB	20.0 C	18.0 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	18.94	18.94	33.559	23.937	396.1	.000	5.65	106.3							0
1	1	18.94	18.94	33.559	23.937	396.1	.004	5.65	106.3	1.5	.38	.0	.01	.27	.01	1
	10 ISL	18.95	18.95	33.565	23.939	396.3	.040	5.71	107.4							10
1	11	18.95	18.95	33.566	23.939	396.3	.043	5.72	107.7	1.5	.36	.0	.00	.27	.01	11
	20 ISL	17.96	17.96	33.466	24.109	380.3	.079	5.98	110.3							20
	30 ISL	16.40	16.39	33.358	24.395	353.3	.115	6.20	111.0							30
1	32	16.05	16.05	33.340	24.461	347.1	.122	6.24	110.9	1.6	.38	.0	.00	.36	.11	32
1	47	13.83	13.82	33.360	24.958	300.2	.170	5.98	101.6	2.5	.57	2.0	.12	.61	.33	47
	50 ISL	13.53	13.53	33.374	25.029	293.4	.180	5.80	98.0							50
1	57	13.04	13.03	33.406	25.153	281.8	.198	5.41	90.5	4.8	.84	6.4	.18	.40	.36	57
1	72	12.26	12.25	33.445	25.334	264.8	.240	4.99	82.1	7.6	.88	9.7	.06	.27	.25	72
	75 ISL	12.11	12.10	33.457	25.372	261.3	.249	4.91	80.5							75
1	97	11.65	11.63	33.506	25.498	249.6	.278	4.63	75.2	10.6	1.19	12.5	.02	.12	.16	97
	100 ISL	11.24	11.23	33.568	25.620	238.2	.311	4.29	69.2							101
1	108	11.03	11.02	33.600	25.683	232.4	.329	4.12	66.1	15.1	1.41	15.9	.01	.06	.37	109
	125 ISL	10.46	10.45	33.645	25.818	219.9	.368	3.83	60.6							126
1	132	10.22	10.20	33.670	25.879	214.1	.384									133
	150 ISL	9.64	9.62	33.805	26.083	195.0	.420	3.52	54.8							151
1	152	9.57	9.56	33.824	26.103	192.7	.424	3.49	54.3	24.7	1.73	21.7	.01	.01	.32	153
1	187	9.08	9.07				.489									188
	200 ISL	8.88	8.86	33.979	26.341	171.4	.511	2.85	43.7							201
1	217	8.62	8.60	34.030	26.422	163.8	.540	2.64	40.2	35.3	2.09	27.2	.01	.01	.33	218
	250 ISL	8.18	8.15	34.091	26.537	153.3	.592	2.26	34.1							252
1	259	8.08	8.05	34.098	26.558	151.5	.605	2.17	32.7	42.8	2.42	30.0	.01			260

RV NEW HORIZON CALCOFI CRUISE 8410 STATION 90 37

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
33 11.0 N	118 23.4 W	19/10/84	0938 GMT	1174 M	200	11 KT			1015.0 MB	19.4 C	19.2 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	19.39	19.39	33.579	23.838	405.6	.000	5.49	104.2							0
1	1	19.39	19.39	33.579	23.838	405.6	.004	5.49	104.2	1.4	.31	.0	.00	.12	.02	1
	10 ISL	19.38	19.38	33.576	23.839	405.8	.041	5.48	104.0							10
1	11	19.38	19.37	33.575	23.838	405.8	.044	5.48	104.0	1.3	.31	.0	.00	.11	.04	11
	20 ISL	17.29	17.29	33.424	24.238	363.1	.079	6.01	109.4							20
1	22	16.78	16.77	33.397	24.339	358.5	.086	6.12	110.4	1.8	.35	.0	.00	.27	.09	22
	30 ISL	15.55	15.54	33.387	24.611	333.8	.114	6.15	108.3							30
1	32	15.31	15.31	33.373	24.651	329.0	.121	6.16	107.9	2.2	.41	.0	.00	.42	.29	32
1	42	14.11	14.11	33.372	24.908	304.8	.152	5.97	102.0	2.5	.54	1.5	.10	.73	.38	42
	50 ISL	13.38	13.37	33.391	25.073	289.2	.176	5.60	94.3							50
1	57	12.94	12.93	33.410	25.175	279.6	.196	5.30	88.4	5.3	.82	6.9	.13	.20	.26	57
1	67	12.61	12.60	33.431	25.257	272.1	.223	5.12	84.9	5.4	.93	8.3	.07	.10	.13	67
	75 ISL	12.18	12.17	33.527	25.414	257.3	.245	4.68	76.9							75
1	77	12.09	12.07	33.547	25.448	254.2	.249	4.59	75.3	9.8	1.05	11.0	.02	.06	.10	77
1	92	11.45	11.44	33.583	25.593	240.6	.286	4.28	69.3	11.6	1.23	13.9	.01	.05	.08	92
	100 ISL	11.25	11.24	33.612	25.652	235.2	.306	4.13	66.6							101
1	111	10.98	10.97	33.657	25.736	227.4	.333	3.93	63.0	15.8	1.32	16.1	.01	.03	.05	112
	125 ISL	10.42	10.41	33.724	25.886	215.3	.363	3.63	57.6							126
1	131	10.15	10.13	33.756	25.958	206.6	.376	3.51	55.3	21.1	1.59	20.0	.02	.01	.05	132
	150 ISL	9.61	9.59	33.826	26.104	193.0	.413	3.38	52.7							151
1	156	9.47	9.45	33.848	26.144	189.3	.425	3.35	52.0	25.6	1.74	22.5	.01	.00	.02	157
1	186	9.03	9.01	33.977	26.315	173.5	.479	2.81	43.2	31.3	1.98	25.7	.01			187
	200 ISL	8.77	8.75	33.991	26.368	168.7	.503	2.80	42.8							201
1	215	8.51	8.48	33.994	26.411	164.7	.528	2.79	42.4	34.7	2.05	27.0	.02			216
1	249	8.26	8.23	34.048	26.492	157.6	.582	2.49	37.7	38.9	2.16	28.6	.01			253
	250 ISL	8.24	8.22	34.050	26.496	157.3	.584	2.47	37.4							252
1	297	7.74	7.71	34.118	26.624	145.7	.656	1.86	27.8	47.0	2.40	31.3	.01			299
	300 ISL	7.71	7.68	34.121	26.631	145.1	.660	1.83	27.3							302
1	351	7.19	7.15	34.155	26.732	135.0	.731	1.35	19.9	55.6	2.62	34.3	.02			353
	400 ISL	6.86	6.82	34.191	26.806	129.6	.797	1.03	15.1							403
1	433	6.68	6.64	34.216	26.851	125.7	.839	.85	12.4	63.7	2.86	36.5	.01			436
	500 ISL	6.24	6.19	34.280	26.960	116.0	.920	.47	6.8							504
1	516	6.13	6.09	34.295	26.985	113.7	.939	.40	5.8	77.1	3.10	39.6	.01			520
	600 ISL	5.71	5.66	34.295	27.038	105.1	1.031	.33	4.7							604
1	602	5.70	5.65	34.338	27.073	106.0	1.032	.33	4.7	85.8	3.20	41.1	.01			606

RV NEW HORIZON CALCOFI CRUISE 8410 STATION 90 45

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 55.1 N	118 56.1 W	19/10/84	1451 GMT	1691 M	350	15 KT	180 06 05	1	1014.0 MB	16.9 C	15.0 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	17.06	17.05	33.446	24.309	360.6	.000	5.70	103.4							0
1	1	17.06	17.05	33.446	24.309	360.7	.004	5.70	103.4	1.5	.35	.0	.01	.25	.33	1
	10 ISL	17.05	17.05	33.443	24.308	361.0	.036	5.72	103.7							10
1	11	17.05	17.05	33.443	24.309	361.0	.040	5.72	103.7	1.5	.36	.0	.01	.24	.35	11
	20 ISL	16.95	16.95	33.475	24.357	355.7	.072	5.77	104.4							20
1	21	16.94	16.94	33.478	24.362	355.2	.075	5.77	104.4	1.6	.36	.0	.02	.34	.34	21
1	30	16.88	16.87	33.488	24.385	354.4	.107	5.77	104.3	1.6	.35	.0	.01	.38	.35	30
1	40	15.18	15.18	33.271	24.601	334.0	.141	6.07	106.0	1.8	.40	.0	.02	.76	.13	40
	50 ISL	14.00	13.99	33.297	24.873	308.3	.174	6.00	102.3							50
1	55	13.63	13.62	33.339	24.959	300.2	.188	5.96	100.8	2.7	.57	2.2	.12	.51	.29	55
1	64	13.24	13.23	33.435	25.112	285.9	.215	5.52	92.7	3.8	.77	5.3	.23	.23	.33	64
1	74	12.48	12.47	33.442	25.289	269.2	.242	5.09	84.1	6.7	.95	9.1	.13	.17	.21	74
	75 ISL	12.41	12.40	33.446	25.307	267.5	.245	5.05	83.4							75
1	88	11.77	11.75	33.506	25.476	251.8	.279	4.72	76.9	9.8	1.15	12.3	.04	.09	.13	88
	100 ISL	11.08	11.07	33.607	25.678	232.6	.309	4.33	69.5							101
1	107	10.75	10.74	33.678	25.793	221.8	.324	4.13	65.9	15.0	1.32	15.9	.02	.02	.31	107
	125 ISL	10.14	10.13	33.751	25.956	191.3	.362	3.70	58.3							126
1	127	10.10	10.09				.365									127
1	149	9.48	9.46	33.847	26.142	189.4	.408	3.30	51.2	25.8	1.76	22.6	.02	.01	.32	150
	150 ISL	9.46	9.44	33.847	26.145	189.1	.409	3.29	51.0							151
1	179	8.88	8.86	33.933	26.305	174.3	.462	2.94	45.1	31.2	1.94	25.7	.02			180
	200 ISL	8.60	8.57	33.977	26.384	167.1	.498	2.79	42.5							201
1	206	8.52	8.50	33.988	26.404	165.3	.507	2.75	41.8	34.9	2.06	27.2	.02			207
1	239	8.05	8.03	34.055	26.528	154.0	.560	2.35	35.4	40.9	2.22	29.6	.02			240
	250 ISL	7.94	7.92	34.070	26.556	151.4	.577	2.22	33.3							252
1	286	7.64	7.61	34.110	26.632	144.8	.631	1.79	26.7	48.3	2.43	32.1	.02			238
	300 ISL	7.50	7.47	34.128	26.666	141.7	.650	1.62	24.1							302
1	339	7.14	7.10	34.175	26.755	133.6	.704	1.19	17.5	57.1	2.70	34.9	.02			341
	400 ISL	6.82	6.78	34.217	26.832	127.0	.784	.83	12.2							403
1	420	6.73	6.70	34.228	26.852	125.4	.809	.76	11.1	65.0	2.90	37.3	.00			423
	500 ISL	6.24	6.20	34.282	26.960	115.9	.905	.45	6.6							504
1	505	6.21	6.17	34.284	26.966	115.4	.911	.44	6.4	75.0	3.07	39.4	.00			508
1	592	5.67	5.62	34.335	27.075	105.6	1.007	.29	4.1	85.6	3.15	41.3	.00			596

RV NEW HORIZON CALCOFI CRUISE 8410 STATION 90 45

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 57.3 N	118 58.6 W	19/10/84	2129 GMT	1691 M	220	22 KT	180 06 06	2	1014.0 MB	18.0 C	17.0 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
1	0	15.84	15.84	33.472	24.381	353.9	.000	5.75	103.9	1.7	.40	.0	.01	.31	.35	0
1	10	15.83	15.82	33.472	24.384	353.8	.035	5.78	104.4	1.6	.36	.0	.00	.31	.34	10
1	20	15.77	15.77	33.478	24.402	352.4	.070	5.79	104.4	1.7	.37	.0	.00	.37	.35	20
	30 ISL	15.57	15.56	33.491	24.459	347.3	.106	5.82	104.5							30
1	31	15.55	15.55	33.492	24.464	346.9	.109	5.82	104.5	1.7	.38	.0	.01	.54	.15	31
1	41	14.17	14.17	33.314	24.850	313.2	.141	6.15	105.2	2.1	.51	.9	.06	.90	.25	41
	50 ISL	13.34	13.33	33.338	25.040	292.4	.169	5.84	98.2							53
1	56	13.07	13.06	33.390	25.134	283.6	.186	5.49	91.8	4.5	.80	5.9	.22	.26	.22	56
1	66	12.16	12.15	33.470	25.372	261.0	.213	4.97	81.6	7.9	1.07	10.6	.07	.19	.20	66
	75 ISL	12.00	11.99	33.499	25.427	256.1	.237	4.77	78.0							75
1	77	11.99	11.98	33.503	25.431	255.7	.241	4.74	77.5	9.7	1.10	11.4	.04	.11	.15	77
1	92	11.07	11.06	33.598	25.674	232.9	.277	4.21	67.6	14.4	1.36	15.6	.01	.06	.09	92
	100 ISL	10.72	10.70	33.640	25.769	224.0	.297	4.07	64.8							101
1	111	10.34	10.33	33.692	25.875	214.1	.322	3.93	62.1	18.8	1.53	18.6	.01	.02	.04	112
	125 ISL	9.98	9.96	33.763	25.993	203.1	.350	3.68	57.7							126
1	131	9.83	9.82	33.794	26.041	198.6	.363	3.56	55.7	22.9	1.62	20.7	.02	.01	.03	132
	150 ISL	9.46	9.44	33.851	26.148	188.7	.399	3.30	51.2							151
1	156	9.34	9.32	33.867	26.180	185.8	.411	3.22	49.8	27.2	1.85	23.4	.00	.00	.03	157
1	186	8.66	8.64	33.974	26.371	169.1	.463	2.84	43.3	33.8	2.04	26.6	.01			187
	200 ISL	8.42	8.40	34.003	26.431	162.6	.486	2.70	41.0							201
1	215	8.22	8.20	34.024	26.479	158.2	.510	2.56	38.7	38.8	2.18	28.6	.00			216
1	250	7.89	7.87	34.070	26.563	150.7	.564	2.18	32.7	43.9	2.34	30.4	.00			251
1	299	7.57	7.54	34.121	26.650	143.2	.637	1.73	25.8	49.7	2.51	32.6	.00			301
	300 ISL	7.57	7.54	34.122	26.652	143.0	.638	1.72	25.6							302
1	353	7.12	7.09	34.175	26.757	133.7	.711	1.21	17.8	57.9	2.74	34.9	.00			355
	400 ISL	6.78	6.74	34.219	26.839	126.4	.772	.86	12.5							403
1	434	6.55	6.51	34.247	26.892	121.7	.819	.67	9.7	68.9	2.99	37.9	.00			437
	500 ISL	5.14	5.10	34.288	26.978	114.1	.892	.45	6.5							504
1	518	5.04	5.99	34.297	25.998	112.3	.913	.41	5.9	78.8	3.14	40.0	.01			522
	600 ISL	5.67	5.61	34.337	27.077	105.6	1.002	.29	4.2							604
1	603	5.65	5.60	34.338	27.079	105.4	1.005	.29	4.1	86.3	3.22	41.2	.01			607

RV NEW HORIZON CALCOFI CRUISE 8410 STATION 90 45

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 55.6 N	118 57.8 W	20/10/84	0209 GMT	1691 M	250	24 KT	270 08 05	1	1012.0 MB	17.0 C	16.0 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	0	16.85	16.85	33.481	24.384	353.4	.300	5.75	103.9	2.6	.42	.1	.00	.35	.04	0
1	10	16.85	16.85	33.480	24.385	353.7	.335	5.79	104.6	2.4	.39	.0	.00	.35	.37	10
1	20	16.85	16.85	33.479	24.384	354.1	.370	5.78	104.4	2.4	.40	.0	.00	.35	.33	20
	30 ISL	16.82	16.82	33.476	24.389	354.3	.405	5.76	104.0							30
1	31	16.82	16.82	33.476	24.389	354.3	.409	5.76	104.0	2.6	.41	.0	.00	.40	.36	31
1	41	13.72	13.71	33.255	24.899	305.5	.142	6.09	103.2	2.9	.54	1.4	.08	.77	.30	41
	50 ISL	13.40	13.39	33.301	24.999	296.3	.170	5.92	99.7							50
1	56	13.20	13.19	33.330	25.061	290.5	.187	5.71	95.8	4.2	.73	4.5	.18	.36	.30	56
1	66	12.91	12.90	33.384	25.162	281.1	.215	5.46	91.0	5.5	.84	6.4	.20	.28	.26	66
	75 ISL	12.10	12.09	33.479	25.391	259.5	.240	4.85	79.5							75
1	76	12.03	12.03	33.485	25.409	257.8	.242	4.80	78.6	9.4	1.15	11.3	.03	.13	.16	76
1	92	11.19	11.18	33.567	25.628	237.2	.281	4.43	71.3	14.0	1.33	14.9	.02	.05	.09	92
	100 ISL	10.93	10.91	33.598	25.700	230.6	.301	4.29	68.6							101
1	110	10.65	10.63	33.639	25.781	223.0	.325	4.11	65.4	18.1	1.48	17.4	.01	.03	.05	111
	125 ISL	10.13	10.11	33.741	25.950	207.2	.356	3.77	59.3							126
1	130	9.94	9.93	33.779	26.011	201.4	.367	3.64	57.1	22.4	1.63	20.1	.01	.01	.03	131
	150 ISL	9.47	9.45	33.850	26.145	189.1	.405	3.33	51.7							151
1	155	9.36	9.35	33.862	26.172	186.6	.419	3.26	50.5	27.5	1.82	23.4	.00	.01	.02	156
1	185	8.74	8.72	33.951	26.341	170.9	.468	2.88	44.0	33.6	2.03	26.4	.00			186
	200 ISL	8.50	8.48	33.986	26.406	165.0	.494	2.71	41.2							201
1	213	8.33	8.31	34.009	26.450	161.0	.514	2.59	39.2	37.9	2.19	28.1	.00			214
1	247	8.07	8.04	34.037	26.512	155.6	.568	2.43	36.6	41.3	2.28	29.3	.00			248
	250 ISL	8.04	8.01	34.042	26.520	154.9	.573	2.39	35.9							252
1	295	7.60	7.57	34.112	26.640	144.1	.641	1.76	26.2	49.8	2.52	32.5	.01			297
	300 ISL	7.55	7.52	34.118	26.651	143.2	.648	1.71	25.4							302
1	347	7.13	7.10	34.158	26.743	134.9	.713	1.28	19.9	57.4	2.71	34.8	.01			349
	400 ISL	6.84	6.80	34.201	26.817	128.5	.783	.93	13.5							403
1	428	6.71	6.67	34.222	26.852	125.6	.819	.79	11.5	66.5	2.96	37.4	.00			431
	500 ISL	6.25	6.20	34.276	26.955	115.3	.905	.51	7.3							504
1	510	6.18	6.14	34.283	26.969	115.1	.917	.48	6.9	75.8	3.12	39.4	.00			513
1	592	5.69	5.64	34.322	27.061	106.9	1.008	.33	4.7	86.0	3.22	40.9	.00			596

RV NEW HORIZON CALCOFI CRUISE 8410 STATION 93 45

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 54.8 N	118 56.5 W	20/10/84	0551 GMT	1691 M	240	22 KT	280 08 05		1013.0 MB	17.0 C	16.0 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	16.85	16.84	33.479	24.385	353.4	.300	5.77	104.2							0
1	1	16.85	16.84	33.479	24.385	353.5	.304	5.77	104.2	2.6	.36	.0	.00	.32	.05	1
	10 ISL	16.85	16.85	33.478	24.383	353.9	.335	5.82	105.1							10
1	11	16.85	16.85	33.478	24.383	353.9	.339	5.82	105.2	2.5	.36	.0	.00	.31	.09	11
	20 ISL	16.85	16.85	33.476	24.382	354.3	.371	5.78	104.4							20
1	22	16.85	16.85	33.476	24.382	354.4	.378	5.77	104.2	2.4	.35	.0	.00	.37	.07	22
	30 ISL	16.81	16.81	33.474	24.390	353.9	.406	5.79	104.5							30
1	32	16.80	16.80	33.474	24.392	353.7	.413	5.79	104.5	2.3	.35	.0	.00	.39	.09	32
1	42	14.11	14.11	33.256	24.818	313.3	.746	6.11	104.4	2.7	.49	1.0	.05	.93	.25	42
	50 ISL	13.65	13.64	33.298	24.947	297.4	.771	5.94	100.6							50
1	58	13.20	13.20	33.336	25.065	290.1	.794	5.66	94.9	4.5	.69	4.6	.19	.33	.25	58
1	68	13.00	12.99	33.339	25.147	282.6	.822	5.47	91.4	4.8	.77	6.0	.21	.26	.21	68
	75 ISL	12.49	12.48	33.439	25.286	269.6	.842	5.15	85.1							75
1	78	12.28	12.27	33.458	25.341	264.4	.850	5.02	82.6	8.1	1.01	10.2	.07	.08	.12	78
1	94	11.49	11.48	33.532	25.547	245.0	.893	4.59	74.3	11.7	1.19	13.6	.02			94
	100 ISL	11.24	11.22	33.559	25.614	238.8	.906	4.45	71.7							101
1	113	10.78	10.76	33.622	25.745	226.6	.937	4.18	66.7	16.4	1.35	16.6	.01	.02	.05	114
	125 ISL	10.44	10.42	33.696	25.862	215.7	.962	3.95	62.6							126
1	133	10.19	10.17	33.750	25.947	207.7	.980	3.78	59.6	20.8	1.49	19.0	.00	.01	.03	134
	150 ISL	9.55	9.54	33.840	26.124	191.1	1.013	3.37	52.4							151
1	158	9.25	9.24	33.878	26.202	183.9	1.029	3.19	49.3	28.5	1.80	23.9	.00	.00	.02	159
1	198	8.70	8.69	33.961	26.356	169.6	1.061	2.92	44.6	34.1	1.96	26.4	.00			199
	200 ISL	8.50	8.48	33.988	26.407	164.9	1.071	2.80	42.5							201
1	218	8.25	8.22	34.021	26.472	159.3	1.084	2.60	39.3	39.2	2.10	28.5	.00			219
	250 ISL	7.93	7.90	34.054	26.553	151.6	1.100	2.22	33.3							252
1	253	7.91	7.88	34.057	26.559	151.2	1.101	2.19	32.9	44.4	2.26	30.4	.00			254
	300 ISL	7.45	7.42	34.112	26.660	142.1	1.120	1.78	26.4							302
1	302	7.43	7.40	34.114	26.665	141.7	1.121	1.76	26.1	51.5	2.45	32.9	.00			304
1	357	7.07	7.04	34.195	26.780	131.5	1.141	1.07	15.8	59.8	2.77	35.6	.00			359
	400 ISL	6.75	6.71	34.223	26.845	125.7	1.151	.86	12.6							403
1	440	6.45	6.41	34.238	26.897	121.2	1.159	.77	11.2	69.1	2.89	37.7	.00			443
	500 ISL	6.06	6.02	34.280	26.982	113.7	1.173	.47	6.8							504
1	523	5.93	5.88	34.297	27.012	111.0	1.178	.37	5.3	81.9	3.08	40.4	.00			527
	600 ISL	5.59	5.54	34.341	27.089	104.3	1.196	.31	4.4							604
1	609	5.56	5.51	34.345	27.096	103.7	1.198	.30	4.3	89.1		41.6	.00			613

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 90 53

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 39.0 N	119 29.7 W	20/10/84	1431 GMT	1309 M	300	30 KT	300 37 06	1	1013.0 MB	15.0 C	13.5 C	1/8	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	15.45	15.45	33.433	24.665	326.7	.000	5.98	105.1							0
1	1	15.45	15.45	33.433	24.665	326.7	.003	5.98	105.1	.8	.41	.1	.00	1.83	.17	1
	10 ISL	15.45	15.45	33.434	24.668	326.7	.033	6.00	105.4							10
1	11	15.45	15.45	33.435	24.668	326.7	.036	6.00	105.4	.8	.43	.1	.00	1.83	.23	11
	20 ISL	15.47	15.47	33.442	24.670	326.5	.065	6.01	105.5							20
1	21	15.47	15.47	33.443	24.670	326.9	.068	6.01	105.5	.9	.43	.1	.00	2.19	.27	21
	30 ISL	15.50	15.50	33.452	24.670	327.1	.098	5.99	105.4							30
1	32	15.51	15.51	33.454	24.670	327.2	.104	5.99	105.4	.7	.46	.1	.00	2.45	.40	32
1	42	15.36	15.35	33.429	24.684	326.1	.137	6.00	105.2	1.1	.46	.1	.00	1.67	.30	42
	50 ISL	14.70	14.69	33.444	24.839	311.5	.163	5.83	100.9							50
1	57	14.11	14.11	33.474	24.986	297.7	.183	5.64	96.5	3.8	.54	1.5	.04	.73	.37	57
1	67	13.79	13.78	33.520	25.091	288.1	.212	5.41	91.9	4.4	.66	3.2	.05	.39	.35	67
	75 ISL	13.32	13.31	33.489	25.161	281.6	.236	5.23	87.9							75
1	77	13.21	13.20	33.479	25.175	280.2	.241	5.19	87.1	5.9	.75	5.5	.03	.24	.25	77
1	92	12.13	12.12	33.477	25.385	260.6	.281	4.86	79.8	8.5	.98	9.8	.01	.14	.14	92
	100 ISL	11.59	11.58	33.517	25.516	248.1	.303	4.63	75.2							101
1	111	11.00	10.99	33.586	25.677	233.0	.330	4.34	69.6	14.2	1.35	15.4	.03	.03	.03	112
	125 ISL	10.71	10.70	33.627	25.760	225.3	.361	4.17	66.4							126
1	135	10.52	10.51	33.664	25.823	219.7	.384	4.02	63.8	17.5	1.43	17.7	.02	.01	.02	136
	150 ISL	9.85	9.84	33.778	26.026	200.5	.415	3.58	56.0							151
1	155	9.61	9.59	33.822	26.100	193.5	.425	3.41	53.1	24.9	1.71	22.2	.02	.01	.03	156
1	185	9.06	9.04	33.951	26.291	175.8	.480	2.80	43.1	31.5	1.98	25.6	.01			186
	200 ISL	8.74	8.72	34.010	26.387	166.9	.506	2.56	39.2							201
1	214	8.48	8.45	34.053	26.462	159.9	.529	2.39	36.3	38.3	2.17	28.4	.00			215
1	247	8.16	8.13	34.079	26.531	153.9	.580	2.20	33.2	41.7	2.28	29.7	.00			248
	250 ISL	8.12	8.10	34.082	26.539	153.2	.585	2.17	32.7							252
1	294	7.63	7.60	34.124	26.645	143.6	.651	1.75	26.1	49.8	2.47	32.4	.00			296
	300 ISL	7.57	7.54	34.128	26.655	142.7	.659	1.70	25.4							302
1	347	7.16	7.13	34.153	26.733	135.8	.724	1.34	19.8	57.0	2.69	34.7	.00			349
	400 ISL	6.71	6.67	34.187	26.823	127.8	.794	.96	14.1	-						403
1	427	6.50	6.46	34.207	26.867	123.9	.829	.80	11.6	68.4	2.94	37.8	.00			430
	500 ISL	6.13	6.09	34.263	26.960	115.8	.916	.52	7.5							504
1	511	6.08	6.04	34.272	26.973	114.7	.928	.49	7.1	78.5	3.05	39.5	.00			514
1	595	5.59	5.54	34.330	27.080	105.1	1.021	.33	4.7	88.5	3.19	41.2	.00			599

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 90 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 25.1 N	119 58.4 W	20/10/84	1939 GMT	918 M	310	35 KT	290 15 07	1	1015.0 MB	16.9 C	13.6 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
	0 ISL	17.83	17.83	33.347	24.050	385.3	.000	5.58	102.7							0
1	1	17.83	17.83	33.347	24.050	385.4	.004	5.58	102.7	1.8	.50	.0	.00	.11	.00	1
	10 ISL	17.83	17.83	33.347	24.050	385.7	.039	5.59	102.8							10
1	11	17.83	17.83	33.346	24.049	385.8	.042	5.59	102.9	1.7	.40	.0	.00	.11	.00	11
	20 ISL	17.81	17.80	33.345	24.054	385.5	.077	5.58	102.6							20
1	21	17.80	17.80	33.346	24.055	385.5	.081	5.58	102.6	1.8	.41	.0	.00	.10	.01	21
	30 ISL	17.82	17.82	33.344	24.050	386.3	.116	5.58	102.7							30
1	31	17.82	17.82	33.344	24.049	386.4	.119	5.58	102.7	1.6	.31	.0	.00	.12	.00	31
1	40	17.78	17.77	33.342	24.059	385.8	.154	5.60	102.9	1.7	.35	.0	.00	.15	.00	40
	50 ISL	15.41	15.40	33.292	24.569	337.4	.190	6.18	108.4							50
1	55	14.21	14.20	33.269	24.808	314.7	.206	6.38	109.2	1.7	.38	.0	.00	.38	.13	55
1	64	13.61	13.60	33.342	24.989	297.6	.234	5.92	100.1	2.6	.54	2.5	.12	.59	.22	64
1	74	12.87	12.86	33.366	25.156	282.0	.262	5.37	89.4	5.0	.82	6.5	.20	.30	.26	74
	75 ISL	12.78	12.77	33.370	25.176	279.9	.266	5.32	88.5							75
1	88	12.02	12.00	33.431	25.370	261.8	.300	4.96	81.2	8.0	.98	10.3	.02	.21	.18	88
	100 ISL	11.51	11.49	33.487	25.509	248.8	.332	4.70	76.1							101
1	107	11.29	11.28	33.521	25.574	242.7	.348	4.57	73.7					.05	.05	107
1	125	10.71	10.70	33.656	25.783	223.1	.392	4.09	65.2	16.3	1.33	16.4	.01	.02	.03	126
1	148	9.93	9.91	33.756	25.996	203.3	.441	3.71	58.1	21.3	1.52	20.0	.00	.01	.01	149
	150 ISL	9.88	9.86	33.754	26.010	202.0	.444	3.69	57.7							151
1	176	9.28	9.26	33.870	26.191	185.1	.495	3.45	53.3	26.5	1.74	22.7	.00			177
	200 ISL	8.87	8.85	33.934	26.307	174.5	.538	3.43	52.5							201
1	204	8.81	8.79	33.942	26.324	173.0	.544	3.42	52.3	33.0	1.87	24.0	.01			205
1	236	8.28	8.25	33.996	26.448	161.5	.598	3.02	45.7	35.6	2.03	26.8	.01			237
	250 ISL	8.06	8.04	34.012	26.493	157.5	.620	2.87	43.2							252
1	281	7.63	7.60	34.039	26.578	149.7	.659	2.53	37.7	43.9	2.22	29.8	.01			283
	300 ISL	7.41	7.39	34.055	26.621	145.8	.696	2.27	33.7							302
1	332	7.06	7.03	34.078	26.689	139.7	.742	1.83	26.9	53.3	2.52	33.5	.00			334
	400 ISL	6.30	6.26	34.125	26.828	126.9	.832	1.13	16.3							403
1	412	6.18	6.14	34.135	26.851	124.8	.848	1.03	14.8	69.9	2.91	38.4	.00			415
1	495	5.79	5.75	34.220	26.968	114.6	.947	.62	8.9	80.2	3.10	40.4	.01			498
	500 ISL	5.77	5.73	34.224	26.974	114.0	.953	.60	8.6							504
1	582	5.48	5.43	34.290	27.062	106.5	1.043	.35	5.0	88.5	3.21	41.7	.00			586

RV NEW HORIZON CALCOFI CRUISE 8410 STATION 90 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 05.3 N	120 38.4 W	21/10/84	1453 GMT	3918 M	100 30 KT	310 08 05	1	1015.0 MB	16.9 C	14.0 C	2/8	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	18.23	18.23	33.438	24.021	388.0	.000	5.50	102.0							0
1	2	18.23	18.23	33.438	24.021	388.2	.008	5.50	102.0	1.8	.38	.0	.00	.09	.01	2
	10 ISL	18.24	18.24	33.438	24.018	388.9	.039	5.51	102.2							10
1	12	18.24	18.24	33.435	24.015	389.0	.046	5.51	102.2	1.8	.36	.0	.01	.09	.01	12
	20 ISL	18.27	18.26	33.435	24.010	389.7	.078	5.48	101.8							20
1	21	18.27	18.27	33.437	24.011	389.7	.081	5.48	101.7	1.5	.34	.0	.00	.09	.01	21
	30 ISL	18.27	18.26	33.436	24.010	390.2	.117	5.52	102.6							30
1	31	18.27	18.26	33.434	24.009	390.3	.120	5.52	102.5	1.5	.35	.0	.00	.09	.01	31
1	41	18.26	18.25	33.434	24.013	390.3	.159	5.51	102.3	1.3	.37	.0	.00	.09	.02	41
	50 ISL	16.27	16.26	33.286	24.371	356.3	.193	6.13	109.3							50
1	55	15.04	15.03	33.235	24.605	334.0	.210	6.40	111.4	1.9	.45	.0	.00	.28	.03	55
1	64	13.81	13.80	33.289	24.907	305.5	.238	6.09	103.4	2.8	.65	1.7	.05	.65	.19	64
1	74	13.06	13.05	33.299	25.067	290.4	.268	5.66	94.5	4.3	.76	4.6	.14	.48	.27	74
	75 ISL	12.97	12.96	33.308	25.091	289.0	.272	5.62	93.8							75
1	88	12.29	12.28	33.309	25.225	275.7	.308	5.26	86.5	5.4	.88	7.7	.08	.38	.29	88
	100 ISL	11.83	11.82	33.448	25.418	257.5	.341	4.86	79.2							101
1	107	11.59	11.58	33.533	25.529	247.1	.357	4.63	75.1	11.2	1.16	12.7	.04	.15	.15	107
1	125	10.48	10.47	33.665	25.831	218.6	.401	3.92	62.1	18.3	1.47	18.2	.01	.02	.03	126
1	148	9.69	9.67	33.797	26.068	196.4	.448	3.52	54.9	23.8	1.67	21.7	.01	.01	.02	149
	150 ISL	9.64	9.63	33.805	26.081	195.1	.452	3.51	54.6							151
1	175	9.08	9.06	33.904	26.251	179.3	.499	3.37	51.9	28.0	1.84	23.7	.01			176
	200 ISL	8.61	8.59	33.969	26.376	167.8	.542	3.24	49.3							201
1	203	8.56	8.53	33.975	26.389	166.7	.547	3.22	49.0	32.8	1.92	25.5	.00			204
1	235	8.08	8.05	34.012	26.490	157.4	.599	2.97	44.7	37.8	2.08	27.4	.00			236
	250 ISL	7.83	7.81	34.023	26.535	153.4	.622	2.82	42.2							252
1	280	7.38	7.35	34.040	26.614	146.2	.668	2.46	36.5	46.9	2.28	30.9	.00			282
	300 ISL	7.14	7.12	34.054	26.657	142.2	.696	2.19	32.2							302
1	330	6.82	6.79	34.075	26.719	136.6	.738	1.76	25.7	56.5	2.61	34.5	.00			332
	400 ISL	6.17	6.13	34.133	26.851	124.6	.829	.99	14.3							403
1	408	6.10	6.06	34.140	26.865	123.3	.840	.92	13.2	71.5	2.92	39.0	.01			411
1	489	5.63	5.59	34.215	26.983	112.9	.935	.51	7.3	82.6	3.10	41.1	.01			492
	500 ISL	5.58	5.54	34.225	26.997	111.6	.947	.47	6.7							504
1	571	5.33	5.28	34.287	27.078	104.5	1.024	.32	4.5	91.1	3.22	42.4	.01			575

RV NEW HORIZON CALCOFI CRUISE 8410 STATION 90 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 05.1 N	120 38.8 W	21/10/84	1950 GMT	3918 M	320 24 KT	320 10 05	1	1017.2 MB	18.0 C	17.0 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	18.25	18.25	33.435	24.013	388.7	.000	5.54	102.8							0
1	1	18.25	18.25	33.435	24.013	388.9	.004	5.54	102.8	1.5	.37	.1	.00	.09	.01	1
	10 ISL	18.27	18.27	33.435	24.009	389.6	.039	5.50	102.1							10
1	11	18.27	18.27	33.435	24.009	389.6	.043	5.50	102.1	1.3	.46	.1	.00	.09	.01	11
	20 ISL	18.26	18.25	33.435	24.012	389.6	.078	5.53	102.6							20
1	21	18.26	18.25	33.434	24.012	389.6	.081	5.53	102.6	1.1	.36	.0	.00	.08	.01	21
	30 ISL	18.27	18.27	33.433	24.008	390.4	.117	5.53	102.7							30
1	32	18.28	18.27	33.433	24.007	390.5	.124	5.53	102.7	1.3	.35	.0	.00	.08	.02	32
1	42	18.25	18.24	33.433	24.013	390.2	.163	5.54	102.8	1.4	.35	.0	.00	.08	.02	42
	50 ISL	15.99	15.98	33.357	24.489	345.1	.193	6.01	106.8							50
1	57	13.92	13.91	33.332	24.918	304.2	.215	6.28	106.9	2.4	.52	1.1	.05	.75	.17	57
1	67	12.97	12.96	33.305	25.089	288.1	.245	5.65	94.3	4.0	.74	4.9	.20	.51	.27	67
	75 ISL	12.41	12.40	33.312	25.204	277.3	.268	5.37	88.5							75
1	77	12.32	12.31	33.319	25.226	275.2	.273	5.32	87.6	5.9	.88	7.6	.09	.38	.28	77
1	92	11.90	11.89	33.480	25.431	256.1	.312	4.86	79.4	8.8	1.10	11.3	.03	.25	.21	92
	100 ISL	11.62	11.61	33.530	25.521	247.6	.333	4.66	75.6							101
1	112	11.19	11.18	33.582	25.640	236.5	.361	4.39	70.7	13.2	1.30	14.8	.01	.10	.06	112
	125 ISL	10.61	10.59	33.651	25.799	221.8	.392	4.03	64.0							126
1	131	10.34	10.33	33.685	25.870	215.0	.406	3.87	61.2	18.9	1.55	18.9	.01	.01	.02	132
	150 ISL	9.82	9.80	33.759	26.025	200.6	.449	3.61	56.5							151
1	156	9.68	9.66	33.796	26.069	196.5	.457	3.56	55.5	23.4	1.72	21.8	.01	.00	.02	157
1	185	9.00	8.98	33.922	26.278	177.0	.511	3.41	52.4	28.1	1.81	24.0	.01			186
	200 ISL	8.73	8.71	33.959	26.349	171.5	.537	3.33	50.9							201
1	214	8.51	8.49	33.982	26.401	165.7	.560	3.25	49.4	32.5	1.94	25.7	.00			215
1	249	7.98	7.95	34.018	26.510	155.8	.616	3.00	45.1							250
	250 ISL	7.95	7.93	34.018	26.514	155.4	.618	2.98	44.8							252
1	296	7.28	7.25	34.047	26.633	144.5	.688	2.37	35.0	47.9	2.35	31.7	.00			298
	300 ISL	7.23	7.20	34.051	26.643	143.6	.693	2.31	34.2							302
1	349	6.65	6.62	34.097	26.759	133.0	.761	1.60	23.3	58.6	2.69	35.8	.00			351
	400 ISL	6.10	6.07	34.141	26.866	123.2	.826	1.02	14.6							403
1	431	5.83	5.79	34.168	26.921	118.1	.864	.75	10.7	76.0	3.04	40.2	.00			434
	500 ISL	5.56	5.52	34.239	27.010	110.3	.942	.45	6.4							504
1	516	5.53	5.48	34.255	27.028	108.9	.959	.42	6.0							519
	600 ISL	5.17	5.12	34.320	27.123	100.5	1.048	.40	5.6							604
1	631	5.16	5.11	34.321	27.124	100.4	1.049	.40	5.5	94.4	3.26	43.0	.00			605

RV NEW HORIZON CALCOFI CRUISE 8410 STATION 90 71

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 37.9 N	120 43.3 W	22/10/84	0022 GMT	3918 M	320 19 KT	330 12 12	1	1016.2 MB	18.0 C	16.0 C	2/8	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	18.15	18.15	33.445	24.045	385.7	.000	5.56	103.0	1.2	.33	.0	.00	.07	.02	0
1	10	18.16	18.15	33.443	24.042	386.4	.038	5.60	103.8	1.5	.37	.0	.00	.10	.01	10
	20 ISL	18.16	18.15	33.442	24.043	386.7	.077	5.54	102.7							20
1	26	18.16	18.15	33.441	24.042	386.9	.100	5.53	102.4	1.3	.32	.0	.00	.10	.01	26
	30 ISL	17.87	17.87	33.430	24.104	381.2	.116	5.62	103.6							30
1	41	17.12	17.11	33.438	24.267	366.0	.156	5.85	106.2	1.4	.37	.0	.00	.16	.05	41
	50 ISL	14.75	14.74	33.383	24.782	317.0	.188	5.83	101.0							50
1	56	13.28	13.27	33.367	25.074	289.3	.205	5.81	97.5	3.9	.64	3.8	.12	.71	.31	56
1	71	12.44	12.43	33.449	25.303	267.8	.247	5.14	84.9	7.6	.97	9.3	.09	.36	.36	71
	75 ISL	12.28	12.27	33.470	25.351	263.3	.258	5.01	82.5							75
1	82	12.04	12.03	33.501	25.420	256.9	.275	4.85	79.4	8.9	1.04	10.7	.03	.23	.30	82
1	98	11.27	11.26	33.565	25.611	238.9	.315	4.48	72.2	13.0	1.28	14.5	.02	.13	.12	98
	100 ISL	11.15	11.14	33.579	25.644	235.9	.321	4.40	70.8							101
1	116	10.40	10.39	33.675	25.852	216.4	.355	3.89	61.6	18.8	1.52	19.0	.00	.07	.10	117
	125 ISL	10.13	10.12	33.715	25.929	209.2	.376	3.72	58.6							126
1	136	9.84	9.82	33.762	26.015	201.2	.399	3.57	55.8	23.1	1.68	21.2	.00	.01	.02	137
	150 ISL	9.52	9.51	33.822	26.114	192.0	.426	3.44	53.4							151
1	156	9.39	9.37	33.847	26.156	188.1	.438	3.40	52.7	25.9	1.77	22.9	.00	.00	.02	157
1	175	9.01	8.99	33.920	26.274	177.2	.473	3.40	52.3	28.1	1.79	23.6	.00	.00	.02	176
1	195	8.57	8.55	33.979	26.389	166.5	.507	3.37	51.5	31.6	1.87	25.2	.06			196
	200 ISL	8.49	8.47	33.987	26.408	164.8	.515	3.35	50.9							201
1	215	8.28	8.25	34.000	26.451	160.9	.539	3.26	49.3	34.3	1.91	25.9	.00			216
1	249	7.72	7.70	34.026	26.553	151.5	.592	2.92	43.6	40.8	2.12	28.6	.00			250
	250 ISL	7.70	7.68	34.027	26.557	151.2	.594	2.90	43.3							252
1	297	7.08	7.05	34.055	26.667	141.2	.663	2.16	31.8	51.1	2.42	32.6	.00			299
	300 ISL	7.05	7.02	34.057	26.674	140.6	.667	2.11	31.1							302
1	350	6.52	6.49	34.105	26.783	130.7	.739	1.37	19.9	61.9	2.76	36.5	.00			352
	400 ISL	6.06	6.03	34.136	26.866	123.2	.798	.95	13.6							403
1	432	5.85	5.81	34.158	26.911	119.1	.837	.77	11.0	75.2	3.02	39.9	.00			435
	500 ISL	5.70	5.66	34.257	27.008	113.7	.915	.42	6.0							504
1	517	5.68	5.64	34.281	27.030	108.9	.933	.36	5.1	83.5	3.16	41.1	.00			520
	600 ISL	5.30	5.25	34.332	27.116	101.3	1.021	.28	4.0							604
1	602	5.29	5.24	34.332	27.118	101.2	1.023	.28	4.0	92.6	3.23	42.4	.00			606

RV NEW HORIZON CALCOFI CRUISE 8410 STATION 90 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 45.0 N	121 19.8 W	22/10/84	0618 GMT	3730 M	330 25 KT	320 10 06		1018.5 MB	16.0 C	15.0 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	17.99	17.99	33.483	24.115	379.1	.000	5.59	103.3	1.6	.37	.1	.00	.14	.00	0
1	10	18.00	18.00	33.480	24.109	380.0	.038	5.60	103.5	1.8	.37	.0	.00	.13	.02	10
	20 ISL	18.00	17.99	33.480	24.111	380.1	.076	5.62	103.7							20
1	25	17.99	17.99	33.480	24.113	380.2	.095	5.62	103.8	1.5	.33	.0	.00	.12	.02	25
	30 ISL	17.99	17.99	33.462	24.098	382.4	.114	5.61	103.6							30
1	40	18.00	18.00	33.480	24.110	381.0	.152	5.59	103.3	1.9	.32	.0	.00	.14	.01	40
	50 ISL	15.16	15.15	33.383	24.693	325.5	.187	5.96	104.0							50
1	55	13.72	13.71	33.373	24.990	297.3	.202	6.07	102.9	1.9	.32	.0	.00	1.00	.18	55
1	70	12.64	12.63	33.408	25.232	274.5	.245	5.25	87.1	3.3	.54	2.1	.07	.46	.28	70
	75 ISL	12.38	12.37	33.429	25.300	268.2	.259	5.08	83.8							75
1	80	12.17	12.15	33.451	25.357	262.8	.272	4.96	81.4	6.0	.93	7.6	.09	.25	.29	80
1	95	11.47	11.46	33.541	25.557	244.1	.310	4.50	72.8	11.8	1.16	13.2	.01	.13	.11	95
	100 ISL	11.21	11.19	33.570	25.627	237.5	.323	4.34	69.9							101
1	114	10.58	10.57	33.642	25.795	221.8	.354	3.99	63.4	17.3	1.53	17.4	.00	.05	.03	114
	125 ISL	10.15	10.13	33.714	25.926	209.5	.378	3.79	59.7							126
1	133	9.87	9.85	33.764	26.011	201.5	.396	3.65	57.1	22.5	1.60	20.6	.00	.01	.02	134
	150 ISL	9.39	9.37	33.840	26.151	188.5	.428	3.23	50.1							151
1	152	9.33	9.31	33.849	26.167	187.0	.432	3.18	49.2	27.6	1.80	23.9	.00	.01	.02	153
1	172	8.95	8.93	33.915	26.280	176.5	.468	2.95	45.3	30.7	1.91	25.7	.00	.00	.02	173
1	191	8.67	8.65	33.959	26.358	169.4	.501	2.92	44.6	33.1	1.97	26.4	.00			192
	200 ISL	8.54	8.52	33.976	26.392	165.3	.516	2.92	44.4							201
1	211	8.39	8.36	33.995	26.430	162.8	.534	2.92	44.3	35.4	2.01	27.1	.00			212
1	246	7.91	7.89	34.038	26.535	153.3	.589	2.51	37.7	41.8	2.18	29.6	.00			247
	250 ISL	7.85	7.82	34.041	26.547	152.2	.596	2.46	36.8							252
1	293	7.23	7.21	34.072	26.660	141.9	.659	1.97	29.1	51.3	2.42	32.9	.00			295
	300 ISL	7.14	7.11	34.074	26.674	140.6	.669	1.90	28.1							302
1	346	6.56	6.53	34.088	26.764	132.4	.731	1.49	21.7	61.2	2.66	36.0	.00			348
	400 ISL	6.19	6.16	34.134	26.849	124.9	.801	1.03	14.9							403
1	428	6.06	6.02	34.161	26.887	121.5	.836	.83	11.9	72.6	2.93	39.2	.00			431
	500 ISL	5.61	5.57	34.219	26.989	112.5	.923	.50	7.2							504
1	512	5.55	5.53	34.228	27.004	111.1	.933	.47	6.7	84.7	3.10	41.3	.00			515
1	596	5.18	5.13	34.307	27.112	101.6	1.022	.33	4.6	94.7	3.20	42.6	.00			600

RV NEW HORIZON CALCOFI CRUISE 8410 STATION 90 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 25.4 N	121 59.7 W	22/10/84	1114 GMT	3730 M	320	20 KT	320 07 05	5	1017.0 MB	18.0 C	16.5 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	18.18	18.18	33.471	24.059	384.4	.300	5.54	102.7							0
1	1	18.18	18.18	33.471	24.059	384.5	.304	5.54	102.7	1.4	.33	.1	.00	.11	.02	1
	10 ISL	18.18	18.18	33.471	24.058	384.9	.338	5.52	102.3							10
1	11	18.18	18.18	33.470	24.058	384.9	.342	5.52	102.3	1.3	.44	.1	.00	.11	.02	11
	20 ISL	18.18	18.18	33.470	24.058	385.2	.377	5.52	102.4							20
1	27	18.18	18.18	33.470	24.059	385.4	.104	5.53	102.5	1.4	.39	.1	.00	.11	.01	27
	30 ISL	18.18	18.18	33.470	24.058	385.7	.116	5.53	102.5							30
1	42	18.20	18.19	33.470	24.055	386.3	.161	5.52	102.4	1.6	.33	.0	.00	.10	.02	42
	50 ISL	18.14	18.13	33.468	24.069	385.3	.193	5.53	102.4							50
1	57	18.09	18.08	33.466	24.079	384.5	.219	5.54	102.5	1.4	.32	.0	.00	.12	.02	57
1	72	12.44	12.43	33.149	25.071	289.9	.269	5.64	93.0	4.4	.66	4.7	.09	.66	.33	72
	75 ISL	12.28	12.27	33.214	25.151	282.3	.279	5.51	90.6							75
1	81	12.01	12.00	33.264	25.242	273.8	.294	5.24	85.7	6.9	.83	7.8	.05	.28	.25	81
1	96	11.18	11.17	33.433	25.526	247.0	.333	4.58	73.6	12.1	1.16	13.6	.02	.13	.12	96
	100 ISL	11.01	11.00	33.480	25.593	240.7	.344	4.38	70.2							101
1	116	10.46	10.45	33.624	25.801	221.2	.380	3.79	60.1	18.5		18.3	.00	.03	.03	116
	125 ISL	10.00	9.98	33.685	25.928	209.2	.400	3.59	56.3							126
1	134	9.55	9.54	33.741	26.046	198.1	.419	3.43	53.3	24.6	1.65	22.4	.00	.01	.02	135
	150 ISL	9.10	9.08	33.857	26.211	182.7	.449	3.11	47.9							151
1	154	9.00	8.98	33.885	26.248	179.2	.457	3.04	46.7	29.6	1.80	25.2	.00	.00	.01	155
1	173	8.57	8.56	33.951	26.366	168.3	.493	2.96	45.1	33.3	1.91	26.6	.00	.00	.02	174
1	193	8.34	8.32	33.996	26.437	161.8	.522	2.89	43.8	35.9	1.97	27.3	.00			194
	200 ISL	8.25	8.23	34.007	26.460	159.8	.534	2.81	42.5							201
1	212	8.09	8.07	34.023	26.496	156.5	.552	2.64	39.8	39.4	2.09	28.7	.00			213
1	245	7.64	7.62	34.052	26.594	147.6	.602	2.11	31.5	46.1	2.20	31.5	.00			246
	250 ISL	7.58	7.56	34.065	26.604	146.6	.610	2.06	30.6							252
1	292	7.12	7.09	34.087	26.688	139.2	.671	1.71	25.2	54.2	2.44	34.0	.00			294
	300 ISL	7.02	6.99	34.092	26.705	137.6	.681	1.63	23.9							302
1	345	6.46	6.43	34.120	26.802	128.7	.741	1.16	16.8	64.6	2.74	37.2	.00			347
	400 ISL	6.08	6.05	34.156	26.888	121.1	.810	.78	11.2							403
1	426	5.96	5.92	34.188	26.921	118.2	.841	.65	9.3	75.8	2.92	39.8	.00			429
	500 ISL	5.63	5.59	34.234	26.999	111.5	.926	.43	6.1							504
1	510	5.59	5.55	34.241	27.009	110.7	.937	.41	5.8	84.4	3.06	41.1	.00			513
1	595	5.18	5.13	34.333	27.131	99.7	1.025	.26	3.7	95.4	3.15	42.5	.00			599

RV NEW HORIZON CALCOFI CRUISE 8410 STATION 90 100

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 05.3 N	122 40.0 W	22/10/84	1706 GMT	3957 M	340	19 KT	340 07 06	5	1020.0 MB	18.0 C	16.5 C	7/8	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	17.22	17.22	33.153	24.046	385.6	.300	5.67	103.0							0
1	2	17.22	17.22	33.153	24.046	385.7	.308	5.67	103.0	1.6	.13	.0	.00	.11	.00	2
	10 ISL	17.22	17.22	33.149	24.043	386.3	.339	5.67	103.0							10
1	12	17.22	17.22	33.148	24.042	386.4	.346	5.67	103.0	1.6	.40	.0	.00	.14	.01	12
	20 ISL	17.24	17.24	33.157	24.053	385.7	.377	5.66	102.9							20
1	28	17.28	17.28	33.199	24.068	384.5	.108	5.65	102.8	1.8	.34	.0	.00	.12	.01	28
	30 ISL	17.32	17.32	33.215	24.071	384.3	.116	5.65	102.8							30
1	43	17.44	17.43	33.281	24.093	382.6	.169	5.63	102.5	1.5	.32	.0	.00	.13	.01	43
	50 ISL	17.29	17.28	33.255	24.117	380.6	.192	5.67	103.2							50
1	59	16.81	16.80	33.154	24.146	378.1	.226	5.77	104.0	1.7	.33	.0	.00	.15	.04	59
1	74	15.00	14.99	33.101	24.511	343.6	.280	6.06	105.3	2.2	.33	.0	.00	.22	.07	74
	75 ISL	14.88	14.87	33.099	24.536	341.2	.284	6.05	104.9							75
1	84	14.15	14.14	33.093	24.685	327.3	.313	6.02	102.8	2.5	.37	.0	.04	.33	.17	84
1	99	13.18	13.17	33.102	24.890	307.8	.360	5.83	97.5	3.1	.44	.6	.14	.31	.22	99
	100 ISL	13.12	13.10	33.107	24.907	306.3	.365	5.81	97.0							101
1	119	12.22	12.20	33.194	25.149	283.6	.419	5.42	88.9	5.3	.73	5.3	.02	.04	.04	119
	125 ISL	11.73	11.71	33.214	25.256	273.4	.437	5.30	86.1							126
1	139	10.69	10.67	33.301	25.511	249.3	.475	4.96	78.8	12.0	1.04	10.8	.01	.02	.04	140
	150 ISL	10.28	10.27	33.447	25.695	232.0	.500	4.52	71.2							151
1	159	10.01	9.99	33.580	25.845	217.8	.521	4.11	64.5	18.9	1.47	18.2	.01	.01	.02	160
1	179	9.28	9.25	33.747	26.095	194.3	.562	3.51	54.2	25.8	1.79	22.9	.00	.00	.02	180
1	199	9.00	8.98	33.898	26.259	179.2	.599	3.73	57.3	26.7	1.67	22.3	.01			200
	200 ISL	8.98	8.96	33.902	26.264	178.6	.601	3.73	57.3							201
1	219	8.57	8.55	33.963	26.377	168.1	.634	3.69	56.2	30.1	1.80	23.6	.01			220
	250 ISL	7.99	7.96	33.998	26.492	157.4	.684	3.41	51.2							252
1	254	7.92	7.90	33.999	26.503	156.5	.690	3.36	50.4	36.7	1.95	26.2	.01			255
	300 ISL	7.15	7.12	34.024	26.634	144.5	.760	2.55	37.6							302
1	303	7.10	7.07	34.026	26.642	143.7	.765	2.48	36.5	49.4	2.34	31.3	.01			305
1	358	6.54	6.51	34.090	26.769	132.1	.840	1.43	20.8	61.1	2.71	35.8	.00			360
	400 ISL	6.15	6.12	34.118	26.842	125.6	.894	1.02	14.7							403
1	442	5.82	5.78	34.145	26.904	119.9	.946	.79	11.3	75.3	2.96	39.7	.00			445
	500 ISL	5.52	5.48	34.214	26.996	111.5	1.013	.49	6.9							504
1	527	5.41	5.37	34.247	27.035	108.1	1.042	.39	5.5	87.4	3.15	41.6	.00			530
	600 ISL	5.16	5.11	34.317	27.122	100.6	1.119	.33	4.6							604
1	612	5.12	5.07	34.326	27.133	99.6	1.131	.32	4.5	96.0	3.24	42.6	.00			616

RV NEW HORIZON CALCOFI CRUISE 8410 STATION 93 26.7

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 57.5 N	117 18.5 W	25/10/84	2113 GMT	57 M	300	09 KT	310 01 02	0	1011.0 MB	24.5 C	15.9 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	10	19.10	19.10	33.591	23.921	398.0	.040	5.79	109.3	1.7	.24	.0	.00	.23	.01	10

RV NEW HORIZON CALCOFI CRUISE 8410 STATION 93 29

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 51.9 N	117 27.8 W	25/10/84	1935 GMT	647 M	340	06 KT	310 02 02	0	1013.0 MB	23.0 C	16.0 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	19.26	19.25	33.577	23.873	403.0	.000	5.54	104.9							0
1	1	19.26	19.25	33.577	23.873	402.5	.004	5.54	104.9	1.5	.24	.0	.00	.10	.06	1
	10 ISL	19.08	19.08	33.573	23.911	398.9	.043	5.59	105.6							10
1	11	19.07	19.07	33.572	23.914	398.6	.044	5.60	105.6	1.6	.27	.0	.00	.10	.06	11
	20 ISL	18.96	18.96	33.557	23.930	397.5	.080	5.64	106.2							20
1	22	18.94	18.94	33.553	23.933	397.3	.088	5.65	106.3	1.5	.24	.0	.00	.14	.03	22
	30 ISL	18.09	18.09	33.483	24.091	382.5	.119	6.07	112.3							30
1	32	17.80	17.80	33.463	24.145	377.3	.125			1.6	.26	.0	.00	.26	.04	32
1	42	15.76	15.76	33.357	24.539	343.0	.162	6.65	117.5	2.0	.33	.0	.00	.36	.09	42
	50 ISL	14.95	14.95	33.375	24.732	321.9	.189	6.52	113.4							50
1	53	14.75	14.74	33.390	24.788	315.5	.198	6.48	112.2	2.5	.38	.0	.00	.67	.33	53
1	63	13.70	13.69	33.436	25.043	292.5	.223	5.68	96.3	4.3	.56	1.8	.14	.56	.42	63
1	73	13.08	13.07	33.472	25.197	278.0	.237	5.25	87.9	5.3	.75	5.8	.05	.25	.28	73
	75 ISL	12.90	12.89	33.476	25.235	274.5	.263	5.17	86.3							75
1	89	11.95	11.94	33.517	25.450	254.3	.299	4.75	77.7	10.6	1.04	11.0	.02	.12	.14	89
	100 ISL	11.52	11.50	33.597	25.593	240.9	.327	4.31	69.9							101
1	104	11.41	11.40	33.623	25.631	237.3	.335	4.18	67.6	14.8	1.25	14.0	.02	.05	.06	104
1	123	10.75	10.74	33.693	25.805	221.1	.381	3.77	60.1	18.4	1.42	17.5	.00	.02	.04	124
	125 ISL	10.69	10.67	33.699	25.821	219.6	.385	3.75	59.7							126
1	148	9.82	9.80	33.796	26.046	198.6	.433	3.43	53.6	24.1	1.64	21.6	.00	.01	.02	149
	150 ISL	9.79	9.77	33.804	26.057	197.5	.437	3.40	53.1							151
1	178	9.45	9.44	33.938	26.217	182.8	.490	2.89	44.9	29.4	1.91	24.6	.00			179
	200 ISL	9.20	9.17	34.023	26.326	172.9	.529	2.59	40.1							201
1	208	9.10	9.08	34.049	26.361	169.7	.543	2.50	38.5	33.7	2.04	26.6	.00			209
1	237	8.74	8.71	34.113	26.469	159.8	.590	2.15	32.9	38.7	2.24	28.6	.00			239
	250 ISL	8.61	8.59	34.140	26.510	155.1	.611	1.98	30.2							252
1	275	8.40	8.38	34.193	26.576	150.3	.650	1.69	25.7	44.8	2.42	30.9	.00			277
	300 ISL	8.20	8.16	34.232	26.623	146.2	.686	1.50	22.7							302
1	334	7.90	7.87	34.213	26.675	141.7	.735	1.30	19.5	51.5	2.64	32.9	.02			336
	400 ISL	7.33	7.29	34.240	26.779	132.5	.826	.92	13.7							403
1	409	7.26	7.22	34.243	26.792	131.4	.837	.88	13.3	59.6	2.75	35.2	.00			411
1	484	6.60	6.55	34.279	26.911	123.7	.932	.54	7.9	70.3	2.99	38.2	.01			487
	500 ISL	6.47	6.42	34.286	26.935	118.6	.951	.49	7.1							504
1	560	5.99	5.94	34.311	27.016	111.2	1.021	.39	5.6	80.9	3.10	39.9	.00			564

RV NEW HORIZON CALCOFI CRUISE 8410 STATION 93 30

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 50.4 N	117 31.5 W	25/10/84	0024 GMT	856 M	270	08 KT	350 02 03	1	1008.0 MB	22.0 C	17.2 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
1	0	19.72	19.72	33.594	23.763	412.6	.000	5.48	104.7	2.3	.21	.0	.00	.12	.02	0
1	10	19.37	19.36	33.577	23.843	405.4	.041	5.57	105.7	2.0	.21	.0	.00	.13	.02	10
	20 ISL	19.28	19.27	33.575	23.864	403.8	.081	5.58	105.7							20
1	21	19.27	19.27	33.574	23.865	403.7	.085	5.58	105.7	1.8	.20	.0	.00	.14	.04	21
	30 ISL	19.02	19.01	33.540	23.904	400.3	.122	5.63	106.3							30
1	31	18.99	18.99	33.537	23.908	400.0	.125	5.63	106.0	1.6	.21	.0	.00	.18	.03	31
1	41	15.59	15.58	33.340	24.565	337.4	.162	6.37	112.2	2.3	.28	.0	.00	.26	.11	41
	50 ISL	14.49	14.49	33.349	24.810	314.3	.192	6.17	106.3							50
1	52	14.39	14.38	33.358	24.840	311.6	.197	6.13	105.4	3.0	.38	.2	.06	.73	.29	52
1	62	13.32	13.31	33.409	25.100	287.0	.227	5.42	91.2	5.3	.65	4.9	.09	.30	.27	62
1	72	12.89	12.88	33.514	25.266	271.4	.255	4.98	83.1	7.4	.79	7.5	.03	.19	.19	72
	75 ISL	12.79	12.78	33.527	25.296	268.6	.264	4.90	81.6							75
1	88	12.37	12.36	33.552	25.398	259.3	.297	4.68	77.2	9.6	.92	9.8	.02	.12	.16	88
	100 ISL	11.68	11.66	33.599	25.557	244.3	.328	4.41	71.7							101
1	103	11.53	11.51	33.599	25.592	241.0	.334	4.35	70.5	13.9	1.11	13.1	.01	.05	.07	103
1	122	10.72	10.70	33.717	25.830	219.7	.380	3.92	62.5	18.1	1.32	16.8	.01	.01	.04	123
	125 ISL	10.61	10.59	33.732	25.861	215.9	.386	3.84	61.1							126
1	147	9.79	9.77	33.856	26.097	193.6	.431	3.17	49.6	25.8	1.70	22.4	.01	.00	.02	148
	150 ISL	9.74	9.72	33.872	26.119	191.7	.437	3.11	48.6							151
1	177	9.38	9.36	34.010	26.286	175.3	.486	2.66	41.2	31.1	1.93	25.5	.01			178
	200 ISL	9.95	9.93	34.075	26.406	165.2	.529	2.35	36.2							201
1	207	9.83	9.81	34.091	26.435	162.4	.537	2.27	34.8	37.3	2.14	27.9	.00			209
1	237	9.62	9.60	34.153	26.518	155.1	.584	1.91	29.1	41.3	2.27	29.5	.00			239
	250 ISL	9.50	9.47	34.173	26.554	152.0	.605	1.75	26.6							252
1	276	9.24	9.21	34.232	26.616	146.4	.644	1.48	22.4	47.4	2.47	31.7	.00			278
	300 ISL	9.06	9.03	34.213	26.651	143.4	.673	1.36	20.5							302
1	335	7.93	7.90	34.219	26.690	140.2	.723	1.25	18.7	52.7	2.60	33.2	.00			337
	400 ISL	7.36	7.32	34.239	26.774	133.1	.817	.97	14.4							403
1	409	7.29	7.25	34.241	26.786	132.0	.829	.93	13.8	59.4	2.75	35.1	.00			412
1	485	6.66	6.62	34.274	26.899	121.9	.925	.58	8.5	70.2	2.95	37.9	.00			488
	500 ISL	6.54	6.50	34.291	26.921	120.0	.943	.53	7.7							504
1	561	5.08	5.03	34.312	27.005	112.4	1.014	.39	5.6	80.1	3.09	40.0	.00			565

RV NEW HORIZON CALCOFI CRUISE 8410 STATION 93 30

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 50.4 N	117 32.0 W	25/10/84	0559 GMT	856 M	130	35 KT			1011.0 MB	19.5 C	17.0 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	19.25	19.25	33.568	23.864	403.8	.000	5.51	104.3							0
1	1	19.25	19.25	33.568	23.864	403.1	.004	5.51	104.3	2.1	.23	.0	.00	.11	.02	1
	10 ISL	19.02	19.01	33.555	23.915	398.5	.040	5.58	105.2							10
1	11	19.00	19.00	33.554	23.919	398.2	.044	5.59	105.3	2.0	.23	.0	.00	.13	.02	11
	20 ISL	18.95	18.95	33.552	23.929	397.5	.080	5.61	105.5							20
1	22	18.94	18.94	33.551	23.931	397.4	.088	5.61	105.6	2.0	.23	.0	.00	.13	.03	22
	30 ISL	16.64	16.64	33.380	24.357	356.9	.118	6.20	111.5							30
1	32	16.04	16.04	33.350	24.471	346.1	.125	6.33	112.5	2.1	.29	.0	.00	.27	.06	32
1	42	14.57	14.56	33.370	24.810	314.1	.158	6.23	107.5	3.0	.35	.0	.00	.53	.20	42
	50 ISL	14.10	14.09	33.376	24.915	304.3	.183	5.99	102.3							50
1	53	13.98	13.98	33.377	24.939	302.1	.191	5.88	100.2	3.5	.46	1.1	.15	.65	.32	53
1	63	13.19	13.18	33.386	25.108	286.2	.220	5.46	91.6	5.3	.68	5.3	.08	.31	.32	63
1	73	13.06	13.05	33.487	25.211	275.6	.249	5.16	86.4	6.2	.73	6.4	.04	.22	.27	73
	75 ISL	12.95	12.94	33.497	25.241	273.9	.255	5.10	85.1							75
1	89	12.14	12.13	33.543	25.434	255.7	.291	4.73	77.7	9.8	.95	10.1	.01	.11	.18	89
	100 ISL	11.54	11.52	33.617	25.604	239.8	.319	4.40	71.3							101
1	104	11.36	11.35	33.641	25.656	234.9	.328	4.30	69.5	13.7	1.12	13.4	.01	.03	.05	104
1	124	10.36	10.35	33.746	25.914	210.6	.374	3.85	60.9	19.0	1.39	17.9	.01	.01	.02	125
	125 ISL	10.34	10.33	33.750	25.920	210.1	.375	3.83	60.5							126
1	149	9.81	9.80	33.885	26.116	191.9	.424	3.06	47.9	26.0	1.75	22.9	.00	.00	.02	150
	150 ISL	9.80	9.79	33.887	26.120	191.6	.425	3.05	47.7							151
1	179	9.36	9.34	33.958	26.249	179.8	.479	2.80	43.4	29.7	1.90	24.9	.01			180
	200 ISL	9.00	8.98	34.046	26.375	168.2	.515	2.47	38.0							201
1	209	8.87	8.85	34.083	26.424	163.6	.531	2.32	35.6	35.1	2.13	27.7	.00			210
1	239	8.68	8.66	34.147	26.504	156.5	.578	1.96	29.9	39.8	2.28	29.3	.00			240
	250 ISL	8.59	8.56	34.163	26.532	154.0	.595	1.83	28.0							252
1	279	8.32	8.29	34.193	26.596	148.4	.640	1.56	23.6	45.6	2.45	31.1	.00			281
	300 ISL	8.16	8.13	34.204	26.629	145.6	.671	1.44	21.7							302
1	338	7.89	7.85	34.213	26.677	141.5	.725	1.29	19.4	50.8	2.59	32.8	.00			340
	400 ISL	7.43	7.39	34.222	26.751	135.3	.811	1.16	17.3							403
1	412	7.34	7.30	34.224	26.766	134.0	.828	1.13	16.7	55.2	2.69	34.0	.00			415
1	486	6.77	6.72	34.267	26.879	123.9	.922	.61	9.9	67.4	2.94	37.3	.00			489
	500 ISL	6.66	6.61	34.275	26.901	122.0	.940	.55	8.0							504
1	561	6.15	6.09	34.308	26.994	113.5	1.012	.41	5.9	77.9	3.09	39.7	.00			565

RV NEW HORIZON CALCOFI CRUISE 8410 STATION 93 30

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 50.8 N	117 31.5 W	25/10/84	1226 GMT	856 M	100	07 KT	210 01 03		1011.5 MB	18.8 C	15.8 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	19.00	19.00	33.557	23.919	397.8	.000	5.54	104.4							0
1	1	19.00	19.00	33.557	23.919	397.8	.004	5.54	104.4	2.0	.24	.0	.00	.13	.02	1
	10 ISL	19.00	18.99	33.556	23.923	397.9	.040	5.55	104.5							10
1	11	18.99	18.99	33.557	23.922	397.9	.044	5.55	104.5	2.1	.24	.0	.00	.13	.03	11
	20 ISL	18.90	18.90	33.555	23.945	395.1	.079	5.58	105.0							20
1	22	18.88	18.87	33.554	23.949	395.7	.087	5.59	105.1	2.0	.23	.0	.00	.15	.03	22
	30 ISL	16.68	16.68	33.380	24.348	357.9	.118	6.14	110.5							30
1	32	16.14	16.13	33.348	24.448	348.4	.124	6.27	111.6	1.9	.31	.0	.00	.20	.05	32
1	42	15.29	15.28	33.343	24.634	330.9	.158	6.33	110.8	2.1	.32	.0	.00	.27	.08	42
	50 ISL	14.45	14.44	33.358	24.827	312.7	.184	6.20	106.6							50
1	53	14.18	14.18	33.364	24.887	307.1	.193			3.0	.40	.3	.03	.71	.37	53
1	63	13.67	13.66	33.360	24.990	297.5	.223	5.95	100.8	3.8	.54	2.5	.14	.68	.41	63
1	73	13.04	13.03	33.470	25.203	277.5	.252	5.28	88.3	6.3	.77	6.6	.05	.26	.29	73
	75 ISL	12.92	12.91	33.483	25.237	274.2	.258	5.18	86.5							75
1	88	12.27	12.26	33.534	25.401	258.9	.292	4.79	78.9	9.0	.92	9.7	.02	.09	.13	88
	100 ISL	11.61	11.59	33.595	25.574	242.6	.323	4.41	71.7							101
1	104	11.43	11.42	33.613	25.621	238.3	.331	4.32	69.9	13.2	1.14	13.5	.01	.04	.06	104
1	123	10.79	10.77	33.712	25.813	220.3	.377	4.02	64.2	17.0	1.30	16.3	.00	.01	.03	124
	125 ISL	10.72	10.71	33.717	25.829	218.9	.380	4.00	63.7							126
1	148	9.86	9.84	33.797	26.040	199.1	.429	3.57	55.9	22.8	1.56	20.7	.00	.00	.02	149
	150 ISL	9.81	9.80	33.808	26.055	197.7	.432	3.52	55.1							151
1	179	9.32	9.30	33.975	26.268	178.0	.487	2.73	42.3	33.6	1.94	25.3	.00			180
	200 ISL	9.13	9.11	34.029	26.342	171.4	.523	2.46	37.9							201
1	209	9.05	9.03	34.047	26.367	169.0	.539			33.9	2.06	26.7	.00			210
1	239	8.61	8.59	34.149	26.517	155.3	.587	2.16	32.9	40.5	2.27	29.2	.00			240
	250 ISL	8.50	8.47	34.166	26.548	152.5	.604	1.99	30.2							252
1	278	8.26	8.23	34.192	26.605	147.6	.647	1.54	23.3	45.9	2.43	31.2	.00			280
	300 ISL	8.07	8.04	34.214	26.652	143.4	.678	1.36	20.5							302
1	338	7.74	7.71	34.244	26.724	137.1	.732	1.16	17.4	53.3	2.64	33.4	.00			340
	400 ISL	7.27	7.23	34.257	26.801	131.1	.815	.88	13.1							403
1	411	7.19	7.15	34.246	26.804	130.2	.830	.84	12.4	60.5	2.77	35.4	.00			414
1	485	6.65	6.61	34.275	26.901	121.7	.922	.54	7.9	69.5	2.92	37.9	.00			488
	500 ISL	6.52	6.48	34.283	26.925	119.6	.940	.49	7.1							504
1	559	5.94	5.89	34.320	27.029	109.9	1.008	.34	4.9	82.0	3.08	40.3	.00			563

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 93 30

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 51.3 N	117 31.7 W	25/10/84	1727 GMT	856 M	360 07 KT	360 02 02	1	1013.0 MB	21.1 C	15.1 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
	0 ISL	19.07	19.07	33.564	23.908	399.8	.000	5.42	102.2							0
1	1	19.07	19.07	33.564	23.908	399.8	.004	5.42	102.2	1.9	.25	.1	.00	.12	.02	1
	10 ISL	19.05	19.04	33.562	23.913	399.8	.040	5.53	104.3							10
1	11	19.04	19.04	33.562	23.913	399.7	.044	5.54	104.5	1.6	.27	.0	.00	.13	.03	11
	20 ISL	18.97	18.97	33.552	23.923	399.1	.080	5.57	104.9							20
1	22	18.96	18.96	33.550	23.925	399.0	.087	5.58	105.0	2.0	.25	.0	.00	.14	.03	22
	30 ISL	16.17	16.16	33.346	24.440	369.1	.118	6.19	110.3							30
1	32	15.49	15.49	33.314	24.565	337.1	.124	6.33	111.2	2.0	.31	.0	.00	.23	.06	32
1	42	14.84	14.83	33.349	24.735	321.2	.157	6.27	108.8	2.6	.35	.0	.00	.23	.09	42
	50 ISL	14.33	14.32	33.372	24.864	309.3	.183	6.09	104.6							50
1	53	14.14	14.13	33.377	24.907	305.2	.191	6.00	102.6	3.2	.44	.6	.00	.78	.17	53
1	63	13.31	13.30	33.380	25.078	289.1	.221	5.54	93.1	5.7	.66	4.8	.14	.32	.28	63
1	73	12.51	12.50	33.446	25.288	269.3	.248	5.02	83.0	7.2	.85	9.5	.03	.19	.21	73
	75 ISL	12.44	12.43	33.457	25.309	267.3	.255	4.98	82.3							75
1	88	12.20	12.19	33.519	25.402	258.8	.288	4.83	79.4	8.8	.91	9.8	.02	.11	.14	88
	100 ISL	11.52	11.51	33.608	25.600	240.1	.319	4.25	68.9							101
1	104	11.30	11.29	33.635	25.662	234.4	.327	4.08	65.8	14.4	1.21	14.7	.01	.04	.06	104
1	123	10.46	10.44	33.737	25.890	212.9	.372	3.91	62.0	18.4	1.36	17.5	.00	.01	.03	124
	125 ISL	10.40	10.39	33.744	25.906	211.5	.375	3.87	61.3							126
1	148	9.73	9.71	33.853	26.105	192.9	.422	3.24	50.6	25.4	1.68	22.4	.00	.01	.02	149
	150 ISL	9.70	9.68	33.859	26.115	192.0	.425	3.21	50.0							151
1	178	9.38	9.35	33.967	26.252	179.4	.477	2.75	42.6	30.2	1.90	25.1	.00			179
	200 ISL	9.26	9.24	34.053	26.339	171.7	.516	2.48	38.4							201
1	207	9.22	9.20	34.075	26.363	169.5	.528	2.41	37.2	33.8	2.05	26.7	.00			208
1	237	8.74	8.72	34.114	26.469	159.8	.577	2.13	32.6	38.4	2.17	28.6	.00			238
	250 ISL	8.59	8.57	34.140	26.513	155.9	.598	1.95	29.7							252
1	276	8.34	8.31	34.189	26.590	149.0	.638	1.59	24.1	45.2	2.40	31.1	.00			278
	300 ISL	8.13	8.10	34.226	26.636	144.9	.673	1.41	21.3							302
1	335	7.84	7.81	34.217	26.688	143.5	.723	1.23	18.4	51.8	2.59	33.0	.01			337
	400 ISL	7.35	7.31	34.239	26.776	132.8	.811	.92	13.6							403
1	408	7.29	7.25	34.242	26.787	131.9	.823	.88	13.0	59.1	2.75	35.2	.00			411
1	484	6.69	6.65	34.272	26.893	122.5	.919	.58	8.5	68.7	2.94	37.7	.00			487
	500 ISL	6.57	6.52	34.279	26.916	120.4	.938	.53	7.7							504
1	559	6.11	6.06	34.310	27.001	112.8	1.007	.36	5.2	79.1	3.04	39.9	.00			563

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 93 35

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 41.6 N	117 51.8 W	24/10/84	1757 GMT	611 M	320 08 KT	360 02 04	0	1014.0 MB	20.2 C	16.0 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	19.54	19.54	33.590	23.807	408.7	.000	5.49	104.5							0
1	1	19.54	19.54	33.590	23.807	408.5	.004	5.49	104.5	1.6	.34	.1	.00	.12	.02	1
	10 ISL	19.45	19.45	33.587	23.828	406.8	.041	5.52	104.9							10
1	11	19.45	19.45	33.587	23.829	406.7	.045	5.52	104.9	1.8	.27	.1	.00	.13	.02	11
	20 ISL	19.42	19.42	33.585	23.834	406.6	.081	5.53	105.0							20
1	22	19.42	19.41	33.584	23.835	406.6	.089	5.53	105.0	1.6	.23	.1	.00	.13	.03	22
	30 ISL	18.99	18.98	33.543	23.914	399.3	.122	5.68	106.9							30
1	32	18.89	18.88	33.534	23.932	397.7	.129	5.71	107.3	1.6	.24	.1	.00	.27	.04	32
1	42	14.86	14.85	33.285	24.683	326.3	.165	6.46	112.1	2.2	.35	.1	.00	.53	.18	42
	50 ISL	14.53	14.53	33.330	24.787	315.5	.192	6.29	108.4							50
1	53	14.42	14.42	33.346	24.823	311.2	.200	6.23	107.1	2.7	.35	.1	.00	.74	.34	53
1	63	13.47	13.46	33.399	25.061	290.7	.230	5.54	93.5	4.3	.62	3.9	.13	.32	.37	63
1	73	12.80	12.79	33.442	25.229	275.0	.259	5.12	85.2	6.6	.90	7.5	.03	.54	.68	73
	75 ISL	12.73	12.72	33.452	25.249	273.1	.265	5.08	84.5							75
1	89	12.44	12.43	33.505	25.347	264.1	.302	4.95	81.8	7.4	.81	8.1	.02	.53	.51	89
	100 ISL	11.89	11.88	33.537	25.476	252.0	.331	4.70	76.7							101
1	104	11.71	11.70	33.548	25.518	248.1	.340	4.62	75.2	11.3	1.05	12.0	.01	.06	.08	104
1	123	11.11	11.10	33.641	25.700	231.1	.387	4.47	71.8	14.3	1.20	14.7	.01	.02	.04	124
	125 ISL	11.05	11.04	33.650	25.719	229.4	.391	4.41	70.8							126
1	148	10.10	10.09	33.780	25.986	204.3	.442	3.45	54.3	22.1	1.56	20.4	.00	.01	.02	149
	150 ISL	10.04	10.02	33.786	26.001	202.9	.445	3.42	53.7							151
1	178	9.25	9.23	33.870	26.194	195.0	.500	3.14	48.5	27.6	1.78	23.9	.00			179
	200 ISL	8.97	8.95	33.952	26.306	174.7	.539	2.88	44.3							201
1	207	8.90	8.87	33.975	26.336	171.9	.551	2.81	43.1	32.2	1.93	26.1	.00			208
1	237	8.36	8.34	34.015	26.450	161.4	.601	2.69	40.8	35.6	2.02	27.7	.00			238
	250 ISL	8.17	8.15	34.029	26.490	157.8	.622	2.60	39.3							252
1	275	7.88	7.85	34.055	26.554	152.0	.661	2.37	35.5	42.7	2.20	29.9	.00			277
	300 ISL	7.66	7.63	34.088	26.612	146.8	.698	2.03	30.3							302
1	334	7.41	7.38	34.139	26.688	140.1	.747	1.52	22.6	52.4	2.52	33.3	.00			336
	400 ISL	6.98	6.94	34.246	26.833	127.1	.839	.72	10.6							403
1	407	6.93	6.89	34.256	26.847	125.8	.844	.65	9.5	64.1	2.88	36.6	.00			410
1	483	6.51	6.47	34.286	26.928	119.0	.936	.42	6.1	71.7	3.01	38.5	.00			486
	500 ISL	6.41	6.37	34.293	26.947	117.3	.957	.39	5.4							504
1	560	6.06	6.01	34.321	27.015	111.4	1.026	.24	3.5	85.3	3.11	40.0	.00			564

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 93 40

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
32 31.0 N	118 12.9 W	24/10/84	1403 GMT	1620 M	310 07 KT	300 02 04	0	1014.0 MB	18.5 C	15.2 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	18.92	18.92	33.446	23.855	403.8	.000	5.50	103.4							0
1	1	18.92	18.92	33.446	23.855	403.9	.004	5.50	103.4	1.6	.23	.1	.00	.12	.02	1
	10 ISL	18.93	18.93	33.445	23.852	404.5	.040	5.51	103.6							10
1	11	18.93	18.93	33.445	23.852	404.6	.044	5.51	103.6	1.7	.26	.1	.00	.12	.02	11
	20 ISL	18.92	18.92	33.444	23.853	404.8	.081	5.51	103.6							20
1	22	18.92	18.92	33.443	23.853	404.9	.089	5.51	103.6	1.8	.26	.1	.00	.12	.03	22
	30 ISL	16.81	16.81	33.346	24.291	363.3	.120	5.96	107.4							30
1	32	16.26	16.26	33.331	24.405	352.3	.126	6.06	108.1	2.4	.31	.1	.00	.16	.04	32
1	42	14.96	14.96	33.342	24.704	324.2	.160	6.08	105.7	2.7	.35	.1	.00	.26	.08	42
	50 ISL	14.05	14.04	33.293	24.860	309.5	.185	5.92	101.0							50
1	52	13.87	13.86	33.282	24.889	306.9	.192	5.87	99.8	3.4	.43	.8	.05	.64	.30	52
1	63	13.15	13.14	33.238	25.047	292.0	.224	5.51	92.3	4.4	.57	3.6	.06	.37	.30	63
1	73	12.79	12.78	33.400	25.198	277.8	.253	5.17	86.0	6.0	.73	6.2	.05	.19	.21	73
	75 ISL	12.71	12.70	33.414	25.224	275.5	.259	5.12	85.1							75
1	88	12.28	12.27	33.466	25.347	264.1	.293	4.91	80.8	7.9	.84	8.5	.01	.15	.13	88
	100 ISL	11.77	11.76	33.524	25.489	250.7	.325	4.67	76.0							101
1	103	11.66	11.65	33.537	25.519	247.9	.331	4.61	74.9	10.8	1.02	11.4	.01	.09	.05	103
1	122	11.01	11.00	33.652	25.727	228.5	.379	4.07	65.3	15.4	1.22	15.4	.00	.02	.02	123
	125 ISL	10.93	10.91	33.668	25.754	226.0	.384	4.00	64.1							126
1	148	10.24	10.22	33.799	25.978	205.1	.435	3.48	54.9	21.6	1.55	20.1	.00	.01	.01	149
	150 ISL	10.19	10.17	33.806	25.991	203.9	.438	3.46	54.6							151
1	178	9.55	9.53	33.936	26.177	186.6	.493	3.17	49.3	27.3	1.76	23.3	.00			179
	200 ISL	9.26	9.24	34.005	26.301	175.3	.533	2.71	41.9							201
1	207	9.18	9.15	34.032	26.336	172.1	.545	2.58	39.8	33.0	2.02	26.2	.00			209
1	238	8.54	8.52	34.059	26.465	160.2	.596	2.50	38.1	37.7	2.09	27.7	.00			239
	250 ISL	8.25	8.22	34.070	26.511	155.9	.615	2.43	36.7							252
1	276	7.68	7.65	34.074	26.598	147.8	.655	2.20	32.8	46.3	2.30	31.0	.00			278
	300 ISL	7.47	7.44	34.108	26.655	142.6	.690	1.85	27.5							302
1	337	7.31	7.28	34.170	26.727	136.4	.741	1.28	19.0	56.0	2.65	34.3	.00			339
	400 ISL	6.94	6.90	34.234	26.829	127.5	.824	.76	11.2							403
1	409	6.86	6.84	34.240	26.843	126.3	.836	.71	10.4	64.9	2.87	36.9	.00			412
1	485	6.26	6.22	34.282	26.958	115.9	.928	.41	5.9	76.1	3.05	39.4	.00			488
	500 ISL	6.16	6.12	34.290	26.977	114.2	.945	.39	5.7							504
1	561	5.83	5.78	34.317	27.041	108.7	1.014	.32	4.6	84.0	3.11	40.8	.00			565

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 93 45

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
32 21.2 N	118 33.4 W	24/10/84	1019 GMT	1406 M	320 14 KT	320 03 04		1014.0 MB	18.0 C	15.5 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	18.43	18.43	33.410	23.951	394.7	.000	5.53	103.0							0
1	1	18.43	18.43	33.410	23.951	394.8	.004	5.53	103.0	2.0	.25	.1	.00	.13	.01	1
	10 ISL	18.43	18.43	33.410	23.950	395.3	.039	5.61	104.4							10
1	11	18.44	18.43	33.410	23.949	395.3	.043	5.61	104.5	1.8	.25	.1	.00	.13	.01	11
	20 ISL	18.42	18.42	33.411	23.954	395.1	.079	5.57	103.7							20
1	22	18.42	18.42	33.411	23.954	395.2	.087	5.56	103.5	1.8	.25	.1	.00	.14	.02	22
	30 ISL	16.90	16.89	33.316	24.248	367.4	.117	5.84	105.4							30
1	32	16.37	16.36	33.295	24.354	357.3	.124	5.92	105.8	2.2	.29	.1	.00	.16	.05	32
1	42	14.20	14.20	33.331	24.857	309.6	.157	5.99	102.6	2.8	.35	.2	.01	.42	.23	42
	50 ISL	13.56	13.55	33.326	24.987	297.5	.182	5.71	96.4							50
1	52	13.49	13.48	33.325	25.000	296.2	.188	5.62	94.8	4.0	.51	2.5	.12	.45	.38	52
1	62	12.94	12.93	33.476	25.173	280.0	.216	5.19	86.6	5.6	.69	5.6	.06	.30	.24	62
1	72	12.98	12.97	33.522	25.255	272.4	.244	4.91	82.0	7.0	.75	7.0	.03	.21	.20	72
	75 ISL	12.87	12.86	33.538	25.289	269.3	.253	4.84	80.7							75
1	88	12.25	12.24	33.568	25.433	255.9	.286	4.58	75.4	9.4	.89	9.6	.02	.12	.12	88
	100 ISL	11.62	11.61	33.623	25.594	240.8	.317	4.20	68.3							101
1	103	11.50	11.49	33.635	25.625	237.8	.323	4.13	66.9	13.8	1.15	13.7	.01	.05	.06	103
1	122	10.83	10.81	33.707	25.802	221.4	.368	3.83	61.2	17.5	1.33	16.8	.01	.02	.03	123
	125 ISL	10.73	10.72	33.715	25.825	219.2	.374	3.82	60.8							126
1	148	9.94	9.93	33.790	26.020	201.0	.423	3.71	58.2	21.6	1.49	19.7	.01	.00	.02	149
	150 ISL	9.90	9.88	33.795	26.031	200.0	.426	3.69	57.9							151
1	178	9.24	9.22	33.880	26.206	183.8	.480	3.36	51.9	27.3	1.68	23.1	.00			179
	200 ISL	8.73	8.71	33.950	26.342	171.1	.519	3.08	47.1							201
1	203	8.56	8.54	33.972	26.385	167.1	.532	2.99	45.5	33.7	1.90	26.2	.00			209
1	238	8.10	8.08	34.018	26.491	157.4	.561	2.71	40.8	38.5	2.03	28.1	.00			239
	250 ISL	7.91	7.88	34.031	26.531	153.8	.600	2.56	38.4							252
1	278	7.48	7.46	34.053	26.609	146.6	.643	2.21	32.8	47.2	2.31	31.4	.00			280
	300 ISL	7.24	7.21	34.061	26.650	143.0	.674	1.98	29.2							302
1	338	6.88	6.85	34.088	26.722	136.6	.727	1.60	23.4	57.0	2.55	34.7	.00			340
	400 ISL	6.30	6.26	34.151	26.849	117.5	.806	1.03	14.9							403
1	412	6.20	6.19				.820									414
1	486	5.89	5.85	34.239	26.971	114.3	.904	.47	6.7	79.2	3.00	40.2	.00			489
	500 ISL	5.83	5.79	34.243	26.981	113.5	.920	.42	5.9							504
1	559	5.59	5.54	34.296	27.053	107.1	.985	.31	4.4	86.6	3.07	41.3	.00			563

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 93 50

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
32 10.8 N	118 54.3 W	24/10/84	0644 GMT	2092 M	310	12 KT			1016.0 MB	18.5 C	16.2 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	17.51	17.51	33.412	24.176	373.3	.000	5.63	103.0	1.9	.30	.1	.00	.14	.01	0
1	10	17.26	17.26	33.396	24.224	369.1	.037	5.69	103.6	2.0	.26	.1	.00	.15	.01	10
	20 ISL	17.14	17.14	33.389	24.245	367.2	.074	5.76	104.5							20
1	21	17.13	17.13	33.388	24.248	367.1	.077	5.76	104.6	2.0	.25	.1	.00	.16	.02	21
	30 ISL	16.95	16.95	33.374	24.280	364.4	.111	5.75	104.0							30
1	31	16.92	16.91	33.372	24.285	363.8	.114	5.75	104.0	2.0	.25	.1	.00	.19	.06	31
1	41	16.15	16.14	33.342	24.441	349.3	.149	5.96	106.1	2.2	.25	.1	.00	.31	.07	41
	50 ISL	15.40	15.39	33.396	24.650	329.6	.183	6.08	106.7							50
1	51	15.33	15.32	33.401	24.670	327.7	.183	6.08	106.5	2.2	.26	.1	.00	.22	.06	51
1	61	14.24	14.23	33.374	24.884	307.7	.215	5.88	100.8	3.0	.36	.5	.07	.75	.29	61
1	71	13.70	13.69	33.407	25.021	294.7	.245	5.57	94.4	4.0	.50	2.7	.13	.33	.32	71
	75 ISL	13.55	13.54	33.411	25.054	291.7	.257	5.50	92.9							75
1	87	13.19	13.17	33.421	25.136	284.2	.291	5.33	89.4	5.4	.63	5.1	.06	.26	.22	87
	100 ISL	12.60	12.59	33.548	25.350	264.1	.327	4.92	81.6							101
1	102	12.52	12.51	33.565	25.378	261.5	.331	4.87	80.6	8.3	.80	8.4	.02	.10	.13	102
1	121	11.55	11.53	33.631	25.613	239.4	.381	4.49	72.3	12.1	1.02	12.2	.01	.04	.05	122
	125 ISL	11.37	11.35	33.636	25.649	235.0	.390	4.42	71.4							126
1	145	10.44	10.42	33.675	25.846	217.6	.439	3.99	63.2	18.3	1.37	17.9	.01	.01	.03	146
	150 ISL	10.27	10.25	33.700	25.896	213.0	.446	3.88	61.2							151
1	175	9.46	9.44	33.850	26.147	192.4	.496	3.39	52.6	26.2	1.65	22.6	.01			176
	200 ISL	8.79	8.77	33.948	26.331	172.3	.541	3.31	50.7							201
1	204	8.71	8.69	33.958	26.352	170.3	.548	3.30	50.4	31.7	1.80	24.8	.00			205
1	234	8.42	8.40	33.992	26.423	164.0	.598	3.08	46.7	35.0	1.89	26.3	.00			235
	250 ISL	8.22	8.20	34.017	26.472	159.5	.624	2.84	42.9							252
1	273	7.91	7.88	34.052	26.547	152.6	.661	2.45	36.8	43.0	2.16	29.6	.00			275
	300 ISL	7.52	7.49	34.091	26.626	145.4	.700	2.07	30.8							302
1	331	7.11	7.08	34.108	26.705	138.2	.744	1.69	24.9	54.5	2.50	33.5	.00			333
	400 ISL	6.71	6.67	34.159	26.801	129.8	.837	1.21	17.7							403
1	404	6.70	6.66	34.162	26.805	129.5	.841	1.19	17.4	62.3	2.73	36.1	.00			406
1	477	6.27	6.23	34.250	26.931	118.4	.933	.61	8.8	73.7	2.93	38.8	.00			480
	500 ISL	6.15	6.10	34.271	26.964	115.5	.960	.50	7.2							504
1	551	5.86	5.82	34.304	27.026	110.0	1.018	.38	5.4	82.3	3.11	40.4	.00			555

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 93 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
32 00.3 N	119 14.2 W	24/10/84	0305 GMT	1525 M	290	07 KT	320 03 04		1014.5 MB	17.9 C	16.5 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	16.96	16.96	33.419	24.312	360.7	.000	5.72	103.5							0
1	1	16.96	16.96	33.419	24.312	360.4	.004	5.72	103.5	2.4	.29	.1	.00	.14	.05	1
	10 ISL	16.74	16.74	33.411	24.355	356.5	.036	5.81	104.8							10
1	11	16.72	16.72	33.410	24.361	356.0	.039	5.82	104.8	2.2	.28	.0	.00	.14	.07	11
	20 ISL	16.41	16.41	33.414	24.436	349.2	.071	5.84	104.5							20
1	27	16.22	16.22	33.420	24.484	344.8	.095	5.85	104.4	1.7	.27	.0	.00	.37	.07	27
	30 ISL	16.22	16.22	33.420	24.484	344.9	.106	5.85	104.3							30
1	42	16.22	16.22	33.419	24.483	345.4	.147	5.83	104.0	2.0	.28	.0	.00	.37	.05	42
	50 ISL	15.85	15.84	33.416	24.567	337.6	.175	5.92	104.9							50
1	57	15.49	15.48	33.413	24.645	330.4	.197	6.00	105.5	2.4	.27	.0	.00	.45	.20	57
1	67	15.19	15.18	33.400	24.700	325.4	.230	6.01	105.0	2.7	.28	.0	.00	.47	.27	67
	75 ISL	14.77	14.75	33.483	24.855	310.7	.256	5.88	101.9							75
1	77	14.67	14.66	33.502	24.891	307.4	.261	5.84	101.0	3.1	.34	.5	.06	.45	.39	77
1	92	13.86	13.85	33.528	25.082	289.7	.306	5.48	93.3	4.6	.47	3.0	.08	.31	.28	92
	100 ISL	13.27	13.25	33.573	25.238	274.9	.330	5.23	88.0							101
1	107	12.79	12.77	33.610	25.361	263.2	.347	5.04	83.9	7.8	.69	6.9	.03	.05	.06	107
1	121	11.86	11.85	33.646	25.566	243.9	.389	4.68	76.4	12.0	.93	10.6	.01	.14	.13	122
	125 ISL	11.70	11.68	33.653	25.603	240.5	.396	4.61	75.1							126
1	146	10.80	10.79	33.704	25.806	221.5	.443	4.24	67.7	16.2	1.20	15.2	.01	.02	.03	147
	150 ISL	10.62	10.60	33.721	25.850	217.4	.451	4.17	66.4							151
1	166	9.93	9.91	33.800	26.031	200.4	.485	3.88	60.8	21.8	1.43	19.1	.01	.00	.02	167
1	186	9.41	9.39	33.860	26.163	188.1	.523	3.55	55.0	25.9	1.61	21.8	.01			187
	200 ISL	9.17	9.15	33.896	26.229	182.0	.549	3.49	53.8							201
1	206	9.09	9.06	33.909	26.254	179.8	.560	3.47	53.4	28.8	1.69	23.1	.01			207
1	236	8.60	8.58	33.969	26.377	168.4	.612	3.19	48.5	33.1	1.85	25.4	.00			237
	250 ISL	8.31	8.28	33.999	26.446	162.0	.639	2.95	44.6							252
1	275	7.81	7.78	34.048	26.559	151.5	.675	2.48	37.1	43.6	2.16	29.7	.00			277
	300 ISL	7.51	7.48	34.079	26.626	145.4	.712	2.14	31.8							302
1	335	7.22	7.19	34.110	26.692	139.6	.762	1.74	25.7	53.6	2.47	33.4	.00			337
	400 ISL	6.83	6.80	34.158	26.783	131.7	.850	1.19	17.4							403
1	408	6.78	6.75	34.163	26.794	130.7	.861	1.13	16.5	62.3	2.67	36.0	.00			411
1	483	6.14	6.09	34.234	26.936	117.8	.953	.57	8.2	74.9	2.93	39.2	.00			486
	500 ISL	6.02	5.98	34.249	26.962	115.4	.973	.49	7.1							504
1	556	5.73	5.68	34.291	27.032	109.3	1.037	.37	5.3	84.1	3.08	40.8	.00			560

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 93 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 50.7 N	119 35.5 W	23/10/84	2352 GMT	3730 M	340	04 KT	320 03 05	0	1014.3 MB	20.0 C	17.0 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	18.01	18.01	33.368	24.022	389.2	.000	5.63	104.0							0
1	1	18.01	18.01	33.369	24.022	389.3	.004	5.63	104.0	1.9	.26	.1	.00	.08	.01	1
	10 ISL	17.64	17.64	33.376	24.117	379.9	.338	5.69	104.3							10
1	11	17.62	17.62	33.368	24.115	379.3	.342	5.69	104.3	1.9	.26	.1	.00	.09	.01	11
	20 ISL	17.58	17.58	33.382	24.135	377.8	.376	5.68	104.1							20
1	27	17.56	17.55	33.392	24.150	376.6	.102	5.68	104.0	2.1	.27	.1	.00	.12	.02	27
	30 ISL	17.54	17.53	33.398	24.159	375.9	.114	5.68	103.9							30
1	42	17.48	17.47	33.419	24.191	373.3	.158	5.67	103.7	1.9	.24	.0	.00	.19	.03	42
	50 ISL	16.55	16.54	33.314	24.328	360.4	.188	5.93	106.5							50
1	57	15.50	15.49	33.212	24.488	345.3	.212	6.13	107.6	2.0	.28	.0	.00	.23	.08	57
1	67	13.86	13.85	33.118	24.765	319.3	.245			2.2	.30	.0	.00	.47	.21	67
	75 ISL	13.26	13.25	33.136	24.900	306.4	.271	6.01	100.8							75
1	77	13.18	13.17	33.144	24.921	304.3	.276	5.99	100.3	3.0	.45	1.7	.12	.51	.31	77
1	93	12.33	12.32	33.211	25.140	293.8	.323	5.43	89.3	5.4	.69	6.1	.05	.24	.22	93
	100 ISL	12.07	12.05	33.284	25.247	273.8	.344	5.26	86.1							101
1	108	11.79	11.77	33.368	25.365	262.7	.364	5.08	82.7	8.1	.89	9.5	.02	.18	.13	109
1	122	10.96	10.95	33.516	25.630	237.7	.401	4.51	72.2	13.3	1.15	14.2	.01	.03	.05	123
	125 ISL	10.85	10.84	33.539	25.668	234.2	.407	4.41	70.4							126
1	147	10.08	10.05	33.712	25.936	209.0	.457	3.66	57.5	21.0	1.52	20.4	.00	.00	.02	148
	150 ISL	10.00	9.98	33.727	25.961	206.7	.462	3.61	56.7							151
1	167	9.53	9.52	33.810	26.104	193.4	.497	3.36	52.2	24.8	1.65	22.6	.00	.00	.02	169
1	187	9.05	9.03	33.934	26.256	179.2	.534	3.03	46.6	29.6	1.84	25.2	.00			189
	200 ISL	8.76	8.74	33.951	26.338	171.5	.556	3.17	48.5							201
1	206	8.64	8.62	33.967	26.370	168.6	.567	3.27	49.9	31.6	1.80	25.0	.00			207
1	236	8.25	8.23	33.999	26.454	160.9	.616	3.40	51.4	34.3	1.81	25.5	.00			237
	250 ISL	8.02	8.00	34.012	26.499	156.9	.638	3.22	48.5							252
1	276	7.62	7.59	34.033	26.574	150.0	.677	2.77	41.3	42.9	2.07	29.2	.00			277
	300 ISL	7.34	7.31	34.048	26.626	145.3	.714	2.41	35.7							302
1	334	7.00	6.97	34.066	26.687	139.8	.762	1.95	28.6	53.2	2.40	33.4	.00			336
	400 ISL	6.31	6.27	34.115	26.819	127.9	.850	1.21	17.5							403
1	408	6.23	6.20	34.121	26.833	126.5	.860	1.14	16.5	66.6	2.72	37.5	.00			410
1	482	5.76	5.72	34.187	26.945	115.5	.950	.64	9.1	78.7	2.95	40.2	.00			485
	500 ISL	5.68	5.63	34.207	26.971	114.2	.971	.55	7.9							504
1	556	5.49	5.44	34.279	27.052	107.1	1.034	.36	5.1	87.5	3.07	41.5	.00			560

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 93 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 32.0 N	120 15.0 W	23/10/84	1636 GMT	3824 M	330	15 KT	320 03 06	1	1016.5 MB	18.0 C	15.9 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	18.08	18.07	33.379	24.014	388.8	.000	5.54	102.4							0
1	1	18.08	18.07	33.379	24.014	388.8	.004	5.54	102.4	1.2	.25	.0	.00	.08	.01	1
	10 ISL	18.06	18.06	33.378	24.015	388.9	.039	5.55	102.6							10
1	11	18.06	18.06	33.377	24.016	388.9	.043	5.55	102.6	1.1	.26	.0	.00	.08	.01	11
	20 ISL	18.06	18.06	33.377	24.017	389.2	.078	5.56	102.8							20
1	22	18.06	18.06	33.376	24.016	389.3	.085	5.56	102.8	1.1	.23	.0	.00	.08	.01	22
	30 ISL	18.09	18.08	33.377	24.011	390.1	.117	5.55	102.7							30
1	32	18.09	18.08	33.377	24.010	390.2	.124	5.55	102.5	1.1	.23	.0	.00	.10	.02	32
1	42	18.01	18.00	33.371	24.026	389.0	.163	5.56	102.7	1.2	.25	.0	.00	.10	.02	42
	50 ISL	15.03	15.02	33.154	24.546	339.6	.193	6.06	105.4							50
1	53	13.95	13.94	33.109	24.738	321.2	.202	6.21	105.6	2.1	.33	.0	.00	.33	.17	53
1	63	13.23	13.22	33.173	24.935	302.7	.233	5.90	98.9	3.1	.44	1.9	.12	.46	.31	63
1	73	12.38	12.37	33.195	25.118	285.4	.262	5.45	89.3	5.3	.64	5.6	.02	.30	.22	73
	75 ISL	12.21	12.20	33.197	25.152	282.2	.269	5.39	88.4							75
1	89	11.49	11.48	33.266	25.339	264.7	.306	5.09	82.3	8.7	.87	9.3	.01	.12	.12	89
	100 ISL	11.46	11.44	33.473	25.507	249.0	.335	4.77	77.1							101
1	104	11.44	11.43	33.532	25.555	244.5	.344	4.67	75.5	11.6	1.07	12.7	.01	.07	.07	104
1	124	10.80	10.78	33.583	25.712	230.0	.394	4.29	68.4	15.1	1.24	15.9	.01	.03	.04	125
	125 ISL	10.78	10.76	33.586	25.717	229.5	.395	4.29	68.2							126
1	149	10.00	9.98	33.728	25.963	206.5	.448	3.75	58.8	21.1	1.48	19.8	.00	.00	.02	150
	150 ISL	9.97	9.96	33.732	25.970	205.8	.449	3.73	58.5							151
1	179	9.07	9.05	33.896	26.247	179.9	.505	3.07	47.2	29.6	1.79	24.8	.00			180
	200 ISL	8.71	8.68	33.955	26.350	170.4	.542	3.01	46.0							201
1	209	8.59	8.57	33.970	26.379	167.7	.557	2.99	45.5	33.5	1.87	26.2	.00			210
1	239	8.19	8.16	34.007	26.470	159.5	.606	2.96	44.7	36.7	1.92	27.0	.00			240
	250 ISL	7.99	7.97	34.015	26.505	156.3	.624	2.92	43.9							252
1	278	7.50	7.47	34.032	26.591	148.4	.667	2.72	40.4	44.5	2.11	29.6	.00			280
	300 ISL	7.19	7.16	34.047	26.646	143.3	.698	2.38	35.2							302
1	338	6.74	6.70	34.075	26.730	135.6	.751	1.72	25.1	57.4	2.45	34.5	.00			340
	400 ISL	6.23	6.20	34.126	26.837	126.1	.832	1.06	15.3							403
1	411	6.16	6.12	34.135	26.854	124.5	.847	.97	14.0	69.2	2.75	38.1	.00			414
1	487	5.61	5.57	34.201	26.975	113.5	.937	.54	7.7	81.7	2.95	40.8	.00			490
	500 ISL	5.54	5.50	34.214	26.994	111.9	.951	.49	6.9							504
1	564	5.31	5.26	34.279	27.073	104.9	1.021	.32	4.5	90.9	3.07	41.8	.00			568

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 93 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
31 11.5 N	120 55.4 W	23/10/84	1047 GMT	3865 M	340	19 KT	330 06 05		1016.0 MB	17.5 C	15.0 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	18.00	18.00	33.492	24.118	378.8	.000	5.55	102.5							0
1	1	18.00	18.00	33.492	24.118	378.8	.000	5.55	102.5	1.4	.25	.0	.00	.08	.02	1
	10 ISL	18.01	18.01	33.491	24.115	379.3	.038	5.55	102.6							10
1	11	18.01	18.01	33.492	24.116	379.4	.042	5.55	102.6	1.4	.25	.0	.00	.09	.02	11
	20 ISL	18.00	18.00	33.490	24.117	379.6	.076	5.55	102.5							20
1	21	18.00	18.00	33.490	24.117	379.6	.079	5.55	102.5	1.4	.26	.0	.00	.08	.02	21
	30 ISL	18.03	18.02	33.489	24.111	380.5	.114	5.55	102.6							30
1	32	18.03	18.03	33.490	24.111	380.6	.121	5.55	102.6	1.5	.25	.0	.00	.09	.02	32
1	42	17.99	17.98	33.488	24.119	380.2	.159	5.55	102.5	1.4	.26	.0	.00	.09	.02	42
	50 ISL	14.81	14.81	33.156	24.594	335.0	.188	6.14	106.4							50
1	52	14.05	14.04	33.099	24.710	323.9	.194	6.26	106.7	2.1	.33	.0	.00	.22	.10	52
1	62	12.86	12.85	33.099	24.951	301.1	.225	5.92	98.4	3.2	.47	2.1	.09	.52	.29	62
1	72	11.94	11.93	33.142	25.163	281.4	.254	5.45	88.9	5.7	.71	6.1	.03	.31	.25	72
	75 ISL	11.90	11.89	33.180	25.196	278.0	.263	5.37	87.5							75
1	87	11.77	11.76	33.287	25.305	267.9	.295	5.14	83.6	7.8	.79	8.3	.01	.17	.15	87
	100 ISL	11.05	11.03	33.384	25.512	248.4	.330	4.77	76.5							101
1	102	10.95	10.94	33.398	25.540	245.8	.333	4.72	75.5	12.3	1.07	12.9	.01	.05	.05	102
1	121	10.11	10.10	33.711	25.929	209.1	.379	3.72	58.5	21.0	1.48	20.2	.00	.01	.03	122
	125 ISL	9.98	9.96	33.760	25.975	204.8	.386	3.61	56.6							126
1	146	9.28	9.27	33.845	26.171	186.4	.428	3.20	49.5	27.7	1.73	24.1	.00	.00	.02	147
	150 ISL	9.20	9.18	33.861	26.198	183.9	.435	3.19	49.2							151
1	176	8.70	8.68	33.948	26.344	170.4	.481	3.11	47.5	32.0	1.81	25.6	.00			177
	200 ISL	8.35	8.33	33.988	26.430	162.6	.521	3.13	47.4							201
1	205	8.28	8.26	33.993	26.444	161.3	.529	3.13	47.3	35.0	1.83	26.4	.00			206
1	235	7.95	7.92	34.017	26.514	155.2	.576	2.89	43.4	39.3	1.98	28.1	.00			236
	250 ISL	7.74	7.72	34.033	26.556	151.3	.599	2.73	40.8							252
1	273	7.40	7.38	34.056	26.623	145.2	.634			48.3	2.24	31.8	.00			275
	300 ISL	6.99	6.96	34.061	26.685	139.5	.672	2.14	31.4							302
1	333	6.50	6.47	34.052	26.752	133.3	.717	1.76	25.6	59.9	2.50	35.3	.00			335
	400 ISL	5.82	5.79	34.088	26.859	123.6	.803	1.19	17.0							403
1	436	5.77	5.74	34.092	26.868	122.7	.811	1.14	16.3	72.5	2.72	38.8	.00			409
1	481	5.43	5.39	34.176	26.976	113.1	.899	.61	8.6	83.6	2.95	41.0	.00			484
	500 ISL	5.36	5.32	34.196	27.001	110.9	.920	.52	7.4							504
1	553	5.17	5.13	34.251	27.067	105.2	.978	.37	5.2	92.4	3.04	42.5	.00			557

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 93 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
30 51.7 N	121 35.4 W	23/10/84	0458 GMT	3730 M	330	17 KT	330 05 04		1017.0 MB	17.5 C	15.5 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	17.86	17.86	33.498	24.156	375.2	.000	5.59	103.0							0
1	2	17.86	17.86	33.498	24.156	375.2	.007	5.59	103.0	1.6	.33	.2	.00	.12	.05	2
	10 ISL	17.84	17.84	33.496	24.161	375.3	.038	5.59	103.0							10
1	12	17.84	17.84	33.493	24.159	375.3	.045	5.59	103.0	1.4	.30	.1	.00	.13	.04	12
	20 ISL	17.86	17.85	33.493	24.154	376.1	.075	5.60	103.1							20
1	28	17.88	17.88	33.493	24.149	376.8	.105	5.60	103.2	1.3	.21	.1	.00	.12	.06	28
	30 ISL	17.88	17.87	33.493	24.150	376.8	.113	5.59	103.0							30
1	43	17.88	17.87	33.494	24.151	377.2	.161	5.56	102.5	1.6	.22	.1	.00	.12	.05	43
	50 ISL	16.10	16.09	33.279	24.405	353.0	.197	5.85	103.9							50
1	59	13.76	13.75	33.069	24.747	320.5	.217	6.15	104.2	1.3	.25	.1	.00	.40	.25	59
1	69	12.98	12.97	33.056	24.893	306.7	.248	5.99	99.8	3.1	.45	1.6	.15	.48	.30	69
	75 ISL	12.50	12.49	33.083	25.005	296.2	.267	5.74	94.7							75
1	79	12.25	12.23	33.105	25.074	289.7	.278	5.58	91.6	4.8	.59	4.5	.03	.25	.26	79
1	94	11.55	11.54	33.269	25.331	265.5	.319	5.15	83.4	8.3	.83	8.8	.01	.13	.12	94
	100 ISL	11.31	11.30	33.305	25.403	258.8	.336	5.04	81.1							101
1	109	10.99	10.98	33.350	25.495	250.3	.358	4.88	78.1	11.2	1.02	12.1	.01	.07	.06	109
1	123	10.36	10.35	33.490	25.714	229.6	.394	4.43	70.0	15.6	1.24	15.7	.01	.03	.03	124
	125 ISL	10.30	10.29	33.510	25.740	227.2	.397	4.36	68.8							126
1	148	9.51	9.49	33.772	26.078	195.4	.446	3.43	53.3	25.3	1.69	22.7	.00	.00	.02	149
	150 ISL	9.48	9.45	33.783	26.092	194.1	.450	3.39	52.6							151
1	168	9.17	9.15	33.874	26.213	182.8	.484	3.10	47.8	28.9	1.80	24.9	.00	.00	.02	169
1	189	8.73	8.71	33.950	26.342	170.9	.521	3.05	47.0	32.3	1.87	26.0	.00			190
	200 ISL	8.52	8.50	33.977	26.396	165.0	.539	3.06	46.5							201
1	209	8.36	8.34	33.992	26.432	162.6	.554	3.03	45.9	35.2	1.92	26.8	.00			210
1	238	8.00	7.97	34.019	26.508	155.8	.600	2.88	43.3	39.1	2.03	28.3	.00			239
	250 ISL	7.81	7.79	34.028	26.542	152.7	.619	2.76	41.3							252
1	277	7.41	7.38	34.045	26.613	146.1	.658	2.45	36.3	47.3	2.22	31.2	.00			278
	300 ISL	7.08	7.05	34.056	26.669	141.0	.692	2.13	31.4							302
1	335	6.62	6.59	34.071	26.742	134.3	.740	1.68	24.5	59.4	2.57	35.6	.00			337
	400 ISL	5.97	5.94	34.101	26.850	124.5	.824	1.14	16.3							403
1	439	5.90	5.87	34.106	26.863	123.3	.835	1.08	15.5	72.4	2.82	39.1	.00			411
1	482	5.46	5.42	34.195	26.988	112.1	.921	.62	8.8	84.3	3.03	41.5	.00			485
	500 ISL	5.43	5.39	34.223	27.013	109.9	.942	.53	7.6							504
1	558	5.35	5.30	34.294	27.081	104.2	1.004	.33	4.7	91.0	3.16	42.4	.00			562

RV NEW HORIZON

CALCOFI CRUISE 8410

STATION 93 100

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 31.3 N	122 15.8 W	22/10/84	2258 GMT	3730 M	330	17 KT	350 07 04	1	1018.0 MB	20.5 C	17.5 C	4/8	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	18.23	18.23	33.570	24.121	378.4	.000	5.53	102.7							0
1	1	18.23	18.23	33.570	24.121	378.5	.004	5.53	102.7	1.7	.32	.0	.00	.13	.01	1
	10 ISL	18.25	18.25	33.564	24.113	379.6	.038	5.53	102.7							10
1	11	18.25	18.25	33.564	24.113	379.7	.042	5.53	102.7	1.2	.31	.0	.00	.13	.01	11
	20 ISL	18.22	18.22	33.562	24.118	379.5	.076	5.54	102.8							20
1	27	18.20	18.19	33.560	24.123	379.2	.102	5.54	102.8	1.5	.30	.0	.00	.11	.05	27
	30 ISL	18.20	18.19	33.557	24.121	379.5	.114	5.54	102.7							30
1	42	18.19	18.18	33.550	24.118	380.3	.159	5.53	102.6	1.4	.30	.0	.00	.11	.04	42
	50 ISL	18.14	18.13	33.547	24.128	379.6	.190	5.53	102.5							50
1	58	18.09	18.08	33.543	24.138	378.9	.219	5.53	102.4	1.4	.29	.0	.00	.13	.04	58
1	68	14.96	14.95	33.093	24.514	343.0	.255	6.03	104.7	1.6	.39	.0	.01	.34	.15	68
	75 ISL	13.94	13.93	33.074	24.715	324.0	.279	5.99	101.8							75
1	80	13.57	13.56	33.062	24.780	317.9	.295	5.97	100.7	2.5	.42	.4	.15	.32	.25	80
1	94	12.25	12.23	33.087	25.060	291.4	.337	5.60	91.9	4.3	.65	4.3	.03	.25	.21	94
	100 ISL	11.99	11.98	33.163	25.167	281.4	.355	5.45	89.0							101
1	109	11.78	11.76	33.276	25.295	269.4	.379	5.26	85.6	6.8	.80	7.1	.02	.14	.14	109
1	124	11.15	11.14	33.386	25.495	250.6	.420	4.87	78.2	11.2	1.07	11.5	.01	.05	.05	125
	125 ISL	11.12	11.11	33.390	25.503	249.9	.422	4.85	77.9							126
1	149	9.84	9.82	33.596	25.887	213.7	.478	4.02	62.8	19.9	1.48	19.1	.01	.01	.02	150
	150 ISL	9.82	9.80	33.602	25.893	213.0	.479	4.00	62.5							151
1	169	9.50	9.48	33.750	26.062	197.3	.519	3.52	54.6	24.2	1.67	22.1	.00	.00	.02	170
1	189	9.06	9.03	33.871	26.229	181.8	.556	3.18	48.9	28.7	1.84	24.6	.00			190
	200 ISL	8.87	8.84	33.918	26.296	175.6	.576	3.07	47.0							201
1	209	8.73	8.70	33.949	26.342	171.3	.592	2.99	45.7	32.3	1.94	26.0	.01			210
1	239	8.27	8.25	34.009	26.459	160.6	.641	2.74	41.4	37.1	2.08	28.0	.00			240
	250 ISL	8.15	8.13	34.019	26.484	158.3	.659	2.74	41.3							252
1	279	7.85	7.82	34.032	26.541	153.4	.703	2.74	41.0	41.3	2.15	29.0	.00			280
	300 ISL	7.47	7.44	34.044	26.604	147.5	.736	2.46	36.5							302
1	337	6.81	6.78	34.066	26.714	137.2	.788	1.87	27.3	56.1	2.52	34.1	.00			339
	400 ISL	6.10	6.07	34.087	26.823	127.3	.872	1.37	19.7							403
1	412	6.01	5.97	34.092	26.838	125.8	.886	1.30	18.7	68.0	2.77	37.6	.00			414
1	486	5.56	5.52	34.187	26.969	114.0	.975	.62	8.8	81.8	3.06	40.8	.00			489
	500 ISL	5.49	5.44	34.203	26.992	112.0	.991	.54	7.7							504
1	558	5.20	5.15	34.262	27.073	104.9	1.055	.39	5.5	92.0	3.17	42.2	.00			562

RV DAVID STARR JORDAN

CALCOFI CRUISE 8410

STATION 94 30

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 43.0 N	117 27.8 W	02/10/84	2152 GMT	570 M	250	07 KT	250 02 05	1	1015.1 MB	20.3 C	17.5 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	22.18	22.18	33.598	23.105	477.3	.000	5.27	105.3							0
1	2	22.18	22.18	33.598	23.105	475.5	.010	5.27	105.3					.12	.04	2
	10 ISL	21.90	21.89	33.593	23.180	468.7	.047	5.41	107.5							10
1	13	21.79	21.79	33.592	23.208	466.1	.061	5.46	108.3							13
	20 ISL	19.47	19.46	33.455	23.724	417.1	.092	6.02	114.4							20
1	22	18.73	18.73	33.423	23.885	401.8	.100	6.18	115.7					.17	.04	22
	30 ISL	16.66	16.66	33.353	24.331	359.4	.131	6.33	113.9							30
1	33	16.09	16.09	33.344	24.455	347.7	.141	6.39	113.7					.24	.06	33
1	42	15.02	15.02	33.373	24.715	323.2	.171	6.31	109.9					.68	.30	42
	50 ISL	14.51	14.50	33.459	24.892	306.6	.197	5.71	98.5							50
1	52	14.42	14.41	33.477	24.924	303.5	.202	5.57	95.9					1.07	.78	52
1	61	13.82	13.81	33.486	25.057	291.1	.229	5.33	90.6					.40	.43	61
1	72	13.44	13.43	33.447	25.105	285.8	.261	5.27	88.9							72
	75 ISL	13.27	13.26	33.463	25.152	283.6	.270	5.22	87.8							75
1	87	12.69	12.68	33.483	25.282	273.3	.302	4.92	81.7					.16	.21	87
1	100	12.39	12.37	33.587	25.421	257.3	.336	4.31	71.2					.07	.15	100
1	120	11.23	11.22	33.581	25.710	233.2	.387	4.53	73.0					.04	.06	121
	125 ISL	11.07	11.05	33.691	25.747	226.8	.398	4.46	71.7							126
1	145	10.49	10.48	33.735	25.883	214.1	.442	3.93	62.3					.01	.04	146
	150 ISL	10.35	10.34	33.760	25.927	210.0	.452	3.76	59.5							151
1	173	9.75	9.73	33.887	26.128	191.2	.499	3.02	47.2							174
	200 ISL	9.32	9.30	33.943	26.243	180.8	.549	2.90	44.9							201
1	204	9.27	9.25	33.949	26.256	179.7	.556	2.88	44.5							205
1	232	8.86	8.83	34.038	26.391	167.1	.604	2.58	39.5							233
	250 ISL	8.76	8.74	34.077	26.437	163.2	.634	2.35	36.0							252
1	272	8.70	8.67	34.111	26.474	160.0	.569	2.10	32.1							273
	300 ISL	8.47	8.44	34.150	26.541	154.1	.714	1.87	28.5							302
1	321	8.26	8.23	34.174	26.591	149.7	.746	1.72	26.0							323
1	381	7.71	7.67	34.223	26.712	138.9	.832	1.15	17.2							383
	400 ISL	7.48	7.44	34.232	26.753	135.2	.858	1.00	14.9							403
1	439	6.92	6.88	34.240	26.837	127.3	.910	.75	11.0							442
	500 ISL	6.38	6.34	34.286	26.945	117.5	.984	.53	7.5							504
1	503	6.37	6.32	34.288	26.949	117.1	.987	.52	7.5							506

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 97 29

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 17.6 N	117 04.7 W	26/10/84	1949 GMT	52 M	320	06 KT	330 01 01	1	1016.0 MB	21.5 C	17.0 C	2/8	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	17.86	17.85	33.520	24.174	373.8	.337	5.76	106.2	2.0	.32	.0	.03	.16	.35	10

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 97 30

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 15.3 N	117 08.6 W	26/10/84	2105 GMT	51 M	210	08 KT	210 01 01	1	1014.0 MB	21.8 C	17.0 C	4/8	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	0	19.63	19.63	33.590	23.785	413.6	.300	5.51	105.1	2.1	.27	.0	.00	.14	.04	0
1	10	18.67	18.67	33.543	23.993	391.1	.340	5.69	106.5	2.0	.28	.0	.00	.16	.04	10
	20 ISL	17.09	17.08	33.452	24.308	361.3	.378	6.11	110.9							20
1	21	16.92	16.92	33.444	24.340	358.3	.381	6.15	111.2	2.4	.33	.0	.00	.24	.07	21
	30 ISL	15.41	15.41	33.390	24.642	329.8	.112	6.38	112.0							30
1	31	15.27	15.27	33.387	24.671	327.1	.115	6.39	111.8	2.8	.37	.0	.00	.23	.09	31
	50 ISL	13.23	13.22	33.448	25.148	282.1	.173	5.35	99.8							50
1	52	13.11	13.10	33.462	25.182	278.8	.178	5.15	86.3	6.4	.79	6.4	.05	.42	.31	52

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 97 32

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 11.3 N	117 17.1 W	26/10/84	2247 GMT	1387 M	250	09 KT	250 02 01	1	1013.8 MB	21.0 C	18.2 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
1	10	19.88	19.85	33.599	23.726	415.6	.342	5.45	104.4	1.7	.24	.0	.00	.13	.07	10

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 97 35

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 04.7 N	117 29.6 W	27/10/84	0144 GMT	1152 M	270	14 KT	270 02 02	1	1015.0 MB	19.8 C	17.5 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
	0 ISL	19.31	19.31	33.577	23.856	404.0	.300	5.54	105.0							0
1	1	19.31	19.31	33.577	23.856	403.8	.304	5.54	105.0	1.6	.26	.0	.00	.16	.03	1
	10 ISL	19.20	19.19	33.573	23.883	401.5	.340	5.71	108.0							10
1	11	19.18	19.18	33.572	23.885	401.4	.344	5.72	108.1	1.6	.26	.0	.00	.17	.02	11
	20 ISL	19.03	19.02	33.571	23.925	398.0	.380	5.68	107.0							20
1	22	18.99	18.99	33.570	23.933	397.2	.388	5.66	106.6	1.7	.26	.0	.00	.15	.03	22
	30 ISL	18.79	18.79	33.553	23.968	394.2	.420	5.68	106.5							30
1	32	18.75	18.74	33.546	23.976	393.5	.427	5.68	106.5	1.8	.26	.0	.00	.16	.05	32
1	42	15.42	15.41	33.336	24.600	334.2	.164	6.45	113.2	2.0	.33	.0	.00	.33	.10	42
	50 ISL	15.08	15.07	33.369	24.700	323.5	.193	6.26	109.1							50
1	53	14.97	14.96	33.419	24.763	318.9	.199	6.12	106.5	3.0	.39	.0	.00	.36	.14	53
1	63	14.17	14.16	33.422	24.935	302.8	.230	5.87	100.5	3.6	.49	.9	.10	.34	.16	63
1	73	13.27	13.26	33.445	25.136	283.8	.259	5.45	91.6	5.3	.73	5.3	.17	.55	.19	73
	75 ISL	13.11	13.10	33.451	25.175	280.2	.266	5.37	89.9							75
1	88	12.30	12.29	33.494	25.366	262.2	.300	4.91	80.9	8.3	.94	9.5	.03	.18	.21	88
	100 ISL	11.60	11.59	33.570	25.556	244.4	.331	4.40	71.4							101
1	103	11.47	11.46	33.586	25.592	240.9	.338	4.30	69.6	13.2	1.21	13.9	.02	.01	.03	103
1	122	10.65	10.63	33.664	25.801	221.5	.384	3.81	60.6	18.1	1.44	17.9	.02	.07	.08	123
	125 ISL	10.56	10.55	33.674	25.823	219.4	.389	3.76	59.7							126
1	147	9.93	9.91	33.764	26.002	202.6	.436	3.39	53.1	23.1	1.66	21.3	.01	.02	.04	148
	150 ISL	9.85	9.83	33.776	26.025	200.6	.442	3.36	52.5							151
1	177	9.19	9.17	33.897	26.227	181.7	.494	3.12	48.1	28.9	1.85	24.4	.01			178
	200 ISL	8.87	8.85	33.980	26.344	171.0	.534	2.89	44.3							201
1	206	8.80	8.78	33.997	26.363	169.8	.544	2.84	43.5	33.5	2.00	26.3	.01			207
1	236	8.38	8.35	34.027	26.457	160.7	.593	2.73	41.4	37.0	2.13	27.6	.01			237
	250 ISL	8.34	8.32	34.076	26.501	155.9	.616	2.39	36.2							252
1	273	8.30	8.27	34.157	26.571	150.7	.652	1.77	26.8	44.3	2.42	30.6	.01			275
	300 ISL	7.93	7.90	34.179	26.645	143.9	.691	1.48	22.2							302
1	333	7.37	7.34	34.182	26.728	135.3	.737	1.29	19.1	55.6	2.69	34.2	.01			335
	400 ISL	6.75	6.71	34.239	26.859	124.5	.825	.77	11.2							403
1	405	6.71	6.67	34.243	26.867	123.7	.831	.73	10.7	66.5	2.93	37.4	.01			408
1	480	6.31	6.27	34.304	26.968	114.9	.920	.43	6.2	75.5	3.10	39.2	.01			483
	500 ISL	6.20	6.15	34.316	26.993	112.8	.943	.38	5.5							504
1	556	5.85	5.80	34.336	27.053	107.4	1.009	.31	4.4	83.9	3.19	40.8	.00			560

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 97 40

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 55.1 N	117 49.6 W	27/10/84	0510 GMT	1664 M	270	15 KT	270 02 05		1016.5 MB	18.0 C	17.0 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	19.14	19.14	33.489	23.833	405.9	.000	5.57	105.2							0
1	1	19.14	19.14	33.489	23.833	406.0	.004	5.57	105.2	2.1	.30	.0	.00	.15	.01	1
	10 ISL	19.15	19.15	33.487	23.828	406.9	.041	5.56	105.0							10
1	11	19.15	19.15	33.487	23.828	406.9	.045	5.56	105.0	2.1	.28	.0	.00	.14	.00	11
	20 ISL	19.13	19.13	33.486	23.833	406.7	.081	5.58	105.3							20
1	22	19.13	19.12	33.485	23.834	406.7	.089	5.58	105.3	2.1	.28	.0	.00	.13	.00	22
	30 ISL	18.46	18.46	33.435	23.962	394.8	.122	5.69	106.0							30
1	32	18.17	18.17	33.410	24.014	389.8	.129	5.74	106.3	2.1	.29	.0	.00	.18	.01	32
1	42	15.30	15.29	33.177	24.504	343.3	.165	6.26	109.5	2.7	.35	.0	.00	.21	.05	42
	50 ISL	13.89	13.88	33.089	24.735	321.4	.193	6.28	106.6							50
1	52	13.68	13.67	33.083	24.774	317.7	.198	6.28	106.2	2.9	.40	.0	.00	.58	.16	52
1	62	13.04	13.03	33.198	24.992	297.2	.229	5.75	96.0	3.8	.61	3.1	.06	.72	.27	62
1	72	12.98	12.97	33.295	25.080	289.1	.258	5.51	91.9	4.6	.82	4.7	.04	.67	.37	72
	75 ISL	12.93	12.92	33.344	25.126	284.8	.268	5.42	90.4							75
1	87	12.61	12.60	33.512	25.320	266.6	.300	4.99	82.7	7.5	.87	7.9	.02	.05	.05	87
	100 ISL	11.77	11.76	33.619	25.562	243.8	.334	4.23	68.9							101
1	102	11.67	11.65	33.628	25.589	241.3	.338	4.14	67.3	13.4	1.21	13.4	.01	.02	.02	102
1	121	10.95	10.93	33.736	25.803	221.2	.384	3.55	56.9	18.6	1.51	17.8	.01	.01	.02	122
	125 ISL	10.87	10.85	33.749	25.828	219.0	.391	3.49	55.7							126
1	146	10.50	10.48	33.808	25.940	208.8	.437	3.19	50.6	22.2	1.70	20.5	.01	.01	.02	147
	150 ISL	10.43	10.41	33.819	25.960	206.9	.445	3.15	50.0							151
1	177	10.00	9.98	33.902	26.099	196.2	.499	2.92	45.9	25.9	1.87	23.0	.00			179
	200 ISL	9.72	9.69	33.967	26.197	185.3	.542	2.70	42.2							201
1	206	9.64	9.62	33.983	26.222	183.0	.553	2.65	41.3	29.6	2.01	24.9	.00			207
1	235	9.16	9.14	34.053	26.355	170.8	.604	2.45	37.8	33.3	2.13	26.7	.00			236
	250 ISL	8.96	8.93	34.078	26.408	165.0	.630	2.37	36.5							252
1	274	8.63	8.60	34.105	26.481	159.4	.668	2.25	34.3	38.4	2.27	28.5	.00			275
	300 ISL	8.08	8.05	34.114	26.570	151.1	.709	2.03	30.5							302
1	331	7.45	7.42	34.124	26.671	141.7	.755	1.72	25.5	51.3	2.57	32.9	.00			333
	400 ISL	6.72	6.68	34.214	26.843	126.0	.847	.85	12.4							403
1	404	6.69	6.66	34.219	26.850	125.3	.852	.81	11.8	65.4	2.98	37.0	.00			406
1	476	6.19	6.15	34.276	26.962	115.3	.959	.48	6.9	75.3	3.14	39.3	.00			479
	500 ISL	6.04	5.99	34.287	26.990	112.9	.966	.44	6.4							504
1	550	5.74	5.69	34.295	27.035	109.0	1.022	.37	5.3	83.9	3.23	40.9	.00			554

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 97 45

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 45.2 N	118 10.2 W	27/10/84	0839 GMT	2167 M	250	16 KT	240 06 05	5	1016.2 MB	17.8 C	16.8 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	19.85	19.84	33.624	23.754	413.5	.000	5.35	102.4							0
1	1	19.85	19.84	33.624	23.754	413.5	.004	5.35	102.4	2.0	.24	.0	.00	.09	.02	1
	10 ISL	19.84	19.84	33.623	23.755	413.8	.041	5.39	103.1							10
1	11	19.84	19.84	33.623	23.755	413.8	.045	5.39	103.2	1.9	.24	.0	.00	.09	.03	11
	20 ISL	19.84	19.84	33.623	23.756	414.1	.083	5.39	103.2							20
1	22	19.85	19.84	33.623	23.754	414.4	.091	5.39	103.2	2.1	.26	.0	.00	.08	.02	22
	30 ISL	18.54	18.54	33.485	23.981	392.9	.123	5.68	106.1							30
1	32	18.03	18.03	33.448	24.078	383.7	.131	5.78	106.8	2.2	.30	.0	.00	.16	.03	32
1	42	15.06	15.06	33.437	24.756	319.3	.166	6.10	106.3	2.9	.38	.0	.00	.23	.05	42
	50 ISL	14.06	14.05	33.487	25.008	295.5	.191	5.76	98.5							50
1	57	13.66	13.65	33.534	25.103	286.6	.211	5.38	91.2	4.8	.61	3.6	.05	.49	.30	57
1	67	12.84	12.83	33.440	25.219	275.6	.238	5.19	86.4	6.2	.75	6.3	.02	.34	.27	67
	75 ISL	12.51	12.50	33.493	25.323	265.0	.261	4.95	81.8							75
1	77	12.47	12.45	33.516	25.349	263.6	.265	4.89	80.9	7.8	.86	8.4	.02	.16	.15	77
1	92	12.28	12.27				.302									92
	100 ISL	11.90	11.88	33.635	25.552	229.4	.321	4.17	68.1							101
1	112	11.24	11.23	33.690	25.715	229.4	.348	3.93	63.4	15.6	1.31	15.2	.01	.02	.05	112
	125 ISL	10.55	10.54	33.716	25.858	216.1	.378	3.86	61.3							126
1	129	10.35	10.34	33.740	25.911	211.1	.387	3.85	60.9	19.1	1.45	18.1	.01	.01	.03	130
	150 ISL	9.85	9.83	33.792	26.038	199.3	.430	3.62	56.7							151
1	154	9.77	9.76	33.804	26.059	197.4	.438	3.57	55.8	23.2	1.63	20.9	.01	.01	.02	155
1	185	9.08	9.06	33.935	26.275	177.3	.496	3.32	51.1	28.9	1.81	23.8	.00			186
	200 ISL	9.01	8.99	34.018	26.351	170.4	.522	2.86	44.0							201
1	214	8.96	8.94	34.086	26.412	164.8	.545	2.41	37.0	35.1	2.15	27.2	.00			215
1	248	8.35	8.32	34.148	26.557	151.5	.598	1.95	29.6	42.2	2.34	29.9	.00			249
	250 ISL	8.32	8.30	34.151	26.563	151.0	.602	1.92	29.2							252
1	296	7.99	7.96	34.196	26.649	143.5	.670	1.49	22.4	48.3	2.56	32.1	.00			298
	300 ISL	7.94	7.91	34.198	26.657	142.8	.675	1.45	21.8							302
1	350	7.31	7.27	34.217	26.764	133.1	.744	1.02	15.1	57.6	2.82	34.8	.00			352
	400 ISL	6.85	6.81	34.233	26.841	126.3	.809	.84	12.3							403
1	433	6.58	6.54	34.242	26.884	122.5	.851	.77	11.2	65.4	2.90	36.8	.00			436
	500 ISL	5.96	5.91	34.253	26.973	114.3	.930	.49	7.0							504
1	519	5.80	5.76	34.258	26.997	112.2	.951	.42	6.0	81.0	3.08	40.6	.00			522
	600 ISL	5.45	5.40	34.327	27.095	103.5	1.038	.28	4.0							604
1	605	5.44	5.39	34.332	27.101	103.0	1.043	.28	4.0	90.1	3.22	42.0	.00			609

RV NEW HORIZON CALCOFI CRUISE 8410 STATION 97 50

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
31 35.3 N	118 30.3 W	27/10/84	1216 GMT	2397 M	290	20 KT	300 06 05	5	1016.0 MB	17.0 C	15.0 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	17.98	17.98	33.408	24.060	384.4	.000	5.59	103.2							0
1	1	17.98	17.98	33.408	24.060	384.4	.004	5.59	103.2	1.8	.32	.0	.00	.09	.02	1
	10 ISL	17.97	17.97	33.407	24.062	384.5	.038	5.64	104.1							10
1	11	17.97	17.96	33.407	24.062	384.5	.042	5.64	104.1	1.8	.31	.0	.00	.09	.04	11
	20 ISL	17.96	17.95	33.407	24.065	384.6	.077	5.60	103.4							20
1	21	17.96	17.95	33.407	24.065	384.6	.080	5.60	103.3	1.8	.33	.0	.00	.09	.03	21
	30 ISL	17.96	17.96	33.408	24.065	384.9	.115	5.61	103.5							30
1	31	17.96	17.95	33.408	24.065	385.0	.119	5.61	103.5	1.8	.31	.0	.00	.09	.03	31
1	41	15.72	15.71	33.345	24.541	339.8	.155	6.10	107.7	2.3	.35	.0	.00	.21	.06	41
	50 ISL	14.66	14.65	33.351	24.777	317.5	.185	5.99	103.5							50
1	56	14.31	14.31	33.368	24.863	309.5	.203	5.92	101.6	2.9	.44	.6	.07	.74	.36	56
1	66	13.96	13.95	33.415	24.973	299.3	.233	5.68	96.8	3.8	.52	1.6	.10	.62	.45	66
	75 ISL	13.23	13.22	33.504	25.191	278.7	.263	5.15	86.5							75
1	76	13.17	13.16	33.510	25.207	277.1	.262	5.11	85.7	6.1	.74	5.8	.03	.17	.21	76
1	91	12.70	12.69	33.555	25.336	265.2	.303	4.94	82.1	7.5	.82	7.5	.02	.11	.14	91
	100 ISL	12.15	12.14	33.582	25.461	253.4	.327	4.79	78.9							101
1	111	11.45	11.44	33.621	25.623	238.2	.353	4.56	73.9	11.8	1.08	12.2	.01	.04	.05	111
	125 ISL	10.51	10.50	33.708	25.859	215.0	.386	4.01	63.6							126
1	130	10.20	10.19	33.742	25.938	208.5	.397	3.82	60.2	19.9	1.45	18.6	.00	.01	.02	131
	150 ISL	9.62	9.60	33.816	26.095	193.8	.437	3.75	58.4							151
1	155	9.52	9.50	33.832	26.124	191.2	.447	3.73	58.0	24.4	1.65	21.5	.01	.00	.02	155
1	184	8.89	8.87	33.930	26.301	174.8	.499	3.27	50.1	29.7	1.84	24.3	.00			185
	200 ISL	8.58	8.56	33.972	26.383	167.2	.527	3.09	47.1							201
1	213	8.36	8.34	33.998	26.437	162.3	.548	2.99	45.3	35.4	1.99	26.6	.00			214
1	248	8.00	7.97	34.021	26.509	155.8	.603	2.91	43.7	38.7	2.04	27.7	.00			249
	250 ISL	7.96	7.94	34.024	26.517	155.1	.607	2.87	43.1							252
1	295	7.21	7.18	34.071	26.662	141.8	.674	2.03	30.3	51.4	2.42	32.6	.00			297
	300 ISL	7.15	7.12	34.074	26.673	140.7	.681	1.97	29.3							302
1	349	6.59	6.55	34.101	26.771	131.9	.747	1.46	21.2	61.0	2.68	35.9	.00			351
	400 ISL	6.25	6.22	34.136	26.843	125.5	.813	1.05	15.1							403
1	431	6.13	6.09	34.163	26.880	122.3	.852	.84	12.1	71.3	2.90	38.7	.01			434
	500 ISL	5.96	5.91	34.257	26.977	114.0	.933	.48	6.9							504
1	516	5.93	5.88	34.278	26.998	112.2	.951	.42	6.0	80.1	3.07	40.1	.01			519
	600 ISL	5.63	5.58	34.331	27.077	105.4	1.043	.31	4.4							604
1	601	5.63	5.57	34.332	27.078	105.4	1.043	.31	4.4	87.8	3.15	41.2	.00			605

RV NEW HORIZON CALCOFI CRUISE 8410 STATION 97 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
31 25.2 N	119 50.8 W	27/10/84	1549 GMT	1031 M	320	21 KT	310 06 05	2	1018.0 MB	18.0 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	18.34	18.34	33.397	23.962	393.7	.000	5.52	102.5							0
1	2	18.34	18.34	33.397	23.962	393.8	.008	5.52	102.5	1.6	.33	.0	.00	.08	.01	2
	10 ISL	18.34	18.34	33.396	23.963	393.9	.039	5.55	103.1							10
1	12	18.33	18.33	33.396	23.963	394.0	.047	5.55	103.1	1.5	.31	.0	.00	.08	.01	12
	20 ISL	18.32	18.32	33.395	23.967	393.9	.079	5.54	103.0							20
1	22	18.32	18.31	33.395	23.967	393.9	.086	5.54	102.9	1.5	.35	.0	.00	.07	.01	22
	30 ISL	18.31	18.31	33.392	23.967	394.3	.118	5.55	103.1							30
1	32	18.31	18.31	33.392	23.967	394.3	.126	5.55	103.1	1.6	.31	.0	.00	.08	.01	32
1	42	15.08	15.08	33.110	24.499	343.7	.162	6.23	108.4	1.8	.38	.0	.00	.13	.05	42
	50 ISL	14.66	14.65	33.114	24.594	334.9	.190	6.14	106.0							50
1	57	14.32	14.31	33.117	24.667	328.1	.213			2.1	.38	.0	.00	.32	.17	57
1	67	13.60	13.59	33.158	24.849	311.0	.244	5.96	100.7	2.8	.48	1.0	.09	.53	.30	67
	75 ISL	13.56	13.55	33.248	24.927	303.8	.270	5.86	99.0							75
1	77	13.55	13.54	33.263	24.941	302.5	.275			3.4	.54	2.0	.12	.35	.28	77
1	92	13.14	13.13	33.391	25.121	285.8	.319	5.54	92.8	5.0	.70	4.9	.04	.18	.20	92
	100 ISL	12.79	12.78	33.460	25.244	274.2	.342	5.20	86.5							101
1	112	12.25	12.24	33.544	25.414	258.2	.373	4.72	77.7	9.8	.95	9.6	.02	.08	.09	112
	125 ISL	11.69	11.67	33.617	25.577	243.0	.407	4.37	71.1							126
1	131	11.42	11.41	33.645	25.647	236.4	.422	4.23	68.4	13.8	1.17	13.8	.01	.04	.05	132
	150 ISL	10.67	10.66	33.721	25.841	218.3	.464	3.81	60.5							151
1	156	10.44	10.42	33.746	25.902	212.5	.478	3.67	58.2	19.8	1.48	18.8	.01	.01	.03	157
1	185	9.56	9.54	33.904	26.174	187.1	.535	3.11	48.4	26.9	1.80	23.3	.01			186
	200 ISL	9.37	9.34	33.962	26.250	180.1	.563	2.91	45.1							201
1	215	9.23	9.21	34.007	26.308	174.9	.589	2.74	42.3	31.3	1.98	25.6	.01			216
1	249	8.74	8.71	34.090	26.452	161.7	.646	2.32	35.5	37.0	2.22	28.0	.00			250
	250 ISL	8.72	8.69	34.093	26.455	161.5	.648	2.30	35.2							252
1	297	8.14	8.11	34.154	26.593	149.3	.722	1.78	26.9	44.9	2.41	31.0	.01			299
	300 ISL	8.10	8.07	34.156	26.601	148.2	.726	1.75	26.4							302
1	352	7.27	7.24	34.177	26.738	135.6	.799	1.23	18.2	56.0		34.6	.00			354
	400 ISL	6.87	6.83	34.215	26.823	127.9	.863	.87	12.7							403
1	434	6.68	6.64	34.242	26.871	123.8	.906	.67	9.8	67.2	2.92	37.5	.00			437
	500 ISL	6.26	6.22	34.277	26.954	116.5	.989	.44	6.4							504
1	519	6.16	6.11	34.286	26.974	114.7	1.006	.40	5.8	76.8	3.05	39.6	.01			522
	600 ISL	5.82	5.77	34.329	27.052	108.1	1.097	.28	4.0							604
1	605	5.80	5.75	34.332	27.056	107.8	1.102	.28	4.0	84.1	3.18	41.0	.00			609

RV NEW HORIZON

CALCOFI CRUISE 8410

STATION 97 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 15.7 N	119 11.0 W	27/10/84	1932 GMT	3655 M	320	18 KT	350 07 06	1	1018.0 MB	17.2 C	13.8 C	6/8	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	18.61	18.61	33.434	23.900	399.5	.000	5.54	103.5							0
1	1	18.61	18.61	33.434	23.900	399.7	.004	5.54	103.5	1.6	.32	.0	.00	.07	.01	1
	10 ISL	18.62	18.62	33.398	23.894	400.5	.040	5.55	103.7							10
1	11	18.62	18.62	33.397	23.893	400.6	.044	5.55	103.7	1.5	.35	.0	.00	.06	.02	11
	20 ISL	18.61	18.61	33.396	23.895	400.8	.080	5.55	103.7							20
1	22	18.61	18.61	33.397	23.896	400.8	.088	5.55	103.7	1.5	.30	.0	.00	.07	.02	22
	30 ISL	18.62	18.61	33.395	23.893	401.3	.120	5.53	103.3							30
1	32	18.63	18.62	33.395	23.891	401.5	.128	5.53	103.3	1.5	.31	.0	.00	.07	.02	32
1	42	16.62	16.61	33.189	24.215	371.8	.166	5.94	106.6	1.6	.35	.0	.00	.10	.03	42
	50 ISL	15.24	15.24	33.122	24.474	346.4	.195	6.05	105.6							50
1	57	14.33	14.32	33.102	24.655	329.3	.218	6.14	105.2	2.1	.40	.0	.00	.20	.14	57
1	67	13.48	13.47	33.069	24.805	315.2	.251	5.99	100.9	2.6	.44	.6	.06	.44	.31	67
	75 ISL	13.18	13.17	33.124	24.907	305.6	.276	5.79	96.9							75
1	77	13.15	13.14	33.138	24.925	304.0	.281	5.75	96.2	3.6	.63	2.2	.09	.28	.24	77
1	92	12.86	12.85	33.156	24.994	297.8	.326	5.64	93.8	4.0	.61	3.4	.06	.20	.22	92
	100 ISL	12.46	12.45	33.196	25.103	287.5	.351	5.48	90.4							101
1	112	11.83	11.81	33.284	25.292	269.8	.383	5.19	84.5	7.7	.88	7.9	.01	.08	.09	112
	125 ISL	11.23	11.22	33.428	25.513	249.9	.418	4.81	77.4							126
1	132	10.94	10.93	33.509	25.628	238.2	.436	4.59	73.4	12.5	.99	13.1	.01	.02	.09	133
	150 ISL	10.43	10.41	33.626	25.809	221.2	.476	4.08	64.6							151
1	157	10.25	10.23	33.665	25.871	215.5	.492	3.89	61.4	19.0	1.48	18.6	.00	.01	.32	158
1	187	9.45	9.43	33.841	26.142	190.1	.553	3.47	53.8	25.3	1.72	22.4	.00			188
	200 ISL	9.17	9.15	33.896	26.231	181.8	.577	3.49	53.9							201
1	217	8.83	8.81	33.950	26.327	172.9	.607	3.56	54.5	29.4	1.78	23.6	.00			218
	250 ISL	8.20	8.17	34.004	26.466	160.1	.662	3.35	50.5							252
1	253	8.15	8.12	34.006	26.475	159.3	.666	3.32	50.1	35.6	1.94	26.0	.00			254
	300 ISL	7.27	7.24	34.031	26.622	145.8	.738	2.69	39.7							302
1	302	7.23	7.21	34.029	26.626	145.3	.742	2.65	39.1	47.6	2.26	30.7	.00			304
1	357	6.71	6.67	34.060	26.723	135.6	.818	1.93	28.2	56.5	2.54	34.1	.00			359
	400 ISL	6.51	6.47	34.131	26.805	129.3	.876	1.27	18.5							403
1	441	6.37	6.33	34.205	26.883	122.5	.928	.73	10.6	69.7	2.97	38.4	.00			444
	500 ISL	6.02	5.98	34.270	26.979	113.9	.997	.41	5.9							504
1	526	5.87	5.82	34.290	27.014	110.7	1.026	.36	5.2	81.3	3.16	40.5	.00			529
	600 ISL	5.50	5.45	34.330	27.091	104.0	1.086	.29	4.1							604
1	610	5.46	5.41	34.333	27.098	103.3	1.116	.28	4.0	89.7	3.24	42.0	.00			614

RV NEW HORIZON

CALCOFI CRUISE 8410

STATION 97 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 55.4 N	119 50.6 W	28/10/84	0117 GMT	3584 M	320	16 KT	320 08 08	1	1016.0 MB	16.5 C	14.0 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
1	0	17.92	17.92	33.250	23.952	394.7	.000	5.59	103.0	1.4	.35	.0	.00	.07	.02	0
1	10	17.94	17.94	33.247	23.945	395.5	.039	5.61	103.4	1.3	.35	.0	.00	.07	.01	10
	20 ISL	17.95	17.95	33.248	23.944	395.1	.079	5.59	103.1							20
1	21	17.95	17.95	33.248	23.944	396.1	.083	5.59	103.0	1.7	.33	.0	.00	.07	.00	21
	30 ISL	17.97	17.95	33.251	23.943	395.5	.119	5.59	103.1							30
1	31	17.97	17.96	33.252	23.944	395.5	.122	5.59	103.1	1.5	.33	.0	.00	.06	.01	31
1	41	17.95	17.94	33.253	23.949	396.3	.162	5.62	103.6	1.9	.33	.0	.00	.07	.01	41
	50 ISL	17.50	17.50	33.196	24.014	390.4	.198	5.69	104.0							50
1	57	17.17	17.16	33.155	24.062	386.1	.224	5.82	105.6	2.0	.34	.0	.00	.14	.04	57
1	67	15.09	15.08	33.024	24.432	350.8	.261	6.20	107.9	1.9	.36	.0	.00	.13	.07	67
	75 ISL	14.37	14.36	33.027	24.589	335.0	.289	6.18	106.0							75
1	77	14.29	14.28	33.028	24.607	334.4	.295	6.17	105.6	2.4	.38	.0	.00	.16	.11	77
1	92	13.47	13.46	33.141	24.862	310.4	.343	5.84	98.4	3.2	.46	.8	.19	.29	.25	92
	100 ISL	13.13	13.12	33.188	24.967	300.6	.369	5.70	95.3							101
1	114	12.58	12.57	33.258	25.128	285.5	.403	5.45	90.2	5.8	.70	5.1	.02	.13	.12	114
	125 ISL	11.98	11.96	33.330	25.300	269.4	.443	5.16	84.3							126
1	132	11.56	11.54	33.379	25.416	258.4	.463	4.96	80.3	9.6	1.03	10.7	.01	.07	.07	133
	150 ISL	10.60	10.58	33.496	25.678	233.7	.503	4.53	71.9							151
1	157	10.25	10.23	33.548	25.780	224.1	.520	4.34	68.4	17.2	1.37	16.5	.01	.01	.02	158
1	187	9.45	9.43	33.781	25.095	194.6	.582	3.49	54.1	25.8	1.75	22.6	.00			188
	200 ISL	8.99	8.97	33.857	26.228	182.1	.606	3.36	51.5							201
1	217	8.45	8.42	33.935	26.374	168.3	.636	3.25	49.3	33.4	1.93	26.0	.00			218
	250 ISL	8.07	8.04	34.004	26.485	158.2	.690	2.87	43.2							252
1	252	8.06	8.03	34.006	26.489	157.9	.693	2.85	42.9	38.9	2.11	28.1	.00			253
	300 ISL	7.34	7.31	34.031	26.612	146.2	.766	2.55	37.7							302
1	301	7.32	7.29	34.037	26.620	145.9	.768	2.54	37.6	48.2	2.29	30.8	.00			303
1	356	6.57	6.54	34.059	26.740	134.9	.845	1.82	26.5	59.9	2.62	35.0	.00			358
	400 ISL	6.15	6.12	34.097	26.825	127.1	.902	1.30	18.7							403
1	439	5.86	5.82	34.135	26.892	121.0	.951	.93	13.3	75.4	2.92	39.3	.00			442
	500 ISL	5.41	5.37	34.185	26.986	112.4	1.022	.65	9.2							504
1	525	5.25	5.21	34.201	27.018	109.5	1.049	.60	8.5	89.4	3.14	41.9	.00			528
	600 ISL	4.89	4.84	34.235	27.087	103.5	1.110	.57	8.0							604
1	610	4.85	4.81	34.237	27.093	103.0	1.140	.57	8.0	95.6	3.16	41.9	.00			614

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 97 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
33 35.5 N	120 31.2 W	28/10/84	0704 GMT	3730 M	310	21 KT			1016.0 MB	17.0 C	14.5 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	18.63	18.63	33.332	23.840	405.3	.000	5.49	102.6							0
1	2	18.63	18.63	33.332	23.840	405.4	.008	5.49	102.6	2.1	.33	.0	.00	.04	.02	2
	10 ISL	18.63	18.63	33.329	23.838	405.8	.041	5.51	102.9							10
1	12	18.63	18.63	33.328	23.838	405.9	.049	5.51	102.9	2.0	.32	.0	.00	.05	.01	12
	20 ISL	18.63	18.63	33.328	23.838	406.2	.081	5.54	103.4							20
1	28	18.63	18.63	33.328	23.839	406.4	.113	5.55	103.7	2.1	.31	.0	.00	.05	.01	28
	30 ISL	18.63	18.63	33.328	23.839	406.5	.122	5.54	103.5							30
1	43	18.63	18.63	33.327	23.838	407.1	.174	5.50	102.7	2.2	.31	.0	.00	.05	.01	43
	50 ISL	17.25	17.24	33.224	24.096	382.6	.202	5.80	105.4							50
1	58	15.68	15.67	33.154	24.402	353.5	.231	6.12	107.8	2.3	.33	.0	.00	.10	.03	58
1	73	15.35	15.34	33.287	24.579	337.1	.283	6.04	105.8	2.4	.33	.0	.00	.14	.08	73
	75 ISL	15.18	15.17	33.272	24.605	334.7	.290	6.04	105.8							75
1	84	14.48	14.47	33.214	24.710	324.8	.319	5.99	103.0	2.4	.36	.0	.02	.30	.20	84
1	99	13.85	13.84	33.335	24.934	303.8	.366	5.68	96.5	3.4	.47	1.9	.10	.16	.19	99
	100 ISL	13.77	13.75	33.338	24.953	302.1	.373	5.66	96.0							101
1	119	12.61	12.59	33.370	25.211	277.9	.424	5.37	88.9	5.1	.59	5.4	.02	.07	.12	119
	125 ISL	12.22	12.21	33.407	25.314	268.1	.441	5.21	85.6							126
1	138	11.52	11.51	33.511	25.525	248.2	.476	4.87	78.9	10.1	.95	10.1	.01	.03	.04	139
	150 ISL	11.19	11.17	33.633	25.681	233.6	.504	4.66	75.0							151
1	158	10.94	10.92	33.706	25.782	224.1	.523	4.49	71.9	14.6	1.16	13.7	.01	.01	.01	159
1	178	9.85	9.83	33.722	25.983	205.1	.566	3.83	59.9	21.6	1.56	19.9	.01	.00	.01	179
1	198	9.45	9.43	33.807	26.115	192.9	.605	3.55	55.1	25.1	1.70	22.0	.00			199
	200 ISL	9.43	9.41	33.816	26.126	191.9	.609	3.56	55.2							201
1	219	9.17	9.14	33.894	26.230	182.3	.644	3.71	57.2	26.7	1.68	22.1	.00			220
	250 ISL	8.45	8.42	33.981	26.410	165.5	.698	3.71	56.3							252
1	254	8.36	8.33	33.989	26.430	165.7	.704	3.71	56.2	32.4	1.78	24.0	.00			255
	300 ISL	7.94	7.91	34.084	26.568	151.2	.777	2.39	35.9							302
1	303	7.92	7.89	34.089	26.575	150.6	.782	2.29	34.2	44.2	2.26	29.9	.00			305
1	357	7.27	7.23	34.146	26.714	137.9	.863	1.53	22.5	54.6	2.60	33.8	.00			359
	400 ISL	6.81	6.77	34.167	26.794	130.7	.917	1.15	16.8							403
1	441	6.41	6.37	34.180	26.857	124.9	.970	.90	13.0	68.4	2.91	37.8	.00			444
	500 ISL	5.94	5.90	34.219	26.949	115.6	1.041	.63	9.0							504
1	526	5.76	5.72	34.237	26.986	113.3	1.071	.54	7.7	81.3	3.11	40.6	.00			529
	600 ISL	5.29	5.24	34.281	27.078	104.9	1.152	.36	5.1							604
1	611	5.23	5.18	34.287	27.090	103.8	1.163	.35	4.9	93.3	3.22	42.5	.00			615

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 97 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
33 15.6 N	121 10.7 W	28/10/84	1238 GMT	3847 M	340	23 KT	330 07 05		1018.2 MB	16.1 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	18.61	18.61	33.323	23.839	405.5	.000	5.49	102.5							0
1	1	18.61	18.61	33.323	23.839	405.5	.004	5.49	102.5	2.0	.35	.0	.00	.05	.02	1
	10 ISL	18.61	18.61	33.323	23.839	405.7	.041	5.49	102.5							10
1	11	18.61	18.61	33.324	23.840	405.7	.044	5.49	102.5	2.0	.36	.0	.00	.05	.01	11
	20 ISL	18.61	18.61	33.323	23.839	406.1	.081	5.49	102.5							20
1	25	18.62	18.61	33.322	23.838	406.4	.101	5.49	102.5	2.1	.31	.0	.00	.05	.01	25
	30 ISL	18.62	18.61	33.322	23.838	406.6	.122	5.49	102.5							30
1	39	18.63	18.62	33.323	23.836	407.1	.158	5.48	102.4	2.0	.35	.0	.00	.05	.01	39
	50 ISL	18.24	18.23	33.332	23.940	397.5	.203	5.58	103.4							50
1	53	18.03	18.02	33.332	23.991	392.8	.214	5.62	103.8							53
1	68	15.76	15.75	33.322	24.513	343.3	.269	6.04	106.7	2.2	.35	.0	.00	.11	.04	68
	75 ISL	15.33	15.32	33.329	24.615	334.1	.293	5.99	104.9							75
1	77	15.26	15.25	33.324	24.625	332.7	.299	5.98	104.6	2.2	.53	.0	.00	.13	.10	77
1	92	14.74	14.73	33.346	24.757	323.7	.348	5.84	101.1	2.6	.38	.3	.09	.22	.20	92
	100 ISL	14.50	14.49	33.411	24.857	311.3	.374	5.72	98.6							101
1	111	14.06	14.05	33.483	25.006	297.4	.406	5.55	94.8	6.5	.74	6.2	.02	.06	.06	111
	125 ISL	12.82	12.80	33.456	25.237	275.6	.448	5.28	87.9							126
1	129	12.49	12.48	33.446	25.292	270.3	.457	5.21	86.1	6.6	.75	6.3	.02	.06	.06	129
1	147	11.36	11.35	33.480	25.530	247.9	.506	4.87	78.6	9.9	.98	10.2	.01	.03	.03	148
	150 ISL	11.22	11.20	33.492	25.565	244.6	.513	4.79	77.1							151
1	166	10.45	10.43	33.585	25.775	224.8	.551	4.26	67.5	16.3	1.32	15.1	.01	.01	.01	167
1	185	9.85	9.83	33.735	25.970	206.6	.592	3.81	59.6	21.5	1.57	20.1	.01			186
	200 ISL	9.49	9.47	33.841	26.136	193.9	.621	3.89	60.4							201
1	204	9.40	9.38	33.877	26.177	190.9	.629	3.91	60.5	23.9	1.55	20.5	.01			205
1	236	8.74	8.72	33.965	26.353	173.8	.686	3.75	57.3	29.1	1.66	22.8	.00			237
	250 ISL	8.44	8.41	33.988	26.417	164.9	.709	3.62	54.9							252
1	283	7.81	7.79	34.020	26.536	153.9	.761	3.21	48.0	39.2	2.00	27.1	.01			284
	300 ISL	7.57	7.54	34.031	26.580	149.3	.788	2.93	43.7							302
1	334	7.17	7.14	34.050	26.651	143.3	.838	2.36	34.8	49.8	2.35	31.7	.01			336
	400 ISL	6.49	6.46	34.112	26.792	130.5	.928	1.37	19.8							403
1	415	6.37	6.33	34.127	26.821	127.9	.947	1.18	17.1	65.8	2.78	37.1	.01			417
1	497	5.91	5.87	34.220	26.953	115.1	1.047	.58	8.3	78.5	2.97	40.1	.02			500
	500 ISL	5.89	5.85	34.223	26.958	115.7	1.051	.56	8.1							504
1	591	5.39	5.34	34.291	27.066	105.9	1.141	.35	5.0	89.3	3.13	42.1	.01			595

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 97 100

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
29 56.2 N	121 50.7 W	28/10/84	1913 GMT	4043 M	350	19 KT	350 07 05	1	1020.0 MB	17.9 C	13.8 C	7/8	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	18.16	18.16	33.247	23.893	400.2	.300	5.56	102.9							0
1	2	18.16	18.16	33.247	23.893	400.4	.308	5.56	102.9	1.2	.34	.0	.00	.08	.01	2
	10 ISL	18.16	18.16	33.245	23.893	400.9	.340	5.56	102.9							10
1	12	18.16	18.15	33.245	23.890	401.0	.348	5.56	102.9	1.2	.38	.0	.00	.09	.02	12
	20 ISL	18.16	18.15	33.245	23.890	401.2	.380	5.57	103.0							20
1	27	18.16	18.15	33.244	23.891	401.4	.408	5.57	103.1	1.2	.32	.0	.00	.09	.02	27
	30 ISL	18.16	18.16	33.244	23.891	401.5	.420	5.57	103.0							30
1	42	18.17	18.16	33.245	23.893	402.0	.468	5.56	102.9	1.3	.32	.0	.00	.10	.01	42
	50 ISL	18.01	18.00	33.259	23.940	397.5	.200	5.59	103.1							50
1	58	17.86	17.85	33.273	23.987	393.2	.231	5.61	103.2	1.3	.32	.0	.00	.14	.05	58
1	73	15.36	15.35	33.016	24.367	357.3	.287	6.01	105.1	2.0	.37	.0	.00	.27	.21	73
	75 ISL	15.14	15.12	33.027	24.425	351.8	.295	6.01	104.7							75
1	83	14.51	14.50	33.094	24.610	334.3	.322	6.02	103.6	2.2	.39	.0	.06	.18	.21	83
1	98	13.59	13.58	33.137	24.835	313.2	.370	5.92	98.3	2.8	.45	.6	.11	.13	.21	98
	100 ISL	13.42	13.41	33.148	24.878	309.2	.378	5.77	97.0							101
1	118	12.39	12.37	33.301	25.200	278.8	.429	5.35	88.2	5.6	.71	5.2	.02	.08	.11	118
	125 ISL	12.32	12.31	33.441	25.321	267.5	.449	5.24	86.2							126
1	137	12.18	12.16	33.635	25.500	250.7	.482	5.04	82.9	7.8	.77	7.4	.01	.03	.05	138
	150 ISL	11.29	11.27	33.601	25.638	237.7	.512	4.74	76.4							151
1	157	10.72	10.70	33.567	25.714	230.5	.530	4.55	72.5	13.9	1.18	13.8	.01	.01	.02	158
1	177	10.00	9.98	33.715	25.953	208.1	.573	4.16	65.3	19.0	1.40	17.6	.01	.00	.02	178
1	197	9.36	9.34	33.831	26.148	189.7	.613	3.88	60.1	23.6	1.58	20.6	.00			198
	200 ISL	9.28	9.26	33.847	26.174	187.3	.618	3.85	59.5							201
1	217	8.84	8.82	33.923	26.304	175.1	.649	3.70	56.7	27.9	1.71	22.9	.01			218
	250 ISL	8.25	8.23	34.001	26.456	161.1	.704	3.30	49.8							252
1	252	8.23	8.20	34.003	26.461	160.6	.707	3.27	49.4	34.8	1.92	26.0	.00			253
	300 ISL	7.52	7.49	34.053	26.604	147.5	.782	2.29	34.0							302
1	301	7.50	7.47	34.053	26.607	147.2	.784	2.26	33.6	46.5	2.30	31.2	.00			303
1	356	6.83	6.80	34.079	26.720	135.9	.861	1.72	25.2	56.7	2.74	34.7	.00			358
	400 ISL	6.44	6.40	34.120	26.806	129.2	.920	1.25	18.2							403
1	440	6.13	6.10	34.160	26.877	122.7	.971	.88	12.7	71.6	2.90	38.9	.00			443
	500 ISL	5.69	5.65	34.199	26.963	114.9	1.042	.59	8.4							504
1	524	5.54	5.49	34.214	26.994	112.1	1.068	.52	7.4	84.1	3.07	41.3	.00			527
	600 ISL	5.19	5.14	34.286	27.093	103.3	1.151	.32	4.6							604
1	608	5.16	5.11	34.294	27.103	102.4	1.159	.31	4.4	94.5	3.20	42.7	.00			612

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 100 29

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 42.7 N	116 43.3 W	30/10/84	2336 GMT	73 M	250	07 KT	320 02 04	1	1012.2 MB	20.0 C	17.0 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	17.37	17.37	33.483	24.263	365.9	.000	5.86	107.0							0
1	1	17.37	17.37	33.483	24.263	365.0	.004	5.86	107.0	3.1	.33	.1	.00	.34	.14	1
	10 ISL	16.97	16.97	33.474	24.353	355.8	.036	5.98	108.2							10
1	11	16.93	16.92	33.474	24.362	355.9	.040	5.98	108.2	3.3	.33	.1	.00	.62	.30	11
	20 ISL	16.59	16.59	33.470	24.438	348.9	.071	5.91	106.2							20
1	22	16.47	16.46	33.470	24.466	345.4	.078	5.89	105.5	3.9	.37	.1	.02	1.06	.52	22
	30 ISL	15.31	15.31	33.475	24.730	321.4	.105	5.51	96.6							30
1	32	15.03	15.02	33.480	24.796	315.1	.111	5.41	94.3	5.3	.54	1.9	.20	.43	.42	32
	50 ISL	13.88	13.87	33.533	25.082	288.4	.165	4.88	83.1							50
1	52	13.86	13.86	33.538	25.088	287.9	.171	4.85	82.5	7.7	.78	5.4	.15	.20	.52	52

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 100 30

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 40.9 N	116 46.7 W	30/10/84	2145 GMT	434 M	250	10 KT	180 03 05	1	1012.5 MB	20.0 C	18.0 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	17.64	17.64	33.476	24.194	371.6	.000	5.88	107.9	2.4	.30	.1	.00	.12	.03	0
1	10	17.15	17.15	33.470	24.307	361.1	.037	5.97	108.5	2.6	.30	.1	.00	.19	.07	10
	20 ISL	16.22	16.22	33.486	24.534	341.6	.072	5.81	103.7							20
	30 ISL	15.26	15.25	33.470	24.737	320.7	.105	5.65	99.0							30
1	31	15.17	15.17	33.472	24.758	318.8	.108	5.64	98.6	4.5	.45	.6	.11	.70	.32	31
1	47	14.27	14.27	33.530	24.996	295.5	.157	4.92	84.5	7.5	.73	4.8	.16	.20	.37	47
	50 ISL	14.17	14.16	33.537	25.024	293.9	.166	4.82	82.6							50
1	57	13.95	13.94	33.550	25.080	288.8	.186	4.66	79.5	8.4	.82	6.3	.11	.18	.29	57
1	73	13.18	13.17	33.590	25.268	271.2	.230	4.49	75.4	9.5	.93	8.5	.06	.14	.26	73
	75 ISL	13.06	13.05	33.599	25.300	268.3	.237	4.41	73.9							75
1	88	12.47	12.45	33.649	25.454	253.9	.270	3.99	66.0	13.1	1.17	12.3	.04	.04	.11	88
	100 ISL	12.14	12.12	33.679	25.541	246.0	.301	3.79	62.4							101
1	104	12.05	12.04	33.687	25.563	243.8	.309	3.75	61.5	15.1	1.28	14.4	.03	.03	.11	104
	125 ISL	11.11	11.10	33.791	25.817	220.1	.359	3.24	52.2							126
1	128	10.97	10.96	33.810	25.857	215.4	.366	3.16	50.7	20.4	1.73	19.0	.02	.02	.06	129
1	148	10.67	10.65	33.896	25.978	205.3	.408	2.82	45.0	24.3	1.79	21.9	.01	.00	.03	149
	150 ISL	10.65	10.63	33.902	25.986	204.5	.412	2.80	44.6							151
1	178	10.31	10.29	33.986	26.111	193.2	.468	2.54	40.2					.01	.02	179
	200 ISL	9.92	9.90	34.052	26.230	182.3	.509	2.35	36.9							201
1	208	9.76	9.74	34.073	26.273	178.3	.523	2.29	35.8	31.9	2.08	26.1	.01	.00	.03	209
1	243	9.07	9.04	34.121	26.424	164.4	.583	2.10	32.4	37.2	2.22	28.2	.01			244
	250 ISL	8.95	8.92	34.131	26.451	161.9	.595	2.04	31.4							252
1	297	8.34	8.31	34.188	26.590	149.3	.568	1.64	24.9	45.3	2.44	31.0	.01			299
	300 ISL	8.31	8.28	34.190	26.596	148.8	.572	1.62	24.5							302
1	352	7.89	7.85	34.215	26.679	141.6	.748	1.26	18.9	52.0	2.62	32.8	.01			354
	400 ISL	7.40	7.36	34.238	26.746	135.7	.814	1.24	18.5							403
1	411	7.27	7.23	34.253	26.760	134.5	.833	1.24	18.3	53.6	2.61	32.5	.03			414

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 100 35

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 31.2 N	117 27.3 W	30/10/84	1752 GMT	1099 M	290	12 KT	270 03 05	1	1015.0 MB	20.2 C	16.7 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	18.18	18.18	33.519	24.095	381.2	.000	5.83	108.1							0
1	2	18.18	18.18	33.519	24.095	381.1	.008	5.83	108.1	2.3	.29	.1	.00	.13	.03	2
	10 ISL	18.14	18.13	33.515	24.104	380.5	.038	5.85	108.3							10
1	12	18.13	18.12	33.515	24.105	380.4	.046	5.85	108.4	2.1	.29	.0	.00	.14	.03	12
	20 ISL	18.09	18.08	33.513	24.114	379.9	.076	5.81	107.5							20
1	23	18.07	18.07	33.512	24.117	379.7	.087	5.79	107.1	2.2	.30	.0	.00	.15	.03	23
	30 ISL	17.26	17.26	33.476	24.285	363.9	.114	6.01	109.5							30
1	33	16.79	16.79	33.460	24.383	354.7	.124	6.10	110.1	2.4	.31	.0	.00	.29	.05	33
1	43	14.75	14.75	33.425	24.814	313.8	.157	6.05	104.8	3.5	.41	.0	.00	.43	.19	43
	50 ISL	14.01	14.00	33.469	25.004	295.8	.179	5.55	94.7							50
1	53	13.80	13.80	33.490	25.063	293.2	.187	5.32	90.4	5.1	.61	2.0	.06	.51	.54	53
1	63	12.97	12.96	33.548	25.276	273.2	.215	4.76	79.5	7.9	.97	7.8	.03	.14	.26	63
1	74	12.66	12.65	33.579	25.362	262.3	.244	4.55	75.6	9.3	.97	9.4	.01	.10	.13	74
	75 ISL	12.60	12.59	33.581	25.374	261.1	.248	4.54	75.3							75
1	89	12.02	12.01	33.513	25.511	248.4	.282	4.43	72.6	11.2	1.09	11.3	.00	.05	.08	89
	100 ISL	11.64	11.63	33.553	25.613	239.0	.310	4.08	66.4							101
1	104	11.54	11.53	33.668	25.643	236.2	.318	3.95	64.1	14.8	1.38	14.8	.01	.02	.05	104
1	123	11.13	11.11	33.797	25.819	219.8	.364	3.24	52.1	20.3	1.65	19.2	.00	.01	.03	124
	125 ISL	11.11	11.09	33.807	25.831	218.8	.367	3.20	51.4							126
1	148	10.78	10.76	33.914	25.973	205.7	.417	2.73	43.5	24.3	1.84	22.0	.00	.00	.03	149
	150 ISL	10.72	10.71	33.918	25.986	204.6	.420	2.73	43.5							151
1	178	9.91	9.89	33.992	26.193	196.2	.475	2.68	42.0	28.4	1.92	24.2	.00			179
	200 ISL	9.76	9.73	34.100	26.294	186.1	.515	2.27	35.5							201
1	207	9.73	9.70	34.131	26.324	183.5	.527	2.14	33.5	33.1	2.16	26.5	.00			208
1	237	9.17	9.15	34.153	26.440	172.9	.577	2.10	32.4	36.9	2.23	28.0	.01			238
	250 ISL	9.00	8.97	34.178	26.479	169.3	.598	1.97	30.3							252
1	276	8.70	8.67	34.201	26.545	163.4	.640	1.68	25.7	42.1	2.39	29.9	.00			278
	300 ISL	8.39	8.35	34.239	26.599	158.6	.675	1.61	24.5							302
1	335	7.94	7.91	34.215	26.671	152.1	.726	1.55	23.5	50.2	2.64	32.6	.00			337
	400 ISL	7.24	7.20	34.236	26.789	141.5	.815	1.03	15.2							403
1	407	7.17	7.13	34.239	26.802	140.4	.825	.96	14.2	60.7	2.84	35.7	.00			410
1	482	6.59	6.54	34.287	26.919	130.3	.918	.55	8.0	71.0	3.33	38.2	.00			485
	500 ISL	6.46	6.42	34.296	26.943	127.3	.940	.53	7.6							504
1	556	6.10	6.05	34.318	27.008	122.0	1.004	.45	6.5	79.6	3.10	39.7	.00			560

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 100 40

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 21.6 N	117 27.2 W	30/10/84	1417 GMT	1914 M	300	14 KT	310 04 05	1	1015.0 MB	17.8 C	15.7 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	18.56	18.55	33.553	24.029	387.3	.000	5.62	105.0							0
1	1	18.56	18.55	33.553	24.029	387.4	.004	5.62	105.0	1.8	.31	.1	.00	.14	.00	1
	10 ISL	18.56	18.56	33.549	24.025	388.0	.039	5.68	106.1							10
1	11	18.56	18.55	33.549	24.025	388.0	.043	5.68	106.1	1.8	.31	.1	.00	.14	.01	11
	20 ISL	18.52	18.52	33.548	24.033	387.6	.075	5.66	105.6							20
1	22	18.51	18.51	33.547	24.035	387.5	.085	5.65	105.5	1.8	.27	.1	.00	.15	.01	22
	30 ISL	16.90	16.90	33.389	24.303	362.1	.115	6.06	109.6							30
1	32	16.45	16.45	33.355	24.382	354.7	.122	6.16	110.3	1.9	.31	.1	.00	.18	.03	32
1	42	14.76	14.76	33.323	24.733	321.5	.156	6.21	107.5	2.7	.38	.1	.00	.26	.07	42
	50 ISL	14.23	14.22	33.383	24.892	306.5	.181	6.00	102.8							50
1	52	14.16	14.15	33.399	24.919	304.0	.187	5.93	101.5	3.3	.46	.2	.03	.35	.33	52
1	63	13.50	13.49	33.461	25.103	295.8	.219	5.34	90.2	5.2	.66	4.4	.07	.27	.38	63
1	73	13.21	13.20	33.506	25.198	279.0	.247	4.98	83.6	6.7	.78	6.4	.04	.18	.30	73
	75 ISL	13.14	13.13	33.520	25.221	275.8	.254	4.88	81.9							75
1	88	12.69	12.68	33.602	25.373	261.6	.288	4.35	72.3	10.4	.98	10.0	.02	.05	.12	88
	100 ISL	11.99	11.97	33.666	25.559	244.2	.319	3.92	64.3							101
1	103	11.84	11.82	33.679	25.597	240.6	.325	3.84	62.7	14.5	1.25	14.4	.02	.02	.06	103
1	122	11.13	11.12	33.804	25.824	219.4	.371	3.16	50.9	19.4	1.57	19.1	.01	.01	.03	123
	125 ISL	11.08	11.05	33.814	25.842	217.7	.376	3.11	50.3							126
1	147	10.68	10.67	33.893	25.973	205.7	.424	2.82	45.0	23.7	1.73	21.6	.01	.01	.03	148
	150 ISL	10.62	10.60	33.906	25.995	203.7	.429	2.79	44.4							151
1	177	9.98	9.96	34.026	26.198	186.8	.482	2.51	39.4	29.0	1.99	24.7	.01			178
	200 ISL	9.68	9.66	34.097	26.304	175.2	.523	2.29	35.8							201
1	207	9.61	9.59	34.113	26.329	172.9	.535	2.23	34.9	32.7	2.12	26.6	.01			208
1	236	9.17	9.15	34.149	26.429	163.9	.584	2.05	31.7	36.3	2.19	27.8	.00			237
	250 ISL	8.99	8.97	34.160	26.466	160.6	.607	1.97	30.3							252
1	275	8.68	8.66	34.174	26.526	155.2	.647	1.81	27.7	41.2	2.36	29.7	.00			277
	300 ISL	8.32	8.29	34.192	26.596	148.9	.684	1.58	24.0							302
1	334	7.82	7.79	34.215	26.689	140.3	.733	1.25	18.7	51.9	2.69	33.2	.00			336
	400 ISL	7.09	7.05	34.244	26.816	129.9	.822	.81	11.9							403
1	407	7.02	6.99	34.247	26.828	127.8	.832	.77	11.3	62.4	2.80	36.0	.00			410
1	482	6.38	6.33	34.292	26.950	116.7	.923	.46	6.7	73.7	3.03	38.9	.00			485
	500 ISL	6.25	6.21	34.302	26.975	114.5	.944	.41	5.9							504
1	556	5.92	5.88	34.332	27.041	108.7	1.007	.31	4.4	82.6	3.14	40.5	.00			560

RV NEW HORIZON

CALCOFI CRUISE 8410

STATION 100 45

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
31 11.3 N	117 47.1 W	30/10/84	1032 GMT	1688 M	320	10 KT	320 06 05		1015.0 MB	17.1 C	15.2 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	18.39	18.39	33.466	24.002	387.8	.000	5.56	103.5							0
1	1	18.39	18.39	33.466	24.002	389.9	.004	5.56	103.5	1.9	.32	.0	.00	.08	.02	1
	10 ISL	18.39	18.39	33.464	24.001	390.4	.039	5.60	104.1							10
1	11	18.39	18.39	33.463	24.000	390.4	.043	5.60	104.2	1.8	.30	.0	.00	.07	.02	11
	20 ISL	18.38	18.38	33.456	23.997	390.7	.078	5.65	105.1							20
1	21	18.38	18.38	33.461	24.001	390.7	.082	5.65	105.1	2.0		.0	.00	.07	.03	21
	30 ISL	18.31	18.30	33.448	24.011	390.1	.117	5.60	104.1							30
1	31	18.30	18.29	33.447	24.012	390.0	.121	5.60	104.0	1.8	.28	.0	.00	.08	.03	31
1	41	15.59	15.58	33.153	24.421	351.2	.158	6.17	108.5	2.0	.34	.0	.00	.11	.06	41
	50 ISL	14.12	14.12	33.163	24.744	322.7	.188	6.02	102.8							50
1	56	13.61	13.61				.207									56
1	65	13.31	13.30	33.178	24.923	303.8	.234	5.78	97.0	3.4	.54	2.0	.09	.27	.30	65
1	75	12.88	12.87	33.209	25.031	293.8	.264			4.1	.62	3.6	.04	.19	.23	75
1	90	12.24	12.23	33.320	25.241	274.1	.306	5.28	86.8	6.5	.75	6.4	.02	.09	.14	90
	100 ISL	11.95	11.94	33.435	25.386	260.6	.334	5.03	82.2							101
1	109	11.72	11.71	33.534	25.506	249.4	.356	4.76	77.5	10.1	.95	10.2	.01	.03	.06	109
	125 ISL	11.07	11.05	33.688	25.745	226.9	.395	3.93	63.2							126
1	127	10.97	10.95	33.708	25.779	223.7	.400	3.81	61.1	16.9		16.4	.00	.01	.03	128
	150 ISL	10.30	10.29	33.835	25.994	203.7	.449	3.19	50.5							151
1	151	10.27	10.25	33.841	26.004	202.7	.451	3.17	50.1	23.4	1.66	21.2	.00	.00	.02	152
1	179	9.67	9.64	33.964	26.203	184.3	.505	2.76	43.1	28.6	1.90	24.3	.00			180
	200 ISL	9.54	9.51	34.061	26.300	175.5	.543	2.41	37.6							201
1	207	9.51	9.49	34.089	26.326	173.1	.555	2.30	35.8	32.7	2.07	26.5	.00			208
1	240	9.14	9.12	34.178	26.456	161.3	.610	1.85	28.6	38.0	2.26	28.4	.00			241
	250 ISL	9.04	9.01	34.190	26.482	159.0	.626	1.78	27.4							252
1	285	8.64	8.61	34.234	26.557	152.4	.681	1.61	24.6	43.2	2.41	30.3	.00			287
	300 ISL	8.41	8.38	34.259	26.595	148.9	.703	1.50	22.8							302
1	336	7.83	7.80	34.313	26.686	140.7	.755	1.25	18.7	51.5	2.72	33.0	.00			338
	400 ISL	6.87	6.83	34.174	26.791	131.0	.842	1.19	17.5							403
1	413	6.71	6.67	34.170	26.810	129.3	.860	1.18	17.2	59.4	2.67	35.3	.00			416
1	491	6.38	6.34	34.296	26.953	116.6	.955	.46	6.7	73.1	3.01	38.8	.00			494
	500 ISL	6.33	6.29	34.305	26.967	115.4	.966	.44	6.4							504
1	570	5.85	5.80	34.331	27.050	108.0	1.044	.30	4.3	83.6	3.13	40.9	.00			574

RV NEW HORIZON

CALCOFI CRUISE 8410

STATION 100 50

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
31 01.4 N	118 07.5 W	30/10/84	0657 GMT	1719 M	330	19 KT	330 06 06		1015.5 MB	17.8 C	15.8 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	18.65	18.65	33.382	23.875	402.0	.000	5.52	103.2							0
1	1	18.65	18.65	33.382	23.875	402.0	.004	5.52	103.2	1.5	.42	.0	.00	.05	.02	1
	10 ISL	18.64	18.64	33.375	23.872	402.2	.040	5.55	103.8							10
1	11	18.64	18.64	33.382	23.877	402.2	.044			1.7	.31	.0	.00	.06	.02	11
	20 ISL	18.53	18.53	33.371	23.896	400.7	.080	5.59	104.3							20
1	27	18.45	18.44	33.362	23.910	399.6	.108	5.62	104.6	1.8	.32	.0	.00	.07	.02	27
	30 ISL	17.66	17.65	33.274	24.036	387.7	.120	5.78	106.0							30
1	42	14.57	14.57	33.064	24.573	336.6	.163	6.33	109.0	2.6	.36	.0	.00	.19	.05	42
	50 ISL	14.26	14.25	33.236	24.772	317.9	.190	6.19	106.3							50
1	57	14.00	13.99	33.333	24.902	305.8	.211	6.07	103.5	2.4	.42	.3	.02	.71	.36	57
1	72	13.08	13.07	33.539	25.249	273.1	.254	4.98	83.4	7.2	.77	6.3	.12	.34	.48	72
	75 ISL	12.79	12.78	33.569	25.329	265.5	.263	4.74	78.9							75
1	82	12.23	12.22	33.618	25.476	251.6	.280	4.30	70.9	11.3	1.04	11.4	.02	.14	.23	82
1	97	11.60	11.59	33.661	25.627	237.6	.317	3.86	62.7	14.8	1.26	14.8	.01	.07	.13	97
	100 ISL	11.49	11.48	33.671	25.654	235.0	.325	3.79	61.5							101
1	116	11.09	11.07	33.723	25.769	224.4	.363	3.53	56.7	18.2	1.44	17.4	.00	.04	.07	117
	125 ISL	10.91	10.90	33.758	25.827	219.1	.382	3.38	54.1							126
1	136	10.73	10.71	33.806	25.898	212.6	.406	3.19	50.9	22.0	1.62	20.0	.00	.01	.04	137
	150 ISL	10.58	10.56	33.855	25.962	206.7	.435	2.99	47.6							151
1	156	10.53	10.51	33.874	25.986	204.6	.448	2.92	46.4	25.5	1.81	22.4	.00	.01	.03	157
1	176	10.44	10.42	33.919	26.037	200.2	.488	2.79	44.3	24.1	1.75	21.7	.00	.01	.04	177
1	195	10.24	10.21	33.991	26.128	191.9	.525	2.52	39.8	27.9	1.93	24.0	.00			196
	200 ISL	10.18	10.15	34.012	26.154	189.6	.534	2.45	38.7							201
1	215	10.03	10.01	34.074	26.228	182.8	.562	2.26	35.5	30.5	2.06	25.6	.00			216
1	249	9.76	9.73	34.171	26.350	171.9	.622	1.86	29.1	34.6	2.22	27.6	.00			250
	250 ISL	9.75	9.73	34.175	26.354	171.5	.624	1.84	28.8							252
1	297	9.47	9.44	34.283	26.486	159.9	.703	1.31	20.4	39.8	2.45	29.6	.00			299
	300 ISL	9.45	9.42	34.286	26.492	159.4	.707	1.29	20.1							302
1	351	8.99	8.95	34.317	26.592	150.7	.786	1.04	16.0	44.8	2.57	31.0	.00			353
	400 ISL	8.15	8.11	34.292	26.701	143.6	.857	.92	13.9							403
1	434	7.54	7.50	34.272	26.775	138.7	.904	.85	12.7	57.8	2.78	34.8	.00			437
	500 ISL	6.85	6.81	34.284	26.882	129.0	.989	.58	8.5							504
1	518	6.70	6.65	34.291	26.907	127.7	1.011	.51	7.4	69.5	2.99	37.9	.00			521
	600 ISL	5.95	5.90	34.323	27.030	118.4	1.106	.34	4.9							604
1	603	5.93	5.88	34.324	27.034	118.0	1.109	.34	4.9	82.6	3.13	40.6	.00			607

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 100 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 50.8 N	118 28.5 W	30/10/84	0320 GMT	2468 M	310	13 KT	310 06 06		1014.5 MB	18.0 C	16.3 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	18.69	18.69	33.399	23.878	401.7	.000	5.54	103.7							0
1	1	18.69	18.69	33.399	23.878	401.8	.004	5.54	103.7	2.1	.33	.0	.00	.05	.01	1
	10 ISL	18.69	18.69	33.394	23.874	402.4	.040	5.60	104.7							10
1	11	18.69	18.69	33.394	23.874	402.5	.044	5.60	104.8	1.8	.32	.0	.00	.05	.02	11
	20 ISL	18.68	18.68	33.390	23.873	402.6	.080	5.59	104.5							20
1	27	18.68	18.67	33.394	23.878	402.7	.108	5.57	104.2	1.9	.31	.0	.00	.05	.02	27
	30 ISL	18.66	18.65	33.391	23.883	402.6	.121	5.58	104.3							30
1	42	18.60	18.59	33.381	23.888	402.2	.163	5.60	104.6	2.0	.31	.0	.00	.07	.02	42
	50 ISL	16.76	16.75	33.249	24.229	359.8	.230	5.92	106.5							50
1	57	15.14	15.13	33.174	24.537	340.6	.226	6.16	107.4	2.4	.33	.0	.00	.12	.04	57
1	72	14.36	14.35	33.220	24.740	321.6	.274	6.02	103.3	2.6	.37	.1	.02	.34	.17	72
	75 ISL	14.20	14.19	33.230	24.781	317.8	.284	5.97	102.2							75
1	82	13.89	13.88	33.251	24.861	310.3	.305	5.97	99.8	3.2	.43	1.1	.10	.28	.24	82
1	98	13.26	13.24	33.293	25.023	295.2	.353	5.62	94.3	4.3	.56	3.1	.04	.16	.18	98
	100 ISL	13.13	13.12	33.301	25.055	292.3	.360	5.57	93.3							101
1	118	12.24	12.22	33.399	25.305	268.8	.439	5.22	85.8	7.2	.76	6.8	.02	.07	.07	118
	125 ISL	12.04	12.03	33.498	25.411	258.9	.429	5.09	83.3							126
1	137	11.74	11.72	33.633	25.580	243.0	.460	4.84	78.8	10.4	.93	9.8	.01	.02	.05	139
	150 ISL	11.20	11.18	33.702	25.733	228.7	.490	4.47	72.0							151
1	157	10.85	10.83	33.729	25.816	220.8	.506	4.26	68.1	15.8	1.21	14.8	.01	.01	.32	158
1	177	10.01	9.99	33.815	26.029	200.8	.548	3.93	61.7	20.9	1.46	18.7	.00	.00	.32	178
1	198	9.63	9.61	33.900	26.159	188.9	.589	3.43	53.4	25.8	1.68	22.0	.00			199
	200 ISL	9.58	9.56	33.907	26.172	187.6	.593	3.42	53.3							201
1	218	9.09	9.07	33.960	26.293	175.3	.625	3.37	51.9	29.4	1.81	23.7	.00			219
	250 ISL	8.26	8.23	34.033	26.457	161.0	.672	3.42	51.7							252
1	253	8.19	8.17	34.005	26.468	160.0	.684	3.42	51.6	35.2	1.87	25.6	.00			254
	300 ISL	7.65	7.62	34.027	26.565	151.2	.757	3.00	44.8							302
1	302	7.63	7.60	34.028	26.568	151.0	.761	2.97	44.3	42.7	2.09	28.6	.00			304
1	358	6.98	6.95	34.066	26.691	139.8	.842	2.03	29.8	54.1	2.45	33.3	.00			360
	400 ISL	6.62	6.58	34.083	26.753	134.4	.899	1.66	24.2							403
1	441	6.33	6.29	34.102	26.806	129.6	.954	1.40	20.2	64.3	2.70	36.5	.00			444
	500 ISL	5.97	5.92	34.167	26.904	120.8	1.027	.87	12.5							504
1	527	5.81	5.77	34.199	26.949	116.7	1.059	.66	9.4	79.1	3.03	40.3	.00			530
	600 ISL	5.37	5.32	34.268	27.057	107.0	1.141	.37	5.3							604
1	609	5.32	5.27	34.274	27.069	105.9	1.150	.36	5.1	90.9	3.17	42.3	.00			613

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 100 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 41.2 N	118 48.2 W	29/10/84	2347 GMT	2955 M	330	20 KT	320 06 05	1	1014.5 MB	19.5 C	17.8 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	0	18.46	18.46	33.330	23.883	401.3	.000	5.55	103.3	1.4	.33	.1	.00	.03	.02	0
1	10	18.45	18.45	33.325	23.881	401.8	.043	5.58	103.9	1.3	.33	.1	.00	.05	.02	10
	20 ISL	18.40	18.39	33.326	23.895	400.8	.080	5.57	103.7							20
1	26	18.37	18.35	33.327	23.903	400.2	.104	5.57	103.5	1.5	.32	.1	.00	.05	.02	26
	30 ISL	18.37	18.37	33.327	23.903	400.4	.120	5.56	103.4							30
1	41	18.38	18.37	33.328	23.902	400.8	.164	5.54	103.0	1.3	.31	.1	.00	.05	.02	41
	50 ISL	16.62	16.61	33.147	24.184	374.2	.199	5.95	106.8							50
1	56	15.47	15.47	33.058	24.374	355.1	.223	6.20	108.7	2.0	.35	.1	.00	.09	.05	56
1	66	14.99	14.98	33.080	24.498	344.6	.255	6.18	107.3	2.0	.35	.1	.00	.11	.08	66
	75 ISL	14.74	14.73	33.243	24.675	327.9	.286	6.06	104.9							75
1	76	14.73	14.71	33.256	24.690	326.5	.289	6.05	104.6	2.3	.34	.1	.01	.25	.22	76
1	91	14.20	14.18	33.301	24.837	312.9	.337	5.82	99.6	2.8	.41	.7	.18	.22	.23	91
	100 ISL	13.67	13.65	33.312	24.955	301.9	.365	5.79	98.0							101
1	106	13.30	13.28	33.318	25.035	294.4	.382	5.75	96.5	3.6	.48	2.2	.07	.14	.17	106
1	121	12.21	12.19	33.352	25.274	271.8	.424	5.28	86.7					.08	.09	121
	125 ISL	11.99	11.98	33.394	25.347	264.9	.436	5.15	84.3							126
1	144	11.26	11.24	33.596	25.640	237.4	.485	4.67	75.3	11.8	1.05	11.8	.01	.02	.02	145
	150 ISL	11.02	11.00	33.630	25.710	233.8	.498	4.55	72.9							151
1	164	10.46	10.44	33.701	25.862	215.5	.530	4.28	67.8	16.7	1.30	16.1	.01	.00	.02	165
1	183	10.07	10.05	33.736	26.004	203.4	.570	4.09	64.3	19.4	1.40	17.9	.01			184
	200 ISL	9.59	9.57	33.834	26.113	193.2	.603	3.83	59.6							201
1	203	9.50	9.48	33.839	26.132	191.4	.609	3.78	58.7	23.6	1.59	21.0	.01			204
1	232	8.81	8.79	33.953	25.333	172.7	.661	3.58	54.8	29.2	1.69	23.5	.00			233
	250 ISL	8.47	8.44	33.989	26.414	165.2	.692	3.44	52.2							252
1	270	8.15	8.12	34.011	26.479	159.2	.724	3.26	49.2	35.9	1.93	26.4	.00			271
	300 ISL	7.69	7.66	34.031	26.563	151.5	.771	2.92	43.6							302
1	327	7.32	7.29	34.040	26.622	146.1	.811	2.59	38.3	46.8	2.31	33.7	.00			329
1	400	6.45	6.41	34.071	26.766	132.9	.913	1.68	24.4	61.2	2.60	35.7	.00			402
1	472	5.88	5.84	34.143	26.895	121.1	1.005	.94	13.5	74.5	2.89	39.5	.00			475
	500 ISL	5.74	5.69	34.176	26.940	117.2	1.038	.73	10.4							504
1	546	5.59	5.54	34.236	27.005	111.4	1.093	.48	6.8	84.3	3.07	41.5	.00			549

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 100 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 21.7 N	119 26.0 W	29/10/84	1753 GMT	3820 M	320 17 KT	320 06 06	1	1018.0 MB	19.5 C	17.2 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	17.98	17.98	33.293	23.972	392.9	.000	5.59	103.1							0
1	1	17.98	17.98	33.293	23.972	392.8	.004	5.59	103.1	1.2	.32	.1	.00	.08	.02	1
	10 ISL	17.95	17.95	33.300	23.984	391.9	.039	5.61	103.4							10
1	11	17.95	17.95	33.301	23.985	391.8	.043	5.61	103.4	1.2	.32	.1	.00	.07	.03	11
	20 ISL	17.94	17.94	33.313	23.996	391.1	.078	5.60	103.3							20
1	27	17.94	17.94	33.319	24.002	390.8	.105	5.60	103.2	1.1	.29	.1	.00	.08	.03	27
	30 ISL	17.95	17.95	33.324	24.003	390.8	.117	5.60	103.2							30
1	42	18.00	18.00	33.346	24.008	390.8	.164	5.59	103.2	1.2	.29	.1	.00	.09	.02	42
	50 ISL	16.53	16.52	33.174	24.225	370.2	.195	5.90	105.8							50
1	58	15.00	15.00	33.040	24.463	347.7	.223	6.17	107.2	1.9	.34	.1	.00	.12	.07	58
1	66	14.27	14.26	33.061	24.635	331.5	.257	6.09	104.2	1.8	.36	.1	.02	.32	.24	68
	75 ISL	14.00	13.99	33.078	24.705	325.0	.280	6.02	102.5							75
1	78	13.91	13.90	33.084	24.729	322.8	.289	5.99	101.8	2.3	.41	.4	.14	.26	.27	78
1	93	12.96	12.96	33.121	24.946	302.4	.336	5.68	94.7	3.7	.55	3.2	.04	.13	.19	93
	100 ISL	13.03	13.02	33.257	25.040	293.6	.358	5.56	92.8							101
1	108	13.06	13.04	33.385	25.134	284.9	.380	5.44	91.0	4.5	.59	3.9	.03	.09	.13	108
1	123	11.91	11.89	33.351	25.314	267.9	.421	5.20	84.8	7.2	.82	7.7	.01	.05	.06	123
	125 ISL	11.78	11.77	33.344	25.347	264.9	.428	5.15	83.9							126
1	147	10.97	10.95	33.517	25.630	238.3	.484	4.63	74.1	12.6	1.18	13.1	.01	.02	.02	148
	150 ISL	10.87	10.85	33.531	25.658	235.7	.493	4.57	73.0							151
1	167	10.24	10.22	33.620	25.837	218.9	.529	4.15	65.4	18.0	1.40	17.4	.01	.00	.01	168
1	187	9.62	9.60	33.760	26.051	198.8	.571	3.60	56.0	23.7	1.62	21.6	.01			188
	200 ISL	9.25	9.23	33.854	26.184	186.3	.596	3.43	53.0							201
1	206	9.10	9.08	33.892	26.238	181.2	.607	3.37	51.9	28.0	1.76	23.8	.00			207
1	236	8.62	8.60	33.959	26.366	169.5	.659	2.97	45.3	33.4	1.99	26.9	.00			237
	250 ISL	8.37	8.34	33.985	26.426	164.0	.683	2.98	45.1							252
1	275	7.92	7.89	34.021	26.521	155.2	.722	3.01	45.2	39.2	2.00	27.8	.00			276
	300 ISL	7.52	7.49	34.043	26.597	148.1	.760	2.67	39.6							302
1	332	7.06	7.03	34.062	26.676	140.9	.807	2.11	31.0	52.0	2.37	32.7	.00			334
	400 ISL	6.28	6.25	34.090	26.802	129.4	.899	1.43	20.6							403
1	406	6.23	6.20	34.093	26.811	128.6	.906	1.38	19.9	65.4	2.71	37.1	.00			408
1	480	5.88	5.84	34.177	26.923	118.7	.998	.74	10.6	76.0	2.93	39.9	.00			493
	500 ISL	5.77	5.73	34.196	26.951	116.2	1.021	.63	8.9							504
1	555	5.47	5.42	34.241	27.024	109.6	1.084	.44	6.2	86.2	3.07	41.5	.00			559

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 100 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 01.5 N	120 37.6 W	29/10/84	1216 GMT	4021 M	340 18 KT	330 07 05		1016.0 MB	17.0 C	15.0 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	STOT UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	18.76	18.76	33.527	23.958	394.0	.000	5.47	102.6							0
1	2	18.76	18.76	33.527	23.958	394.1	.008	5.47	102.6	2.4	.28	.1	.00	.04	.02	2
	10 ISL	18.77	18.77	33.525	23.954	394.8	.039	5.54	103.9							10
1	12	18.77	18.77	33.525	23.953	395.0	.047	5.55	104.1	2.6	.33	.1	.00	.05	.02	12
	20 ISL	18.78	18.77	33.525	23.953	395.3	.079	5.54	103.8							20
1	27	18.78	18.77	33.525	23.952	395.6	.106	5.50	103.2	2.6	.30	.1	.00	.04	.02	27
	30 ISL	18.78	18.78	33.531	23.957	395.7	.119	5.49	103.0							30
1	42	18.79	18.78	33.525	23.950	396.3	.165	5.46	102.4	2.4	.29	.1	.00	.05	.03	42
	50 ISL	18.67	18.67	33.550	23.999	392.0	.198	5.55	103.9							50
1	57	18.42	18.41	33.586	24.090	383.5	.224	5.65	105.3	2.8	.27	.1	.00	.06	.02	57
1	72	17.06	17.04	33.737	24.536	341.4	.278	5.83	105.9	2.8	.25	.1	.00	.09	.03	72
	75 ISL	16.93	16.91	33.755	24.580	337.3	.289	5.82	105.4							75
1	82	16.74	16.72	33.786	24.648	331.0	.312	5.76	104.0	2.8	.24	.1	.00	.10	.05	82
1	97	16.27	16.26	33.879	24.828	314.4	.360	5.59	100.1	3.1	.26	.1	.01	.15	.13	97
	100 ISL	16.02	16.00	33.869	24.878	308.8	.370	5.55	98.9							101
1	116	14.68	14.67	33.848	25.157	283.4	.416	5.35	92.8	4.2	.38	1.7	.06	.12	.12	116
	125 ISL	14.04	14.03	33.826	25.260	273.7	.443	5.20	88.9							126
1	135	13.41	13.39	33.760	25.354	264.9	.471	5.03	84.9	5.7	.62	5.2	.01	.05	.07	136
	150 ISL	12.61	12.59	33.743	25.501	251.1	.508	4.87	80.8							151
1	154	12.37	12.35	33.741	25.546	246.9	.519	4.81	79.4	9.4	.84	8.5	.01	.03	.05	155
1	174	11.17	11.15	33.729	25.760	226.7	.566	4.37	70.3	14.4	1.09	13.4	.01	.01	.02	175
1	193	10.42	10.40	33.760	25.916	212.0	.608	3.96	62.7	19.2	1.34	17.4	.01			194
	200 ISL	10.14	10.12	33.791	25.988	205.3	.622	3.82	60.2							201
1	213	9.65	9.63	33.854	26.120	192.8	.648	3.62	56.4	24.7	1.58	21.1	.00			214
1	246	8.88	8.85	33.947	26.317	174.5	.708	3.64	55.8	29.0	1.69	23.0	.00			247
	250 ISL	8.82	8.80	33.960	26.336	172.7	.715	3.57	54.7							252
1	294	8.27	8.24	34.066	26.505	157.3	.789	2.65	40.1	39.8	2.08	28.2	.00			296
	300 ISL	8.16	8.13	34.071	26.526	155.4	.797	2.56	38.7							302
1	347	7.20	7.17	34.090	26.679	143.9	.867	1.93	28.5	52.7	2.59	32.8	.00			349
	400 ISL	6.49	6.46	34.109	26.790	133.7	.939	1.37	19.9							403
1	429	6.23	6.19	34.124	26.836	129.6	.977	1.12	16.2	68.7	2.79	38.0	.00			432
	500 ISL	5.92	5.87	34.211	26.945	116.9	1.063	.62	8.9							504
1	514	5.88	5.83	34.230	26.965	115.2	1.079	.55	7.9	79.5	2.97	40.2	.01			517
1	600	5.47	5.42	34.309	27.073	105.1	1.174	.31	4.4	89.3	3.11	41.9	.00			604

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 100 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
29 41.5 N	120 47.5 W	29/10/84	0638 GMT	3730 M	330	17 KT	340 08 05		1017.0 MB	16.1 C	15.0 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
	0 ISL	18.37	18.37	33.242	23.836	405.7	.000	5.55	103.1							1
1	1	18.37	18.37	33.242	23.836	405.8	.004	5.55	103.1	2.4	.46	.1	.00	.05	.02	10
	10 ISL	18.38	18.38	33.242	23.834	406.2	.041	5.53	102.8							11
1	11	18.38	18.38	33.242	23.834	406.2	.045	5.53	102.9					.05	.02	20
	20 ISL	18.38	18.37	33.242	23.836	406.5	.081	5.56	103.3							26
1	26	18.37	18.37	33.241	23.836	406.7	.105	5.58	103.7	2.3	.34	.1	.00	.04	.01	30
	30 ISL	18.38	18.37	33.241	23.835	406.9	.122	5.57	103.5							42
1	42	18.39	18.38	33.240	23.832	407.5	.173	5.54	103.0	2.1	.33	.1	.00	.04	.02	50
	50 ISL	16.60	16.59	33.071	24.131	379.2	.202	5.92	106.2							57
1	57	15.13	15.12	32.999	24.404	353.2	.227	6.22	108.3	2.5	.37	.1	.00	.09	.03	72
1	72	15.31	15.30	33.347	24.633	332.0	.278	5.99	104.9	2.6	.33	.1	.00	.12	.10	75
	75 ISL	15.33	15.32	33.391	24.663	329.1	.289	5.94	104.1							81
1	81	15.34	15.33	33.464	24.717	324.2	.308	5.86	102.7	2.8	.34	.2	.02	.17	.10	96
1	96	15.37	15.36	33.752	24.933	304.2	.355	5.60	98.4	3.5	.36	.8	.08	.16	.15	101
	100 ISL	15.08	15.07	33.713	24.966	301.1	.368	5.58	97.4							116
1	116	13.97	13.95	33.542	25.371	291.4	.414	5.49	93.6	4.5	.48	2.5	.06	.11	.12	126
	125 ISL	13.86	13.84	33.652	25.478	291.4	.441	5.58	95.0							135
1	134	13.77	13.75	33.779	25.295	273.5	.467	5.61	95.4	5.8	.51	3.5	.02	.07	.09	151
	150 ISL	12.87	12.85	33.762	25.465	254.5	.508	5.16	86.2							155
1	154	12.56	12.54	33.743	25.510	253.3	.518	5.01	83.1	7.9	.74	4.9	.01	.03	.05	174
1	173	11.51	11.49	33.722	25.592	233.2	.565	4.69	76.1	12.0	1.00	11.0	.01	.02	.02	193
1	192	10.57	10.55	33.783	25.908	212.9	.607	3.72	59.1	20.0	1.50	18.3	.01			221
	200 ISL	10.17	10.15	33.798	25.989	205.2	.623	3.71	58.5							212
1	211	9.66	9.63	33.820	26.092	195.4	.645	3.70	57.7	24.2	1.64	20.9	.01			246
1	245	8.82	8.80	33.947	26.326	173.6	.708	3.34	51.1	31.0	1.87	24.6	.00			252
	250 ISL	8.70	8.68	33.959	26.354	173.9	.716	3.29	50.2							294
1	293	7.87	7.84	34.034	26.539	153.7	.786	2.80	42.0	41.7	2.17	28.8	.00			302
	300 ISL	7.78	7.75	34.045	26.561	151.7	.797	2.68	40.0							344
1	344	7.39	7.35	34.108	26.667	142.3	.862	1.91	28.3	51.5	2.52	32.6	.00			403
	400 ISL	6.97	6.93	34.201	26.799	130.3	.938	1.06	15.5							428
1	426	6.80	6.76	34.241	26.854	125.3	.971	.75	11.0	66.1	3.01	37.2	.01			504
	500 ISL	6.36	6.32	34.320	26.975	114.7	1.060	.38	5.4							512
1	509	6.31	6.27	34.326	26.986	113.6	1.073	.36	5.2	75.6	3.17	39.4	.01			401
1	597	5.66	5.61	34.346	27.085	104.7	1.166	.28	4.0	86.4			.01			

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 100 100

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
29 21.7 N	121 27.4 W	29/10/84	0100 GMT	4374 M	350	15 KT	350 12 08	1	1017.5 MB	19.9 C	15.7 C	2/3	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
	0 ISL	19.23	19.23	33.452	23.782	410.8	.000	5.43	102.7							2
1	2	19.23	19.23	33.452	23.782	410.9	.008	5.43	102.7	2.1	.31	.0	.00	.05	.02	10
1	10	19.24	19.24	33.455	23.781	411.4	.041	5.44	102.9	2.1	.33	.0	.00	.05	.02	20
	20 ISL	19.25	19.25	33.452	23.775	412.2	.082	5.45	103.2							26
1	26	19.26	19.26	33.450	23.772	412.5	.107	5.46	103.3	2.1	.29	.0	.00	.05	.01	30
	30 ISL	19.16	19.15	33.451	23.803	410.2	.123	5.46	103.0							41
1	41	18.88	18.87	33.456	23.876	403.4	.168	5.45	102.4	2.2	.29	.0	.00	.06	.03	50
	50 ISL	17.83	17.82	33.457	24.136	379.3	.203	5.78	106.3							55
1	56	17.14	17.13	33.467	24.308	362.6	.225	5.99	108.6	2.2	.27	.0	.00	.09	.03	67
1	67	16.63	16.62	33.504	24.457	348.7	.254	5.99	107.8	2.2	.27	.0	.00	.10	.01	75
	75 ISL	16.51	16.50	33.660	24.604	335.0	.292	5.87	105.5							81
1	81	16.42	16.41	33.757	24.705	325.4	.311	5.77	103.5	2.4	.25	.0	.00	.10	.03	101
	100 ISL	15.24	15.23	33.720	24.936	304.0	.372	5.52	96.7							101
1	101	15.20	15.18	33.715	24.943	303.4	.374	5.51	96.5	3.4	.38	.9	.07	.18	.13	120
1	120	14.18	14.16	33.731	25.174	281.7	.429	5.24	89.9	4.6	.51	2.9	.06	.14	.10	126
	125 ISL	13.76	13.75	33.726	25.256	274.0	.444	5.13	87.2							140
1	139	12.68	12.67	33.713	25.462	254.5	.482	4.84	80.5	9.2	.79	7.6	.02	.05	.06	151
	150 ISL	12.15	12.13	33.726	25.575	245.1	.509	4.69	77.1							159
1	158	11.75	11.73	33.713	25.640	237.9	.529	4.56	74.3	11.3	.98	10.9	.01	.03	.05	179
1	178	10.54	10.52	33.750	25.895	213.8	.574	4.04	64.2	17.8	1.35	16.6	.00			199
1	197	9.81	9.79	33.841	26.083	196.1	.612	3.54	55.4	23.6	1.64	21.0	.00			201
	200 ISL	9.72	9.69	33.854	26.109	193.6	.618	3.49	54.5							232
1	231	8.86	8.84	33.972	26.339	172.1	.675	3.13	48.0	31.1	1.98	25.1	.00			252
	250 ISL	8.49	8.46	34.007	26.425	164.2	.707	3.03	46.0							282
1	281	8.00	7.97	34.035	26.520	155.4	.755	2.85	42.8	40.3	2.12	28.3	.00			302
	300 ISL	7.69	7.66	34.053	26.591	149.9	.785	2.56	38.2							337
1	335	7.20	7.17	34.085	26.675	141.1	.836	1.96	28.9	52.0	2.48	33.0	.00			403
	400 ISL	6.83	6.79	34.132	26.803	128.8	.924	1.06	15.5							423
1	421	6.74	6.71	34.212	26.828	126.8	.950	.84	12.3	65.7	2.88	37.2	.00			504
	500 ISL	5.96	5.92	34.269	26.985	115.2	1.045	.46	6.5							510
1	507	5.90	5.85	34.272	26.996	112.2	1.053	.45	6.4	80.5	3.13	40.5	.00			595
1	591	5.470	5.420	34.333	27.073	105.4	1.145	.34	4.8	88.7	3.22	41.7	.00			

RV NEW HORIZON

CALCOFI CRUISE 8410

STATION 103 29

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
31 08.8 N	116 20.5 W	31/10/84	0600 GMT	35 M	340	08 KT	340 02 05		1014.8 MB	17.5 C	15.8 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	10	18.45	18.45	33.523	24.032	387.3	.039	5.66	105.5	2.9	.31	.1	.00	.12	.04	10

RV NEW HORIZON

CALCOFI CRUISE 8410

STATION 103 30

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
31 06.2 N	116 25.1 W	31/10/84	0738 GMT	55 M	310	10 KT	310 02 06		1014.0 MB	17.8 C	15.5 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
1	0	18.50	18.50	33.525	24.020	388.2	.000	5.69	106.2	2.4	.28	.0	.00	.17	.02	0
1	10	18.17	18.15	33.503	24.087	382.2	.038	5.80	107.5	2.7	.30	.0	.00	.20	.02	10
	20 ISL	16.63	16.63	33.419	24.389	353.6	.075	6.03	108.4							20
1	21	16.46	16.45	33.412	24.423	350.4	.079	6.04	108.3	3.2	.33	.0	.00	.29	.19	21
	30 ISL	15.07	15.06	33.432	24.750	321.0	.109	5.91	103.0							30
1	31	14.94	14.94	33.414	24.763	318.3	.112	5.88	102.3	3.7	.41	.0	.00	.80	.43	31
	50 ISL	13.60	13.59	33.473	25.091	287.5	.170	5.06	95.7							50
1	52	13.58	13.57	33.479	25.100	286.7	.175	4.95	93.7	7.5	.77	5.7	.08	.20	.28	52

RV NEW HORIZON

CALCOFI CRUISE 8410

STATION 103 35

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
30 57.1 N	116 45.2 W	31/10/84	1006 GMT	1756 M	050	17 KT	240 03 04		1014.2 MB	17.2 C	15.0 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	18.93	18.93	33.534	23.921	397.6	.000	5.59	105.0							0
1	1	18.93	18.93	33.534	23.921	397.7	.004	5.59	105.0	1.9	.28	.0	.00	.12	.03	1
	10 ISL	18.92	18.92	33.531	23.921	398.0	.040	5.60	105.3							10
1	11	18.92	18.92	33.530	23.921	398.0	.044	5.60	105.3	1.9	.26	.0	.00	.10	.05	11
	20 ISL	18.45	18.45	33.486	24.003	390.5	.079	5.75	107.1							20
1	21	18.40	18.40	33.481	24.011	389.7	.083	5.77	107.4	2.1	.27	.0	.00	.14	.05	21
	30 ISL	15.83	15.83	33.404	24.560	337.6	.116	6.17	109.1							30
1	31	15.56	15.56	33.403	24.619	332.0	.119	6.19	109.0	2.9	.36	.0	.00	.40	.16	31
1	41	14.40	14.40	33.464	24.918	303.9	.151	5.71	98.2	4.1	.46	.3	.02	.68	.46	41
	50 ISL	13.97	13.96	33.486	25.026	293.8	.178	5.40	92.2							50
1	51	13.94	13.94	33.487	25.032	293.2	.180	5.38	91.7	4.9	.55	1.6	.10	.49	.54	51
1	61	13.35	13.34	33.509	25.170	280.3	.209	5.03	84.7	6.4	.72	5.0	.06	.23	.35	61
1	71	12.82	12.81	33.513	25.280	270.0	.236	4.91	81.8	7.7	.82	7.4	.03	.15	.22	71
	75 ISL	12.70	12.69	33.516	25.306	267.9	.248	4.88	81.1							75
1	86	12.33	12.32	33.513	25.374	261.5	.276	4.79	79.0	8.8	.91	9.1	.03	.07	.14	86
	100 ISL	11.15	11.14	33.533	25.609	239.2	.312	4.54	72.9							101
1	101	11.10	11.09	33.536	25.620	238.2	.313	4.52	72.6	13.0	1.15	13.4	.01	.01	.05	101
1	120	10.59	10.58	33.758	25.892	212.8	.358	3.45	54.9	20.8		19.1	.00	.01	.04	121
	125 ISL	10.49	10.48	33.796	25.931	209.1	.368	3.32	52.6							126
1	144	10.12	10.10	33.869	26.052	197.9	.407	2.99	47.1	25.6	1.79	22.3	.00	.01	.02	145
	150 ISL	10.04	10.02	33.885	26.078	195.5	.418	2.95	46.3							151
1	174	9.70	9.68	33.943	26.180	186.3	.464	2.84	44.3	28.6	1.88	24.2	.00			175
	200 ISL	9.18	9.15	34.023	26.328	172.7	.511	2.62	40.4							201
1	203	9.12	9.10	34.031	26.344	171.2	.516	2.59	39.9	33.5	2.04	26.3	.00			204
1	232	8.64	8.62	34.065	26.447	161.8	.564	2.47	37.7	37.4	2.10	27.7	.00			233
	250 ISL	8.62	8.60	34.117	26.490	158.0	.593	2.17	33.1							252
1	271	8.60	8.57	34.164	26.531	154.6	.625	1.79	27.3	42.3	2.31	29.7	.00			272
	300 ISL	8.34	8.31	34.194	26.594	149.0	.670	1.50	22.7							302
1	329	8.02	7.99	34.232	26.649	144.1	.712	1.31	19.7	50.0	2.56	32.4	.00			331
	400 ISL	7.44	7.40	34.197	26.731	137.2	.812	.90	13.4							403
1	403	7.41	7.37	34.197	26.734	136.9	.815									405
1	477	5.43	6.39	34.233	26.897	121.7	.912	.59	8.6	71.4	2.93	38.4	.00			480
	500 ISL	6.22	6.18	34.251	25.938	118.0	.940	.51	7.4							504
1	553	5.92	5.87	34.298	27.014	111.2	1.001	.35	5.0	82.2	3.05	40.2	.00			557

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 103 40

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
30 47.0 N	117 04.8 W	31/10/84	1343 GMT	1794 M	310 15 KT	300 07 06	1	1015.1 MB	17.0 C	14.0 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	0	18.40	18.40	33.512	24.035	386.8	.000	5.65	105.2	2.0	.28	.1	.00	.12	.34	0
1	10	18.40	18.40	33.512	24.035	387.0	.039	5.66	105.4	2.0	.29	.1	.00	.11	.35	10
1	20	16.47	16.47	33.329	24.355	355.8	.076	6.19	110.9	2.1	.33	.1	.00	.13	.38	20
1	29	14.60	14.60	33.331	24.773	317.2	.106	6.20	107.0	2.7	.39	.1	.00	.22	.20	29
	30 ISL	14.51	14.50	33.335	24.795	315.1	.109	6.19	106.4							30
1	39	14.11	14.11	33.355	24.902	305.2	.137	5.92	101.2	3.2	.46	.5	.02	.50	.64	39
	50 ISL	13.50	13.49	33.407	25.061	290.4	.170	5.55	93.6							50
1	54	13.30	13.29	33.432	25.121	284.7	.181	5.37	90.3	5.1	.65	4.9	.04	.34	.31	54
1	64	12.84	12.83	33.557	25.308	267.2	.208	4.66	77.7	8.6	.88	8.4	.02	.29	.15	64
1	73	12.56	12.55	33.611	25.406	258.0	.232	4.20	69.6	11.4	1.05	11.0	.01	.07	.09	73
	75 ISL	12.50	12.49	33.619	25.423	256.5	.238	4.11	68.1							75
1	88	12.25	12.25				.270									88
	100 ISL	11.98	11.97	33.690	25.579	242.3	.300	3.56	58.4							101
1	107	11.82	11.81	33.709	25.623	238.2	.316	3.49	56.8	16.3	1.42	15.8	.01	.01	.05	107
1	125	11.35	11.33	33.777	25.764	225.2	.360	3.18	51.4	19.3		18.4	.00	.01	.04	126
1	148	10.46	10.45	33.794	25.934	209.3	.409	3.28	52.0	21.9	1.66	20.6	.00	.01	.03	149
	150 ISL	10.44	10.42	33.801	25.945	208.3	.413	3.26	51.6							151
1	177	10.11	10.09	33.936	26.105	193.6	.467	2.78	43.8	26.6	1.83	23.4	.00			178
	200 ISL	9.62	9.60	34.034	26.264	178.9	.510	2.51	39.2							201
1	204	9.53	9.51	34.049	26.291	176.4	.517	2.47	38.4	31.5	1.97	25.7	.00			205
1	237	8.98	8.95	34.127	26.443	162.5	.573	2.03	31.2	37.9	2.21	28.3	.00			239
	250 ISL	8.81	8.78	34.147	26.485	159.6	.594	1.89	29.0							252
1	282	8.44	8.41	34.181	26.569	151.1	.644	1.61	24.5	44.7	2.42	33.6	.00			284
	300 ISL	8.22	8.19	34.195	26.614	147.1	.670	1.46	22.1							302
1	333	7.81	7.78	34.214	26.690	140.2	.718	1.22	18.3	52.3	2.63	33.2	.00			335
	400 ISL	7.05	7.01	34.230	26.812	130.4	.808	.90	13.2							403
1	412	6.92	6.88	34.214	26.817	128.8	.825	.85	12.5	62.9	2.91	36.2	.00			415
1	493	6.20	6.15	34.253	26.943	117.4	.923	.50	7.2	75.1	2.97	37.1	.00			496
	500 ISL	6.15	6.10	34.257	26.953	116.5	.932	.48	6.9							504
1	577	5.64	5.59	34.304	27.054	107.3	1.018	.32	4.6	85.8	3.12	41.1	.00			581

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 103 45

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
30 36.5 N	117 25.2 W	31/10/84	1715 GMT	2180 M	310 11 KT	310 06 05	1	1016.8 MB	16.0 C	13.7 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	18.30	18.30	33.505	24.055	384.8	.000	5.67	105.4							0
1	1	18.30	18.30	33.505	24.055	384.9	.004	5.67	105.4	1.9	.32	.1	.00	.17	.32	1
	10 ISL	18.30	18.30	33.501	24.051	385.5	.039	5.68	105.5							10
1	11	18.30	18.30	33.500	24.051	385.6	.042	5.68	105.5	1.9	.30	.1	.00	.16	.33	11
	20 ISL	18.05	18.05	33.492	24.107	380.6	.077	5.73	106.0							20
1	22	18.00	18.00	33.491	24.119	379.5	.084	5.74	106.1	2.1	.32	.1	.00	.19	.34	22
	30 ISL	15.90	15.89	33.281	24.450	348.0	.114	6.11	108.2							30
1	32	15.41	15.40	33.243	24.531	340.5	.120	6.19	108.5	2.0	.37	.1	.00	.26	.36	32
1	42	15.08	15.07	33.299	24.646	329.7	.153	6.17	107.5	2.3	.38	.1	.00	.36	.14	42
	50 ISL	14.58	14.57	33.341	24.786	315.6	.180	6.00	103.6							50
1	58	14.01	14.00	33.379	24.935	302.6	.204	5.76	98.2	3.5	.51	1.5	.10	.35	.32	58
1	68	13.28	13.27	33.423	25.118	285.4	.233	5.40	90.8	4.8	.72	5.1	.09	.21	.37	68
	75 ISL	12.71	12.70	33.449	25.252	272.7	.253	5.10	84.7							75
1	78	12.50	12.49	33.460	25.300	268.3	.261	4.99	82.5	7.4	.91	8.7	.03	.11	.17	78
1	93	11.79	11.78	33.532	25.491	250.4	.299	4.56	74.3	10.8	1.09	11.9	.02	.06	.09	93
	100 ISL	11.50	11.48	33.573	25.577	242.3	.318	4.35	70.4							101
1	114	11.00	10.99	33.647	25.724	228.6	.349	4.02	64.5	15.8	1.34	15.8	.01	.02	.04	114
	125 ISL	10.57	10.55	33.700	25.843	217.5	.375	3.88	61.6							126
1	133	10.27	10.25	33.737	25.923	210.0	.393	3.78	59.7	20.9	1.57	19.7	.00	.01	.02	134
	150 ISL	9.77	9.76	33.811	26.065	196.8	.427	3.39	52.9							151
1	158	9.58	9.56	33.851	26.128	193.9	.443	3.17	49.3	26.3	1.78	23.0	.00	.00	.02	159
1	188	9.25	9.23	34.037	26.327	172.5	.497	2.55	39.4	32.4	1.98	26.0	.00			189
	200 ISL	9.15	9.12	34.073	26.372	168.5	.517	2.40	37.1							201
1	219	8.99	8.96	34.104	26.423	164.0	.549	2.23	34.3	36.3	2.17	27.8	.00			220
	250 ISL	8.71	8.69	34.139	26.493	157.8	.599	1.98	30.2							252
1	254	8.68	8.65	34.142	26.501	157.1	.604	1.95	29.8	40.2	2.33	29.3	.00			255
	300 ISL	8.26	8.23	34.186	26.601	148.4	.675	1.55	23.4							302
1	303	8.22	8.19	34.188	26.608	147.7	.680	1.52	23.0	46.9	2.52	31.6	.00			305
1	357	7.06	7.02	34.152	26.756	133.7	.756	1.17	17.2	58.8	2.72	35.4	.00			359
	400 ISL	6.70	6.66	34.132	26.828	127.3	.812	.89	13.0							403
1	441	6.57	6.53	34.230	26.876	123.2	.863	.66	9.6	69.1	2.95	37.9	.00			444
	500 ISL	6.27	6.23	34.264	26.942	117.7	.934	.47	6.8							504
1	526	6.14	6.09	34.275	26.969	115.3	.964	.42	6.1	77.2	3.08	39.7	.00			529
	500 ISL	5.59	5.54	34.311	27.065	106.5	1.047	.28	4.0							504
1	611	5.50	5.44	34.316	27.081	105.1	1.058	.27	3.9	89.2	3.19	41.5	.00			615

RV NEW HORIZON CALCOFI CRUISE 8410 STATION 103 50

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 26.8 N	117 44.9 W	31/10/84	2105 GMT	2395 M	310 22 KT	310 07 07	1	1016.0 MB	17.5 C	14.4 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
	0 ISL	18.81	18.81	33.510	23.931	395.6	.300	5.58	104.7							0
1	1	18.81	18.81	33.510	23.931	395.7	.304	5.58	104.7	1.8	.30	.1	.00	.13	.02	1
	10 ISL	18.81	18.81	33.509	23.930	397.1	.343	5.57	104.5							10
1	11	18.81	18.81	33.538	23.930	397.1	.344	5.57	104.5	1.8	.30	.1	.00	.13	.02	11
	20 ISL	18.82	18.82	33.537	23.929	397.6	.379	5.58	104.7							20
1	22	18.82	18.82	33.537	23.928	397.7	.387	5.58	104.7	1.8	.28	.1	.00	.13	.01	22
	30 ISL	18.82	18.81	33.536	23.928	397.9	.419	5.60	105.2							30
1	32	18.82	18.81	33.536	23.929	398.0	.427	5.61	105.3	1.8	.27	.1	.00	.13	.02	32
1	42	15.60	15.59	33.176	24.437	349.7	.164	6.29	110.7	2.1	.35	.1	.00	.14	.04	42
	50 ISL	14.26	14.25	33.146	24.703	324.5	.191	6.26	107.2							50
1	58	13.61	13.60	33.117	24.814	314.0	.216	6.24	105.4	2.9	.44	.2	.01	.40	.29	58
1	68	12.95	12.94	33.255	25.054	291.4	.246	5.72	95.4	4.0	.63	3.4	.08	.29	.30	68
	75 ISL	12.61	12.60	33.288	25.145	284.9	.267	5.50	91.0							75
1	78	12.50	12.49	33.257	25.142	283.3	.275	5.43	89.7	5.8	.76	6.1	.03	.17	.13	78
1	93	11.88	11.87	33.367	25.346	264.2	.316	5.07	82.7	8.4	.93	9.1	.02	.06	.11	93
	100 ISL	11.67	11.65	33.427	25.432	256.1	.335	4.95	80.5							101
1	114	11.28	11.27	33.537	25.589	241.5	.369	4.74	76.4	11.7	1.06	11.7	.01	.02	.04	114
	125 ISL	10.78	10.77	33.621	25.743	227.0	.396	4.47	71.4							126
1	133	10.43	10.41	33.682	25.853	216.7	.414	4.23	67.0	17.2	1.32	16.3	.00	.01	.01	134
	150 ISL	10.06	10.04	33.820	26.023	200.8	.449	3.54	55.7							151
1	158	9.93	9.91	33.880	26.093	194.3	.465	3.22	50.5	25.4	1.76	22.2	.00	.00	.02	159
1	189	9.28	9.26	33.970	26.270	177.9	.523	2.88	44.5	33.6	1.95	25.2	.00			190
	200 ISL	9.17	9.15	34.014	26.322	173.2	.542	2.71	41.8							201
1	219	9.06	9.04	34.086	26.397	166.4	.574	2.40	37.0	34.9	2.15	27.3	.00			220
	250 ISL	8.88	8.86	34.151	26.477	159.4	.625	2.04	31.2							252
1	254	8.86	8.83	34.156	26.485	158.8	.630	2.00	30.7	39.3	2.30	28.8	.00			255
	300 ISL	8.23	8.20	34.183	26.603	148.1	.701	1.63	24.7							302
1	303	8.18	8.15	34.193	26.611	147.4	.706	1.61	24.3	46.4	2.51	31.3	.00			305
1	357	7.60	7.57	34.222	26.726	137.0	.783	1.15	17.1	55.0	2.93	34.2	.00			359
	400 ISL	6.94	6.90	34.245	26.838	128.5	.840	.88	12.9							403
1	441	6.37	6.33	34.224	26.897	121.1	.891	.67	9.7	71.7	2.98	38.6	.00			444
	500 ISL	6.14	6.09	34.287	26.977	114.2	.950	.43	6.2							504
1	526	6.09	6.04	34.314	27.006	111.8	.989	.36	5.2	79.4	3.14	39.9	.00			529
	600 ISL	5.61	5.56	34.314	27.065	105.3	1.070	.32	4.6							604
1	610	5.53	5.48	34.329	27.087	104.6	1.080	.32	4.5	88.9	3.21	41.6	.00			614

RV NEW HORIZON CALCOFI CRUISE 8410 STATION 103 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 16.5 N	118 05.1 W	01/11/84	0050 GMT	3394 M	310 13 KT	320 06 05	1	1015.0 MB	17.2 C	14.8 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
	0 ISL	18.66	18.66	33.442	23.917	397.9	.300	5.52	103.3							0
1	1	18.66	18.66	33.442	23.917	398.0	.304	5.52	103.3	1.8	.31	.1	.00	.06	.02	1
	10 ISL	18.68	18.68	33.441	23.911	398.9	.340	5.55	103.8							10
1	11	18.69	18.69	33.442	23.911	398.9	.344	5.55	103.9	1.8	.31	.1	.00	.06	.02	11
	20 ISL	18.69	18.69	33.439	23.909	399.4	.380	5.53	103.5							20
1	22	18.69	18.69	33.439	23.909	399.5	.387	5.53	103.5	1.8	.29	.1	.00	.05	.02	22
	30 ISL	18.52	18.52	33.410	23.928	398.0	.420	5.59	104.2							30
1	32	18.49	18.49	33.403	23.933	397.6	.427	5.60	104.4	1.8	.29	.1	.00	.07	.03	32
1	42	15.88	15.87	33.125	24.335	359.4	.165	6.24	110.6	1.8	.33	.1	.00	.10	.04	42
	50 ISL	15.00	14.99	33.137	24.539	343.2	.193	6.27	109.0							50
1	57	14.63	14.63	33.186	24.655	329.3	.216	6.30	108.7	2.3	.37	.1	.00	.27	.14	57
1	68	13.79	13.78	33.149	24.802	315.5	.251	6.12	103.8	2.6	.41	.2	.01	.25	.26	68
	75 ISL	13.68	13.66	33.274	24.924	304.2	.274	5.84	98.8							75
1	78	13.66	13.65	33.329	24.969	299.9	.282	5.73	97.0	3.5	.58	2.1	.09	.18	.28	78
1	93	13.12	13.11	33.426	25.153	282.8	.326	5.51	92.3	5.5	.72	5.5	.03	.09	.17	93
	100 ISL	12.86	12.84	33.505	25.266	272.1	.346	5.36	89.3							101
1	113	12.41	12.39	33.627	25.449	255.0	.379	5.05	83.4	7.8	.76	7.3	.02	.02	.06	113
	125 ISL	11.97	11.96	33.660	25.556	245.0	.410	4.70	77.0							126
1	133	11.65	11.63	33.671	25.626	238.6	.431	4.44	72.2	12.3	1.08	12.4	.23	.02	.05	134
	150 ISL	10.77	10.75	33.763	25.858	215.7	.468	3.81	60.9							151
1	158	10.34	10.33	33.819	25.975	205.7	.486	3.51	55.5	21.7	1.59	19.8	.00	.00	.02	159
1	188	9.72	9.70	33.963	26.194	185.4	.544	2.84	44.4	28.6	1.90	24.3	.00			189
	200 ISL	9.43	9.40	33.978	26.253	180.6	.566	3.07	47.7							201
1	218	9.01	8.99	33.964	26.309	174.7	.598	3.47	53.3	29.4	1.80	23.9	.01			219
	250 ISL	8.57	8.54	34.039	26.438	163.0	.652	3.02	45.9							252
1	253	8.53	8.51	34.045	26.448	162.0	.656	2.96	45.0	28.6	1.92	24.4	.00			254
	300 ISL	7.52	7.50	34.033	26.588	149.0	.730	2.86	42.6							302
1	301	7.50	7.47	34.032	26.591	148.7	.732	2.86	42.5	44.2	2.15	29.3	.00			303
1	356	6.91	6.88	34.078	26.710	138.0	.810	1.90	27.9	55.3	2.55	33.7	.00			358
	400 ISL	6.64	6.61	34.139	26.793	130.6	.869	1.32	19.3							403
1	440	6.47	6.43	34.197	26.863	124.3	.921	.92	13.4	67.2	2.87	37.5	.00			443
	500 ISL	6.13	6.09	34.275	26.968	115.0	.992	.50	7.2							504
1	525	5.99	5.95	34.304	27.010	111.3	1.020	.39	5.6	80.2	3.13	40.4	.00			528

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 103 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
30 06.4 N	119 25.0 W	01/11/84	0421 GMT	3386 M	330	13 KT	330 06 05		1017.0 MB	16.5 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	13.67	13.66	33.345	23.842	405.0	.000	5.48	102.5							0
1	1	13.67	13.66	33.345	23.842	405.2	.004	5.48	102.5	2.1	.33	.1	.00	.03	.03	1
	10 ISL	13.68	13.68	33.337	23.832	406.4	.041	5.53	103.4							10
1	11	13.69	13.68	33.337	23.831	406.5	.045	5.53	103.4	1.9	.32	.1	.00	.03	.02	11
	20 ISL	13.67	13.67	33.336	23.834	406.7	.081	5.52	103.1							20
1	22	13.67	13.67	33.335	23.834	406.7	.089	5.51	103.0	1.8		.1	.00	.04	.01	22
	30 ISL	13.67	13.66	33.329	23.831	407.2	.122	5.52	103.1							30
1	32	13.66	13.66	33.328	23.831	407.3	.130	5.52	103.2	1.9	.31	.1	.00	.04	.01	32
1	42	13.63	13.62	33.322	23.836	407.2	.170	5.51	102.9	1.8	.32	.1	.00	.04	.02	42
	50 ISL	17.73	17.72	33.434	24.119	380.5	.202	5.77	106.0							50
1	58	16.82	16.81	33.512	24.417	352.2	.231	6.00	108.4	2.5	.27	.1	.00	.04	.03	58
1	68	15.59	15.58	33.596	24.535	341.2	.265	5.92	106.5	2.3	.26	.1	.00	.07	.04	68
	75 ISL	15.00	15.00	33.630	24.697	326.1	.290	5.94	103.8							75
1	78	15.76	15.74	33.640	24.760	320.1	.298	5.80	102.6	3.2	.29	.1	.00	.13	.14	78
1	93	15.03	15.02	33.706	24.971	300.3	.349	5.57	97.2	3.3	.34	.5	.14	.16	.13	93
	100 ISL	14.98	14.96	33.757	25.023	295.7	.367	5.51	96.0							101
1	114	14.85	14.84	33.827	25.104	288.4	.406	5.41	94.1	4.1	.39	1.5	.10	.13	.12	114
	125 ISL	14.23	14.21	33.810	25.225	277.1	.438	5.29	90.8							126
1	133	13.65	13.63	33.784	25.324	267.7	.462	5.18	87.9	5.9	.55	4.4	.09	.07	.09	134
	150 ISL	12.61	12.59	33.747	25.504	250.9	.504	4.97	82.5							151
1	158	12.09	12.07	33.738	25.597	242.1	.525	4.80	78.8	10.0	.84	9.2	.01	.01	.01	159
1	188	10.36	10.34	33.830	25.981	205.8	.592	3.48	55.1	22.5	1.59	20.0	.00			189
	200 ISL	10.04	10.01	33.886	26.080	196.5	.616	3.21	50.4							201
1	213	9.70	9.68	33.967	26.199	185.4	.650	2.95	46.1	29.0	1.85	23.8	.00			213
	250 ISL	9.02	8.99	34.052	26.377	169.0	.707	2.71	41.6							252
1	253	8.96	8.93	34.056	26.390	167.8	.711	2.70	41.5	34.9	2.05	26.3	.00			254
	300 ISL	7.82	7.79	34.034	26.546	153.2	.787	2.88	43.1							302
1	302	7.77	7.73	34.031	26.552	152.6	.791	2.88	43.1	42.6	2.13	28.6	.00			304
1	357	6.88	6.85	34.074	26.710	137.9	.870	1.83	26.8	56.9	2.55	34.1	.00			359
	400 ISL	6.52	6.48	34.121	26.796	130.1	.928	1.26	18.2							403
1	440	6.27	6.23	34.163	26.862	124.3	.979	.88	12.7	70.9	2.93	38.5	.00			443
	500 ISL	5.76	5.72	34.235	26.959	115.4	1.051	.55	8.0							504
1	525	5.57	5.53	34.220	26.994	112.2	1.079	.49	7.0	85.1	3.14	41.2	.00			528
	600 ISL	5.38	5.33	34.277	27.064	105.3	1.161	.35	5.0							604
1	610	5.35	5.30	34.280	27.069	105.9	1.171	.35	4.9	90.9	3.22	42.1	.00			614

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 103 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
29 46.6 N	119 05.0 W	01/11/84	0940 GMT	3545 M	320	13 KT	320 08 06		1018.8 MB	16.8 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
	0 ISL	19.02	19.02	33.410	23.802	408.9	.000	5.47	103.0							0
1	2	19.02	19.02	33.410	23.802	409.0	.008	5.47	103.0	2.0	.26	.1	.00	.04	.01	2
	10 ISL	19.02	19.02	33.408	23.801	409.4	.041	5.53	104.1							10
1	12	19.02	19.02	33.408	23.801	409.5	.049	5.53	104.1	2.0	.28	.1	.00	.03	.01	12
	20 ISL	19.02	19.02	33.408	23.801	409.7	.082	5.49	103.4							20
1	22	19.02	19.02	33.408	23.802	409.7	.090	5.48	103.2	2.0	.28	.1	.00	.04	.02	22
	30 ISL	19.03	19.03	33.413	23.803	410.4	.123	5.47	103.0							30
1	32	19.04	19.03	33.407	23.797	410.8	.131	5.47	103.0	2.0	.29	.1	.00	.04	.01	32
1	42	18.76	18.76	33.420	23.876	403.3	.171	5.59	104.7	2.0	.29	.1	.00	.04	.01	42
	50 ISL	17.53	17.52	33.495	24.237	369.2	.203	5.82	106.6							50
1	56	16.66	16.65	33.559	24.492	345.0	.223	5.96	107.3	2.2	.25	.1	.00	.06	.03	56
1	66	16.47	16.46	33.586	24.556	339.2	.258	5.90	105.9	2.3	.25	.1	.00	.07	.03	66
	75 ISL	16.40	16.39	33.599	24.583	335.9	.289	5.89	105.5							75
1	76	16.38	16.37	33.599	24.585	335.6	.291	5.89	105.5	2.3	.25	.1	.00	.07	.03	76
1	90	15.58	15.57	33.579	24.752	321.2	.337	5.82	102.6	2.4	.29	.1	.00	.10	.03	90
	100 ISL	15.22	15.21	33.588	24.915	305.9	.369	5.62	98.4							101
1	110	14.95	14.93	33.797	25.060	292.4	.398	5.42	94.5	3.4	.38	1.0	.10	.14	.15	110
	125 ISL	14.42	14.40	33.752	25.140	283.9	.442	5.30	91.3							126
1	130	14.20	14.18	33.795	25.219	277.7	.455	5.25	90.1	4.4	.52	3.0	.06	.11	.13	130
	150 ISL	12.33	12.31	33.682	25.508	253.4	.509	4.60	75.9							151
1	153	12.00	11.98	33.668	25.559	245.5	.517	4.48	73.4	11.2	.98	11.0	.00	.03	.05	154
1	183	10.46	10.44	33.760	25.909	212.5	.586	3.82	60.6	19.3	1.42	18.0	.00			184
	200 ISL	9.87	9.85	33.839	26.072	197.2	.623	3.52	55.1							201
1	212	9.58	9.56	33.902	26.168	188.2	.643	3.30	51.4	26.4	1.72	22.7	.00			213
1	247	9.47	9.44	34.098	26.334	173.2	.706	2.44	37.9	32.6	2.01	26.0	.00			248
	250 ISL	9.40	9.37	34.093	26.348	171.9	.712	2.43	37.7							252
1	295	8.31	8.28	34.098	26.523	155.6	.786	2.30	34.8	41.1	2.20	29.1	.00			297
	300 ISL	8.25	8.22	34.101	26.536	154.5	.793	2.26	34.2							302
1	349	7.75	7.71	34.148	26.647	144.4	.866	1.71	25.6	49.0	2.59	32.0	.00			351
	400 ISL	7.47	7.43	34.226	26.750	135.4	.938	1.08	16.0							403
1	433	7.28	7.24	34.272	25.813	129.9	.982	.72	10.7	60.7	2.84	35.5	.00			436
	500 ISL	6.53	6.48	34.287	26.928	119.3	1.069	.45	6.5							504
1	518	6.31	6.26	34.287	26.956	115.7	1.086	.42	6.1	74.8	3.03	39.0	.00			521
	600 ISL	5.62	5.57	34.311	27.061	107.0	1.178	.29	4.1							604
1	602	5.61	5.56	34.311	27.063	106.8	1.180	.29	4.1	86.5	3.17	41.4	.00			606

RV NEW HORIZON

CALCOFI CRUISE 8410

STATION 103 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
29 27.0 N	119 44.4 W	01/11/84	1525 GMT	3761 M	330	07 KT	330 08 04	1	1020.0 MB	17.5 C	14.1 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	19.24	19.24	33.475	23.797	409.3	.000	5.43	102.7							0
1	1	19.24	19.24	33.475	23.797	409.4	.004	5.43	102.7	2.2	.31	.1	.00	.07	.02	1
	10 ISL	19.25	19.25	33.474	23.793	410.2	.041	5.48	103.7							10
1	11	19.25	19.25	33.474	23.792	410.2	.045	5.48	103.7	2.2	.34	.1	.00	.07	.01	11
	20 ISL	19.26	19.26	33.477	23.794	410.5	.082	5.45	103.1							20
1	22	19.26	19.26	33.477	23.793	410.6	.090	5.44	102.9	2.2	.29	.1	.00	.07	.01	22
	30 ISL	19.28	19.28	33.476	23.788	411.4	.123	5.46	103.4							30
1	32	19.29	19.28	33.476	23.787	411.5	.131	5.47	103.5	2.1	.30	.1	.00	.07	.01	32
1	42	19.27	19.26	33.475	23.792	411.5	.172	5.44	102.9	2.2	.30	.1	.00	.06	.01	42
	50 ISL	19.27	19.25	33.476	23.792	411.7	.205	5.44	102.9							50
1	57	19.27	19.26	33.476	23.793	411.9	.234	5.44	102.9	2.1	.28	.1	.00	.05	.02	57
1	67	17.20	17.19	33.492	24.313	362.5	.272	6.00	109.1	2.2	.29	.1	.00	.11	.02	67
	75 ISL	16.67	16.66	33.494	24.440	350.7	.301	5.98	107.6							75
1	77	16.62	16.61	33.491	24.449	349.8	.308	5.97	107.4	2.5	.30	.1	.00	.11	.05	77
1	93	15.69	15.68	33.498	24.665	329.5	.362	5.78	102.1	2.6	.34	.1	.00	.15	.15	93
	100 ISL	15.28	15.27	33.501	24.759	320.8	.385	5.67	99.4							101
1	113	14.57	14.55	33.517	24.926	305.1	.425	5.42	93.6	4.0	.46	.5	.11	.13	.14	113
	125 ISL	13.82	13.80	33.563	25.118	287.1	.462	5.02	85.3							126
1	133	13.35	13.34	33.594	25.237	275.9	.483	4.76	80.2	7.0	.74	5.9	.04	.09	.11	133
	150 ISL	12.25	12.23	33.645	25.492	251.8	.529	4.30	70.9							151
1	157	11.81	11.79	33.668	25.595	242.1	.547	4.14	67.5	13.2	1.17	13.2	.01	.03	.05	158
1	186	10.34	10.32	33.803	25.964	207.4	.612	3.61	57.1	20.9	1.56	19.5	.00			187
	200 ISL	9.81	9.79	33.860	26.099	194.7	.640	3.43	53.6							201
1	216	9.31	9.29	33.916	26.224	182.9	.670	3.27	50.6	27.6	1.81	23.6	.00			217
1	250	8.65	8.62	33.992	26.389	167.6	.729	3.11	47.4	32.7	1.90	25.7	.00			251
1	299	7.88	7.85	34.044	26.546	153.2	.809	2.70	40.5	41.2	2.13	29.1	.00			301
	300 ISL	7.87	7.84	34.045	26.548	153.1	.810	2.69	40.4							302
1	353	7.15	7.12	34.083	26.681	140.9	.888	1.91	28.2	52.3	2.48	33.1	.00			355
	400 ISL	6.61	6.57	34.124	26.787	131.1	.951	1.32	19.2							403
1	436	6.26	6.22	34.158	26.860	124.5	.998	.95	13.7	68.6	2.85	38.3	.00			439
	500 ISL	5.85	5.81	34.216	26.957	115.7	1.074	.60	8.6							504
1	521	5.75	5.71	34.235	26.985	113.2	1.098	.53	7.6	80.7	3.05	40.6	.00			524
	600 ISL	5.41	5.36	34.307	27.083	104.6	1.184	.32	4.5							604
1	607	5.39	5.33	34.312	27.091	103.9	1.192	.31	4.4	89.9	3.21	42.2	.00			611

RV NEW HORIZON

CALCOFI CRUISE 8410

STATION 103 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
29 36.8 N	120 23.5 W	01/11/84	2130 GMT	3936 M	330	06 KT	340 09 09	1	1019.0 MB	19.5 C	15.8 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
	0 ISL	19.68	19.68	33.752	23.895	400.2	.000	5.39	103.0							0
1	1	19.68	19.68	33.752	23.895	400.2	.004	5.39	103.0	2.5	.28	.1	.00	.03	.01	1
	10 ISL	19.67	19.67	33.759	23.903	399.7	.040	5.44	103.8							10
1	11	19.67	19.67	33.759	23.903	399.7	.044	5.44	103.9	2.5		.1	.00	.03	.01	11
	20 ISL	19.63	19.62	33.746	23.905	399.9	.080	5.45	103.9							20
1	27	19.60	19.59	33.736	23.905	400.1	.108	5.45	103.9	2.5	.27	.1	.00	.04	.01	27
	30 ISL	19.60	19.60	33.740	23.906	400.1	.120	5.44	103.8							30
1	42	19.63	19.62	33.754	23.911	400.1	.167	5.41	103.2	2.5	.26	.1	.00	.04	.01	42
	50 ISL	19.15	19.14	33.694	23.989	392.9	.200	5.62	106.2							50
1	58	18.34	18.33	33.620	24.135	379.3	.230	5.86	109.1	2.6	.25	.1	.00	.05	.03	58
1	68	16.82	16.81	33.553	24.451	349.4	.266	6.06	109.5	2.4	.26	.1	.00	.06	.05	68
	75 ISL	16.27	16.26	33.608	24.618	333.6	.291	6.00	107.3							75
1	78	16.13	16.12	33.633	24.671	328.7	.300	5.98	106.6							78
1	94	15.17	15.16	33.633	24.884	308.7	.351	5.67	99.2	3.3	.37	.2	.02	.09	.05	94
	100 ISL	14.70	14.69	33.546	24.996	298.2	.370	5.51	95.4					.15	.16	101
1	109	14.09	14.07	33.659	25.136	284.9	.395	5.28	90.3	4.9	.55	3.0	.07	.09	.16	109
1	124	13.34	13.33	33.628	25.265	272.9	.437	4.95	83.4	7.1	.73	5.9	.02	.07	.15	124
	125 ISL	13.26	13.24	33.632	25.286	271.5	.441	4.90	82.4							126
1	148	11.82	11.80	33.655	25.582	243.1	.501	4.17	68.0	13.6	1.18	13.4	.01	.04	.08	149
	150 ISL	11.71	11.69	33.662	25.608	240.7	.505	4.15	67.5							151
1	168	10.60	10.58	33.762	25.886	214.3	.546	3.88	61.7	19.1	1.43	17.9	.00	.01	.02	169
1	188	10.03	10.00	33.879	26.076	196.6	.587	3.34	52.5	24.7	1.72	21.9	.00			189
	200 ISL	9.87	9.85	33.968	26.172	187.8	.610	2.95	46.2							201
1	208	9.81	9.79	34.030	26.230	182.4	.625	2.68	42.0	29.5	1.97	24.8	.00			209
1	238	9.68	9.65	34.229	26.409	165.1	.677	1.84	28.8	35.3	2.28	27.4	.00			239
	250 ISL	9.67	9.64	34.283	26.453	162.1	.697	1.54	24.0							252
1	277	9.65	9.61	34.372	26.527	155.8	.739	1.03	16.1	40.3	2.54	29.6	.00			278
	300 ISL	9.24	9.21	34.372	26.593	149.8	.775	1.01	15.7							302
1	336	8.44	8.41	34.317	26.677	142.0	.827	.98	14.9	49.1	2.69	32.2	.00			338
	400 ISL	7.37	7.33	34.195	26.738	136.4	.916	1.12	16.6							403
1	409	7.25	7.21	34.182	26.745	135.8	.928	1.13	16.7	52.7	2.67	32.5	.00			411
1	482	6.57	6.52	34.267	26.906	121.1	1.083	.73	10.6	66.4	2.89	36.4	.00			485
	500 ISL	6.41	6.36	34.284	26.941	117.9	1.044	.63	9.1							504
1	556	5.91	5.86	34.328	27.039	108.9	1.108	.31	4.4	82.1	3.17	40.9	.00			560

RV NEW HORIZON CALCOFI CRUISE 8410 STATION 103 100

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
28 47.5 N	121 03.5 W	02/11/84	0330 GMT	4187 M	360	10 KT	360 04 06		1019.0 MB	17.5 C	15.0 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	19.89	19.89	33.816	23.889	400.5	.000	5.38	103.2							0
1	1	19.89	19.89	33.816	23.889	400.7	.004	5.38	103.2	3.0	.25	.0	.00	.05	.02	1
	10 ISL	19.91	19.91	33.810	23.878	401.8	.040	5.37	103.1							10
1	11	19.92	19.91	33.813	23.880	401.9	.044	5.37	103.1	2.9	.25	.0	.00	.06	.02	11
	20 ISL	19.87	19.86	33.835	23.909	401.5	.080	5.39	103.3							20
1	26	19.83	19.82	33.798	23.893	401.2	.104	5.40	103.5	3.0	.25	.0	.00	.06	.02	26
	30 ISL	19.82	19.81	33.723	23.891	401.5	.120	5.40	103.4							30
1	41	19.81	19.80	33.794	23.888	402.2	.164	5.39	103.2	2.9	.27	.0	.00	.06	.02	41
	50 ISL	19.76	19.75	33.784	23.902	401.3	.201	5.38	103.0							50
1	56	19.72	19.71	33.793	23.913	401.8	.224	5.38	102.9	3.0	.25	.0	.00			56
1	66	15.60	15.59	33.487	24.675	327.7	.260	6.01	105.9	3.9	.46	.0	.00	.06	.33	66
	75 ISL	14.43	14.42	33.439	24.940	302.7	.289	5.71	98.2							75
1	77	14.37	14.35	33.511	24.963	300.6	.295	5.60	96.3	4.6	.45	.0	.00	.27	.31	77
1	92	13.43	13.41	33.564	25.198	278.5	.338	4.95	83.5	7.2	.72	4.4	.14	.19	.27	92
	100 ISL	12.81	12.80	33.597	25.346	264.6	.361	4.59	76.5							101
1	107	12.33	12.32	33.628	25.463	253.5	.378	4.30	70.9	11.5	1.10	11.0	.02	.10	.16	107
1	122	11.46	11.44	33.723	25.701	231.0	.414	3.61	58.5	17.4	1.40	16.8	.01	.05	.12	122
	125 ISL	11.29	11.29	33.739	25.744	227.1	.422	3.57	57.7							126
1	146	10.50	10.49	33.838	25.963	206.5	.468	3.43	54.5	21.9	1.60	20.0	.01	.01	.02	147
	150 ISL	10.42	10.40	33.869	26.001	203.1	.476	3.29	52.2							151
1	166	10.10	10.08	33.995	26.155	188.7	.507	2.72	42.8	28.0	1.89	23.9	.00	.00	.02	167
1	186	9.45	9.43	34.023	26.284	176.6	.544	2.72	42.2	31.1	1.97	25.4	.00			187
	200 ISL	9.24	9.22	34.048	26.338	171.7	.568	2.66	41.2							201
1	206	9.17	9.15	34.060	26.359	169.9	.578	2.64	40.8	33.6	2.05	26.5	.00			207
1	236	8.72	8.70	34.145	26.497	157.2	.627	2.05	31.3	39.5	2.26	29.0	.00			237
	250 ISL	8.53	8.51	34.177	26.551	152.3	.649	1.78	27.2							252
1	276	8.23	8.20	34.220	26.632	144.9	.687	1.37	20.7	47.2	2.53	31.6	.00			277
	300 ISL	7.98	7.95	34.243	26.687	140.0	.722	1.13	17.1							302
1	335	7.66	7.63	34.259	26.746	134.8	.770	.92	13.7	55.5	2.74	34.2	.00			337
	400 ISL	7.13	7.09	34.239	26.847	126.0	.856	.63	9.3							403
1	410	7.05	7.01	34.293	26.861	124.7	.867	.60	8.8	64.0	2.93	36.5	.00			412
1	484	6.26	6.22	34.333	26.975	114.3	.956	.37	5.3	75.4	3.05	39.3	.00			487
	500 ISL	6.14	6.09	34.337	26.993	112.7	.974	.39	5.6							504
1	557	5.85	5.80	34.323	27.043	108.4	1.037	.44	6.3	79.9	3.07	39.5	.00			561

RV NEW HORIZON CALCOFI CRUISE 8410 STATION 107 31

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
30 28.8 N	116 05.3 W	04/11/84	0742 GMT	18 M	310	13 KT	310 03 07		1014.0 MB	17.0 C	15.5 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
1	10	16.61	16.61	33.533	24.457	345.8	.335	5.71	102.7	5.0	.45	.0	.01	.38	.27	10

RV NEW HORIZON CALCOFI CRUISE 8410 STATION 107 32

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
30 27.0 N	116 09.9 W	04/11/84	0547 GMT	179 M	310	13 KT	310 03 07		1014.0 MB	17.5 C	16.2 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	17.39	17.39	33.429	24.218	369.3	.000	5.76	105.1	3.1	.33	.0	.00	.11	.08	0
1	10	16.86	16.85	33.445	24.355	355.6	.035	5.79	104.6	3.5	.35	.0	.00	.24	.14	10
	20 ISL	15.86	15.86	33.471	24.605	333.0	.071	5.41	95.8							20
	30 ISL	14.90	14.90	33.537	24.844	310.5	.103	4.95	86.1							30
1	31	14.82	14.81	33.511	24.865	308.5	.106	4.91	85.2	6.0		3.4	.13	.36	.42	31
1	41	14.42	14.41	33.538	24.972	298.7	.135	4.72	81.3	7.0	.75	4.3	.06	.19	.28	41
	50 ISL	13.76	13.75	33.582	25.143	282.6	.163	4.49	76.2							50
1	57	13.28	13.27	33.626	25.275	270.2	.181	4.25	71.5	10.0	1.00	9.3	.04	.05	.13	57
1	72	12.79	12.78	33.734	25.456	253.3	.220	3.45	57.5	14.7	1.32	13.9	.03	.02	.10	72
	75 ISL	12.63	12.62	33.749	25.493	249.4	.229	3.38	56.1							75
1	88	12.06	12.05	33.800	25.648	235.4	.259	3.23	53.0	17.6	1.49	16.9	.01	.02	.06	88
	100 ISL	11.76	11.75	33.851	25.752	225.8	.288	3.02	49.4							101
1	108	11.64	11.62	33.898	25.804	221.0	.305	2.89	47.0	20.8	1.69	19.6	.01	.01	.04	108
	125 ISL	11.28	11.27	33.975	25.930	209.5	.342	2.55	41.2							125
1	133	11.14	11.12	34.007	25.981	204.7	.359	2.40	38.7	25.1	1.92	22.5	.05	.01	.05	134
	150 ISL	10.93	10.91	34.058	26.059	197.7	.393	2.20	35.3							151
1	159	10.85	10.83	34.080	26.090	194.9	.411	2.13	34.1	28.3	2.06	24.1	.06	.02	.08	160

RV NEW HORIZON

CALCOFI CRUISE 8410

STATION 107 35

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 21.6 N	116 22.2 W	04/11/84	0258 GMT	1744 M	330	15 KT	330 06 06		1012.4 MB	18.0 C	16.5 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	17.50	17.50	33.509	24.251	365.0	.300	5.77	105.6							0
1	2	17.50	17.50	33.509	24.251	365.1	.307	5.77	105.6	3.9	.36	.0	.00	.15	.09	2
	10 ISL	17.50	17.50	33.536	24.250	365.6	.337	5.79	105.9							10
1	12	17.50	17.50	33.535	24.250	365.7	.344	5.79	106.0	3.7	.35	.0	.00	.14	.10	12
	20 ISL	17.27	17.26	33.472	24.281	364.3	.373	5.84	106.4							20
1	23	17.18	17.18	33.460	24.291	363.3	.384	5.86	106.6	3.6	.34	.0	.00	.13	.10	23
	30 ISL	15.68	15.67	33.277	24.497	343.6	.109	6.17	108.8							30
1	33	15.07	15.06	33.213	24.581	335.6	.119	6.29	109.5	2.4	.33	.0	.00	.10	.09	33
1	43	14.76	14.75	33.195	24.635	330.8	.152	6.28	108.7	2.5	.33	.0	.00	.12	.12	43
	50 ISL	14.14	14.13	33.226	24.790	319.2	.175	6.12	104.6							50
1	58	13.44	13.44	33.205	24.916	304.3	.199	5.88	99.0	3.3	.49	1.5	.08	.22	.2*	58
1	68	13.05	13.04	33.302	25.070	290.0	.229	5.57	93.1	4.3	.59	3.7	.05	.17	.30	68
	75 ISL	12.85	12.84	33.351	25.148	282.6	.250	5.44	90.6							75
1	78	12.80	12.79	33.375	25.177	280.0	.257	5.36	89.2	5.7	.69	5.5	.05	.12	.24	78
1	94	12.91	12.90	33.698	25.405	258.8	.300	3.81	63.6	12.6	1.15	9.2	.01	.02	.06	94
	100 ISL	12.63	12.62	33.776	25.521	247.9	.316	3.40	56.5							101
1	114	11.91	11.89	33.892	25.750	226.4	.348	2.83	46.5	20.2	1.65	19.2	.01	.01	.03	114
	125 ISL	11.58	11.56	33.963	25.867	215.5	.374	2.60	42.2							126
1	133	11.40	11.38	34.010	25.936	209.1	.392	2.47	40.0	24.4	1.84	22.1	.01	.00	.03	134
	150 ISL	11.07	11.05	34.150	26.105	193.4	.425	1.98	31.8							151
1	158	10.91	10.89	34.211	26.181	186.3	.441	1.76	28.3	33.7	2.16	25.9	.01	.00	.03	159
1	188	10.17	10.15	34.238	26.332	172.5	.494	1.74	27.5	34.0	2.25	27.0	.00			189
	200 ISL	9.87	9.84	34.225	26.374	168.6	.515	1.79	28.1							201
1	218	9.45	9.43	34.206	26.427	163.8	.544	1.83	28.5	37.2	2.29	27.9	.00			219
	250 ISL	8.98	8.96	34.233	26.525	155.0	.595	1.58	24.3							252
1	252	8.97	8.94	34.235	26.529	154.6	.598	1.56	24.0	41.9	2.39	29.6	.00			253
	300 ISL	8.53	8.49	34.242	26.604	148.1	.671	1.36	20.8							302
1	301	8.52	8.48	34.243	26.606	148.0	.673	1.36	20.7	46.5	2.52	31.1	.00			303
1	356	7.91	7.87	34.251	26.705	139.3	.752	1.08	16.2	53.1	2.67	33.1	.00			358
	400 ISL	7.46	7.42	34.258	26.776	133.0	.812	.93	13.8							403
1	440	7.08	7.04	34.266	26.836	127.6	.864	.80	11.9	60.3	2.80	35.2	.00			443
	500 ISL	6.64	6.59	34.291	26.916	120.5	.938	.52	7.6							504
1	526	6.45	6.41	34.304	26.951	117.4	.969	.41	6.0	74.0	3.02	39.4	.00			529
	600 ISL	5.83	5.77	34.353	27.070	106.4	1.052	.30	4.3							604
1	612	5.72	5.67	34.362	27.091	104.5	1.064	.28	4.0	87.0	3.14	40.8	.00			616

RV NEW HORIZON

CALCOFI CRUISE 8410

STATION 107 40

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 11.6 N	116 42.0 W	03/01/84	2312 GMT	2644 M	330	20 KT	330 07 06	1	1017.2 MB	19.9 C	18.0 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	18.99	18.99	33.537	23.905	399.0	.000	5.55	104.5	1.7	.27	.0	.00	.08	.02	0
1	10	19.00	18.99	33.531	23.901	399.8	.040	5.55	104.5	1.7	.26	.0	.00	.08	.03	10
1	20	18.99	18.98	33.528	23.904	399.9	.080	5.57	104.9	1.5	.26	.0	.00	.06	.03	20
1	30	18.83	18.82	33.511	23.929	397.9	.119	5.60	105.1	1.7	.26	.0	.00	.07	.07	30
1	40	15.68	15.68	33.264	24.485	345.0	.156	6.45	113.7	2.1	.32	.0	.00	.13	.09	40
	50 ISL	15.22	15.21	33.325	24.635	328.4	.191	6.37	111.3							50
1	55	14.99	14.99	33.344	24.699	325.1	.206	6.33	110.1	2.4	.36	.0	.00	.19	.21	55
1	65	14.21	14.20	33.414	24.921	304.2	.238	5.89	100.9	3.4	.46	.3	.12	.38	.33	65
1	72	13.64	13.63	33.448	25.064	290.7	.258	5.41	91.6	4.5	.63	3.2	.13	.08	.24	72
	75 ISL	13.42	13.41	33.465	25.123	285.2	.268	5.30	89.3							75
1	89	12.62	12.61				.306									89
	100 ISL	12.05	12.04	33.595	25.491	250.6	.335	4.85	79.5							101
1	109	11.68	11.66	33.634	25.592	241.2	.356	4.69	76.3	10.8	.98	10.7	.02	.02	.06	109
	125 ISL	11.11	11.10	33.668	25.721	229.2	.394	4.49	72.1							126
1	127	11.03	11.02	33.672	25.739	227.6	.400	4.46	71.6	13.7	1.14	13.4	.01	.01	.03	128
	150 ISL	10.19	10.17	33.769	25.962	206.7	.449	4.12	65.0							151
1	152	10.11	10.09	33.782	25.986	204.4	.454	4.07	64.0	19.4	1.41	17.9	.01	.00	.02	153
1	181	9.53	9.51	33.998	26.252	179.6	.509	2.84	44.2	29.7	1.91	24.6	.01			182
	200 ISL	9.32	9.30	34.097	26.364	169.3	.542	2.40	37.2							201
1	210	9.23	9.20	34.135	26.409	165.3	.559	2.24	34.5	35.3	2.17	27.2	.00			211
1	243	8.83	8.81	34.200	26.522	154.9	.611	1.78	27.3	40.7	2.35	29.2	.00			244
	250 ISL	8.76	8.74	34.211	26.543	153.1	.622	1.69	25.8							252
1	291	8.35	8.32	34.252	26.638	144.7	.684	1.27	19.3	47.7	2.58	31.8	.00			293
	300 ISL	8.26	8.23	34.252	26.653	143.3	.696	1.22	18.5							302
1	343	7.75	7.72	34.249	26.726	136.9	.757	1.05	15.7	54.3	2.72	33.8	.00			345
	400 ISL	7.06	7.02	34.251	26.825	127.9	.832	.78	11.5							403
1	423	6.81	6.77	34.255	26.864	124.4	.862	.68	10.0	66.4	2.92	37.2	.00			426
	500 ISL	6.28	6.23	34.294	26.966	115.4	.953	.44	6.4							504
1	506	6.25	6.20	34.298	26.972	114.8	.960	.43	6.2	76.5	3.08	39.4	.00			509
1	588	5.84	5.79	34.351	27.066	105.7	1.051	.28	4.0	84.7	3.18	41.0	.00			592

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 107 45

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 01.8 N	117 01.8 W	03/11/84	1931 GMT	1309 M	320	21 KT	320 07 05	1	1016.0 MB	19.2 C	17.1 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	18.73	18.73	33.564	23.993	393.7	.000	5.58	104.6							0
1	2	18.73	18.73	33.564	23.993	393.7	.008	5.58	104.6	1.9	.27	.0	.00	.11	.02	2
	10 ISL	18.71	18.71	33.564	23.998	393.7	.039	5.63	105.4							10
1	12	18.71	18.71	33.563	23.998	393.6	.047	5.63	105.5	1.8	.27	.0	.00	.10	.02	12
	20 ISL	18.69	18.69	33.558	24.000	393.5	.078	5.62	105.2							20
1	23	18.68	18.67	33.562	24.006	393.3	.090	5.61	105.0	1.9	.26	.0	.00	.12	.02	23
	30 ISL	18.61	18.61	33.554	24.017	389.5	.117	5.62	105.0							30
1	33	18.58	18.58	33.551	24.021	389.2	.128	5.62	105.0	1.8	.35	.0	.00	.12	.03	33
1	43	16.06	16.06	33.391	24.499	343.9	.185	6.20	110.2	2.5	.33	.0	.00	.31	.11	43
	50 ISL	15.14	15.14	33.395	24.705	324.3	.189	6.04	105.4							50
1	58	14.51	14.51	33.446	24.881	307.8	.213	5.86	101.0	3.5	.46	.0	.03	.54	.37	58
1	68	13.58	13.57	33.527	25.138	283.6	.243	4.98	84.3	6.4	.75	5.3	.02	.16	.22	69
	75 ISL	13.09	13.08	33.538	25.246	273.4	.263	4.91	82.2							75
1	78	12.93	12.92	33.538	25.277	270.5	.270	4.83	81.5	7.4	.85	7.5	.02	.10	.17	78
1	93	12.21	12.20	33.585	25.453	254.0	.310	4.50	74.0	10.2	1.02	10.7	.02	.04	.08	93
	100 ISL	11.95	11.94	33.604	25.517	248.1	.328	4.36	71.4							101
1	113	11.59	11.58	33.639	25.612	239.4	.359	4.12	66.9	13.8	1.21	13.8	.01	.02	.05	113
	125 ISL	11.26	11.25	33.688	25.710	230.3	.388	3.75	60.5							126
1	132	11.05	11.03	33.720	25.774	224.3	.405	3.56	57.2	18.1	1.47	17.7	.01	.01	.03	133
	150 ISL	10.24	10.22	33.807	25.984	204.6	.442	3.55	56.1							151
1	157	9.90	9.89	33.842	26.067	195.7	.457	3.55	55.6	23.3	1.61	20.7	.01	.00	.01	158
1	187	9.22	9.20	33.912	26.235	181.2	.513	3.61	55.7	25.9	1.70	22.4	.01			188
	200 ISL	8.91	8.89	33.948	26.312	174.1	.536	3.58	54.9							201
1	217	8.54	8.52	33.991	26.404	165.5	.565	3.48	52.9	32.1	1.82	24.6	.01			219
	250 ISL	7.94	7.92	34.050	26.524	154.4	.618	3.02	45.4							252
1	252	7.92	7.90	34.052	26.529	154.0	.621	2.99	44.9	39.7	2.05	27.7	.01			253
	300 ISL	7.74	7.71	34.149	26.648	143.5	.692	1.77	26.4							302
1	301	7.74	7.71	34.151	26.650	143.3	.694	1.73	25.9	49.1	2.47	31.9	.01			303
1	355	7.74	7.73	34.281	26.753	134.5	.769	.89	13.3	55.7	2.77	33.9	.01			357
	400 ISL	7.25	7.22	34.295	26.834	127.4	.828	.73	10.8							403
1	439	6.74	6.70	34.284	26.895	121.7	.877	.59	8.6	67.1	2.94	37.2	.01			442
	500 ISL	6.34	6.29	34.319	26.977	114.4	.948	.41	5.9							504
1	524	6.22	6.17	34.334	27.005	111.9	.975	.35	5.1	78.1	3.12	39.7	.01			527
	600 ISL	5.75	5.73	34.369	27.093	104.2	1.058	.25	3.6							604
1	609	5.69	5.64	34.373	27.102	103.4	1.067	.25	3.6	87.4	3.20	41.3	.01			613

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 107 50

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
29 51.0 N	117 22.4 W	03/11/84	1447 GMT	2505 M	350	25 KT	350 07 06	1	1015.9 MB	17.2 C	15.2 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
1	0	18.51	18.51	33.557	24.042	386.0	.000	5.63	105.1	1.8	.27	.0	.00	.13	.05	0
1	10	18.50	18.50	33.557	24.045	385.1	.038	5.63	105.1	1.8	.43	.0	.00	.15	.03	10
1	20	18.49	18.49	33.554	24.046	385.3	.077	5.64	105.2	1.7	.30	.0	.00	.15	.05	20
1	30	17.57	17.55	33.436	24.182	373.8	.115	5.92	108.4	1.8	.30	.0	.00	.20	.07	30
1	40	15.05	15.04	33.220	24.592	334.8	.150	6.35	110.5	2.1	.35	.0	.00	.24	.09	40
	50 ISL	14.65	14.65	33.371	24.793	315.0	.183	6.17	106.6							50
1	55	14.47	14.46	33.384	24.843	311.3	.198	5.98	103.0	3.0	.43	.1	.02	.48	.39	55
1	65	14.06	14.05	33.402	24.943	302.1	.229	5.68	97.0	3.6	.50	.7	.11	.31	.35	65
1	75	13.27	13.25	33.513	25.190	278.7	.258	4.96	83.4	6.5	.78	6.2	.04	.13	.28	75
1	90	12.83	12.82	33.542	25.300	268.7	.299	4.79	79.8					.10	.18	90
	100 ISL	12.49	12.47	33.583	25.399	259.4	.326	4.49	74.2							101
1	110	12.11	12.10	33.627	25.505	249.5	.350	4.16	68.3	12.5	1.10	12.3	.02	.03	.07	110
	125 ISL	11.28	11.27	33.687	25.706	230.7	.387	3.74	60.4							126
1	129	11.05	11.04	33.704	25.760	225.6	.397	3.64	58.4	17.5	1.40	17.1	.01	.01	.03	130
	150 ISL	10.56	10.54	33.788	25.913	211.4	.442	3.34	53.1							151
1	153	10.50	10.48	33.801	25.934	209.4	.449	3.31	52.5	21.6	1.60	20.2	.00	.00	.03	154
1	182	9.48	9.46	33.932	26.209	183.7	.506	3.19	49.5	27.3	1.72	23.2	.01			183
	200 ISL	9.00	8.97	33.957	26.306	174.7	.538	3.46	53.2							201
1	211	8.74	8.72	33.963	26.350	170.6	.557	3.61	55.2	30.1	1.71	23.4	.01			212
1	245	8.12	8.09	34.013	26.485	158.1	.612	3.23	48.7	36.3	1.98	26.2	.00			246
	250 ISL	8.07	8.04	34.025	26.502	156.6	.621	3.11	46.8							252
1	292	7.78	7.75	34.139	26.611	146.9	.685	2.12	31.7	45.9	2.29	30.6	.00			294
	300 ISL	7.70	7.67	34.116	26.628	145.3	.696	2.01	30.0							302
1	345	7.27	7.24	34.150	26.717	137.4	.760	1.49	22.0	54.2	2.60	33.6	.00			347
	400 ISL	7.03	6.99	34.217	26.803	130.0	.833	.92	13.5							403
1	427	6.93	6.89	34.251	26.844	126.5	.868	.69	10.1	64.3	2.88	36.6	.00			430
	500 ISL	6.32	6.27	34.305	26.969	115.1	.956	.39	5.7							504
1	512	6.21	6.17	34.312	26.988	113.4	.969	.37	5.3	76.9	3.08	39.2	.00			515
1	598	5.75	5.70	34.368	27.091	104.3	1.063	.21	3.0	86.0	3.17	41.1	.00			602

RV NEW HORIZON CALCOFI CRUISE 8410 STATION 107 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
29 41.3 N	117 41.8 W	03/11/84	1103 GMT	3233 M	010	22 KT	330 05 05		1016.0 MB	17.0 C	15.0 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	18.68	18.68	33.493	23.951	394.7	.000	5.54	103.7							0
1	1		18.68	18.68	33.493	23.951	394.8	.004	5.54	103.7	1.6	.32	.0	.00	.07	.02	1
	10	ISL	18.70	18.69	33.489	23.944	395.7	.040	5.53	103.6							10
1	11		18.70	18.70	33.488	23.944	395.8	.043	5.53	103.5	1.6	.28	.0	.00	.06	.02	11
1	20		18.69	18.69	33.498	23.946	395.9	.079	5.54	103.7	1.6	.27	.0	.00	.07	.02	20
1	30		18.71	18.70	33.486	23.940	395.8	.118	5.51	103.2	1.7	.27	.0	.00	.07	.02	30
1	40		15.86	15.85	33.241	24.429	350.4	.156	6.13	108.5	1.9	.32	.0	.00	.06	.03	40
	50	ISL	15.51	15.50	33.329	24.576	334.5	.190	6.02	105.9							50
1	54		15.37	15.36	33.355	24.625	332.1	.203	5.98	104.8	2.2	.31	.0	.00	.10	.08	54
1	63		15.05	15.04	33.440	24.761	319.4	.232	5.87	102.3	2.5	.34	.2	.05	.15	.17	63
1	73		14.37	14.36	33.460	24.923	304.2	.263	5.68	97.5	3.0	.43	1.3	.07	.13	.16	73
	75	ISL	14.45	14.44	33.515	24.949	301.8	.270	5.64	97.1							75
1	87		14.97	14.96	33.815	25.069	293.9	.305	5.44	94.9	3.1	.35	.7	.13	.14	.16	87
	100	ISL	14.29	14.28	33.757	25.170	275.6	.342	5.29	91.3							101
1	105		13.88	13.86	33.806	25.294	269.9	.355	5.20	88.7	4.9	.50	3.4	.02	.07	.12	105
1	123		11.99	11.97	33.656	25.552	245.4	.404	4.11	67.3	12.6	1.15	12.8	.01	.02	.05	124
	125	ISL	11.91	11.89	33.659	25.569	243.9	.407	4.05	66.3							126
1	145		11.27	11.25	33.750	25.757	226.3	.455	3.57	57.6	17.5	1.43	17.0	.00	.01	.04	146
	150	ISL	11.13	11.11	33.763	25.792	223.0	.466	3.57	57.4							151
1	172		10.50	10.48	33.827	25.954	208.0	.514	3.55	56.4	21.0	1.56	19.3	.00			173
1	199		9.89	9.86	33.976	26.176	187.4	.567	2.86	44.8	27.5	1.86	23.7	.00			200
	200	ISL	9.86	9.84	33.978	26.182	186.8	.568	2.86	44.9							201
1	231		9.03	9.01	34.019	26.349	171.2	.624	2.79	42.9	31.7	1.99	25.9	.00			232
	250	ISL	8.78	8.75	34.066	26.427	164.1	.656	2.55	39.3							252
1	275		8.54	8.51	34.123	26.508	155.8	.695	2.18	33.2	39.8	2.24	29.0	.00			276
	300	ISL	8.21	8.18	34.147	26.578	150.4	.734	1.91	28.9							302
1	323		7.89	7.86	34.158	26.634	145.4	.769	1.70	25.5	48.0	2.63	31.8	.00			325
1	399		6.92	6.89	34.179	26.788	131.3	.873	1.06	15.6	60.7	2.77	35.7	.00			401
	400	ISL	6.91	6.87	34.180	26.791	131.1	.875	1.05	15.4							403
1	475		6.28	6.24	34.240	26.922	119.2	.969	.56	8.1	73.0	3.01	39.0	.00			478
	500	ISL	6.11	6.06	34.258	26.958	115.9	.998	.46	6.6							504
1	553		5.80	5.75	34.290	27.023	110.1	1.058	.34	4.9	83.4	3.19	40.9	.00			557

RV NEW HORIZON CALCOFI CRUISE 8410 STATION 107 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
29 31.8 N	118 02.3 W	03/11/84	0720 GMT	4178 M	320	18 KT	320 05 06		1017.0 MB	18.5 C	16.5 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
1	0		18.58	18.58	33.337	23.856	403.9	.000	5.55	103.6	1.8	.33	.0	.00	.04	.01	0
1	10		18.59	18.59	33.336	23.854	404.3	.040	5.59	104.4	1.7	.34	.0	.00	.03	.01	10
	20	ISL	18.58	18.58	33.338	23.857	404.4	.081	5.58	104.1							20
1	25		18.58	18.58	33.338	23.859	404.4	.101	5.57	104.0	1.7	.31	.0	.00	.04	.02	25
	30	ISL	18.47	18.46	33.335	23.884	402.1	.121	5.63	104.9							30
1	39		18.01	18.00	33.330	23.995	391.9	.156	5.76	106.3	1.8	.30	.0	.00	.04	.02	39
	50	ISL	16.60	16.59	33.451	24.421	351.5	.198	5.95	107.0							50
1	54		16.15	16.14	33.498	24.561	338.3	.211	6.00	106.9	2.4	.28	.0	.00	.09	.05	54
1	64		15.93	15.92	33.503	24.616	333.4	.244	5.96	105.7	2.3	.28	.0	.00	.09	.09	64
1	73		15.84	15.83	33.580	24.695	326.1	.274	5.88	104.2	2.6	.28	.0	.00	.13	.11	73
	75	ISL	15.80	15.79	33.627	24.739	322.0	.281	5.83	103.2							75
1	88		15.41	15.40	33.850	24.999	297.7	.321	5.52	97.1	3.3	.31	.3	.05	.22	.21	88
	100	ISL	14.56	14.54	33.780	25.131	285.4	.357	5.44	94.1							101
1	102		14.43	14.41	33.765	25.147	283.8	.361	5.43	93.6	4.0	.41	1.8	.08	.19	.20	102
1	116		13.32	13.30	33.781	25.389	261.0	.399	5.08	85.6	6.8	.65	5.3	.02	.06	.11	116
	125	ISL	12.77	12.75	33.776	25.494	251.2	.423	4.94	82.3							126
1	139		12.06	12.04	33.755	25.615	239.9	.459	4.77	78.3	9.9	.87	9.3	.02	.03	.05	140
	150	ISL	11.47	11.45	33.736	25.709	231.0	.484	4.66	75.5							151
1	158		11.06	11.04	33.735	25.784	224.0	.503	4.51	72.4	14.0	1.11	13.4	.01	.01	.03	159
1	176		10.51	10.49	33.831	25.955	208.0	.541	3.72	59.1	20.3	1.43	18.7	.01			177
1	195		10.17	10.15	33.981	26.131	191.5	.579	2.68	42.3	27.7	1.91	23.9	.01			196
	200	ISL	10.12	10.10	34.007	26.161	188.9	.588	2.56	40.4							201
1	223		9.92	9.89	34.096	26.265	179.5	.630	2.30	36.1	31.2	2.07	25.7	.01			224
	250	ISL	9.54	9.51	34.180	26.395	167.6	.677	1.94	30.2							252
1	262		9.35	9.32	34.239	26.446	162.9	.697	1.80	27.9	37.8	2.32	28.2	.00			263
	300	ISL	8.81	8.78	34.197	26.524	152.2	.757	1.48	22.6							302
1	317		8.55	8.52	34.248	26.605	148.5	.783	1.38	21.0	45.4	2.54	31.0	.00			319
1	388		7.21	7.17	34.171	26.743	135.6	.883	1.28	18.9	57.1	2.71	34.7	.00			390
	400	ISL	7.04	7.00	34.179	26.773	133.7	.900	1.22	17.9							403
1	461		6.41	6.37	34.188	26.864	124.6	.979	.85	12.3	68.6	2.93	38.1	.01			464
	500	ISL	6.18	6.14	34.223	26.922	119.5	1.026	.64	9.2							504
1	537		5.09	6.04	34.272	26.972	115.1	1.069	.44	6.3	77.5	3.11	40.0	.00			540

RV NEW HORIZON CALCOFI CRUISE 8410 STATION 107 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
29 11.8 N	118 40.9 W	03/11/84	0200 GMT	3118 M	360	22 KT	360 06 06	1	1017.0 MB	18.0 C	16.0 C	7/8

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	19.58	19.53	33.538	23.757	413.1	.000	5.43	103.4							0
1	2	19.58	19.58	33.538	23.757	413.4	.008	5.43	103.4	1.9		.1	.00	.06	.02	2
	10 ISL	19.59	19.59	33.545	23.760	413.9	.041	5.50	104.7							10
1	12	19.60	19.59	33.538	23.756	414.0	.049	5.51	105.0	1.9	.29	.0	.00	.05	.03	12
	20 ISL	19.61	19.60	33.550	23.760	413.7	.083	5.52	105.2							20
1	29	19.62	19.61	33.562	23.767	413.3	.115	5.53	105.4	2.0	.27	.0	.00	.05	.03	29
	30 ISL	19.63	19.63	33.568	23.767	413.4	.124	5.52	105.2							30
1	43	19.73	19.73	33.602	23.768	413.8	.177	5.43	103.7	2.1	.29	.0	.00	.08	.03	43
	50 ISL	19.05	19.04	33.590	23.925	399.0	.206	5.64	106.3							50
1	58	18.06	18.05	33.539	24.143	378.4	.237	5.90	109.1	2.3	.29	.0	.00	.10	.05	58
1	68	16.89	16.88	33.473	24.372	356.8	.273	6.06	109.6	2.3	.29	.0	.00	.12	.05	68
	75 ISL	16.43	16.42	33.476	24.481	346.9	.299	6.02	107.8							75
1	78	16.29	16.28	33.475	24.513	343.7	.308	5.98	106.8	2.4	.31	.0	.00	.10	.08	78
1	93	15.29	15.27	33.482	24.743	322.1	.358	5.80	101.6	2.8	.36	.0	.00	.15	.18	93
	100 ISL	14.69	14.67	33.498	24.885	308.7	.381	5.57	96.3							101
1	108	14.07	14.06	33.525	25.036	294.4	.404	5.28	90.2	4.7	.57	1.8	.08	.14	.14	109
1	123	13.09	13.07	33.599	25.293	270.2	.446	4.76	79.8	7.8	.81	7.2	.02	.06	.08	123
	125 ISL	12.94	12.92	33.603	25.327	267.0	.453	4.70	78.4							126
1	147	11.84	11.82	33.591	25.606	240.8	.513	4.05	66.1	14.0	1.22	13.9	.01	.03	.06	148
	150 ISL	11.76	11.74	33.717	25.641	237.5	.516	3.93	64.0							151
1	167	11.39	11.37	33.899	25.852	217.9	.555	3.14	50.8	20.7	1.62	19.7	.00	.01	.02	168
1	197	11.10	11.07	34.018	25.998	204.4	.597	2.72	43.8	24.3	1.89	22.2	.00			198
	200 ISL	10.86	10.83	34.105	26.109	194.1	.623	2.40	38.5							201
1	207	10.72	10.69	34.149	26.169	188.6	.636	2.24	35.8	28.8	2.03	24.8	.00			208
1	236	10.10	10.08	34.233	26.341	172.7	.688	1.91	30.1	33.3	2.19	26.9	.00			237
	250 ISL	9.93	9.90	34.277	26.405	166.8	.712	1.69	26.5							252
1	276	9.65	9.62	34.342	26.503	158.0	.754	1.30	20.3	40.2	2.47	29.3	.00			277
	300 ISL	9.25	9.22	34.344	26.570	151.2	.792	1.10	17.0							302
1	334	8.66	8.63	34.346	26.665	143.2	.842	.92	14.1	48.1	2.67	31.6	.00			336
	400 ISL	7.74	7.70	34.354	26.811	129.9	.932	.63	9.4							403
1	408	7.64	7.60	34.355	26.826	128.6	.942	.60	9.0	57.7	2.86	34.5	.00			410
1	482	6.89	6.84	34.382	26.954	117.0	1.033	.30	4.4	70.3	3.07	37.8	.00			485
	500 ISL	6.74	6.70	34.387	26.977	114.9	1.054	.28	4.0							504
1	557	6.37	6.32	34.399	27.037	109.7	1.112	.20	2.9	77.9	3.14	39.6	.00			561

RV NEW HORIZON CALCOFI CRUISE 8410 STATION 107 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
28 51.2 N	119 21.6 W	02/11/84	2007 GMT	4518 M	330	14 KT	340 04 04	1	1021.0 MB	19.0 C	15.5 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	19.86	19.86	33.732	23.809	408.3	.000	5.39	103.3							0
1	1	19.86	19.86	33.732	23.809	408.4	.004	5.39	103.3	2.2	.26	.0	.00	.06	.02	1
	10 ISL	19.87	19.86	33.731	23.808	408.7	.041	5.49	105.1							10
1	11	19.87	19.86	33.732	23.809	408.7	.045	5.49	105.2	2.2	.27	.0	.00	.06	.03	11
	20 ISL	19.85	19.85	33.731	23.811	408.8	.082	5.45	104.4							20
1	26	19.85	19.84	33.699	23.812	408.9	.106	5.40	103.4	2.2	.25	.0	.00	.08	.01	26
	30 ISL	19.85	19.84	33.699	23.812	409.2	.123	5.40	103.4							30
1	41	19.86	19.85	33.730	23.810	409.7	.167	5.40	103.5	2.1	.26	.0	.00	.08	.02	41
	50 ISL	19.53	19.52	33.736	23.901	401.4	.204	5.49	104.5							50
1	56	19.33	19.32	33.710	23.954	396.3	.227	5.55	105.3	2.4	.26	.0	.00	.11	.03	56
1	66	17.39	17.37	33.536	24.281	365.5	.265	5.92	108.1	2.4	.27	.0	.00	.11	.05	66
1	75	16.52	16.51	33.510	24.487	345.1	.297	5.96	107.0	2.4	.28	.0	.00	.11	.08	75
1	90	15.72	15.71	33.527	24.681	328.0	.348	5.81	102.7	2.8	.33	.0	.00	.12	.14	90
	100 ISL	15.04	15.02	33.538	24.841	313.0	.381	5.70	99.4							101
1	105	14.70	14.69	33.543	24.917	305.8	.395	5.62	97.3	3.4	.39	.2	.07	.12	.16	105
1	120	13.59	13.57	33.571	25.172	281.5	.439	5.00	86.5	6.7	.69	4.5	.03	.09	.13	120
	125 ISL	13.26	13.25	33.582	25.246	274.8	.454	4.85	81.5							126
1	144	12.22	12.20	33.638	25.494	251.6	.505	4.37	71.9	11.3	1.03	11.1	.01	.03	.06	145
	150 ISL	11.90	11.89	33.665	25.574	243.9	.519	4.20	68.7							151
1	164	11.11	11.09	33.741	25.779	224.6	.553	3.80	61.1	17.2	1.36	16.6	.00	.02	.04	165
1	183	10.20	10.17	33.819	26.000	203.7	.593	3.50	55.2	22.2	1.61	20.5	.00			184
	200 ISL	9.64	9.62	33.874	26.153	189.4	.626	3.37	52.6							201
1	203	9.55	9.53	33.907	26.177	187.2	.632	3.36	52.3	26.3	1.74	22.7	.00			204
1	233	8.83	8.80	33.974	26.346	171.4	.685	3.21	49.1	31.1	1.86	25.1	.00			234
	250 ISL	8.47	8.45	34.000	26.422	164.4	.714	3.09	46.8							252
1	272	8.09	8.06	34.032	26.505	155.8	.749	2.95	42.9	38.6	2.07	28.1	.00			273
	300 ISL	7.78	7.75	34.059	26.597	148.4	.792	2.31	34.5							302
1	331	7.51	7.48	34.146	26.679	141.0	.837	1.71	25.4	51.0	2.52	32.9	.00			333
	400 ISL	6.83	6.79	34.180	26.801	130.0	.930	1.16	17.0							403
1	405	6.79	6.75	34.191	26.808	129.3	.935	1.14	16.7	60.8	2.75	35.8	.00			407
1	479	6.38	6.33	34.231	26.942	117.5	1.029	.48	7.0	72.5	3.03	38.9	.00			482
	500 ISL	6.26	6.22	34.299	26.971	114.9	1.053	.44	6.4							504
1	553	5.98	5.93	34.325	27.028	109.9	1.112	.35	5.0	80.8	3.14	40.6	.00			556

RV NEW HORIZON

CALCOFI CRUISE 8410

STATION 107 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
28 32.6 N	119 59.4 W	02/11/84	1430 GMT	4030 M	340	20 KT	350 04 04	1	1020.5 MB	17.3 C	14.2 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
	0 ISL	19.63	19.63	33.796	23.942	395.5	.000	5.39	102.9							0
1	1	19.63	19.63	33.796	23.942	395.6	.004	5.39	102.9	2.5	.28	.1	.00	.06	.03	1
	10 ISL	19.65	19.65	33.794	23.935	396.6	.040	5.45	104.0							10
1	11	19.65	19.65	33.794	23.934	396.7	.043	5.45	104.1	2.5	.24	.1	.00	.06	.02	11
	20 ISL	19.65	19.65	33.795	23.935	397.1	.079	5.45	104.1							20
1	27	19.65	19.65	33.795	23.935	397.2	.107	5.45	104.1	2.7	.24	.0	.00	.06	.02	27
	30 ISL	19.66	19.65	33.795	23.935	397.4	.119	5.44	103.8							30
1	42	19.68	19.67	33.797	23.932	398.1	.166	5.39	103.0	2.5	.24	.0	.00	.06	.02	42
	50 ISL	18.71	18.70	33.639	24.057	386.4	.198	5.66	106.0							50
1	58	17.54	17.53	33.507	24.244	368.8	.228	5.91	108.2	2.4	.33	.0	.00	.13	.02	58
1	68	16.32	16.31	33.534	24.551	339.7	.263	5.92	105.9	2.4	.29	.0	.00	.11	.07	68
	75 ISL	15.39	16.38	33.697	24.660	329.7	.287	5.82	104.3							75
1	78	16.42	16.41	33.743	24.683	327.0	.296	5.77	103.5	2.4	.26	.0	.00	.11	.04	78
1	93	15.63	15.62	33.768	24.887	308.5	.344	5.60	98.9	3.0	.33	.0	.03	.14	.16	93
	100 ISL	15.46	15.44	33.783	24.938	303.9	.366	5.52	97.2							101
1	109	15.23	15.21	33.794	24.989	299.2	.392	5.43	95.2	3.5	.38	.7	.09	.12	.15	109
1	124	14.31	14.29	33.719	25.137	285.4	.436	5.26	90.4	4.9	.50	2.5	.07	.11	.13	124
	125 ISL	14.20	14.18	33.713	25.155	283.7	.440	5.23	89.7							126
1	148	12.43	12.41	33.672	25.480	253.1	.503	4.62	76.4	9.7	.93	9.3	.01	.06	.08	149
	150 ISL	12.31	12.29	33.673	25.504	250.8	.507	4.58	75.5							151
1	168	11.10	11.08	33.716	25.761	226.4	.550	4.07	65.4	15.8	1.26	15.3	.00	.02	.04	169
1	188	10.48	10.46	33.807	25.943	209.4	.594	3.45	54.7	21.6	1.61	19.8	.00			189
	200 ISL	10.33	10.31	33.925	26.060	198.6	.618	2.98	47.1							201
1	207	10.27	10.24	33.991	26.123	192.7	.632	2.73	43.2	26.9	1.88	23.3	.00			208
1	237	9.66	9.63	34.014	26.244	181.6	.667	2.66	41.5	29.7	1.97	24.9	.00			238
	250 ISL	9.37	9.34	34.045	26.316	175.0	.711	2.55	39.5							252
1	276	8.82	8.79	34.108	26.453	162.1	.754	2.26	34.6	37.1	2.18	27.9	.00			277
	300 ISL	8.35	8.32	34.135	26.547	153.5	.792	1.97	29.9							302
1	334	7.80	7.77	34.156	26.646	144.3	.843	1.58	23.7	49.4	2.52	32.2	.00			336
	400 ISL	7.06	7.03	34.199	26.785	131.8	.934	.99	14.6							403
1	408	7.00	6.96	34.234	26.797	130.6	.944	.93	13.7	61.3	2.79	35.7	.00			410
1	481	6.58	6.54	34.283	26.917	120.1	1.036	.46	6.7	70.6	3.00	38.1	.00			484
	500 ISL	6.42	6.38	34.295	26.947	117.3	1.059	.43	6.2							504
1	556	5.82	5.78	34.306	27.032	109.3	1.122	.33	4.7	82.5	3.14	40.7	.00			559

RV NEW HORIZON

CALCOFI CRUISE 8410

STATION 107 100

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
28 11.6 N	120 38.8 W	02/11/84	0859 GMT	3310 M	360	10 KT	330 05 05		1021.1 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	19.65	19.65	33.770	23.916	398.0	.000	5.39	102.9							0
1	1	19.65	19.65	33.770	23.916	398.1	.004	5.39	102.9	2.4	.25	.0	.00	.06	.03	1
	10 ISL	19.67	19.66	33.759	23.912	398.8	.040	5.37	102.6							10
1	11	19.67	19.66	33.759	23.912	398.9	.044	5.37	102.6	2.5	.25	.0	.00	.05	.03	11
	20 ISL	19.67	19.66	33.757	23.911	399.3	.080	5.38	102.7							20
1	27	19.67	19.66	33.755	23.910	399.7	.107	5.38	102.7	2.3	.24	.0	.00	.04	.03	27
	30 ISL	19.67	19.66	33.755	23.909	399.9	.120	5.38	102.8							30
1	42	19.67	19.67	33.763	23.906	400.6	.167	5.40	103.1	2.4	.25	.0	.00	.05	.02	42
	50 ISL	18.35	18.34	33.638	24.146	378.0	.199	5.72	106.5							50
1	58	16.88	16.87	33.525	24.415	352.5	.227	5.99	108.3	2.3	.27	.0	.00	.06	.05	58
1	68	15.75	15.73	33.465	24.628	332.4	.262	5.91	104.5	2.8	.32	.0	.00	.10	.13	68
	75 ISL	15.24	15.23	33.457	24.734	322.5	.285	5.83	102.0							75
1	78	15.10	15.08	33.456	24.764	319.6	.294	5.79	100.8	3.2	.37	.0	.00	.10	.16	78
1	93	13.99	13.98	33.591	25.104	287.5	.339	5.18	88.4	5.1	.55	2.6	.06	.13	.19	93
	100 ISL	13.57	13.56	33.622	25.214	277.2	.360	4.95	83.7							101
1	109	13.10	13.09	33.638	25.321	267.2	.383	4.72	79.1	8.1	.78	7.1	.03	.08	.13	109
1	124	12.18	12.17	33.651	25.510	249.4	.422	4.43	72.8	11.0	.99	10.7	.01	.04	.08	124
	125 ISL	12.10	12.09	33.656	25.530	247.5	.426	4.38	71.9							126
1	148	11.04	11.02	33.743	25.793	222.9	.481	3.71	59.6	17.8	1.41	17.1	.01	.01	.03	149
	150 ISL	10.99	10.97	33.744	25.803	221.9	.484	3.72	59.6							151
1	168	10.47	10.45	33.766	25.911	212.0	.524	3.82	60.6	19.4	1.44	18.1	.00	.01	.02	169
1	188	9.88	9.86	33.873	26.097	194.5	.564	3.32	52.0	24.8	1.69	21.8	.00			189
	200 ISL	9.62	9.60	33.942	26.193	185.6	.587	3.05	47.5							201
1	208	9.48	9.46	33.984	26.249	180.4	.602	2.88	44.8	29.7	1.90	24.5	.00			209
1	237	9.24	9.21	34.073	26.358	170.6	.552	2.44	37.7	33.6	2.06	26.5	.00			238
	250 ISL	9.01	8.98	34.097	26.415	165.4	.574	2.28	35.1							252
1	277	8.49	8.46	34.132	26.523	155.3	.717	2.00	30.4	41.0	2.24	29.1	.00			278
	300 ISL	8.10	8.07	34.151	26.597	148.6	.752	1.75	26.4							302
1	335	7.62	7.59	34.177	26.694	140.5	.803	1.42	21.2	52.1	2.57	33.0	.00			337
	400 ISL	7.08	7.04	34.214	26.794	130.9	.891	1.08	15.9							403
1	410	7.02	6.98	34.220	26.807	129.7	.904	1.03	15.1	58.2	2.72	34.6	.00			412
1	484	6.48	6.43	34.278	26.943	117.6	.995	.40	5.8	73.2	3.05	38.8	.00			487
	500 ISL	6.36	6.32	34.310	26.966	115.5	1.015	.37	5.4							504
1	560	5.95	5.90	34.334	27.040	108.9	1.083	.26	3.7	82.2	3.17	40.8	.00			564

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 110 32.8

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
29 50.3 N	115 50.0 W	04/11/84	1216 GMT	49 M	270	07 KT	310 03 06		1014.0 MB	15.8 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	15.26	15.26	33.502	24.761	317.6	.000									0
1	1	15.26	15.25	33.502	24.761	317.6	.003			5.5	.60	2.1	.13	.62	.34	1
	10 ISL	15.23	15.23	33.494	24.763	317.2	.032	5.19	90.8							10
1	11	15.22	15.22	33.501	24.769	317.1	.035	5.20	91.0	5.4	.59	2.2	.15	.62	.34	11
	20 ISL	14.70	14.70	33.484	24.869	307.9	.063	5.31	91.9							20
1	22	14.55	14.55	33.484	24.901	304.9	.069	5.33	92.0	4.9	.62	2.3	.12	.37	.40	22
	30 ISL	13.85	13.84	33.530	25.085	287.5	.093	4.99	84.3							30
1	32	13.70	13.69	33.546	25.128	283.6	.098	4.87	82.6	6.0	.75	4.8	.09	.16	.27	32
1	42	13.40	13.39	33.614	25.242	272.9	.126	4.20	70.3	9.8	1.02	8.7	.14	.38	.19	42

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 110 35

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
29 47.7 N	115 59.5 W	04/11/84	1439 GMT	944 M	350	09 KT	340 05 05	1	1015.0 MB	16.2 C	14.4 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
	0 ISL	18.20	18.20	33.535	24.080	382.5	.000	5.65	104.8							0
1	1	18.20	18.20	33.535	24.080	382.5	.004	5.65	104.8	2.7	.27	.0	.00	.13	.07	1
	10 ISL	18.19	18.19	33.533	24.081	382.7	.038	5.60	103.8							10
1	11	18.19	18.19	33.533	24.080	382.8	.042	5.60	103.9	2.7	.28	.0	.00	.12	.06	11
	20 ISL	16.34	16.34	33.436	24.445	348.2	.075	5.98	107.0							20
1	22	15.82	15.82	33.397	24.550	338.3	.082	6.07	107.4	2.9	.33	.0	.00	.25	.07	22
	30 ISL	15.14	15.14	33.377	24.692	325.0	.108	5.92	103.3							30
1	32	15.01	15.00	33.369	24.715	322.9	.114	5.86	102.0	3.3	.39	.0	.00	.18	.24	32
1	42	13.47	13.46	33.230	24.907	304.8	.146	5.83	98.2	3.3	.50	1.4	.10	.22	.32	42
	50 ISL	13.52	13.51	33.329	24.996	296.6	.170	5.64	95.2							50
1	53	13.54	13.53	33.374	25.027	293.6	.179	5.54	93.6	4.2	.58	2.7	.18	.18	.29	53
1	63	13.06	13.05	33.515	25.233	274.3	.207	5.03	84.2	6.4	.76	6.2	.08	.11	.19	63
1	73	12.90	12.89	33.545	25.288	269.4	.234	4.88	81.4	7.4	.83	7.2	.04	.05	.15	73
	75 ISL	12.83	12.82	33.560	25.314	266.9	.240	4.75	79.2							75
1	88	12.39	12.38	33.654	25.480	251.4	.273	3.97	65.5	12.7	1.16	12.4	.01	.02	.07	88
	100 ISL	12.14	12.13	33.752	25.595	240.7	.303	3.57	58.8							101
1	104	12.06	12.06	33.773	25.625	238.0	.312	3.50	57.5	16.1	1.39	15.7	.01	.02	.05	104
1	123	11.40	11.38	33.842	25.805	221.2	.357	3.17	51.3	19.7	1.58	18.9	.01	.01	.03	124
	125 ISL	11.33	11.32	33.845	25.820	219.9	.361	3.16	51.1							125
1	148	10.38	10.35	33.894	26.026	200.6	.410	3.07	48.6	24.1	1.72	21.5	.01	.00	.02	149
	150 ISL	10.33	10.32	33.898	26.038	199.5	.413	3.06	48.4							151
1	178	9.69	9.67	33.976	26.208	183.8	.447	2.86	44.6	28.5	1.88	23.9	.00			179
	200 ISL	9.25	9.23	34.030	26.322	173.3	.506	2.72	42.0							201
1	208	9.11	9.09	34.047	26.357	170.0	.523	2.66	41.0	32.8	2.02	25.9	.00			209
1	237	8.79	8.76	34.091	26.444	162.2	.568	2.41	36.9	35.6	2.15	27.4	.00			238
	250 ISL	8.65	8.62	34.119	26.487	158.4	.589	2.23	34.0							252
1	276	8.38	8.35	34.167	26.567	151.1	.628	1.86	28.2	43.2	2.34	29.9	.00			277
	300 ISL	8.09	8.06	34.193	26.632	145.3	.665	1.57	23.6							302
1	334	7.70	7.67	34.217	26.708	138.4	.713	1.22	18.2	52.6	2.74	33.1	.00			335
	400 ISL	7.18	7.14	34.270	26.825	128.1	.801	.71	10.4							403
1	408	7.13	7.09	34.276	26.836	127.1	.810	.66	9.7	62.4	2.87	35.8	.00			410
1	482	6.64	6.60	34.335	26.950	117.1	.901	.35	5.1	71.6	3.07	38.2	.00			485
	500 ISL	6.51	6.47	34.345	26.974	114.9	.922	.30	4.4							504
1	557	6.10	6.05	34.353	27.043	108.8	.986	.24	3.5	80.6	3.14	40.0	.00			561

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 110 40

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
29 37.1 N	116 19.9 W	04/11/84	1844 GMT	2377 M	310	04 KT	310 15 11	1	1016.0 MB	17.7 C	14.9 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
	0 ISL	18.13	18.13	33.447	24.051	385.6	.000	5.71	105.7							0
1	1	18.13	18.13	33.447	24.051	385.2	.004	5.71	105.7	2.6	.30	.0	.00	.15	.00	1
	10 ISL	18.00	18.00	33.442	24.081	382.7	.038	5.71	105.5							10
1	11	17.99	17.99	33.442	24.083	382.5	.042	5.71	105.4	2.5	.30	.0	.00	.12	.04	11
	20 ISL	17.98	17.98	33.447	24.088	382.3	.077	5.69	105.1							20
1	21	17.98	17.98	33.447	24.089	382.3	.080	5.69	105.1	2.5	.29	.0	.00	.14	.03	21
	30 ISL	16.97	16.97	33.287	24.209	371.1	.114	5.94	107.4							30
1	31	16.82	16.81	33.269	24.231	369.0	.118	5.97	107.7	2.2	.32	.0	.00	.14	.07	31
1	41	14.47	14.46	33.152	24.663	328.0	.152	6.20	106.6	2.3	.38	.0	.00	.23	.18	41
	50 ISL	14.00	13.99	33.222	24.815	315.9	.182	6.06	103.2							50
1	52	13.91	13.91	33.185	24.806	314.7	.188	6.03	102.5	2.7	.42	.2	.01	.33	.25	52
1	62	13.63	13.62	33.312	24.962	300.2	.215	5.65	95.6	4.1	.55	2.2	.07	.24	.33	62
1	72	13.82	13.81	33.543	25.101	287.2	.247	4.92	83.7	6.7	.75	5.4	.05	.17	.25	72
	75 ISL	13.63	13.61	33.563	25.157	282.0	.257	4.85	82.1							75
1	87	12.69	12.68	33.584	25.361	262.3	.295	4.65	77.3	9.0	.95	8.9	.03	.07	.13	87
	100 ISL	12.08	12.07	33.702	25.569	243.1	.322	3.84	63.1							101
1	102	12.03	12.02	33.718	25.591	241.2	.325	3.74	61.3	14.7	1.28	14.4	.01	.02	.05	102
1	121	11.75	11.73	33.836	25.736	227.9	.373	3.10	50.6	19.0	1.56	18.2	.01	.01	.03	122
	125 ISL	11.67	11.66	33.858	25.767	225.0	.381	3.01	49.0							126
1	146	11.20	11.18	33.984	25.952	207.8	.427	2.55	41.1	24.1	1.83	22.1	.01	.00	.03	147
	150 ISL	11.15	11.13	34.005	25.977	205.5	.434	2.48	40.0							151
1	176	10.77	10.75	34.125	26.139	190.7	.486	2.12	33.9	28.4	2.05	24.6	.01			177
	200 ISL	10.23	10.21	34.168	26.267	178.9	.533	2.02	32.0							201
1	206	10.09	10.07	34.173	26.295	176.3	.541	2.01	31.7	32.0	2.15	26.3	.01			207
1	236	9.56	9.53	34.234	26.409	166.0	.592	1.84	28.7	35.6	2.23	27.6	.01			237
	250 ISL	9.31	9.28	34.218	26.461	161.2	.615	1.73	26.8							252
1	277	8.86	8.83	34.242	26.552	152.9	.657	1.50	23.0	42.1	2.45	29.8	.00			278
	300 ISL	8.50	8.47	34.255	26.618	145.9	.692	1.30	19.8							302
1	335	8.01	7.98	34.265	26.700	139.4	.742	1.04	15.7	51.3	2.68	32.3	.00			337
	400 ISL	7.21	7.17	34.266	26.817	128.9	.829	.74	11.0							403
1	410	7.11	7.07	34.266	26.831	127.6	.842	.71	10.5	62.1	2.94	35.7	.00			412
1	485	6.54	6.50	34.312	26.945	117.5	.936	.41	6.0	71.8	3.00	39.3	.00			488
	500 ISL	6.45	6.40	34.319	26.965	115.9	.952	.37	5.4							504
1	559	6.15	6.10	34.340	27.019	111.1	1.019	.30	4.3	78.5	3.10	39.8	.00			562

RV NEW HORIZON CALCOFI CRUISE 8410 STATION 110 45

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
29 27.8 N	116 39.3 W	04/11/84	2232 GMT	695 M	280	06 KT	280 15 11	1	1013.8 MB	19.8 C	15.5 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	20.04	20.04	33.588	23.676	421.4	.000	5.36	103.0							0
1	1	20.04	20.04	33.588	23.676	421.0	.004	5.36	103.0	2.0	.25	.0	.00	.11	.00	1
	10 ISL	19.94	19.94	33.584	23.699	419.1	.042	5.44	104.3							10
1	11	19.94	19.93	33.584	23.700	419.0	.046	5.44	104.3	2.0	.24	.0	.00	.11	.03	11
	20 ISL	19.92	19.92	33.580	23.701	419.3	.084	5.41	103.7							20
1	22	19.92	19.92	33.579	23.701	419.4	.092	5.40	103.5	2.0	.34	.0	.00	.10	.02	22
	30 ISL	19.92	19.91	33.576	23.703	419.8	.126	5.40	103.5							30
1	32	19.92	19.91	33.576	23.700	419.9	.134	5.40	103.5	1.9	.24	.0	.00	.09	.02	32
1	42	17.39	17.38	33.363	24.169	375.3	.174	5.92	108.0	2.1	.28	.0	.00	.15	.07	42
	50 ISL	15.37	15.36	33.231	24.530	341.1	.203	6.17	108.1							50
1	52	15.01	15.00	33.224	24.603	334.2	.209	6.18	107.5	2.2	.33	.0	.00	.16	.10	52
1	62	14.56	14.55	33.469	24.889	307.1	.241	5.70	98.4	3.2	.41	.3	.08	.28	.23	62
1	73	13.89	13.88	33.538	25.083	288.9	.273	5.11	87.0	4.6	.66	4.0	.07	.12	.20	73
	75 ISL	13.78	13.77	33.547	25.114	286.1	.280	5.00	85.0							75
1	88	13.18	13.17	33.583	25.262	272.3	.315	4.52	75.9	8.6	.90	8.1	.03	.07	.09	88
	100 ISL	12.55	12.53	33.618	25.415	259.0	.348	4.31	71.5							101
1	103	12.42	12.41	33.625	25.445	255.1	.355	4.29	70.9	11.0	1.05	10.9	.02	.03	.07	103
1	123	11.71	11.70	33.668	25.612	239.7	.404	4.17	67.9	13.4	1.17	13.2	.01	.02	.05	123
	125 ISL	11.68	11.66	33.690	25.635	237.5	.410	4.06	66.0							126
1	147	11.33	11.31	33.885	25.851	217.4	.461	3.02	48.8	20.7	1.67	19.8	.00	.00	.05	148
	150 ISL	11.23	11.21	33.894	25.877	215.0	.466	3.01	48.5							151
1	177	10.03	10.01	33.941	26.123	191.9	.522	2.93	46.1	26.3	1.83	23.0	.00			178
	200 ISL	9.29	9.27	34.013	26.302	175.2	.564	2.74	42.4							201
1	207	9.11	9.09	34.031	26.346	171.0	.576	2.69	41.5	32.5	2.02	25.8	.00			208
1	236	8.54	8.52	34.043	26.445	162.0	.624	2.69	40.9	36.0	2.05	27.1	.00			237
	250 ISL	8.38	8.35	34.059	26.482	159.6	.646	2.59	39.2							252
1	276	8.15	8.12	34.095	26.545	153.0	.686	2.30	34.7	41.5	2.26	29.3	.00			277
	300 ISL	7.86	7.83	34.130	26.616	146.6	.723	1.93	29.0							302
1	334	7.45	7.42	34.177	26.712	137.8	.771	1.40	20.8	53.4	2.62	33.4	.00			336
	400 ISL	6.89	6.85	34.253	26.851	125.3	.858	.71	10.4							403
1	408	6.83	6.79	34.260	26.865	124.1	.868	.65	9.5	65.6	2.94	37.0	.00			410
1	481	6.27	6.23	34.309	26.977	114.1	.959	.39	5.6	75.7	3.11	39.3	.00			484
	500 ISL	6.14	6.10	34.321	27.004	111.7	.977	.35	5.0							504
1	555	5.79	5.75	34.355	27.075	105.3	1.037	.29	4.1	84.6	3.20	40.8	.00			559

RV NEW HORIZON CALCOFI CRUISE 8410 STATION 110 50

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
29 17.3 N	116 59.3 W	05/11/84	0207 GMT	2962 M	300	08 KT	300 10 10	1	1014.0 MB	17.5 C	15.0 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	19.53	19.52	33.634	23.822	407.0	.000	5.53	105.2							0
1	2	19.53	19.52	33.634	23.822	407.1	.008	5.53	105.2	2.3	.25	.1	.00	.07	.04	2
	10 ISL	19.53	19.52	33.632	23.821	407.6	.041	5.50	104.7							10
1	12	19.53	19.52	33.632	23.820	407.7	.049	5.50	104.7	2.1			.01	.08	.04	12
	20 ISL	19.49	19.49	33.630	23.828	407.2	.081	5.51	104.8							20
1	22	19.48	19.48	33.630	23.830	407.1	.089	5.51	104.8	3.3	.20	.1	.00	.12	.04	22
	30 ISL	19.47	19.46	33.631	23.835	406.9	.122	5.55	105.5							30
1	32	19.47	19.46	33.631	23.837	406.8	.130	5.56	105.7	3.6	.21	.1	.00	.11	.05	32
1	43	15.72	15.72	33.411	24.590	355.2	.171	6.02	106.3	3.3	.34	.1	.00	.11	.09	43
	50 ISL	14.90	14.89	33.332	24.757	339.5	.194	6.01	104.4							50
1	53	14.77	14.77	33.334	24.778	337.5	.203	6.01	104.1	3.4	.38	.1	.00	.31	.25	53
1	63	14.33	14.32	33.502	24.963	300.2	.234	5.31	91.2	5.7	.59	3.0	.09	.21	.23	63
1	73	13.56	13.55	33.552	25.162	281.4	.263	4.87	82.4	7.2	.75	6.2	.03	.12	.15	73
	75 ISL	13.46	13.45	33.570	25.197	278.2	.269	4.75	80.2							75
1	88	12.99	12.98	33.649	25.352	263.7	.303	4.26	71.3	11.1	.69	10.4	.02	.05	.09	88
	100 ISL	12.30	12.28	33.630	25.472	252.5	.335	4.35	71.8							101
1	103	12.15	12.13	33.624	25.496	250.3	.342	4.39	72.1	12.2	1.06	11.7	.01	.02	.06	103
1	122	11.26	11.24	33.594	25.715	229.7	.389	4.04	65.2	15.9	1.27	15.5	.00	.01	.04	123
	125 ISL	11.20	11.18	33.716	25.743	227.1	.395	3.94	63.5							126
1	147	10.81	10.79	33.914	25.968	205.2	.444	3.05	48.8	23.7	1.72	21.3	.00	.01	.02	148
	150 ISL	10.75	10.74	33.930	25.990	204.7	.449	3.02	48.3							151
1	177	10.07	10.05	34.020	26.179	186.6	.502	2.73	43.0	28.6	1.91	24.2	.00			178
	200 ISL	9.20	9.17	34.004	26.311	174.3	.543	2.89	44.6							201
1	207	8.96	8.93	34.000	26.346	171.0	.555	2.92	44.8	33.5	1.96	25.9	.00			208
1	237	8.71	8.68	34.109	26.471	159.7	.605	2.36	36.1	38.6	2.19	28.2	.00			238
	250 ISL	8.56	8.53	34.142	26.520	155.2	.625	2.15	32.7							252
1	277	8.23	8.20	34.191	26.609	147.1	.666	1.78	26.9	45.7	2.42	30.6	.00			278
	300 ISL	7.91	7.88	34.226	26.668	141.7	.699	1.53	22.9							302
1	336	7.46	7.43	34.216	26.741	135.1	.749	1.21	18.0	56.0	2.70	34.1	.00			338
	400 ISL	7.10	7.06	34.279	26.842	126.4	.833	.74	11.0							403
1	412	7.05	7.01	34.289	26.858	125.0	.847	.68	10.0	64.6	2.92	36.2	.00			414
1	486	6.42	6.37	34.317	26.966	115.4	.937	.49	7.1	74.5	3.06	38.7	.00			489
	500 ISL	6.30	6.26	34.323	26.985	113.7	.953	.45	6.6							504
1	561	5.84	5.79	34.349	27.064	105.5	1.021	.30	4.3	84.3	3.17	40.5	.00			565

RV NEW HORIZON CALCOFI CRUISE 8410 STATION 113 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
29 37.2 N	117 20.2 W	05/11/84	0533 GMT	3494 M	300	06 KT	300 10 10		1015.4 MB	17.9 C	15.5 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	18.52	18.52	33.545	24.030	387.2	.000	5.61	104.7							0
1	1		18.52	18.52	33.545	24.030	387.2	.004	5.61	104.7	2.0	.26	.1	.00	.12	.04	1
	10	ISL	18.52	18.52	33.543	24.030	387.5	.039	5.62	104.9							10
1	11		18.52	18.52	33.544	24.030	387.5	.042	5.62	104.9	2.0	.26	.0	.00	.11	.04	11
	20	ISL	18.50	18.49	33.542	24.035	387.6	.077	5.63	105.0							20
1	22		18.49	18.49	33.541	24.035	387.6	.085	5.63	105.0	2.1	.24	.0	.00	.11	.04	22
	30	ISL	18.49	18.48	33.538	24.035	387.8	.116	5.64	105.2							30
1	32		18.49	18.48	33.537	24.035	387.9	.124	5.64	105.2	1.9	.25	.0	.00	.11	.05	32
1	42		14.82	14.81	33.140	24.577	335.1	.160	6.22	107.7	2.0	.34	.0	.00	.14	.06	42
	50	ISL	14.33	14.32	33.198	24.729	321.2	.186	6.16	105.7							50
1	53		14.16	14.16	33.234	24.768	318.4	.195	6.14	104.9	2.4	.39	.0	.00	.26	.20	53
1	63		13.46	13.45	33.289	24.978	299.6	.226	5.70	96.1	3.7	.54	2.2	.16	.16	.23	63
1	73		13.35	13.34	33.367	25.060	291.1	.255	5.49	92.4	4.5	.67	3.9	.08	.10	.21	73
	75	ISL	13.30	13.29	33.385	25.084	288.9	.262	5.43	91.3							75
1	88		12.93	12.92				.295									88
	100	ISL	12.56	12.55	33.574	25.377	261.6	.331	4.84	80.2							101
1	103		12.48	12.47	33.593	25.407	258.7	.338	4.80	79.4	8.7	.88	8.6	.01	.05	.08	103
1	122		11.78	11.76	33.739	25.655	235.6	.387	4.73	77.2	10.8	.91	10.2	.01	.02	.04	123
	125	ISL	11.71	11.69	33.754	25.687	232.6	.393	4.53	73.8							126
1	146		11.14	11.12	33.953	25.939	209.1	.440	2.78	44.8	22.9	1.74	21.1	.01	.00	.02	147
	150	ISL	11.03	11.02	33.958	25.969	206.2	.447	2.77	44.5							151
1	176		10.18	10.15	34.008	26.151	189.3	.499	2.70	42.6	27.5	1.91	23.8	.00			177
	200	ISL	9.22	9.19	34.011	26.313	174.1	.542	3.06	47.2							201
1	205		9.05	9.03	34.016	26.343	171.3	.551	3.09	47.6	30.9	1.88	24.5	.01			206
1	234		9.04	9.01	34.168	26.465	160.4	.599	2.09	32.2	37.4	2.25	28.0	.00			235
	250	ISL	8.89	8.86	34.201	26.515	155.9	.624	1.81	27.8							252
1	272		8.64	8.61	34.220	26.569	151.0	.658	1.59	24.3	43.2	2.43	30.2	.00			273
	300	ISL	8.36	8.33	34.241	26.629	145.7	.700	1.34	20.3							302
1	328		8.07	8.04	34.253	26.682	141.1	.740	1.15	17.3	53.7	2.65	32.5	.00			330
1	400		7.20	7.16	34.275	26.826	128.0	.836	.71	10.5	61.7	2.87	35.8	.00			402
1	473		6.56	6.52	34.298	26.931	119.6	.927	.45	6.6	71.2	3.01	38.3	.00			476
	500	ISL	6.37	6.32	34.310	26.966	115.5	.958	.36	5.2							504
1	546		6.08	6.04	34.332	27.021	110.7	1.011	.20	2.9	79.7	3.13	40.0	.00			550

RV NEW HORIZON CALCOFI CRUISE 8410 STATION 113 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
28 57.4 N	117 39.0 W	05/11/84	0850 GMT	3597 M	310	06 KT	300 15 11		1015.4 MB	17.0 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
1	0		18.36	18.36	33.475	24.017	388.5	.000	5.61	104.4	1.9	.28	.0	.00	.09	.03	0
1	10		18.37	18.37	33.472	24.014	388.1	.039	5.63	104.7	1.8	.29	.0	.00	.09	.03	10
1	20		18.37	18.37	33.471	24.011	388.7	.078	5.56	103.5	1.7	.34	.0	.00	.08	.02	20
1	30		18.39	18.39	33.472	24.008	390.4	.115	5.54	103.1	1.7	.28	.0	.00	.09	.03	30
1	40		17.04	17.04	33.479	24.340	359.0	.154	5.96	108.1	2.1	.28	.0	.00	.07	.03	40
1	50		16.43	16.43	33.540	24.529	341.3	.189	5.97	107.0	2.3	.30	.0	.00	.08	.04	50
1	60		16.26	16.26	33.573	24.670	328.2	.222	5.83	104.2	2.4	.27	.0	.00	.09	.05	60
1	70		16.15	16.14	33.821	24.810	315.1	.254	5.71	102.0	2.4	.28	.0	.00	.10	.10	70
	75	ISL	15.85	15.83	33.917	24.875	307.8	.270	5.66	100.5							75
1	85		15.16	15.15				.300									85
1	99		14.45	14.44	33.800	25.169	281.7	.340	5.33	92.0	4.2	.47	2.1	.06	.12	.19	99
	100	ISL	14.33	14.31	33.787	25.185	280.2	.344	5.29	91.0							101
1	118		12.69	12.67	33.634	25.399	259.9	.391	4.65	77.3	9.8	.92	8.4	.01	.05	.08	119
	125	ISL	12.22	12.21	33.639	25.494	251.0	.410	4.35	71.7							126
1	141		11.49	11.48	33.713	25.668	232.8	.450	3.74	60.6	15.9	1.32	15.5	.00	.01	.03	142
	150	ISL	11.26	11.24	33.755	25.763	225.8	.469	3.49	56.3							151
1	170		10.83	10.81	33.868	25.928	210.5	.514	2.99	47.8	22.4	1.69	20.7	.00			171
1	199		10.09	10.06	34.052	26.202	185.0	.569	2.41	38.0	29.1	2.00	24.7	.00			199
	200	ISL	10.04	10.02	34.058	26.214	183.8	.572	2.40	37.7							201
1	226		9.53	9.50	34.124	26.351	171.1	.618	2.25	35.0	33.3	2.12	26.2	.00			227
	250	ISL	9.29	9.27	34.219	26.464	160.9	.658	1.77	27.5							252
1	263		9.19	9.16	34.264	26.516	156.2	.679	1.50	23.2	40.4	2.43	29.1	.00			264
	300	ISL	8.62	8.59	34.263	26.606	146.2	.735	1.13	17.2							302
1	319		8.30	8.26	34.279	26.668	142.4	.763	1.03	15.6	49.2	2.71	32.1	.00			321
1	390		7.38	7.34	34.261	26.789	131.5	.859	.80	11.9	59.3	2.82	35.2	.00			392
	400	ISL	7.29	7.24	34.264	26.805	130.0	.872	.76	11.2							403
1	463		6.77	6.73	34.292	26.898	121.7	.952	.51	7.5	68.4	3.00	37.5	.00			466
	500	ISL	6.50	6.45	34.308	26.948	117.3	.996	.41	6.0							504
1	540		6.22	6.17	34.325	26.998	112.9	1.042	.34	4.9	77.6	3.11	39.5	.00			543

RV NEW HORIZON

CALCOFI CRUISE 8410

STATION 110 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
28 37.0 N	118 19.1 W	05/11/84	1405 GMT	3599 M	290	07 KT	310 15 11	1	1016.0 MB	17.2 C	14.1 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
	0 ISL	18.37	18.37	33.402	23.959	393.8	.000	5.57	103.6							0
1	2	18.37	18.37	33.402	23.959	394.0	.008	5.57	103.6	1.7	.32	.0	.00	.06	.02	2
	10 ISL	18.38	18.38	33.398	23.955	394.7	.039	5.58	103.8							10
1	12	18.38	18.38	33.398	23.954	394.8	.047	5.58	103.8	1.6	.30	.0	.00	.06	.03	12
	20 ISL	18.38	18.38	33.400	23.956	395.0	.079	5.57	103.5							20
1	23	18.38	18.38	33.400	23.956	395.1	.090	5.56	103.4	1.5	.29	.0	.00	.07	.02	23
	30 ISL	18.39	18.38	33.400	23.954	395.5	.118	5.56	103.4							30
1	35	18.39	18.39	33.400	23.953	395.7	.130	5.56	103.4	1.5	.28	.0	.00	.07	.03	33
1	43	16.96	16.95	33.222	24.161	376.1	.168	5.92	107.0	1.5	.30	.0	.00	.07	.04	43
	50 ISL	16.04	16.03	33.215	24.370	357.0	.195	6.07	107.7							50
1	54	15.62	15.61	33.216	24.464	347.5	.208	6.11	107.6	2.0	.31	.0	.00	.08	.05	54
1	64	14.98	14.97	33.202	24.593	335.4	.242	6.07	105.5	2.0	.33	.0	.00	.14	.11	64
1	74	15.08	15.07	33.379	24.708	324.9	.275	5.91	103.0	2.3	.33	.0	.00	.16	.17	74
	75 ISL	15.02	15.00	33.384	24.726	323.4	.279	5.89	102.6							75
1	89	14.07	14.06	33.354	24.904	306.5	.322	5.72	97.7	3.0	.45	1.4	.07	.13	.16	89
	100 ISL	13.65	13.63	33.458	25.072	290.7	.356	5.52	93.6							101
1	104	13.54	13.52	33.500	25.127	285.6	.366			4.2	.54	3.2	.07	.08	.14	104
1	124	12.74	12.73	33.641	25.395	260.5	.421	4.82	80.2	8.0	.81	7.5	.01	.05	.08	124
	125 ISL	12.67	12.66	33.649	25.415	258.7	.424	4.73	78.7							126
1	147	11.58	11.56	33.749	25.700	231.9	.479	3.52	57.2	17.0	1.44	16.5	.01	.01	.04	149
	150 ISL	11.44	11.43	33.759	25.733	228.8	.485	3.50	56.6							151
1	176	10.25	10.22	33.856	26.021	201.7	.542	3.26	51.5	23.4	1.66	21.0	.00			177
	200 ISL	9.65	9.63	33.926	26.176	187.3	.588	3.07	47.9							201
1	205	9.56	9.54	33.939	26.201	184.9	.598	3.03	47.1	28.1	1.84	23.9	.00			206
1	233	9.08	9.05	34.020	26.343	171.9	.647	2.79	43.0	32.4	1.95	25.9	.00			234
	250 ISL	8.85	8.82	34.059	26.410	165.8	.676	2.59	39.7							252
1	271	8.62	8.59	34.103	26.480	159.4	.710	2.29	34.9	38.6	2.17	28.3	.00			272
	300 ISL	8.37	8.34	34.181	26.580	150.3	.755	1.68	25.5							302
1	327	8.15	8.12	34.242	26.661	143.0	.795	1.14	17.2	49.7	2.77	32.3	.00			329
1	400	7.36	7.33	34.265	26.794	131.1	.894	.72	10.7	59.9	2.84	35.2	.00			402
	500 ISL	6.57	6.52	34.304	26.936	118.6	1.019	.38	5.5	68.8	2.97	37.7	.00			477
1	553	6.21	6.16	34.327	27.001	112.8	1.080	.31	4.5	78.1	3.09	39.7	.00			504
																556

RV NEW HORIZON

CALCOFI CRUISE 8410

STATION 110 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
28 17.2 N	118 56.8 W	05/11/84	1925 GMT	3895 M	270	05 KT	310 15 11	1	1015.8 MB	19.7 C	16.0 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	19.83	19.82	33.770	23.871	402.6	.000	5.39	103.3							0
1	2	19.83	19.82	33.770	23.871	402.5	.008	5.39	103.3	2.5	.25	.1	.00	.05	.02	2
	10 ISL	19.77	19.77	33.762	23.879	402.0	.040	5.44	104.0							10
1	12	19.76	19.76	33.761	23.880	401.9	.048	5.44	104.1	2.5	.25	.0	.00	.05	.02	12
	20 ISL	19.74	19.74	33.759	23.885	401.8	.080	5.41	103.5							20
1	22	19.74	19.74	33.759	23.885	401.8	.088	5.40	103.3	2.4	.24	.0	.00	.06	.01	22
	30 ISL	19.72	19.72	33.757	23.888	401.8	.121	5.40	103.2							30
1	33	19.72	19.71	33.756	23.890	401.9	.132	5.40	103.2	2.4	.24	.0	.00	.05	.02	33
1	43	19.68	19.68	33.757	23.899	401.3	.172	5.41	103.3	2.4	.24	.0	.00	.05	.02	43
	50 ISL	19.69	19.68	33.753	23.895	402.0	.201	5.41	103.4							50
1	53	19.69	19.68	33.751	23.893	402.2	.212	5.41	103.4	2.4	.24	.0	.00	.05	.02	53
1	63	17.88	17.87	33.558	24.202	373.0	.251	5.87	108.2	2.3	.25	.0	.00	.10	.00	63
1	73	16.93	16.92	33.522	24.400	354.3	.287	5.97	108.0	2.5	.26	.0	.00	.08	.04	73
	75 ISL	16.75	16.74	33.528	24.447	350.6	.295	5.96	107.5							75
1	88	15.93	15.91	33.525	24.634	332.4	.338	5.85	103.8	2.5	.29	.0	.00	.09	.10	88
	100 ISL	15.52	15.51	33.586	24.771	319.7	.379	5.75	101.3							101
1	103	15.43	15.42	33.598	24.801	316.9	.387	5.72	100.5	3.0	.33	.0	.01	.10	.13	103
1	123	13.83	13.81	33.590	25.137	285.2	.447	5.24	89.2	5.0	.58	3.6	.04	.07	.14	123
	125 ISL	13.66	13.64	33.593	25.174	281.8	.454	5.17	87.7							126
1	147	12.28	12.27	33.631	25.476	253.3	.514	4.57	75.3	10.1	.94	9.9	.01	.03	.06	148
	150 ISL	12.14	12.12	33.639	25.510	250.2	.520	4.51	74.0							151
1	176	10.87	10.85	33.726	25.811	221.8	.582	3.96	63.3	17.5	1.34	16.5	.00			177
	200 ISL	10.09	10.06	33.797	26.002	203.9	.633	3.73	58.7							201
1	206	9.93	9.91	33.817	26.044	200.0	.645	3.68	57.7	22.8	1.57	20.1	.00			207
1	235	9.39	9.35	33.956	26.245	181.3	.700	3.13	48.5	28.9	1.84	23.8	.00			236
	250 ISL	9.11	9.08	34.008	26.328	173.7	.727	2.92	45.3							252
1	275	8.71	8.68	34.057	26.439	163.4	.768	2.62	40.0							276
	300 ISL	8.30	8.27	34.105	26.530	155.0	.809	2.27	34.4							302
1	333	7.84	7.80	34.136	26.624	145.4	.859	1.83	27.4	47.9	2.45	31.2	.00			335
	400 ISL	7.20	7.16	34.197	26.764	133.9	.952	1.12	16.5							403
1	407	7.15	7.11	34.201	26.774	132.9	.961	1.06	15.6	59.5	2.75	35.0	.00			409
1	481	6.59	6.55	34.254	26.893	122.3	1.056	.62	9.0	69.2	2.99	37.7	.00			484
	500 ISL	6.46	6.42	34.269	26.921	119.8	1.079	.54	7.8							504
1	556	6.11	6.06	34.312	27.001	112.7	1.144	.36	5.2	78.8	3.14	39.8	.00			559

RV NEW HORIZON — CALCOFI CRUISE 3410 — STATION 110 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
27 57.7 N	119 36.6 W	06/11/34	0041 GMT	3792 M	310	39 KT	310 15 11	1	1015.0 MB	19.0 C	16.0 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	20.10	20.10	33.755	23.788	410.4	.000	5.40	104.0							0
1	1	20.10	20.10	33.755	23.788	410.4	.004	5.40	104.0	2.5	.27	.1	.00	.04	.02	1
	10 ISL	20.08	20.08	33.754	23.792	410.3	.041	5.40	103.9							10
1	11	20.08	20.08	33.753	23.792	410.3	.045	5.40	103.9	2.6	.25	.0	.00	.04	.02	11
	20 ISL	20.04	20.03	33.751	23.802	409.7	.082	5.39	103.6							20
1	27	20.01	20.00	33.748	23.808	409.4	.110	5.38	103.4	2.5	.25	.0	.00	.04	.02	27
	30 ISL	20.00	20.00	33.747	23.807	409.5	.123	5.38	103.3							30
1	42	20.00	20.00	33.743	23.805	410.2	.172	5.37	103.2	2.3	.34	.0	.00	.05	.03	42
	50 ISL	19.89	19.88	33.745	23.833	407.5	.205	5.38	103.2							50
1	57	19.79	19.78	33.747	23.864	405.2	.233	5.39	103.2	2.5	.26	.0	.00	.06	.03	57
1	67	17.60	17.59	33.582	24.288	364.9	.271	5.93	108.8	2.3	.26	.0	.00	.07	.03	67
	75 ISL	16.57	16.55	33.519	24.483	345.5	.303	5.94	106.7							75
1	77	16.42	16.41	33.514	24.512	343.7	.308	5.94	106.4	2.4	.28	.0	.00	.07	.05	77
1	92	16.00	15.99	33.511	24.683	327.9	.356	5.79	102.9	2.6	.30	.0	.00	.07	.15	92
	100 ISL	15.55	15.53	33.538	24.805	316.4	.383	5.67	99.9							101
1	107	15.15	15.13	33.647	24.900	307.5	.404	5.57	97.4	3.0	.39	.5	.12	.11	.19	107
1	122	14.47	14.45	33.631	25.035	295.1	.449	5.41	93.3	3.9	.48	2.0	.10	.09	.15	122
	125 ISL	14.27	14.25	33.629	25.075	291.3	.459	5.36	92.0							126
1	146	12.94	12.92	33.628	25.345	265.8	.519	4.96	82.9	7.1	.73	6.7	.01	.03	.09	147
	150 ISL	12.74	12.72	33.633	25.388	261.9	.528	4.87	81.0							151
1	165	11.90	11.88	33.646	25.561	245.6	.567	4.51	73.7	11.4	1.32	11.1	.01	.09	.05	166
1	185	10.97	10.95	33.677	25.755	227.4	.614	4.23	67.8	15.2	1.24	15.1	.00			186
	200 ISL	10.38	10.36	33.757	25.921	211.8	.646	4.07	64.3							201
1	204	10.23	10.21	33.782	25.966	207.5	.655	4.02	63.4	19.8	1.43	17.8	.00			205
1	233	9.35	9.33	33.888	26.195	186.0	.712	3.63	56.2	26.2	1.69	22.3	.00			234
	250 ISL	8.95	8.92	33.938	26.300	176.2	.743	3.48	53.4							252
1	272	8.51	8.48	33.999	26.407	166.2	.780	3.28	49.9	34.2	1.91	25.2	.00			273
	300 ISL	8.06	8.03	34.029	26.508	156.9	.826	2.97	43.2							302
1	329	7.70	7.66	34.062	26.587	149.7	.871	2.37	35.4	45.3	2.29	30.9	.00			331
	400 ISL	7.19	7.15	34.186	26.756	134.6	.971	1.15	16.9							403
1	402	7.19	7.15	34.189	26.760	134.3	.973	1.12	16.5	58.6	2.77	34.8	.00			404
1	476	6.65	6.61	34.236	26.871	124.5	1.070	.79	11.5	65.5	2.91	36.9	.00			479
	500 ISL	6.50	6.45	34.252	26.904	121.5	1.099	.70	10.2							504
1	554	6.18	6.13	34.292	26.976	115.1	1.162	.52	7.5	74.1	3.05	38.3	.00			557

RV NEW HORIZON — CALCOFI CRUISE 3410 — STATION 110 100

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
27 37.8 N	120 15.3 W	06/11/34	0607 GMT	4008 M	320	12 KT	310 15 11		1017.0 MB	18.0 C	15.0 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	20.16	20.16	33.737	23.796	409.4	.000	5.37	103.5							0
1	1	20.16	20.16	33.737	23.796	409.5	.004	5.37	103.5	2.4	.24	.0	.00	.05	.02	1
	10 ISL	20.18	20.17	33.735	23.791	410.4	.041	5.37	103.5							10
1	11	20.18	20.17	33.735	23.791	410.4	.045	5.37	103.5	2.6	.32	.0	.00	.05	.02	11
	20 ISL	20.18	20.18	33.736	23.790	410.9	.082	5.44	104.9							20
1	26	20.19	20.19	33.736	23.790	411.1	.105	5.48	105.7	2.6	.26	.0	.00	.05	.02	26
	30 ISL	20.19	20.18	33.737	23.790	411.3	.123	5.44	104.9							30
1	41	20.20	20.19	33.739	23.789	411.7	.168	5.36	103.4	2.5	.24	.0	.00	.06	.03	41
	50 ISL	19.82	19.81	33.766	23.873	404.1	.205	5.49	105.0							50
1	56	19.57	19.56	33.753	23.927	399.1	.229	5.63	107.3	2.4	.26	.0	.00	.12	.08	56
1	66	17.75	17.74	33.635	24.269	366.7	.267	5.96	109.6	2.4	.26	.0	.00	.14	.11	66
	75 ISL	17.02	17.00	33.570	24.417	352.8	.300	5.98	108.4							75
1	76	16.97	16.95	33.569	24.425	351.9	.303	5.99	108.3	2.4	.27	.0	.00	.14	.16	76
1	91	15.75	15.74	33.554	24.695	326.7	.353	5.72	101.2	2.9	.34	.0	.04	.09	.15	91
	100 ISL	15.06	15.05	33.569	24.859	312.6	.383	5.52	96.3							101
1	106	14.68	14.66	33.554	24.931	304.5	.400	5.39	93.3	4.2	.47	.1	.16	.06	.11	106
1	120	13.84	13.82	33.630	25.143	284.6	.441	5.03	85.6	6.1	.69	2.5	.05	.04	.09	120
	125 ISL	13.48	13.46	33.639	25.223	277.1	.457	4.87	82.2							126
1	144	12.33	12.31	33.665	25.494	251.5	.508	4.19	69.1	11.9	1.09	11.4	.02	.01	.04	145
	150 ISL	12.11	12.09	33.736	25.567	244.7	.522	3.94	64.8							151
1	164	11.67	11.65	33.816	25.737	229.9	.556	3.36	54.7	18.2	1.49	17.2	.00	.01	.03	165
1	183	11.14	11.11	33.893	25.894	214.2	.598	2.99	48.1	21.9	1.71	20.3	.00			184
	200 ISL	10.85	10.83	34.027	26.049	199.8	.632	2.49	39.9							201
1	203	10.80	10.78	34.051	26.077	197.3	.639	2.41	38.6	26.6	1.96	23.3	.00			204
1	232	10.05	10.02	34.100	26.245	181.6	.693	2.46	38.7	29.8	2.05	24.8	.01			233
	250 ISL	10.13	10.10	34.241	26.343	172.7	.725	1.83	28.9							252
1	271	10.28	10.24	34.401	26.443	163.9	.760	1.04	16.5	36.8	2.54	28.3	.00			272
	300 ISL	9.63	9.59	34.383	26.538	155.1	.807	1.09	17.0							302
1	328	8.81	8.78	34.298	26.604	149.0	.850	1.13	17.3	44.6	2.60	30.8	.00			330
	400 ISL	7.87	7.83	34.271	26.727	138.1	.953	1.00	15.0							403
1	403	7.84	7.80	34.270	26.730	137.7	.956	.99	14.8	53.6	2.75	33.4	.00			405
1	477	7.39	7.34	34.379	26.881	124.3	1.054	.36	5.3	63.6	3.02	35.8	.00			480
	500 ISL	7.16	7.11	34.379	26.914	120.9	1.082	.35	5.2							504
1	555	6.43	6.38	34.347	26.988	114.3	1.147	.34	4.9	74.4	3.13	38.9	.00			558

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 60 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
37°15.2'N	124°19.6'W	10/19/84	1909 GMT	24 m	1200 - 1800 PST	1202 PST	1800 PST	319.7 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	93	4.1	4.0	4.1	0.18					0.20	0.08
17	34	6.5	6.7	6.6	0.23					0.36	0.07
20	29	6.9	7.2	7.1	0.19					0.31	0.11
30	15	-	-	-	-					0.38	0.18
55	3.5	2.7	2.7	2.7	0.15					0.51	0.36
75	0.80	1.2	0.99	1.1	0.12					0.21	0.15

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 62 88

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
36°19.3'N	125°19.1'W	10/20/84	1923 GMT	13 m	1207 - 1759 PST	1206 PST	1757 PST	348.8 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
1	93	8.7	8.0	8.3	0.20					0.59	0.21
9	34	12.4	12.6	12.5	0.29	1.9	0.28	0.0	0.02	0.60	0.19
11	29	13.7	11.6	12.6	0.23	2.0	0.26	0.0	0.02	0.61	0.15
16	15	-	-	-	-	2.1	0.28	0.0	0.03	0.64	0.34
30	3.5	4.8	4.4	4.6	0.20	2.0	0.30	0.0	0.02	0.63	0.24
41	0.80	8.5	7.3	7.9	0.17	3.0	0.39	1.0	0.11	0.56	0.33

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 63 52

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
37°19.0'N	122°37.7'W	10/21/84	1823 GMT	6 m	1200 - 1745 PST	1155 PST	1743 PST	1391.0 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
1	93	79.7	90.4	85.1	0.44					5.22	1.30
5	34	120.5	115.7	118.1	0.54					4.80	1.43
6	29	127.4	128.8	128.1	0.59					4.63	1.70
8	15	-	-	-	-					4.63	1.82
15	3.5	3.0	21.4	12.2	0.35					4.41	1.53
20	0.80	44.4	47.1	45.8	1.30					2.47	1.77

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 67 49

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
36°49.1'N	121°59.4'W	10/18/84	1817 GMT	10 m	1154 - 1753 PST	1154 PST	1751 PST	493.7 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	93	28.2	32.9	30.5	0.25					1.01	0.54
8	34	24.2	26.5	25.4	0.27					1.08	0.55
9	29	20.6	20.9	20.7	0.26					1.05	0.57
13	15	-	-	-	-					1.11	0.56
24	3.5	4.0	3.9	3.9	0.23					1.03	0.58
32	0.80	11.0	11.2	11.1	0.22					0.81	0.53

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 67 80

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
35°47.9'N	124°11.6'W	10/17/84	1928 GMT	16 m	1202 - 1756 PST	1202 PST	1756 PST	458.8 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
1	93	2.7	3.8	3.2	0.18					0.68	0.17
11	34	12.7	11.9	12.3	0.19					0.66	0.13
13	29	14.3	13.7	14.0	0.21					0.64	0.21
20	15	-	-	-	-					0.67	0.18
37	3.5	8.7	8.5	8.6	0.17					0.76	0.30
50	0.80	3.8	3.9	3.8	0.17					0.40	0.34

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 70 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
35°52.6'N	122°22.0'W	10/16/84	1929 GMT	10 m	1250 - 1800 PST	1154 PST	1753 PST	528.6 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
1	93	33.9	33.8	33.9	0.33					-	-
8	34	24.5	24.2	24.4	0.49					1.98	0.54
9	29	19.9	22.2	21.0	0.27					1.92	0.51
13	15	-	-	-	-					2.19	0.53
24	3.5	4.1	3.6	3.9	0.23					2.30	0.57
32	0.80	16.2	16.7	16.4	0.24					2.29	0.71

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 73 65

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
35°08.8'N	122°21.2'W	10/22/84	1917 GMT	17 m	1151 - 1754 PST	1153 PST	1754 PST	182.2 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	93	2.2	2.1	2.1	0.19	0.0	0.29	0.0	0.00	0.34	0.19
12	34	5.4	5.4	5.4	0.20	0.0	0.29	0.0	0.00	0.35	0.18
14	29	6.6	6.0	6.3	0.24	0.0	0.28	0.0	0.00	0.33	0.20
21	15	-	-	-	-	0.0	0.28	0.0	0.00	0.34	0.23
39	3.5	1.5	2.1	1.8	0.19	0.0	0.29	0.0	0.00	0.35	0.16
53	0.80	1.9	2.0	1.9	0.14	0.0	0.46	1.5	0.29	0.31	0.39

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 74 96

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33°54.8'N	124°21.5	10/23/84	1917 GMT	26 m	1158 - 1753 PST	1201 PST	1753 PST	179.3 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	93	1.1	1.3	1.2	0.17	0.0	0.29	0.0	0.00	0.09	0.04
18	34	2.2	2.4	2.3	0.19	0.0	0.30	0.0	0.00	0.10	0.05
22	29	2.6	2.6	2.6	0.22	0.0	0.32	0.0	0.00	0.10	0.05
32	15	-	-	-	-	0.0	0.28	0.0	0.00	0.09	0.06
59	3.5	2.3	2.6	2.4	0.15	0.0	0.28	0.0	0.00	0.25	0.10
82	0.80	1.5	1.6	1.6	0.12	0.0	0.35	0.0	0.03	0.34	0.26

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 77 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
34°23.4'N	122°15.1'W	10/13/84	1949 GMT	17 m	1216 - 1804 PST	1155 PST	1804 PST	269.2 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	93	5.3	5.0	5.2	0.18					0.19	0.07
12	34	5.9	5.1	5.5	0.19					0.21	0.06
14	28	5.8	5.8	5.8	0.20					0.22	0.07
21	15	6.1	5.6	5.9	0.19					0.37	0.08
39	3.5	6.0	5.9	6.0	0.18					1.15	0.27
53	0.80	0.54	0.56	0.55	0.12					0.29	0.32

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 80 55

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
34°18.9'N	120°50.3'W	10/12/84	1920 GMT	10 m	1148 - 1756 PST	1149 PST	1756 PST	355.3 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	93	8.6	11.4	10.0	0.28					0.68	0.27
8	34	17.6	16.7	17.2	0.31					0.67	0.28
9	28	20.0	16.9	18.5	0.37					0.68	0.31
13	15	13.0	11.9	12.4	0.34					0.69	0.32
24	3.5	10.6	9.4	10.0	0.35					1.64	0.90
32	0.80	1.5	2.0	1.8	0.29					2.34	1.18

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 80 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
34°09.2'N	121°08.9'W	10/11/84	1826 GMT	26 m	1153 - 1803 PST	1151 PST	1800 PST	303.8 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
1	93	1.6	1.8	1.7	0.13					0.13	0.07
18	34	5.0	4.8	4.9	0.15					0.15	0.08
22	28	5.8	6.1	6.0	0.16					0.15	0.07
32	15	3.8	4.9	4.4	0.16					0.18	0.10
59	3.5	4.3	4.5	4.4	0.18					0.84	0.38
82	0.80	0.26	0.21	0.24	0.09					0.16	0.23

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 80 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33°48.0'N	121°51.2'W	10/10/84	1813 GMT	30 m	1152 - 1803 PST	1154 PST	1803 PST	484.9 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	93	0.97	1.0	1.0	0.15					0.11	0.03
21	34	3.6	3.5	3.6	0.17					0.11	0.04
25	28	4.5	4.6	4.5	0.17					0.11	0.04
37	15	16.3	16.8	16.6	0.22					1.11	0.34
69	3.5	1.0	1.1	1.0	0.14					0.18	0.28
94	0.80	0.08	0.08	0.08	0.10					0.02	0.07

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 80 100

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°50.4'N	123°57.1'W	10/09/84	1826 GMT	26 m	1154 - 1809 PST	1202 PST	1807 PST	172.0 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
1	93	0.74	0.66	0.70	0.13					0.10	0.03
18	34	2.4	2.1	2.2	0.14					0.10	0.04
22	28	2.9	3.0	3.0	0.15					0.11	0.03
32	15	2.2	2.0	2.1	0.18					0.09	0.07
59	3.5	2.9	3.0	3.0	0.13					0.43	0.21
82	0.80	0.61	0.68	0.64	0.10					0.21	0.29

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 82 45

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
34°19.0'N	119°53.7'W	10/07/84	1833 GMT	15 m	1200 - 1758 PST	1148 PST	1758 PST	869.5 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
1	93	19.7	14.4	17.1	0.25					0.41	0.13
11	34	18.1	17.3	17.7	0.32					0.52	0.16
12	28	17.8	17.6	17.7	0.42					0.55	0.16
19	15	48.1	47.5	47.8	0.55					2.51	0.68
34	3.5	5.2	5.0	5.1	0.23					0.69	0.53
47	0.80	0.35	0.22	0.29	0.16					0.13	0.19

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 83 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33°34.8'N	120°47.0'W	10/08/84	1737 GMT	17 m	1140 - 1807 PST	1151 PST	1807 PST	200.3 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	93	0.50	1.0	0.75	0.15					0.22	0.10
12	34	6.7	7.7	7.2	0.18					0.24	0.08
14	28	7.0	7.0	7.0	0.22					0.25	0.08
21	15	6.2	6.3	6.2	0.21					0.26	0.09
39	3.5	2.2	2.1	2.2	0.21					0.40	0.17
53	0.80	0.61	0.65	0.63	0.13					0.42	0.45

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 83 100

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°14.8'N	123°29.9'W	10/05/84	1905 GMT	31 m	1159 - 1817 PST	1202 PST	1816 PST	187.0 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
1	93	0.16	0.13	0.14	0.13					0.10	0.03
22	34	2.8	3.1	2.9	0.18					0.12	0.04
26	28	3.6	3.6	3.6	0.22					0.12	0.04
38	15	4.0	3.7	3.9	0.20					0.17	0.05
72	3.5	0.86	1.1	1.0	0.12					0.26	0.20
98	0.80	0.05	0.06	0.05	0.10					0.02	0.04

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 87 40

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33°39.5'N	118°58.4'W	10/03/84	1843 GMT	25 m	1156 - 1815 PST	1149 PST	1800 PST	322.2 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	93	1.1	1.2	1.2	0.21					0.13	0.03
18	34	4.7	4.5	4.6	0.22					0.14	0.03
21	28	5.7	5.8	5.7	0.25					0.22	0.02
31	15	9.0	8.5	8.8	0.21					0.58	0.22
57	3.5	2.6	2.8	2.7	0.14					0.50	0.38
80	0.80	0.30	0.26	0.28	0.13					0.17	0.17

RV DAVID STARR JORDAN — CALCOFI CRUISE 8410 — STATION 87 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°39.7'N	121°03.9'W	10/04/84	1804 GMT	33 m	1142 - 1823 PST	1143 PST	1810 PST	188.1 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	93	0.57	0.31	0.44	0.13					0.08	0.03
22	34	2.6	2.7	2.7	0.14					0.08	0.02
26	28	2.7	2.7	2.7	0.14					0.13	0.03
40	15	3.7	3.9	3.8	0.19					0.35	0.07
75	3.5	0.96	0.96	0.96	0.11					0.28	0.24
103	0.80	0.12	0.12	0.12	0.09					0.09	0.09

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 90 45

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°55.3'N	118°56.6'W	10/19/84	1902 GMT	16 m	1133 - 1744 PST	1141 PST	1744 PST	259.1 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	95	4.6	4.0	4.3	0.18					0.33	0.05
9	38	9.3	9.3	9.3	0.17					0.34	0.04
12	30	3.3	4.1	3.7	0.17					0.33	0.07
17	17	4.3	-	4.3	0.19					0.42	0.04
34	4	5.8	6.3	6.1	0.16					1.13	0.19
55	0.50	0.66	0.48	0.57	0.11					0.29	0.28

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 90 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°25.2'N	119°58.0'W	10/20/84	1900 GMT	24 m	1140 - 1747 PST	1145 PST	1747 PST	150.8 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	95	0.39	0.20	0.30	0.13					0.11	0.01
14	38	3.3	3.3	3.3	0.15					0.11	0.01
18	30	1.7	1.9	1.8	0.14					0.11	0.01
27	17	2.3	2.3	2.3	0.13					0.11	0.01
50	4	2.1	1.9	2.0	0.14					0.22	0.05
82	0.50	0.97	0.97	0.97	0.10					0.32	0.22

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 90 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°04.9'N	120°38.4'W	10/21/84	1909 GMT	22 m	1146 - 1735 PST	1146 PST	1747 PST	80.1 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	95	0.28	0.25	0.26	0.12					0.11	0.00
13	38	2.9	3.0	3.0	0.14					0.11	0.00
16	30	1.5	1.7	1.6	0.13					0.11	0.01
25	17	1.3	1.4	1.4	0.13					0.10	0.00
46	4	0.49	0.51	0.50	0.15					0.11	0.00
77	0.50	0.70	0.70	0.70	0.10					0.43	0.23

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 90 100

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
31°06.1'N	122°40.7'W	10/22/84	1830 GMT	23 m	1154 - 1750 PST	1154 PST	1755 PST	101.4 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	95	0.51	0.41	0.46	0.10					0.13	0.00
13	38	3.4	3.2	3.3	0.11					0.15	0.00
17	30	1.5	1.4	1.5	0.11					0.15	0.01
27	17	1.8	1.4	1.6	0.12					0.17	0.02
48	4	1.2	1.0	1.1	0.11					0.18	0.06
80	0.50	0.31	0.43	0.37	0.08					0.31	0.21

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 93 26

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°57.3'N	117°16.9'W	10/18/84	1848 GMT	*	1139 - 1740 PST	1138 PST	1740 PST	67.5 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	95	5.4	6.5	6.0	0.22					0.25	0.04
15	38	2.7	3.3	3.0	0.16					0.48	0.13

* The secchi depth was estimated to be 25 m. The bottom depth was shallower than this.

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 93 30

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°51.6'N	117°31.5'W	10/25/84	1800 GMT	31 m	1137 - 1650 PST	1137 PST	1735 PST	151.4 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	95	1.4	1.1	1.2	0.12					0.14	0.01
20	38	5.9	5.9	5.9	0.14					0.15	0.02
24	30	1.7	1.5	1.6	0.12					0.18	0.00
36	17	1.2	1.1	1.1	0.12					0.22	0.10
66	4	0.88	0.75	0.82	0.10					0.22	0.25
108	0.50	0.06	0.24	0.15	0.10					0.03	0.05

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 93 35

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°41.6'N	117°51.5'W	10/24/84	1830 GMT	34 m	1134 - 1734 PST	1136 PST	1734 PST	205.0 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	95	0.94	1.2	1.1	0.16					0.14	0.01
21	38	4.4	3.8	4.1	0.25					0.16	0.02
27	30	2.5	2.6	2.6	0.19					0.23	0.03
39	17	2.9	2.9	2.9	0.18					0.53	0.16
72	4	1.1	1.3	1.2	0.09					0.21	0.29
119	0.50	0.06	0.06	0.06	0.07					0.03	0.05

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 93 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
31°33.9'N	120°16.6'W	10/23/84	1854 GMT	31 m	1145 - 1746 PST	1145 PST	1746 PST	207.2 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	95	0.40	0.35	0.38	0.12					0.09	0.01
20	38	2.4	2.4	2.4	0.18					0.10	0.02
24	30	0.85	0.91	0.88	0.14					0.09	0.02
36	17	0.97	0.68	0.82	0.14					0.10	0.02
66	4	3.9	4.3	4.1	0.12					0.57	0.22
108	0.50	0.13	0.13	0.13	0.08					0.09	0.09

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 97 29

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°17.5'N	117°04.6'W	10/26/84	1900 GMT	28 m	1133 - 1731 PST	1132 PST	1731 PST	

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	95	7.2	5.4	6.3	0.14	2.6	0.33	0.0	0.00	0.72	0.37
39						6.2	0.67	3.3	0.24	0.15	0.04

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 97 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
31°15.5'N	119°10.5'W	10/27/84	1858 GMT	29 m	1141 - 1737 PST	1141 PST	1737 PST	139.5 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	95	0.25	0.16	0.20	0.13					0.09	0.01
18	38	3.0	2.9	3.0	0.16					0.09	0.01
23	30	0.84	0.99	0.92	0.16					0.08	0.02
33	17	1.0	0.90	0.97	0.15					0.07	0.03
62	4	2.0	2.0	2.0	0.16					0.23	0.09
101	0.50	0.46	0.51	0.48	0.09					0.22	0.20

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 97 100

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
29°55.6'N	121°50.7'W	10/28/84	1838 GMT	27 m	1151 - 1748 PST	1151 PST	1748 PST	106.5 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	95	0.61	0.68	0.64	0.13					0.11	0.01
16	38	3.2	3.3	3.3	0.15					0.10	0.02
20	30	1.1	1.2	1.2	0.16					0.09	0.02
31	17	0.91	0.81	0.86	0.12					0.10	0.02
57	4	1.0	1.4	1.2	0.15					0.16	0.05
93	0.50	0.37	0.34	0.35	0.08					0.21	0.19

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 100 35

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
31°31.2'N	117°06.6'W	10/30/84	1830 GMT	29 m	1132 - 1725 PST	1132 PST	1725 PST	342.8 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	95	2.3	2.1	2.2	0.14					0.15	0.04
17	38	6.8	7.0	6.9	0.16					0.16	0.03
23	30	4.1	3.9	4.0	0.15					0.21	0.05
33	17	6.5	6.4	6.4	0.21					0.46	0.22
62	4	2.5	2.5	2.5	0.10					0.28	0.36
101	0.50	0.17	0.12	0.15	0.09					0.02	0.05

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 100 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
30°21.5'N	119°28.0'W	10/29/84	1832 GMT	30 m	1142 - 1739 PST	1142 PST	1739 PST	182.5 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	95	0.75	0.50	0.63	0.13					0.08	0.02
18	38	3.1	2.8	2.9	0.13					0.10	0.02
24	30	1.7	1.6	1.7	0.14					0.08	0.02
35	17	1.6	2.1	1.8	0.14					0.08	0.02
64	4	2.4	2.4	2.4	0.12					0.25	0.14
105	0.50	0.36	0.38	0.37	0.08					0.07	0.13

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 103 45

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
30°36.3'N	117°26.3'W	10/31/84	1830 GMT	17 m	1136 - 1727 PST	1134 PST	1727 PST	121.4 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	95	0.71	0.69	0.70	0.14					0.17	0.03
10	38	6.5	6.6	6.6	0.16					0.15	0.03
12	30	2.6	2.7	2.7	0.14					0.15	0.03
20	17	2.4	2.2	2.3	0.15					0.15	0.04
36	4	1.5	1.3	1.4	0.13					0.28	0.10
60	0.50	0.78	0.77	0.77	0.10					0.45	0.38

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 103 86

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
29°15.6'N	120°09.9'W	11/01/84	1918 GMT	36 m	1144 - 1739 PST	1144 PST	1739 PST	139.3 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	95	0.30	0.34	0.32	0.12	2.3	0.27	0.1	0.00	0.05	0.02
23	38	3.0	3.1	3.1	0.14	2.3	0.26	0.1	0.00	0.07	0.02
28	30	1.4	1.4	1.4	0.14	2.3	0.25	0.1	0.00	0.06	0.02
42	17	0.98	1.0	1.0	0.15	2.3	0.26	0.1	0.00	0.07	0.03
76	4	1.2	1.1	1.2	0.11	2.4	0.30	0.1	0.00	0.09	0.07
126	0.50	0.17	0.18	0.18	0.08	8.7	0.88	8.4	0.02	0.05	0.11

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 107 45

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
30°01.4'N	117°01.6'W	11/03/84	1855 GMT	21 m	1132 - 1724 PST	1132 PST	1724 PST	175.2 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	95	0.98	1.2	1.1	0.16					0.14	0.02
12	38	5.5	5.6	5.6	0.18					0.13	0.04
15	30	1.9	2.0	2.0	0.17					0.13	0.03
24	17	2.6	2.3	2.5	0.17					0.12	0.04
44	4	2.9	3.0	2.9	0.21					0.32	0.14
73	0.50	0.51	0.50	0.50	0.14					0.15	0.24

RV NEW HORIZON — CALCOFI CRUISE 8410 — STATION 107 80

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
28°51.1'N	119°21.4'W	11/02/84	1933 GMT	29 m	1146 - 1736 PST	1141 PST	1736 PST	174.9 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	95	0.65	0.57	0.61	0.15					0.07	0.02
17	38	3.9	3.5	3.7	0.14					0.08	0.04
23	30	2.1	1.7	1.9	0.18					0.05	0.02
33	17	2.3	2.1	2.2	0.16					0.06	0.02
62	4	1.7	1.6	1.6	0.11					0.09	0.04
101	0.50	0.81	0.70	0.75	0.09					0.11	0.16

RV NEW HORIZON | CALCOFI CRUISE 8410 | STATION 110 40

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
29°37.4'N	116°20.2'W	11/04/84	1915 GMT	28 m	1131 - 1722 PST	1129 PST	1722 PST	278.0 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	95	2.6	2.3	2.4	0.14					0.10	0.02
17	38	2.7	2.8	2.8	0.19					0.11	0.04
22	30	3.5	3.9	3.7	0.18					0.10	0.04
32	17	4.4	2.8	3.6	0.15					0.11	0.06
59	4	4.0	4.0	4.0	0.11					0.31	0.29
97	0.50	0.15	0.12	0.13	0.08					0.02	0.10

RV NEW HORIZON | CALCOFI CRUISE 8410 | STATION 110 80

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
28°17.3'N	118°56.9'W	11/05/84	1900 GMT	42 m	1140 - 1733 PST	1140 PST	1733 PST	178.1 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	95	0.98	0.86	0.92	0.12					0.04	0.03
26	38	2.3	1.5	1.9	0.13					0.05	0.02
33	30	1.7	1.7	1.7	0.13					0.05	0.02
48	17	1.3	1.2	1.3	0.14					0.05	0.03
89	4	1.6	1.5	1.5	0.10					0.09	0.10
148	0.50	0.18	0.14	0.16	0.08					0.05	0.09

RV DAVID STARR JORDAN

CalCOFI Cruise 8410

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	10/19	0305	0311	106	49	650	650
60	52.5	37 51.8N 123 03.8W	10/19	0455	0504	160	78	519	519
60	55	37 46.8N 123 14.7W	10/19	0725	0747	414	209	258	258
60	60	37 36.8N 123 36.5W	10/19	1210	1231	407	207	179	179
60	70	37 16.9N 124 19.9W	10/19	1805	1827	407	209	145	145
60	80	36 56.8N 125 03.2W	10/20	0020	0042	435	210	46	46
60	90	36 36.8N 125 46.3W	10/20	0635	0657	381	218	163	163
60	100	36 16.9N 126 29.0W	10/20	1250	1312	427	211	54	54
63	52	37 18.6N 122 37.1W	10/21	1755	1804	168	88	214	214
63	55	37 12.6N 122 50.1W	10/21	1525	1547	411	218	163	163
63	60	37 02.6N 123 11.7W	10/21	1135	1157	454	212	115	115
63	70	36 42.6N 123 54.8W	10/21	0525	0547	391	215	381	181
63	80	36 22.6N 124 37.7W	10/20	2350	0012	421	215	33	33
67	49	36 49.2N 121 59.1W	10/18	1715	1737	407	210	143	143
67	50	36 47.2N 122 03.4W	10/18	1555	1617	418	209	89	89
67	55	36 37.5N 122 24.7W	10/18	1245	1307	417	207	190	190
67	60	36 27.2N 122 46.4W	10/18	0835	0857	440	212	145	145
67	70	36 07.2N 123 29.3W	10/18	0200	0222	404	215	173	173
67	80	35 47.2N 124 11.7W	10/17	2005	2027	413	213	58	58
70	51	36 10.7N 121 43.9W	10/16	1225	1236	212	98	104	104
70	53	36 06.9N 121 52.1W	10/16	1515	1537	422	212	85	85
70	60	35 52.9N 122 21.9W	10/16	2145	2207	433	212	35	35
70	70	35 32.9N 123 04.4W	10/17	0430	0452	438	219	39	39
73	50	35 38.6N 121 15.3W	10/16	0500	0504	67	28	45	45
"	"	" "	10/22	0820	0824	69	28	58	58
73	53	35 32.6N 121 28.1W	10/22	1125	1147	411	209	73	73
73	60	35 18.9N 121 57.5W	10/22	1600	1622	409	209	78	78
73	70	34 58.6N 122 39.9W	10/22	2320	2342	413	211	32	32
73	80	34 38.6N 123 21.9W	10/23	0455	0517	395	215	51	51
73	90	34 18.6N 124 03.7W	10/23	1040	1102	408	216	37	37
73	100	33 58.6N 124 45.4W	10/23	1605	1627	430	221	23	23
77	48	35 07.3N 120 42.4W	10/13	0405	0408	63	27	32	32
77	51	35 01.3N 120 55.1W	10/13	0635	0657	430	210	79	79
77	55	34 53.3N 121 11.9W	10/13	1025	1047	391	213	56	56
77	60	34 43.4N 121 32.8W	10/13	1450	1512	419	216	26	26
77	70	34 23.3N 122 14.8W	10/13	2145	2207	415	211	14	14
77	80	34 03.3N 122 56.5W	10/14	0335	0357	423	216	59	59
80	51	34 27.0N 120 31.4W	10/12	2225	2233	159	70	44	44
80	55	34 19.0N 120 48.1W	10/12	1825	1847	418	214	62	62
80	60	34 09.0N 121 09.0W	10/11	1910	1932	415	209	53	53
"	"	" "	10/11	1935	1956	411	230	63	63
"	"	" "	10/11	2005	2027	404	208	42	42
"	"	" "	10/12	0105	0127	418	212	62	62
"	"	" "	10/12	0135	0157	427	180	49	49
"	"	" "	10/12	0205	0226	406	214	99	99
"	"	" "	10/12	0707	0729	474	219	80	80
"	"	" "	10/12	0740	0802	428	212	112	112
"	"	" "	10/12	0805	0826	433	205	86	86
"	"	" "	10/12	1220	1241	499	198	82	82
"	"	" "	10/12	1250	1311	381	205	79	79

RV DAVID STARR JORDAN

CalCOFI Cruise 8410

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)
"	"	" "	10/12	1320	1342	449	201	69	69
80	70	33 49.0N 121 50.6W	10/10	1330	1352	425	212	158	158
"	"	" "	10/10	1405	1426	413	214	99	99
"	"	" "	10/10	1435	1457	415	212	55	55
"	"	" "	10/10	1935	1957	414	191	237	237
"	"	" "	10/10	2000	2022	434	189	74	74
"	"	" "	10/10	2030	2052	428	183	58	58
"	"	" "	10/11	0100	0121	401	211	192	192
"	"	" "	10/11	0125	0147	428	211	341	341
"	"	" "	10/11	0155	0217	404	202	191	191
"	"	" "	10/11	0710	0732	423	194	258	258
"	"	" "	10/11	0735	0757	418	189	91	91
"	"	" "	10/11	0825	0847	438	186	139	139
80	80	33 29.0N 122 32.0W	10/10	0630	0652	430	215	65	65
80	90	33 09.0N 123 13.3W	10/10	0015	0037	421	209	5	5
80	100	32 49.3N 123 54.4W	10/09	1715	1737	432	211	23	23
82	46	34 16.2N 119 56.5W	10/07	2045	2107	379	221	63	63
83	40.6	34 13.5N 119 24.7W	10/08	0040	0044	69	27	320	320
83	42	34 10.7N 119 30.5W	10/08	0300	0317	300	158	73	73
83	51	33 52.6N 120 08.0W	10/08	0834	0845	217	96	78	78
83	55	33 44.6N 120 24.4W	10/08	1235	1257	421	210	83	83
83	60	33 34.7N 120 45.3W	10/08	1627	1648	393	213	53	53
83	70	33 14.7N 121 26.6W	10/08	2220	2242	393	215	25	25
83	80	32 54.7N 122 07.6W	10/09	0355	0417	421	213	90	90
83	90	32 34.7N 122 48.7W	10/09	0923	0945	412	216	82	82
83	100	32 14.7N 123 29.5W	10/05	1900	1922	412	216	32	32
"	"	" "	10/05	1930	1952	400	195	30	30
"	"	" "	10/05	1955	2016	386	201	21	21
"	"	" "	10/06	0100	0122	396	207	66	66
"	"	" "	10/06	0130	0152	392	207	31	31
"	"	" "	10/06	0155	0216	382	198	34	34
"	"	" "	10/06	0830	0852	412	180	63	63
"	"	" "	10/06	0915	0937	399	198	63	63
"	"	" "	10/06	0945	1007	406	189	87	87
"	"	" "	10/06	1255	1317	420	205	57	57
"	"	" "	10/06	1325	1347	401	205	47	47
"	"	" "	10/06	1355	1416	397	201	35	35
87	33	33 53.2N 118 29.7W	10/03	0940	0946	102	52	118	118
87	35	33 49.5N 118 37.6W	10/03	1310	1332	406	210	54	54
87	40	33 39.5N 118 58.4W	10/03	1735	1757	389	213	18	18
87	45	33 29.4N 119 19.2W	10/03	2235	2257	406	220	25	25
87	50	33 19.2N 119 39.6W	10/04	0220	0228	147	71	82	82
87	55	33 09.4N 120 00.4W	10/04	0620	0642	404	214	270	270
87	60	32 59.4N 120 21.0W	10/04	1100	1122	409	210	152	152
87	70	32 39.4N 121 02.0W	10/04	1655	1717	389	209	275	275
87	80	32 19.2N 121 42.9W	10/04	2320	2342	409	211	147	147
87	90	31 59.4N 122 23.6W	10/05	0530	0553	406	213	84	84
87	100	31 39.3N 123 04.1W	10/05	1205	1227	399	208	60	60

RV NEW HORIZON

CalCOFI Cruise 8410

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	10/19	0035	0040	94	41	95	95
90	30	33 24.8N 117 55.6W	10/19	0345	0407	449	195	60	60
90	35	33 14.4N 118 15.2W	10/19	0700	0722	405	211	62	62
90	37	33 10.9N 118 23.6W	10/19	1010	1032	427	212	49	49
90	45	32 55.1N 118 56.8W	10/19	1510	1532	456	189	13	13
"	"	32 55.0N 118 58.0W	10/19	1630	1652	452	208	27	27
"	"	32 57.9N 119 00.0W	10/19	2200	2221	425	189	33	33
"	"	32 58.5N 119 01.1W	10/19	2255	2317	453	180	24	24
"	"	32 59.8N 119 02.0W	10/19	2320	2344	459	185	17	17
"	"	32 55.6N 118 59.0W	10/20	0240	0301	476	172	50	50
"	"	32 55.4N 118 59.8W	10/20	0315	0337	494	151	69	69
"	"	32 55.5N 118 58.0W	10/20	0343	0411	430	198	130	130
"	"	32 55.9N 118 59.2W	10/20	0820	0841	425	197	42	42
"	"	32 56.1N 119 00.4W	10/20	0943	1005	487	193	29	29
90	53	32 39.1N 119 30.7W	10/20	1505	1527	449	210	22	22
90	90	31 26.1N 122 00.3W	10/22	1152	1214	459	192	35	35
90	100	31 05.6N 122 40.5W	10/22	1740	1802	414	213	10	10
93	26.7	32 57.7N 117 18.5W	10/25	2120	2128	134	66	37	37
93	29	32 52.6N 117 28.0W	10/25	1832	1854	407	211	34	34
93	30	32 51.1N 117 32.8W	10/24	2032	2054	409	199	34	34
"	"	32 51.3N 117 32.7W	10/24	2105	2126	388	193	52	52
"	"	32 51.0N 117 33.6W	10/24	2140	2201	396	212	56	56
"	"	32 49.7W 117 30.5W	10/25	0210	0231	380	191	111	111
"	"	32 50.1N 117 31.2W	10/25	0242	0303	396	172	116	116
"	"	32 50.2N 117 31.1W	10/25	0318	0339	402	172	109	109
"	"	32 50.2N 117 32.6W	10/25	0819	0840	400	169	110	110
"	"	32 51.3W 117 33.1W	10/25	1010	1031	398	205	113	113
"	"	32 51.5N 117 33.3W	10/25	1045	1106	387	223	114	114
"	"	32 50.6N 117 30.7W	10/25	1402	1423	376	181	112	112
"	"	32 50.8N 117 31.4W	10/25	1440	1501	385	184	39	39
"	"	32 51.0N 117 31.7W	10/25	1515	1537	368	198	38	38
93	35	32 41.0N 117 52.4W	10/24	1702	1724	438	201	23	23
93	40	32 31.6N 118 13.4W	10/24	1430	1452	410	207	15	15
93	45	32 21.7N 118 33.5W	10/24	1059	1121	421	218	43	43
93	50	32 10.8N 118 55.0W	10/24	0710	0732	429	203	49	49
93	55	32 00.3N 119 14.9W	10/24	0330	0352	410	201	61	61
93	60	31 50.9N 119 34.9W	10/24	0000	0022	400	212	48	48
93	70	31 33.2N 120 16.0W	10/23	1740	1802	424	194	205	205
93	80	31 11.9N 120 55.8W	10/23	1129	1151	429	204	154	154
93	90	30 52.0N 121 36.0W	10/23	0535	0557	429	212	56	56
93	100	30 31.4N 122 16.0W	10/22	2335	2357	417	209	29	29
97	29	32 17.6N 117 06.1W	10/26	2002	2007	89	44	56	56
97	30	32 14.9N 117 08.7W	10/26	2118	2124	87	43	81	81
97	32	32 11.2N 117 17.1W	10/26	2254	2316	401	197	30	30
97	35	32 04.1N 117 29.8W	10/27	0206	0228	414	188	77	77
97	40	31 54.9N 117 49.8W	10/27	0531	0553	413	209	78	78
97	45	31 44.9N 118 10.8W	10/27	0906	0928	410	213	54	54
97	50	31 35.4N 118 30.7W	10/27	1242	1303	373	218	37	37
97	55	31 25.3N 118 51.2W	10/27	1620	1642	404	214	25	25
97	60	31 16.2N 119 11.8W	10/27	2002	2024	436	213	438	14

RV NEW HORIZON

CalCOFI Cruise 8410

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)
97	70	30 55.9N 119 51.3W	10/28	0153	0215	419	210	100	100
97	80	30 35.8N 120 31.3W	10/28	0729	0751	447	215	34	34
97	90	30 17.8N 121 11.4W	10/28	1343	1405	453	195	22	22
97	100	29 56.4N 121 51.3W	10/28	1940	2002	439	211	23	23
100	29.2	31 42.4N 116 43.6W	10/30	2345	2354	152	72	73	73
100	30	31 40.9N 116 47.0W	10/30	2207	2229	397	213	30	30
100	35	31 31.1N 117 08.0W	10/30	1835	1857	397	209	5	5
100	40	31 21.4N 117 27.9W	10/30	1448	1510	405	206	22	22
100	45	31 11.2N 117 47.4W	10/30	1103	1125	412	211	73	73
100	50	31 01.9N 118 07.8W	10/30	0720	0742	415	211	58	58
100	55	30 50.9N 118 28.7W	10/30	0344	0406	412	210	51	51
100	60	30 41.9N 118 48.8W	10/30	0010	0033	457	203	72	72
100	70	30 21.8N 119 28.2W	10/29	1835	1857	414	216	203	203
100	80	30 02.3N 120 08.5W	10/29	1254	1318	467	192	28	28
100	90	29 41.3N 120 48.0W	10/29	0703	0725	416	217	70	70
100	100	29 22.3N 121 28.0W	10/29	0122	0146	449	209	29	29
103	29	31 08.8N 116 20.5W	10/31	0601	0605	64	28	109	109
103	30	31 06.7N 116 24.4W	10/31	0700	0707	116	54	156	156
103	35	30 57.3N 116 45.7W	10/31	1036	1058	437	211	37	37
103	40	30 47.6N 117 05.7W	10/31	1414	1437	438	207	9	9
103	45	30 36.7N 117 25.5W	10/31	1740	1802	430	214	5	5
103	50	30 26.9N 117 45.4W	10/31	2146	2208	443	210	32	32
103	55	30 16.4N 118 05.4W	11/1	0117	0140	420	213	38	38
103	60	30 06.9N 118 25.3W	11/1	0443	0505	415	209	48	48
103	70	29 47.0N 119 05.8W	11/1	1043	1106	442	211	27	27
103	80	29 27.5N 119 44.8W	11/1	1600	1622	422	210	36	36
103	90	29 06.9N 120 23.8W	11/1	2156	2218	423	209	14	14
103	100	28 48.4N 121 03.9W	11/2	0328	0350	417	201	60	60
107	31	30 29.0N 116 05.4W	11/4	0723	0725	35	15	116	116
107	32	30 27.0N 116 10.1W	11/4	0601	0619	325	170	43	43
107	35	30 22.0N 116 22.7W	11/4	0322	0344	397	212	23	23
107	40	30 11.9N 116 42.1W	11/3	2340	0002	427	221	16	16
107	45	30 01.9N 117 02.2W	11/3	1956	2018	430	210	9	9
107	50	29 51.9N 117 26.6W	11/3	1552	1614	433	209	9	9
107	55	29 41.6N 117 41.6W	11/3	1136	1158	430	214	23	23
107	60	29 31.7N 118 02.8W	11/3	0743	0805	432	215	23	23
107	70	29 12.2N 118 41.3W	11/3	0224	0246	410	215	41	41
107	80	28 51.6N 119 21.7W	11/2	2028	2050	409	212	24	24
107	90	28 32.5N 120 00.0W	11/2	1500	1522	419	209	24	24
107	100	28 11.9N 120 39.0W	11/2	0928	0950	415	209	34	34
110	32.4	29 50.4N 115 50.0W	11/4	1237	1243	98	43	489	489
110	35	29 48.0N 116 00.0W	11/4	1507	1529	436	203	16	16
110	40	29 37.2N 116 20.8W	11/4	1923	1945	427	210	12	12
110	45	29 27.9N 116 39.5W	11/4	2254	2316	418	214	34	34
110	50	29 17.4N 116 59.8W	11/5	0229	0251	445	199	49	49
110	55	29 07.6N 117 20.5W	11/5	0554	0616	425	206	49	49
110	60	28 57.6N 117 39.1W	11/5	0916	0938	425	209	47	47
110	70	28 36.2N 118 21.5W	11/5	1436	1458	445	204	25	25
110	80	28 17.1N 118 56.7W	11/5	1958	2020	431	209	30	30
110	90	27 58.0N 119 36.9W	11/6	0104	0126	436	208	18	18
110	100	27 37.1N 120 15.7W	11/6	0628	0650	423	215	90	54

DISTRIBUTION LIST

INTER-AMERICAN TROPICAL TUNA COMMISSION
(C/O SCRIPPS INSTITUTION OF OCEANOGRAPHY)

DR. JAMES JOSEPH

NATIONAL MARINE FISHERIES SERVICE
(C/O SCRIPPS INSTITUTION OF OCEANOGRAPHY)

DIRECTOR'S OFFICE

MR. RON DOTSON

DR. REUBEN LASKER

DR. A. ALVARINO DE LEIRA

LIBRARY (2)

MR. RONALD LYNN

DR. GEOFFREY MOSER

DR. ROBERT OWEN, JR.

MR. NELSON C. ROSS, JR.

DR. PAUL SMITH

SCRIPPS INSTITUTION OF OCEANOGRAPHY

DR. LAURENCE ARMI

DR. EDWARD BRINTON

DR. RICHARD W. EPPLEY

DR. ABRAHAM FLEMINGER

DR. JORIS M. T. M. GIESKES

DR. LOREN R. HAURY

DR. THOMAS L. HAYWARD

MRS. KITTIE KUHNS

LIBRARY, SIO (DR. PETER BRUEGGEMAN)

LIBRARY, SIO (STELLA WADE) (4)

MR. ARNOLD W. MANTYLA

DR. JOHN A. McGOWAN

DR. W. A. NIERENBERG

DR. PEARN P. NIILER

PROF. JOSEPH L. REID

DR. RICHARD H. ROSENBLATT

DR. JAMES J. SIMPSON

DR. KENNETH L. SMITH

MR. GEORGE H. SNYDER

DR. ROBERT E. STEVENSON

DR. MIZUKI TSUCHIYA

AFRICA

M. Henri Rotschi
Centre de Recherches
Oceanographiques
29, Rue des Pecheurs
B.P.V. 18 - Abidjan
Republique de Cote d'Ivoire

AUSTRALIA

Dr. John A. T. Bye
Flinders Institute for Atmospheric
and Marine Sciences
The Flinders University of S.A.
Bedford Park 5042, S.A.
Australia

Prof. R. Radok, Director
Horace Lamb Institute of Oceanography
P. O. Box 167
Kingswood 5062, S.A.
Australia

CANADA

Director
Institute of Oceanography
University of British Columbia
Vancouver, B.C. V6T 1W5
Canada

Library
Pacific Biological Station
Fisheries and Marine Service
Nanaimo, B.C. V9R 5K6
Canada

Dr. C. S. Wong
Institute of Ocean Sciences
Department of Fisheries and
Environment
P. O. Box 6000
Sidney, B.C. V8L 4B2
Canada

Library
Science Services
Dalhousie University
Halifax, N.S. B3H 4J3
Canada

Dr. Cedric R. Mann
Bedford Institution of Oceanography
P. O. Box 1006
Dartmouth, N.S. B2Y 4A2
Canada

Prof. Gordon A. Riley
Institute of Oceanography
Dalhousie University
Halifax, N.S. B3H 3J5
Canada

GERMANY

Akademie der Wissenschaften der DDR
Institut fur Meereskunde Bibliothek
253 Warnemunde
East Germany

Deutsches-Hydrographisches Institut
Tauschstelle
Postfach 220
Bernhard-Hocht-Str. 78
D-2000 Hamburg
West Germany

Dr. Reimer Simonsen
Institut fur Meeresforschung
285 Bremerhaven
Am Handelshafen 12
West Germany

ICELAND

Dr. Unnsteinn Stefansson
Hafrannsoknastofnunin
Skulagata 4
Reykjavik
Iceland

JAPAN

Dr. Kiyomitsu Kitano
Hokkaido Regional Fisheries
Research Laboratory
Katsurakoi 116, Kushiro City
Hokkaido
Japan

Director
Kobe Marine Observatory
Nakayamate 7
Kobe, 650
Japan

The Public Health Institute
of Hyogo Prefecture
Arata-Cho, Hyogo-Ku
2-1 Kobe
Japan

Prof. Hideo Kawai
Kyoto University
Department of Fisheries
Faculty of Agriculture
Kyoto
Japan

Mr. Hajime Yamanaka
Far Seas Fisheries
Research Laboratory
Orido, Shimizu 424
Shizuoka-Ken
Japan

Director
Japan Oceanographic Data Center
Hydrographic Department
Maritime Safety Agency
No. 3-1, 5 Chome, Tsukiji
Chuo-Ku, Tokyo
Japan 104

Library
Ocean Research Institute
University of Tokyo
Nakano-Ku, Tokyo
Japan

Oceanography Division
Marine Department
Japan Meteorological Agency
1-3-4 Ohte-Machi, Chiyoda-Ku
Tokyo, 100
Japan

KOREA

Library
Fisheries Research and
Development Agency
16-2KA, Namhang Dong
Youngdo-Ku Busan 606
Korea

MEXICO

Biblioteca
Centro de Investigacion Cientifica y
Educacion Superior de Ensenada
Apartado Postal 2732
Ensenada, Baja California
Mexico

Biblioteca
Instituto Nacional de Pesca
Centro de Investigacion Pesquera
Apartado Postal 1306
Ensenada, Baja California
Mexico

Biblioteca
Unidad de Ciencias Marinas
Universidad Autonoma de Baja
California
Apartado de Correos 453
Ensenada, Baja California
Mexico

Biblioteca, U.N.A.M.
Centro de Ciencias del
Mar y Limnologia
Apartado Postal 811
Mazatlan, Sinaloa
Mexico

Biblioteca
Centro de Promocion Pesquera
Apartado Postal 396
Mazatlan, Sinaloa
Mexico

Biblioteca
Centro de Investigacion Pesquera
Seccion de Hidrologia
Instituto Nacional de Pesca
Apartado Postal 550
Mazatlan, Sinaloa
Mexico

American Embassy (4)
Regional Fishery Attache
Apartado Postal 83-BIS
Mexico 1, D.F.
Mexico

Biblioteca
Departmento de Pesca
Alvaro Oregon 269
Mexico 7, D.F.
Mexico

Biblioteca
Universidad Nacional Autonoma
de Mexico
Apartado Postal 70-223
Mexico 20, D.F.
Mexico

Director
Inst. de Geofisica
Torre de Ciencias, 3ER Piso
Universidad Nacional Autonoma
de Mexico
Villa Obregon, D.F.
Mexico

NEW ZEALAND

Director
New Zealand Oceanographic Institute
P. O. Box 8009
Wellington
New Zealand

PERU

Biblioteca, Instituto del Mar
Apartado Postal 22
Callao
Peru

UNITED KINGDOM

Science Reference Library (A)
25 Southampton Buildings
Chancery Lane
London WC2A 1AW England
United Kingdom

Library
Subscription Department
New South Wales Government Offices
66 Strand
London, WC2N 5LZ, England
United Kingdom

Library
Fisheries Laboratory
Ministry of Agriculture, Fisheries
and Food
Lowestoft, Suffolk
NR33 0HT, England
United Kingdom

Head of Library and
Information Service
Plymouth
PL1 2PB, England
United Kingdom

Library
Inst. of Oceanographic Science
Wormley, Godalming
Surrey GU8 5UB, England
United Kingdom

Library
Department of Agriculture and
Fisheries for Scotland
Marine Laboratory
P. O. Box 101, Victoria Road
Torry, Aberdeen AB9 8DB, Scotland
United Kingdom

UNITED STATES

ALASKA

Library
Institute of Marine Science
University of Alaska
College, AK 99701

CALIFORNIA

Library
Department of Oceanography
Humboldt State University
Arcata, CA 95521

Marine Technical Information Center
Department of Fish and Game
245 W. Broadway, Suite 350
Long Beach, CA 90802

Dr. Donn S. Gorsline
Department of Geology
University of Southern California
Los Angeles, CA 90007

Hancock Library of Biology
and Oceanography
University of Southern California
Los Angeles, CA 90007

Dr. Dale Straughan
University of Southern California
Los Angeles, CA 90007

Naval Environmental Prediction
Research Facility
Monterey, CA 93940

Prof. C. N. K. Mooers, Chairman
Department of Oceanography
U. S. Naval Postgraduate School
Monterey, CA 93940

Director
Pacific Environmental Group
NMFS/NOAA
C/O Fleet Numerical Weather Central
Monterey, CA 93940

Commanding Officer (Code 40) (2)
Fleet Numerical Weather Central
Monterey, CA 93940

Library
Geology-Oceanography Department
California State University
Northridge, CA 91324

E. J. List
California Technical Institution
Pasadena, CA 91125

Officer in Charge (Code L31)
Civil Engineering Laboratory
Naval Construction Battalion Center
Port Hueneme, CA 93043

Bernard Cohenour
Code 3144, Bldg. 514
Pacific Missile Test Center
Point Mugu, CA 93042

Director
Operations Research Branch
Department of Fish and Game
1416 Ninth Street
Sacramento, CA 95814

Mr. David Farris
Department of Biology
San Diego State University
San Diego, CA 92182

Intersea Research Corporation
11760 Sorrento Valley Road
San Diego, CA 92121

Library
Department of the Navy
Naval Ocean Systems Center
San Diego, CA 92152

Library
San Diego Society of Natural History
P. O. Box 1390
San Diego, CA 92112

Eric Shulenberger
San Diego Natural History Museum
P. O. Boix 1390
San Diego, CA 92112

Library
California Academy of Sciences
Golden Gate Park
San Francisco, CA 94118

Director
Center for Coastal Marine Studies
University of California
Santa Cruz, CA 95064

NMFS/NOAA
Tiburon Laboratory
3150 Paradise Drive
Tiburon, CA 94920

CONNECTICUT

Prof. George Veronis
Department of Geology
and Geophysics
Yale University
P. O. Box 2161, Yale Station
New Haven, CT 06520

FLORIDA

R.S.M.A.S. Library
University of Miami
4600 Rickenbacker Causeway
Miami, FL 33149

Library
Southwest Fisheries Center
NMFS/NOAA
75 Virginia Beach Drive
Miami, FL 33149

HAWAII

Library
Southwest Fisheries Center
NMFS/NOAA
P. O. Box 3830
Honolulu, HI 96812

MAINE

Director
Center for Marine Studies
University of Maine
Orono, ME 04469

MARYLAND

Secretary for Publications
Chesapeake Bay Institute
The Johns Hopkins University
Baltimore, MD 21218

Acquisitions Section, IRDB/D823
Library and Information Services
Division, NOAA
6009 Executive Blvd.
Rockville, MD 20852

Chief
Oceanic Services Division (W16)
Office of Meteorology and
Oceanography
National Weather Service
8060 13th Street, Room 1213
Silver Spring, MD 20910

MASSACHUSETTS

Dr. John M. Edmond
Department of Earth and
Planetary Sciences
Bldg. 54, Room 1326
Mass. Institute of Technology
Cambridge, MA 02139

Prof. Henry M. Stommel
Dept. of Physical Oceanography
Woods Hole Oceanographic Inst.
Woods Hole, MA 02543

Dr. Bruce A. Warren
Woods Hole Oceanographic Inst.
Woods Hole, MA 02543

Dr. L. V. Worthington
Woods Hole Oceanographic Inst.
Woods Hole, MA 02543

MISSISSIPPI

NAV OCEAN
NSTL Station, MS 39522

NEW JERSEY

Princeton Geology Library
Department of Geological and
Geophysical Sciences
Guyot Hall
Princeton University
Princeton, NJ 08540

NEW YORK

Prof. Gerhard Neumann
Department of Meteorology
and Oceanography
New York University
Bronx,
New York, NY 10453

Dr. Arnold L. Gordon
Lamont-Doherty Geological
Observatory of Columbia Univ.
Palisades, NY 10964

OREGON

Pattullo Study
School of Oceanography
Oregon State University
Corvallis, OR 97331

Pacific Marine Fisheries Commission
528 S. W. Mill
Portland, OR 97201

RHODE ISLAND

Pell Marine Science Library
University of Rhode Island
Narragansett Bay Campus
Narragansett, RI 02882

TEXAS

Working Collection
Department of Oceanography
Texas A&M University
College Station, TX 77843

VIRGINIA

Professor Ronald E. Johnson
Institute of Oceanography
Old Dominion University
Norfolk, VA 23508

WASHINGTON

Library
Fisheries-Oceanography WB-30
151 Oceanography Teaching Bldg.
University of Washington
Seattle, WA 98195

Prof. Gunnar I. Roden
Dept. of Oceanography WB-10
University of Washington
Seattle, WA 98195

WASHINGTON, D.C.

British Navy Staff
British Embassy
3100 Massachusetts Avenue, N.W.
Attn: Scientific Information Officer
Washington, DC 20008

Commanding Officer
U. S. Coast Guard Oceanographic Unit
Bldg. 159-E, Navy Yard Annex
Washington, DC 20590

Commander (2)
U. S. Naval Oceanographic Office
Library Code 3330
Washington, DC 20373

Director (3)
National Oceanographic Data Center
NOAA
Washington, DC 20235

Director (6)
World Data Center A
NOAA
Washington, DC 20235

Dr. Robert H. Gibbs, Jr.
Division of Fisheries
U. S. National Museum
Washington, DC 20560

Director
National Marine Fisheries Service
NOAA
Washington, DC 20235