UNIVERSITY OF CALIFORNIA, SAN DIEGO SCRIPPS INSTITUTION OF OCEANOGRAPHY

data report

PHYSICAL, CHEMICAL AND BIOLOGICAL DATA

CalCOFI Cruise 9207
2 – 16 July 1992

CalCOFI Cruise 9210
26 September – 11 October 1992

SIO Reference 93-13
30 April 1993

UNIVERSITY OF CALIFORNIA, SAN DIEGO

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LA JOLLA, CALIFORNIA 92093-0227

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Approved for distribution:

Edward A. Frieman, Director

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INTRODUCTION

The data in this report were collected during Cruises 9207* and 9210 of the California Cooperative Oceanic Fisheries Investigations (CalCOFI) program aboard the RV *New Horizon* of the Scripps Institution of Oceanography, University of California, San Diego and the NOAA ship RV *David Starr Jordan.* The CalCOFI program was organized in the late 1940s to study the causes of variations in population size of fishes of importance to the State of California. It is carried out by NOAA's National Marine Fisheries; Service Southwest Fisheries Science Center, the California Department of Fish and Game, and the Marine Life Research Group (MLRG) at Scripps Institution of Oceanography (SIO). MLRG contributes to this program by investigations of the physical, chemical and biological structure of the California Current. Data from CalCOFI Cruises 9207 and 9210 were collected and processed by personnel of the Marine Life Research Group and the Southwest Fisheries; Science Center. Volunteers and other SIO staff members also assisted in the collection of data and chemical analyses at sea.

STANDARD PROCEDURES

Hydrographic Cast Data

The hydrographic casts usually consisted, of 20 three-liter plastic (JVC) bottles; lowered to a maximum stripling depth of 500 meters, bottom depth permitting. Temperature, salinity, oxygen and nutrients were determined at sea for all depths sampled. Chlorophyll-a and phaeopigments were determined at sea from the top 14 depths. A social near-bottom cast was done in the Santa Barbara Basin,

Paired protected reversing thermometers read by two observers were used to determine temperatures which were then recorded to hundredths of a degree Celsius. The temperatures arc reported relative to the International Practical Temperature Scale of 1968 (TPTS-68). The new International Temperature Scale of 1990 (ITS-90) differs from the IPTS -68 by less than 0.01° C over oceanic: temperature ranges, so the distinction between due two scales is of marginal significance for temperatures listed to the nearest hundredth of a degree. Most sampling bottles used below a depth of about 75 meters were equipped with unprotected thermometers for determination of the depth of sampling, using the Saunders (1981) pressure-to-depth conversion technique.

Salinity samples were analyzed at. sea using inductive-type salinometers standardized with substandard seawater, Periodic checks on the concentration of the substandard were made by comparison with IAPSO Standard Seawater batch P-78. Salinity values have been calculated from the algorithms for the Practical Salinity Scale, 1978 (UNESCO, 1981a) and were reported to three decimal places, provided that accepted standards were met If only one determination per sample was obtained, or there was doubt concerning the accuracy of the analytical results, the salinities were reported to two decimal places.

Dissolved oxygen was determined by the Winkler method, as modified by Carpenter (1965), using the equipment and procedure outlined by Anderson (1971). Percent oxygen saturation was calculated from the equations of Weiss (1970).

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).

Samples for chlorophyll *a* and phaeopigments were filtered onto GF/F niters. The pigments were extracted with a cold extraction technique in 90% acetone (Venrick and Hayward, 1984), and the fluorescence determined tielore and after acidification with a Turner Designs fluorometer (Yentsch and Menzel, 1963; Holm-Hansen *et al.*]%5V.

Evaluation of the data involved comparisons with adjacent stations and consideration of the variation of a properly as; a function of density or depth and the relationships with other properties (Klein, 1973). Estimates of precision of the standard techniques are given in SIO, 1991.

Primary Productivity Casts

Primary productivity casts were taken each day shortly before local apparent noon *(LAN),* using a Sea-Bird Electronics, Inc. CID and General Oceanics rosette.. Primary production was estimated from C uptake using a

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

simulated *in situ* technique. Light penetration was estimated from the Secchi depth (assuming that the 1% light level is three times the Secchi depth). The depths with ambient light intensities corresponding to light levels simulated by the on-deck incubators were identified and sampled with five-liter Niskin bottles tripped on the up CTD/rosette cast. The Niskin bottles were equipped with epoxy-coated springs and silicone-rubber O-rings. Pressures and temperatures reported were derived from the CID at the time of the Niskin bottle trip. Triplicate samples (two light and one dark control) were drawn from each productivity sample depth into 250 ml polycarbonate incubation bottles. Samples were innoculated with 10 pCi of C as NaHCO- (200 |il of 50 ^Ci/ml stock) prepared in a 0.3 gAiter solution of sodium carbonate (Fitzwater *et al,* 1982). Samples were incubated from LAN to civil twilight in seawater-cooled incubators with neutral-density screens which simulate *in situ* light levels. At the end of the incubation, the samples were filtered onto Millipore HA filters and placed in scintillation vials. One half ml of 10% HC1 was added to each sample. The sample 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 SIO where the radioactivity was determined with a scintillation counter. Salinity, oxygen, nutrients, chlorophyll-a, and phaeopigments were determined for all depths.

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 each 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).

TABULATED DATA

Hydrographic Cast Data

The reported hydrographic cast time is the Coordinated Universal Time (UTC) of the messenger release. Bottom depths, determined acoustically, have been corrected using British Admiralty Tables (Carter, 1980) and are reported in meters. Weather conditions have been coded using WMO code 4501. Secchi depths, taken on most daylight stations, are also reported.

Observed and interpolated standard depth data from hydrographic casts have been interspersed and are presented together sequentially by depth. Interpolated or extrapolated standard level data are noted by the footnote "ISL" printed after the depth. Density-related parameters have been calculated from the International Equation of State of Seawater 1980 (UNESCO, 1981, b). Computed values of potential temperature, sigma-theta, specific volume anomaly (SVA), dynamic height or geopotential anomaly, and pressure are included with both observed and interpolated standard depth levels.

Primary Productivity Casts

In addition to the normal hydrographic data, the tabulated data include: the *in situ* light levels at which the samples were collected, 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, chlorophyll-a and phaeopigments. The uptake values are totals for the incubation period. Also shown are the times of LAN, civil twilight, and the value of the mean uptake integrated from the surface to the deepest sample, assuming that the shallowest value continues to the surface and that negative values (when dark uptake exceeds light uptake) are zero. 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 digits presented. Incubation time, LAN, and civil twilight are given in local Pacific Standard Time (PST); to convert to UTC, add eight hours to the PST time. Incubation light intensities are listed in a footnote at the bottom of each page.

Macrozooplankton Data

Macrozooplankton biomass volumes are tabulated as total biomass volume (cm /1000 m strained) and as the total volume minus the volume of larger organisms under the heading "Small." Tow times are given in local PS'T (+8) time.

FOOTNOTES

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

ISL: After a depth value indicates; that this is an interpolated or extrapolated standard level.

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 AutoAnalyzer in Sea Water Nutrient Analysis;* Revised. Oregon State University Technical Report 215, Reference No. 71-22.

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

Carter, D. J. T., 1980. Echo-sounding correction tables. Third Edition. Hydrographic Department, Ministry of Defence, Taunton, U.K., NP139:150 pp.

Fitzwater, S. E., G. A. Knauer, and J. H. Martin. 1982. Metal contamination and its effect on primary production measurements. *Limnol. Oceanogr., 27:*544-551.

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 C method of primary production measurement. *Limnol Oceanogr., 24:*917-928.

Reid, J. L., and A. W. Mantyla, 1976. The effect of the geostrophic flow upon coastal sea elevations in the northern North Pacific Ocean. *J. Geophys. Res., 81:*3100-3110.

Saunders, P. M., 1981. Practical conversion of pressure to depth. J. *Phys. Oceanogr., 11:*573-574.

Scripps Institution of Oceanography, University of California, 1991. Physical, Chemical and Biological Data, CalCOFI Cruises 9003 and 9004. SIO Ref. 91-4, 96 pp.

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. Determining chlorophyll on the 1984 CalCOFI surveys. *CalCOFI Rep., Vol. XXV:* 74-79.

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.

PERSONNEL

CalCOFI Cruise 9207

SHIP'S CAPTAIN

Gary Michael Albertson, RV *David Starr Jordan*

PERSONNEL. PARTICIPATING IN THE COLLECTION OF DATA

Griffith, David A. (In Charge)	Fishery Biologist, NMFS
Abramenkoff, Dimitry N.	Fishery Biologist, NMFS
Aviles, Maria D.	Student, Cal Poly San Luis Obispo
Bos, David L.	Staff Research Associate, SIO
Dotson, Ronald C.	Fishery Biologist, NMFS
Gripp, Sherry L.	Staff Research Associate, SIO
Gruber, Dennis W.	Marine Technician, SIO
Hanebuth, Virginia L.	Student, UCSB
James. Wcndelien K.	Student, UCSB
Pyle, Peter	Biologist, Pt. Reyes Bird Observatory
Renger, Edward H.	Staff Research Associate, SIO
Sharpe, Colin D.	Student, UCSC
Wilkinson, James R.	Staff Research Associate, SIO

FIGURES

Cruise 9207

1. CalCOFI Cruise 9207, track and station positions.

2. Horizontal distribution of dynamic height anomaly (0 over 500 m). In areas shallower than 500 m, the dynamic heights were extrapolated on the basis of the offshore deeper steric height as described in Reid and Mantyla (1976).

3. Horizontal distributions at 10 meters: A) chlorophyll-a; B) potential density; C) temperature; and D) salinity.

4. Horizontal distributions at 200 meters: A) dynamic height anomaly (200 over 500 m); B) potential density; C) temperature; and D) salinity.

5. Sections along CalCOFI line 90 (vertical exaggeration, 1000): A) potential density; B) temperature; C) salinity; D) silicate; E) nitrate; F) phosphate; G) chlorophyll-a; H) oxygen saturation; I) oxygen; J) nitrite; and K) phaeopigments.

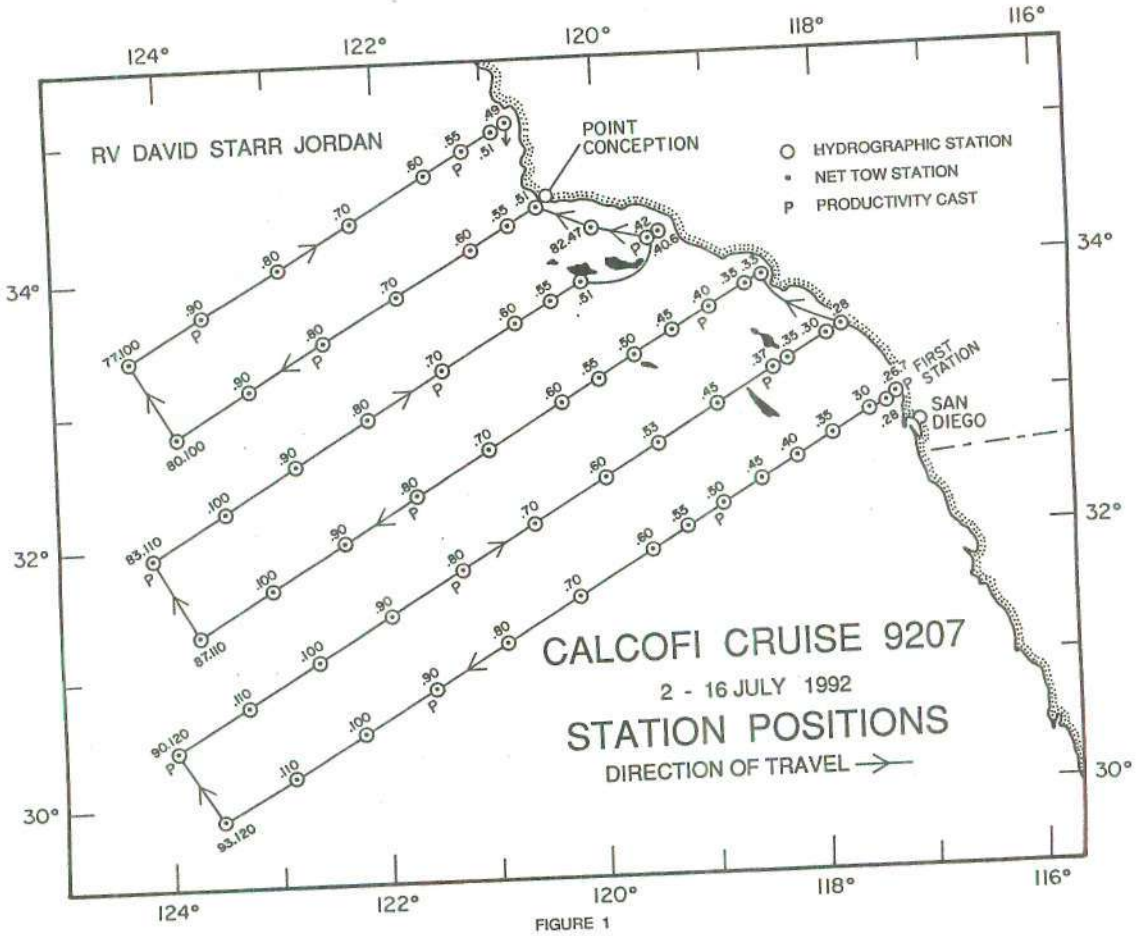


FIGURE 1

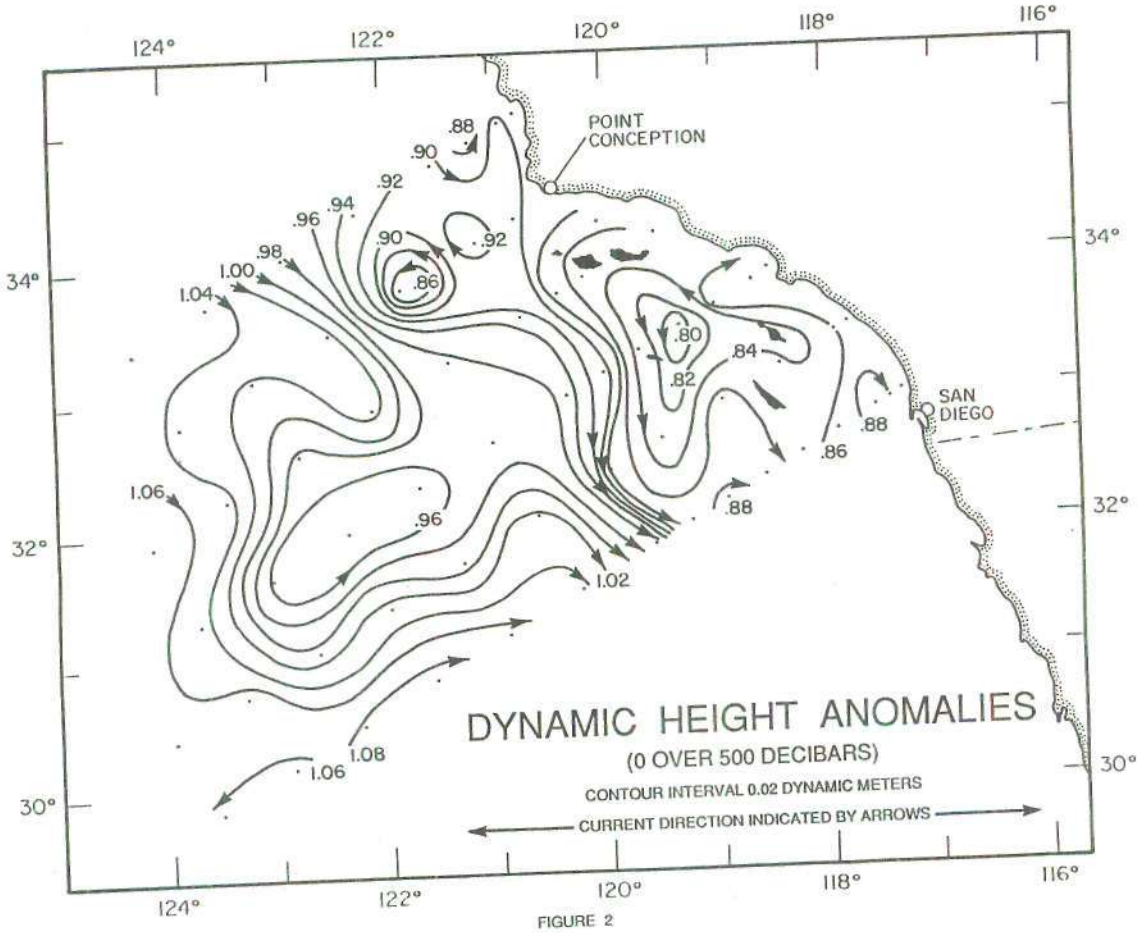


FIGURE 2

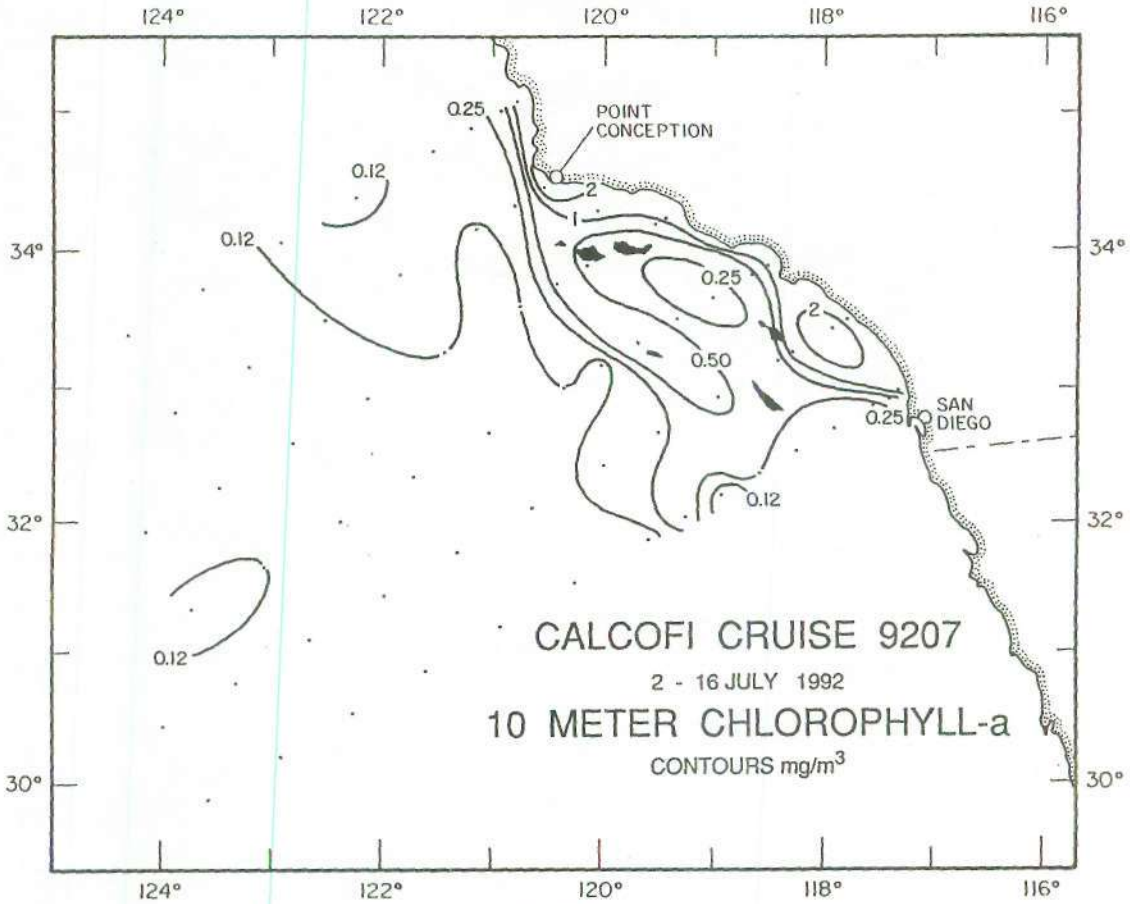
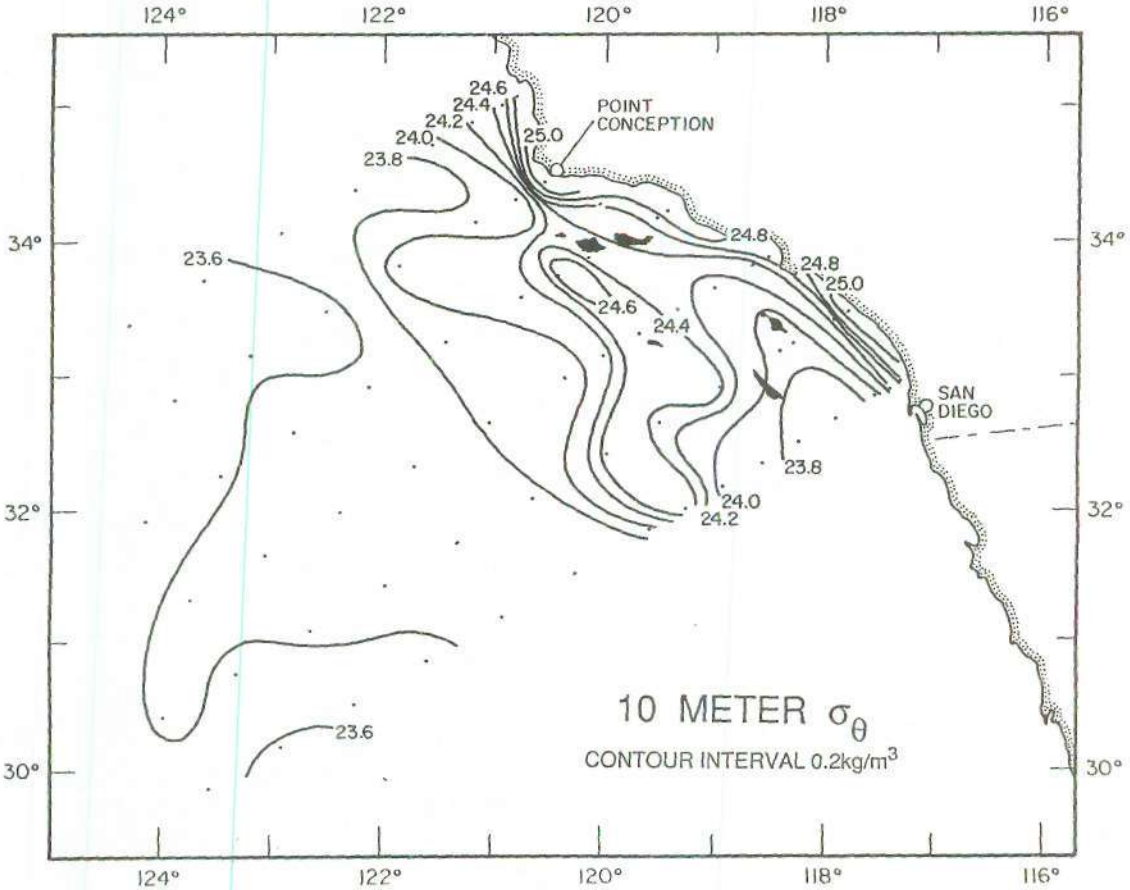


FIGURE 3A



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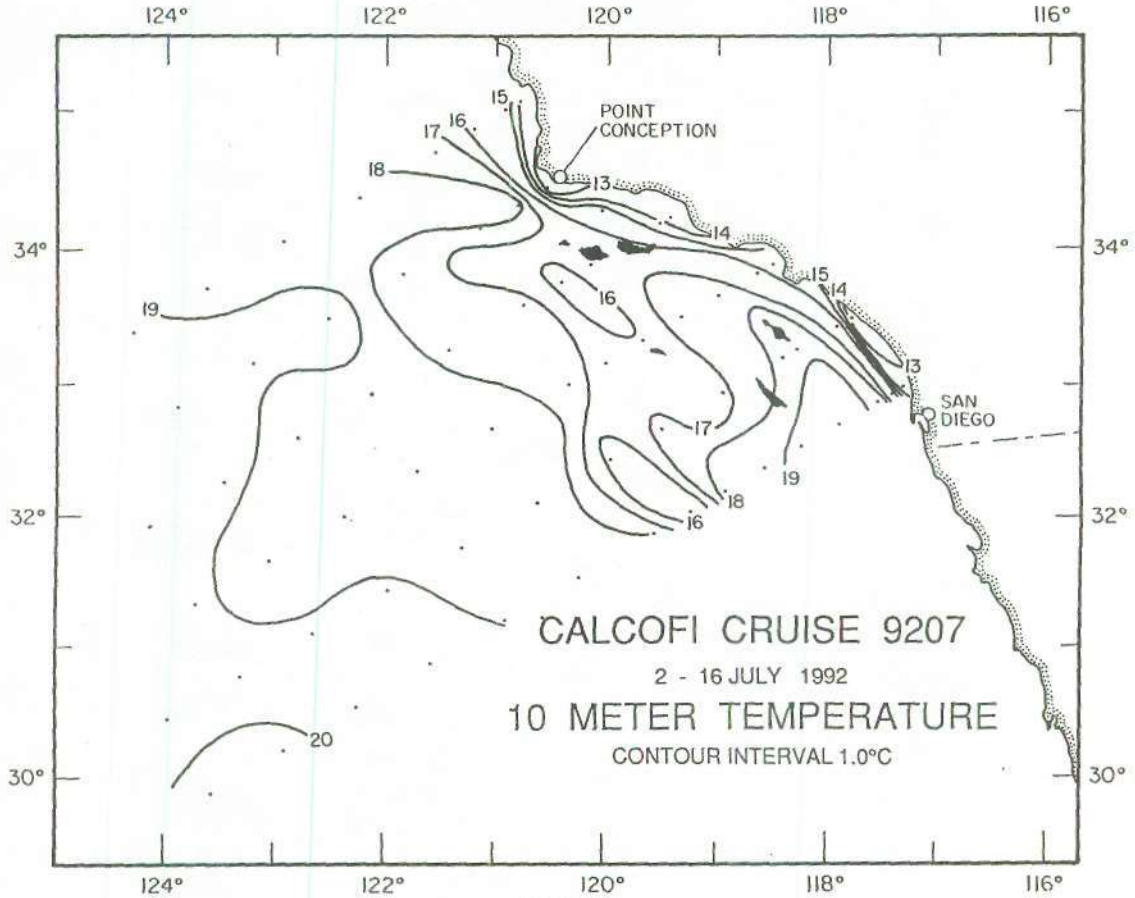

FIGURE 3C

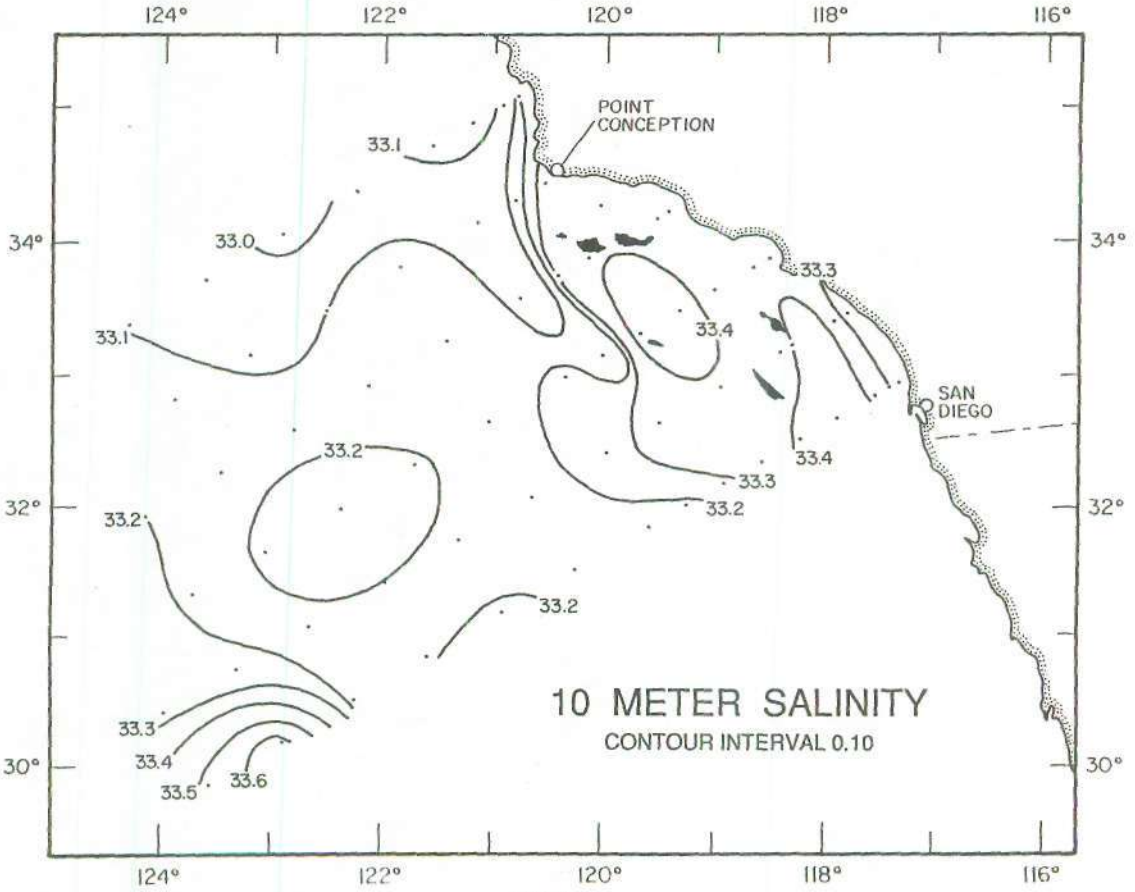

FIGURE 3D

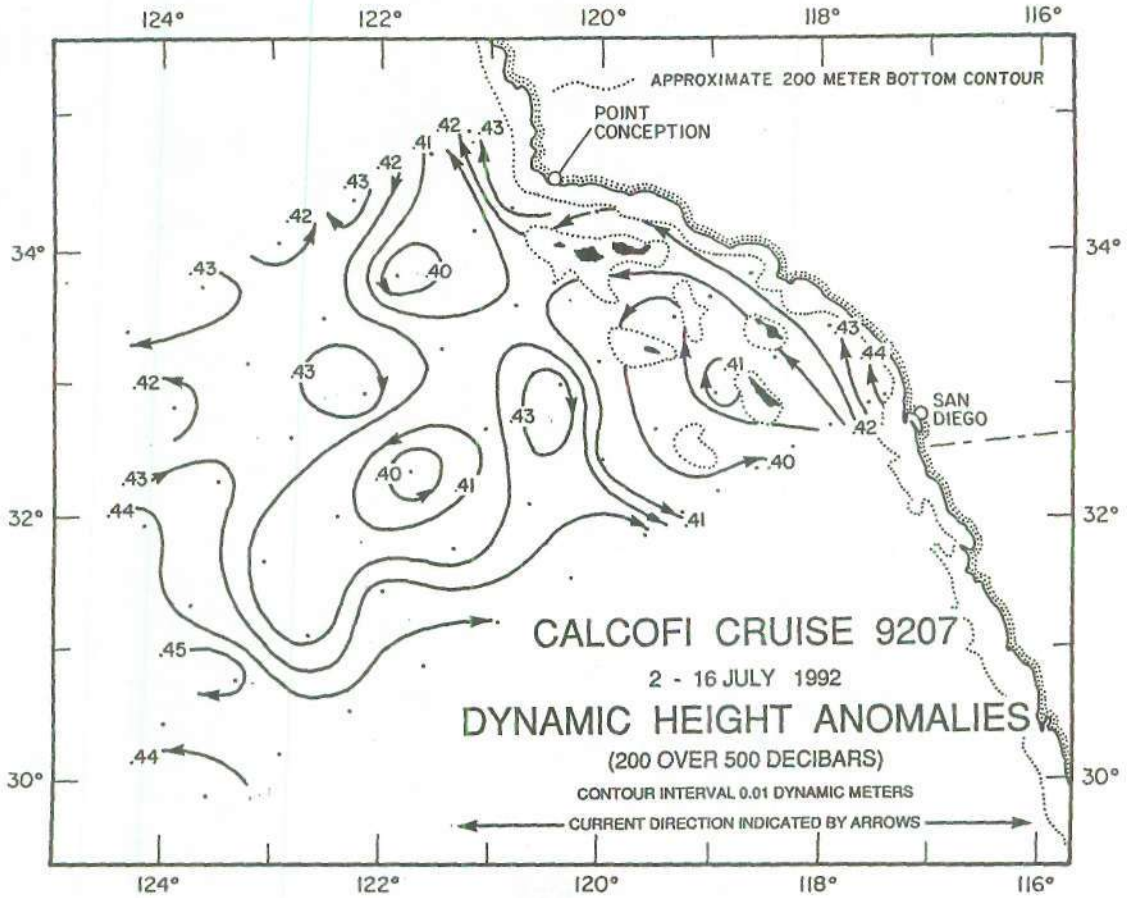

FIGURE 4A

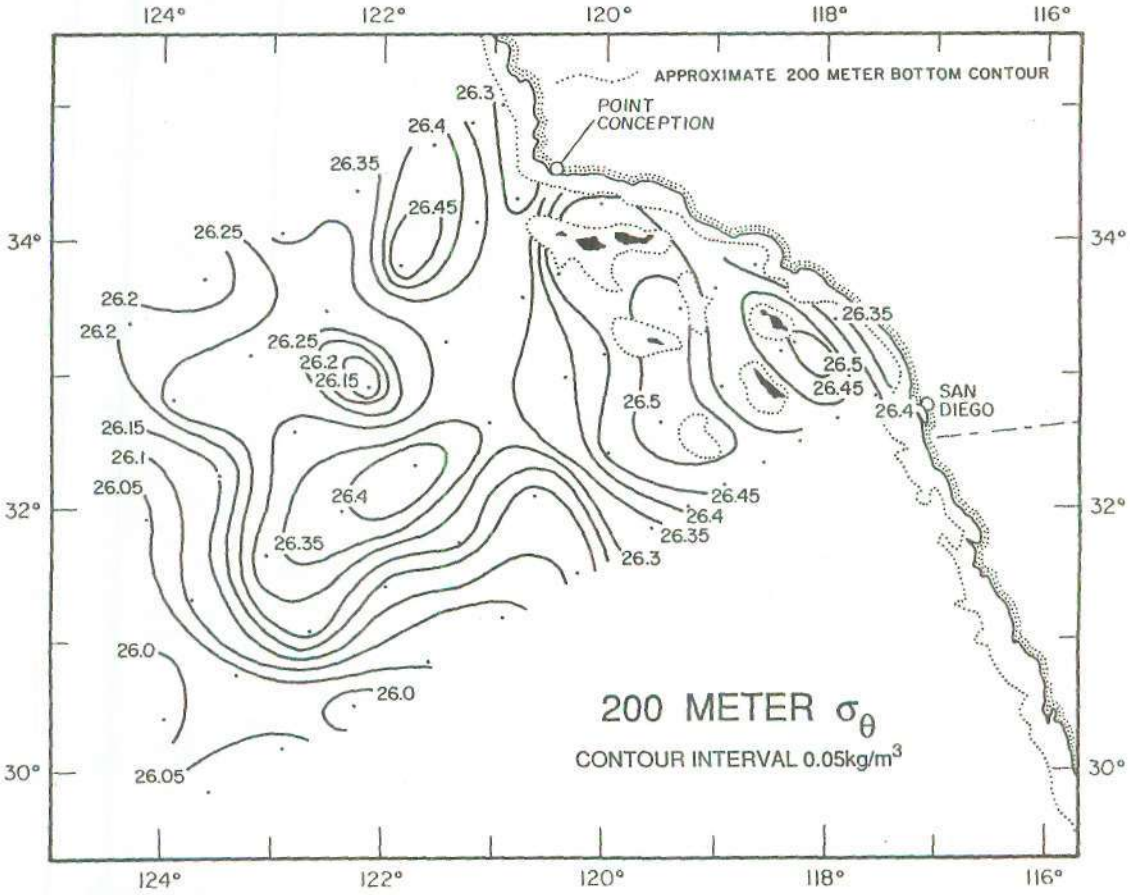

FIGURE 4B

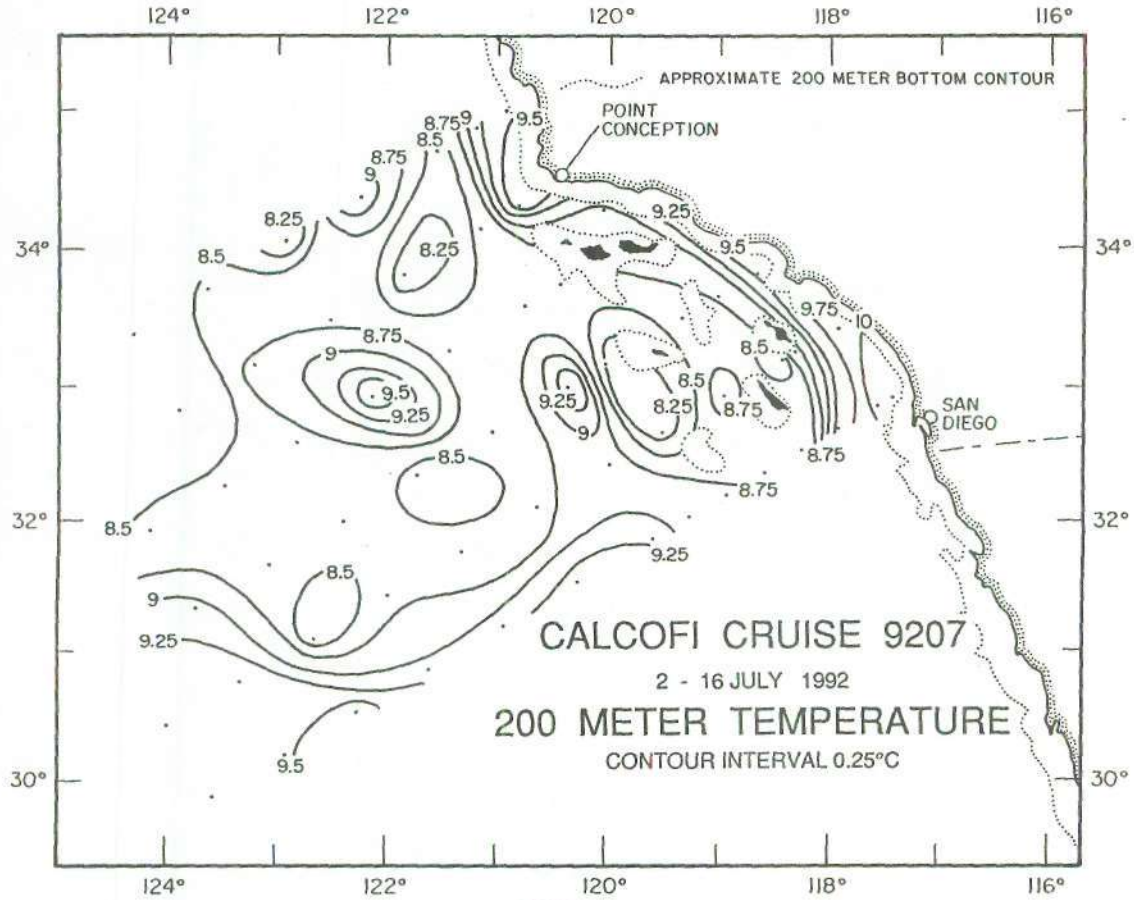

FIGURE 4C

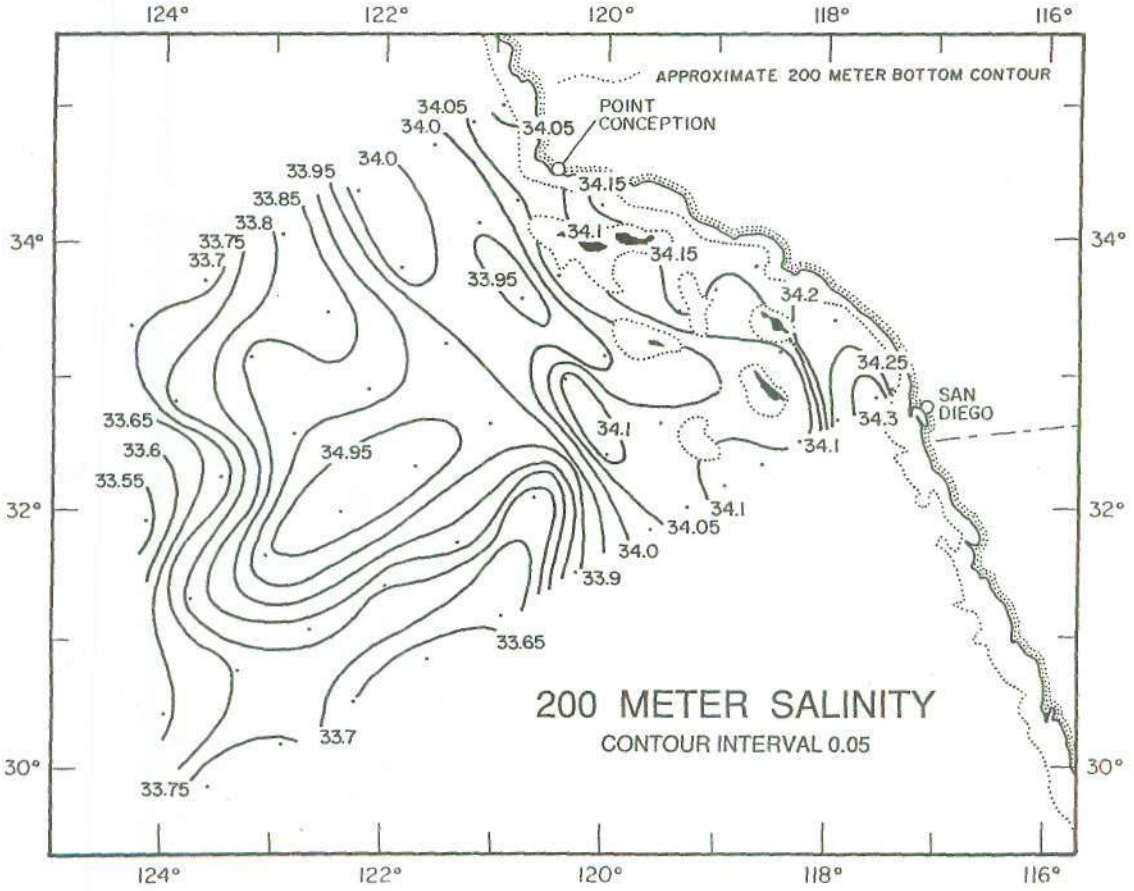

FIGURE 4D

CALCOFI CRUISE 9207

5 - 8 JULY 1992

POTENTIAL DENSITY (σ_θ) ALONG CALCOFI LINE 90

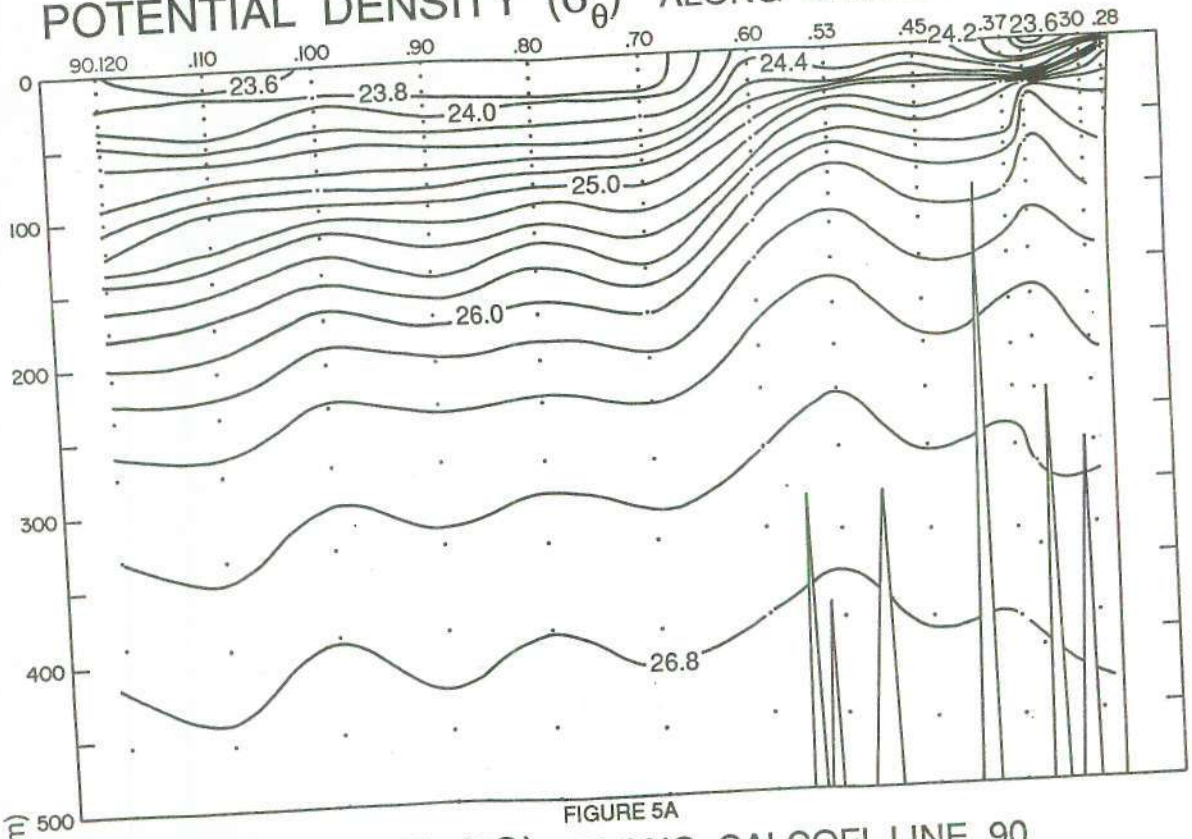

FIGURE 5A

TEMPERATURE (°C) ALONG CALCOFI LINE 90

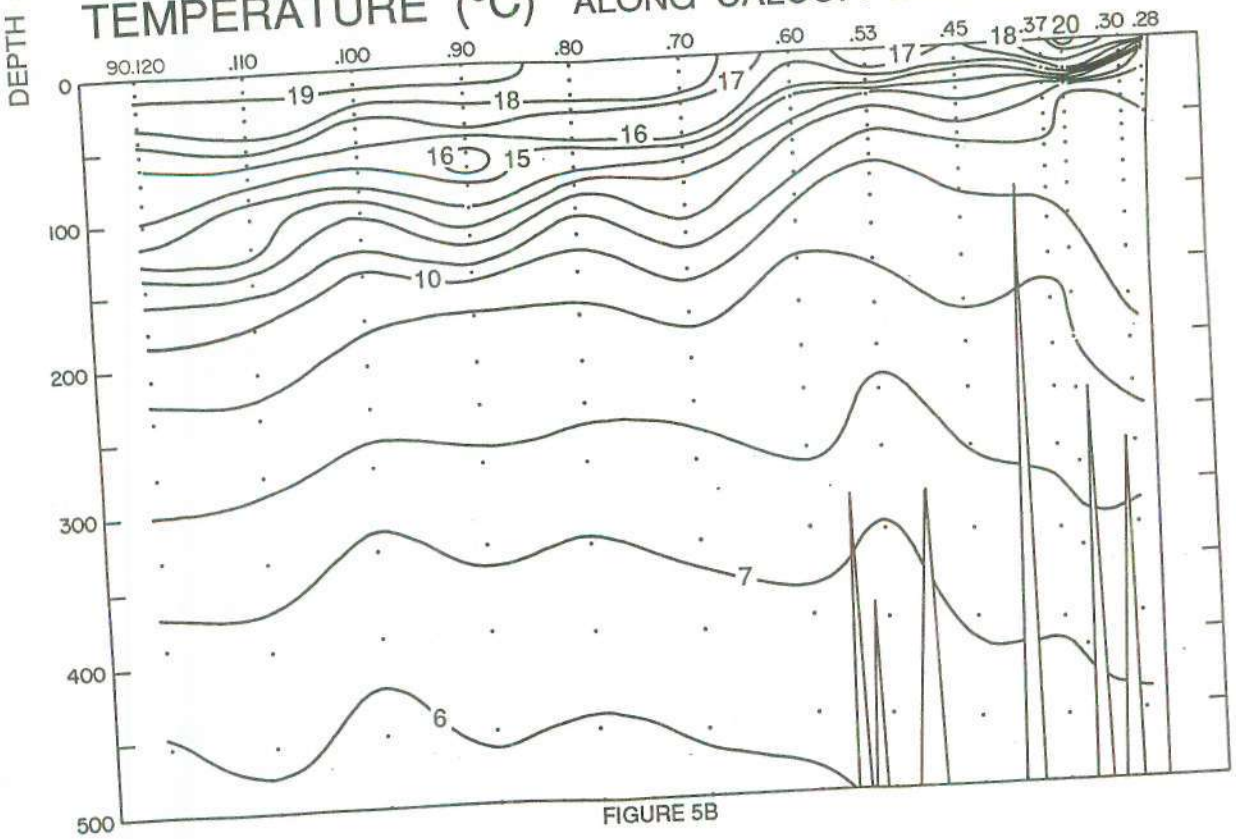

FIGURE 5B

CALCOFI CRUISE 9207

5 - 8 JULY 1992

SALINITY ALONG CALCOFI LINE 90

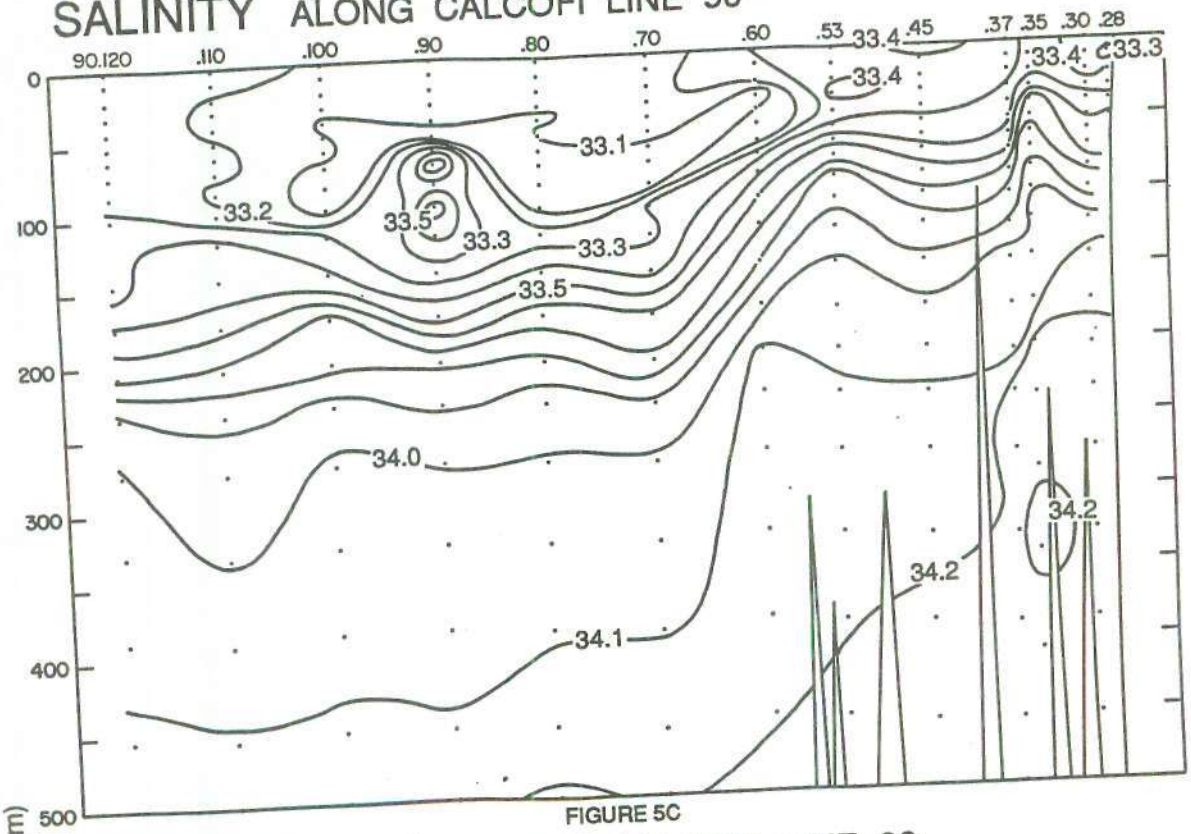

FIGURE 5C

SILICATE (μM/l) ALONG CALCOFI LINE 90

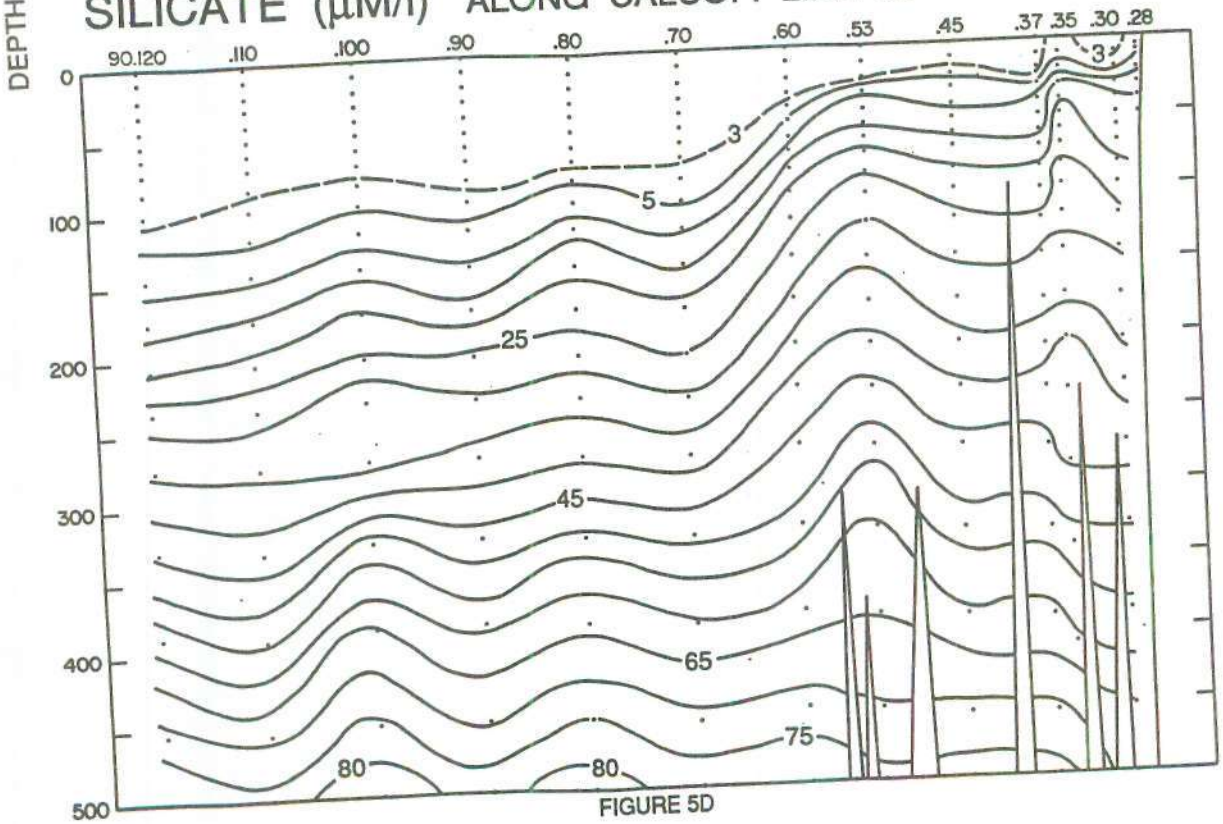

FIGURE 5D

CALCOFI CRUISE 9207

5 - 8 JULY 1992

NITRATE (µM/l) ALONG CALCOFI LINE 90

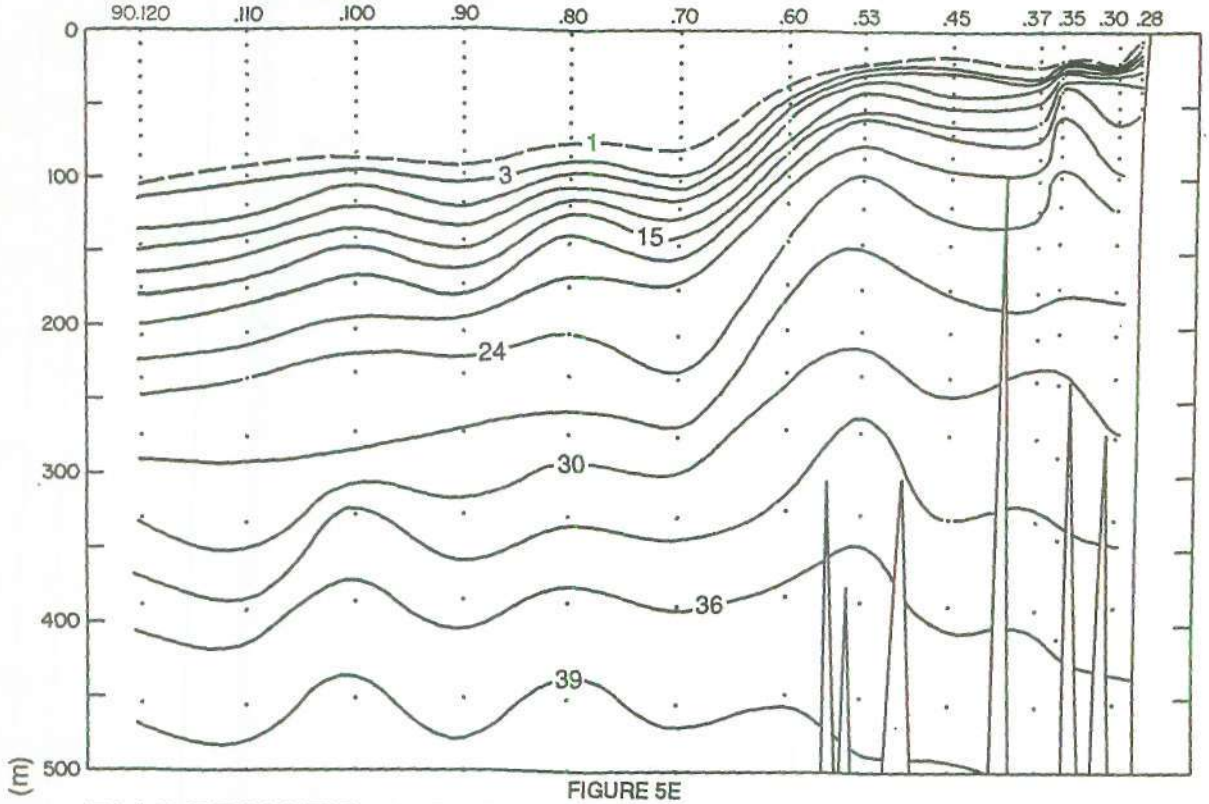

FIGURE 5E

PHOSPHATE (µM/l) ALONG CALCOFI LINE 90

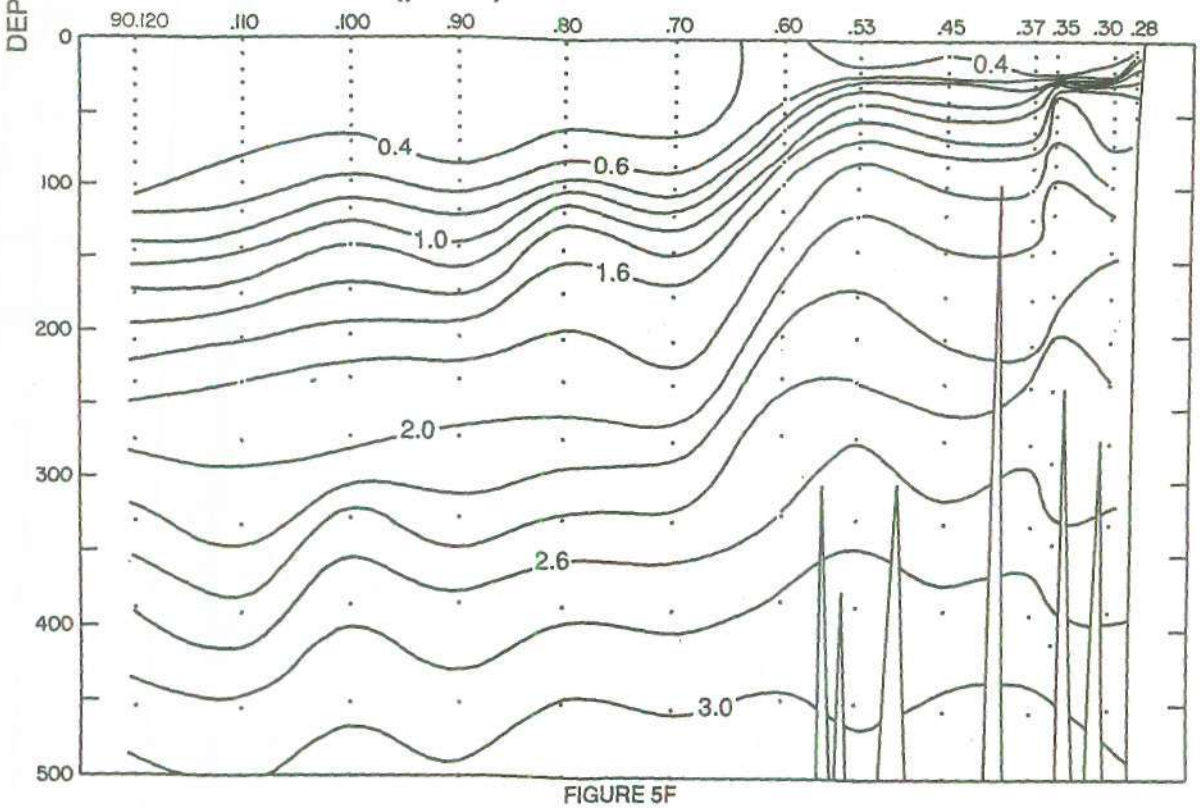

FIGURE 5F

CALCOFI CRUISE 9207

5 - 8 JULY 1992

CHLOROPHYLL-a (µg/l) ALONG CALCOFI LINE 90

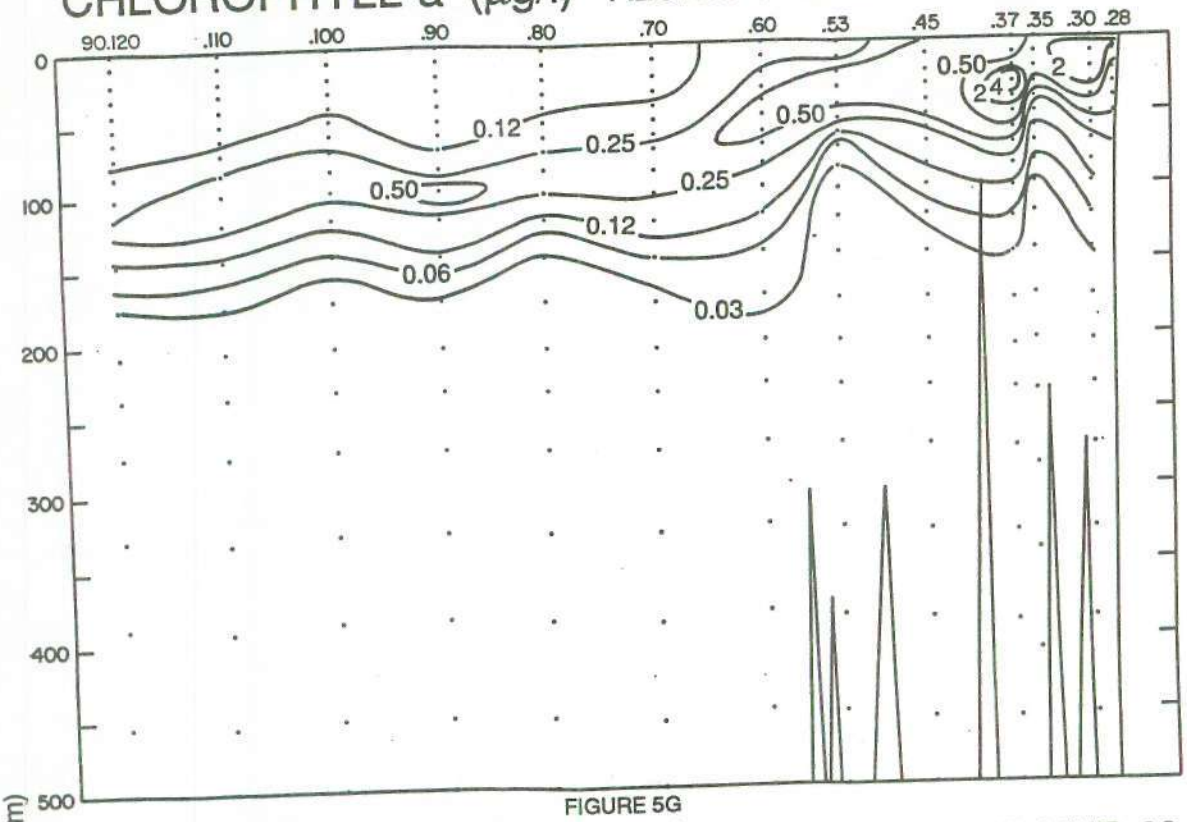

FIGURE 5G

OXYGEN SATURATION (%) ALONG CALCOFI LINE 90

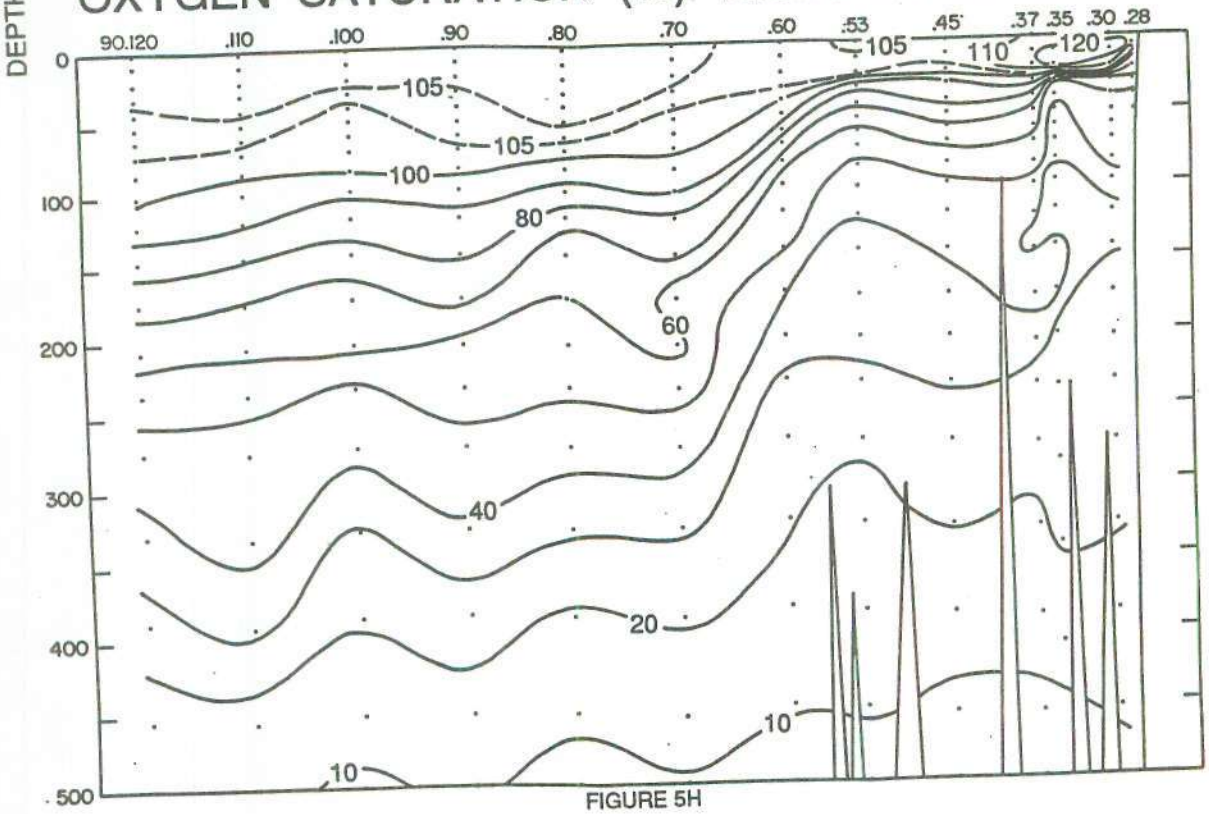

FIGURE 5H

CALCOFI CRUISE 9207

5 - 8 JULY 1992

OXYGEN (ml/l) ALONG CALCOFI LINE 90

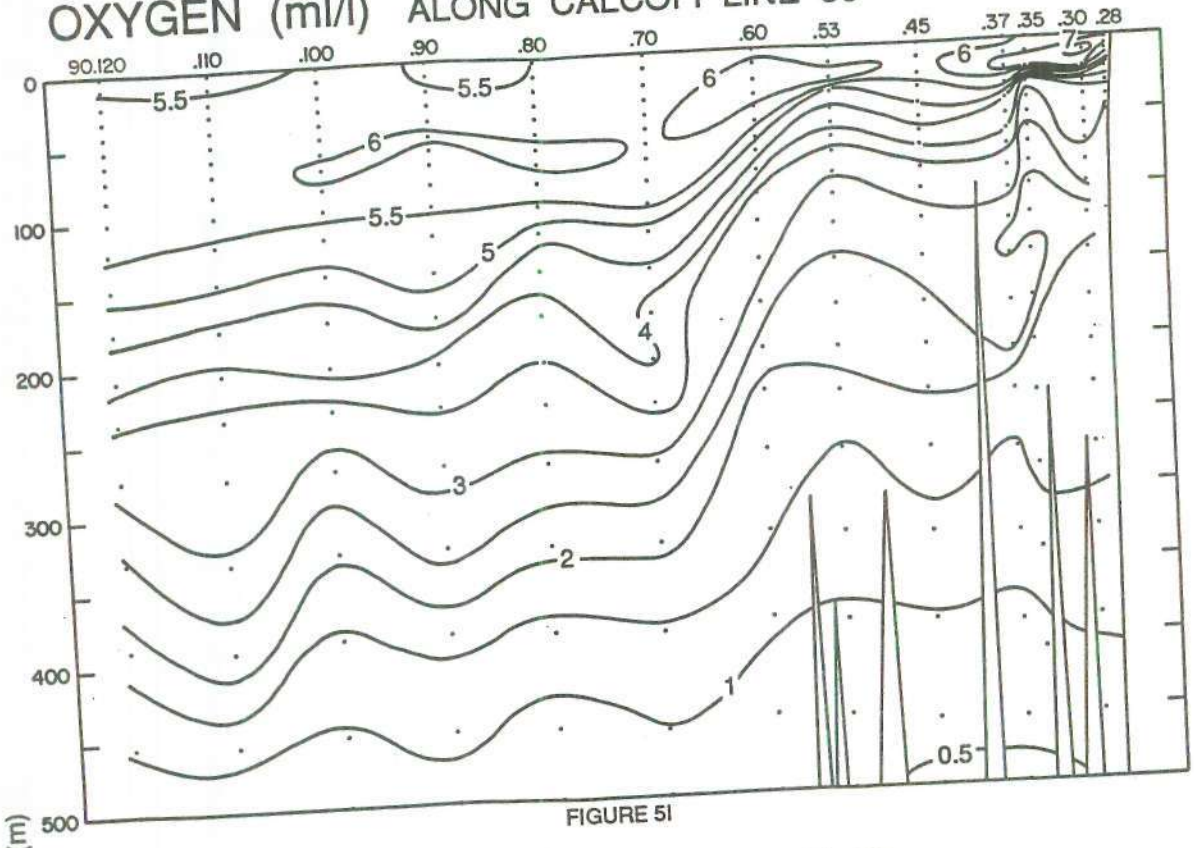

FIGURE 5I

NITRITE (µM/l) ALONG CALCOFI LINE 90

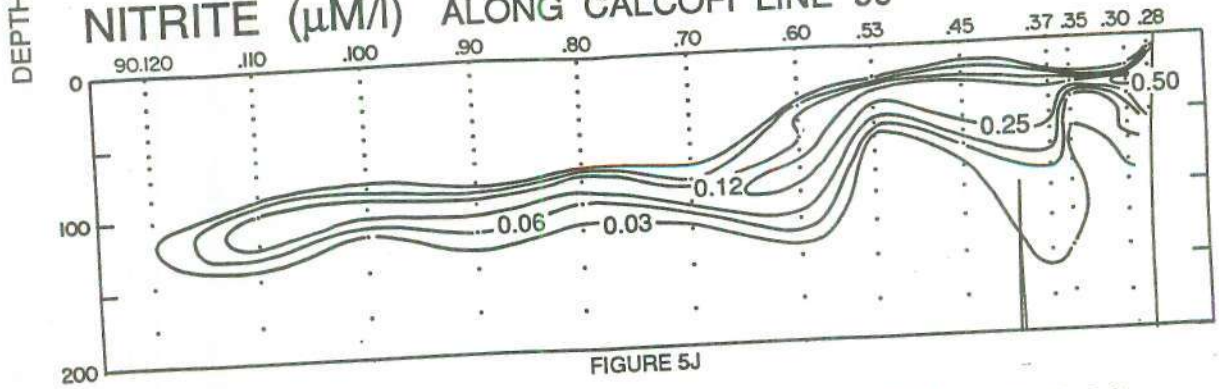

FIGURE 5J

PHAEOPIGMENTS (µg/l) ALONG CALCOFI LINE 90

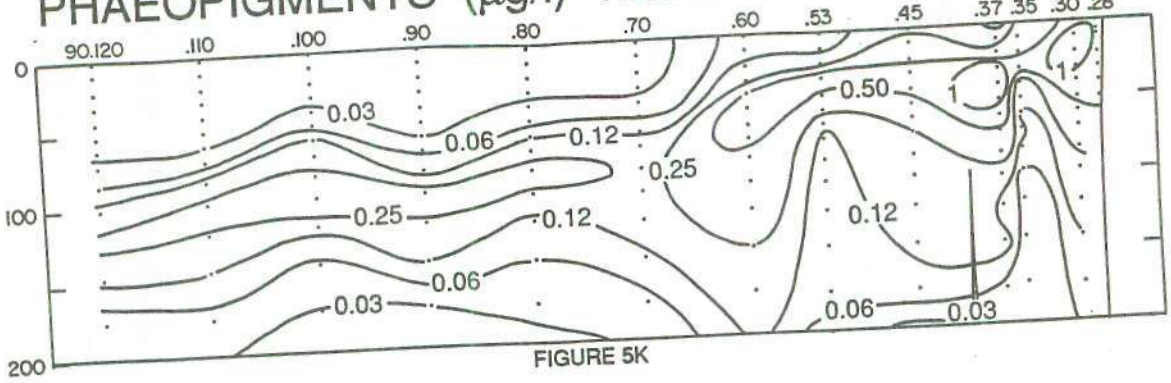

FIGURE 5K

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 77 49

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
35 5.2 N	120 46.6 W	16/07/92	0050 UTC	65 m	350 28 kn	290 05 04	1	1011.9 mb	16.7 C	15.4 C	09m 04	3/8	CI

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 UM/1	CHL-A ug/1	PBAEO ug/1	PRESS db
	0 ISL	13.45	13.45	33.212	24.919	302.5	0.000	6.41	108.0	3.1	0.60	2.7	0.12	1.35	0.39	0
1	1	13.45	13.45	33.212	24.919	302.5	0.003	6.41	108.0	3.1	0.60	2.7	0.12	1.35	0.39	1
1	6	13.42	13.42	33.212	24.925	302.1	0.018	6.40	107.7	3.0	0.60	2.7	0.12	1.36	0.41	6
	10 ISL	13.24	13.24	33.214	24.963	298.6	0.030	6.36	106.7	3.2	0.61	3.0	0.12	1.31	0.43	10
1	11	13.20	13.20	33.214	24.971	297.9	0.033	6.35	106.4	3.3	0.61	3.1	0.12	1.30	0.44	11
1	16	11.78	11.78	33.229	25.256	270.8	0.047	5.84	95.0	6.0	0.88	7.0	0.21	2.48	1.09	16
	20 ISL	11.16	11.16	33.253	25.387	258.4	0.058	5.31	85.2	9.0	1.07	10.3	0.21	2.04	1.01	20
1	26	10.76	10.76	33.307	25.501	247.7	0.073	4.60	73.2	13.2	1.30	14.0	0.22	0.77	0.88	26
	30 ISL	10.80	10.80	33.391	25.559	242.2	0.083	4.34	69.2	14.7	1.39	14.0	0.24	0.66	0.95	30
1	36	10.87	10.87	33.472	25.610	237.6	0.097	4.14	66.1	16.0	1.47	14.1	0.26	0.50	1.09	36
1	45	10.85	10.84	33.484	25.623	236.5	0.119	4.10	65.5	16.4	1.50	14.3	0.26	0.51	1.08	45
	50 ISL	10.82	10.81	33.491	25.634	235.6	0.130	4.06	64.8	16.8	1.51	14.6	0.26	0.50	1.11	50
1	53	10.80	10.79	33.495	25.641	235.0	0.138	4.03	64.3	17.1	1.52	14.8	0.26	0.49	1.13	53

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 77 51

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
35 1.3 N	120 55.0 W	15/07/92	2245 UTC	241 m	340 26 kn	320 04 04	1	1013.1 mb	17.3 C	16.4 C	18m 04	1/8	CI

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS 0b
	0 ISL	15.71	15.71	33.036	24.303	361.1	0.000	6.12	107.8	1.9	0.39	0.1	0.01	0.24	0.07	0
1	1	15.71	15.71	33.036	24.303	361.2	0.004	6.12	107.8	1.9	0.39	0.1	0.01	0.24	0.07	1
	10 ISL	15.18	15.18	33.035	24.419	350.4	0.036	6.18	107.7	2.0	0.42	0.1	0.01	0.28	0.09	10
1	11	15.06	15.06	33.035	24.446	347.9	0.039	6.19	107.6	2.0	0.42	0.1	0.01	0.28	0.09	11
	20 ISL	13.22	13.22	33.065	24.852	309.4	0.069	6.11	102.3	3.1	0.57	2.0	0.15	0.88	0.38	20
1	21	13.03	13.03	33.074	24.896	305.2	0.072	6.10	101.8	3.2	0.59	2.2	0.17	0.95	0.42	21
	30 ISL	13.01	13.01	33.191	24.991	296.4	0.099	6.12	102.1	2.9	0.67	3.0	0.14	1.04	0.53	30
1	31	13.01	13.01	33.197	24.996	296.0	0.102	6.12	102.1	2.9	0.68	3.2	0.14	1.05	0.54	31
1	42	11.41	11.40	33.159	25.270	270.1	0.133	5.22	84.2	9.2	1.06	9.5	0.24	0.64	0.64	42
	50 ISL	10.72	10.71	33.215	25.436	254.4	0.154	4.82	76.6	12.1	1.23	13.0	0.19	0.38	0.60	50
1	51	10.66	10.65	33.223	25.453	252.8	0.156	4.79	76.0	12.3	1.24	13.3	0.18	0.36	0.59	51
1	61	10.55	10.54	33.228	25.476	250.8	0.182	4.75	75.2	12.7	1.25	13.8	0.15	0.34	0.46	61
1	70	10.32	10.31	33.257	25.539	245.0	0.204	4.61	72.7	13.7	1.34	14.9	0.12	0.24	0.37	70
	75 ISL	10.18	10.17	33.306	25.601	239.2	0.216	4.14	69.8	15.1	1.41	16.2	0.11	0.19	0.30	75
1	83	10.03	10.02	33.407	25.705	229.5	0.235	4.13	64.7	17.5	1.53	18.2	0.10	0.14	0.22	83
	100 ISL	10.28	10.27	33.635	25.841	217.0	0.273	3.51	55.4	19.8	1.64	19.7	0.13	0.15	0.40	101
1	103	10.34	10.33	33.672	25.860	215.3	0.279	3.41	53.9	20.1	1.65	19.8	0.13	0.15	0.44	104
1	123	10.02	10.01	33.801	26.015	200.9	0.321	2.96	46.5	23.8	1.81	22.3	0.09	0.08	0.29	124
	125 ISL	10.00	9.99	33.814	26.029	199.7	0.325	2.92	45.9	24.1	1.82	22.5	0.09	0.08	0.29	126
1	142	9.88	9.86	33.913	26.126	190.8	0.358	2.65	41.5	26.6	1,93	23.8	0.06	0.05	0.26	143
	150 ISL	9.81	9.79	33.935	26.156	188.2	0.373	2.56	40.1	27.5	1.97	24.3	0.07	0.05	0.25	151
1	172	9.63	9.61	33.966	26.210	183.4	0.414	2.39	37.3	29.6	2.04	25.3	0.08	0.05	0.24	173
	200 ISL	9.47	9.45	34.014	26.274	177.9	0.465	2.22	34.5	31.6	2.11	26.4	0.11	0.04	0.29	201
1	204	9.45	9.43	34.021	26.283	177.1	0.472	2.19	34.0	31.9	2.12	26.6	0.11	0.04	0.30	205

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 77 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
34 53.3 N	121 12.0 W	15/07/92	1825 UTC	558 *m*	320 15 kn	320 01 03	1	1015.8 mb	20.2 C	18.5 C		1/8	CI

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS <ib
1	0	17.96	17.96	33.149	23.866	402.8	0.000	5.69	104.8	1.7	0.35	0.1	0.00	0.15	0.03	0
1	10	15.79	15.79	33.152	24.375	354.6	0.038	6.19	109.3	2.2		0.1	0.00	0.20	0.07	10
1	20	13.26	13.26	33.020	24.809	313.5	0.071	15.12	102.6	3.4	0.55	0.7	0.00	0.40	0.18	20
1	28	12.49	12.49	33.120	25.037	291.9	0.095	5.94	98.0	4.5	0.81	3.5	0.13	0.85	0.62	28
	30 ISL	12.32	12.32	33.165	25.105	285.5	0.101	5.82	95.7	5.0	0.86	4.4	0.15	0.80	0.61	30
1	38	11.78	11.78	33.343	25.345	262.9	0.123	5.29	86.1	7.2	1.05	8.1	0.19	0.47	0.43	38
1	49	11.40	11.39	33.447	25.496	248.8	0.151	4.85	78.3	10.7		11.0	0.24	0.49	0.38	49
	50 ISL	11.36	11.35	33.454	25.509	247.6	0.154	4.78	77.2	11.1	1.33	11.3	0.25	0.47	0.38	50
1	58	11.00	10.99	33.493	25.604	238.7	0.173	4.19	67.1	13.9	1.49	14.2	0.29	0.34	0.38	58
1	67	10.64	10.63	33.511	25.682	231.5	0.194	3.74	59.5	16.5	1.60	16.9	0.33	0.28	0.34	67
	75 ISL	10.34	10.33	33.587	25.793	221.0	0.213	3.57	56.4	19.3	1.67	19.2	0.26	0.23	0.35	75
1	81	10.17	10.16	33.653	25.873	213.5	0.226	3.48	54.8	21.2	1.72	20.6	0.19	0.19	0.35	81
1	97	10.07	10.06	33.751	25.967	204.9	0.259	2.96	46.5	23.5	1.83	22.1	0.12	0.10	0.31	97
	100 ISL	10.03	10.02	33.766	25.986	203.2	0.265	2.90	45.6	24.0	1.85	22.4	0.10	0.09	0.31	101
1	117	9.84	9.83	33.846	26.080	194.6	0.299	2.66	41.6	26.4	1.93	23.9	0.03	0.06	0.32	118
	125 ISL	9.82	9.81	33.883	26.113	191.7	0.314	2.60	40.7	27.0	1.95	24.2	0.03	0.05	0.29	126
1	141	9.79	9.77	33.949	26.170	186.6	0.345	2.49	39.0	28.2	2.00	24.7	0.04	0.05	0.21	142
	150 ISL	9.71	9.69	33.976	26.204	183.5	0.361	2.36	36.9	29.4	2.05	25.4	0.04	0.04	0.21	151
1	172	9.48	9.46	34.026	26.281	176.6	0.401	2.08	32.3	32.3	2.15	26.9	0.04	0.03	0.22	173
	200 ISL	9.24	9.22	34.062	26.349	170.7	0.450	2.06	31.9	34.5	2.20	27.5	0.04	0.03	0,23	201
1	202	9.23	9.21	34.064	26.352	170.4	0.453	2.06	31.8	34.6	2.20	27.5	0.04	0.03	0.23	203
1	233	9.13	9.10	34.087	26.387	167.7	0.505	1.98	30.5	36.1	2.24	27.8	0.09			234
	250 ISL	8.89	8.86	34.090	26.428	164.1	0.534	2.07	31.8	37.0	2.25	28.1	0.07			252
1	274	8.45	8.42	34.093	26.498	157.6	0.572	2.19	33.3	39.1	2.27	28.9	0.03			276
	300 ISL	7.95	7.92	34.098	26.578	150.3	0.612	2.08	31.2	43.8	2.35	30.4	0.02			302
1	329	7.47	7.44	34.112	26.658	142.8	0.655	1.84	27.3	49.8	2.47	32.2	0.01			331
1	390	7.08	7.04	34.173	26.762	133.8	0.739	1.20	17.7	59.0	2.71	35.1	0.01			393
	400 ISL	7.00	6.96	34.178	26.777	132.4	0.752	1.13	16.6	60.4	2.75	35.5	0.01			403
1	456	6.50	6.46	34.197	26.859	125.0	0.825	0.83	12.1	68.6	2.92	37.6	0.00			459
	500 ISL	6.12	6.08	34.209	26.918	119.7	0.878	0.66	9.5	75.6	3.01	38.9				503
1	524	5.91	5.86	34.216	26.950	116.7	0.907	0.57	8.2	79.4	3.06	39.6				528

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
34 43.4 N	121 33.0 W	15/07/92	1428 UTC	934 in	320 15 kn	330 01 05	2	1015.9 mb	17.8 C	16.9 C	25m 02	8/8 AC

CAST	DEPTH ID	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA TBETA	SVA	DYN BT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	18.56	18.56	33.109	23.688	419.8	0.000	5.59	104.2	2.0	0.36	0.1	0.00	0.14	0.03	0
1	1	18.56	18.56	33.109	23.688	419.9	0.004	5.59	104.2	2.0	0.36	0.1	0.00	0.14	0.03	1
	10 ISL	17.46	17.46	33.118	23.963	393.9	0.041	5.76	105.1	2.0	0.37	0.1	0.00	0.17	0.05	10
1	11	17.29	17.29	33.122	24.006	389.8	0.045	5.79	105.3	2.0	0.37	0.1	0.00	0.17	0.05	11
1	20	16.51	16.51	33.178	24.232	368.6	0.079	5.93	106.2	1.3	0.37	0.1	0.00	0.21	0.07	20
1	30	15.89	15.89	33.181	24.375	355.2	0.115	6.07	107.4	1.2	0.40	0.1	0.00	0.33	0.15	30
1	41	14.05	14.04	33.116	24.723	322.3	0.152	6.37	108.6	2.1	0.45	0.2	0.00	0.67	0.34	41
1	50	12.80	12.79	33.117	24.976	298.4	0.180	6.12	101.6	3.4	0.61	2.3	0.11	0.75	0.36	50
1	60	11.66	11.65	33.075	25.159	281.0	0.209	5.48	88.8	7.3	0.90	7.1	0.33	0.49	0.35	60
1	70	11.05	11.04	33.092	25.283	269.4	0.237	5.25	84.0	9.2	1.03	9.3	0.23	0.38	0.33	70
	75 ISL	10.87	10.86	33.134	25.348	263.4	0.250	5.10	81.3	10.5	1.11	10.9	0.22	0.33	0.29	75
1	84	10.55	10.54	33.235	25.482	250.7	0.273	4.77	75.5	13.4	1.28	14.0	0.20	0.25	0.23	84
1	98	9.66	9.65	33.415	25.773	223.3	0.306	4.10	63.7	18.6	1.56	18.9	0.03	0.09	0.21	98
	100 ISL	9.61	9.60	33.439	25.800	220.7	0.311	4.02	62.4	19.2	1.59	19.4	0.03	0.08	0.20	100
1	119	9.29	9.28	33.623	25.996	202.4	0.351	3.47	53.6	23.6	1.77	22.4	0.01	0.03	0.12	120
	125 ISL	9.09	9.08	33.647	26.047	197.7	0.363	3.47	53.3	24.6	1.80	23.0	0.01	0.02	0.10	126
1	144	8.52	8.51	33.697	26.175	185.8	0.399	3.46	52.5	27.2	1.87	24.5	0.01	0.01	0.07	145
	150 ISL	8.49	8.47	33.727	26.203	183.2	0.411	3.42	51.9	27.9	1.88	24.8	0.01	0.01	0.06	151
1	173	8.36	8.34	33.823	26.299	174.5	0.452	3.18	48.1	30.6	1.94	25.9	0.02	0.01	0.05	174
	200 ISL	8.29	8.27	33.970	26.425	163.1	0.497	2.70	40.8	35.1	2.06	27.8	0.01	0.01	0.05	201
1	203	8.28	8.26	33.984	26.438	161.9	0.502	2.65	40.1	35.6	2.07	28.0	0.01	0.01	0.05	204
1	231	8.12	8.10	34.026	26.495	156.9	0.547	2.44	36.8	38.8	2.19	29.1	0.01			232
	250 ISL	8.03	8.00	34.073	26.545	152.5	0.576	2.18	32.8	41.9	2.28	30.1	0.01			251
1	272	7.86	7.83	34.119	26.607	147.0	0.609	1.87	28.0	45.9	2.39	31.3	0.00			274
	300 ISL	7.37	7.34	34.112	26.672	141.0	0.649	1.71	25.3	51.4	2.49	33.0	0.00			302
1	328	6.89	6.86	34.095	26.725	136.1	0.688	1.59	23.3	56.6	2.59	34.5	0.00			330
1	387	6.66	6.62	34.156	26.805	129.3	0.766	1.08	15.7	63.9	2.81	36.4	0.00			390
	400 ISL	6.59	6.55	34.170	26.825	127.4	0.783	0.99	14.4	65.6	2.85	36.8	0.00			403
1	453	6.25	6.21	34.212	26.904	120.6	0.849	0.69	10.0	72.8	2.99	38.6	0.00			456
	500 ISL	5.88	5.84	34.210	26.949	116.5	0.905	0.58	8.3	78.6	3.07	39.8				503
1	523	5.70	5.66	34.209	26.971	114.5	0.931	0.53	7.6	81.5	3.11	40.4				527

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
34 23.0 N	122 15.2 W	15/07/92	0818 UTC	4017 m	020 12 kn			1016.7 mb	17.8 C	17.2 C		

CAST	DEPTH in	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	18.24	18.24	33.020	23.699	418.8	0.000	5.61	103.8	2.4	0.38	0.1	0.00	0.10	0.03	0
1	1	18.24	18.24	33.020	23.699	418.8	0.004	5.61	103.8	2.4	0.38	0.1	0.00	0.10	0.03	1
1	10	18.22	18.22	33.018	23.702	418.8	0.042	5.62	104.0	2.4	0.38	0.1	0.00	0.10	0.02	10
1	20	16.81	16.81	32.989	24.017	389.0	0.082	5.84	105.1	2.4	0.39	0.1	0.00	0.14	0.05	20
1	29	14.81	14.81	32.976	24.454	347.6	0.115	6.11	105.7	2.3	0.40	0.1	0.00	0.18	0.07	29
	30 ISL	14.78	14.78	33.000	24.479	345.2	0.119	6.11	105.6	2.2	0.40	0.1	0.00	0.18	0.07	30
1	39	14.54	14.53	33.119	24.623	331.8	0.149	6.10	105.0	1.9	0.43	0.1	0.00	0.23	0.12	39
1	49	13.99	13.98	33.165	24.773	317.7	0.182	5.90	100.5	2.3	0.54	0.5	0.05	0.34	0.21	49
	50 ISL	13.82	13.81	33.154	24.800	315.2	0.185	5.87	99.6	2.6	0.56	0.9	0.08	0.34	0.22	50
1	58	12.42	12.41	33.091	25.029	293.5	0.209	5.59	92.1	5.9	0.76	4.7	0.31	0.38	0.31	58
1	68	11.79	11.78	33.207	25.238	273.8	0.238	5.05	82.1	9.2	1.03	9.6	0.07	0.29	0.31	68
	75 ISL	11.05	11.04	33.320	25.461	252.7	0.256	4.56	73.0	12.8	1.26	13.5	0.05	0.19	0.24	75
1	82	10.39	10.38	33.446	25.674	232.4	0.273	4.06	64.2	16.5	1.47	17.0	0.02	0.10	0.15	82
1	96	10.19	10.18	33.661	25.877	213.5	0.304	3.34	52.6	21.3	1.71	20.6	0.01	0.03	0.08	96
	100 ISL	10.12	10.11	33.702	25.921	209.5	0.313	3.21	50.5	22.4	1.76	21.3	0.01	0.03	0.08	100
1	117	9.86	9.85	33.816	26.054	197.1	0.347	2.85	44.6	25.6	1.88	23.2	0.01	0.01	0.06	118
	125 ISL	9.79	9.78	33.841	26.085	194.3	0.363	2.77	43.3	26.3	1.91	23.7	0.01	0.01	0.06	126
1	141	9.68	9.66	33.869	26.125	190.8	0.394	2.68	41.8	27.3	1.94	24.3	0.01	0.01	0.07	142
	150 ISL	9.61	9.59	33.889	26.153	188.4	0.411	2.62	40.8	28.0	1.96	24.7	0.01	0.01	0.07	151
1	172	9.45	9.43	33.940	26.219	182.5	0.452	2.48	38.5	30.0	2.03	25.6	0.00	0.01	0.06	173
	200 ISL	9.23	9.21	34.005	26.306	174.7	0.502	2.27	35.1	32.7	2.13	26.9	0.00	0.00	0.05	201
1	202	9.21	9.19	34.009	26.313	174.2	0.505	2.26	34.9	32.9	2.14	27.0	0.00	0.00	0.05	203
1	231	9.04	9.01	34.050	26.372	169.0	0.555	2.13	32.8	35.1	2.19	28.0	0.00			232
	250 ISL	8.86	8.83	34.083	26.427	164.2	0.587	2.02	31.0	37.3	2.24	28.7	0.00			251
1	271	8.62	8.59	34.115	26.490	158.5	0.620	1.90	29.0	40.1	2.30	29.5	0.00			273
	300 ISL	8.22	8.19	34.131	26.563	151.8	0.665	1.77	26.8	44.4	2.39	30.8	0.00			302
1	327	7.83	7.80	34.133	26.623	146.4	0.706	1.66	24.9	48.5	2.48	32.1	0.00			329
1	386	7.05	7.01	34.122	26.726	137.1	0.789	1.45	21.3	56.9	2.63	34.6	0.00			388
	400 ISL	6.91	6.87	34.127	26.749	135.0	0.808	1.36	19.9	59.1	2.68	35.2	0.00			403
1	451	6.48	6.44	34.160	26.833	127.4	0.875	0.98	14.2	67.4	2.86	37.4	0.00			454
	500 ISL	6.13	6.09	34.199	26.909	120.6	0.936	0.69	9.9	74.7	3.00	39.1	0.00			503
1	519	6.00	5.95	34.215	26.938	117.9	0.959	0.58	8.3	77.5	3.05	39.7	0.00			523

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 77 SO

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
34 3.6 N	122 56.4 W	15/07/92	0225 UTC	4231 *n*	360 11 Len	320 03 05	2	1017.0 mb	19.2 C	17.8 C	21m 01	8/8	AC

CAST	DEPTH in	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	18.48	18.48	32.979	23.608	427.4	0.000	5.61	104.3	2.4	0.40	0.1	0.00	0.13	0.03	0
1	1	18.48	18.48	32.979	23.608	427.4	0.004	5.61	104.3	2.4	0.40	0.1	0.00	0.13	0.03	1
1	10	18.35	18.35	32.979	23.641	424.7	0.043	5.61	104.0	2.4	0.39	0.1	0.00	0.13	0.04	10
	20 ISL	17.43	17.43	32.972	23.859	404.2	0.084	5.78	105.3	2.4	0.39	0.1	0.00	0.15	0.04	20
1	21	17.34	17.34	32.972	23.880	402.2	0.088	5.80	105.5	2.4	0.39	0.1	0.00	0.15	0.04	21
1	30	17.14	17.14	32.966	23.923	398.3	0.124	5.81	105.2	2.3	0.39	0.1	0.00	0.24	0.11	30
1	39	15.57	15.56	32.907	24.236	368.7	0.159	6.11	107.3	2.3	0.41	0.1	0.00	0.14	0.04	39
1	50	14.16	14.15	32.863	24.505	343.3	0.198	6.16	105.1	2.2	0.42	0.1	0.00	0.21	0.13	50
1	60	13.51	13.50	32.860	24.636	331.1	0.232	6.15	103.5	2.5	0.43	0.1	0.00	0.27	0.17	60
1	70	13.25	13.24	32.990	24.789	316.7	0.264	6.05	101.3	3.4	0.55	1.3	0.07	0.39	0.27	70
	75 ISL	12.85	12.84	33.014	24.887	307.5	0.280	5.96	99.0	4.1	0.62	2.3	0.18	0.33	0.27	75
1	83	12.11	12.10	33.036	25.046	292.4	0.304	5.76	94.2	5.4	0.74	4.4	0.32	0.20	0.28	83
1	99	11.06	11.05	33.103	25.290	269.4	0.348	5.17	82.7	9.1	1.06	10.4	0.06	0.14	0.19	99
	100 ISL	10.98	10.97	33.104	25.305	268.0	0.351	5.15	82.3	9.3	1.07	10.7	0.06	0.14	0.19	100
1	119	9.65	9.64	33.150	25.568	243.2	0.400	4.90	76.0	13.3	1.31	15.0	0.02	0.09	0.11	120
	125 ISL	9.37	9.36	33.192	25.646	235.8	0.414	4.79	73.9	14.8	1.38	16.2	0.02	0.07	0.09	126
1	143	8.77	8.75	33.346	25.862	215.5	0.455	4.45	67.8	19.1	1.57	19.4	0.01	0.02	0.04	144
	150 ISL	8.60	8.58	33.409	25.937	208.4	0.470	4.34	65.9	20.6	1.62	20.3	0.01	0.02	0.04	151
1	174	8.26	8.24	33.618	26.153	188.3	0.517	3.98	60.0	25.2	1.75	22.8	0.01	0.00	0.02	175
	200 ISL	8.19	8.17	33.812	26.316	173.3	0.564	3.49	52.6	29.4	1.86	25.0	0.01	0.00	0.02	201
1	204	8.19	8.17	33.837	26.336	171.5	0.571	3.42	51.6	30.1	1.88	25.3	0.01	0.00	0.02	205
1	232	7.93	7.91	33.965	26.475	158.7	0.617	3.02	45.3	35.7	2.01	27.5	0.00			233
	250 ISL	7.69	7.67	33.992	26.531	153.6	0.645	2.88	43.0	38.8	2.08	28.5	0.00			251
1	273	7.37	7.34	34.000	26.583	148.9	0.680	2.74	40.6	42.7	2.16	29.7	0.00			275
	300 ISL	7.06	7.03	34.015	26.639	143.9	0.720	2,41	35.9	47.7	2.29	31.4	0.00			302
1	329	6.75	6.72	34.025	26.689	139.4	0.761	2.10	30.7	53.1	2.44	33.3	0.00			331
1	389	6.13	6.10	34.032	26.776	131.5	0.842	1.65	23.7	63.2	2.66	36.5	0.00			391
	400 ISL	6.04	6.01	34.038	26.792	130.1	0.856	1.56	22.4	65.0	2.70	37.0	0.00			403
1	453	5.71	5.67	34.083	26.869	123.2	0.924	1.13	16.1	73.3	2.88	39.0	0.00			456
	500 ISL	5.52	5.48	34.134	26.933	117.6	0.980	0.80	11.4	79.8	3.02	40.3				503
1	523	5.42	5.38	34.160	26.965	114.7	1.007	0.64	9.1	83.0	3.09	41.0				527

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 77 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
33 43.3 N	123 37.8 W	14/07/92	1943 UTC	4139 m	340 09 kn	350 01 05	2	1018.7 mb	19.8 C	18.5 C		8/8	AC

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	S103 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	19.15	19.15	33.060	23.502	437.5	0.000	5.49	103.4	2.5	0.35	0.1	0.00	0.09	0.02	0
1	1	19.15	19.15	33.060	23.502	437.6	0.004	5.49	103.4	2.5	0.35	0.1	0.00	0.09	0.02	1
1	10	18.86	18.86	33.062	23.577	430.7	0.043	5.52	103.4	2.5	0.41	0.1	0.00	0.09	0.03	10
1	20	18.44	18.44	33.070	23.688	420.5	0.086	5.58	103.7	2.4	0.35	0.1	0.00	0.08	0.02	20
	30 ISL	17.66	17.65	33.056	23.868	403.6	0.127	5.72	104.7	2.4	0.35	0.1	0.00	0.10	0.03	30
1	31	17.59	17.58	33.055	23.884	402.1	0.131	5.73	104.8	2.4	0.35	0.1	0.00	0.10	0.03	31
1	40	17.45	17.44	33.058	23.920	399.0	0.167	5.73	104.5	2.4	0.35	0.1	0.00	0.11	0.04	40
	50 ISL	17.05	17.04	33.055	24.013	390.4	0.207	5.78	104.6	2.4	0.36	0.0	0.00	0.15	0.06	50
1	51	16.97	16.96	33.054	24.031	388.7	0.211	5.79	104.6	2.4	0.36	0.0	0.00	0.15	0.06	51
1	60	15.66	15.65	33.044	24.323	361.2	0.244	6.02	105.9	2.2	0.36	0.0	0.00	0.14	0.05	60
1	69	15.08	15.07	33.103	24.495	344.9	0.276	6.00	104.4	2.2	0.35	0.0	0.00	0.17	0.07	69
	75 ISL	14.80	14.79	33.115	24.565	338.4	0.297	5.98	103.5	2.2	0.35	0.0	0.00	0.19	0.11	75
1	83	14.40	14.39	33.109	24.646	330.9	0.323	5.95	102.1	2.3	0.36	0.0	0.00	0.21	0.16	83
1	98	13.09	13.08	33.080	24.891	307.7	0.371	5.83	97.4	3.4	0.48	0.6	0.02	0.23	0.23	98
	100 ISL	12.90	12.89	33.075	24.925	304.6	0.377	5.81	96.7	3.6	0.51	1.1	0.04	0.23	0.23	100
1	118	11.32	11.31	33.049	25.202	278.3	0.430	5.56	89.4	6.1	0.79	6.2	0.15	0.20	0.24	118
	125 ISL	10.84	10.83	33.046	25,285	270.4	0.449	5.49	87.4	7.2	0.89	7.9	0.12	0.17	0.22	126
1	143	9.84	9.82	33.089	25.490	251.1	0.496	5.25	81.8	10.8	1.13	12.1	0.02	0.10	0.14	144
	150 ISL	9.52	9.50	33.148	25.588	241.8	0.513	5.07	78.4	12.8	1.24	14.0	0.02	0.08	0.11	151
1	173	8.76	8.74	33.394	25.901	212.3	0.566	4.41	67.2	19.6	1.56	19.5	0.01	0.02	0.03	174
	200 ISL	8.55	8.53	33.673	26.153	188.9	0.620	3.75	56.9	25.3	1.75	23.0	0.00	0.00	0.02	201
1	202	8.53	8.51	33.691	26.170	187.3	0.623	3.71	56.3	25.6	1.76	23.2	0.00	0.00	0.02	203
1	231	8.43	8.41	33.869	26.325	173.2	0.676	3.28	49.7	30.0	1.88	25.3	0.00			232
	250 ISL	8.21	8.18	33.936	26.411	165.3	0.708	3.18	48.0	32.8	1.93	26.2	0.00			251
1	271	7.91	7.88	33.982	26.492	157.8	0.742	3.10	46.5	36.1	1.99	27.2	0.00			272
	300 ISL	7.51	7.48	34.013	26.574	150.3	0.786	2.75	40.9	41.9	2.15	29.4	0.00			302
1	326	7.16	7.13	34.021	26.630	145.2	0.825	2.41	35.5	47.4	2.31	31.4	0.00			328
1	386	6.39	6.36	34.025	26.737	135.4	0.909	1.96	28.4	58.2	2.54	34.2	0.01			388
	400 ISL	6.28	6.24	34.037	26.761	133.3	0.928	1.78	25.7	60.9	2.61	35.1	0.01			402
1	451	5.98	5.94	34.095	26.845	125.7	0.994	1.14	16.3	70.4	2.85	38.4	0.00			454
	500 ISL	5.68	5.64	34.149	26.925	118.5	1.054	0.78	11.1	78.4	3.01	39.9				503
1	520	5.56	5.52	34.171	26.957	115.6	1.077	0.64	9.1	81.7	3.07	40.5				523

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 77 100

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCBI/FOREL	CLD AMT TYPE
33 23.2 N	124 19.4 W	14/07/92	1339 UTC	4496 m	340 05 kn	340 02 04	6	1017.8 mb	17.8 C	17.8 C	33m 01	7/8 AC

CAST	DEPTH HI	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA TBETA	SVA	DYN BT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 UM/1	NO2 UM/1	CBL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	19.13	19.13	33.095	23.534	434.5	0.000	5.46	102.8	2.5	0.36	0.1	0.00	0.10	0.02	0
1	1	19.13	19.13	33.095	23.534	434.5	0.004	5.46	102.8	2.5	0.36	0.1	0.00	0.10	0.02	1
1	10	19.13	19.13	33.094	23.534	434.9	0.043	5.47	103.0	2.4	0.36	0.1	0.00	0.10	0.02	10
1	20	18.88	18.88	33.086	23.591	429.8	0.087	5.50	103.1	2.4	0.36	0.1	0.00	0.10	0.02	20
1	30	18.37	18.36	33.072	23.708	419.0	0.129	5.59	103.7	2.4	0.36	0.1	0.00	0.10	0.02	30
1	40	17.61	17.60	33.074	23.894	401.5	0.170	5.74	105.0	2.4	0.36	0.1	0.00	0.11	0.03	40
	50 ISL	17.43	17.42	33.069	23.934	398.0	0.210	5.73	104.4	2.4	0.36	0.1	0.00	0.13	0.03	50
1	51	17.41	17.40	33.073	23.942	397.3	0.214	5.73	104.4	2.4	0.36	0.1	0.00	0.13	0.03	51
1	61	15.87	15.86	33.042	24.274	365.8	0.252	6.03	106.6	2.4	0.36	0.1	0.00	0.17	0.04	61
1	72	15.05	15.04	33.042	24.455	348.8	0.292	6.03	104.8	2.4	0.36	0.1	0.00	0.11	0.06	72
	75 ISL	14.93	14.92	33.052	24.489	345.7	0.302	6.02	104.4	2.4	0.36	0.1	0.00	0.13	0.07	75
1	86	14.39	14.38	33.073	24.620	333.4	0.339	5.98	102.6	2.5	0.38	0.1	0.00	0.22	0.14	86
	100 ISL	12.87	12.86	32.996	24.870	309.8	0.384	5.93	98.5	3.5	0.50	0.7	0.01	0.28	0.23	100
1	101	12.75	12.74	32.991	24.889	308.0	0.387	5.93	98.3	3.6	0.51	0.7	0.01	0.28	0.24	101
1	121	11.19	11.18	33.070	25.242	274.5	0.446	5.38	86.3	7.7	0.92	8.2	0.05	0.20	0.21	121
	125 ISL	10.91	10.89	33.092	25.309	268.2	0.457	5.28	84.2	8.7	0.99	9.5	0.05	0.18	0.20	126
1	145	9.71	9.69	33.222	25.615	239.3	0.507	4.82	74.9	13.6	1.29	14.8	0.01	0.08	0.12	146
	150 ISL	9.46	9.44	33.256	25.682	232.9	0.519	4.74	73.3	14.8	1.35	15.8	0.01	0.06	0.10	151
1	175	8.57	8.55	33.451	25.975	205.3	0.574	4.34	65.8	20.7	1.60	20.1	0.01	0.01	0.03	176
	200 ISL	8.25	8.23	33.699	26.218	182.6	0.622	3.62	54.6	27.5	1.83	24.1	0.00	0.00	0.03	201
1	205	8.23	8.21	33.745	26.257	179.0	0.631	3.48	52.5	28.8	1.87	24.8	0.00	0.00	0.03	206
1	233	8.10	8.08	33.899	26.398	166.1	0.680	3.08	46.4	33.2	1.99	26.8	0.00			234
	250 ISL	7.96	7.93	33.947	26.457	160.8	0.707	3.07	46.1	35.2	2.02	27.2	0.00			251
1	273	7.73	7.70	33.980	26.516	155.4	0.744	3.05	45.5	37.7	2.06	27.5	0.00			274
	300 ISL	7.39	7.36	33.990	26.573	150.3	0.785	2.94	43.6	41.5	2.12	28.6	0.00			302
1	326	7.06	7.03	33.990	26.619	146.1	0.824	2.74	40.3	45.7	2.21	30.1	0.00			328
1	386	6.45	6.42	34.031	26.734	135.7	0.908	1.89	27.4	57.8	2.55	34.4	0.00			388
	400 ISL	6.36	6.32	34.050	26.761	133.3	0.927	1.69	24.5	60.5	2.63	35.2	0.00			402
1	452	6.06	6.02	34.115	26.851	125.3	0.994	1.08	15.5	69.8	2.86	37.8	0.00			455
	500 ISL	5.68	5.64	34.135	26.914	119.5	1.053	0.84	12.0	77.5	2.96	39.4				503
1	523	5.50	5.46	34.145	26.944	116.8	1.080	0.72	10.2	81.2	3.01	40.2				526

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 80 51

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCBI/FOREL	CLD AMT TYPE
34 26.9 N	120 31.5 W	13/07/92	0224 UTC	75 m	310 10 Jen	150 02 04	4	1013.4 mb	19.5 C	19.2 C	12m 04	8/8

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA TBETA	SVA	DYN BT	OXYGEN ml/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CBL-A ug/1	PHAEO ug/1	PRESS <B>
1	0	16.39	16.39	33.349	24.390	352.9	0.000	6.59	117.9	2.7	0.38	0.6	0.04	1.38	0.55	0
1	5	15.63	15.63	33.360	24.570	335.8	0.017	6.62	116.7	3.4	0.44	0.9	0.06	2.11	0.62	5
1	10	12.88	12.88	33.381	25.163	279.5	0.033	6.30	105.0	3.7	0.65	1.8	0.08	2.28	0.59	10
1	20	11.85	11.85	33.421	25.392	258.0	0.059	5.17	84.3	7.2	1.04	7.4	0.18	1.37	0.71	20
1	30	11.82	11.82	33.425	25.401	257.3	0.085	5.04	82.1	8.7	1.10	8.6	0.20	1.26	0.93	30
1	40	11.66	11.65	33.450	25.450	252.9	0.111	4.71	76.5	10.6	1.27	10.2	0.23	1.39	1.39	40
1	50	11.44	11.43	33.446	25.488	249.6	0.136	4.58	74.0	11.3	1.27	11.2	0.24	0.84	1.04	50
1	60	11.00	10.99	33.513	25.619	237.3	0.160	4.04	64.7	15.3	1.47	14.5	0.26	0.58	0.86	60

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 80 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	KIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCBI/FOREL	CLD AMT TYPE
34 19.1 N	120 48.0 W	13/07/92	0510 UTC	762 m	300 08 Jen			1013.8 mb	19.8 C	19.4 C		

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA TBETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	19.28	19.28	33.061	23.470	440.6	0.000	5.61	105.9	2.1	0.37	0.1	0.01	0.13	0.03	0
1	1	19.28	19.28	33.061	23.470	440.6	0.004	5.61	105.9	2.1	0.37	0.1	0.01	0.13	0.03	1
	10 ISL	18.08	18.08	33.112	23.809	408.6	0.043	5.75	106.2	2.1	0.37	0.1	0.01	0.21	0.05	10
1	12	17.59	17.59	33.126	23.938	396.4	0.051	5.78	105.7	2.1	0.37	0.1	0.01	0.24	0.06	12
	20 ISL	15.22	15.22	33.138	24.490	343.9	0.080	6.44	112.4	1.2	0.38	0.1	0.01	0.37	0.12	20
1	21	14.91	14.91	33.143	24.562	337.2	0.084	6.51	112.9	1.1	0.38	0.1	0.01	0.40	0.13	21
	30 ISL	12.73	12.73	33.214	25.064	289.5	0.112	6.24	103.5	2.7	0.60	2.4	0.10	0.96	0.41	30
1	31	12.55	12.55	33.228	25.110	285.1	0.115	6.21	102.7	2.9	0.64	2.8	0.11	1.03	0.45	31
1	40	12.16	12.15	33.445	25.353	262.2	0.139	5.05	82.9	9.2	1.09	8.6	0.20	1.49	0.86	40
1	50	11.87	11.86	33.459	25.418	256.2	0.165	4.86	79.3	10.6	1.18	10.0	0.23	1.13	0.96	50
1	61	11.53	11.52	33.486	25.503	248.4	0.193	4.56	73.9	12.6	1.30	12.0	0.25	1.38	0.99	61
1	71	10.87	10.86	33.526	25.653	234.3	0.217	4.03	64.4	16.2	1.50	15.8	0,27	0.65	0.71	71
	75 ISL	10.71	10.70	33.544	25.695	230.4	0.226	3.88	61.8	17.2	1.55	16.8	0.27	0.55	0.70	75
1	78	10.61	10.60	33.558	25.724	227.7	0.233	3.78	60.1	17.8	1.59	17.4	0.27	0.51	0.70	78
1	98	10.07	10.06	33.682	25.913	210.1	0.277	3.18	50.0	22.9	1.80	21.2	0.28	0.19	0.51	98
	100 ISL	10.04	10.03	33.695	25.929	208.7	0.281	3.13	49.2	23.3	1.81	21.5	0.27	0.17	0.49	100
1	118	9.90	9.89	33.796	26.031	199.3	0.318	2.84	44.5	25.4	1.90	23.0	0.15	0.10	0.36	119
	125 ISL	9.92	9.91	33.815	26.043	198.3	0.332	2.81	44.0	25.5	1.90	23.0	0.14	0.10	0.34	126
1	144	10.01	9.99	33.854	26.059	197.3	0.370	2.77	43.5	25.7	1.91	23.1	0.13	0.10	0.31	145
	150 ISL	9.99	9.97	33.874	26.078	195.6	0.381	2.73	42.9	26.1	1.93	23.3	0.13	0.09	0.29	151
1	174	9.83	9.81	33.959	26.171	187.2	0.427	2.49	39.0	28.4	2.03	24.6	0.13	0.05	0.23	175
	200 ISL	9.52	9.50	34.035	26.282	177.1	0.475	2.18	33.9	32.3	2.16	26.4	0.06	0.03	0.23	201
1	203	9.48	9.46	34.043	26.295	175.9	0.480	2.14	33.3	32.8	2.18	26.6	0.05	0.03	0.23	204
1	233	9.04	9.01	34.108	26.417	164.8	0.531	1.85	28.5	37.7	2.33	28.5	0.04			234
	250 ISL	8.90	8.87	34.130	26.457	161.3	0.559	1.82	27.9	39.0	2.36	28.9	0.05			251
1	274	8.76	8.73	34.151	26.496	158.0	0.597	1.78	27.2	40.3	2.39	29.2	0.06			276
	300 ISL	8.62	8.59	34.170	26.533	155.0	0.638	1.71	26.1	41.9	2.43	29.6	0.04			302
1	329	8.38	8.35	34.184	26.581	150.8	0.682	1.58	24.0	44.8	2.50	30.5	0.02			331
1	388	7.34	7.30	34.198	26.745	135.5	0.767	1.09	16.1	58.4	2.80	34.4	0.04			391
	400 ISL	7.18	7.14	34.198	26.768	133.5	0.783	0.99	14.6	62.0	2.86	34.6	0.04			403
1	454	6.59	6.55	34.197	26.847	126.2	0.853	0.64	9.3	75.6	3.08	35.4	0.02			457
	500 ISL	6.21	6.17	34.211	26.908	120.7	0.910	0.61	8.8	76.7	3.08	38.1	0.01			503
1	522	6.03	5.98	34.219	26.938	118.1	0.936	0.59	8.5	77.2	3.08	39.4	0.01			526

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 80 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRV	WET	SECCHI/FOREL	CLD AMT TYPE
34 9.0 N	121 9.0 W	13/07/92	0853 UTC	2187 m	080 05 *.n			1014.2 mb	21.2 C	20.1 C		

CAST	DEPTH in	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS Ob
	0 ISL	19.71	19.71	33.043	23.346	452.4	0.000	5.55	105.6	2.2	0.37	0.1	0.00	0.12	0.03	0
1	1	19.71	19.71	33.043	23.346	452.5	0.005	5.55	105.6	2.2	0.37	0.1	0.00	0.12	0.03	1
	10 ISL	17.96	17,96	33.087	23.819	407.7	0.043	5.71	105.2	2.2	0.37	0.1	0.00	0.11	0.02	10
1	11	17.71	17.71	33.096	23.886	401.3	0.047	5.73	105.0	2.2	0.37	0.1	0.00	0.11	0.02	11
1	20	17.01	17.01	33.134	24.082	382.9	0.083	5.85	105.8	1.7	0.38	0.1	0.00	0.14	0.04	20
1	30	16.02	16.02	33.002	24.209	371.1	0.120	5.99	106.2	2.2	0.38	0.1	0.01	0.17	0.05	30
1	40	14.87	14.86	33.009	24.467	346.7	0.156	6.08	105.3	2.2	0.39	0.1	0.01	0.20	0.12	40
1	50	14.01	14.00	33.085	24.708	324.0	0.190	6.11	104.0	2.7	0.43	0.1	0.00	0.27	0.17	50
1	60	12.72	12.71	33.071	24.956	300.5	0.221	5.83	96.6	4.4	0.62	2.5	0.13	0.48	0.28	60
1	70	11.79	11.78	33.053	25.119	285.2	0.250	5.59	90.8	6.1	0.80	6.0	0.15	0.39	0.36	70
	75 ISL	11.27	11.26	33.065	25.223	275.3	0.264	5.43	87.3	7.6	0.93	8.1	0.12	0.34	0.34	75
1	83	10.51	10.50	33.103	25.386	259.8	0.286	5.16	81.6	10.1	1.12	11.4	0.06	0.25	0.28	83
1	98	9.80	9.79	33.188	25.573	242.3	0.323	4.82	75.1	13.4	1.32	15.0	0.03	0.13	0.18	98
	100 ISL	9.75	9.74	33.202	25.592	240.5	0.328	4.78	74.4	13.8	1.34	15.4	0.03	0.12	0.17	100
1	118	9.43	9.42	33.345	25.756	225.2	0.370	4.38	67.7	17.3	1.52	18.2	0.01	0.06	0.09	119
	125 ISL	9.32	9.31	33.401	25.818	219.5	0.386	4.23	65.3	18.6	1.58	19.2	0.01	0.04	0.07	126
1	143	9.06	9.04	33.552	25.978	204.6	0.424	3.82	58.6	22.3	1.73	21.7	0.01	0.01	0.04	144
	150 ISL	8.98	8.96	33.628	26.050	197.9	0.438	3.60	55.2	24.1	1.79	22.8	0.01	0.01	0.04	151
1	173	8.76	8.74	33.852	26.260	178.4	0.481	2.95	45.1	29.5	1.98	25.8	0.00	0.01	0.05	174
	200 ISL	8.55	8.53	33.954	26.373	168.1	0.528	2.68	40.8	33.3	2.08	27.3	0.01	0.01	0.04	201
1	204	8.52	8.50	33.963	26.385	167.1	0.535	2.65	40.3	33.8	2.09	27.4	0.01	0.01	0.04	205
1	233	8.41	8.39	34.086	26.498	156.8	0.582	2.12	32.2	39.8	2.28	29.3	0.00			234
	250 ISL	8.11	8.08	34.089	26.546	152.5	0.608	2.11	31.8	42.3	2.33	30.1	0.00			251
1	273	7.63	7.60	34.074	26.605	147.0	0.642	2.10	31.3	45.8	2.38	31.2	0.00			275
	300 ISL	7.29	7.26	34.110	26.682	140.0	0.681	1.72	25.4	52.0	2.55	33.0	0.00			302
1	328	7.03	7.00	34.155	26.753	133.5	0.719	1.26	18.5	58.5	2.73	34.9	0.00			330
1	388	6.49	6.45	34.181	26.847	125.1	0.797	0.88	12.8	67.7	2.91	37.4	0.00			390
	400 ISL	6.42	6.38	34.190	26.864	123.7	0.812	0.82	11.9	69.0	2.94	37.7	0.00			403
1	454	6.16	6.12	34.231	26.930	118.0	0.877	0.60	8.6	74.9	3.05	39.0	0.00			457
	500 ISL	5.83	5.79	34.256	26.991	112.4	0.930	0.45	6.4	81.4	3.14	40.1				503
1	523	5.67	5.63	34.269	27.022	109.7	0.956	0.38	5.4	84.6	3.18	40.7				527

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 80 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
33 49.0 N	121 50.5 W	13/07/92	1412 UTC	3622 in	050 09 Kn	330 03 03	4	1014.7 mb	21.2 C	20.9 C	26m 02	8/8 AC

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 UM/1	PO4 uM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	19.66	19.66	33.110	23.410	446.3	0.000	5.62	106.9	1.2	0.36	0.1	0.00	0.15	0.05	0
1	1	19.66	19.66	33.110	23.410	446.3	0.004	5.62	106.9	1.2	0.36	0.1	0.00	0.15	0.05	1
1	10	17.07	17.07	33.181	24.104	380.5	0.042	5.91	107.1	1.3	0.37	0.0	0.00	0.15	0.06	10
1	20	14.87	14.87	33.222	24.631	330.5	0.077	6.44	111.7	1.2	0.37	0.0	0.00	0.28	0.17	20
	30 ISL	12.71	12.71	33.146	25.015	294.1	0.108	5.97	99.0	4.6	0.69	3.4	0.18	0.59	0.28	30
1	31	12.53	12.53	33.138	25.044	291.4	0.111	5.90	97.4	5.0	0.73	3.8	0.20	0.62	0.29	31
1	40	11.71	11.70	33.140	25.200	276.7	0.137	5.47	88.8	7.4	0.96	7.5	0.30	0.67	0.32	40
1	50	11.14	11.13	33.388	25.497	248.7	0.163	4.40	70.7	13.4	1.31	14.1	0.24	0.41	0.32	50
1	61	10.64	10.63	33.434	25.621	237.0	0.190	4.46	70.9	15.5	1.43	15.1	0.32	0.25	0.31	61
1	70	9.90	9.89	33.365	25.694	230.2	0.211	4.31	67.3	16.9	1.49	17.5	0.13	0.16	0.26	70
	75 ISL	9.58	9.57	33.374	25.754	224.6	0.222	4.22	65.5	18.0	1.55	18.7	0.07	0.12	0.22	75
1	84	9.19	9.18	31.432	25.862	214.4	0.242	4.04	62.2	20.2	1.65	20.4	0.02	0.06	0.15	84
1	99	9.08	9.07	33.556	25.977	203.8	0.273	3.71	57.0	22.8	1.75	22.1	0.02	0.03	0.10	99
	100 ISL	9.07	9.06	33.563	25.984	203.2	0.275	3.69	56.7	23.0	1.76	22.2	0.02	0.03	0.10	100
1	119	8.90	8.89	33.688	26.109	191.7	0.313	3.31	50.7	26.4	1.87	24.1	0.01	0.02	0.15	120
	125 ISL	8.81	8.80	33.724	26.151	187.8	0.324	3.23	49.4	27.4	1.90	24.6	0.01	0.02	0.14	126
1	145	8.53	8.51	33.832	26.279	175.9	0.361	3.02	45.9	30.5	1.98	26.0	0.01	0.01	0.08	146
	150 ISL	8.50	8.48	33.859	26.305	173.5	0.369	2.94	44.7	31.3	2.00	26.4	0.01	0.01	0.08	151
1	175	8.37	8.35	33.967	26.410	164.1	0.412	2.63	39.9	34.9	2.11	27.9	0.01	0.01	0.09	176
	200 ISL	8.10	8.08	34.011	26.485	157.3	0.452	2.60	39.2	37.7	2.15	28.5	0.01	0.01	0.07	201
1	204	8.05	8.03	34.015	26.496	156.3	0.458	2.60	39.1	38.2	2.16	28.6	0.01	0.01	0.07	205
1	232	7.84	7.82	34.067	26.568	149.9	0.501	2.22	33.3	43.3	2.30	30.4	0.01			233
	250 ISL	7.57	7.55	34.051	26.595	147.5	0.528	2.25	33.5	45.1	2.32	30.9	0.01			251
1	273	7.23	7.20	34.025	26.623	145.1	0.561	2.31	34.1	47.1	2.35	31.4	0.01			275
	300 ISL	7.11	7.08	34.065	26.671	140.9	0.600	1.94	28.6	51.5	2.49	32.8	0.01			302
1	327	7.04	7.01	34.119	26.724	136.3	0.637	1.48	21.8	56.5	2.65	34.4	0.00			329
1	386	6.49	6.46	34.158	26.829	126.8	0.715	0.99	14.4	66.6	2.88	37.1	0.00			389
	400 ISL	6.38	6.34	34.168	26.851	124.8	0.733	0.91	13.2	68.6	2.92	37.6	0.00			403
1	452	6.03	5.99	34.201	26.923	118.5	0.796	0.66	9.5	75.6	3.05	39.2	0.00			455
	500 ISL	5.74	5.70	34.225	26.978	113.6	0.852	0.50	7.1	82.0	3.13	40.3				503
1	520	5.62	5.58	34.236	27.002	111.5	0.874	0.44	6.3	84.6	3.16	40.7				524

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 80 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	NAVES	NEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
33 29.4 N	122 30.8 W	13/07/92	2042 UTC	3966 in	050 12 *kn*	050 03 04	4	1016.2 mb	20.1 C	19.8 C		8/8	AS

CAST	DEPTH *m*	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRESS db
	0 ISL	19.30	19.30	33.099	23.494	438.3	0.000	5.51	104.1	2.2	0.34	0.1	0.00	0.11	0.02	0
1	1	19.30	19.30	33.099	23.494	438.4	0.004	5.51	104.1	2.2	0.34	0.1	0.00	0.11	0.02	1
1	10	19.19	19.19	33.104	23.526	435.6	0.044	5.52	104.1	2.2	0.34	0.1	0.00	0.11	0.02	10
1	20	18.63	18.63	33.168	23.716	417.8	0.086	5.56	103.8	2.2	0.34	0.1	0.00	0.10	0.02	20
1	30	17.59	17.58	33.077	23.901	400.5	0.127	5.77	105.5	2.2	0.36	0.1	0.00	0.13	0.04	30
1	40	16.65	16.64	33.005	24.067	384.9	0.167	5.88	105.5	2.2	0.36	0.1	0.00	0.13	0.03	40
1	50	16.22	16.21	32.996	24.160	376.4	0.205	5.90	105.0	2.2	0.36	0.1	0.00	0.14	0.05	50
1	60	15.40	15.39	32.955	24.311	362.2	0.242	6.00	105.0	2.2	0.38	0.1	0.00	0.21	0.08	60
1	71	13.95	13.94	32.962	24.626	332.4	0.280	6.12	104.0	2.3	0.39	0.1	0.00	0.25	0.16	71
	75 ISL	13.56	13.55	32.976	24.716	323.8	0.293	6.09	102.7	2.5	0.42	0.3	0.01	0.28	0.18	75
1	85	12.79	12.78	33.011	24.896	306.9	0.324	5.92	98.2	3.5	0.53	0.9	0.06	0.33	0.24	85
1	99	11.93	11.92	33.018	25.066	290.9	0.366	5.67	92.4	5.4	0.72	4.5	0.12	0.31	0.33	99
	100 ISL	11.86	11.85	33.021	25.081	289.5	0.369	5.65	91.9	5.6	0.74	4.8	0.12	0.30	0.33	100
1	119	10.63	10.62	33.105	25.368	262.4	0.422	5.13	81.3	10.1	1.10	11.0	0.06	0.17	0.24	119
	125 ISL	10.28	10.27	33.146	25.460	253.7	0.437	4.97	78.2	11.7	1.20	12.8	0.05	0.14	0.21	126
1	144	9.38	9.36	33.302	25.731	228.1	0.483	4.46	68.9	16.8	1.49	17.9	0.02	0.07	0.11	145
	150 ISL	9.23	9.21	33.357	25.798	221.8	0.496	4.30	66.2	18.2	1.56	19.0	0.02	0.05	0.09	151
1	175	8.88	8.86	33.594	26.039	199.3	0.549	3.70	56.6	23.6	1.76	22.6	0.05	0.01	0.05	176
	200 ISL	8.69	8.67	33.831	26.255	179.3	0.596	3.19	48.6	28.8	1.90	25.1	0.03	0.01	0.05	201
1	204	8.66	8.64	33.863	26.285	176.6	0.603	3.12	47.6	29.6	1.92	25.4	0.02	0.01	0.05	205
1	233	8.26	8.24	33.977	26.436	162.7	0.653	2.90	43.8	34.7	2.02	27.1	0.01			234
	250 ISL	8.12	8.09	34.019	26.490	157.8	0.680	2.71	40.8	37.4	2.10	28.1	0.01			251
1	274	7.95	7.92	34.057	26.545	152.9	0.717	2.41	36.2	41.2	2.23	29.4	0.01			275
	300 ISL	7.70	7.67	34.079	26.599	148.1	0.756	2.14	32.0	45.4	2.35	30.9	0.01			302
1	329	7.40	7.37	34.093	26.653	143.2	0.799	1.86	27.6	50.2	2.47	32.5	0.00			331
1	388	6.78	6.74	34.122	26.762	133.4	0.880	1.30	19.0	60.5	2.72	35.6	0.00			390
	400 ISL	6.68	6.64	34.127	26.780	131.8	0.896	1.22	17.8	62.3	2.76	36.1	0.00			402
1	453	6.30	6.26	34.149	26.847	125.9	0.964	0.93	13.4	69.9	2.91	37.9	0.00			456
	500 ISL	5.93	5.89	34.181	26.920	119.3	1.022	0.68	9.7	77.1	3.03	39.4				503
1	523	5.75	5.71	34.198	26.956	116.0	1.049	0.56	8.0	80.6	3.09	40.1				526

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 80 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	NAVES	NEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
33 9.2 N	123 13.3 W	14/07/92	0239 UTC	4231 m	050 11 kn	320 03 04	4	1015.3 mb	19.3 C	18.8 C	26m 01	8/8	AS

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 UM/l	PO4 UM/l	NO3 UM/l	NO2 UM/l	CHL-A ug/l	PHAEO ug/l	PRESS db
	0 ISL	19.14	19.14	33.089	23.527	435.2	0.000	5.51	103.8	2.5	0.37	0.1	0.00	0.09	0.02	0
1	1	19.14	19.14	33.089	23.527	435.2	0.004	5.51	103.8	2.5	0.37	0.1	0.00	0.09	0.02	1
1	10	19.10	19.10	33.088	23.537	434.6	0.043	5.52	103.9	2.5	0.36	0.1	0.00	0.09	0.03	10
	20 ISL	18.24	18.24	33.095	23.757	413.9	0.086	5.62	104.1	2.5	0.36	0.1	0.00	0.10	0.02	20
1	21	18.14	18.14	33.096	23.782	411.6	0.090	5.63	104.1	2.5	0.36	0.1	0.00	0.10	0.02	21
1	30	17.65	17.64	33.087	23.894	401.1	0.127	5.73	104.9	2.5	0.36	0.1	0.00	0.13	0.03	30
1	40	16.72	16.71	33.070	24.101	381.7	0.166	5.84	105.0	2.3	0.37	0.1	0.00	0.13	0.04	40
1	49	16.00	15.99	32.990	24.205	372.1	0.200	5.91	104.7	2.3	0.37	0.1	0.00	0.18	0.06	49
	50 ISL	15.94	15.93	32.992	24.220	370.7	0.203	5.92	104.7	2.3	0.37	0.1	0.00	0.18	0.06	50
1	58	15.43	15.42	33.024	24.358	357.7	0.233	6.01	105.3	2.4	0.37	0.1	0.00	0.22	0.11	58
1	69	14.31	14.30	33.008	24.586	336.1	0.271	6.11	104.6	2.7	0.42	0.1	0.00	0.33	0.21	69
	75 ISL	13.99	13.98	33.008	24.653	329.9	0.291	6.08	103.4	2.8	0.44	0.2	0.01	0.36	0.27	75
1	82	13.68	13.67	33.015	24.722	323.5	0.314	6.05	102.3	3.1	0.47	0.3	0.04	0.38	0.32	82
1	97	12.65	12.64	33.073	24.972	299.9	0.360	5.63	93.2	5.0	0.69	3.7	0.15	0.32	0.30	97
	100 ISL	12.38	12.37	33.082	25.031	294.4	0.369	5.53	91.0	5.7	0.76	4.9	0.14	0.29	0.29	100
1	117	10.94	10.93	33.162	25.358	263.4	0.417	4.97	79.3	10.6	1.16	11.9	0.02	0.13	0.21	117
	125 ISL	10.46	10.45	33.235	25.499	250.1	0.437	4.70	74.3	12.9	1.30	14.3	0.02	0.09	0.16	126
1	142	9.74	9.72	33.410	25.757	225.8	0.478	4.16	64.8	17.5	1.53	18.3	0.01	0.03	0.08	143
	150 ISL	9.56	9.54	33.488	25.848	217.3	0.495	3.93	61.0	19.4	1.62	19.7	0.01	0.02	0.08	151
1	172	9.24	9.22	33.680	26.050	198.4	0.541	3.40	52.4	23.9	1.80	22.7	0.01	0.01	0.09	173
	200 ISL	8.77	8.75	33.857	26.263	178.6	0.594	3.06	46.8	28.9	1.92	25.4	0.01	0.01	0.04	201
1	202	8.74	8.72	33.867	26.276	177.5	0.597	3.04	46.4	29.2	1.93	25.5	0.01	0.01	0.04	203
1	232	8.47	8.45	33.986	26.411	165.1	0.649	2.71	41.2	34.1	2.07	27.3	0.00			233
	250 ISL	8.26	8.23	34.022	26.471	159.6	0.678	2.57	38.9	37.0	2.14	28.3	0.00			251
I	272	7.99	7.96	34.046	26.530	154.3	0.713	2.41	36.2	40.6	2.21	29.5	0.00			273
	300 ISL	7.64	7.61	34.060	26.593	148.6	0.755	2.21	32.9	45.1	2.32	31.0	0.00			302
1	329	7.30	7.27	34.070	26.649	143.5	0.797	1.98	29.3	49.9	2.44	32.5	0.00			331
1	388	6.81	6.77	34.129	26.764	133.3	0.879	1.28	18.7	60.1	2.72	35.6	0.00			390
	400 ISL	6.71	6.67	34.135	26.782	131.7	0.895	1.19	17.4	61.9	2.76	36.1	0.00			402
1	454	6.28	6.24	34.163	26.861	124.6	0.964	0.87	12.6	69.9	2.90	38.1	0.00			457
	500 ISL	5.96	5.92	34.205	26.935	117.9	1.020	0.61	8.7	77.4	3.04	39.6				503
1	522	5.80	5.75	34.225	26.971	114.6	1.045	0.48	6.9	81.0	3.10	40.3				525

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 80 100

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
32 49.2 N	123 5*.4 W	14/07/92	0813 UTC	4114 *m*	340 10 kn			1017.0 mb	18.6 C	18.6 C		

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
1	0	19.67	19.67	33.168	23.452	442.4	0.000	5.40	102.8	2.4	0.36	0.1	0.00	0.07	0.02	0
1	10	19.68	19.68	33.167	23.449	443.0	0.044	5.40	102.8	2.4	0.36	0.1	0.00	0.07	0.02	10
1	20	19.50	19.50	33.166	23.495	439.0	0.088	5.43	103.0	2.3	0.36	0.1	0.00	0.08	0.02	20
1	30	18.72	18.71	33.147	23.678	421.8	0.131	5.60	104.7	2.3	0.36	0.1	0.00	0.10	0.02	30
1	41	17.86	17.85	33.120	23.869	403.9	0.177	5.74	105.5	2.3	0.38	0.1	0.00	0.11	0.05	41
1	50	16.90	16.89	33.067	24.057	386.2	0.212	5.91	106.6	2.3	0.36	0.1	0.00	0.12	0.03	50
1	60	15.84	15.83	33.025	24.268	366.4	0.250	6.02	106.3	2.3	0.38	0.1	0.00	0.15	0.06	60
1	71	15.06	15.05	33.008	24.427	351.5	0.289	6.06	105.4	2.4	0.38	0.1	0.00	0.19	0.08	71
	75 ISL	14.42	14.41	33.003	24.560	338.9	0.303	6.05	103.8	2.6	0.40	0.2	0.01	0.27	0.13	75
1	84	12.96	12.95	33.020	24.870	309.3	0.332	6.03	100.4	3.4	0.50	0.4	0.03	0.41	0.23	84
1	99	12.01	12.00	33.096	25.112	286.6	0.377	5.50	89.8	6.0	0.82	6.1	0.10	0.24	0.23	99
	100 ISL	11.93	11.92	33.097	25.127	285.1	0.380	5.48	89.3	6.2	0.84	6.4	0.10	0.23	0.23	100
1	118	10.44	10.43	33.122	25.414	258.0	0.429	5.15	81.3	9.9	1.11	11.4	0.03	0.13	0.15	118
	125 ISL	9.91	9.90	33.146	25.522	247.7	0.447	5.08	79.3	11.6	1.21	13.0	0.02	0.10	0.12	126
1	143	8.90	8.88	33.256	25.771	224.2	0.489	4.85	74.0	16.2	1.43	16.8	0.01	0.03	0.05	144
	150 ISL	8.88	8.86	33.346	25.845	217.3	0.505	4.61	70.4	17.9	1.50	18.2	0.01	0.03	0.05	151
1	173	8.80	8.78	33.590	26.049	198.4	0.552	3.83	58.5	23.1	1.70	22.2	0.01	0.01	0.03	174
	200 ISL	8.25	8.23	33.757	26.264	178.3	0.603	3.60	54.3	28.5	1.85	24.6	0.00	0.00	0.03	201
1	204	8.16	8.14	33.776	26.292	175.6	0.610	3.57	53.8	29.2	1.86	24.8	0.00	0.00	0.03	205
1	232	7.91	7.89	33.930	26.450	161.1	0.657	3.84	57.6	31.6	1.75	24.1	0.00			233
	250 ISL	7.66	7.64	33.962	26.512	155.4	0.686	3.48	51.9	35.9	1.90	26.1	0.00			251
1	272	7.36	7.33	33.974	26.564	150.7	0.720	2.88	42.6	41.8	2.14	29.3	0.00			273
	300 ISL	7.14	7.11	34.006	26.621	145.6	0.761	2.51	37.0	46.7	2.29	31.1	0.00			302
1	328	6.97	6.94	34.037	26.669	141.4	0.801	2.22	32.6	50.9	2.39	32.4	0.00			330
1	387	6.58	6.54	34.096	26.768	132.6	0.882	1.43	20.8	60.9	2.67	35.8	0.00			389
	400 ISL	6.46	6.42	34.109	26.794	130.3	0.899	1.28	18.6	63.5	2.74	36.5	0.00			402
1	452	6.04	6.00	34.162	26.891	121.5	0.965	0.81	11.6	73.0	2.98	38.9	0.00			455
	500 ISL	5.88	5.84	34.213	26.951	116.3	1.022	0.58	8.3	78.0	3.06	39.7				503
1	521	5.81	5.76	34.236	26.978	113.9	1.046	0.48	6.9	80.2	3.09	40.0				524

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 82 47

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
34 16.9 N	120 1.5 W	12/07/92	2205 UTC		160 05 kn	270 01 04	5	1014.2 mb	20.2 C	20.1 C	19m 04	8/8

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO Ug/1	PRESS db
	0 ISL	17.55	17.55	33.288	24.071	383.3	0.000	6.29	115.1	1.6	0.37	0.1	0.00	0.55	0.18	0
	1A	17.55	17.55	33.288	24.071	383.3	0.004	6.29	115.1	1.6	0.37	0.1	0.00	0.55	0.18	1
1	10	15.47	15.47	33.347	24.596	333.5	0.036	6.69	117.5	1.4	0.39	0.1	0.00	1.02	0.32	10
1	20	14.32	14.32	33.369	24.861	308.5	0.068	6.74	115.7	1.5	0.49	0.2	0.00	0.66	0.29	20
1	29	13.92	13.92	33.392	24.963	299.1	0.096	6.47	110.2	2.2	0.54	1.0	0.02	0.55	0.33	29
	30 ISL	13.89	13.89	33.391	24.968	298.6	0.099	6.45	109.8	2.3	0.55	1.0	0.02	0.65	0.49	30
1	39	13.6	13.6	33.387	25.025	293.5	0.125	6.14	103.9	2.9	0.61	1.8	0.04	1.32	1.72	39
1	48	13.10	13.09	33.423	25.153	281.5	0.151	5.28	88.4	6.4	0.95	5.2	0.09	0.49	0.98	48
	50 ISL	12.99	12.98	33.426	25.178	279.2	0.157	5.20	86.9	6.8	0.98	5.6	0.10	0.57	1.12	50
1	59	12.53	12.52	33.438	25.277	270.0	0.181	5.03	83.2	8.4	1.07	7.0	0.14	1.03	1.91	59
1	68	12.17	12.16	33.462	25.365	261.8	0.205	4.83	79.3	10.4	1.18	9.2	0.22	0.64	1.79	68
	75 ISL	11.81	11.80	33.468	25.437	255.0	0.223	4.61	75.1	14.1	1.35	13.2	0.20	0.49	1.37	75
1	82	11.43	11.42	33.482	25.518	247.4	0.241	4.35	70.3	18.1	1.54	17.5	0.16	0.41	0.90	82
1	98	10.70	10.69	33.606	25.746	226.1	0.279	3.72	59.2	26.3 U	1.94 U	23.7 U	0.17 U	0.20	0.52	98
	100 ISL	10.61	10.60	33.636	25.785	222.4	0.283	3.60	57.2	23.2	1.79	22.1	0.17	0.18	0.50	100
1	117	9.96	9.95	33.893	26.097	193.0	0.319	2.67	41.9	26.3	1.94	23.7	0.17	0.08	0.43	118
	125 ISL	9.77	9.76	33.970	26.189	184.4	0.334	2.46	38.5	28.5	2.03	24.8	0.12	0.07	0.35	126
1	136	9.57	9.55	34.045	26.281	175.9	0.354	2.27	35.4	31.3	2.14	26.2	0.06	0.06	0.24	137
	150 ISL	9.36	9.34	34.098	26.357	168.9	0.378	2.05	31.8	34.3	2.24	27.5	0.06	0.05	0.27	151
1	166	9.17	9.15	34.126	26.410	164.2	0.404	1.86	28.7	36.9	2.32	28.5	0.06	0.05	0.31	167
1	196	8.94	8.92	34.154	26.469	159.2	0.453	1.71	26.3	39.5	2.41	29.5	0.07	0.02	0.21	197
	200 ISL	8.91	8.89	34.156	26.475	158.6	0.459	1.69	26.0	39.8	2.42	29.6	0.07			201
1	225	8.72	8.70	34.164	26.512	155.6	0.498	1.59	24.3	42.3	2.48	30.3	0.09			226
	250 ISL	8.41	8.38	34.157	26.554	151,8	0.537	1.43	21.7	46.5	2.57	31.3	0.07			251
1	265	8.20	8.17	34.151	26.582	149.4	0.560	1.34	20.2	49.1	2.63	32.0	0.05			267
	300 ISL	7.80	7.77	34.147	26.638	144.5	0.611	1.29	19.3	52.8	2.69	33.1	0.01			302
1	315	7.64	7.61	34.148	26.662	142.4	0.632	1.26	18.8	54.5	2.72	33.5	0.00			317
1	375	6.97	6.93	34.177	26.780	131.7	0.715	0.79	11.6	67.2	3.01	35.5	0.00			377
	400 ISL	6.81	6.77	34.186	26.809	129.2	0.747	0.67	9.8	70.6	3.07	35.4	0.01			403
1	434	6.67	6.63	34.198	26.837	127.0	0.791	0.52	7.6	76.8	3.16	35.2	0.02			437
	500 ISL	6.51	6.46	34.228	26.883	123.5	0.873	0.09	1.3	105.0	3.60	25.2	0.01			503
1	505	6.51	6.46	34.230	26.885	123.4	0.880	0.06	0.9	107.5	3.64	24.0	0.01			509
1	525	6.51	6.46	34.232	26.886	123.5	0.904	0.03	0.4	116.1	3.81	18.6	0.00			529
1	545	6.48	6.43	34.231	26.890	123.5	0.929	0.05	0.7	117.5	3.92	17.4	0.00			549
1	555	6.45	6.40	34.228	26.891	123.4	0.941	0.06	0.9	116.7	3.95	18.3	0.00			559
1	565	6.43	6.38	34.226	26.893	123.4	0.954	0.07	1.0	113.8	4.09	20.9	0.12			569
1	570	6.43	6.38	34.226	26.893	123.5	0.960	0.07	1.0	114.0	4.20	21.0	0.14			574
1	575	6.42	6,37	34.226	26.894	123.4	0.966	0.07	1.0	113.9	4.24	21.0	0.20			579

A) SANTA BARBARA BASIN STATION.

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 83 40.6

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
34 13.6 N	119 24.5 W	12/07/92	1253 UTC	30 *m*	130 07 kn	140 01 07	4	1012.9 nb	20.1 C	20.1 C		8/8	

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN BT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	19.33	19.33	33.343	23.673	421.3	0.000	6.03	114.2	2.4	0.36	0.1	0.00	0.49	0.20	0
1	1	19.33	19.33	33.343	23.672	421.3	0.004	6.03	114.2	2.4	0.36	0.1	0.00	0.49	0.20	1
1	6	16.79	16.79	33.350	24.298	361.8	0.024	6.37	114.9	2.4	0.36	0.0	0.00	0.50	0.24	6
	10 ISL	13.82	13.82	33.302	24.913	303.3	0.037	6.02	102.2	3.9	0.57	2.1	0.07	1.10	0.51	10
1	11	13.13	13.13	33.301	25.052	290.1	0.040	5.89	98.6	4.4	0.64	2.8	0.09	1.26	0.58	11
	20 ISL	12.41	12.41	33.362	25.240	272.4	0.065	5.06	83.5	9.0	1.01	7.7	0.20	1.20	0.79	20
1	21	12.33	12.33	33.369	25.261	270.5	0.068	4.97	81.9	9.6	1.05	8.1	0.21	1.19	0.81	21
1	26	12.20	12.20	33.401	25.311	265.9	0.081	4.48	73.6	12.3	1.31	9.5	0.25	1.53	1.08	26

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 83 42

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
34 10.7 N	119 30.5 W	12/07/92	1111 UTC	125 m	110 08 *kn*			1012.8 mb	19.3 C	19.3 C			

CAST	DEPTH *m*	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	17.22	17.22	33.339	24.189	372.0	0.000	6.46	117.5	1.3	0.38	0.2	0.01	0.34	0.11	0
1	1	17.22	17.22	33.339	24.189	372.0	0.004	6.46	117.5	1.3	0.38	0.2	0.01	0.34	0.11	1
1	10	14.64	14.64	33.348	24.777	316.3	0.035	6.83	118.0	1.3	0.39	0.3	0.01	0.54	0.20	10
1	20	13.90	13.90	33.356	24.939	301.2	0.066	6.30	107.2	3.1	0.57	1.8	0.05	0.68	0.26	20
1	30	11.95	11.95	33.369	25.333	263.8	0.094	4.84	79.1	9.1	1.06	9.1	0.22	0.78	0.56	30
1	40	11.10	11.10	33.436	25.541	244.2	0.119	4.20	67.4	14.0	1.35	14.6	0.16	0.37	0.45	40
1	50	10.75	10.74	33.538	25.683	231.0	0.143	3.91	62.3	16.3	1.47	16.9	0.06	0.17	0.26	50
1	60	10.59	10.58	33.672	25.816	218.6	0.165	3.54	56.3	18.5	1.59	18.8	0.02	0.08	0.20	60
1	71	10.43	10.42	33.732	25.890	211.7	0.189	3.33	52.8	20.3	1.67	20.0	0.02	0.06	0.14	71
	75 ISL	10.40	10.39	33.743	25.904	210.5	0.198	3.28	51.9	20.7	1.70	20.3	0.04	0.06	0.17	75
1	85	10.37	10.36	33.761	25.924	208.9	0.219	3.18	50.3	21.3	1.75	20.7	0.09	0.07	0.25	85
1	100	10.33	10.32	33.786	25.950	206.7	0.250	3.06	48.4	22.2	1.78	21.3	0.13	0.07	0.16	101

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 83 51

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	NAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
33 52.6 N	120 8.1 W	12/07/92	0558 UTC	97 m	300 05 kn			1012.9 mb	20.0 C	20.0 C			

CAST	DEPTH *m*	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	19.13	19.13	33.377	23.749	413.9	0.000	5.75	108.5	1.9	0.36	0.2	0.00	0.17	0.08	0
1	1	19.13	19.13	33.377	23.749	414.0	0.004	5.75	108.5	1.9	0.36	0.2	0.00	0.17	0.08	1
	10 ISL	16.86	16.86	33.390	24.313	360.5	0.039	6.05	109.3	2.4	0.40	0.2	0.01	0.29	0.19	10
1	11	16.50	16.50	33.394	24.400	352.3	0.043	6.09	109.2	2.5	0.40	0.2	0.01	0.32	0.21	11
1	20	14.56	14.56	33.352	24.797	314.6	0.073	5.94	102.5	3.9	0.59	2.3	0.06	0.65	0.35	20
	30 ISL	14.14	14.14	33.382	24.909	304.2	0.104	5.46	93.4	6.4	0.79	4.6	0.10	0.90	0.72	30
1	31	14.09	14.09	33.387	24.924	302.9	0.107	5.39	92.1	6.8	0.82	5.0	0.11	0.90	0.75	31
1	41	11.36	11.35	33.490	25.536	244.7	0.134	4.21	68.0	15.0	1.34	13.8	0.20	0.52	0.63	41
1	50	10.59	10.58	33.598	25.758	223.8	0.155	3.66	58.2	18.8	1.56	18.2	0.13	0.26	0.35	50
1	61	10.61	10.60	33.622	25.773	222.6	0.180	3.57	56.8	20.0	1.60	18.2	0.15	0.27	0.52	61
1	71	10.46	10.45	33.659	25.828	217.6	0.202	3.43	54.4	21.4	1.66	19.3	0.14	0.22	0.59	71
	75 ISL	10.43	10.42	33.666	25.839	216.7	0.210	3.41	54.0	21.6	1.67	19.5	0.14	0.21	0.58	75
1	86	10.35	10.34	33.683	25.866	214.3	0.234	3.35	53.0	22.1	1.70	19.9	0.13	0.20	0.56	86

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 83 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
33 44.9 N	120 24.5 W	12/07/92	0255 UTC	973 m	060 09 *kn*	140 01 06	4	1011.8 mb	19.1 C	19.1 C	11m 03	8/8	

CAST	DEPTH *m*	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uH/1	NO2 uM/1	CHI-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	17.59	17.59	33.239	24.024	387.8	0.000	6.35	116.2	1.1	0.40	0.1	0.00	0.69	0.24	0
1	1	17.59	17.59	33.239	24.024	387.8	0.004	6.35	116.2	1.1	0.40	0.1	0.00	0.69	0.24	1
1	10	15.39	15.39	33.361	24.624	330.8	0.036	6.44	113.0	2.1	0.43	0.1	0.00	0.63	0.24	10
	20 ISL	14.37	14.37	33.367	24.849	309.7	0.068	6.67	114.6	1.8	0.48	0.0	0.00	1.93	0.58	20
1	21	14.32	14.32	33.363	24.857	309.0	0.071	6.69	114.8	1.8	0.48	0.0	0.00	2.05	0.62	21
1	30	13.67	13.67	33.375	25.001	295.5	0.099	6.02	102.0	3.3	0.66	2.2	0.05	1.82	0.77	30
1	40	13.36	13.35	33.379	25.067	289.5	0.128	5.70	95.9	4.4	0.79	3.4	0.08	0.93	0.56	40
1	50	12.18	12.17	33.403	25.317	265.9	0.156	4.91	80.6	9.0	1.08	8.4	0.17	0.50	0.45	50
1	60	11.87	11.86	33.455	25.416	256.7	0.182	4.60	75.1	11.7	1.20	10.5	0.16	0.29	0.36	60
1	69	11.49	11.48	33.477	25.503	248.6	0.204	4.33	70.1	13.4	1.30	12.5	0.16	0.24	0.33	69
	75 ISL	11.19	11.18	33.510	25.583	241.1	0.219	4.08	65.6	15.1	1.39	14.5	0.20	0.21	0.34	75
1	84	10.73	10.72	33.574	25.715	228.7	0.240	3.71	59.1	18.0	1.52	17.5	0.23	0.18	0.34	84
1	99	10.13	10.12	33.696	25.914	210.0	0.273	3.30	51.9	22.2	1.72	20.6	0.07	0.11	0.25	99
	100 ISL	10.11	10.10	33.702	25.922	209.3	0.275	3.28	51.6	22.4	1.73	20.7	0.07	0.11	0.25	100
1	117	9.87	9.86	33.788	26.030	199.4	0.310	3.03	47.4	24.7	1.82	22.3	0.08	0.07	0.22	118
	125 ISL	9.82	9.81	33.829	26.071	195.7	0.326	2.92	45.7	25.6	1.86	22.9	0.06	0.06	0.19	126
1	143	9.72	9.70	33.916	26.156	188.0	0.360	2.68	41.8	27.6	1.95	24.2	0.01	0.03	0.13	144
	150 ISL	9.64	9.62	33.946	26.192	184.6	0.373	2.57	40.1	28.7	1.99	24.8	0.01	0.03	0.13	151
1	173	9.28	9.26	34.026	26.314	173.5	0.415	2.25	34.8	32.7	2.12	26.7	0.02	0.02	0.12	174
	200 ISL	8.65	8.63	34.085	26.460	159.9	0.460	2.08	31.7	38.4	2.26	28.5	0.05	0.02	0.13	201
1	203	8.58	8.56	34.089	26.474	158.6	0.464	2.07	31.5	38.9	2.27	28.7	0.05	0.02	0.13	204
1	232	8.23	8.21	34.091	26.529	153.8	0.510	2.20	33.3	40.8	2.27	29.3	0.01			233
	250 ISL	8.05	8.02	34.099	26.563	150.8	0.537	2.13	32.1	42.9	2.32	30.0	0.01			251
1	272	7.86	7.83	34.113	26.602	147.4	0.570	1.96	29.4	45.8	2.40	30.9	0.00			274
	300 ISL	7.64	7.61	34.132	26.649	143.3	0.611	1.71	25.5	49.6	2.51	32.1	0.00			302
1	327	7.45	7.42	34.151	26.692	139.6	0.649	1.47	21.8	53.2	2.61	33.3	0.00			329
1	387	7.01	6.97	34.182	26.778	132.1	0.730	1.12	16.5	60.5	2.79	35.4	0.00			390
	400 ISL	6.90	6.86	34.187	26.797	130.4	0.747	1.04	15.3	62.3	2.83	35.9	0.00			403
1	453	6.48	6.44	34.207	26.870	124.0	0.815	0.77	11.2	69.7	2.96	37.8	0.00			456
	500 ISL	6.16	6.12	34.222	26.923	119.2	0.872	0.62	8.9	75.2	3.06	38.9	0.00			503
1	523	6.00	5.95	34.230	26.950	116.9	0.899	0.54	7.8	77.9	3.11	39.5	0.00			527

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 83 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
33 34.6 N	120 45.2 W	11/07/92	2322 UTC	1314 m	130 06 *n	310 03 06	4	1012.8 mb	21.1 C	19.4 C	28m 01	8/8	ST

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA TBETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 UM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRESS db
	0 ISL	17.54	17.54	33.092	23.923	397.3	0.000	5.80	106.0	2.3	0.39	0.1	0.00	0.11	0.02	0
1	1	17.54	17.54	33.092	23.923	397.4	0.004	5.80	106.0	2.3	0.39	0.1	0.00	0.11	0.02	1
	10 ISL	17.17	17.17	33.095	24.014	389.0	0.039	5.81	105.4	2.2	0.38	0.0	0.00	0.12	0.03	10
1	11	17.10	17.10	33.095	24.031	387.5	0.043	5.81	105.2	2.2	0.38	0.0	0.00	0.12	0.03	11
	20 ISL	16.37	16.37	33.099	24.203	371.3	0.077	5.89	105.2	2.2	0.38	0.0	0.00	0.14	0.04	20
1	21	16.29	16.29	33.100	24.222	369.5	0.081	5.90	105.2	2,2	0.38	0.0	0.00	0.14	0.04	21
	30 ISL	16.04	16.04	33.103	24.282	364.1	0.114	5.95	105.6	2.2	0.38	0.0	0.00	0.20	0.07	30
1	31	16.02	16.02	33.102	24.286	363.8	0.118	5.96	105.7	2.2	0.38	0.0	0.00	0.21	0.07	31
1	40	15.44	15.43	33.066	24.387	354.3	0.150	6.04	105.9	2.2	0.39	0.0	0.00	0.27	0.10	40
1	50	14.19	14.18	33.026	24.625	331.9	0.184	6.10	104.2	2.6	0.42	0.0	0.00	2.38	0.46	50
1	60	12.72	12.71	33.025	24.920	303.9	0.216	5.92	98.1	3.9	0.57	1.7	0.10	0.40	0.30	60
1	70	11.55	11.54	33.056	25.165	280.7	0.245	5.48	88.6	6.7	0.88	7.1	0.12	0.33	0.35	70
	75 ISL	11.03	11.02	33.086	25.282	269.7	0.259	5.28	84.4	8.5	1.02	9.5	0.09	0.28	0.33	75
1	84	10.33	10.32	33.154	25.457	253.1	0.283	4.99	78.6	11.2	1.20	12.7	0.04	0.18	0.26	84
1	99	10.08	10.07	33.281	25.599	239.9	0.320	4.87	76.4	12.5	1.24	13.7	0.03	0.11	0.16	99
	100 ISL	10.07	10.06	33.287	25.605	239.3	0.322	4.85	76.0	12.7	1.25	13.9	0.03	0.11	0.16	100
1	118	9.83	9.82	33.377	25.716	229.2	0.364	4.39	68.5	16.0	1.43	16.8	0.02	0.07	0.11	119
	125 ISL	9.72	9.71	33.412	25.761	225.0	0.380	4.29	66.8	16.9	1.47	17.5	0.02	0.06	0.10	126
1	143	9.40	9.38	33.511	25.891	212.9	0.420	4.07	62.9	19.0	1.57	19.2	0.02	0.03	0.09	144
	150 ISL	9.26	9.24	33.561	25.953	207.2	0.434	3.96	61.1	20.2	1.61	20.0	0.02	0.02	0.08	151
1	174	8.85	8.83	33.738	26.157	188.2	0.482	3.59	54.9	24.8	1.76	22.8	0.02	0.01	0.04	175
	200 ISL	8.62	8.60	33.906	26.324	172.7	0.529	3.22	49.1	29.6	1.88	25.0	0.01	0.01	0.04	201
1	204	8.59	8.57	33.927	26.346	170.8	0.535	3.17	48.3	30.3	1.90	25.3	0.01	0.01	0.04	205
1	233	8.17	8.15	33.999	26.466	159.7	0.583	2.92	44.1	35.4	2.02	27.2	0.01			234
	250 ISL	7.92	7.89	34.021	26.521	154.7	0.610	2.75	41.3	38.7	2.11	28.4	0.01			251
1	272	7.61	7.58	34.039	26.580	149.3	0.644	2.51	37.4	43.2	2.23	30.0	0.00			274
	300 ISL	7.24	7.21	34.063	26.652	142.8	0.684	2.12	31.3	49.2	2.40	32.1	0.00			302
1	327	6.91	6.88	34.079	26.710	137.5	0.722	1.76	25.8	54.8	2.55	33.9	0.00			329
1	388	6.30	6.27	34.078	26.790	130.3	0.804	1.39	20.1	64.3	2.75	36.7	0.00			390
	400 ISL	6.23	6.19	34.094	26.812	128.3	0.819	1.27	18.3	66.3	2.80	37.2	0.00			403
1	454	6.01	5.97	34.188	26.915	119.2	0.886	0.72	10.3	74.8	3.00	39.1	0.00			457
	500 ISL	5.89	5.85	34.252	26.981	113.5	0.940			79.7	3.09	39.9				503
1	524	5.83	5.78	34.285	27.015	110.6	0.967	1.38 U	19.7U	82.3	3.14	40.3				528

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 83 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
33 15.0 N	121 26.2 W	11/07/92	1627 UTC	3792 m	130 09 kn	300 04 06	4	1013.2 mb	20.4 C	20.3 C		8/8	ST

CAST	DEPTH ns	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/I	OXY PCT	SIO3 UM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRESS db
1	0	17.90	17.90	33.122	23.860	403.4	0.000	5.66	104.1	2.3	0.38	0.0	0.00	0.12	0.02	0
1	9	17.61	17.61	33.130	23.936	396.4	0.036	5.68	103.9	2.3	0.37	0.0	0.00	0.12	0.02	9
	10 ISL	17.60	17.60	33.130	23.939	396.2	0.040	5.68	103.9	2.3	0.37	0.0	0.00	0.12	0.02	10
1	20	17.50	17.50	33.129	23.962	394.3	0.079	5.69	103.9	2.1	0.37	0.0	0.00	0.13	0.03	20
1	29	17.38	17.38	33.123	23.987	392.3	0.115	5.71	104.0	2.1	0.37	0.0	0.00	0.15	0.03	29
	30 ISL	17.34	17.34	33.119	23.993	391.7	0.119	5.71	103.9	2.1	0.37	0.0	0.00	0.15	0.03	30
1	40	16.95	16.94	33.082	24.057	385.9	0.158	5.81	104.9	2.0	0.37	0.0	0.00	0.19	0.05	40
1	49	15.47	15.46	33.017	24.343	358.8	0.191	5.99	105.0	2.0	0.38	0.0	0.00	0.18	0.07	49
	50 ISL	15.28	15.27	33.015	24.384	355.0	0.195	6.00	104.8	2.0	0.38	0.0	0.00	0.19	0.08	50
1	61	13.44	13.43	33.029	24.781	317.3	0.232	6.05	101.8	2.8	0.46	0.2	0.01	0.35	0.17	61
1	70	12.76	12.75	33.035	24.920	304.2	0.260	5.93	98.3	3.5	0.56	1.3	0.08	0.40	0.23	70
	75 ISL	12.38	12.37	33.046	25.002	296.5	0.275	5.77	94.9	4.5	0.66	3.0	0.08	0.39	0.24	75
1	85	11.70	11.69	33.095	25.168	280.8	0.304	5.37	87.1	6.9	0.88	7.2	0.09	0.32	0.27	85
1	100	10.94	10.93	33.248	25.425	256.7	0.344	4.84	77.3	10.6	1.17	12.3	0.03	0.15	0.19	100
1	119	9.84	9.83	33.379	25.716	229,2	0.390	4.30	67.1	16.2	1.47	17.6	0.01	0.06	0.13	120
	125 ISL	9.77	9.76	33.453	25.785	222.7	0.404	4.10	63.9	17.7	1.54	18.8	0.01	0.04	0.11	126
1	145	9.55	9.53	33.643	25.970	205.5	0.446	3.49	54.2	22.2	1.73	21.7	0.01	0.01	0.05	146
	150 ISL	9.47	9.45	33.679	26.011	201.7	0.457	3.38	52.4	23.2	1.77	22.3	0.01	0.01	0.05	151
1	174	9.06	9.04	33.816	26.185	185.6	0.503	3.02	46.4	27.5	1.92	24.8	0.01	0.02	0.07	175
	200 ISL	8.68	8.66	33.923	26.329	172.4	0.550	2.83	43.2	31.3	2.02	26.5	0.00	0.01	0.05	201
1	206	8.60	8.58	33.942	26.356	169.9	0.560	2.80	42.6	32.2	2.04	26.8	0.00	0.01	0.04	207
1	235	8.23	8.21	34.019	26.473	159.1	0.608	2.48	37.5	37.7	2.18	28.9	0.00			236
	250 ISL	7,96	7.93	34.027	26.520	154.9	0.631	2.52	37.8	39.8	2.20	29.3	0.00			251
1	274	7.54	7.51	34.026	26.580	149.3	0.668	2.60	38.7	43.1	2.23	29.9	0.00			276
	300 ISL	7.26	7.23	34.047	26.636	144.2	0.706	2.28	33.7	47.8	2.36	31.5	0.00			302
1	329	7.03	7.00	34.073	26.689	139.6	0.747	1.82	26.8	53.4	2.53	33.5	0.00			331
1	388	6.49	6.45	34.100	26.783	131.2	0.827	1.32	19.2	63.2	2.75	36.4	0.00			390
	400 ISL	6.46	6.42	34.117	26.801	129.7	0.843	1.20	17.4	64.8	2.80	36.8	0.00			403
1	454	6.31	6.27	34.194	26.882	122.7	0.911	0.73	10.6	72.2	2.99	38.2	0.00			457
	500 ISL	5.80	5.76	34.207	26.957	115.7	0.965	0.56	8.0	80.5	3.10	39.9				503
1	523	5.55	5.51	34.214	26.993	112.3	0.992	0.48	6.8	84.7	3.15	40.8				527

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 83 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	KIND	SPEED	WAVES	WEA	BAROMETER	DRY	NET	SECCHI/FOREL	CLD AMT	TYPE
33 54.6 N	122 7.7 W	11/07/92	1059 UTC	4172 in	310	05 Jen			1012.9 mb	20.4 C	20.1 C			

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA TBETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PRAEO ug/1	PRESS db
	0 ISL	19.06	19.06	33.126	23.575	430.5	0.000	5.53	104.0	2.4	0.40	0.0	0.00	0.11	0.02	0
1	1	19.06	19.06	33.126	23.575	430.6	0.004	5.53	104.0	2.4	0.40	0.0	0.00	0.11	0.02	1
	10 ISL	18.88	18.88	33.131	23.625	426.2	0.043	5.57	104.4	2.4	0.37	0.0	0.00	0.10	0.03	10
1	11	18.86	18.86	33.131	23.630	425.7	0.047			2.4	0.37	0.0	0.00	0.10	0.03	11
1	20	18.07	18.07	33.128	23.824	407.5	0.085	5.63	103.9	2.4	0.37	0.0	0.00	0.10	0.02	20
1	30	18.01	18.00	33.130	23.840	406.3	0.125	5.63	103.8	2.4	0.37	0.0	0.00	0.10	0.02	30
1	40	17.55	17.54	33.138	23.958	395.4	0.165	5.76	105.3	2.3	0.37	0.0	0.00	0.15	0.04	40
1	50	15.90	15.89	33.079	24.295	363.4	0.203	5.96	105.4	2.3	0.39	0.0	0.00	0.15	0.05	50
1	60	14.67	14.66	33.084	24.569	337.6	0.238	6.10	105.3	2.4	0.41	0.0	0.00	0.17	0.07	60
1	70	14.11	14.10	33.213	24.786	317.1	0.271	6.00	102.4	2.5	0.48	0.0	0.01	0.32	0.20	70
	75 ISL	13.87	13.86	33.231	24.850	311.1	0.287	5.87	99.7	2.8	0.54	0.9	0.04	0.34	0.23	75
1	84	13.40	13.39	33.223	24.940	302.8	0.314	5.61	94.4	3.8	0.67	3.2	0.09	0.37	0.26	84
1	99	12.33	12.32	33.175	25.113	286.6	0.359	5.35	88.0	6.1	0.85	6.5	0.06	0.22	0.28	99
	100 ISL	12.27	12.26	33.183	25.130	284.9	0.362	5.31	87.2	6.4	0.87	6.9	0.06	0.21	0.27	100
1	118	11.36	11.35	33.371	25.446	255.2	0.410	4.46	71.9	12.1	1.27	13.4	0.02	0.12	0.14	118
	125 ISL	11.06	11.04	33.405	25.526	247.6	0.428	4.30	68.9	13.5	1.35	14.8	0.02	0.10	0.12	126
1	143	10.45	10.43	33.478	25.690	232.3	0.471	4.00	63.3	16.5	1.49	17.2	0.01	0.05	0.09	144
	150 ISL	10.30	10.28	33.531	25.758	226.0	0.487	3.81	60.1	18.0	1.56	18.3	0.01	0.04	0.08	151
1	173	9.92	9.90	33.711	25.963	207.0	0.537	3.20	50.1	22.8	1.77	21.7	0.00	0.01	0.05	174
	200 ISL	9.52	9.50	33.859	26.145	190.1	0.590	2.78	43.2	27.3	1.96	24.4	0.00	0.01	0.09	201
1	203	9.47	9.45	33.871	26.162	188.5	0.596	2.75	42.7	27.7	1.97	24.6	0.00	0.01	0.09	204
1	232	8.78	8.76	33.918	26.310	174.8	0.649	2.79	42.7	31.0	2.02	26.4	0.00			233
	250 ISL	8.50	8.47	33.966	26.391	167.4	0.680	2.72	41.3	33.6	2.07	27.3	0.00			251
1	272	8.22	8.19	34.023	26.478	159.3	0.715	2.56	38.7	37.3	2.16	28.4	0.00			273
	300 ISL	7.85	7.82	34.061	26.563	151.6	0.759	2.29	34.3	42.5	2.29	30.1	0.00			302
1	328	7.51	7.48	34.085	26.631	145.4	0.801	1.97	29.3	48.0	2.44	31.9	0.00			330
1	387	6.90	6.86	34.136	26.757	134.0	0.883	1.29	18.9	59.0	2.73	35.2	0.00			389
	400 ISL	6.81	6.77	34.147	26.778	132.1	0.900	1.18	17.3	61.0	2.78	35.7	0.00			402
1	454	6.47	6.43	34.187	26.855	125.3	0.970	0.83	12.0	68.8	2.95	37.5	0.00			457
	500 ISL	6.05	6.01	34.202	26.922	119.3	1.026	0.65	9.3	76.2	3.05	39.2	0.00			503
1	523	5.84	5.79	34.210	26.954	116.2	1.053	0.56	8.0	79.9	3.10	40.0	0.00			526

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 83 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
32 34.6 N	122 48.6 W	11/07/92	0734 UTC	4256 n	160	11 kn			1013.2 mb	19.9 C	19.9 C			

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	19.19	19.19	33.184	23.587	429.5	0.000	5.52	104.1	2.5	0.39	0.0	0.01	0.10	0.02	0
1	1	19.19	19.19	33.184	23.587	429.5	0.004	5.52	104.1	2.5	0.39	0.0	0.01	0.10	0.02	1
	10 ISL	18.57	18.57	33.190	23.748	414.5	0.042	5.55	103.5	2.5	0.38	0.0	0.00	0.10	0.03	10
1	12	18.39	18.39	33.192	23.794	410.1	0.051	5.56	103.3	2.5	0.38	0.0	0.00	0.10	0.03	12
	20 ISL	18.20	18.20	33.192	23.841	405.9	0.083	5.59	103.5	2.5	0.37	0.0	0.00	0.12	0.03	20
1	21	18.18	18.18	33.192	23.846	405.5	0.087	5.60	103.6	2.5	0.37	0.0	0.00	0.12	0.03	21
	30 ISL	17.49	17.48	33.198	24.018	389.3	0.123	5.74	104.8	2.5	0.37	0.0	0.00	0.15	0.04	30
1	32	17.31	17.30	33.194	24.057	385.6	0.131	5.78	105.2	2.5	0.37	0.0	0.00	0.16	0.04	32
1	42	16.49	16.48	33.082	24.164	375.8	0.169	5.92	105.9	2.5	0.38	0.0	0.00	0.19	0.06	42
	50 ISL	15.26	15.25	33.093	24.448	348.9	0.198	6.04	105.5	2.5	0.41	0.0	0.00	0.34	0.14	50
1	52	14.93	14.92	33.100	24.525	341.6	0.205	6.07	105.3	2.5	0.42	0.0	0.00	0.39	0.17	52
1	61	13.68	13.67	33.048	24.747	320.5	0.234	6.10	103.1	3.0	0.46	0.1	0.01	0.68	0.45	61
1	72	12.73	12.72	33.013	24.909	305.3	0.269	5.91	97.9	4.6	0.64	2.6	0.33	0.52	0.42	72
	75 ISL	12.40	12.39	33.018	24.977	298.9	0.278	5.79	95.3	5.3	0.71	3.9	0.30	0.46	0.41	75
1	85	11.37	11.36	33.066	25.206	277.2	0.307	5.37	86.5	7.8	0.96	8.5	0.09	0.27	0.37	85
1	100	10.58	10.57	33.165	25.423	256.8	0.347	4.91	77.8	11.5	1.22	13.0	0.02	0.14	0.18	100
1	120	9.79	9.78	33.369	25.716	229.2	0.395	4.28	66.7	16.5	1.49	17.6	0.02	0.05	0.10	121
	125 ISL	9.67	9.66	33.416	25.773	223.9	0.407	4.14	64.4	17.7	1.55	18.5	0.02	0.04	0.09	126
1	146	9.35	9.33	33.596	25.966	205.9	0.452	3.62	56.0	22.2	1.74	21.8	0.01	0.01	0.07	147
	150 ISL	9.30	9.28	33.630	26.000	202.7	0.460	3.53	54.5	23.0	1.77	22.3	0.01	0.01	0.07	151
1	175	9.02	9.00	33.806	26.183	185.8	0.509	3.09	47.5	27.3	1.91	24.7	0.00	0.01	0.07	176
	200 ISL	8.62	8.60	33.891	26.313	173.8	0.554	2.87	43.7	30.8	1.99	26.5	0.00	0.00	0.06	201
1	206	8.53	8.51	33.905	26.338	171.5	0.564	2.84	43.2	31.6	2.01	26.8	0.00	0.00	0.06	207
1	234	8.33	8.31	33.992	26.437	162.6	0.611	2.66	40.3	35.4	2.16	27.8	0.01			235
	250 ISL	8.18	8.15	34.023	26.484	158.4	0.636	2.52	38.0	37.8	2.20	28.5	0.01			251
1	275	7.91	7.88	34.055	26.549	152.5	0.675	2,30	34.5	41.8	2.25	29.8	0.00			277
	300 ISL	7.61	7.58	34.069	26.604	147.5	0.713	2.10	31.3	45.8	2.35	31.2	0.00			302
1	329	7.29	7.26	34.080	26.658	142.7	0.755	1.86	27.5	50.5	2.48	32.8	0.00			331
1	390	6.84	6.80	34.138	26.767	133.1	0.839	1.26	18.4	60.2	2.72	35.4	0.00			392
	400 ISL	6.75	6.71	34.145	26.784	131.5	0.852	1.18	17.2	61.9	2.76	35.9	0.00			402
1	454	6.27	6.23	34.181	26.876	123.1	0.921	0.81	11.7	70.4	2.93	38.1	0.00			457
	500 ISL	6.06	6.02	34.214	26.930	118.5	0.976	0.62	8.9	75.5	3.02	39.1				503
1	524	5.95	5.90	34.232	26.958	116.1	1.005	0.52	7.5	78.1	3.06	39.6				527

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 83 100

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
32 14.8 N	123 29.4 W	11/07/92	0019 UTC	4165 *m*	120 10 kn	150 03 07	4	1013.6 mb	20.8 C	20.5 C	34m 01	8/8	

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	19.58	19.58	33.173	23.479	439.8	0.000	5.45	103.6	2.4	0.35	0.1	0.00	0.07	0.02	0
1	1	19.58	19.58	33.173	23.479	439.8	0.004	5.45	103.6	2.4	0.35	0.1	0.00	0.07	0.02	1
1	10	19.24	19.24	33.174	23.567	431.7	0.044	5.47	103.3	2.4	0.35	0.1	0.00	0.07	0.02	10
1	20	19.03	19.03	33.186	23.630	426.1	0.087	5.50	103.4	2.4	0.35	0.1	0.00	0.09	0.02	20
1	30	18.91	18.90	33.179	23.655	424.0	0.129	5.52	103.6	2.3	0.35	0.1	0.00	0.10	0.02	30
1	40	18.12	18.11	33.140	23.822	408.4	0.171	5.66	104.6	2.3	0.35	0.1	0.00	0.10	0.02	40
1	49	16.63	16.62	33.043	24.102	381.9	0.206	5.94	106.6	2.3	0.35	0.1	0.00	0.10	0.03	49
	50 ISL	16.55	16.54	33.054	24.129	379.4	0.210	5.94	106.4	2.3	0.35	0.1	0.00	0.10	0.03	50
1	59	16.20	16.19	33.201	24.322	361.2	0.243	5.98	106.5	2.3	0.34	0.1	0.00	0.13	0.04	59
1	69	16.09	16.08	33.289	24.415	352.7	0.279	5.94	105.6	2.3	0.33	0.1	0.00	0.14	0.04	69
	75 ISL	15.53	15.52	33.251	24.511	343.6	0.300	5.94	104.4	2.3	0.35	0.1	0.00	0.17	0.07	75
1	83	14.55	14.54	33.175	24.665	329.1	0.327	5.93	102.1	2.4	0.40	0.1	0.00	0.23	0.13	83
1	98	12.93	12.92	33.129	24.961	301.1	0.374	5.76	95.9	3.7	0.53	1.7	0.06	0.32	0.33	98
	100 ISL	12.76	12.75	33.123	24.989	298.4	0.380	5.74	95.2	3.9	0.55	2.1	0.07	0.32	0.32	100
1	117	11.47	11.46	33.093	25.209	277.6	0.429	5.54	89.4	6.0	0.78	6.1	0.10	0.23	0.25	117
	125 ISL	10.84	10.83	33.088	25.318	267.3	0.451	5.43	86.4	7.6	0.91	8.3	0.08	0.18	0.21	125
1	142	9.66	9.64	33.137	25.557	244.7	0.494	5.16	80.1	11.6	1.18	12.9	0.01	0.09	0.14	143
	150 ISL	9.28	9.26	33.218	25.681	232.9	0.513	4.98	76.7	13.9	1.29	14.9	0.01	0.06	0.10	1S1
1	172	8.63	8.61	33.472	25.982	204.6	0.562	4.50	68.4	19.5	1.52	19.1	0.00	0.01	0.03	173
	200 ISL	8.59	8.57	33.677	26.150	189.3	0.617	4.26	64.8	22.8	1.59	20.7	0.00	0.00	0.03	201
1	202	8.59	8.57	33.688	26.158	188.5	0.621	4.23	64.3	23.1	1.60	20.8	0.00	0.00	0.03	203
1	231	8.65	8.63	33.980	26.378	168.2	0.672	2.76	42.1	32.7	2.03	26.7	0.00			232
	250 ISL	8.50	8.47	34.044	26.452	161.6	0.704	2.64	40.1	35.9	2.14	27.5	0.00			251
1	273	8.23	8.20	34.058	26.504	156.9	0.740	2.50	37.8	38.5	2.20	28.4	0.00			274
	300 ISL	7.90	7.87	34.078	26.569	151.0	0.782	2.28	34.2	42.6	2.31	29.8	0.00			302
1	327	7.55	7.52	34.088	26.628	145.7	0.822	2.04	30.4	47.0	2.43	31.3	0.00			329
1	387	6.88	6.84	34.109	26.739	135.7	0.906	1.46	21.4	58.5	2.72	35.0	0.00			389
	400 ISL	6.74	6.70	34.112	26.760	133.8	0.924	1.36	19.9	60.5	2.77	35.7	0.00			402
1	453	6.20	6.16	34.130	26.845	126.0	0,993	1.01	14.6	68.2	2.94	38.1	0.00			456
	500 ISL	5,87	5.83	34.173	26.921	119.1	1.050	0.72	10.3	76.4	3.07	39.7	0.01			503
1	522	5.71	5.67	34.194	26.958	115.8	1.076	0.58	8.3	80.3	3.13	40.4	0.01			525

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 83 110

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
31 54.7 N	124 10.1 W	10/07/92	1809 UTC	4205 m	110 10 kn	120 03 03	4	1015.1 mb	20.0 C	20.0 C		8/8	NS

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	19.36	19.36	33.203	23.558	432.2	0.000	5.46	103.3	2.1	0.35	0.1	0.00	0.07	0.02	0
1	1	19.36	19.36	33.203	23.558	432.2	0.004	5.46	103.3	2.1	0.35	0.1	0.00	0.07	0.02	1
1	10	19.27	19.27	33.200	23.579	430.5	0.043	5.45	103.0	2.1	0.35	0.0	0.00	0.08	0.02	10
1	20	19.12	19.12	33.197	23.615	427.5	0.086	5.47	103,1	1.9	0.36	0.0	0.00	0.08	0.02	20
1	30	18.40	18.39	33.225	23.817	408.5	0.128	5.62	104.5	1.9	0.35	0.0	0.00	0.09	0.02	30
1	41	18.00	17.99	33.210	23.904	400.6	0.172	5.71	105.3	1.8	0.35	0.0	0.00	0.10	0.02	41
1	50	17.19	17.18	33.370	24.222	370.6	0.207	5.91	107.4	1.8	0.33	0.0	0.00	0.11	0.03	50
1	61	16.79	16.78	33.430	24.362	357.6	0.247	5.89	106.3	1.8	0.34	0.0	0.00	0.13	0.03	61
1	70	16.78	16.77	33.554	24.460	348.5	0.279	5.86	105.8	1.8	0.30	0.0	0.00	0.14	0.04	70
	75 ISL	16.49	16.48	33.544	24.519	343.0	0.296	5.85	105.0	1.8	0.31	0.0	0.00	0.16	0.06	75
1	85	15.90	15.89	33.520	24.636	332.1	0.330	5.81	103.0	1.9	0.33	0.0	0.00	0.20	0.10	85
1	100	16.10	16.08	33.751	24.769	320.0	0.379	5.68	101.3	1.9	0.31	0.0	0.00	0.23	0.17	100
1	119	13.71	13.69	33.439	25.045	293.8	0.437	5.53	93.8	3.4	0.53	2.2	0.19	0.24	0.29	119
	125 ISL	12.97	12.95	33.371	25.141	284.7	0.454	5.47	91.3	4.4	0.63	3.7	0.16	0.21	0.27	125
1	145	10.89	10.87	33.261	25.445	255.8	0.509	5.26	83.9	8.2	0.94	9.3	0.01	0.10	0.15	146
	150 ISL	10.55	10.53	33.268	25.509	249.6	0.521	5.23	82.8	8.9	0.99	10.2	0.01	0.08	0.12	151
1	175	9.37	9.35	33.381	25.795	222.7	0.580	4.99	77.0	13.3	1.23	14.4	0.01	0.03	0.03	176
	200 ISL	8.58	8.56	33.541	26.045	199.2	0.633	4.37	66.4	20.5	1.56	19.7	0.00	0.01	0.02	201
1	205	8.49	8.47	33.581	26.090	195.0	0.643	4.24	64.3	22.0	1.62	20.7	0.00	0.00	0.02	206
1	233	8.44	8.42	33.877	26.330	172.7	0.694	3.75	56.9	27.7	1.73	23.1	0.00			234
	250 ISL	8.29	8.26	33.944	26.405	165.9	0.723	3.67	55.5	29.8	1.76	23.9	0.00			251
1	274	8.00	7.97	33.970	26.469	160.1	0.762	3.62	54.4	32.7	1.82	24.8	0.00			275
	300 ISL	7.61	7.58	33.989	26.541	153.5	0.803	3.35	49.9	37.7	1.95	26.7	0.00			302
1	328	7.17	7.14	33.995	26.608	147.3	0.845	2.98	43.9	44.0	2.13	29.1	0.00			330
1	386	6.42	6.39	34.015	26.725	136.5	0.927	2.12	30.7	57.2	2.48	33.9	0.00			388
	400 ISL	6.28	6.24	34.023	26.750	134.3	0.946	1.95	28.2	60.0	2.55	34.8	0.00			402
1	452	5.86	5.82	34.059	26.832	126.9	1.014	1.42	20.3	69.7	2.77	37.7	0.00			455
	500 ISL	5.53	5.49	34.103	26.907	120.0	1.073	1.00	14.2	78.1	2.93	39.6	0.00			503
1	521	5.39	5.35	34.123	26.940	117.0	1.098	0.82	11.6	81.8	3.00	40.5	0.00			524

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 87 33

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	KIND	SPEED	NAVES	WEA	BAROMETER	DRY	WET	SECCHT/FOREL	CLD AMT	TYPE
33 53.3 N	118 29.4 W	08/07/92	1140 UTC	55 m	070	04 Jen			1015.1 mb	18.5 C	18.0 C			

CAST	DEPTH II	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 UM/1	CHL-A ug/1	PBAEO ug/1	PRESS db
	0 ISL	17.87	17.87	33.391	24.073	383.1	0.000	6.12	112.7	3.9	0.40	0.2	0.00	0.54	0.29	0
1	2	17.87	17.87	33.391	24.073	383.2	0.008	6.12	112.7	3.9	0.40	0.2	0.00	0.54	0.29	2
1	7	15.94	15.94	33.389	24.523	340.4	0.026	6.30	111.7	4.7	0.46	0.4	0.01	1.07	0.63	7
	10 ISL	15.48	15.48	33.388	24.625	330.7	0.036	6.35	111.6	5.0	0.47	0.6	0.02	1.46	0.90	10
1	12	15.24	15.24	33.383	24.674	326.1	0.042	6.38	111.6	5.3	0.49	0.7	0.02	1.68	1.05	12
	20 ISL	12.92	12.92	33.388	25.161	280.0	0.067	5.47	91.2	8.6	0.86	6.0	0.13	1.40	0.88	20
1	21	12.63	12.63	33.393	25.222	274.2	0.069	5.32	88.2	9.1	0.92	6.8	0.15	1.37	0.86	21
	30 ISL	11.59	11.59	33.400	25.424	255.1	0.093	4.37	70.9	12.6	1.39	12.2	0.31	0.84	0.69	30
1	31	11.53	11.53	33.401	25.436	254.1	0.096	4.28	69.3	13.0	1.44	12.7	0.32	0.78	0.67	31
1	42	10.80	10.79	33.513	25.654	233.5	0.123	3.63	57.9	17.1	1.65	16.8	0.32	0.40	0.45	42
	50 ISL	10.62	10.61	33.601	25.755	224.1	0.141	3.21	51.0	20.4	1.87	18.2	0.40	0.39	0.60	50
1	52	10.57	10.56	33.623	25.781	221.7	0.145	3.10	49.2	21.2	1.92	18.5	0.42	0.39	0.64	52

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 87 35

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCBI/FOREL	CLD AMT	TYPE
33 49.2 N	118 37.9 W	08/07/92	1334 UTC	698 B	190	07 kn	170 02 03	2	1016.0 mb	19.8 C	18.8 C	21m 03	8/8	AC

CAST	DEPTH in	TEMP DEG c	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN BL/1	OXY PCT	SIO3 uM/1	PO4 UM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS <Jb
	0 ISL	18.56	18.56	33.339	23.864	403.0	0.000	5.82	108.6	2.0	0.34	0.1	0.00	0.24	0.09	0
1	1	18.56	18.56	33.339	23.864	403.1	0.004	5.82	108.6	2.0	0.34	0.1	0.00	0.24	0.09	1
1	10	16.54	16.54	33.334	24.344	357.5	0.038	6.25	112.1	2.2	0.37	0.1	0.00	0.35	0.11	10
1	20	13.86	13.86	33.309	24.911	303.8	0.071	6.44	109.5	2.4	0.45	0.1	0.00	0.69	0.19	20
1	29	12.24	12.24	33.297	25.222	274.3	0.097	5.58	91.7	6.2	0.81	5.1	0.14	1.83	1.24	29
	30 ISL	12.10	12.10	33.307	25.257	271.1	0.100	5.44	89.1	6.9	0.87	6.0	0.16	1.79	1.23	30
1	39	11.16	11.16	33.426	25.523	246.0	0.123	4.31	69.3	13.2	1.36	13.7	0.32	1.04	0.82	39
1	49	10.95	10.94	33.528	25.640	235.1	0.147	3.84	61.5	15.6	1.49	16.5	0.30	0.63	0.56	49
	50 ISL	10.92	10.91	33.541	25.655	233.6	0.150	3.81	60.9	15.9	1.50	16.7	0.27	0.58	0.53	50
1	59	10.67	10.66	33.637	25.774	222.5	0.170	3.67	58.4	17.7	1.55	18.1	0.03	0.22	0.31	59
1	68	10.60	10.59	33.660	25.805	219.8	0.190	3.60	57.2	18.3	1.57	18.5	0.02	0.13	0.29	68
	75 ISL	10.46	10.45	33.733	25.886	212.2	0.205	3.32	52.6	20.3	1.67	19.9	0.03	0.11	0.25	75
1	83	10.32	10.31	33.818	25.977	203.8	0.222	3.00	47.4	22.6	1.79	21.6	0.05	0.09	0.20	83
1	97	10.31	10.30	33.842	25.997	202.1	0.250	2.93	46.3	23.1	1.83	22.0	0.06	0.08	0.18	97
	100 ISL	10.29	10.28	33.854	26.010	201.0	0.256	2.91	46.0	23.4	1.84	22.2	0.05	0.07	0.16	101
1	118	10.15	10.14	33.948	26.108	192.1	0.292	2.70	42.6	25.6	1.94	23.5	0.00	0.01	0.04	119
	125 ISL	10.11	10.10	33.991	26.148	188.4	0.305	2.56	40.3	26.8	2.00	24.2	0.00	0.01	0.05	126
1	142	10.05	10.03	34.086	26.233	180.8	0.336	2.21	34.8	29.5	2.13	25.7	0.01	0.02	0.09	143
	150 ISL	10.04	10.02	34.110	26.254	179.0	0.351	2.10	33.1	30.3	2.16	26.1	0.01	0.02	0.09	151
1	172	9.98	9.96	34.149	26.295	175.5	0.390	1.91	30.0	31.9	2.23	26.8	0.01	0.03	0.09	173
	200 ISL	9.70	9.68	34.186	26.371	168.8	0.438	1.80	28.1	34.3	2.31	27.7	0.01	0.02	0.08	201
1	203	9.66	9.64	34.189	26.380	168.0	0.443	1.79	28.0	34.6	2.32	27.8	0.01	0.02	0.08	204
1	232	9.18	9.15	34.208	26.474	159.6	0.491	1.70	26.3	38.4	2.41	29.0	0.01			233
	250 ISL	9.00	8.97	34.212	26.506	156.8	0.519	1.66	25.6	39.9	2.44	29.5	0.01			251
1	271	8.81	8.78	34.212	26.536	154.2	0.552	1.61	24.7	41.6	2.48	30.1	0.00			273
	300 ISL	8.44	8.41	34.216	26.597	148.8	0.596	1.48	22.5	45.3	2.56	31.3	0.00			302
1	328	8.09	8.06	34.220	26.653	143.8	0.637	1.34	20.2	49.0	2.64	32.4	0.00			330
1	387	7.66	7.62	34.219	26.716	138.5	0.720	1.18	17.6	53.8	2.75	34.0	0.00			390
	400 ISL	7.53	7.49	34.222	26.737	136.7	0.738	1.11	16.5	55.6	2.79	34.5	0.00			403
1	452	7.03	6.99	34.242	26.824	128.9	0.807	0.80	11.8	63.3	2.94	36.6	0.00			455
	500 ISL	6.72	6.67	34.262	26.882	123.8	0.867	0.62	9.1	69.0	3.04	37.7				503
1	522	6.58	6.53	34.271	26.908	121.5	0.894	0.54	7.9	71.6	3.08	38.2				526

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 87 40

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
33 39.4 N	118 58.6 W	08/07/92	1727 UTC	752 m	300	08 kn	300 01 05	2	1017.8 mb	21.5 C	19.0 C		8/8	AC

CAST	DEPTH in	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	18.87	18.87	33.322	23.773	411.7	0.000	5.74	107.7	1.7	0.40	0.1	0.00	0.18	0.08	0
1	1	18.87	18.87	33.322	23.773	411.7	0.004	5.74	107.7	1.7	0.40	0.1	0.00	0.18	0.08	1
1	10	17.77	17.77	33.331	24.052	385.5	0.040	5.92	108.8	1.4	0.36	0.1	0.00	0.20	0.08	10
	20 ISL	15.39	15.39	33.369	24.631	330.5	0.076	6.08	106.7	2.3	0.44	0.2	0.01	0.38	0.19	20
1	21	15.14	15.14	33.375	24.690	324.9	0.079	6.10	106.5	2.5	0.46	0.2	0.01	0.40	0.20	21
	30 ISL	13.54	13.54	33.378	25.030	292.8	0.107	5.65	95.4	5.5	0.72	3.8	0.16	0.56	0.34	30
1	31	13.39	13.39	33.377	25.059	290.0	0.110	5.58	94.0	5.9	0.75	4.3	0.18	0.58	0.35	31
1	40	12.26	12.25	33.357	25.266	270.5	0.135	4.88	80.2	9.0	1.02	9.0	0.27	0.67	0.37	40
1	50	11.60	11.59	33.399	25.422	255.8	0.161	4.46	72.3	11.7	1.21	12.4	0.16	0.69	0.49	50
1	60	11.11	11.10	33.445	25.547	244.2	0.186	4.26	68.4	13.5	1.33	14.6	0.07	0.40	0.36	60
1	70	11.04	11.03	33.447	25.561	243.0	0.211	4.20	67.3	13.9	1.36	15.0	0.07	0.42	0.37	70
	75 ISL	10.84	10.83	33.491	25.631	236.5	0.223	4.05	64.7	15.1	1.43	16.1	0.06	0.32	0.32	75
1	83	10.49	10.48	33.581	25.762	224.1	0.241	3.75	59.4	17.6	1.55	18.2	0.03	0.14	0.21	83
1	98	10.17	10.16	33.713	25.920	209.4	0.274	3.37	53.1	21.1	1.72	20.7	0.02	0.06	0.11	98
	100 ISL	10.14	10.13	33.732	25.940	207.5	0.278	3.31	52.1	21.6	1.74	21.0	0.02	0.05	0.11	100
1	118	9.93	9.92	33.886	26.097	193.1	0.314	2.86	44.9	25.4	1.92	23.5	0.01	0.02	0.10	119
	125 ISL	9.89	9.88	33.923	26.132	189.8	0.327	2.75	43.1	26.3	1.97	24.0	0.01	0.02	0.09	126
1	144	9.77	9.75	33.992	26.207	183.2	0.363	2.53	39.6	28.3	2.06	25.1	0.01	0.02	0.07	145
	150 ISL	9.71	9.69	34.013	26.233	180.8	0.374	2.48	38.7	29.0	2.09	25.4	0.01	0.02	0.07	151
1	174	9.38	9.36	34.078	26.339	171.2	0.416	2.26	35.1	32.5	2.19	26.9	0.02	0.01	0.08	175
	200 ISL	8.87	8.85	34.113	26.448	161.2	0.459	1.90	29.1	38.1	2.35	29.0	0.05	0.01	0.10	201
1	205	8.77	8.75	34.118	26.467	159.4	0.467	1.83	28.0	39.2	2.38	29.4	0.06	0.01	0.10	206
1	233	8.48	8.46	34.164	26.549	152.1	0.511	1.63	24.8	43.2	2.50	30.8	0.11			234
	250 ISL	8.30	8.27	34.186	26.594	148.1	0.536	1.49	22.6	45.8	2.57	31.6	0.09			251
1	274	8.06	8.03	34.209	26.648	143.2	0.571	1.32	19.9	49.2	2.66	32.6	0.05			276
	300 ISL	7.91	7.88	34.213	26.674	141.2	0.608	1.24	18.6	51.1	2.70	33.2	0.03			302
1	330	7.75	7.72	34.209	26.694	139.6	0.650	1.19	17.8	53.0	2.74	33.7	0.02			332
1	389	7.26	7.22	34.224	26.777	132.5	0.730	0.97	14.3	59.7	2.88	35.7	0.00			392
	400 ISL	7.16	7.12	34.230	26.796	130.8	0.745	0.91	13.4	61.3	2.91	36.1	0.00			403
1	455	6.69	6.65	34.263	26.886	122.7	0.815	0.62	9.1	69.7	3.07	38.0	0.00			458
	500 ISL	6.37	6.32	34.290	26.950	117.0	0.869	0.46	6.7	76.1	3.16	38.9				503
1	523	6.21	6.16	34.305	26.983	114.1	0.895	0.38	5.5	79.3	3.21	39.4				527

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 87 45

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
33 29.6 N	119 19.0 W	08/07/92	2218 UTC	1656 m	340 09 Kn	350 01 04	2	1017.1 mb	22.1 C	19.5 C	18m 03	8/8	AC

CAST	DEPTH a	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	19.22	19.22	33.429	23.766	412.3	0.000	5.69	107.6	2.0	0.39	0.1	0.01	0.29	0.08	0
1	1	19.22	19.22	33.429	23.766	412.4	0.004	5.69	107.6	2.0	0.39	0.1	0.01	0.29	0.08	1
	10 ISL	17.12	17.12	33.431	24.283	363.3	0.039	5.89	107.0	2.9	0.44	0.6	0.03	0.43	0.14	10
1	11	16.70	16.70	33.433	24.383	353.8	0.043	5.90	106.3	3.0	0.45	0.6	0.03	0.45	0.15	11
1	20	12.01	12.01	33.498	25.422	255.1	0.070	5.23	85.6	13.3	1.01	8.7	0.06	1.95	0.79	20
1	30	10.61	10.61	33.558	25.723	226.7	0.094	3.88	61.7	18.2	1.49	16.5	0.17	1.07	0.57	30
1	40	10.36	10.36	33.595	25.795	220.1	0.116	3.60	56.9	19.7	1.62	18.8	0.17	0.62	0.37	40
1	50	10.03	10.02	33.668	25.908	209.5	0.138	3.30	51.8	22.2	1.77	21.1	0.10	0.27	0.23	50
1	59	9.80	9.79	33.729	25.995	201.5	0.156	3.18	49.7	23.9	1.83	22.3	0.05	0.10	0.18	S9
1	69	9.77	9.76	33.821	26.072	194.4	0.176	2.98	46.6	25.3	1.90	23.3	0.04	0.05	0.13	69
	75 ISL	9.71	9.70	33.866	26.117	190.2	0.188	2.84	44.3	26.4	1.95	24.0	0.03	0.04	0.11	75
1	84	9.60	9.59	33.918	26.176	184.8	0.205	2.64	41.1	28.1	2.01	24.9	0.02	0.03	0.09	84
1	99	9.45	9.44	33.967	26.239	179.1	0.232	2.44	37.9	30.4	2.09	26.1	0.03	0.01	0.09	100
	100 ISL	9.44	9.43	33.969	26.242	178.8	0.234	2.44	37.9	30.5	2.09	26.1	0.03	0.01	0.09	101
1	119	9.33	9.32	33.997	26.282	175.4	0.267	2.40	37.2	31.6	2.11	26.5	0.03	0.01	0.09	120
	125 ISL	9.27	9.26	34.018	26.308	173.0	0.278	2.33	36.0	32.5	2.14	26.9	0.03	0.01	0.09	126
1	143	9.09	9.07	34.080	26.386	165.9	0.308	2.08	32.1	35.3	2.25	28.4	0.02	0.01	0.08	144
	150 ISL	9.03	9.01	34.093	26.406	164.2	0.320	2.02	31.1	36.0	2.28	28.7	0.03	0.01	0.08	151
1	172	8.83	8.81	34.121	26.460	159.4	0.355	1.89	29.0	38.1	2.36	29.4	0.06	0.01	0.07	173
	200 ISL	8.54	8.52	34.156	26.533	153.0	0.399	1.71	26.0	41.9	2.46	30.7	0.01	0.01	0.06	201
1	201	8.53	8.51	34.157	26.535	152.8	0.401	1.70	25.9	42.0	2.46	30.7	0.01	0.01	0.06	202
1	230	8.30	8.28	34.180	26.589	148.2	0.444	1.57	23.8	45.5	2.55	31.8	0.00			231
	250 ISL	8.10	8.07	34.190	26.627	144.8	0.474	1.46	22.0	48.0	2.62	32.6	0.00			252
1	270	7.90	7.87	34.197	26.662	141.7	0.502	1.34	20.1	50.5	2.68	33.3	0.00			272
	300 ISL	7.66	7.63	34.205	26.704	138.2	0.544	1.21	18.1	53.8	2.76	34.1	0.00			302
1	326	7.47	7.44	34.212	26.737	135.3	0.580	1.10	16.4	56.6	2.82	34.8	0.00			328
1	385	7.07	7.03	34.236	26.813	128.9	0.658	0.82	12.1	63.1	2.97	36.6	0.04			388
	400 ISL	6.97	6.93	34.244	26.833	127.1	0.677	0.76	11.2	64.9	3.01	37.0	0.03			403
1	451	6.65	6.61	34.273	26.899	121.3	0.740	0.57	8.3	71.2	3.12	38.3	0.00			454
	500 ISL	6.38	6.33	34.295	26.953	116.8	0.799	0.43	6,2	76.6	3.21	39.0				504
1	523	6.26	6.21	34.306	26.977	114.6	0.825	0.37	5.3	79.2	3.25	39.3				527

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 87 50

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
33 19.2 N	119 40.0 W	09/07/92	0139 UTC	75 *m*	350 09 kn	330 01 06	2	1016.0 mb	21.5 C	19.5 C	13m 03	8/8	AC

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	17.78	17.78	33.421	24.118	378.8	0.000	5.86	107.8	2.8	0.37	0.1	0.00	0.29	0.15	0
1	1	17.78	17.78	33.421	24.118	378.8	0.004	5.86	107.8	2.8	0.37	0.1	0.00	0.29	0.15	1
1	6	16.95	16.95	33.423	24.317	360.0	0.022	5.95	107.7	3.0	0.38	0.1	0.01	0.37	0.17	6
	10 ISL	16.02	16.02	33.424	24.532	339.6	0.036	5.95	105.7	4.0	0.48	1.0	0.04	0.60	0.29	10
1	11	15.76	15.76	33.424	24.591	334.1	0.040	5.95	105.2	4.4	0.51	1.4	0.05	0.66	0.32	11
	20 ISL	12.84	12.84	33.408	25.192	277.0	0.067	5.13	85.4	8.7	0.98	7.6	0.19	0.89	0.51	20
1	21	12.54	12.54	33.411	25.253	271.2	0.070	5.02	83.1	9.2	1.03	8.4	0.21	0.91	0.52	21
	30 ISL	11.66	11.66	33.480	25.473	250.5	0.093	4.45	72.3	13.1	1.30	12.4	0.28	0.63	0.42	30
1	31	11.64	11.64	33.487	25.483	249.6	0.096	4.40	71.5	13.5	1.32	12.7	0.28	0.59	0.40	31
1	41	11.32	11.31	33.525	25.571	241.4	0.120	4.14	66.8	15.2	1.43	14.5	0.30	0.44	0.36	41
	50 ISL	11.21	11.20	33.543	25.605	238.4	0.142	4.05	65.2	15.9	1.46	15.2	0.30	0.40	0.35	50
1	51	11.19	11.18	33.547	25.612	237.8	0.144	4.03	64.8	16.1	1.47	15.3	0.30	0.39	0.35	51
1	60	10.56	10.55	33.647	25.801	219.9	0.165	3.53	56.1	20.6	1.66	18.8	0.25	0.17	0.27	60

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 87 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
33 9.3 N	120 0.4 W	09/07/92	0426 UTC	1205 m	330 10 kn			1016.7 mb	18.9 C	17.9 C			

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	17.49	17.49	33.114	23.952	394.6	0.000	5.70	104.1	2.3	0.41	0.1	0.00	0.09	0.02	0
1	1	17.49	17.49	33.114	23.952	394.6	0.004	5.70	104.1	2.3	0.41	0.1	0.00	0.09	0.02	1
1	10	16.92	16.92	33.108	24.083	382.5	0.039	5.73	103.4	2.3	0.39	0.1	0.00	0.11	0.02	10
1	20	16.62	16.62	33.111	24.155	375.9	0.077	5.79	103.9	2.3	0.39	0.1	0.00	0.14	0.04	20
	30 ISL	14.99	14.99	33.044	24.468	346.3	0.113	6.03	104.7	2.4	0.42	0.1	0.00	0.19	0.08	30
1	31	14.81	14.81	33.041	24.505	342.9	0.116	6.05	104.7	2.4	0.42	0.1	0.00	0.20	0.08	31
1	39	14.05	14.04	33.107	24.716	322.9	0.143	6.10	104.0	3.1	0.49	0.8	0.05	0.84	0.49	39
1	50	12.43	12.42	33.030	24.980	298.0	0.177	5.87	96.7	4.8	0.68	3.2	0.17	0.48	0.36	50
1	59	11.60	11.59	33.083	25.177	279.4	0.203	5.44	88.1	7.1	0.90	7.4	0.12	0.47	0.41	59
1	70	11.06	11.05	33.136	25.316	266.3	0.233	5.12	81.9	9.4	1.08	10.6	0.08	0.33	0.37	70
	75 ISL	10.77	10.76	33.164	25.389	259.5	0.246	4.98	79.2	10.7	1.17	12.1	0.06	0.26	0.31	75
1	84	10.13	10.32	33.225	25.512	247.9	0.269	4.74	74.7	12.8	1.32	14.5	0.03	0.16	0.20	84
1	98	10.15	10.14	33.356	25.646	235.5	0.303	4.39	69.0	14.9	1.42	16.2	0.04	0.08	0.19	98
	100 ISL	10.09	10.08	33.368	25.665	233.7	0.308	4.37	68.6	15.2	1.43	16.4	0.04	0.07	0.18	100
1	117	9.48	9.47	33.470	25.846	216.7	0.346	4.24	65.7	17.9	1.53	18.6	0.02	0.05	0.12	118
	125 ISL	9.23	9.22	33.549	25.948	207.1	0.363	4.07	62.7	20.0	1.61	20.0	0.01	0.04	0.09	126
1	143	8.81	8.79	33.730	26.156	187.6	0.398	3.64	55.6	24.8	1.79	23.1	0.00	0.01	0.04	144
	150 ISL	8.75	8.73	33.783	26.207	182.9	0.411	3.51	53.6	26.2	1,83	23.9	0.00	0.01	0.04	151
1	172	8.63	8.61	33.911	26.326	172.0	0.450	3.18	48.5	29.9	1.93	25.7	0.02	0.01	0.03	173
	200 ISL	8.28	8.26	33.997	26.448	160.9	0.497	2.96	44.8	34.5	2.04	27.4	0.00	0.01	0.04	201
1	201	8.27	8.25	33.999	26.451	160.6	0.499	2.95	44.6	34.7	2.04	27.4	0.00	0.01	0.04	202
1	231	7.94	7.92	34.024	26.520	154.5	0.546	2.76	41.4	38.8	2.16	28.9	0.00			232
	250 ISL	7.79	7.77	34.047	26.560	150.9	0.575	2.53	37.9	41.9	2.26	30.1	0.00			251
1	271	7.64	7.61	34.072	26.602	147.3	0.606	2.24	33.4	45.4	2.37	31.4	0.00			273
	300 ISL	7.36	7.33	34.092	26,658	142.3	0.648	1.91	28.3	50.2	2.52	33.2	0.00			302
1	326	7.13	7.10	34.110	26.704	138.2	0.685	1.64	24.2	54.4	2.65	34.7	0.00			328
1	385	6.92	6.88	34.186	26.794	130.5	0.764	1.05	15.4	62.3	2.88	36.8	0.00			387
	400 ISL	6.81	6.77	34.196	26.817	128.5	0.783	0.96	14.0	64.4	2.93	37.4	0.00			403
1	449	6.42	6.38	34.216	26.885	122.4	0.845	0.74	10.7	71.2	3.05	39.1	0.00			452
	500 ISL	6.07	6.03	34.239	26.948	116.8	0.906	0.57	8.2	77.7	3.14	40.4				503
1	520	5.93	5.88	34.248	26.973	114.6	0.929	0.51	7.3	80.3	3.18	40.9				524

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 87 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	NAVES	NEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
32 59.4 N	120 20.8 W	09/07/92	0743 DTC	717 in	020 07 Jen			1016.9 mb	19.1 C	17.2 C		

CAST	DEPTH in	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA TBETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PBAEO ug/1	PRESS db
	0 ISL	18.30	18.30	33.222	23.838	405.4	0.000	5.59	103.7	2.4	0.37	0.2	0.00	0.11	0.03	0
1	2	18.30	18.30	33.222	23.838	405.5	0.008	5.59	103.7	2.4	0.37	0.2	0.00	0.11	0.03	2
	10 ISL	18.00	18.00	33.216	23.908	399.2	0.040	5.61	103.5	2.4	0.37	0.2	0.00	0.12	0.02	10
1	11	17.95	17.95	33.215	23.919	398.1	0.044	5.61	103.4	2.4	0.37	0.2	0.00	0.12	0.02	11
	20 ISL	17.91	17.91	33.211	23.926	397.8	0.080	5.62	103.5	2.4	0.36	0.2	0.00	0.13	0.04	20
1	21	17.90	17.90	33.211	23.929	397.6	0.084	5.62	103.5	2.4	0.36	0.2	0.00	0.13	0.04	21
	30 ISL	17.82	17.81	33.212	23.949	395.9	0.120	5.64	103.7	2.4	0.36	0.1	0.00	0.14	0.05	30
1	31	17.81	17.80	33.212	23.952	395.7	0.124	5.64	103.6	2.4	0.36	0.1	0.00	0.14	0.05	31
1	42	16.39	16.38	33.121	24.216	370.8	0.166	5.95	106.3	2.4	0.38	0.1	0.00	0.16	0.06	42
	50 ISL	15.18	15.17	33.138	24.500	343.9	0.194	6.06	105.7	2.5	0.41	0.1	0.00	0.19	0.08	50
1	51	15.04	15.03	33.143	24.534	340.6	0.198	6.07	105.6	2.5	0.41	0.1	0.00	0.19	0.08	51
1	61	14.20	14.19	33.156	24.723	322.8	0.231	6.08	104.0	2.7	0.45	0.1	0.00	0.21	0.12	61
1	71	13.14	13.13	33.185	24.962	300.3	0.262	5.66	94.7	4.4	0.64	3.1	0.10	0.49	0.26	71
	75 ISL	12.50	12.49	33.187	25.089	288.3	0.274	5.46	90.1	5.9	0.78	5.5	0.09	0.43	0.25	75
1	85	11.04	11.03	33.233	25.395	259.2	0.301	4.91	78.6	10.4	1.13	11.8	0.07	0.16	0.23	85
1	100	10.40	10.39	33.455	25.680	232.3	0.338	4.10	64.8	16.6	1.47	17.3	0.05	0.05	0.13	100
1	121	9.85	9.84	33.708	25.971	205.0	0.384	3.36	52.6	22.5	1.76	21.7	0.02	0.02	0.11	122
	125 ISL	9.80	9.79	33.754	26.015	200.9	0.392	3.22	50.3	23.6	1.81	22.4	0.02	0.02	0.10	126
1	145	9.64	9.62	33.944	26.191	184.7	0.431	2.62	40.8	28.5	2.01	25.1	0.01	0.01	0.07	146
	150 ISL	9.59	9.57	33.973	26.222	181.8	0.440	2.52	39.3	29.4	2.05	25.6	0.01	0.01	0.07	151
1	175	9.39	9.37	34.063	26.325	172.5	0.484	2.21	34.3	33.0	2.20	27.2	0.01	0.01	0.07	176
	200 ISL	9.27	9.25	34.106	26.379	167.9	0.527	2.07	32.0	34.8	2.26	28.2	0.00	0.01	0.08	201
1	205	9.24	9.22	34.111	26.387	167.1	0.535	2.05	31.7	35.1	2.27	28.3	0.00	0.01	0.08	206
1	234	8.94	8.91	34.147	26.464	160.3	0.583	1.91	29.3	38.2	2.36	29.4	0.00			235
	250 ISL	8.79	8.76	34.159	26.497	157.5	0.608	1.83	28.0	39.7	2.41	29.9	0.00			251
1	274	8.58	8.55	34.171	26.540	153.8	0.645	1.71	26.1	42.0	2.47	30.7	0.00			276
	300 ISL	8.35	8.32	34.181	26.583	150.1	0.685	1.60	24.3	44.6	2.53	31.5	0.00			302
1	329	8.09	8.06	34.187	26.627	146.2	0.728	1.49	22.5	47.8	2.60	32.5	0.00			331
1	389	7.47	7.43	34.190	26.721	138.0	0.813	1.23	18.3	55.4	2.77	34.8	0.00			391
	400 ISL	7.36	7.32	34.190	26.736	136.6	0.828	1.19	17.6	56.8	2.80	35.2	0.00			403
1	454	6.87	6.83	34.195	26.808	130.2	0.900	1.01	14.8	63.7	2.94	37.2	0.00			457
	500 ISL	6.52	6.47	34.214	26.871	124.6	0.959			69.7	3.04	38.6				503
1	524	6.33	6.28	34.224	26.903	121.7	0.989	0.07 U	1.0U	72.8	3.09	39.4				528

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 87 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
32 39.4 N	121 2.2 W	09/07/92	1331 UTC	3769 m	100 07 kn	340 02 05	2	1016.6 mb	21.1 C	17.8 C	32m 01 8/8	AC

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	18.50	18.50	33.185	23.761	412.9	0.000	5.54	103.2	2.2	0.37	0.1	0.00	0.11	0.02	0
1	1	18.50	18.50	33.185	23.761	412.9	0.004	5.54	103.2	2.2	0.37	0.1	0.00	0.11	0.02	1
1	10	18.25	18.25	33.187	23.824	407.1	0.041	5.56	103.0	2.2	0.37	0.1	0.00	0.11	0.02	10
	20 ISL	18.17	18.17	33.183	23.841	405.9	0.082	5.57	103.1	2.2	0.37	0.0	0.00	0.12	0.03	20
1	21	18.17	18.17	33.183	23.841	405.9	0.086	5.57	103.1	2.2	0.37	0.0	0.00	0.12	0.03	21
1	30	18.11	18.10	33.183	23.856	404.8	0.122	5.61	103.7	2.2	0.37	0.0	0.00	0.12	0.04	30
1	40	17.32	17.31	33.187	24.050	386.6	0.162	5.76	104.8	2.2	0.37	0.0	0.00	0.14	0.04	40
	50 ISL	16.80	16.79	33.183	24.170	375.5	0.200	5.85	105.4	2.1	0.40	0.0	0.00	0.20	0.07	50
1	51	16.73	16.72	33.181	24.184	374.1	0.204	5.86	105.4	2.1	0.40	0.0	0.00	0.21	0.07	51
1	60	15.48	15.47	33.152	24.445	349.4	0.236	6.02	105.6	2.1	0.41	0.0	0.00	0.25	0.10	60
1	71	13.27	13.26	33.140	24.901	306.1	0.272	6.05	101.5	3.4	0.54	0.9	0.04	0.40	0.26	71
	75 ISL	12.63	12.62	33.152	25.036	293.2	0.284	5.78	95.7	4.8	0.69	3.5	0.05	0.39	0.26	75
1	84	11.54	11.53	33.185	25.267	271.3	0.310	5.12	82.8	8.1	1.04	9.8	0.06	0.29	0.27	84
1	98	10.92	10.91	33.207	25.396	259.3	0.347	4.94	78.8	10.1	1.19	12.2	0.04	0.06	0.07	98
	100 ISL	10.83	10.82	33.219	25.422	256.9	0.352	4.89	77.9	10.5	1.22	12.7	0.04	0.06	0.07	100
1	119	10.02	10.01	33.362	25.672	233.4	0.399	4.40	68.9	14.9	1.48	17.3	0.02	0.10	0.18	120
	125 ISL	9.81	9.80	33.390	25.729	228.0	0.412	4.34	67.7	15.8	1.52	18.1	0.02	0.09	0.16	126
1	143	9.29	9.27	33.480	25.885	213.5	0.452	4.19	64.6	18.5	1.61	19.9	0.01	0.04	0.08	144
	150 ISL	9.17	9.15	33.541	25.952	207.3	0.467	4.02	61.9	20.0	1.67	21.0	0.01	0.03	0.06	151
1	173	8.90	8.88	33.751	26.159	188.0	0.512	3.41	52.2	25.4	1.88	24.5	0.00	0.01	0.03	174
	200 ISL	8.63	8.61	33.925	26.338	171.5	0.561	3.03	46.2	30.6	2.01	26.7	0.00	0.00	0.03	201
1	203	8.60	8.58	33.939	26.353	170.0	0.566	3.00	45.7	31.1	2.02	26.9	0.00	0.00	0.03	204
1	233	8.18	8.16	34.020	26.481	158.3	0.615	2.71	40.9	36.8	2.18	28.9	0.00			234
	250 ISL	8.00	7.97	34.037	26.521	154.7	0.642	2.59	38.9	39.2	2.25	29.9	0.00			251
1	272	7.76	7.73	34.045	26.563	151.0	0.675	2.44	36.5	42.3	2.33	31.2	0.00			274
	300 ISL	7.35	7.32	34.060	26.634	144.5	0.717	2.14	31.7	48.0	2.48	33.2	0.00			302
1	327	6.95	6.92	34.076	26.702	138.3	0.755	1.81	26.6	54.0	2.64	35.1	0.00			329
1	388	6.38	6.35	34.123	26.816	128.0	0.836	1.13	16.4	65.8	2.94	38.7	0.00			390
	400 ISL	6.29	6.25	34.133	26.835	126.2	0.851	1.03	14.9	67.8	2.98	39.2	0.00			402
1	452	5.97	5.93	34.178	26.912	119.4	0.915	0.70	10.0	75.4	3.14	41.0	0.00			455
	500 ISL	5.79	5.75	34.220	26.968	114.6	0.971	0.52	7.4	80.4	3.23	41.9				503
1	523	5.70	5.66	34.240	26.995	112.2	0.998	0.44	6.3	82.8	3.27	42.3				526

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 87 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
32 19.8 N	121 43.2 W	09/07/92	2002 UTC		090 07 kn	100 02 04	2	1017.7 *mb*	21.1 C	20.2 C		8/8	AS

CAST	DEPTH n	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN BT	OXYGEN Bl/1	OXY PCT	SIO3 uM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS <Jb
	0 ISL	18.88	18.88	33.214	23.688	419.8	0.000	5.54	103.9	2.2	0.37	0.1	0.00	0.10	0.02	0
1	1	18.88	18.88	33.214	23.688	419.8	0.004	5.54	103.9	2.2	0.37	0.1	0.00	0.10	0.02	1
	10 ISL	18.60	18.60	33.209	23.755	413.8	0.042	5.56	103.7	2.2	0.38	0.1	0.00	0.12	0.03	10
1	11	18.56	18.56	33.208	23.764	412.9	0.046	5.56	103.7	2.2	0.38	0.1	0.00	0.12	0.03	11
	20 ISL	18.43	18.43	33.207	23.796	410.2	0.083	5.60	104.1	2.2	0.37	0.1	0.00	0.14	0.04	20
1	21	18.42	18.42	33.207	23.798	410.0	0.087	5.60	104.1	2.2	0.37	0.1	0.00	0.14	0.04	21
1	30	17.36	17.36	33.158	24.018	389.3	0.123	5.80	105.6	2.1	0.36	0.1	0.00	0.18	0.05	30
1	41	16.87	16.86	33.193	24.161	376.1	0.165	5.85	105.5	2.0	0.37	0.1	0.00	0.23	0.08	41
1	50	15.80	15.79	33.157	24.378	355.6	0.198	5.99	105.8	2.2	0.39	0.1	0.00	0.28	0.11	50
1	61	14.29	14.28	33.093	24.656	329.3	0.236	6.11	104.6	2.6	0.42	0.1	0.00	0.34	0.16	61
1	71	13.30	13.29	33.073	24.843	311.6	0.268	6.14	103.0	3.2	0.49	0.1	0.01	0.41	0.20	71
	75 ISL	12.79	12.78	33.095	24.961	300.4	0.280	5.91	98.1	4.4	0.62	2.4	0.03	0.39	0.23	75
1	86	11.54	11.53	33.186	25.268	271.3	0.311	5.16	83.5	8.2	1.02	9.7	0.09	0.29	0.29	86
1	100	10.86	10.85	33.248	25.439	255.3	0.348	4.78	76.2	11.0	1.24	13.2	0.05	0.20	0.22	100
1	120	9.47	9.46	33.405	25.797	221.4	0.396	4.35	67.3	16.8	1.53	18.4	0.02	0.07	0.12	121
	125 ISL	9.33	9.32	33.453	25.857	215.8	0.407	4.23	65.3	18.0	1.58	19.3	0.02	0.06	0.09	126
1	145	9.06	9.04	33.644	26.050	197.8	0.448	3.77	57.9	22.3	1.74	22.3	0.01	0.03	0.02	146
	150 ISL	9.00	8.98	33.691	26.096	193.5	0.458	3.67	56.3	23.3	1.77	22.9	0.01	0.03	0.02	151
1	175	8.69	8.67	33.885	26.297	174.9	0.504	3.22	49.1	28.7	1.93	25.6	0.01	0.01	0.04	176
	200 ISL	8.26	8.24	33.988	26.443	161.3	0.546	2.85	43.1	34.7	2.10	28.2	0.00	0.00	0.03	201
1	206	8.16	8.14	34.003	26.470	158.8	0.556	2.77	41.8	36.1	2.14	28.7	0.00	0.00	0.03	207
1	235	7.82	7.80	34.041	26.551	151.6	0.601	2.49	37.3	41.2	2.29	30.5	0.00			236
	250 ISL	7.65	7.63	34.048	26.581	148.9	0.623	2.38	35.5	43.4	2.35	31.3	0.00			251
1	275	7,36	7.33	34.055	26.628	144.7	0.660	2.19	32.4	47.3	2.44	32.7	0.00			277
	300 ISL	7.07	7.04	34.075	26.685	139.6	0.695	1.85	27.2	52.7	2.59	34.5	0.00			302
1	330	6.75	6.72	34.103	26.750	133.6	0.736	1.44	21.0	59.2	2.77	36.6	0.00			332
1	390	6.29	6.26	34.142	26.842	125.4	0.814	0.99	14.3	68.5	2.98	39.3	0.00			392
	400 ISL	6.24	6.20	34.149	26.854	124.4	0.827	0.93	13.4	69.7	3.01	39.6	0.00			402
1	455	5.99	5.95	34.191	26.920	118.8	0.893	0.6,5	9.3	75.7	3.15	41.1	0.00			458
	500 ISL	5.76	5.72	34.227	26.977	113.7	0.946	0.49	7.0	81,2	3.23	42.1				503
1	524	5.63	5.59	34.247	27.009	110.8	0.973	0.41	5.8	84.2	3.28	42.6				528

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 87 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
31 59.1 N	122 23.4 W	10/07/92	0158 UTC	4098 m	150 11 kn	150 03 06	4	1015.5 mb	20.6 C	20.6 C	23m 01	8/8	

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	19.42	19.42	33.212	23.549	433.0	0.000	5.48	103.8	2.2	0.36	0.0	0.00	0.10	0.02	0
1	1	19.42	19.42	33.212	23.550	433.1	0.004	5.48	103.8	2.2	0.36	0.0	0.00	0.10	0.02	1
1	10	18.81	18.81	33.233	23.721	417.0	0.043	5.52	103.4	2.2	0.36	0.0	0.00	0.11	0.03	10
1	20	18.57	18.57	33.211	23.764	413.3	0.084	5.55	103.5	2.2	0.35	0.0	0.00	0.14	0.03	20
1	30	16.94	16.94	33.150	24.111	380.4	0.124	5.84	105.5	2.2	0.36	0.0	0.00	0.14	0.03	30
1	41	15.89	15.88	33.140	24.344	358.5	0.164	5.97	105.6	2.3	0.39	0.0	0.00	0.19	0.07	41
1	50	13.57	13.56	33.047	24.768	318.2	0.195	6.15	103.7	2.9	0.44	0.0	0.00	0.22	0.13	50
1	60	12.82	12.81	33.122	24.976	298.7	0.226	5.86	97.4	4.4	0.62	2.4	0.12	0.51	0.24	60
1	70	12.05	12.04	33.113	25.117	285.4	0.255	5.50	89.9	6.2	0.82	6.2	0.11	0.44	0.28	70
	75 ISL	11.67	11.66	33.123	25.195	278.0	0.269	5.34	86.6	7.4	0.92	8.1	0.08	0.39	0.27	75
1	83	11.12	11.11	33.161	25.325	265.8	0.291	5.08	81.4	9.4	1.08	10.8	0.04	0.30	0.24	83
1	99	10.45	10.44	33.310	25.558	243.9	0.332	4.54	71.8	13.4	1.30	14.9	0.03	0.18	0.32	99
	100 ISL	10.41	10.40	33.319	25.572	242.5	0.334	4.51	71.2	13.7	1.31	15.1	0.03	0.17	0.31	100
1	118	9.85	9.84	33.474	25.788	222.3	0.376	3.96	61.8	18.3	1.53	18.8	0.01	0.05	0.12	119
	125 ISL	9.65	9.64	33.544	25.876	214.1	0.391	3.79	59.0	19.9	1.59	20.0	0.01	0.04	0.11	126
1	143	9.24	9.22	33.714	26.076	195.4	0.428	3.45	53.2	23.6	1.72	22.5	0.00	0.01	0.10	144
	150 ISL	9.15	9.13	33.761	26.127	190.6	0.441	3.35	51.6	24.8	1.76	23.1	0.00	0.01	0.09	151
1	173	8.94	8.92	33.881	26.255	178.9	0.484	3.07	47.1	28.4	1.87	24.8	0.01	0.00	0.04	174
	200 ISL	8.63	8.61	33.997	26.394	166.1	0.531	2.72	41.5	33.4	2.01	26.8	0.00	0.01	0.04	201
1	203	8.59	8.57	34.007	26.408	164.8	0.535	2.69	41.0	33.9	2.02	27.0	0.00	0.01	0.04	204
1	232	8.18	8.16	34.039	26.496	156.9	0.582	2.61	39.4	37.8	2.10	28.3	0.00			233
	250 ISL	7.95	7.92	34.053	26.542	152.8	0.610	2.51	37.7	40.4	2.16	29.1	0.00			251
1	273	7.69	7.66	34.066	26.590	148.5	0.645	2.33	34.8	43.8	2.24	30.2	0.00			275
	300 ISL	7.42	7.39	34.079	26.639	144.1	0.684	2.07	30.7	48.0	2.35	31.7	0.00			302
1	328	7.16	7.13	34.092	26.686	140.0	0.724	1.77	26.1	52.6	2.47	33.3	0.00			330
1	389	6.59	6.55	34.128	26.792	130.4	0.806	1.19	17.3	63.1	2.72	36.5	0.00			391
	400 ISL	6.53	6.49	34.140	26.810	128.9	0.821	1.10	16.0	64.5	2.76	36.8	0.00			402
1	454	6.28	6.24	34.195	26.886	122.2	0.888	0.74	10.7	70.9	2.92	38.1	0.00			457
	500 ISL	6.01	5.97	34.220	26.941	117.4	0.944	0.57	8.2	76.7	3.00	39.4				503
1	525	5.86	5.81	34.234	26.971	114.7	0.973	0.47	6.7	79.8	3.04	40.1				529

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 87 100

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCBI/FOREL	CLD AMT TYPE
31 39.2 N	123 4.2 W	10/07/92	0720 UTC	4123 m	110 12 kn			1015.9 nb	20.1 C	19.9 C		

CAST	DEPTH n	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN BT	OXYGEN nl/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/I	NO2 UM/1	CHL-A ug/1	PBAEO ug/1	PRESS db
	0 ISL	18.89	18.89	33.215	23.686	420.0	0.000	5.51	103.4	2.1	0.37	0.2	0.00	0.10	0.02	0
1	1	18.89	18.89	33.215	23.686	420.0	0.004	5.51	103.4	2.1	0.37	0.2	0.00	0.10	0.02	1
	10 ISL	18.67	18.67	33.221	23.746	414.6	0.042	5.53	103.3	2.1	0.37	0.2	0.00	0.12	0.03	10
1	11	18.62	18.62	33.221	23.759	413.4	0.046	5.53	103.2	2.1	0.37	0.2	0.00	0.12	0.03	11
1	20	18.07	18.07	33.208	23.885	401.7	0.083	5.64	104.2	2.1	0.37	0.1	0.00	0.14	0.03	20
1	30	17.22	17.22	33.204	24.087	382.8	0.122	5.79	105.2	2.1	0.37	0.1	0.00	0.17	0.04	30
1	41	16.48	16.47	33.169	24.233	369.2	0.163	5.89	105.4	2.1	0.37	0.1	0.00	0.20	0.07	41
1	50	14.31	14.30	33.048	24.617	332.7	0.195	6.10	104.5	2.2	0.39	0.1	0.00	0.32	0.16	50
1	61	13.03	13.02	33.027	24.861	309.6	0.230	5.94	99.1	3.5	0.56	1.5	0.25	0.49	0.37	61
1	70	12.31	12.30	33.023	24.998	296.8	0.257	5.68	93.3	4.8	0.70	4.3	0.10	0.45	0.42	70
	75 ISL	11.92	11.91	33.087	25.121	285.1	0.272	5.40	88.0	6.5	0.84	6.8	0.06	0.37	0.36	75
1	84	11.23	11.22	33.219	25.350	263.4	0.297	4.90	78.7	10.0	1.10	11.3	0.03	0.20	0.21	84
1	99	10.06	10.05	33.285	25.605	239.3	0.334	4.52	70.8	14.3	1.37	16.0	0.01	0.08	0.10	99
	100 ISL	10.02	10.01	33.292	25.617	238.2	0.337	4.50	70.5	14.5	1.38	16.2	0.01	0.08	0.10	100
1	118	9.63	9.62	33.434	25.793	221.7	0.378	4.10	63.7	18.1	1.54	19.0	0.01	0.04	0.07	119
	125 ISL	9.51	9.50	33.484	25.852	216.3	0.393	3.96	61.4	19.4	1.59	19.9	0.01	0.03	0.06	126
1	144	9.27	9.25	33.615	25.993	203.2	0.433	3.59	55.4	22.5	1.71	21.9	0.00	0.01	0.04	145
	150 ISL	9.25	9.23	33.659	26.031	199.7	0.445	3.49	53.8	23.3	1.74	22.4	0.00	0.01	0.04	151
1	174	9.15	9.13	33.824	26.177	186.4	0.492	3.10	47.8	26.7	1.85	24.2	0.01	0.01	0.04	175
	200 ISL	8.72	8.70	33.949	26.343	171.0	0.538	2.71	41.4	32.0	2.01	26.6	0.00	0.01	0.03	201
1	204	8.65	8.63	33.963	26.365	169.0	0.545	2.66	40.6	32.8	2.03	27.0	0.00	0.01	0.03	205
1	233	8.32	8.30	34.027	26.466	159.8	0.593	2.47	37.4	37.1	2.12	28.5	0.00			234
	250 ISL	8.11	8.08	34.045	26.511	155.7	0.619	2.38	35.9	39.5	2.17	29.3	0.00			251
1	273	7.83	7.80	34.061	26.566	150.8	0.655	2.24	33.5	42.9	2.25	30.4	0.00			275
	300 ISL	7.57	7.54	34.086	26.623	145.7	0.695	1.97	29.3	47.4	2.37	31.8	0.00			302
1	328	7.33	7.30	34.112	26.678	140.8	0.735	1.66	24.6	52.2	2.50	33.3	0.00			330
1	387	6.89	6.85	34.155	26.773	132.4	0.815	1.17	17.2	61.0	2.71	35.6	0.00			389
	400 ISL	6.78	6.74	34.162	26.794	130.6	0.833	1.08	15.8	63.0	2.75	36.1	0.00			402
1	453	6.35	6.31	34.188	26.872	123.6	0.900	0.80	11.6	70.5	2.89	38.0	0.00			456
	500 ISL	6.08	6.04	34.211	26.925	119.0	0.957	0.63	9.1	75.5	2.97	39.2				503
1	521	5.96	5.91	34.222	26.949	116.9	0.982	0.55	7.9	77.7	3.01	39.7				524

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 87 110

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
31 19.2 N	123 44.8 W	10/07/92	1236 UTC	3869 m	110 11 kn			1014.3 mb	20.2 C	20.1 C		

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CBL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	19.08	19.08	33.175	23.608	427.5	0.000	5.48	103.2	2.2	0.35	0.0	0.01	0.12	0.03	0
1	1	19.08	19.08	33.175	23.608	427.5	0.004	5.48	103.2	2.2	0.35	0.0	0.01	0.12	0.03	1
	10 ISL	19.05	19.05	33.174	23.615	427.1	0.043	5.49	103.3	2.2	0.35	0.0	0.00	0.13	0.04	10
1	12	19.03	19.03	33.171	23.618	426.9	0.051	5.49	103.2	2.2	0.35	0.0	0.00	0.13	0.04	12
	20 ISL	18.93	18.93	33.175	23.647	424.5	0.085	5.51	103.4	2.2	0.35	0.0	0.00	0.14	0.04	20
1	22	18.91	18.91	33.176	23.652	424.0	0.094	5.52	103.6	2.2	0.35	0.0	0.00	0.14	0.04	22
	30 ISL	17.56	17.55	33.134	23.952	395.6	0.127	5.77	105.5	2.2	0.35	0.0	0.00	0.16	0.04	30
1	31	17.38	17.37	33.129	23.991	391.9	0.131	5.80	105.7	2.2	0.35	0.0	0.00	0.16	0.04	31
1	41	16.92	16.91	33.104	24.081	383.7	0.169	5.85	105.6	2.2	0.36	0.0	0.00	0.15	0.05	41
1	50	16.56	16.55	33.163	24.210	371.7	0.203	5.84	104.7	2.2	0.37	0.0	0.00	0.22	0.10	50
1	60	15.99	15.98	33.140	24.323	361.2	0.240	5.91	104.8	2.2	0.39	0.0	0.00	0.28	0.10	60
1	70	15.12	15.11	33.118	24.498	344.6	0.275	6.01	104.7	2.3	0.41	0.0	0.00	0.29	0.19	70
	75 ISL	14.53	14.52	33.092	24.605	334.6	0.292	6.00	103.2	2.4	0.43	0.1	0.01	0.29	0.20	75
1	85	13.39	13.38	33.047	24.806	315.6	0.325	5.98	100.5	2.9	0.48	0.4	0.06	0.30	0.23	85
1	99	12.52	12.51	33.033	24.966	300.5	0.368	5.77	95.2	4.1	0.63	2.4	0.16	0.25	0.22	99
	100 ISL	12.47	12.46	33.039	24.980	299.2	0.371	5.74	94.6	4.3	0.65	2.7	0.16	0.25	0.22	100
1	119	11.61	11.60	33.200	25.267	272.2	0.425	5.06	82.0	8.4	1.00	9.3	0.07	0.17	0.30	119
	125 ISL	11.30	11.28	33.249	25.362	263.3	0.441	4.86	78.2	10.0	1.11	11.2	0.05	0.14	0.27	126
1	144	10.37	10.35	33.398	25.642	236.9	0.489	4.27	67.4	15.0	1.41	16.3	0.01	0.07	0.13	145
	150 ISL	10.15	10.13	33.437	25.710	230.5	0.503	4.12	64.7	16.3	1.50	17.4	0.01	0.05	0.10	151
1	174	9.48	9.46	33.589	25.940	209.0	0.555	3.62	56.1	21.0	1.76	20.5	0.01	0.01	0.04	175
	200 ISL	9.15	9.13	33.783	26.145	189.9	0.607	3.21	49.4	25.7	1.84	23.7	0.00	0.01	0.04	201
1	204	9.10	9.08	33.807	26.172	187.4	0.615	3.20	49.2	26.2	1.85	24.0	0.00	0.01	0.04	205
1	232	8.27	8.25	33.840	26.326	173.0	0.665	3.98	60.1	27.1	1.68	22.6	0.00			233
	250 ISL	7.99	7.96	33.890	26.408	165.5	0.696	3.78	56.8	30.0	1.73	23.6	0.00			251
1	274	7.74	7.71	33.957	26.497	157.3	0.735	3.52	52.6	35.1	1.88	25.9	0.00			275
	300 ISL	7.40	7.37	33.987	26.569	150.7	0.775	3.06	45.3	41.0	2.06	28.4	0.00			302
1	328	7.05	7.02	34.003	26.631	145.0	0.816	2.55	37.5	47.3	2.27	31.0	0.00			330
1	387	6.39	6.36	34.033	26.743	134.8	0.899	1.87	27.1	58.4	2.58	34.2	0.00			389
	400 ISL	6.30	6.26	34.044	26.764	133.0	0.916	1.72	24.8	60.6	2.63	35.0	0.00			402
1	453	6.00	5.96	34.091	26.839	126.3	0.985	1.18	16.9	69.3	2.82	38.0				456
	500 ISL	5.73	5.69	34.133	26.907	120.3	1.043	0.87	12.4	76.7	2.95	39.6	0.00			503
1	525	5.58	5.54	34.155	26.942	117.1	1.072	0.70	9.9	80.7	3.02	40.4	0.00			528

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 90 28

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	NAVES	NEA	BAROMETER	DRY	NET	SECCHI/FOREL	CLD AMT TYPE
33 29.0 N	117 46.2 N	08/07/92	0556 UTC	65 n	360 14 kn			1015.9 lib	20.9 C	19.1 C		

CAST	DEPTH ▪	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN BT	OXYGEN Ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 UM/1	CBL-A ug/1	PHAEO ug/1	PRESS db
1	0	19.34	19.34	33.364	23.686	420.0	0.000	6.31	119.5	3.2	0.29	0.2	0.00	0.87	0.44	0
1	6	15.99	15.99	33.364	24.493	343.3	0.023	6.76	120.0	3.4	0.40	0.2	0.00	3.10	1.11	6
1	10	12.41	12.41	33.283	25.179	278.0	0.035	6.06	99.9	3.6	0.64	2.8	0.10	1.46	0.80	10
	20 ISL	12.01	12.01	33.410	25.354	261.6	0.062	4.79	78.4	8.5	1.03	9.3	0.19	0.96	0.90	20
1	21	11.97	11.97	33.423	25.371	260.0	0.065	4.70	76.8	9.1	1.06	9.9	0.19	0.91	0.91	21
	30 ISL	11.42	11.42	33.461	25.503	247.7	0.088	4.23	68.4	12.5	1.29	13.5	0.29	0.78	0.83	30
1	31	11.36	11.36	33.464	25.516	246.4	0.090	4.20	67.8	12.8	1.31	13.8	0.30	0.77	0.82	31
1	40	11.10	11.10	33.526	25.611	237.6	0.112	3.79	60.9	14.8	1.45	15.9	0.38	0.62	0.82	40
	50 ISL	11.01	11.00	33.595	25.681	231.1	0.135	3.45	55.3	16.8	1.56	17.7	0.40	0.52	0.67	50
1	51	11.00	10.99	33.602	25.688	230.5	0.138	3.42	54.8	17.0	1.57	17.9	0.40	0.51	0.66	51

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 90 30

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	NIND SPEED	NAVES	WEA	BAROMETER	DRY	NET	SECCHI/FOREL	CLD AKT TYPE
33 25.2 N	117 54.3 N	08/07/92	0346 UTC	614 ▪	340 14 kn			1015.3 lM>	22.1 C	19.3 C		

CAST	DEPTB ▪	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN Bl/1	OXY PCT	SIO3 uM/1	PO4 UM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS <Sb
1	0	18.79	18.79	33.357	23.820	407.2	0.000	6.10	114.3	2.8	0.36	0.1	0.00	1.39	0.62	0
1	10	16.32	16.32	33.389	24.437	348.7	0.038	7.00	125.1	2.9	0.35	0.1	0.02	3.80	1.19	10
	20 ISL	13.26	13.26	33.340	25.057	289.9	0.070	6.57	110.3	4.1	0.45	0.0	0.03	3.29	1.12	20
1	21	12.97	12.97	33.339	25.113	284.5	0.073	6.53	109.0	4.2	0.46	0.0	0.03	3.24	1.11	21
	30 ISL	11.39	11.39	33.438	25.490	248.9	0.097	4.36	70.4	11.1	1.26	11.8	0.55	2.37	1.03	30
1	31	11.28	11.28	33.451	25.520	246.0	0.099	4.12	66.4	11.9	1.35	13.2	0.59	2.25	1.02	31
1	40	11.04	11.04	33.539	25.632	235.6	0.121	3.69	59.2	15.2	1.53	16.9	0.20	1.07	0.89	40
	50 ISL	10.88	10.87	33.594	25.704	229.0	0.144	3.64	58.2	16.5	1.53	17.5	0.08	0.58	0.56	50
1	51	10.86	10.85	33.598	25.710	228.4	0.146	3.64	58.2	16.5	1.53	17.6	0.07	0.56	0.53	51
1	60	10.65	10.64	33.614	25.760	223.9	0.167	3.69	58.7	17.1	1.53	17.8	0.09	0.32	0.38	60
1	70	10.46	10.45	33.640	25.813	219.0	0.189	3.67	58.2	17.8	1.55	18.3	0.05	0.22	0.31	70
	75 ISL	10.43	10.42	33.676	25.847	215.9	0.200	3.54	56.1	18.7	1.59	18.9	0.04	0.19	0.30	75
1	85	10.40	10.39	33.758	25.916	209.6	0.221	3.24	51.3	20.7	1.70	20.2	0.04	0.16	0.27	85
1	99	10.29	10.28	33.835	25.995	202.4	0.250	3.03	47.9	22.7	1.80	21.6	0.01	0.09	0.18	100
	100 ISL	10.30	10.29	33.843	26.000	202.0	0.252	3.00	47.4	22.9	1.81	21.7	0.01	0.09	0.19	101
1	120	10.54	10.53	34.015	26.093	193.7	0.291	2.32	36.9	26.2	2.02	23.9	0.01	0.06	0.30	121
	125 ISL	10.53	10.52	34.047	26.120	191.2	0.301	2.21	35.2	27.0	2.06	24.4	0.01	0.05	0.27	126
1	144	10.39	10.37	34.139	26.216	182.5	0.336	1.95	10.9	29.7	2.18	25.8	0.00	0.03	0.12	145
	150 ISL	10.36	10.34	34.1S5	26.234	180.9	0.347	1.90	30.1	30.3	2.20	26.0	0.00	0.03	0.11	151
1	175	10.16	10.14	34.191	26.297	175.5	0.392	1.80	28.4	32.3	2.26	26.7	0.00	0.02	0.07	176
	200 ISL	9.82	9.80	34.212	26.371	168.8	0.435	1.75	27.4	34.1	2.30	27.5	0.00	0.02	0.07	201
1	205	9.74	9.72	34.214	26.386	167.5	0.443	1.74	27.2	34.5	2.31	27.7	0.00	0.02	0.07	206
1	234	9.18	9.15	34.222	26.484	158.6	0.491	1.68	26.0	38.5	2.40	28.9	0.00			235
	250 ISL	8.96	8.93	34.221	26.519	155.5	0.516	1.66	25.5	40.1	2.43	29.4	0.00			251
1	274	8.67	8.64	34.217	26.562	151.8	0.553	1.61	24.6	42.3	2.48	30.2	0.00			276
	300 ISL	8.29	8.26	34.211	26.616	146.9	0.591	1.51	22.9	45.8	2.55	31.3	0.00			302
1	329	7.91	7.88	34.207	26.670	142.1	0.613	1.38	20.7	49.8	2.64	32.5	0.00			331
1	389	7.50	7.46	34.223	26.742	136.0	0.717	1.09	16.2	56.2	2.79	34.1	0.00			392
	400 ISL	7.40	7.36	34.227	26.760	134.4	0.732	1.03	15.3	57.8	2.82	34.7	0.00			403
1	454	6.91	6.87	34.245	26.842	127.0	0.802	0.74	10.9	65.3	2.97	36.8	0.00			457
	500 ISL	6.66	6.61	34.260	26.888	123.1	0.860	0.60	8.8	69.4	3.03	37.8				503
1	521	6.55	6.50	34.267	26.909	121.4	0.885	0.54	7.9	71.2	3.06	38.2				525

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 90 35

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	NIND SPEED	HAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
33 14.8 N	118 15.7 H	08/07/92	0009 UTC	540 ▪	350 08 kn	350 01 02	5	1016.5 ab	20.9 C	19.9 C	09m 05 8/8	AS

CAST	DEPTH ▪	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN BT	OXYGEN Ml/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CBL-A ug/1	PHAEO ug/1	PRESS db
1	0	20.10	20.10	33.473	23.572	430.8	0.000	6.05	116.3	3.4	0.24	0.2	0.00	1.29	0.26	0
1	10	18.85	18.85	33.465	23.888	401.1	0.042	6.43	120.7	3.9	0.27	0.1	0.00	1.88	0.44	10
1	20	17.10	17.10	33.467	24.316	360.6	0.080	6.64	120.5	6.3	0.33	0.1	0.00	1.14	0.45	20
1	30	11.56	11.S6	33.573	25.564	241.8	0.110	3.70	60.0	15.0	1.34	13.3	0.46	0.91	0.58	30
1	40	10.79	10.79	33.710	25.810	218.7	0.133	3.25	51.9	19.4	1.64	19.3	0.06	0.31	0.24	40
1	50	10.49	10.48	33.780	25.917	208.7	0.154	3.09	49.0	21.5	1.72	20.7	0.04	0.14	0.14	50
1	60	10.42	10.41	33.816	25.957	205.1	0.175	2.98	47.2	22.5	1.77	21.3	0.03	0.11	0.12	60
1	70	10.33	10.32	33.856	26.004	200.9	0.195	2.88	45.6	23.4	1.82	22.0	0.02	0.08	0.13	70
	75 ISL	10.26	10.25	33.881	26.036	198.0	0.205	2.81	44.4	24.1	1.86	22.5	0.02	0.07	0.13	75
1	83	10.16	10.15	33.923	26.086	193.4	0.221	2.69	42.4	25.3	1.92	23.2	0.03	0.05	0.11	83
1	98	10.11	10.10	33.999	26.154	187.2	0.249	2.41	38.0	27.3	2.01	24.4	0.04	0.02	0.06	99
	100 ISL	10.11	10.10	34.006	26.160	186.8	0.253	2.36	37.2	27.5	2.02	24.5	0.04	0.02	0.06	101
1	118	10.13	10.12	34.068	26.205	182.9	0.286	2.15	33.9	28.9	2.11	25.4	0.05	0.02	0.05	119
	125 ISL	9.83	9.82	34.052	26.243	179.3	0.299	2.32	36.3	29.5	2.08	25.5	0.04	0.02	0.05	126
1	143	8.95	8.93	34.002	26.347	169.6	0.330	2.85	43.8	31.1	2.00	25.6	0.02	0.01	0.04	144
	150 ISL	8.88	8.86	34.015	26.369	167.7	0.342	2.83	43.4	31.7	2.02	25.7	0.02	0.01	0.04	151
1	173	8.63	8.61	34.038	26.426	162.6	0.380	2.75	41.9	34.1	2.07	26.7	0.02	0.01	0.05	174
	200 ISL	8.97	8.95	34.206	26.505	155.8	0.423	1.74	26.8	39.4	2.38	29.1	0.01	0.00	0.04	201
1	203	9.01	8.99	34.224	26.513	155.2	0.428	1.63	25.1	40.0	2.42	29.4	0.01	0.00	0.04	204
1	237	8.68	8.65	34.220	26.562	151.0	0.480	1.56	23.8	42.7	2.48	30.2	0.01			238
	250 ISL	8.60	8.57	34.216	26.572	150.3	0.500	1.57	24.0	43.2	2.49	30.3	0.01			252
1	287	8.37	8.34	34.204	26.598	148.4	0.555	1.58	24.0	44.9	2.51	30.8	0.01			289
	300 ISL	8.22	8.19	34.199	26.617	146.8	0.574	1.55	23.4	46.3	2.54	31.3	0.01			302
1	343	7.70	7.67	34.193	26.689	140.3	0.636	1.38	20.6	51.9	2.65	33.2	0.01			345
	400 ISL	7.24	7.20	34.235	26.788	131.6	0.713	0.93	13.8	59.7	2.85	35.3	0.01			403
1	410	7.16	7.12	34.243	26.806	130.0	0.726	0.85	12.5	61.1	2.88	35.7	0.01			413

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 90 37

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
33 10.8 N	118 23.6 W	07/07/92	2056 UTC	1171 m	110 02 kn	100 01 05	2	1016.9 mb	21.1 C	19.8 C	19m 03	8/8	AC

CAST	DEPTH n	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
1	CI	18.39	18.39	33.343	23.909	398.7	0.000	5.97	111.0	1.6	0.33	0.1	0.00	0.34	0.11	0
1	10	18.03	18.03	33.340	23.995	390.8	0.039	6.07	112.1	1.4	0.34	0.1	0.00	0.48	0.14	10
1	20	15.41	15.41	33.327	24.594	334.0	0.076	6.61	116.0	2.0	0.38	0.1	0.01	1.37	0.42	20
1	30	12.72	12.72	33.428	25.232	273.5	0.106	5.76	95.7	5.9	0.69	2.5	0.23	4.19	1.44	30
1	40	11.72	11.71	33.459	25.446	253.3	0.132	4.56	74.2	10.4	1.15	10.4	0.38	2.93	1.61	40
1	50	11.51	11.50	33.483	25.504	248.1	0.158	4.27	69.2	11.9	1.24	12.7	0.31	1.63	1.13	50
1	61	11.36	11.35	33.504	25.548	244.1	0.185	4.10	66.2	13.2	1.33	14.3	0.21	0.97	0.80	61
1	71	10.75	10.74	33.603	25.734	226.6	0.208	3.67	58.5	16.9	1.54	17.7	0.15	0.45	0.48	71
	75 ISL	10.66	10.65	33.644	25.782	222.1	0.217	3.54	56.3	18.0	1.59	18.5	0.12	0.34	0.44	75
1	85	10.54	10.53	33.734	25.873	213.7	0.239	3.30	52.4	20.1	1.68	19.8	0.07	0.19	0.40	85
	100 ISL	10.08	10.07	33.817	26.017	200.3	0.270	3.12	49.1	23.0	1.79	21.7	0.05	0.09	0.17	100
1	101	10.05	10.04	33.821	26.025	199.5	0.272	3.11	48.9	23.2	1.80	21.8	0.05	0.09	0.15	102
1	121	9.96	9.95	33.923	26.120	190.9	0.311	2.76	43.3	25.7	1.92	23.3	0.05	0.05	0.11	122
	125 ISL	9.90	9.89	33.950	26.152	188.0	0.319	2.68	42.0	26.5	1.95	23.7	0.05	0.05	0.12	126
1	145	9.48	9.46	34.060	26.308	173.6	0.355	2.43	37.8	30.4	2.07	25.7	0.03	0.03	0.16	146
	150 ISL	9.35	9.33	34.061	26.330	171.5	0.363	2.47	38.3	31.0	2.07	25.9	0.03	0.03	0.14	151
1	176	8.75	8.73	34.035	26.405	164.7	0.407	2.74	41.9	33.7	2.05	26.4	0.03	0.01	0.05	177
	200 ISL	8.48	8.46	34.055	26.463	159.6	0.446	2.59	39.4	36.0	2.12	27.3	0.02	0.01	0.07	201
1	207	8.46	8.44	34.073	26.480	158.1	0.457	2.55	38.7	36.9	2.16	27.7	0.02	0.01	0.07	208
1	235	8.73	8.70	34.236	26.567	150.6	0.500	1.49	22.8	42.9	2.51	30.1	0.02			236
	250 ISL	8.60	8.57	34.241	26.591	148.5	0.523	1.49	22.7	44.5	2.53	30.7	0.02			251
1	275	8.23	8.20	34.205	26.620	146.0	0.560	1.49	22.5	46.4	2.55	31.3	0.01			277
	300 ISL	7.97	7.94	34.202	26.656	142.9	0.596	1.41	21.2	49.2	2.61	32.2	0.01			302
1	331	7.67	7.64	34.208	26.705	138.6	0.639	1.26	18.8	53.0	2.70	33.3	0.01			333
1	391	7.14	7.10	34.236	26.803	129.9	0.720	0.89	13.1	61.3	2.89	35.6	0.01			394
	400 ISL	7.06	7.02	34.240	26.817	128.7	0.731	0.84	12.4	62.5	2.92	36.0	0.01			403
1	456	6.61	6.57	34.264	26.898	121.5	0.802	0.58	8.5	70.4	3.06	37.9	0.01			459
	500 ISL	6.31	6.26	34.293	26.960	116.0	0.854	0.43	6.2	77.1	3.15	38.7	0.02			503
1	525	6.14	6.09	34.310	26.996	112.8	0.882	0.34	4.9	80.9	3.20	39.1	0.03			529

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 90 45

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
32 55.2 N	118 55.9 W	07/07/92	1545 UTC	1705 in	300 07 kn	300 01 04	2	1016.0 mb	18.1 C	17.8 C		8/8	AC

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	16.97	16.97	33.414	24.305	360.9	0.000	5.83	105.5	2.4	0.39	0.2	0.00	0.50	0.21	0
1	1	16.97	16.97	33.414	24.305	360.9	0.004	5.83	105.5	2.4	0.39	0.2	0.00	0.50	0.21	1
1	10	16.38	16.38	33.393	24.426	349.7	0.036	5.95	106.5	2.4	0.40	0.1	0.01	0.60	0.35	10
	20 ISL	14.80	14.80	33.360	24.752	318.9	0.069	5.88	101.9	3.7	0.52	1.6	0.08	0.70	0.41	20
1	21	14.62	14.62	33.359	24.790	315.4	0.072	5.87	101.4	4.0	0.54	1.7	0.09	0.70	0.42	21
1	30	13.32	13.32	33.379	25.075	288.4	0.099	5.24	88.1	8.1	0.85	6.4	0.26	0.65	0.62	30
1	41	12.90	12.89	33.388	25.166	280.1	0.131	5.05	84.2	9.3	0.94	7.9	0.31	0.63	0.55	41
1	50	12.01	12.00	33.418	25.360	261.7	0.155	4.61	75.4	12.0	1.15	11.4	0.27	0.52	0.35	50
1	60	11.23	11.22	33.467	25.542	244.6	0.180	4.28	68.9	14.7	1.31	14.2	0.16	0.28	0.28	60
1	69	10.81	10.80	33.512	25.652	234.3	0.202	4.02	64.1	16.8	1.44	16.5	0.08	0.18	0.25	69
	75 ISL	10.60	10.59	33.565	25.731	227.0	0.216	3.79	60.2	18.4	1.54	18.0	0.05	0.15	0.24	75
1	84	10.35	10.34	33.646	25.837	217.0	0.236	3.45	54.5	20.8	1.68	19.9	0.02	0.13	0.22	84
1	99	10.05	10.04	33.721	25.947	206.9	0.267	3.16	49.6	23.6	1.79	21.8	0.02	0.08	0.18	99
	100 ISL	10.04	10.03	33.727	25.953	206.3	0.270	3.14	49.3	23.7	1.80	21.9	0.02	0.08	0.18	100
1	119	9.85	9.84	33.832	26.068	195.8	0.308	2.86	44.8	26.2	1.91	23.3	0.02	0.04	0.16	120
	125 ISL	9.79	9.78	33.856	26.097	193.2	0.319	2.79	43.6	26.9	1.94	23.7	0.02	0.03	0.15	126
1	144	9.56	9.54	33.921	26.186	185.1	0.355	2.61	40.6	29.0	2.01	25.0	0.01	0.01	0.12	145
	150 ISL	9.46	9.44	33.943	26.219	182.0	0.366	2.57	39.9	29.8	2.03	25.4	0.01	0.01	0.12	151
I	174	9.07	9.05	34.015	26.339	171.0	0.409	2.44	37.6	32.8	2.12	26.8	0.01	0.01	0.12	175
	200 ISL	8.76	8.74	34.050	26.416	164.2	0.452	2.38	36.4	35.6	2.17	27.7	0.02	0.00	0.02	201
1	203	8.73	8.71	34.053	26.423	163.5	0.457	2.37	36.2	35.9	2.18	27.8	0.02	0.00	0.01	204
1	233	8.44	8.42	34.109	26.512	155.6	0.505	2.07	31.4	40.4	2.32	29.4	0.00			234
	250 ISL	8.28	8.25	34.128	26.551	152.1	0.531	1.92	29.1	42.8	2.39	30.2	0.00			251
1	272	8.08	8.05	34.145	26.595	148.2	0.564	1.75	26.4	45.7	2.47	31.1	0.00			274
	300 ISL	7.91	7.88	34.166	26.637	144.7	0.605	1.57	23.6	48.7	2.56	32.1	0.01			302
1	329	7.73	7.70	34.184	26.678	141.2	0.647	1.39	20.8	51.9	2.64	33.0	0.01			331
1	388	7.15	7.11	34.214	26.784	131.7	0.727	0.98	14.5	60.7	2.84	35.4	0.00			390
	400 ISL	7.05	7.01	34.222	26.804	129.9	0.743	0.91	13.4	62.4	2.88	35.9	0.00			403
1	455	6.61	6.57	34.260	26.895	121.8	0.812	0.61	8.9	70.4	3.04	37.8	0.00			458
	500 ISL	6.21	6.17	34.294	26.974	114.6	0.865	0.44	6.4	78.1	3.14	39.2	0.01			503
1	525	5.98	5.93	34.314	27.019	110.4	0.893	0.34	4.9	82.4	3.19	39.9	0.01			529

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 90 53

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
32 38.8 N	119 28.9 W	07/07/92	1057 UTC	1314 *m*	330 13 kn			1014.3 mb	16.9 C	16.0 C		

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG c	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	17.29	17.29	33.390	24.211	369.9	0.000	5.75	104.7	1.9	0.36	0.1	0.00	0.19	0.08	0
1	1	17.29	17.29	33.390	24.211	369.9	0.004	5.75	104.7	1.9	0.36	0.1	0.00	0.19	0.08	1
	10 ISL	17.21	17.21	33.393	24.233	368.2	0.037	5.78	105.1	1.9	0.36	0.1	0.00	0.21	0.08	10
1	11	17.20	17.20	33.393	24.235	368.0	0.041	5.78	105.1	1.9	0.36	0.1	0.00	0.21	0.08	11
	20 ISL	15.84	15.84	33.380	24.539	339.3	0.072	6.11	108.2	2.4	0.41	0.1	0.00	0.47	0.22	20
1	21	15.63	15.63	33.380	24.586	334.8	0.076	6.12	107.9	2.5	0.41	0.1	0.00	0.51	0.24	21
	30 ISL	13.25	13.25	33.422	25.122	283.9	0.104	5.08	85.3	8.5	0.91	6.7	0.39	0.76	0.51	30
1	31	12.99	12.99	33.428	25.179	278.6	0.106	4.95	82.7	9.2	0.97	7.6	0.43	0.77	0.53	31
1	42	11.55	11.54	33.381	25.417	256.1	0.136	4.49	72.7	12.2	1.20	12.6	0.18	0.52	0.36	42
	50 ISL	11.18	11.17	33.416	25.511	247.3	0.156	4.28	68.8	13.9	1.30	14.4	0.09	0.33	0.29	50
1	52	11.12	11.11	33.433	25.536	245.0	0.161	4.22	67.8	14.4	1.33	14.8	0.07	0.29	0.28	52
1	61	10.48	10.47	33.561	25.748	225.0	0.182	3.75	59.4	18.0	1.53	18.1	0.02	0.12	0.17	61
1	71	10.11	10.10	33.656	25.886	212.1	0.204	3.48	54.7	20.8	1.66	20.2	0.02	0.05	0.11	71
	75 ISL	10.02	10.01	33.702	25.937	207.3	0.212	3.34	52.4	22.0	1.71	21.0	0.02	0.04	0.11	75
1	85	9.85	9.84	33.807	26.048	197.0	0.233	3.01	47.1	24.9	1.82	22.6	0.01	0.03	0.10	85
1	100	9.56	9.55	33.878	26.151	187.4	0.261	2.83	44.0	27.5	1.92	24.1	0.01	0.02	0.10	100
1	119	9.31	9.30	33.946	26.246	178.8	0.296	2.63	40.7	30.0	2.00	25.4	0.01	0.01	0.10	120
	125 ISL	9.24	9.23	33.964	26.271	176.5	0.307	2.59	40.0	30.7	2.02	25.7	0.01	0.01	0.10	126
1	143	9.02	9.00	34.009	26.342	170.1	0.338	2.48	38.2	33.0	2.09	26.7	0.00	0.01	0.08	144
	150 ISL	8.88	8.86	34.027	26.378	166.8	0.350	2.42	37.1	34.3	2.12	27.2	0.01	0.01	0.07	151
1	173	8.43	8.41	34.072	26.483	157.1	0.387	2.25	34.2	38.4	2.22	28.7	0.03	0.01	0.06	174
	200 ISL	8.19	8.17	34.083	26.529	153.2	0.429	2.19	33.1	40.6	2.28	29.5	0.04	0.01	0.06	201
1	202	8.18	8.16	34.083	26.530	153.1	0.432	2.19	33.1	40.8	2.28	29.6	0.04	0.01	0.06	203
1	231	7.87	7.85	34.111	26.599	147.0	0.476	1.92	28.8	45.5	2.40	31.0	0.03			232
	250 ISL	7.65	7.63	34.131	26.646	142.7	0.503	1.71	25.5	49.2	2.49	32.2	0.02			251
1	270	7.42	7.39	34.150	26.694	138.4	0.531	1.49	22.1	53.0	2.59	33.5	0.01			272
	300 ISL	7.16	7.13	34.169	26.746	133.8	0.572	1.27	18.7	57.4	2.70	34.8	0.01			302
1	326	6.98	6.95	34.180	26.780	130.9	0.606	1.14	16.8	60.4	2.77	35.6	0.01			328
1	385	6.74	6.70	34.193	26.823	127.6	0.683	0.96	14.0	64.7	2.85	36.6	0.00			388
	400 ISL	6.69	6.65	34.200	26.836	126.6	0.702	0.90	13.1	65.8	2.87	36.8	0.00			403
1	450	6.49	6.45	34.227	26.884	122.6	0.764	0.72	10.5	70.1	2.96	37.8	0.00			453
	500 ISL	6.16	6.12	34.251	26.946	117.1	0.824	0.57	8.2	76.1	3.06	39.1	0.01			503
1	521	6.02	5.97	34.261	26.972	114.8	0.848	0.51	7.3	78.6	3.10	39.7	0.01			525

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 90 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
32 25.0 N	119 57.6 W	07/07/92	0633 UTC	870 m	350 16 kn			1015.8 mb	18.2 C	17.3 C		

CAST	DEPTH *m*	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 UM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	16.66	16.66	33.365	24.340	357.6	0.000	5.95	107.0	2.1	0.41	0.1	0.00	0.24	0.10	0
1	1	16.66	16.66	33.365	24.340	357.6	0.004	5.95	107.0	2.1	0.41	0.1	0.00	0.24	0.10	1
1	10	15.76	15.76	33.256	24.462	346.4	0.035	6.08	107.4	1.9	0.42	0.1	0.00	0.21	0.09	10
	20 ISL	15.47	15.47	33.249	24.521	341.0	0.070	6.11	107.3	1.9	0.42	0.1	0.00	0.25	0.14	20
1	21	15.43	15.43	33.246	24.527	340.4	0.073	6.11	107.2	1.9	0.42	0.1	0.00	0.26	0.15	21
	30 ISL	14.07	14.07	33.078	24.689	325.2	0.103	6.17	105.2	2.4	0.44	0.1	0.00	0.29	0.19	30
1	31	13.91	13.91	33.063	24.711	323.2	0.106	6.18	105.0	2.5	0.44	0.1	0.00	0.29	0.19	31
1	40	13.20	13.19	33.129	24.906	304.8	0.134	5.95	99.7	4.1	0.60	1.8	0.08	0.55	0.58	40
1	49	12.78	12.77	33.185	25.032	293.0	0.161	5.67	94.2	5.5	0.76	3.9	0.15	0.64	0.58	49
	50 ISL	12.62	12.61	33.179	25.059	290.5	0.164	5.62	93.0	5.9	0.79	4.5	0.15	0.63	0.61	50
1	60	11.32	11.31	33.178	25.301	267.5	0.192	5.08	81.8	9.6	1.08	10.2	0.12	0.51	0.85	60
1	69	11.73	11.72	33.375	25.380	260.3	0.216	4.81	78.2	11.0	1.18	10.6	0.20	0.43	0.55	69
	75 ISL	11.50	11.49	33.450	25.480	250.9	0.231	4.47	72.4	13.1	1.29	12.6	0.28	0.36	0.47	75
1	82	11.01	11.00	33.510	25.616	238.1	0.248	4.05	64.9	15.9	1.43	15.5	0.34	0.27	0.43	82
1	98	10.07	10.06	33.632	25.874	213.8	0.285	3.49	54.8	21.5	1.69	20.2	0.18	0.16	0.41	98
	100 ISL	10.00	9.99	33.641	25.893	212.0	0.289	3.48	54.6	21.8	1.70	20.5	0.17	0.15	0.40	100
1	117	9.54	9.53	33.700	26.016	200.6	0.324	3.36	52.2	23.6	1.77	22.1	0.11	0.11	0.29	118
	125 ISL	9.32	9.31	33.734	26.078	194.8	0.340	3.35	51.8	24.5	1.79	22.7	0.07	0.08	0.27	126
1	142	8.95	8.93	33.817	26.202	183.3	0.372	3.29	50.5	26.7	1.85	24.0	0.01	0.04	0.25	143
	150 ISL	8.92	8.90	33.870	26.249	179.0	0.386	3.16	48.5	28.0	1.90	24.7	0.01	0.04	0.21	151
1	171	8.83	8.81	33.981	26.350	169.8	0.423	2.73	41.8	31.8	2.05	26.4	0.00	0.03	0.13	172
	200 ISL	8.78	8.76	34.102	26.453	160.6	0.471	2.12	32.5	37.3	2.26	28.5	0.00	0.03	0.13	201
1	201	8.78	8.76	34.105	26.456	160.4	0.472	2.10	32.1	37.5	2.27	28.6	0.00	0.03	0.13	202
1	230	8.39	8.37	34.121	26.529	153.9	0.518	1.93	29.3	41.6	2.36	29.8	0.00			231
	250 ISL	8.24	8.21	34.142	26.568	150.4	0.548	1.79	27.1	44.0	2.43	30.6	0.00			251
1	269	8.12	8.09	34.159	26.600	147.7	0.577	1.66	25.0	46.1	2.49	31.4	0.00			271
	300 ISL	7.78	7.75	34.154	26.646	143.7	0.622	1.57	23.5	49.4	2.56	32.5	0.00			302
1	324	7.48	7.45	34.146	26.684	140.4	0.656	1.51	22.4	52.3	2.61	33.4	0.00			326
1	382	6.72	6.68	34.166	26.805	129.2	0.734	1.08	15.8	63.3	2.83	36.4	0.00			384
	400 ISL	6.55	6.51	34.174	26.834	126.6	0.757	0.97	14.1	66.2	2.89	37.2	0.00			403
1	448	6.18	6.14	34.197	26.900	120.7	0.817	0.73	10.5	72.9	3.02	38.9	0.00			451
	500 ISL	5.90	5.86	34.219	26.954	116.1	0.878	0.56	8.0	78.4	3.10	40.0	0.00			503
1	517	5.81	5.77	34.227	26.971	114.5	0.898	0.51	7.3	80.2	3.13	40.4	0.00			521

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 90 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
32 5.2 N	120 38.2 W	07/07/92	0058 UTC	3824 m	350 22 kn	320 06 07	1	1015.2 mb	19.9 C	17.5 C	26m 01	3/8	AC

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	18.80	18.80	33.164	23.670	421.5	0.000	5.52	103.4	2.4	0.39	0.0	0.00	0.07	0.01	0
1	2	18.80	18.80	33.164	23.670	421.6	0.008	5.52	103.4	2.4	0.39	0.0	0.00	0.07	0.01	2
	10 ISL	18.82	18.82	33.163	23.665	422.4	0.042	5.51	103.2	2.4	0.37	0.1	0.00	0.07	0.01	10
1	11	18.82	18.82	33.163	23.665	422.4	0.046	5.51	103.2	2.4	0.37	0.1	0.00	0.07	0.01	11
	20 ISL	18.76	18.76	33.163	23.680	421.3	0.084	5.53	103.5	2.4	0.37	0.1	0.00	0.07	0.01	20
1	22	18.75	18.75	33.163	23.683	421.1	0.093	5.53	103.4	2.4	0.37	0.1	0.00	0.07	0.01	22
	30 ISL	17.32	17.32	33.188	24.051	386.2	0.125	5.77	105.0	2.4	0,37	0.1	0.00	0.09	0.02	30
1	32	16.95	16.94	33.197	24.145	377.3	0.133	5.83	105.4	2.4	0.37	0.1	0.00	0.10	0.02	32
1	42	16.67	16.66	33.183	24.200	372.4	0.170	5.85	105.1	2.4	0.37	0.1	0.00	0.13	0.04	42
	50 ISL	16.34	16.33	33.162	24.260	366.9	0.200	5.87	104.8	2.4	0.37	0.1	0.00	0.15	0.05	50
1	51	16.27	16.26	33.158	24.273	365.7	0.203	5.07	104.6	2.4	0.37	0.1	0.00	0.15	0.05	51
1	61	14.94	14.93	33.098	24.521	342.1	0.239	5.99	103.9	2.4	0.39	0.1	0.00	0.21	0.10	61
1	71	13.84	13.83	33.070	24.732	322.3	0.272	5.98	101.4	2.6	0.44	0.1	0.00	0.28	0.18	71
	75 ISL	13.44	13.43	33.048	24.796	316.2	0.285	5.94	99.9	2.8	0.48	0.4	0.01	0.29	0.20	75
1	86	12.70	12.69	33.046	24.941	302.6	0.31S	5.79	95.9	3.6	0.58	1.7	0.06	0.31	0.24	86
	100 ISL	12.84	12.83	33.291	25.104	287.5	0.360	5.54	92.2	4.3	0.62	3.3	0.18	0.26	0.23	100
1	101	12.85	12.84	33.309	25.116	286.4	0.363	5.52	91.9	4.4	0.63	3.5	0.19	0.26	0.23	101
1	120	11.41	11.40	33.264	25.353	264.0	0.415	4.93	79.5	9.1	1.08	10.5	0.02	0.16	0.19	120
	125 ISL	11.15	11.13	33.275	25.409	258.8	0.428	4.83	77.5	10.1	1.15	11.6	0.02	0.14	0.17	126
1	145	10.31	10.29	33.375	25.634	237.6	0.478	4.47	70.5	14.1	1.36	15.3	0.01	0.06	0.09	146
	150 ISL	10.12	10.10	33.418	25.700	231.4	0.490	4.30	67.5	15.5	1.44	16.6	0.01	0.05	0.08	151
1	175	9.28	9.26	33.624	26.000	203.3	0.544	3.65	56.3	22.1	1.74	21.9	0.00	0.01	0.04	176
	200 ISL	8.54	8.52	33.702	26.177	186.7	0.593	3.92	59.5	24.6	1.72	22.1	0.00	0.00	0.03	201
1	206	8.40	8.38	33.719	26.212	183.4	0.604	4.01	60.7	25.1	1.72	22.2	0.00	0.00	0.03	207
1	235	8.19	8.17	33.912	26.395	166.5	0.655	3.60	54.3	30.7	1.84	24.4	0.00			236
	250 ISL	8.08	8.05	33.965	26.453	161.2	0.679	3.35	50.4	33.6	1.94	25.7	0.00			251
1	274	7.89	7.86	34.014	26.520	155.2	0.717	2.94	44.1	38.2	2.11	27.7	0.00			275
	300 ISL	7.61	7.58	34.045	26.585	149.3	0.757	2.53	37.7	43.3	2.28	29.9	0.00			302
1	329	7.27	7.24	34.064	26.649	143.6	0.799	2.11	31.2	49.1	2.46	32.1	0.00			331
1	389	6.64	6.60	34.099	26.763	133.2	0.882	1.45	21.1	61.0	2.75	35.8	0.00			391
	400 ISL	6.53	6.49	34.104	26.781	131.6	0.897	1.36	19.8	62.8	2.79	36.3	0.00			402
1	455	6.08	6.04	34.134	26.863	124.2	0.967	0.99	14.2	71.1	2.98	38.5	0.00			458
	500 ISL	5.84	5.80	34.188	26.937	117.6	1.022	0.67	9.6	78.3	3.11	39.9	0.00			503
1	524	5.71	5.67	34.216	26.975	114.2	1.049	0.50	7.1	82.2	3.18	40.7	0.00			527

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 90 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCBI/FOREL	CLD AMT	TYPE
31 45.2 N	121 19.0 W	06/07/92	1838 UTC	3743 m	330 20 kn	330 06 07	1	1016.9 mb	20.9 C	18.8 C		1/8	AC

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN BT	OXYGEN ml/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	18.90	18.90	33.181	23.658	422.7	0.000	5.50	103.2	2.1	0.38	0.1	0.00	0.09	0.02	0
1	2	18.90	18.90	33.181	23.658	422.8	0.008	5.50	103.2	2.1	0.38	0.1	0.00	0.09	0.02	2
	10 ISL	18.86	18.86	33.180	23.668	422.1	0.042	5.50	103.1	2.1	0.38	0.1	0.00	0.09	0.01	10
1	12	18.85	18.85	33.180	23.670	421.9	0.051	5.50	103.1	2.1	0.38	0.1	0.00	0.09	0.01	12
	20 ISL	18.79	18.79	33.182	23.687	420.6	0.084	5.52	103.3	2.1	0.38	0.1	0.00	0.06	0.01	20
1	22	18.77	18.77	33.182	23.692	420.2	0.093	5.52	103.3	2.1	0.38	0.1	0.00	0.06	0.01	22
	30 ISL	17.47	17.47	33.189	24.016	389.6	0.125	5.73	104.6	2.1	0.39	0.1	0.00	0.08	0.03	30
1	32	17.12	17.11	33.187	24.097	381.8	0.133	5.78	104.8	2.1	0.39	0.1	0.00	0.09	0.03	32
1	41	16.46	16.45	33.077	24.167	375.5	0.167	5.85	104.6	2.1	0.38	0.1	0.00	0.11	0.03	41
	50 ISL	16.13	16.12	33.118	24.274	365.5	0.200	5.88	104.5	2.1	0.38	0.1	0.00	0.13	0.04	50
1	51	16.08	16.07	33.123	24.289	364.1	0.204	5.88	104.4	2.1	0.38	0.1	0.00	0.13	0.04	51
1	61	14.82	14.81	33.031	24.496	344.6	0.239	6.14	106.2	2.3	0.41	0.1	0.00	0.16	0.08	61
1	71	14.08	14.07	33.065	24.678	327.4	0.273	6.04	103.0	2.7	0.42	0.1	0.00	0.25	0.18	71
	75 ISL	13.63	13.62	33.063	24.769	318.8	0.286	5.98	101.0	3.2	0.47	0.6	0.06	0.29	0.22	75
1	84	12.58	12.57	33.056	24.972	299.6	0.314	5.81	96.0	4.5	0.62	2.4	0.18	0.35	0.29	84
1	100	11.33	11.32	33.079	25.224	275.8	0.360	5.38	86.6	7.1	0.91	8.0	0.06	0.25	0.24	100
1	118	10.35	10.34	33.255	25.533	246.6	0.407	4.67	73.6	13.1	1.31	14.6	0.02	0.08	0.11	118
	125 ISL	10.10	10.09	33.308	25.617	238.8	0.424	4.47	70.1	14.8	1.41	16.3	0.02	0.06	0.09	126
1	144	9.59	9.57	33.439	25.804	221.3	0.468	4.08	63.3	18.6	1.58	19.4	0.01	0.02	0.06	145
	150 ISL	9.42	9.40	33.488	25.870	215.1	0.481	4.03	62.3	19.5	1.61	19.9	0.01	0.02	0.05	151
1	173	8.86	8.84	33.668	26.100	193.5	0.528	3.92	60.0	22.7	1.67	21.4	0.01	0.01	0.03	174
	200 ISL	8.58	8.56	33.825	26.267	178.1	0.578	3.55	54.0	27.1	1.81	23.7	0.00	0.00	0.03	201
1	204	8.55	8.53	33.844	26.287	176.4	0.5B5	3.50	53.2	27.8	1.83	24.0	0.00	0.00	0.03	205
1	233	8.13	8.11	33.948	26.432	162.9	0.634	3.43	51.7	32.3	1.89	25.3	0.00			234
	250 ISL	7.95	7.92	33.983	26.486	158.0	0.661	3.24	48.6	35.3	1.96	26.5	0.00			251
1	272	7.72	7.69	34.012	26.543	152.9	0.696	2.93	43.8	39.6	2.08	28.2	0.00			273
	300 ISL	7.35	7.32	34.037	26.616	146.3	0.737	2.52	37.3	45.7	2.25	30.5	0.00			302
1	328	6.97	6.94	34.054	26.682	140.2	0.777	2.10	30.8	52.0	2.43	32.8	0.00			330
1	387	6.35	6.32	34.094	26.797	129.7	0.857	1.34	19.4	64.7	2.76	36.8	0.00			389
	400 ISL	6.24	6.20	34.106	26.820	127.6	0.874	1.20	17.3	67.0	2.82	37.5	0.00			402
1	452	5.89	5.85	34.158	26.906	119.9	0.938	0.77	11.0	75.4	3.01	39.5	0.00			455
	500 ISL	5.62	5.58	34.204	26.976	113.6	0.994	0.55	7.8	81.9	3.10	40.6	0.01			503
1	524	5.49	5.45	34.228	27.011	110.5	1.021	0.44	6.2	85.2	3.15	41.2	0.01			527

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 90 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
31 25.2 N	121 59.2 W	06/07/92	1254 UTC	3849 *m*	340 25 kn	340 06 06	1	1014.5 mb	18.3 C	12.5 C		4/8	AC

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 1SL	19.12	19.12	33.198	23.615	426.7	0.000	5.49	103.4	2.4	0.38	0.0	0.00	0.07	0.01	0
1	1	19.12	19.12	33.198	23.615	426.8	0.004	5.49	103.4	2.4	0.38	0.0	0.00	0.07	0.01	1
1	10	19.09	19.09	33.199	23.624	426.3	0.043	5.47	103.0	2.4	0.38	0.0	0.00	0.06	0.01	10
1	20	18.74	18.74	33.181	23.699	419.5	0.085	5.52	103.2	2.4	0.37	0.0	0.00	0.07	0.01	20
1	30	17.63	17.62	33.152	23.949	395.9	0.126	5.74	105.1	2.4	0.37	0.0	0.00	0.10	0.02	30
1	40	17.32	17.31	33.178	24.043	387.3	0.165	5.78	105.2	2.3	0.38	0.0	0.00	0.08	0.02	40
1	50	15.75	15.74	33.050	24.307	362.3	0.202	6.01	106.0	2.3	0.38	0.0	0.00	0.09	0.02	50
1	60	16.31	16.30	33.346	24.408	353.1	0.238	5.91	105.6	2.3	0.36	0.0	0.00	0.09	0.03	60
1	69	16.42	16.41	33.557	24.546	340.3	0.269	5.82	104.3	2.3	0.33	0.0	0.00	0.12	0.04	69
	75 ISL	15.82	15.81	33.498	24.636	331.8	0.289	5.84	103.4	2.4	0.35	0.0	0.00	0.14	0.05	75
1	83	14.83	14.82	33.378	24.762	319.9	0.316	5.85	101.5	2.5	0.39	0.0	0.00	0.17	0.10	83
1	98	13.99	13.98	33.504	25.037	294.1	0.362	5.56	94.9	3.5	0.49	1.8	0.12	0.65	0.33	98
	100 ISL	13.83	13.82	33.502	25.068	291.1	0.367	5.53	94.0	3.7	0.51	2.2	0.12	0.63	0.33	100
1	118	12.29	12.27	33.412	25.304	268.8	0.418	5.34	87.9	5.9	0.72	5.9	0.06	0.21	0.21	118
	125 ISL	11.66	11.64	33.359	25.381	261.5	0.436	5.30	86.0	6.9	0.81	7.4	0.04	0.18	0.18	126
1	143	10.20	10.18	33.276	25.575	243.1	0.482	5.18	81.4	10.1	1.04	11.2	0.01	0.10	0.12	144
	150 ISL	9.79	9.77	33.304	25.666	234.6	0.499	5.11	79.6	11.5	1.12	12.6	0.01	0.08	0.09	151
1	173	8.90	8.88	33.487	25.952	207.5	0.549	4.71	72.0	16.9	1.38	17.1	0.00	0.02	0.03	174
	200 ISL	8.73	8.71	33.750	26.185	185.9	0.603	3.79	57.8	25.0	1.71	22.3	0.00	0.00	0.02	201
1	204	8.71	8.69	33.780	26.212	183.5	0.610	3.67	56.0	26.1	1.75	22.9	0.00	0.00	0.02	205
1	233	8.24	8.22	33.895	26.374	168.5	0.661	3.58	54.1	30.5	1.83	24.5	0.00			234
	250 ISL	8.07	8.04	33.948	26.441	162.3	0.689	3.40	51.2	33.4	1.91	25.7	0.00			251
1	272	7.87	7.84	33.997	26.510	156.2	0.724	3.13	46.9	37.2	2.03	27.2	0.00			273
	300 ISL	7.51	7.48	34.010	26.572	150.5	0.767	2.92	43.4	41.7	2.14	28.9	0.00			302
1	327	7.16	7.13	34.011	26.622	146.0	0.807	2.68	39.5	46.4	2.25	30.5	0.00			329
1	386	6.66	6.62	34.080	26.745	134.9	0.890	1.60	23.3	59.0	2.66	35.2	0.00			388
	400 ISL	6.54	6.50	34.086	26.766	133.0	0.909	1.48	21.5	61.3	2.72	35.9	0.00			402
1	452	6.09	6.05	34.106	26.840	126.3	0.976	1.18	17.0	69.5	2.87	37.9	0.00			455
	500 ISL	5.69	5.65	34.156	26.930	118.1	1.035	0.79	11.3	78.8	3.03	39.9	0.00			503
1	523	5.50	5.46	34.181	26.973	114.1	1.061	0.61	8.7	83.3	3.10	40.9	0.00			526

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 90 100

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
31 5.1 N	122 39.8 W	06/07/92	0714 UTC	3981 *n*	360 19 kn			1016.9 mb	18.9 C	16.9 C			

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 UM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	19.08	19.08	33.179	23.611	427.2	0.000	5.52	103.9	2.3	0.37	0.1	0.00	0.09	0.02	0
1	1	19.08	19.08	33.179	23.611	427.2	0.004	5.52	103.9	2.3	0.37	0.1	0.00	0.09	0.02	1
1	10	19.09	19.09	33.184	23.613	427.3	0.043	5.52	103.9	2.3	0.37	0.1	0.00	0.09	0.02	10
	20 ISL	18.31	18.31	33.149	23.781	411.6	0.085	5.64	104.6	2.3	0.38	0.1	0.00	0.10	0.02	20
1	21	18.20	18.20	33.145	23.805	409.4	0.089	5.66	104.8	2.3	0.38	0.1	0.00	0.10	0.02	21
1	30	17.15	17.15	33.146	24.059	385.5	0.125	5.79	105.0	2.3	0.36	0.1	0.00	0.09	0.03	30
1	40	16.55	16.54	33.099	24.163	375.8	0.163	5.85	104.8	2.3	0.37	0.1	0.00	0.11	0.03	40
1	49	16.15	16.14	33.113	24.265	366.3	0.196	5.86	104.2	2.3	0.38	0.1	0.00	0.14	0.05	49
	50 ISL	16.09	16.08	33.115	24.280	364.9	0.200	5.87	104.2	2.3	0.38	0.1	0.00	0.15	0.05	50
1	59	15.50	15.49	33.120	24.416	352.2	0.232	5.95	104.4	2.6	0.39	0.1	0.00	0.22	0.11	59
1	70	14.67	14.66	33.085	24.570	337.8	0.270	6.03	104.1	2.7	0.42	0.1	0.00	0.26	0.19	70
	75 ISL	14.20	14.19	33.066	24.654	329.8	0.287	6.00	102.5	2.8	0.44	0.2	0.01	0.30	0.22	75
1	84	13.34	13.33	33.048	24.816	314.5	0.316	5.95	99.9	3.3	0.49	0.5	0.05	0.36	0.27	84
1	98	12.18	12.17	33.084	25.070	290.5	0.358	5.65	92.6	4.8	0.68	4.0	0.13	0.26	0.40	98
	100 ISL	12.06	12.05	33.106	25.110	286.8	0.364	5.61	91.7	5.1	0.71	4.5	0.12	0.25	0.38	100
1	117	11.19	11.18	33.308	25.427	256.9	0.410	5.26	84.5	8.2	0.91	8.8	0.03	0.14	0.17	117
	125 ISL	10.71	10.70	33.349	25.544	245.8	0.430	5.13	81.6	9.7	1.01	10.6	0.02	0.10	0.12	126
1	142	9.82	9.80	33.424	25.755	226.0	0.470	4.87	76.0	13.0	1.20	14.0	0.01	0.04	0.05	143
	150 ISL	9.61	9.59	33.503	25.851	216.9	0.488	4.68	72.7	14.9	1.27	15.5	0.01	0.03	0.04	151
1	173	9.17	9.15	33.718	26.091	194.5	0.535	4.20	64.7	20.3	1.45	19.1	0.01	0.01	0.02	174
	200 ISL	8.42	8.40	33.784	26.259	178.8	0.586	4.14	62.7	25.1	1.63	21.6	0.01	0.00	0.02	201
1	203	8.35	8.33	33.790	26.275	177.4	0.591	4.13	62.5	25.7	1.65	21.9	0.01	0.00	0.02	204
1	232	8.29	8.27	33.975	26.429	163.3	0.640	3.19	48.3	33.2	1.93	26.0	0.00			233
	250 ISL	8.08	8.05	34.010	26.489	157.9	0.669	2.99	45.0	37.3	2.06	27.8	0.00			251
1	272	7.74	7.71	34.018	26.545	152.7	0.703	2.86	42.7	33.3 U	1.93 U	26.0 U	0.00			273
	300 ISL	7.32	7.29	34.038	26.621	145.8	0.745	2.46	36.4	48.0	2.35	31.8	0.00			302
1	328	6.91	6.88	34.052	26.689	139.5	0.785	2.04	29.9	53.5	2.47	33.3	0.00			330
1	387	6.21	6.18	34.073	26.798	129.5	0.864	1.43	20.6	65.8	2.76	37.0	0.00			389
	400 ISL	6.09	6.06	34.079	26.818	127.7	0.881	1.33	19.1	68.0	2.80	37.6	0.00			402
1	452	5.72	5.68	34.115	26.893	120.9	0.946	0.96	13.7	76.2	2.95	39.6	0.00			455
	500 ISL	5.50	5.46	34.174	26.967	114.3	1.002	0.65	9.2	83.3	3.09	40.8	0.00			503
1	521	5.40	5.36	34.200	26.999	111.4	1.026	0.52	7.4	86.4	3.15	41.3	0.00			524

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 90 110

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
30 45.2 N	123 20.2 W	06/07/92	0134 UTC	4021 m	360 19 kn	360 05 05	1	1016.3 mb	20.6 C	17.8 C	33m 01	4/8	AC

CAST	DEPTH ID	TEMP DEG C	POT TEMP DEG c	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	19.68	19.68	33.257	23.517	436.1	0.000	5.43	103.4	2.3	0.37	0.2	0.00	0.07	0.02	0
1	2	19.68	19.68	33.257	23.517	436.2	0.009	5.43	103.4	2.3	0.37	0.2	0.00	0.07	0.02	2
	10 ISL	19.60	19.60	33.255	23.537	434.6	0.044	5.44	103.5	2.3	0.35	0.2	0.00	0.07	0.01	10
1	11	19.59	19.59	33.255	23.539	434.4	0.048	5.44	103.4	2.3	0.35	0.2	0.00	0.07	0.01	11
	20 ISL	18.49	18.49	33.195	23.772	412.5	0.086	5.59	104.1	2.3	0.37	0.2	0.00	0.06	0.02	20
1	22	18.25	18.25	33.183	23.822	407.8	0.094	5.62	104.1	2.3	0.37	0.2	0.00	0.06	0.02	22
1	30	18.12	18.11	33.179	23.851	405.3	0.127	5.63	104.1	2.3	0.36	0.1	0.00	0.07	0.01	30
1	41	18.04	18.03	33.187	23.877	403.2	0.171	5.64	104.1	2.3	0.36	0.1	0.00	0.08	0.02	41
	50 ISL	17.17	17.16	33.199	24.095	382.6	0.207	5.84	106.0	2.3	0.36	0.1	0.00	0.08	0.02	50
1	51	17.06	17.05	33.202	24.123	379.9	0.210	5.86	106.1	2.3	0.36	0.1	0.00	0.08	0.02	51
1	60	16.31	16.30	33.241	24.328	360.7	0.244	5.95	106.2	2.3	0.35	0.1	0.00	0.11	0.03	60
1	71	15.49	15.48	33.217	24.494	345.2	0.283	5.94	104.3	2.4	0.36	0.0	0.00	0.14	0.05	71
	75 ISL	15.11	15.10	33.203	24.566	338.3	0.296	5.93	103.3	2.5	0.37	0.0	0.00	0.17	0.08	75
1	85	14.15	14.14	33.188	24.759	320.1	0.329	5.89	100.6	2.6	0.42	0.0	0.00	0.26	0.17	85
1	100	13.11	13.10	33.266	25.031	294.5	0.375	5.64	94.3	3.9	0.55	2.3	0.12	0.30	0.26	100
1	120	13.24	13.22	33.448	25.147	284.1	0.433	5.44	91.3	4.6	0.61	3.7	0.18	0.27	0.24	120
	125 ISL	12.91	12.89	33.449	25.213	277.8	0.447	5.36	89.4	5.3	0.67	4.8	0.15	0.24	0.22	125
1	144	11.35	11.33	33.435	25.498	250.9	0.497	5.01	80.8	8.8	0.96	9.9	0.02	0.10	0.12	145
	150 ISL	11.00	10.98	33.455	25.576	243.5	0.512	4.90	78.5	10.0	1.04	11.2	0.02	0.08	0.10	151
1	176	9.92	9.90	33.581	25.861	216.6	0.572	4.44	69.5	15.4	1.32	15.9	0.01	0.03	0.04	177
	200 ISL	9.40	9.38	33.700	26.040	200.0	0.622	4.04	62.5	20.0	1.52	19.2	0.01	0.01	0.03	201
1	205	9.33	9.31	33.725	26.071	197.1	0.632	3.95	61.1	21.0	1.56	19.8	0.01	0.01	0.03	206
1	236	8.80	8.77	33.871	26.270	178.7	0.690	3.38	51.7	28.0	1.80	24.0	0.00			237
	250 ISL	8.57	8.54	33.918	26.342	172.0	0.715	3.27	49.8	30.4	1.86	25.1	0.00			251
1	276	8.17	8.14	33.979	26.451	161.9	0.758	3.17	47.8	34.4	1.94	26.4	0.00			277
	300 ISL	7.84	7.81	33.996	26.513	156.3	0.796	3.11	46.6	37.6	2.00	27.4	0.00			302
1	333	7.41	7.38	33.997	26.576	150.5	0.847	2.98	44.2	42.3	2.10	28.9	0.00			335
1	393	6.65	6.61	34.019	26.698	139.4	0.934	2.23	32.5	54.4	2.43	33.3	0.00			395
	400 ISL	6.60	6.56	34.029	26.713	138.1	0.944	2.09	30.4	56.0	2.48	33.9	0.00			402
1	456	6.22	6.18	34.113	26.829	127.5	1.018	1.10	15.9	68.5	2.84	38.0	0.00			459
	500 ISL	5.80	5.76	34.141	26.904	120.6	1.073	0.84	12.0	76.8	2.97	39.7	0.00			503
1	523	5.58	5.54	34.157	26.944	116.9	1.100	0.71	10.1	81.1	3.04	40.6	0.00			526

FV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 90 120

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
30 24.9 N	124 0.0 W	05/07/92	1644 UTC	4245 m	350 16 kD	350 02 03	1	1018.2 mb	22.1 C	18.2 C		6/8	AC

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN RT	OXYGEN ml/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 "M/l	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	19.47	19.47	33.295	23.600	428.2	0.000	5.46	103.6	2.1	0.35	0.0	0.00	0.07	0.02	0
1	1	19.47	19.47	33.295	23.600	428.2	0.004	5.46	103.6	2.1	0.35	0.0	0.00	0.07	0.02	1
1	10	19.30	19.30	33.293	23.643	424.5	0.043	5.48	103.7	2.1	0.34	0.0	0.00	0.07	0.01	10
	20 ISL	18.83	18.83	33.279	23.751	414.5	0.085	5.55	104.0	2.1	0.34	0.0	0.00	0.08	0.02	20
1	22	18.72	18.72	33.276	23.776	412.2	0.093	5.57	104.2	2.1	0.34	0.0	0.00	0.08	0.02	22
	30 ISL	18.36	18.35	33.268	23.860	404.4	0.126	5.60	104.0	2.1	0.34	0.0	0.00	0.08	0.02	30
1	32	18.25	18.24	33.265	23.885	402.1	0.134	5.61	104.0	2.1	0.34	0.0	0.00	0.08	0.02	32
1	42	17.44	17.43	33.246	24.067	385.1	0.173	5.80	105.8	2.1	0.34	0.0	0.00	0.08	0.02	42
	50 ISL	16.54	16.53	33.223	24.260	366.8	0.203	5.94	106.5	2.1	0.34	0.0	0.00	0.08	0.02	50
1	52	16.34	16.33	33.221	24.305	362.6	0.210	5.96	106.4	2.1	0.34	0.0	0.00	0.08	0.02	52
1	61	16.03	16.02	33.249-	24.397	354.1	0.243	5.94	105.4	2.1	0.34	0.0	0.00	0.09	0.03	61
1	72	15.82	15.81	33.232	24.432	351.1	0.281	5.94	105.0	2.1	0.34	0.1	0.00	0.10	0.03	72
	75 ISL	15.75	15.74	33.240	24.454	349.1	0.292	5.92	104.5	2.1	0.34	0.1	0.00	0.11	0.03	75
1	85	15.49	15.48	33.277	24.540	341.2	0.326	5.86	102.9	2.1	0.35	0.1	0.00	0.14	0.06	85
	100 ISL	14.97	14.96	33.312	24.681	328.1	0.377	5.82	101.2	2.2	0.36	0.1	0.00	0.18	0.14	100
1	101	14.93	14.91	33.314	24.692	327.2	0.380	5.82	101.1	2.2	0.36	0.1	0.00	0.18	0.15	101
1	122	13.70	13.68	33.360	24.986	299.5	0.446	5.60	94.9					0.28	0.28	122
	125 ISL	13.42	13.40	33.353	25.037	294.7	0.455	5.56	93.7	4.4	0.60	3.9	0.01	0.27	0.27	125
1	147	11.43	11.41	33.333	25.404	259.9	0.516	5.23	84.5	7.8	0.90	8.9	0.02	0.11	0.14	148
	150 ISL	11.26	11.24	33.346	25.445	256.0	0.523	5.17	83.2	8.3	0.94	9.5	0.02	0.10	0.13	151
1	176	10.19	10.17	33.504	25.756	226.8	0.586	4.62	72.7	13.2	1.23	14.4	0.01	0.03	0.05	177
	200 ISL	9.46	9.44	33.645	25.987	205.0	0.638	4.27	66.2	18.0	1.43	18.0	0.00	0.01	0.03	201
1	207	9.30	9.28	33.690	26.048	199.3	0.652	4.17	64.4	19.6	1.48	18.9	0.00	0.01	0.02	208
1	236	8.85	8.82	33.927	26.306	175.3	0.706	3.55	54.4	27.2	1.73	22.9	0.00			237
	250 ISL	8.63	8.60	33.977	26.379	168.5	0.730	3.36	51.2	30.1	1.82	24.3	0.00			251
1	274	8.27	8.24	34.016	26.465	160.6	0.770	3.09	46.7	34.6	1.96	26.2	0.00			275
	300 ISL	7.98	7.95	34.047	26.533	154.5	0.811	2.79	41.9	39.0	2.10	28.0	0.00			302
1	330	7.62	7.59	34.063	26.598	148.6	0.856	2.45	36.5	44.5	2.25	30.0	0.00			332
1	389	6.55	6.51	34.068	26.750	134.3	0.940	1.75	25.4	59.2	2.60	34.7	0.00			391
	400 ISL	6.42	6.38	34.076	26.774	132.2	0.954	1.61	23.3	61.6	2.66	35.4	0.00			402
1	455	5.94	5.90	34.127	26.875	122.9	1.025	1.01	14.5	72.6	2.91	38.5	0.00			458
	500 ISL	5.63	5.59	34.160	26.940	117.0	1.079	0.74	10.5	80.0	3.03	40.0	0.00			503
1	525	5.46	5.42	34.179	26.976	113.8	1.107	0.59	8.4	84.1	3.10	40.8	0.00			528

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 93 26.6

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
32 57.8 N	117 18.2 W	02/07/92	1939 UTC	58 *m*	260 07 kn	270 04 05	1	1013.1 mb	22.8 C	21.5 C		1/8	ST

CAST	DEPTH *n*	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL-A Ug/1	PHAEO ug/1	PRESS db
1	0	20.06	20.06	33.433	23.552	432.7	0.000	6.09	116.9	3.3	0.30	0.2	0.01	0.57	0.13	0
1	5	18.37	18.37	33.396	23.954	394.6	0.021	6.38	118.7	3.0	0.32	0.2	0.01	0.73	0.15	5
	10 ISL	13.55	13.55	33.291	24.960	298.9	0.038	7.18	121.3	3.5	0.34	0.1	0.01	1.29	0.48	10
1	11	12.59	12.59	33.302	25.159	279.9	0.041	7.29	120.7	3.7	0.34	0.1	0.01	1.40	0.55	11
1	20	11.72	11.72	33.395	25.396	257.6	0.065	5.03	81.8	7.2	0.95	7.5	0.20	14.02	4.26	20
	30 ISL	11.19	11.19	33.557	25.619	236.6	0.090	3.71	59.7	15.0	1.47	15.5	0.41	3.22	1.22	30
1	31	11.16	11.16	33.572	25.636	235.0	0.092	3.64	58.5	15.7	1.51	16.1	0.42	1.72	0.79	31
1	40	10.87	10.87	33.632	25.735	225.8	0.113	3.49	55.8	17.2	1.59	17.3	0.30	0.66	0.38	40
	50 ISL	10.82	10.81	33.661	25.766	223.0	0.135	3.36	53.7	18.1	1.63	18.7	0.35	0.64	0.35	50
1	51	10.82	10.81	33.664	25.769	222.8	0.138	3.35	53.5	18.2	1.63	18.8	0.36	0.64	0.35	51

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 93 28

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DFY	WET	SECCHI/FOREL	CLD AMT	TYPE
32 54.0 N	117 23.4 W	02/07/92	2357 UTC	550 HI	250 10 k.n	260 04 06	1	1012.3 mb	19.7 C	19.6 C	16m 03	3/8	CS

CAST	DEPTH m	TJSMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uK/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	19.17	19.17	33.352	23.720	416.7	0.000	6.00	113.3	1.7	0.31	0.1	0.00	0.26	0.06	0
1	2	19.17	19.17	33.352	23.720	416.8	0.008	6.00	113.3	1.7	0.31	0.1	0.00	0.26	0.06	2
	10 ISL	16.23	16.23	33.319	24.404	351.8	0.039	6.38	113.8	3.0	0.37	0.1	0.00	0.29	0.09	10
1	11	15.74	15.74	33.322	24.517	341.1	0.043	6.44	113.7	3.2	0.38	0.1	0.00	0.29	0.09	11
	20 ISL	13.72	13.72	33.333	24.958	2519.3	0.071	6.56	111.2	1.3	0.43	0.1	0.01	1.99	0.79	20
1	23	13.29	13.29	33.336	25.047	290.9	0.080	6.60	110.9	1.0	0.44	0.1	0.01	2.68	l.0fl	23
	30 ISL	12.52	12.52	33.359	25.217	274.9	0.100	5.63	93.1	4.5	0.75	4.4	0.15	3.90	1.63	30
1	32	12.35	12.35	33.364	25.254	271.5	0.105	5.31	87 5	5.8	0.85	5.9	0.19	4.03	1.71	32
1	42	11.55	11.54	33.384	25.419	255.9	0.132	4.49	72 7	11.0	1.18	11.8	0.17	1.33	1.00	42
	50 ISL	10.62	10.61	33.298	25.519	246.5	0.152	4.59	72.8	12.7	1.28	13.7	0.06	0.45	0.64	50
1	52	10.43	10.42	33.289	25.545	244.1	0.157	4.63	73.2	13.0	1.30	14.0	0.03	0.35	0.57	52
1	61	10.52	10.51	33.504	25.697	229.9	0.178	4.10	65.0	15.5	1.43	16.2	0.02	0.13	0.31	61
1	71	10.38	10.37	33.609	25.803	220.0	0.201	3.82	60.4	17.6	1.52	17.6	0.01	0.08	0.19	71
	75 ISL	10.39	10.38	33.665	25.845	216.1	0.209	3.65	57.8	18.6	1.57	18.3	0.01	0.06	0.18	75
1	86	10.42	10.41	33.805	25.949	206.5	0.233	3.16	50.1	21.2	1.73	20.2	0.01	0.03	0.14	86
1	99	10.41	10.40	33.917	26.039	198.3	0.259	2.72	43.1	24.0	1.88	22.1	0.01	0.03	0.14	99
	100 ISL	10.42	10.41	33.926	26.044	197.8	0.261	2.68	42.5	24.2	1.89	22.2	0.01	0.03	0.14	101
1	119	10.63	10.62	34.081	26.129	190.3	0.298	2.10	33.5	27.3	2.10	24.3	0.01	0.03	0.09	120
	125 ISL	10.61	10.60	34.108	26.153	188.1	0.309	1.99	31.7	28.1	2.14	24.8	0.01	0.03	0.09	126
1	144	10.44	10.42	34.165	26.228	181.4	0.344	1.78	28.3	30.1	2.23	25.9	0.01	0.01	0.08	145
	150 ISL	10.40	10.38	34.183	26.249	179.5	0.355	1.72	27.3	30.8	2.26	26.2	0.01	0.01	0.08	151
1	174	10.29	10.27	34.236	26.310	174.3	0.398	1.55	24.6	32.9	2.34	26.9	0.01	0.01	0.06	175
	200 ISL	10.23	10.21	34.239	26.323	173.6	0.443	1.55	24.5	33.2	2.34	26.9	0.02	0.01	0.06	201
1	205	10.22	10.20	34.239	26.325	173.5	0.451	1.55	24.5	33.2	2.34	26.9	0.02	0.01	0.06	206
1	233	9.80	9.77	34.232	26.391	167.7	0.499	1.66	26.0	34.9	2.37	27.4	0.01			234
	250 ISL	9.58	9.55	34.229	26.425	164.7	0.527	1.615	25.9	36.2	2.38	27.7	0.01			251
1	275	9.26	9.23	34.226	26.475	160.3	0.568	1.66	25.7	38.3	2.40	28.3	0.01			277
	300 ISL	8.93	8.90	34.229	26.531	155.4	0.608	1.58	24.3	40.9	2.45	29.1	0.01			302
1	329	8.55	8.52	34.232	26.593	149.8	0.652	1.47	22.4	44.1	2.53	30.2	0.01			331
1	390	7.79	7.75	34.209	26.690	141.2	0.741	1.32	19.8	51.2	2.67	32.5	0.00			393
	400 ISL	7.70	7.66	34.212	26.705	139.8	0.755	1.26	18.8	52.6	2.70	32.9	0.00			403
1	456	7.23	7.19	34.241	26.795	131.8	0.831	0.89	13.2	60.6	2.88	35.1	0.02			459
	500 ISL	6.82	6.77	34.258	26.865	125.5	0.887	0.68	10.0	66.8	2.99	36.6	0.01			503
1	527	6.57	6.52	34.269	26.908	121.6	0.921	0.55	8.0	70.6	3.06	37.5	0.01			531

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 93 30

LATITUDE!	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	S1ECCHI/FOREL	CLD AMT	TYPE
32 51.0 N	117 31.8 W	03/07/92	0220 UTC	831 m	320 10 kn	290 03 07	1	1011.6 mb	20.1 C	19.7 C	20m 02	7/8	SC

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	19.48	19.48	33.418	23.691	419.5	0.000	5.74	109.0	2.2	0.32	0.1	0.00	0.17	0.05	0
1	1	19.48	19.48	33.418	23.691	419.5	0.004	5.74	109.0	2.2	0.32	0.1	0.00	0.17	0.05	1
	10 ISL	18.72	18.72	33.392	23.865	403.3	0.041	5.85	109.5	2.4	0.33	0.1	0.00	0.20	0.07	10
1	11	18.63	18.63	33.390	23.885	401.3	0.045	5.86	109.5	2.4	0.33	0.1	0.00	0.21	0.07	11
	20 ISL	15.21	15.21	33.309	24.624	331.1	0.078	6.47	113.0	3.3	0.40	0.1	0.00	0.26	0.09	20
1	21	14.81	14.81	33.308	24.710	323.0	0.081	6.53	113.2	3.3	0.41	0.1	0.00	0.27	0.09	21
	30 ISL	13.21	13.21	33.320	25.051	290.7	0.109	6.38	107.0	1.7	0.47	0.2	0.02	3.86	1.80	30
1	31	13.08	13.08	33.318	25.076	288.4	0.112	6.36	106.4	1.5	0.48	0.2	0.03	4.16	1.95	31
1	40	11.54	11.54	33.234	25.304	266.8	0.137	5.00	80.9	8.6	1.02	9.6	0.13	1.07	0.73	40
1	50	10.84	10.83	33.259	25.450	253.1	0.163	4.74	75.6	11.4	1.21	12.8	0.03	0.42	0.43	50
1	60	10.55	10.54	33.356	25.576	241.3	0.188	4.49	71.2	13.3	1.32	14.6	0.03	0.15	0.23	60
1	70	10.39	10.38	33.455	25.6B1	231.5	0.211	4.44	70.2	13.7	1.27	15.0	0.02	0.09	0.13	70
	75 ISL	10.45	10.44	33.576	25.765	223.7	0.223	4.01	63.5	16.0	1.41	16.7	0.02	0.07	0.13	75
1	83	10.61	10.60	33.774	25.892	211.8	0.240	3.22	51.2	20.0	1.66	19.8	0.02	0.06	0.13	83
1	98	10.74	10.73	33.910	25.975	204.3	0.271	2.66	42.5	22.7	1.78	21.9	0.02	0.07	0.12	98
	100 ISL	10.74	10.73	33.927	25.939	203.1	0.275	2.60	41.5	23.1	1.81	22.2	0.02	0.07	0.12	100
1	118	10.63	10.62	34.070	26.120	191.1	0.311	2.12	33.8	26.8	2.04	24.5	0.02	0.02	0.11	119
	125 ISL	10.60	10.59	34.117	26.162	187.2	0.324	1.97	31.4	28.0	2.11	25.2	0.02	0.02	0.10	126
1	142	10.51	10.49	34.204	26.246	179.7	0.355	1.70	27.1.	30.4	2.24	26.4	0.02	0.02	0.07	143
	150 ISL	10.40	10.38	34.222	26.279	176.7	0.370	1.68	26.7	31.2	2.25	26.7	0.02	0.02	0.06	151
1	172	10.11	10.09	34.252	26.353	170.1	0.408	1.66	26.2	33.0	2.27	27.3	0.01	0.01	0.05	173
	200 ISL	10.05	10.03	34.327	26.422	164.1	0.454	1.24	19.6	36.2	2.39	28.4	0.01	0.01	0.05	201
1	202	10.05	10.03	34.331	26.425	163.9	0.458	1.21	19.1	36.4	2.40	28.5	0.01	0.01	0.05	203
1	231	9.71	9.68	34.324	26.478	159.4	0.505	1.26	19.7	37.9	2.46	28.8	0.01			232
	250 ISL	9.27	9.24	34.282	26.517	155.8	0.535	1.36	21.1	39.8	2.46	29.7	0.01			251
1	271	8.77	8.74	34.235	26.560	151.9	0.567	1.47	22.5	42.0	2.46	30.8	0.01			273
	300 ISL	8.48	8.45	34.219	26.593	149.2	0.611	1.46	22.2	43.9	2.48	31.1	0.00			302
1	327	8.32	8.29	34.219	26.618	147.3	0.651	1.46	22.1	45.8	2.52	31.2	0.00			329
1	387	7.71	7.67	34.222	26.711	139.0	0.736	1.17	17.5	52.9	2.69	33.5	0.00			389
	400 ISL	7.59	7.55	34.226	26.732	137.2	0.754	1.10	16.4	54.6	2.73	34.0	0.00			403
1	453	7.12	7.08	34.244	26.813	130.0	0.825	0.82	12.1	61.3	2.89	35.9	0.00			456
	500 ISL	6.77	6.72	34.257	26.871	124.9	0.885	0.66	9.7	66.8	2.99	37.2	0.01			503
1	525	6.59	6.54	34.264	26.901	122.2	0.916	0.57	8.3	69.7	3.04	37.9	CI. 01			529

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 93 35

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
32 40.8 N	117 52.5 W	03/07/92	0558 UTC	638 in	310 10 kn			1011.5 mb	18.8 C	17.5 C		

CAST	DEPTH ▪	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CBL-A ug/1	PHAEO ug/1	PRESS dto
1	0	19.72	19.72	33.473	23.671	421.4	0.000	5.54	105.7	1.8	0.30	0.0	0.00	0.15	0.04	0
	10 ISL	19.60	19.60	33.468	23.699	419.1	0.042	5.60	106.6	1.8	0.32	0.0	0.00	0.18	0.06	10
1	11	19.59	19.59	33.467	23.701	419.0	0.046	5.61	106.8	1.8	0.32	0.0	0.00	0.18	0.06	1.1
1	20	15.84	15.84	33.346	24.513	341.8	0.080	7.00	123.9	3.6	0.35	0.0	0.00	0.21	0.07	20
1	30	13.53	13.53	33.350	25.010	294.6	0.112	6.08	102.7	3.1	0.49	0.0	0.00	1.02	0.45	30
1	41	12.87	12.86	33.373	25.160	280.6	0.144	5.31	88.5	5.8	0.77	4.5	0.15	1.78	0.97	41
	50 ISL	12.44	12.43	33.429	25.287	268.7	0.169	4.75	78.4	8.3	0.98	8.2	0.22	1.37	0.93	50
1	51	12.39	12.38	33.436	25.302	267.3	0.171	4.69	77.4	8.6	1.00	8.6	0.22	1.29	0.92	51
1	60	11.81	11.80	33.502	25.463	252.2	0.195	4.22	68.8	11.5	1.21	12.7	0.16	0.50	0.72	60
1	69	11.30	11.29	33.536	25.584	240.9	0.217	4.05	65.3	13.6	1.33	14.6	0.08	0.31	0.53	69
	75 ISL	11.17	11.16	33.541	25.611	238.4	0.231	4.02	64.7	14.2	1.35	15.1	0.07	0.26	0.47	75
1	83	11.05	11.04	33.556	25.645	235.4	0.250	3.97	63.7	14.9	1.38	15.7	0.06	0.22	0.41	83
1	99	10.45	10.44	33.699	25.862	215.1	0.286	3.45	54.7	19.2	1.60	18.8	0.02	0.05	0.14	99
	100 ISL	10.44	10.43	33.709	25.871	214.2	0.288	3.42	54.2	19.4	1.61	19.0	0.02	0.05	0.14	101)
1	118	10.31	10.30	33.884	26.030	199.5	0.326	2.85	45.1	23.6	1.84	22.2	0.01	0.04	0.09	11!>
	125 ISL	10.23	10.22	33.942	26.090	194.0	0.339	2.68	42.3	25.2	1.91	23.1	0.01	0.03	0.08	126
1	144	10.00	9.98	34.072	26.231	181.0	0.375	2.32	36.5	29.1	2.05	25.1	0.01	0.01	0.06	145
	150 ISL	9.95	9.93	34.101	26.262	178.1	0.386	2.23	35.0	30.1	2.09	25.6	0.01	0.01	0.05	151.
1	174	9.81	9.79	34.191	26.356	169.7	0.428	1.89	29.6	33.5	2.24	27.2	0.01	0.01	0.04	175
	200 ISL	9.68	9.66	34.270	26.440	162.3	0.471	1.51	23.6	36.8	2.39	28.4	0.01	0.01	0.03	201
1	204	9.65	9.63	34.278	26.451	161.3	0.477	1.46	22.8	37.3	2.41	28.6	0.01	0.01	0.03	20!:.
1	232	9.08	9.05	34.272	26.540	153.2	0.521	1.38	21.3	41.1	2.48	29.7	0.00			233
	250 ISL	8.68	8.65	34.244	26.581	149.5	0.548	1.44	22.0	43.4	2.49	30.4	0.00			2511
1	273	8.17	8.14	34.204	26.628	145.2	0.582	1.52	23.0	46.5	2.51	31.4	0.01			27!i
	300 ISL	7.58	7.55	34.174	26.691	139.3	0.621	1.47	21.9	51.7	2.59	33.0	0.01			30;i
1	327	7.12	7.09	34.165	26.749	134.0	0.658	1.33	19.6	56.9	2.69	34.6	0.00			329
1	387	7.02	6.98	34.247	26.828	127.4	0.736	0.78	11.5	63.3	2.90	36.3	0.00			389
	400 ISL	6.93	6.89	34.254	26.846	125.8	0.753	0.71	10.4	64.9	2.93	36.7	0.00			4031
1	452	6.53	6.49	34.269	26.912	120.0	0.816	0.54	7.9	70.9	3.03	38.2	0.00			45!!
	500 ISL	6.28	6.24	34.286	26.959	116.1	0.873	0.44	6.4	75.4	3.08	39.1	0.00			503
1	523	6.16	6.11	34.295	26.981	114.1	0.900	0.39	5.6	77.5	3.10	39.6	0.00			527

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 93 40

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
32 30.6 N	118 13.0 W	03/07/92	0935 UTC	1551 *m*	290 16 Jen			1011.7 *ab*	18.1 C	17.2 C		

CAST	DEPTH *m*	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN «1/1	OXY PCT	SIO3 uM/1	PO4 UM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	19.31	19.31	33.400	23.721	416.6	0.000	5.58	105.6	2.0	0.32	0.1	0.00	0.17	0.06	0
1	2	19.31	19.31	33.400	23.721	416.7	0.008	5.58	105.6	2.0	0.32	0.1	0.00	0.17	0.06	2
	10 ISL	19.31	19.31	33.401	23.722	416.9	0.042	5.59	105.8	2.0	0.37	0.1	0.00	0.17	0.06	10
1	12	19.31	19.31	33.401	23.722	416.9	0.050	5.59	105.8	2.0	0.39	0.1	0.00	0.17	0.06	12
	20 ISL	15.35	15.35	33.297	24.584	335.0	0.080	6.36	111.4	1.8	0.40	0.1	0.00	0.29	0.10	20
1	21	14.81	14.81	33.296	24.701	323.8	0.083	6.44	111.6	1.8	0.40	0.1	0.00	0.31	0.10	21
	30 ISL	12.86	12.86	33.287	25.095	286.5	0.111	5.74	95.6	4.2	0.68	3.3	0.13	0.62	0.31	30
1	32	12.65	12.65	33.286	25.135	282.7	0.117	5.49	91.0	5.0	0.76	4.4	0.16	0.68	0.36	32
1	41	11.84	11.83	33.338	25.330	264.4	0.141	4.73	77.1	9.5	1.06	10.3	0.19	0.64	0.51	41
1	50	11.18	11.17	33.388	25.490	249.4	0.164	4.45	71.5	12.2	1.23	13.3	0.07	0.38	0.47	50
1	60	10.58	10.57	33.497	25.681	231.4	0.188	4.03	64.0	15.7	1.42	16.7	0.03	0.14	0.28	60
1	69	10.49	10.48	33.589	25.768	223.2	0.209	3.78	59.9	17.4	1.51	18.0	0.03	0.06	0.18	69
	75 ISL	10.37	10.36	33.641	25.830	217.6	0.222	3.63	57.4	18.6	1.57	18.7	0.03	0.05	0.15	75
1	83	10.20	10.19	33.705	25.909	210.2	0.239	3.45	54.4	20.3	1.64	19.7	0.02	0.03	0.12	83
1	97	9.95	9.94	33.809	26.033	198.7	0.268	3.12	48.9	23.5	1.79	21.9	0.02	0.02	0.07	97
	100 ISL	9.91	9.90	33.829	26.055	196.6	0.274	3.07	48.1	24.0	1.81	22.3	0.02	0.02	0.07	100
1	117	9.68	9.67	33.921	26.166	186.5	0.306	2.84	44.3	26.6	1.90	23.9	0.01	0.02	0.09	118
	125 ISL	9.56	9.55	33.942	26.202	183.2	0.321	2.79	43.4	27.5	1.93	24.4	0.01	0.02	0.08	126
1	142	9.29	9.27	33.973	26.270	177.0	0.352	2.74	42.4	29.2	1.97	25.2	0.01	0.01	0.05	143
	150 ISL	9.17	9.15	33.994	26.306	173.7	0.366	2.70	41.7	30.3	2.00	25.6	0.01	0.01	0.05	151
1	172	8.86	8.84	34.046	26.396	165.5	0.403	2.61	40.0	33.3	2.07	26.7	0.01	0.02	0.06	173
	200 ISL	8.48	8.46	34.075	26.479	158.1	0.448	2.55	38.8	36.5	2.13	27.7	0.00	0.01	0.04	201
1	201	8.47	8.45	34.076	26.481	157.9	0.450	2.55	38.8	36.6	2.13	27.7	0.00	0.01	0.04	202
1	230	8.12	8.10	34.107	26.558	150.9	0.495	2.30	34.7	41.2	2.26	29.3	0.00			231
	250 ISL	7.93	7.90	34.133	26.607	146.6	0.524	2.01	30.2	44.6	2.37	30.5	0.00			251
1	270	7.76	7.73	34.159	26.653	142.5	0.553	1.70	25.4	48.1	2.49	31.8	0.00			272
	300 ISL	7.54	7.51	34.196	26.714	137.1	0.595	1.31	19.5	53.1	2.64	33.5	0.00			302
1	325	7.35	7.32	34.220	26.760	133.1	0.629	1.05	15.6	57.2	2.74	34.8	0.00			327
1	385	6.70	6.66	34.231	26.859	124.2	0.706	0.76	11.1	66.5	2.91	37.1	0.00			387
	400 ISL	6.64	6.60	34.238	26.873	123.1	0.725	0.70	10.2	67.8	2.94	37.4	0.00			403
1	450	6.50	6.46	34.266	26.914	119.8	0.785	0.55	8.0	71.4	3.02	38.2	0.00			453
	500 ISL	6.20	6.16	34.291	26.973	114.6	0.844	0.42	6.1	76.9	3.11	39.3	0.00			503
1	520	6.08	6.03	34.302	26.997	112.5	0.867	0.37	5.3	79.1	3.14	39.7	0.00			524

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 93 45

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
32 20.6 N	118 33.4 W	03/07/92	1358 UTC	1408 n	300 12 kn	290 04 07	2	1012.2 mb	18.0 C	16.5 C		8/8	SC

CAST	DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0	ISL	18.67	18.67	33.371	23.861	403.3	0.000	5.62	105.1	1.6	0.27	0.0	0.00	0.24	0.07	0
1	1		18.67	18.67	33.371	23.861	403.4	0.004	5.62	105.1	1.6	0.27	0.0	0.00	0.24	0.07	1
	10	ISL	18.62	18.62	33.371	23.873	402.5	0.040	5.63	105.2	1.6	0.27	0.0	0.00	0.25	0.07	10
1	11		18.61	18.61	33.371	23.876	402.3	0.044	5.63	105.2	1.6	0.27	0.0	0.00	0.25	0.07	11
	20	ISL	15.07	15.07	33.293	24.642	329.4	0.077	6.24	108.7	2.3	0.38	0.0	0.00	0.46	0.19	20
1	21		14.65	14.65	33.293	24.733	320.8	0.080	6.30	108.8	2.4	0.39	0.0	0.00	0.48	0.20	21
	30	ISL	13.68	13.68	33.266	24.915	303.7	0.109	6.08	102.9	3.1	0.48	0.8	0.05	1.78	0.83	30
1	31		13.65	13.65	33.262	24.918	303.5	0.112	6.06	102.5	3.2	0.49	0.9	0.06	1.90	0.89	31
1	41		12.97	12.96	33.262	25.054	290.7	0.141	5.47	91.3	5.8	0.71	4.7	0.32	1.36	0.81	41
	50	ISL	11.87	11.86	33.249	25.255	271.7	0.167	5.05	82.3	8.7	1.02	8.8	0.36	0.42	0.36	50
1	51		11.76	11.75	33.249	25.276	269.8	0.169	5.01	81.5	9.0	1.05	9.2	0.36	0.33	0.31	51
1	61		11.61	11.60	33.278	25.326	265.2	0.196	4.90	79.4	9.8	1.10	10.3	0.31	0.28	0.31	61
1	71		11.05	11.04	33.397	25.520	246.9	0.222	4.36	69.9	13.2	1.32	14.2	0.07	0.16	0.31	71
	75	ISL	10.80	10.79	33.455	25.610	238.5	0.231	4.22	67.3	14.4	1.38	15.4	0.06	0.12	0.30	75
1	84		10.31	10.30	33.576	25.790	221.6	0.252	3.99	63.0	16.7	1.48	17.4	0.04	0.06	0.26	84
1	99		10.04	10.03	33.674	25.912	210.2	0.284	3.66	57.5	19.6	1.62	19.3	0.03	0.02	0.07	99
	100	ISL	10.02	10.01	33.682	25.922	209.3	0.287	3.63	57.0	19.9	1.63	19.5	0.03	0.02	0.07	100
1	119		9.76	9.75	33.829	26.080	194.6	0.325	3.04	47.5	24.9	1.85	22.7	0.01	0.01	0.09	120
	125	ISL	9.71	9.70	33.866	26.118	191.2	0.337	2.92	45.6	25.9	1.89	23.3	0.01	0.01	0.08	126
1	144		9.54	9.52	33.965	26.224	181.5	0.372	2.65	41.2	28.8	2.00	24.9	0.00	0.01	0.06	145
	150	ISL	9.44	9.42	33.992	26.261	178.0	0.383	2.58	40.1	29.9	2.03	25.4	0.00	0.01	0.06	151
1	174		9.01	8.99	34.078	26.398	165.4	0.424	2.35	36.2	34.3	2.16	27.1	0.00	0.01	0.06	175
	200	ISL	8.72	8.70	34.123	26.479	158.1	0.466	2.14	32.7	37.9	2.26	28.4	0.00	0.01	0.04	201
1	204		8.68	8.66	34.128	26.489	157.2	0.472	2.10	32.1	38.4	2.28	28.6	0.00	0.01	0.04	205
1	233		8.40	8.38	34.169	26.565	150.5	0.517	1.74	26.4	43.2	2.43	30.3	0.00			234
	250	ISL	8.17	8.14	34.173	26.603	147.1	0.542	1.67	25.2	45.5	2.48	31.0	0.00			251
1	273		7.86	7.83	34.171	26.648	143.1	0.576	1.62	24.3	48.3	2.53	31.7	0.00			275
	300	ISL	7.67	7.64	34.179	26.682	140.2	0.614	1.49	22.2	50.9	2.60	32.5	0.00			302
1	328		7.51	7.48	34.191	26.715	137.5	0.653	1.32	19.6	53.8	2.67	33.4	0.00			330
1	387		6.89	6.85	34.228	26.831	127.0	0.731	0.85	12.5	64.0	2.88	36.3	0.00			389
	400	ISL	6.80	6.76	34.234	26.848	125.5	0.747	0.78	11.4	65.5	2.92	36.7	0.00			403
1	453		6.48	6.44	34.255	26.908	120.4	0.812	0.59	8.6	71.1	3.03	38.1	0.00			456
	500	ISL	6.18	6.14	34.279	26.966	115.3	0.868	0.46	6.6	76.9	3.10	39.2	0.00			503
1	523		6.03	5.98	34.292	26.995	112.7	0.894	0.40	5.7	79.8	3.13	39.7	0.00			527

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 93 50

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
32 11.0 N	118 53.7 W	03/07/92	1730 UTC	1472 B	300 12 kn	290 05 06	2	1013.1 nb	18.7 C	16.5 C		8/8	SC

CAST	DEPTH D		TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN al/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
1	0		18.13	18.13	33.295	23.936	396.1	0.000	5.59	103.4	1.7	0.35	0.0	0.00	0.11	0.02	0
	10	ISL	18.14	18.14	33.293	23.932	396.8	0.040	5.59	103.4	1.5	0.35	0.0	0.00	0.11	0.02	10
1	11		18.14	18.14	33.293	23.932	396.9	0.044	5.59	103.4	1.5	0.35	0.0	0.00	0.11	0.02	11
1	20		16.92	16.92	33.218	24.167	374.7	0.078	5.85	105.7	1.8	0.36	0.0	0.00	0.14	0.04	20
	30	ISL	14.73	14.73	33.127	24.588	334.9	0.114	6.08	105.1	2.4	0.41	0.0	0.00	0.17	0.06	30
1	31		14.53	14.53	33.123	24.628	331.1	0.117	6.10	105.0	2.5	0.42	0.0	0.00	0.17	0.06	31
1	39		13.87	13.86	33.149	24.786	316.3	0.143	6.12	103.9	3.0	0.46	0.0	0.00	0.30	0.16	39
1	50		13.61	13.60	33.273	24.935	302.3	0.177	5.97	100.9	2.3	0.56	0.8	0.04	0.65	0.32	50
1	59		12.00	11.99	33.181	25.178	279.2	0.203	5.37	87.7	6.8	0.86	6.2	0.25	0.30	0.24	59
1	68		11.10	11.09	33.183	25.345	263.5	0.228	5.04	80.8	9.3	1.07	10.7	0.06	0.15	0.16	68
	75	ISL	10.52	10.51	33.263	25.509	248.0	0.246	4.82	76.3	11.4	1.19	13.0	0.04	0.09	0.11	75
1	83		10.06	10.05	33.381	25.680	231.9	0.265	4.59	72.0	13.6	1.29	14.9	0.02	0.06	0.08	83
1	97		9.92	9.91	33.523	25.814	219.4	0.296	4.25	66.5	16.1	1.40	17.0	0.01	0.03	0.06	97
	100	ISL	9.83	9.82	33.555	25.854	215.6	0.303	4.12	64.4	17.3	1.46	17.9	0.01	0.03	0.06	100
1	117		9.33	9.32	33.735	26.077	194.7	0.338	3.31	51.2	24.5	1.80	22.8	0.01	0.01	0.06	118
	125	ISL	9.23	9.22	33.822	26.162	186.9	0.353	3.03	46.8	27.1	1.90	24.2	0.01	0.01	0.06	126
1	142		9.11	9.09	33.981	26.306	173.6	0.384	2.55	39.3	31.5	2.06	26.3	0.01	0.01	0.05	143
	150	ISL	9.05	9.03	34.031	26.354	169.1	0.397	2.37	36.5	33.4	2.13	27.1	0.01	0.01	0-05	151
1	171		8.90	8.88	34.112	26.442	161.2	0.432	2.02	31.0	37.2	2.26	28.6	0.01	0.01	0.05	172
	200	ISL	8.75	8.73	34.137	26.485	157.6	0.478	1.89	28.9	39.2	2.33	29.2	0.00	0.01	0.05	201
1	201		8.75	8.73	34.137	26.485	157.6	0.480	1.89	28.9	39.2	2.33	29.2	0.00	0.01	0.05	202
1	229		8.62	8.60	34.146	26.513	155.5	0.524	1.83	27.9	40.4	2.35	29.6	0.00			230
	250	ISL	8.48	8.45	34.149	26.537	153.5	0.556	1.80	27.4	41.7	2.38	30.1	0.00			251
1	269		8.32	8.29	34.151	26.563	151.3	0.585	1.76	26.7	43.3	2.42	30.6	0.00			271
	300	ISL	7.93	7.90	34.150	26.621	146.1	0.631	1.67	25.1	47.2	2.49	31.7	0.00			302
1	324		7.61	7.58	34.156	26.673	141.5	0.666	1.54	23.0	51.0	2.57	32.7	0.00			326
1	383		7.03	6.99	34.223	26.808	129.3	0.746	0.92	13.5	61.9	2.85	35.8	0.00			385
	400	ISL	6.86	6.82	34.236	26.841	126.2	0.767	0.80	11.7	65.0	2.91	36.5	0.00			403
1	450		6.40	6.36	34.264	26.925	118.6	0.828	0.55	8.0	73.1	3.05	38.3	0.00			453
	500	ISL	6.13	6.09	34.284	26.976	114.3	0.887	0.44	6.3	78.0	3.11	39.4	0.00			503
1	521		6.02	5.97	34.292	26.997	112.5	0.910	0.40	5.7	80.1	3.14	39.8	0.00			525

FV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 93 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CID AMT TYPE
32 0.8 N	119 14.2 W	03/07/92	2211 UTC	1482 n	290 16 kn	290 03 06	2	1013.2 wb	19.5 C	17.4 C	2 2 B 02	8/8 SC

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN »1/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	17.74	17.74	33.356	24.078	382.6	0.000	5.70	104.7	1.2	0.37	0.4	0.00	0.20	0.07	0
1	1	17.74	17.74	33.356	24.078	382.7	0.004	5.70	104.7	1.2	0.37	0.4	0.00	0.20	0.07	1
1	10	15.41	15.41	33.187	24.486	344.0	0.037	6.15	107.8	1.9	0.39	0.4	0.00	0.29	0.13	10
1	20	14.58	14.58	33.175	24.657	328.0	0.070	6.17	106.3	2.8	0.44	0.4	0.01	0.50	0.28	20
	30 ISL	13.83	13.83	33.345	24.945	300.8	0.102	6.49	110.3	2.1	0.47	0.7	0.02	0.45	0.25	30
1	31	13.76	13.76	33.363	24.973	298.2	0.105	6.51	110.5	2.0	0.48	0.8	0.02	0.44	0.24	31
1	41	13.15	13.14	33.393	25.120	284.5	0.134	6.25	104.7	2.4	0.61	1.7	0.04	0.35	0.30	41
1	50	12.45	12.44	33.349	25.223	274.8	0.159	5.47	90.3	5.1	0.89	5.6	0.11	0.26	0.21	50
1	60	11.17	11.16	33.236	25.374	260.6	0.186	4.93	79.1	10.7	1.17	11.4	0.17	0.23	0.23	60
1	69	10.11	10.10	33.309	25.615	237.8	0.208	4.47	70.1	14.3	1.39	15.7	0.11	0.14	0.24	69
	75 ISL	9.75	9.74	33.343	25.702	229.6	0.222	4.53	70.5	14.8	1.37	15.8	0.07	0.11	0.20	75
1	83	9.48	9.47	33.387	25.780	222.2	0.240	4.69	72.6	15.1	1.34	16.0	0.03	0.09	0.13	83
1	98	9.05	9.04	33.521	25.954	206.0	0.272	4.28	65.7	19.3	1.52	19.2	0.02	0.05	0.14	98
	100 ISL	9.06	9.05	33.539	25.967	204.8	0.276	4.22	64.8	19.7	1.54	19.5	0.02	0.05	0.14	10c
1	118	9.14	9.13	33.664	26.052	197.1	0.313	3.75	57.7	22.7	1.66	21.7	0.01	0.03	0.10	119
	125 ISL	9.11	9.10	33.717	26.099	192.8	0.326	3.60	55.4	23.9	1.71	22.5	0.01	0.03	0.09	126
1	143	8.96	8.94	33.839	26.218	181.8	0.360	3.29	50.5	26.9	1.82	24.1	0.00	0.02	0.08	144
	150 ISL	8.88	8.86	33.870	26.255	178.4	0.373	3.23	49.5	28.0	1.85	24.6	0.00	0.02	0.08	151
1	172	8.70	8.68	33.951	26.347	170.1	0.411	2.99	45.6	31.3	1.94	25.9	0.00	0.01	0.06	173
	200 ISL	8.80	8.78	34.069	26.424	163.4	0.458	2.29	35.1	35.8	2.17	27.9	0.01	0.03	0.18	201
1	201	8.80	8.78	34.072	26.427	163.1	0.459	2.27	34.8	36.0	2.18	28.0	0.01	0.03	0.18	202
1	231	8.47	8.45	34.091	26.493	157.3	0.507	2.13	32.4	39.2	2.27	29.3	0.01			232
	250 ISL	8.23	8.20	34.103	26.539	153.2	0.537	2.04	30.8	41.9	2.37	30.2	0.01			251
1	271	7.96	7.93	34.115	26.589	148.7	0.568	1.94	29.1	45.2	2.47	31.1	0.01			27}
	300 ISL	7.58	7.55	34.119	26.648	143.4	0.611	1.78	26.5	49.6	2.54	32.3	0.01			302
1	326	7.25	7.22	34.121	26.696	139.0	0.648	1.62	23.9	53.7	2.59	33.5	0.01			328
1	386	6.59	6.55	34.145	26.805	129.1	0.728	1.12	16.3	64.1	2.84	36.6	0.00			388
	400 ISL	6.49	6.45	34.153	26.825	127.4	0.746	1.04	15.1	65.9	2.88	37.1	0.00			403
1	453	6.19	6.15	34.191	26.895	121.3	0.812	0.76	11.0	72.5	2.99	38.7	0.00			456
	500 ISL	5.86	5.82	34.240	26.975	114.0	0.867	0.52	7.4	79.8	3.09	39.9	0.00			503
1	525	5.69	5.65	34.267	27.018	110.1	0.895	0.40	5.7	83.7	3.15	40.6	0.00			529

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 93 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
31 50.6 N	119 34.4 W	04/07/92	0144 UTC	1755 m	320 15 kn	320 04 05	2	1012.9 «b	18.9 C	16.8 C	2 5 B 01	8/8 SC

CAST	DEPTH n	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN »1/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	18.15	18.15	33.188	23.849	404.4	0.000	5.60	103.6	2.3	0.36	0.1	0.00	0.08	0.02	0
1	1	18.15	18.15	33.188	23.849	404.5	0.004	5.60	103.6	2.3	0.36	0.1	0.00	0.08	0.02	1
	10 ISL	18.14	18.14	33.187	23.851	404.6	0.040	5.60	103.6	2.1	0.37	0.1	0.00	0.10	0.02	10
1	11	18.14	18.14	33.187	23.851	404.6	0.044	5.60	103.6	2.1	0.37	0.1	0.00	0.10	0.02	111.
	20 ISL	17.98	17.98	33.178	23.884	401.8	0.081	5.62	103.6	2.1	0.35	0.1	0.00	0.10	0.02	20
1	21	17.96	17.96	33.182	23.892	401.1	0.085	5.62	103.6	2.1	0.35	0.1	0.00	0.10	0.02	21.
	30 ISL	17.20	17.20	33.125	24.031	388.1	0.120	5.79	105.1	2.3	0.35	0.1	0.00	0.12	0.03	3b
1	32	16.99	16.98	33.109	24.068	384.6	0.128	5.83	105.4	2.3	0.35	0.1	0.00	0.13	0.03	33
1	41	16.05	16.04	33.046	24.236	368.8	0.162	5.96	105.7	2.1	0.37	0.1	0.00	0.13	0.02	41.
	50 ISL	15.42	15.41	33.032	24.366	356.7	0.195	6.00	105.1	2.1	0.38	0.1	0.00	0.15	0.05	50
1	51	15.34	15.33	33.031	24.383	355.1	0.198	6.00	104.9	2.1	0.38	0.1	0.00	0.15	0.06	5)1
1	61	13.91	13.90	33.006	24.668	328.1	0.232	6.09	103.4	2.5	0.43	0.1	0.00	0.23	0.12	611
1	71	13.23	13.22	33.171	24.933	303.0	0.264	5.73	96.0	3.7	0.60	2.0	0.11	0.52	0.31	71
	75 ISL	12.94	12.93	33.203	25.015	295.3	0.276	5.66	94.3	4.1	0.63	2.7	0.12	0.48	0.31	75
1	84	12.24	12.23	33.237	25.177	280.0	0.302	5.53	90.8	5.1	0.68	4.6	0.13	0.29	0.30	84
1	99	11.00	10.99	33.247	25.413	257.7	0.342	5.23	83.6	8.3	0.95	9.3	0.03	0.14	0.26	99
	100 ISL	10.91	10.90	33.252	25.433	255.9	0.345	5.19	82.8	8.7	0.98	9.7	0.03	0.13	0.25	100
1	119	9.60	9.59	33.427	25.793	221.8	0.390	4.31	66.9	16.8	1.47	17.6	0.00	0.05	0.07	120
	125 ISL	9.63	9.62	33.535	25.872	214.4	0.403	3.99	62.0	19.0	1.58	19.2	0.00	0.04	0.06	126
1	144	9.71	9.69	33.792	26.060	197.0	0.442	3.09	48.2	24.6	1.82	22.8	0.00	0.01	0.04	145
	150 ISL	9.68	9.66	33.837	26.101	193.3	0.454	2.94	45.8	25.8	1.87	23.5	0.00	0.01	0.04	151
1	174	9.47	9.45	33.942	26.218	182.7	0.499	2.59	40.2	29.3	2.00	25.3	0.00	0.01	0.03	175
	200 ISL	9.22	9.20	34.031	26.328	172.7	0.545	2.30	35.5	32.8	2.13	26.9	0.00	0.01	0.03	201
1	205	9.17	9.15	34.044	26.346	171.0	0.554	2.26	34.9	33.4	2.15	27.1	0.00	0.01	0.03	206
1	234	8.92	8.89	34.089	26.422	164.3	0.602	2.11	32.4	36.5	2.23	28.2	0.00			235
	250 ISL	8.78	8.75	34.105	26.457	161.3	0.628	2.04	31.2	38.0	2.27	28.7	0.00			251
1	273	8.57	8.54	34.121	26.502	157.3	0.665	1.95	29.7	40.2	2.33	29.4	0.00			275
	300 ISL	8.31	8.28	34.134	26.552	152.9	0.707	1.83	27.7	43.1	2.39	30.3	0.00			302
1	328	8.02	7.99	34.146	26.605	148.2	0.749	1.69	25.4	46.6	2.46	31.4	0.00			330
1	387	7.40	7.36	34.182	26.724	137.6	0.833	1.25	18.5	55.8	2.70	34.1	0.00			389
	400 ISL	7.22	7.18	34.187	26.754	134.8	0.851	1.15	17.0	58.5	2.75	34.8	0.00			402
1	453	6.52	6.48	34.212	26.869	124.1	0.920	0.77	11.2	69.5	2.94	37.6	0.00			456
	500 ISL	6.12	6.08	34.241	26.943	117.3	0.977	0.58	8.4	76.7	3.06	39.1	0.00			503
1	524	5.92	5.87	34.257	26.982	113.8	1.004	0.48	6.9	80.4	3.12	39.9	0.00			527

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 93 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
31 30.8 N	120 14.8 W	04/07/92	0721 UTC	3931 a	300 15 kn			1014.2 mb	18.1 C	16.9 C		

CAST	DEPTH -	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN »1/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	18.67	18.67	33.169	23.706	418.1	0.000	5.52	103.1	2.1	0.36	0.1	0.00	0.09	0.02	0
1	1	18.67	18.67	33.169	23.706	418.1	0.004	5.52	103.1	2.1	0.36	0.1	0.00	0.09	0.02	1
1	10	18.66	18.66	33.171	23.711	418.0	0.042	5.52	103.1	2.1	0.36	0.0	0.00	0.09	0.01	10
1	20	17.91	17.91	33.149	23.879	402.3	0.083	5.67	104.4	2.1	0.35	0.0	0.00	0.11	0.02	20
	30 ISL	17.14	17.14	33.144	24.059	385.4	0.122	5.76	104.4	2.0	0.35	0.0	0.00	0.10	0.02	30
1	31	17.08	17.07	33.144	24.074	384.1	0.126	5.77	104.5	2.0	0.35	0.0	0.00	0.10	0.02	31
1	41	16.78	16.77	33.139	24.140	378.0	0.164	5.82	104.8	2.0	0.34	0.0	0.00	0.11	0.03	41
1	50	16.51	16.50	33.139	24.203	372.3	0.198	5.88	105.3	2.1	0.35	0.0	0.00	0.15	0.04	50
1	61	16.13	16.12	33.178	24.320	361.5	0.238	6.03	107.2	2.1	0.36	0.0	0.00	0.33	0.13	61
1	70	15.76	15.75	33.190	24.413	352.9	0.270	6.00	105.9	2.1	0.38	0.0	0.00	0.43	0.19	70
	75 ISL	15.68	15.67	33.198	24.437	350.7	0.288	5.94	104.7	2.2	0.39	0.0	0.00	0.45	0.25	75
1	84	15.40	15.39	33.198	24.499	345.0	0.319	5.83	102.2	2.3	0.41	0.0	0.00	0.48	0.33	84
1	100	13.68	13.67	33.141	24.820	314.7	0.372	5.80	98.1	3.5	0.52	0.9	0.06	0.29	0.29	100
1	119	11.44	11.43	33.108	25.227	276.0	0.428	5.41	87.3	6.8	0.88	7.5	0.07	0.14	0.20	119
	125 ISL	10.99	10.97	33.121	25.318	267.4	0.445	5.31	84.8	7.9	0.97	9.1	0.06	0.12	0.18	125
1	143	10.12	10.10	33.230	25.553	245.2	0.491	4.94	77.5	11.8	1.20	13.2	0.01	0.07	0.14	144
	150 ISL	9.95	9.93	33.337	25.665	234.7	0.507	4.67	73.0	13.8	1.30	14.9	0.01	0.05	0.11	151
1	174	9.66	9.64	33.713	26.007	202.7	0.560	3.74	58.2	20.5	1.59	19.8	0.00	0.01	0.03	175
	200 ISL	9.40	9.38	33.878	26.179	186.8	0.611	3.26	50.5	25.4	1.78	22.7	0.01	0.00	0.04	201
1	203	9.37	9.35	33.888	26.192	185.7	0.616	3.23	50.0	25.9	1.79	22.9	0.01	0.00	0.04	204
1	233	8.76	8.74	33.992	26.371	169.1	0.669	3.07	46.9	31.1	1.90	25.2	0.00			234
	250 ISL	8.52	8.49	34.022	26.432	163.5	0.698	2.94	44.7	33.6	1.97	26.3	0.00			251
1	273	8.25	8.22	34.043	26.489	158.3	0.735	2.73	41.3	36.9	2.08	27.7	0.00			274
	300 ISL	7.88	7.85	34.061	26.559	152.0	0.777	2.47	37.0	41.6	2.21	29.4	0.00			302
1	328	7.48	7.45	34.073	26.626	145.8	0.818	2.18	32.4	47.0	2.35	31.3	0.00			330
1	387	6.68	6.64	34.102	26.760	133.5	0.901	1.45	21.1	60.2	2.68	35.6	0.00			389
	400 ISL	6.56	6.52	34.115	26.786	131.1	0.918	1.31	19.0	62.7	2.74	36.3	0.00			402
1	454	6.18	6.14	34.171	26.880	122.7	0.986	0.82	11.8	71.9	2.96	38.7	0.00			457
	500 ISL	5.86	5.82	34.210	26.952	116.2	1.041	0.59	8.4	78.9	3.07	40.0	0.00			503
1	524	5.69	5.65	34.231	26.989	112.8	1.069	0.47	6.7	82.5	3.12	40.7	0.00			527

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 93 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
31 10.7 N	120 55.4 W	04/07/92	1246 UTC	3840 m	330 13 kn	330 03 06	1	1015.1 mb	20.5 C	16.5 C	27n 01	2/8 SC

CAST	DEPTH n	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 UM/1	NO3 uM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	19.00	19.00	33.204	23.650	423.4	0.000	5.48	103.0	2.0	0.37	0.1	0.00	0.08	0.02	0
1	1	19.00	19.00	33.204	23.650	423.4	0.004	5.48	103.0	2.0	0.37	0.1	0.00	0.08	0.02	1
1	10	19.00	19.00	33.205	23.651	423.6	0.042	5.48	103.0	2.0	0.37	0.1	0.00	0.09	0.01	10
	20 ISL	18.65	18.65	33.194	23.731	416.4	0.084	5.56	103.8	2.0	0.37	0.1	0.00	0.09	0.02	20
1	21	18.60	18.60	33.192	23.742	415.4	0.089	5.57	103.9	2.0	0.37	0.1	0.00	0.09	0.02	21
1	30	18.01	18.00	33.173	23.873	403.2	0.125	5.65	104.2	2.0	0.37	0.1	0.00	0.08	0.01	30
1	40	17.71	17.70	33.163	23.938	397.3	0.165	5.68	104.1	2.0	0.36	0.1	0.00	0.09	0.02	40
1	50	17.25	17.24	33.166	24.051	386.8	0.205	5.76	104.7	2.0	0.35	0.1	0.00	0.10	0.03	50
1	60	16.22	16.21	33.306	24.398	354.0	0.242	5.90	105.2	1.9	0.34	0.1	0.00	0.12	0.04	60
1	71	15.92	15.91	33.296	24.458	348.6	0.280	5.89	104.4	1.9	0.34	0.1	0.00	0.14	0.05	71
	75 ISL	15.80	15.79	33.325	24.508	344.0	0.294	5.87	103.8	1.9	0.34	0.1	0.00	0.15	0.07	75
1	84	15.38	15.37	33.381	24.645	331.2	0.324	5.81	101.9	2.1	0.35	0.1	0.00	0.19	0.13	84
1	100	13.90	13.89	33.282	24.884	308.6	0.376	5.75	97.8	2.9	0.46	0.5	0.03	0.35	0.33	100
1	119	12.51	12.49	33.293	25.170	281.7	0.432	5.48	90.5	5.0	0.67	4.9	0.14	0.22	0.28	119
	125 ISL	12.07	12.05	33.277	25.241	274.9	0.448	5.43	88.9	5.7	0.74	6.1	0.12	0.19	0.25	125
1	145	10.74	10.72	33.246	25.459	254.4	0.501	5.23	83.2	8.8	0.97	9.9	0.02	0.10	0.14	146
	150 ISL	10.46	10.44	33.259	25.518	248.8	0.514	5.15	81.4	9.8	1.04	11.0	0.02	0.08	0.12	151
1	174	9.43	9.41	33.396	25.797	222.5	0.571	4.60	71.1	15.5	1.37	16.5	0.01	0.03	0.04	175
	200 ISL	9.05	9.03	33.670	26.073	196.8	0.625	3.76	57.7	22.8	1.69	21.8	0.00	0.00	0.03	201
1	204	9.03	9.01	33.711	26.108	193.5	0.633	3.64	55.9	23.8	1.73	22.5	0.00	0.00	0.03	205
1	233	8.69	8.67	33.852	26.272	178.3	0.687	3.30	50.3	28.3	1.84	24.6	0.00			234
	250 ISL	8.46	8.43	33.931	26.369	169.3	0.716	3.14	47.7	31.6	1.92	25.7	0.00			251
1	272	8.16	8.13	34.013	26.479	159.2	0.752	2.97	44.8	36.0	2.02	27.0	0.00			273
	300 ISL	7.78	7.75	34.042	26.558	152.0	0.796	2.79	41.7	40.5	2.13	28.5	0.00			302
1	328	7.40	7.37	34.040	26.611	147.2	0.838	2.58	38.2	45.1	2.24	30.0	0.00			330
1	386	6.67	6.63	34.063	26.730	136.3	0.920	1.83	26.7	57.1	2.56	34.2	0.00			388
	400 ISL	6.54	6.50	34.073	26.755	134.0	0.939	1.68	24.4	59.7	2.62	35.0	0.00			402
1	450	6.15	6.11	34.118	26.842	126.2	1.004	1.18	17.0	68.6	2.83	37.5	0.00			453
	500 ISL	5.79	5.75	34.179	26.936	117.6	1.065	0.74	10.6	78.1	3.01	39.6	0.00			503
1	519	5.66	5.62	34.203	26.971	114.4	1.087	0.57	8.1	81.7	3.08	40.4	0.00			522

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 93 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	NAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
30 50.8 N	121 35.5 W	04/07/92	1807 UTC	4088 m	350 13 kn	340 04 04	1	1016.4 ab	20.5 C	17.5 C		7/8	AS

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN «1/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	19.48	19.48	33.204	23.528	435.1	0.000	5.47	103.8	2.1	0.37	0.1	0.00	0.08	0.01	0
1	1	19.48	19.48	33.204	23.528	435.1	0.004	5.47	103.8	2.1	0.37	0.1	0.00	0.08	0.01	1
1	10	19.27	19.27	33.198	23.578	430.7	0.043	5.47	103.4	2.1	0.37	0.1	0.00	0.09	0.02	10
	20 ISL	18.13	18.13	33.164	23.837	406.3	0.085	5.67	104.8	2.1	0.36	0.1	0.00	0.08	0.02	20
1	21	18.02	18.02	33.161	23.861	404.0	0.089	5.69	105.0	2.1	0.36	0.1	0.00	0.08	0.02	21
1	30	17.84	17.83	33.159	23.904	400.2	0.125	5.68	104.4	2.1	0.35	0.1	0.00	0.07	0.01	30
1	39	17.79	17.78	33.165	23.921	398.9	0.161	5.69	104.5	2.1	0.36	0.1	0.00	0.08	0.02	39
1	50	17.69	17.68	33.166	23.946	396.9	0.205	5.67	103.9	2.1	0.36	0.1	0.00	0.09	0.02	50
1	59	17.41	17.40	33.167	24.014	390.7	0.241	5.76	105.0	2.0	0.35	0.1	0.00	0.10	0.03	59
1	70	16.99	16.98	33.177	24.121	380.8	0.283	5.79	104.7	2.0	0.36	0.1	0.00	0.12	0.03	70
	75 ISL	16.61	16.60	33.192	24.221	371.4	0.302	5.83	104.6	2.0	0.36	0.1	0.00	0.13	0.04	75
1	84	15.88	15.87	33.226	24.414	353.2	0.334	5.90	104.4	2.0	0.35	0.1	0.00	0.16	0.05	84
1	98	15.19	15.18	33.271	24.602	335.6	0.383	5.89	102.8	2.1	0.37	0.1	0.00	0.27	0.15	98
	100 ISL	15.10	15.08	33.275	24.625	333.5	0.389	5.89	102.6	2.2	0.37	0.1	0.00	0.27	0.17	100
1	117	14.21	14.19	33.299	24.833	314.0	0.444	5.78	98.9	2.6	0.43	0.4	0.03	0.28	0.26	117
	125 ISL	13.49	13.47	33.311	24.991	299.1	0.469	5.65	95.3	3.5	0.53	2.2	0.03	0.24	0.25	125
1	143	11.73	11.71	33.340	25.354	264.6	0.520	5.32	86.5	6.6	0.81	7.4	0.03	0.14	0.18	144
	150 ISL	11.10	11.08	33.320	25.453	255.1	0.538	5.26	84.3	7.9	0.91	9.1	0.03	0.11	0.15	151
1	173	9.50	9.48	33.323	25.729	229.0	0.593	4.98	77.1	13.1	1.23	14.2	0.01	0.04	0.06	174
	200 ISL	9.00	8.98	33.634	26.052	198.6	0.651	4.11	63.0	20.7	1.57	19.7	0.00	0.01	0.02	201
1	202	9.00	8.98	33.660	26.073	196.8	0.655	4.04	62.0	21.2	1.59	20.1	0.00	0.01	0.02	203
1	232	8.80	8.78	33.860	26.261	179.4	0.712	3.53	54.0	27.0	1.76	23.5	0.00			233
	250 ISL	8.56	8.53	33.926	26.350	171.2	0.743	3.37	51.3	29.8	1.84	24.8	0.00			251
1	273	8.21	8.18	33.975	26.442	162.8	0.782	3.21	48.5	33.3	1.93	26.1	0.00			274
	300 ISL	7.83	7.80	34.010	26.526	155.1	0.824	2.96	44.3	38.3	2.06	27.9	0.00			302
1	328	7.45	7.42	34.029	26.596	148.7	0.867	2.66	39.5	44.0	2.20	29.9	0.00			3:10
1	386	6.74	6.70	34.059	26.718	137.5	0.950	1.91	27.9	56.4	2.53	34.1	0.00			3R8
	400 ISL	6.56	6.52	34.066	26.747	134.8	0.969	1.75	25.4	59.5	2.60	35.0	0.00			402
1	451	5.99	5.95	34.098	26.846	125.6	1.035	1.23	17.6	70.3	2.84	38.0	0.00			454
	500 ISL	5.66	5.62	34.147	26.926	118.4	1.095	0.87	12.4	78.5	3.00	39.8	0.00			503
1	519	5.53	5.49	34.166	26.957	115.5	1.117	0.73	10.4	81.7	3.06	40.5	0.00			522

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 93 100

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	NAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
30 31.1 N	122 15.7 W	05/07/92	0016 UTC	4148 •	360 15 kn	360 03 04	1	1015.9 mb	20.4 C	17.9 C	37» 01	3/8	AC

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN »1/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS dJ)
	0 ISL	19.43	19.43	33.196	23.535	434.4	0.000	5.48	103.9	2.0	0.37	0.0	0.00	0.07	0.01	0
1	1	19.43	19.43	33.196	23.535	434.5	0.004	5.48	103.9	2.0	0.37	0.0	0.00	0.07	0.01	1
	10 ISL	19.22	19.22	33.193	23.586	429.8	0.043	5.49	103.6	2.0	0.37	0.1	0.00	0.07	0.02	ILO
1	11	19.18	19.18	33.193	23.597	428.9	0.048	5.49	103.6	2.0	0.37	0.1	0.00	0.07	0.02	! L l
1	20	18.61	18.61	33.190	23.738	415.7	0.086	5.58	104.1	2.0	0.36	0.1	0.00	0.08	0.02	20
1	30	18.02	18.01	33.146	23.850	405.4	0.127	5.66	104.4	2.0	0.36	0.1	0.00	0.08	0.02	30
1	41	17.91	17.90	33.157	23.886	402.4	0.171	5.67	104.4	2.0	0.37	0.1	0.00	0.07	0.05	41
1	49	17.40	17.39	33.173	24.021	389.7	0.203	5.77	105.2	1.9	0.36	0.1	0.00	0.10	0.02	49
	50 ISL	17.29	17.28	33.178	24.051	386.9	0.207	5.79	105.3	1.9	0.36	0.1	0.00	0.11	0.02	50
1	59	16.36	16.35	33.222	24.301	363.2	0.240	5.93	105.9	1.8	0.37	0.1	0.00	0.14	0.05	59
1	69	15.93	15.92	33.220	24.398	354.3	0.276	5.93	105.0	1.8	0.35	0.1	0.00	0.13	0.05	«9
	75 ISL	15.67	15.66	33.243	.24.474	347.2	0.297	5.91	104.2	1.8	0.36	0.1	0.00	0.15	0.07	75
1	84	15.28	15.27	33.280	24.589	336.5	0.328	5.86	102.5	1.9	0.38	0.1	0.00	0.19	0.11	414
1	98	14.63	14.62	33.284	24.733	323.1	0.374	5.82	100.5	2.3	0.43	0.1	0.01	0.45	0.35	i>8
	100 ISL	14.53	14.52	33.288	24.757	320.8	0.381	5.80	99.9	2.4	0.44	0.2	0.03	0.45	0.35	100
1	118	13.55	13.53	33.341	25.002	297.9	0.436	5.60	94.6	3.5	0.57	2.3	0.16	0.30	0.36	11.8
	125 ISL	13.07	13.05	33.368	25.119	286.8	0.457	5.48	91.6	4.4	0.65	3.8	0.13	0.25	0.31	125
1	144	11.79	11.77	33.438	25.419	258.4	0.509	5.14	83.7	7.2	0.87	8.3	0.01	0.13	0.17	145
	150 ISL	11.46	11.44	33.441	25.483	252.5	0.524	5.08	82.1	7.9	0.93	9.3	0.01	0.11	0.15	151
1	174	10.39	10.37	33.471	25.696	232.5	0.582	4.79	75.7	11.5	1.15	12.8	0.01	0.05	0.09	175
	200 ISL	9.58	9.56	33.650	25.972	206.5	0.639	4.21	65.4	17.9	1.44	17.8	0.01	0.01	0.03	201
1	203	9.51	9.49	33.675	26.003	203.6	0.645	4.14	64.2	18.7	1.47	18.4	0.01	0.01	0.02	204
1	232	9.01	8.98	33.875	26.240	181.5	0.701	3.59	55.2	25.5	1.70	22.3	0.00			233
	250 ISL	8.71	8.68	33.945	26.342	172.1	0.733	3.39	51.8	29.0	1.80	24.0	0.00			251
1	272	8.36	8.33	33.997	26.437	163.3	0.770	3.20	48.5	32.9	1.91	25.6	0.00			273
	300 ISL	7.99	7.96	34.032	26.520	155.8	0.815	2.90	43.6	37.9	2.06	27.6	0.00			302
1	328	7.63	7.60	34.045	26.583	150.1	0.857	2.57	38.3	43.2	2.21	29.6	0.00			330
1	386	6.67	6.63	34.061	26.729	136.4	0.940	1.85	27.0	57.2	2.56	34.2	0.00			3K8
	400 ISL	6.50	6.46	34.068	26.757	133.8	0.959	1.70	24.7	60.2	2.63	35.1	0.00			41)2
1	451	6.02	5.98	34.099	26.843	125.9	1.026	1.21	17.4	70.0	2.84	37.8	0.00			454
	500 ISL	5.69	5.65	34.142	26.919	119.1	1.086	0.86	12.3	77.8	2.99	39.6	0.00			503
1	521	5.55	5.51	34.160	26.950	116.3	1.110	0.71	10.1	81.2	3.06	40.3	0.00			524

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 93 110

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
30 11.0 N	122 55.2 W	05/07/92	0535 UTC	3819 m	340 14 kn			1016.3 nb	19.9 C	17.8 C		

CAST	DEPTH -	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	20.36	20.36	33.599	23.600	428.2	0.000	5.33	103.0	2.0	0.34	0.2	0.00	0.07	0.01	0
1	1	20.36	20.36	33.599	23.600	428.2	0.004	5.33	103.0	2.0	0.34	0.2	0.00	0.07	0.01	1
	10 ISL	20.33	20.33	33.602	23.611	427.5	0.043	5.34	103.2	2.0	0.34	0.2	0.00	0.07	0.02	10
1	11	20.33	20.33	33.602	23.611	427.6	0.047	5.34	103.2	2.0	0.34	0.2	0.00	0.07	0.02	11
	20 ISL	19.19	19.19	33.528	23.850	405.1	0.085	5.50	104.0	2.0	0.33	0.2	0.00	0.07	0.01	20
1	21	19.06	19.06	33.522	23.879	402.4	0.089	5.52	104.1	2.0	0.33	0.2	0.00	0.07	0.01	21
	30 ISL	18.93	18.92	33.587	23.962	394.8	0.124	5.53	104.1	2.0	0.34	0.2	0.00	0.07	0.02	30
1	31	18.92	18.91	33.589	23.966	394.4	0.128	5.53	104.0	2.0	0.34	0.2	0.00	0.07	0.02	31
1	41	18.34	18.33	33.531	24.067	385.2	0.167	5.66	105.3	1.9	0.34	0.2	0.00	0.08	0.02	41
	50 ISL	17.62	17.61	33.492	24.213	371.5	0.201	5.81	106.6	1.9	0.34	0.2	0.00	0.09	0.02	50
1	51	17.54	17.53	33.492	24.232	369.7	0.205	5.82	106.6	1.9	0.34	0.2	0.00	0.09	0.02	51
1	61	17.11	17.10	33.607	24.423	351.8	0.241	5.82	105.8	2.0	0.32	0.2	0.00	0.11	0.03	61
1	71	16.19	16.18	33.479	24.538	341.0	0.276	5.85	104.3	2.0	0.37	0.2	0.00	0.15	0.05	71
	75 ISL	15.94	15.93	33.473	24.590	336.2	0.289	5.84	103.6	2.1	0.38	0.2	0.00	0.19	0.11	75
1	84	15.48	15.47	33.497	24.712	324.8	0.319	5.79	101.8	2.3	0.39	0.2	0.00			84
1	100	14.74	14.73	33.546	24.911	306.2	0.370	5.63	97.6	2.8	0.44	0.4	0.02	0.35	0.42	100
1	120	13.31	13.29	33.525	25.192	279.8	0.428	5.23	88.0	5.2	0.70	5.0	0.19	0.26	0.32	120
	125 ISL	12.91	12.89	33.527	25.274	272.1	0.442	5.15	85.9	5.9	0.76	6.1	0.17	0.23	0.28	125
1	144	11.51	11.49	33.550	25.558	245.2	0.491	4.88	79.0	8.9	0.97	10.1	0.02	0.11	0.14	145
	150 ISL	11.16	11.14	33.548	25.620	239.4	0.506	4.79	77.0	10.0	1.04	11.3	0.02	0.09	0.11	151
1	174	10.10	10.08	33.576	25.827	219.9	0.561	4.47	70.2	14.5	1.27	15.4	0.00	0.03	0.05	175
	200 ISL	9.49	9.47	33.762	26.074	196.8	0.615	4.26	66.1	18.7	1.41	18.1	0.00	0.01	0.04	201
1	204	9.43	9.41	33.795	26.109	193.5	0.623	4.23	65.6	19.4	1.43	18.4	0.00	0.01	0.04	205
1	233	8.94	8.91	33.955	26.314	174.6	0.676	4.03	61.8	25.0	1.57	20.9	0.00			234
	250 ISL	8.67	8.64	33.993	26.386	167.9	0.705	3.85	58.7	28.1	1.67	22.4	0.00			251
1	273	8.32	8.29	34.015	26.457	161.4	0.743	3.53	53.4	32.4	1.82	24.6	0.00			274
	300 ISL	7.97	7.94	34.048	26.535	154.3	0.786	2.95	44.3	38.7	2.06	27.5	0.00			302
1	328	7.64	7.61	34.075	26.605	148.0	0.828	2.34	34.9	45.2	2.30	30.4	0.00			330
1	387	7.05	7.01	34.110	26.716	138.0	0.912	1.63	24.0	55.5	2.61	34.1	0.00			389
	400 ISL	6.94	6.90	34.122	26.741	135.8	0.930	1.48	21.7	57.8	2.67	34.8	0.00			402
1	452	6.55	6.51	34.170	26.831	127.6	0.999	0.97	14.1	66.4	2.88	37.1	0.00			455
	500 ISL	6.20	6.16	34.203	26.903	121.2	1.058	0.72	10.4	73.3	3.00	38.7	0.00			503
1	522	6.04	5.99	34.218	26.936	118.3	1.085	0.60	8.6	76.5	3.06	39.4	0.00			525

RV DAVID STARR JORDAN CALCOFI CRUISE 9207 STATION 93 120

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
29 51.1 N	123 35.3 W	05/07/92	1104 UTC	4093 m	350 17 kn			1016.3 mb	20.8 C	17.2 C		

CAST	DEPTH -	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN «1/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
1	0	20.37	20.37	33.578	23.581	430.0	0.000	5.33	103.0	2.1	0.34	0.0	0.00	0.08	0.02	0
1	10	20.38	20.38	33.580	23.581	430.4	0.043	5.33	103.0	2.1	0.34	0.1	0.00	0.08	0.01	10
1	20	19.48	19.48	33.499	23.754	414.2	0.085	5.49	104.3	2.1	0.33	0.1	0.00	0.07	0.01	20
1	30	19.34	19.33	33.517	23.804	409.8	0.126	5.50	104.2	2.1	0.33	0.1	0.00	0.07	0.02	30
1	40	19.22	19.21	33.522	23.839	406.9	0.167	5.50	104.0	2.0	0.33	0.0	0.00	0.09	0.02	40
1	50	17.99	17.98	33.453	24.093	382.9	0.207	5.82	107.5	2.0	0.33	0.0	0.00	0.11	0.03	50
1	60	17.10	17.09	33.466	24.317	361.8	0.244	5.88	106.7	1.9	0.33	0.0	0.00	0.14	0.05	60
1	70	16.19	16.18	33.381	24.463	348.2	0.280	5.90	105.1	2.2	0.35	0.0	0.00	0.18	0.07	70
	75 ISL	15.84	15.83	33.387	24.547	340.3	0.297	5.87	103.9	2.2	0.36	0.0	0.00	0.20	0.08	75
1	84	15.19	15.18	33.415	24.712	324.7	0.327	5.82	101.7	2.3	0.39	0.0	0.00	0.24	0.15	84
1	98	13.76	13.75	33.395	25.000	297.5	0.370	5.53	93.8	3.7	0.56	1.6	0.09	0.39	0.47	98
	100 ISL	13.73	13.72	33.423	25.028	294.9	0.376	5.50	93.3	3.8	0.57	1.8	0.09	0.38	0.46	100
1	119	13.56	13.54	33.667	25.252	274.2	0.430	5.20	88.0	4.8	0.63	4.8	0.10	0.23	0.34	119
	125 ISL	13.01	12.99	33.634	25.337	266.1	0.446	5.10	85.3	5.9	0.72	6.3	0.08	0.19	0.29	125
1	144	11.05	11.03	33.491	25.595	241.5	0.495	4.78	76.6	10.2	1.06	11.6	0.01	0.07	0.16	145
	150 ISL	10.67	10.65	33.489	25.661	235.3	0.509	4.62	73.5	11.8	1.16	13.2	0.01	0.05	0.13	151
1	174	9.73	9.71	33.567	25.882	214.6	0.563	4.15	64.7	17.4	1.46	17.9	0.00	0.02	0.05	175
	200 ISL	9.40	9.38	33.765	26.091	195.2	0.616	4.38	67.8	18.5	1.39	17.6	0.00	0.00	0.02	201
1	204	9.38	9.36	33.798	26.120	192.5	0.624	4.42	68.4	18.6	1.37	17.5	0.00	0.00	0.02	205
1	233	8.88	8.86	33.946	26.316	174.3	0.677	4.02	61.6	24.7	1.58	20.9	0.00			234
	250 ISL	8.55	8.52	33.984	26.397	166.8	0.706	3.83	58.3	28.4	1.70	22.7	0.00			251
1	272	8.15	8.12	34.007	26.476	159.5	0.742	3.58	54.0	33.1	1.84	24.8	0.00			273
	300 ISL	7.78	7.75	34.027	26.547	153.1	0.786	3.21	48.0	38.3	2.01	26.9	0.00			302
1	327	7.46	7.43	34.038	26.601	148.2	0.826	2.81	41.7	43.4	2.17	28.8	0.00			329
1	386	6.65	6.61	34.072	26.740	135.3	0.910	1.85	27.0	57.9	2.59	33.8	0.00			388
	400 ISL	6.47	6.43	34.075	26.766	132.9	0.929	1.69	24.5	61.0	2.66	34.9	0.00			402
1	451	5.97	5.93	34.105	26.854	124.8	0.995	1.19	17.1	70.8	2.87	38.0	0.00			454
	500 ISL	5.91	5.87	34.200	26.937	117.6	1.054	0.69	9.9	77.1	3.05	39.4	0.00			503
1	520	5.88	5.83	34.239	26.972	114.6	1.077	0.48	6.9	79.7	3.12	40.0	0.00			523

PRIMARY PRODUCTIVITY CASTS

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 77 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
34 53.8 N	121 12.2 W	15/ 7/92	1933 UTC	24 m	02	1216 - 1950 PST	1211 PST	1946 PST	467.9 Hg C/a2

DEPTH m	TEMP DEG C	SALINITY PSS 78	SIGMA THETA	DISS O2 ml/1	OXY PCT	SIO3 UM/1	PO4 uM/1	NO3 uM/1	NO2 UM/1	CHL ug/1	PHAEO ug/1	LIGHT PCT	UPTAKE (Big C/a3) 1	2	MEAN	DARK
2	17.95	33.144	23.864	5.72	105.4	2.0	0.37	0.1	0.00	0.15	0.04	88. A	3.7	3.6	3.7	0.10
16	14.36	33.076	24.627	6.28	107.7	2.2	0.40	0.1	0.00	0.22	0.09	36.	5.5	5.9	5.7	0.11
28	12.70	33.128	25.003	5.96	98.8	5.0	0.68	3.6	0.14	0.85	0.57	17.	16.0	16.8	16.4	0.22
48	11.47	33.412	25.456	4.88	78.9	9.6	1.22	10.3	0.23	0.45	0.46	4.6	3.8	3.9	3.9	0.14
61	10.97	33.490	25.607	4.25	68.0	14.0	1.47	13.9	0.28	0.35	0.40	2.0	1.3	1.3	1.3	0.13
79	10.36	33.592	25.793	3.44	54.4	19.8	1.66	19.4	0.31	0.20	0.40					
99	10.13	33.706	25.922	3.19	50.2	22.6	1.77	21.4	0.14	0.12	0.34	0.18	0.03	0.03	0.03	0.09

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 77 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALL'E
33 43.4 N	123 37.9 W	14/ 7/92	1901 UTC	36 m	01	1216 - 1950 PST	1221 PST	1950 PST	189.9 ag C/a2

DEPTH m	TEMP DEG C	SALINITY PSS 78	SIGMA THETA	DISS O2 Hi/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL ug/1	PHAEO ug/1	LIGHT PCT	UPTAKE (ag C/a3) 1	2	MEAN	DARK
2	19.11	33.058	23.511	5.49	103.3	2.6	0.36	0.1	0.00	0.11	0.01	92. A	2.5	2.5	2.5	0.10
24	17.97	33.047	23.786	5.66	104.2	2.5	0.35	0.1	0.00	0.10	0.02	36.	2.2	2.3	2.2	0.14
62 B	15.42	33.076	24.400	6.02	105.5	2.5	0.36	0.1	0.00	0.15	0.06	7.1 B	2.0	2.1	2.1	0.09
71	15.00	33.100	24.510	5.99	104.1	2.5	0.35	0.1	0.00	0.18	0.08	4.8	0.98	1.1	1.1	0.06
91	14.08	33.118	24.720	5.95	101.5	2.7	0.39	0.1	0.00	0.23	0.17	2.1	0.60	0.68	0.64	0.04
105	12.68	33.065	24.960	5.77	95.5	3.7	0.54	1.3	0.04	0.23	0.21					
148	9.54	33.122	25.565	5.15	79.7	12.3	1.21	13.4	0.01	0.20 U	0.37 U	0.18	0.04	0.05	0.05	0.03

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 80 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33 29.3 N	122 31.4 W	13/ 7/92	1953 UTC	27 m	01	1236 - 1956 PST	1216 PST	1952 PST	155.6 Bg C/a2

DEPTH m	TEMP DEG C	SALINITY PSS 78	SIGMA THETA	DISS O2 Bl/1	OXY PCT	SIO3 UM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL ug/1	PHAEO ug/1	LIGHT PCT	UPTAKE (ag C/B3) 1	2	MEAN	DARK
3	19.27	33.103	23.505	5.50	103.9	2.2	0.35	0.1	0.00	0.10	0.03	84. A	2.3	2.5	2.4	0.13
20	18.61	33.138	23.698	5.57	103.9	2.2	0.35	0.1	0.00	0.12	0.03	32.	2.7	3.0	2.9	0.13
33	17.06	33.031	23.992	5.83	105.5	2.2	0.35	0.1	0.00	0.14	0.05	15.	2.2	2.5	2.4	0.20
57	15.67	32.964	24.259	5.94	104.5	2.2	0.36	0.1	0.00	0.17	0.06	3.9	1.1	1.1	1.1	0.09
71	13.93	32.963	24.630	6.11	103.8	2.5	0.41	0.1	0.00	0.29	0.12	1.8	0.62	0.62	0.62	0.05
96	12.08	33.026	25.044	5.66	92.5	5.1	0.69	4.0	0.11	0.36	0.29					
114	11.02	33.115	25.307	5.17	82.6	8.9	1.01	9.8	0.05	0.20	0.22	0.15	0.07	0.07	0.07	0.03

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 83 42

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
34 10.8 N	119 30.8 W	12/ 7/92	1838 UTC	22 m	04	1200 - 1947 PST	1205 PST	194 5 PST	852.5 Bg C/B2

DEPTH m	TEMP DEG C	SALINITY PSS 78	SIGMA THETA	DISS O2 Bl/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 UM/1	CHL ug/1	PHAEO ug/1	LIGHT PCT	UPTAKE (Bg C/B3) 1	2	MEAN	DARK
3	17.63	33.342	24.093	6.18	113.3	3.4	0.55	1.8	0.04	0.43	0.24	81. A	28.9	29.5	29.2	0.15
16	14.43	33.354	24.826	6.12	105.3	3.3	0.55	1.8	0.04	0.62	0.29	33.	26.2	23.9	25.1	0.14
25	13.06	33.354	25.107	5.99	100.2	4.4	0.63	2.7	0.08	0.71	0.39	17.	17.5	18.5	18.0	0.16
44	11.13	33.400	25.508	4.34	69.7	15.0	1.39	15.7	0.03	0.36	0.48	4.6	2.3	2.2	2.2	0.09
54	10.97	33.525	25.634	3.99	63.9	13.0	1.28	14.0	0.07	0.21	0.45	2.3	0.63	0.66	0.65	0.07
74	10.41	33.733	25.895	3.34	52.9	20.5	1.65	19.8	0.02	0.05	0.19					
90	10.34	33.785	25.948	3.12	49.4	21.9	1.74	20.8	0.05	0.04	0.14	0.19	0.02	0.01	0.01	0.05
104	10.37	33.835	25.982	2.99	47.3	22.9	1.79	21.6	0.03	0.04	0.12					

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 83 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33 14.9 N	121 26.2 W	11/ 7/92	1851 UTC	28 n	01	1210 - 1944 PST	1210 PST	1944 PST	228.4 ag C/a2

DEPTH m	TEMP DEG C	SALINITY PSS 78	SIGMA THETA	DISS O2 ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL ug/1	PHAEO ug/1	LIGHT PCT	UPTAKE (ag C/a3) 1	2	MEAN	DARK
2	18.83	33.085	23.602	5.63	105.4	2.4	0.37	0.1	0.00	0.13	0.02	90. A	3.2	3.3	3.3	0.09
19	17.42	33.128	23.980	5.70	103.9	2.3	0.37	0.1	0.00	0.13	0.03	35.	3.6	3.7	3.6	0.14
33	17.18	33.128	24.038	5.76	104.5	2.0	0.38	0.1	0.00	0.16	0.03	16.	3.4	3.6	3.5	0.13
56	14.15	33.038	24.642	6.07	103.6	2.4	0.41	0.1	0.00	0.20	0.08	4.6	1.5	1.6	1.6	0.07
71	12.82	33.046	24.917	5.99	99.5	3.7	0.54	1.0	0.05	0.41	0.20	2.0	1.4	1.4	1.4	0.06
81	11.89	33.080	25.121	5.50	89.6	6.0	0.81	5.9	0.11	0.40	0.27					
115	10.47	33.364	25.597	4.43	70.1	13.5	1.34	15.2	0.02	0.12	0.08	0.18	0.07	0.06	0.07	0.04

A) INCUBATION LIGHT INTENSITIES WERE 95, 35, 17, 4.6, 2.1 AND 0.18 PERCENT RESPECTIVELY.
B) INTENDED SAMPLING DEPTH WAS 42M.

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 83 110

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
31 55.8 N	124 9.4 W	10/ 7/92	1932 UTC	35 a	01	1225 - 1950 PST	1222 PST	1947 PST	139.4 ag C/a2

DEPTH	TEMP	SALINITY	SIGMA	DISS O2	OXY	SIO3	PO4	NO3	NO2	CHL	PHAEO	LIGHT	UPTAKE <ag C/B3)			
-	DEC C	PSS 78	THETA	a0/1	PCT	uM/1	UM/1	UM/1	UM/1	ug/1	ug/1	PCT	1	2	MEAN	DARK
4	19.43	33.197	23.536	5.43	102.9	2.1	0.38	0.1	0.00	0.08	0.02	84. A	1.3	1.2	1.3	0.09
23	19.10	33.195	23.619	5.47	103.0	2.1	0.37	0.1	0.00	0.09	0.01	36.	2.1	2.0	2.1	0.12
41	18.29	33.230	23.849	5.62	104.2	2.0	0.35	0.1	0.00	0.10	0.02	17.	1.5	1.5	1.5	0.13
70	16.56	33.433	24.418	5.91	106.1	2.0	0.33	0.1	0.00	0.15	0.05	4.6	0.79	0.84	0.82	0.09
90	15.68	33.496	24.667	5.82	102.7	2.0	0.34	0.1	0.00	0.25	0.12	1.9	0.64	0.72	0.68	0.06
105	14.89	33.552	24.884	5.69	98.9	2.4	0.39	0.1	0.01	0.30	0.28					
145	10.84	33.279	25.467	5.24	83.5	8.4	0.94	9.6	0.01	0.10	0.12	0.17	0.07	0.08	0.08	0.05

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 87 40

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33 40.7 N	118 59.5 W	8/ 7/92	1924 UTC	23 -	03	1209 - 1945 PST	1201 PST	1940 PST	465.8 ag C/»2

DEPTH	TEMP	SALINITY	SIGMA	DISS O2	OXY	SIO3	PO4	NO3	NO2	CHL	PHAEO	LIGHT	UPTAKE (ag C/a3)			
-	DEG C	PSS 78	THETA	Ml/1	PCT	uM/1	uM/1	UM/1	uM/1	ug/1	ug/1	PCT	1	2	MEAN	DARK
1	18.67	33.325	23.825	5.77	107.9	1.6	0.37	0.1	0.00	0.18	0.06	94. A	5.1	5.4	5.2	0.14
16	17.27	33.401	24.225	5.88	107.1	1.6	0.36	0.1	0.00	0.27	0.10	34.	9.9	10.1	10.0	0.15
27	15.10	33.409	24.726	6.08	106.1	2.8	0.46	0.3	0.03	0.51	0.21	16.	11.9	12.6	12.2	0.17
46	11.67	33.387	25.400	4.55	73.9	11.0	1.18	11.4	0.22	0.66	0.50	4.6	5.5	5.9	5.7	0.08
57	10.92	33.471	25.601	4.14	66.2	14.3	1.37	15.3	0.06	0.33	0.35	2.2	0.89	0.95	0.92	0.05
75	10.49	33.582	25.763	3.75	59.4	17.5	1.54	18.1	0.03	0.14	0.26					
95	10.08	33.725	25.945	3.33	52.4	21.3	1.72	20.8	0.02	0.07	0.17	0.18	0.03	0.03	0.03	0.04

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 87 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32 19.6 N	121 43.1 W	9/ 7/92	1921 UTC	28 -	01	1212 - 1955 PST	1212 PST	1947 PST	242.0 ag C/a2

DEPTH	TEMP	SALINITY	SIGMA	DISS O2	OXY	SIO3	PO4	NO3	NO2	CHL	PHAEO	LIGHT	UPTAKE (ag C/a3)			
-	DEG C	PSS 78	THETA	al/1	PCT	uM/1	uM/1	UM/1	UM/1	ug/1	ug/1	PCT	1	2	MEAN	DARK
3	18.90	33.213	23.682	5.51	103.4	2.3	0.37	0.1	0.00	0.10	0.02	85. A	1.8	1.8	1.8	0.10
19	18.41	33.206	23.800	5.57	103.5	2.2	0.37	0.1	0.00	0.13	0.03	35.	4.0	4.1	4.0	0.15
32	17.18	33.155	24.058	5.81	105.4	2.2	0.37	0.1	0.00	0.19	0.05	17.	3.9	4.1	4.0	0.18
55	15.34	33.141	24.468	6.03	105.5	2.5	0.40	0.1	0.00	0.29	0.12	4.9	2.6	2.6	2.6	0.08
69	13.92	33.073	24.717	6.11	103.8	2.7	0.45	0.1	0.00	0.37	0.18	2.3	1.4	1.4	1.4	0.07
79	12.33	33.143	25.087	5.52	90.8	5.8	0.81	5.6	0.15	0.42	0.28					
115	10.01	33.300	25.625	4.57	71.5	14.2	1.44	16.2	0.03	0.12	0.15	0.18	0.09	0.08	0.09	0.04

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 90 38

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33 10.0 N	118 25.2 W	7/ 7/92	1956 UTC	18 -	03	1228 - 1935 PST	1158 PST	1934 PST	332.8 ag C/a2

DEPTH	TEMP	SALINITY	SIGMA	DISS O2	OXY	SIO3	PO4	NO3	NO2	CBL	PHAEO	LIGHT	UPTAKE (ag C/a3)			
a	DEG C	PSS 78	THETA	al/1	PCT	uM/1	uM/1	UM/1	uM/1	ug/1	ug/1	PCT	1	2	MEAN	DARK
3	19.09	33.369	23.754	5.80	109.3	1.7	0.38	0.2	0.00	0.28	0.06	77. A	9.8	10.2	10.0	0.19
13	17.88	33.339	24.031	6.07	111.8	1.7	0.34	0.2	0.00	0.43	0.12	33.	8.1	8.1	8.1	0.17
21	14.67	33.320	24.749	6.32	109.2	1.7	0.41	0.1	0.00	0.65	0.14	17.	5.6	5.8	5.7	0.24
37	12.44	33.405	25.268	5.60	92.5	3.9	0.75	4.1	0.13	2.93	1.46	4.3	6.6	7.2	6.9	0.26
45	12.09	33.433	25.357	5.00	82.0	6.9	0.98	7.8	0.20	2.13	1.32	2.2	1.4	1.5	1.5	0.19
60	11.34	33.523	25.566	4.03	65.0	13.6	1.35	14.7	0.12	0.60	0.85					
75	10.54	33.559	25.736	3.94	62.5	16.3	1.46	17.0	0.06	0.37	0.61	0.17	0.01	0.01	0.01	0.05

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 90 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
31 45.1 N	121 18.8 N	6/ 7/92	1920 UTC	24 a	01	1205 - 1945 PST	1210 PST	1940 PST	132.9 ag C/a2

DEPTH	TEMP	SALINITY	SIGMA	DISS O2	OXY	SIO3	PO4	NO3	NO2	CHL	PHAEO	LIGHT	UPTAKE (ag C/a3)			
-	DEG C	PSS 78	THETA	al/1	PCT	UM/1	UM/1	UM/1	UM/1	ug/1	ug/1	PCT	1	2	MEAN	DARK
2	18.87	33.183	23.667	5.49	102.9	2.2	0.38	0.1	0.00	0.09	0.02	88. A	2.1	1.9	2.0	0.13
17	18.81	33.183	23.683	5.50	103.0	2.2	0.39	0.1	0.00	0.09	0.02	34.	3.1	3.0	3.1	0.10
29	17.11	33.130	24.056	5.83	105.6	2.1	0.38	0.1	0.00	0.09	0.03	16.	2.2	2.2	2.2	0.15
47	15.93	33.112	24.314	5.93	105.0	2.2	0.38	0.1	0.00	0.14	0.04	4.9	1.4	1.3	1.3	0.11
59	14.42	33.049	24.595	6.10	104.7	2.5	0.43	0.1	0.00	0.19	0.10	2.3	0.70	0.63	0.66	0.09
81	12.49	33.087	25.013	5.73	94.5	4.8	0.67	3.2	0.23	0.35	0.30					
99	10.83	33.061	25.298	5.40	85.9	7.7	0.94	8.6	0.07	0.21	0.23	0.18	0.13	0.11	0.12	0.03

A) INCUBATION LIGHT INTENSITIES WERE 95, 35, 17, 4.6, 2.1 AND 0.18 PERCENT RESPECTIVELY.

PRIMARY PRODUCTIVITY CASTS

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 90 121

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
30 23.5 N	124 3.3 N	5/ 7/92	1955 UTC	32 m	01	1236 - 1950 PST	1221 PST	1945 PST	94.7 ng C/»2

DEPTH m	TEMP DEG C	SALINITY PSS 78	SIGMA THETA	DISS O2 nl/1	OXY PCT	SIO3 UM/1	PO4 uM/1	NO3 uM/1	NO2 UM/1	CHL ug/1	PHAEO ug/1	LIGHT PCT	UPTAKE (»g C/«3) 1	2	MEAN	DARK
4	19.52	33.301	23.592	5.45	103.5	2.1	0.37	0.1	0.00	0.06	0.01	83. A	1.4	1.3	1.4	0.10
22	18.97	33.319	23.747	5.52	103.8	2.1	0.34	0.1	0.00	0.07	0.02	35.	1.7	1.7	1.7	0.09
37	18.29	33.324	23.920	5.60	103.9	2.1	0.34	0.1	0.00	0.07	0.02	17.	1.1	1.2	1.1	0.13
64	15.93	33.233	24.408	5.93	105.0	2.1	0.34	0.1	0.00	0.09	0.03	4.6	0.52	0.61	0.56	0.12
80	15.68	33.287	24.506	5.90	104.0	2.1	0.34	0.1	0.00	0.12	0.04	2.2	0.32	0.30	0.31	0.09
113	13.74	33.352	24.971	5.66	96.0	3.3	0.48	1.3	0.00	0.32	0.26					
129	12.92	33.336	25.124	5.51	91.8	4.5	0.62	3.9	0.12	0.24	0.24	0.21	0.13	0.12	0.13	0.03

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 93 26.7

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32 57.5 N	117 18.4 W	2/ 7/92	1915 UTC	12 n	05	1153 - 1932 PST	1153 PST	1928 PST	1398.4 *mg C/mi*

DEPTH *m*	TEMP DEG C	SALINITY PSS 78	SIGMA THETA	DISS O2 «1/1	OXY PCT	SIO3 UM/1	PO4 uM/1	NO3 UM/1	NO2 UM/1	CHL ug/1	PHAEO ug/1	LIGHT PCT	UPTAKE <«g C/B3) 1	2	MEAN	DARK
3	19.32	33.422	23.735	6.19	117.2	3.1	0.33	0.1	0.00	0.55	0.13	68. A	27.1	26.8	26.9	0.5!'.i
9	13.10	33.295	25.053	7.20	120.5	3.1	0.39	0.1	0.00	0.82	0.24	32.	30.8	34.2	32.5	0.77
15	12.27	33.305	25.223	7.29	119.9	2.8	0.37	0.1	0.01	4.87	1.46	15.	85.5	93.9	89.7	1.7
25	11.38	33.531	25.564	3.88	62.7	13.9	1.37	13.8	0.49	2.99	1.10	4.1	27.2	29.0	28.1	0.2»
30	11.28	33.535	25.586	3.86	62.2	14.4	1.41	14.6	0.46	2.18	1.01	2.2	9.9	9.8	9.8	0.24
39	10.86	33.625	25.731	3.49	55.8	17.4	1.59	17.4	0.31	0.67	0.46					
48	10.75	33.675	25.790	3.35	53.4	18.3	1.63	18.2	0.32	0.50	0.31	0.22	0.09	0.11	0.10	0.15
62	10.61	33.724	25.853	3.19	50.7	20.1	1.72	19.0	0.26	0.51	0.46					

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 93 50

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32 12.4 N	118 54.6 W	3/ 7/92	1918 UTC	22 m	02	1200 - 1937 PST	1200 PST	1936 PST	309.3 «g C/«2

DEPTH *m*	TEMP DEG C	SALINITY PSS 78	SIGMA THETA	DISS O2 «1/1	OXY PCT	SIO3 uM/1	PO4 UM/1	NO3 UM/1	NO2 uM/1	CHL ug/1	PHAEO ug/1	LIGHT PCT	UPTAKE (»g C/»3) 1	2	MEAN	DARK
2	18.16	33.301	23.933	5.57	103.1	1.6	0.41	0.0	0.00	0.11	0.03	87. A	2.6	2.6	2.6	0.12
16	17.24	33.238	24.107	5.77	104.9	1.6	0.37	0.0	0.00	0.14	0.03	33.	3.9	5.5	4.7	0.13
25	14.58	33.142	24.631	6.09	104.9	2.6	0.45	0.0	0.00	0.21	0.07	17.	4.3	4.7	4.5	0.14
43	13.51	33.296	24.973	5.90	99.6	2.8	0.60	0.9	0.05	0.74	0.40	5.0	7.8	8.5	8.2	0.12
54	12.97	33.296	25.081	5.60	93.4	5.1	0.75	3.4	0.12	0.47	0.34	2.3	2.0	2.2	2.1	0.07
74	11.12	33.183	25.341	5.07	81.3	9.2	1.03	10.0	0.14	0.18	0.20					
92	10.11	33.367	25.661	4.60	72.2	13.5	1.29	14.8	0.02	0.01	0.02	0.16	0.05	0.03	0.04	0.02

RV DAVID STARR JORDAN — CALCOFI CRUISE 9207 — STATION 93 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
30 50.8 N	121 36.4 W	4/ 7/92	1905 UTC	29 m	01	1206 - 1953 PST	1210 PST	1943 PST	118.6 Bg C/»2

DEPTH m	TEMP DEG C	SALINITY PSS 78	SIGMA THETA	DISS O2 ml/1	OXY PCT	SIO3 uM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL ug/1	PHAEO Ug/1	LIGHT PCT	UPTAKE (»g C/m3) 1	2	MEAN	DARK
4	19.34	33.187	23.551	5.45	103.1	2.1	0.37	0.1	0.00			81. A	1.6	1.6	1.6	0.07
20	17.97	33.158	23.871	5.66	104.3	2.1	0.36	0.1	0.00	0.08	0.02	35.	2.2	2.4	2.3	0.10
34	17.83	33.167	23.912	5.70	104.8	2.0	0.36	0.1	0.00	0.08	0.02	17.	1.7	1.9	1.8	0.12
58	17.52	33.138	23.966	5.71	104.3	2.1	0.37	0.1	0.00	0.11	0.03	4.6	0.80	0.93	0.86	0.11
73	16.64	33.187	24.211	5.84	104.9	2.0	0.37	0.1	0.00	0.13	0.05	2.1	0.39	0.36	0.38	0.10
95	15.19	33.277	24.606	5.91	103.2	2.1	0.37	0.1	0.00	0.28	0.15					
120	13.84	33.305	24.915	5.70	96.8	3.2	0.49	1.1	0.09	0.30	0.26	0.17	0.10	0.08	0.09	0.03

A) INCUBATION LIGHT INTENSITIES WERE 95, 35, 17, 4.6, 2.1 AND 0.18 PERCENT RESPECTIVELY.

MACROZOOPLANKTON BIOMASS
Net Mesh Size: 0.505 mm

Line	Sia.	Position		Dale Mo/Day	Time(PST) Start	End	Water Volume Strained (m)	Max. Tow Depth (m)	Volume per 1000 m Total (cm)	Strained Small (cm)
77	49	35 05.3N	120 46.6W	7/15	1714	1721	147	60	286	286
77	51	35 01.3N	120 55.1W	7/15	1517	1539	447	206	143	143
77	55	34 53.3N	121 11.9W	7/15	1217	1239	438	212	105	105
77	60	34 43.3N	121 32.9W	7/15	0736	0758	431	215	98	98
77	70	34 23.2N	122 14.9W	7/15	0055	0117	450	212	58	58
77	80	33 03.5N	122 56.4W	7/14	1905	1927	439	211	50	50
77	90	33 43.3N	123 38.0W	7/14	1343	1405	437	213	73	46
77	100	33 23.3N	124 19.4W	7/14	0624	0646	436	211	37	37
80	51	34 27.0N	120 31.4W	7/12	1849	1856	135	63	379	379
80	55	34 19.0N	120 48.0W	7/12	2147	2209	462	203	197	197
80	60	34 09.IN	121 09.0W	7/13	0133	0155	362	211	75	75
80	70	33 49.0N	121 50.6W	7/13	0650	0712	430	209	79	79
80	80	33 29.2N	122 31.6W	7/13	1318	1340	425	212	42	42
80	90	33 09.0N	123 13.3W	7/13	1919	1941	435	215	37	37
80	100	32 49. IN	123 54.4W	7/14	0049	0111	424	214	50	50
82	47	34 16.6N	120 01.5W	7/12	1448	1510	412	213	213	213
83	40.6	34 13.5N	119 24.7W	7/12	0531	0534	52	21	18810	96
83	42	34 10.7N	119 30.5W	7/12	0337	0347	192	91	229	229
83	51	33 52.7N	120 08.0W	7/11	2225	2234	174	83	161	161
83	55	33 44.7N	120 24.6W	7/11	1935	1957	435	214	198	198
83	60	33 34.7N	120 45.3W	7/11	1600	1622	435	214	39	39
83	70	33 15.0N	121 26.3W	7/11	0904	0926	413	216	44	44
83	80	32 54.7N	122 07.7W	7/11	0336	0358	435	210	92	92
83	90	32 34.6N	122 48.7W	7/10	2207	2229	431	214	88	88
83	100	32 14.7N	123 29.4W	7/10	1700	1722	446	209	27	27
83	110	31 54.6N	124 10.1W	7/10	1047	1109	446	211	22	22
87	33	33 53.4N	118 29.4W	7/08	0408	0413	88	42	830	830
87	35	33 49.4N	118 37.7W	7/08	0615	0637	420	209	83	83
87	40	33 39.4N	118 58.6W	7/08	1003	1025	418	211	69	69
87	45	33 29.5N	119 19.1W	7/08	1456	1518	420	212	60	60
87	50	33 19.4N	119 39.8W	7/08	1805	1812	124	56	233	233
87	55	33 09.4N	120 00.4W	7/08	2103	2125	415	212	65	65
87	60	32 59.4N	120 20.9 W	7A)9	0100	0122	426	208	99	99
87	70	32 39.3N	121 02.0W	7/09	0634	0656	433	211	85	85
87	80	32 19.4N	121 42.9W -	7/09	1244	1306	436	212	57	57
87	90	31 59. IN	122 23.4W	7/09	1839	1901	426	209	80	80
87	100	31 39.3N	123 04.2W	7/09	2356	0018	427	212	66	66
87	110	31 19.4N	123 44.5W	7/10	0515	0537	443	220	47	47
90	28	33 29. IN	117 46.2W	7/07	2220	2242	418	219	136	136
90	30	33 25.2N	117 54.3W	7/07	2030	2052	442	217	154	154
90	35	33 15.0N	118 15.0W	7/07	1645	1707	426	214	122	122
90	37	33 10.0N	118 25.3W	7/07	1335	1357	421	211	43	43
90	45	32 55.0N	118 56.0W	7/07	0822	0844	396	219	124	124
90	53	32 38.9N	119 28.9W	7/07	0338	0400	430	214	102	102
90	60	32 25. IN	119 57.7W	7/06	2310	2331	395	219	109	109
90	70	32 05. IN	120 38.3W	7/06	1745	1807	420	217	38	38
90	80	31 45.1N	121 19.1W	7/06	1200	1222	460	209	28	28
90	90	31 25.0N	121 59.4W	7/06	0538	0601	454	222	15	15
90	100	31 05. IN	122 39.9W	7/05	2354	0016	430	208	44	44
90	110	30 45.0N	123 19.9W	7/05	1811	1833	444	215	14	14
90	120	30 25. IN	123 59.9W	7/05	0928	0950	463	197	11	11
93	26.7	32 57.5N	117 18.2W	7/02	1243	1249	119	49	169	169
93	28	32 54.IN	117 23.5W	7/02	1640	1702	443	213	36	36
93	30	32 50.8N	117 31.9W	7/02	1900	1922	425	217	45	45
93	35	32 40.8N	117 52.5W	7/02	2240	2302	417	218	86	86
93	40	32 30.8N	118 12.9W	7/03	0306	0328	404	217	91	91
93	45	32 20.7N	118 33.3W	7/03	0639	0701	409	216	81	81
93	50	32 10.9N	118 53.6W	7/03	1011	1033	428	214	49	49
93	55	32 00.8N	119 14.0W	7/03	1453	1515	418	212	112	112
93	60	31 50.8N	119 34.4W	7/03	1830	1852	416	212	29	29
93	70	31 30.9N	120 14.8W	7/04	0002	0024	424	214	68	68
93	80	31 10.8N	120 55.2W	7/04	0526	0548	440	208	27	27
93	90	30 50.8N	121 35.4W	7/04	1130	1152	427	208	19	19
93	100	30 30.9N	122 15.5W	7/04	1655	1717	445	212	22	22
93	110	30 10.9N	122 55.3W	7/04	2215	2237	443	219	29	29
93	120	29 50.9N	123 35.2W	7/05	0347	0409	455	216	31	31

FIGURES

Cruise 9210

1. CalCOFI Cruise 9210, track and station positions.

2. Horizontal distribution of dynamic height anomaly (0 over 500 m). In areas shallower than 500 m, the dynamic heights were extrapolated on the basis of the offshore deeper steric height as described in Reid and Mantyla (1976).

3. Horizontal distributions at 10 meters: A) chlorophyll-a; B) potential density; C) temperature; and D) salinity.

4. Horizontal distributions at 200 meters: A) dynamic height anomaly (200 over 500 m); B) potential density; C) temperature; and D) salinity.

5. Sections along CalCOFI line 90 (vertical exaggeration, 1000): A) potential density; B) temperature; C) salinity; D) silicate; E) nitrate; F) phosphate; G) chlorophyll-a; H) oxygen saturation; I) oxygen; J) nitrite; and K) phaeopigments.

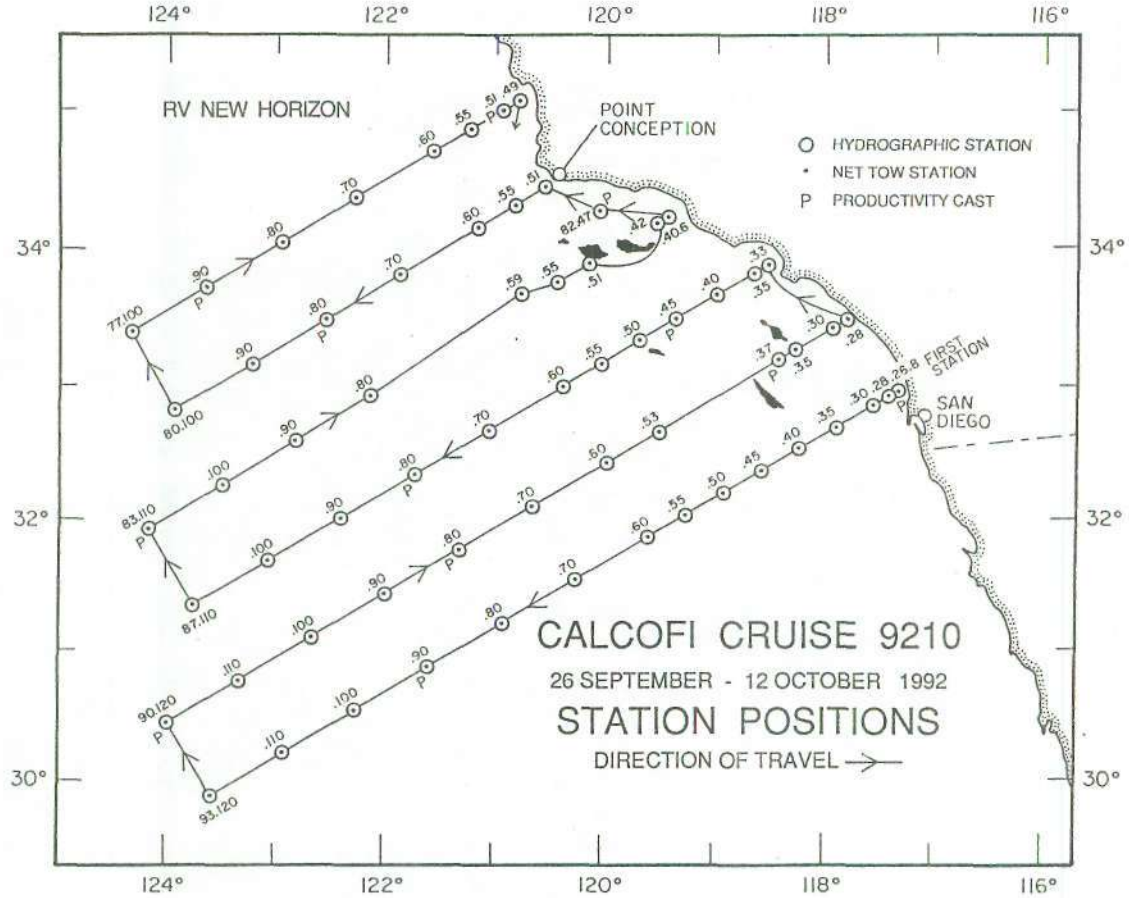

FIGURE 1

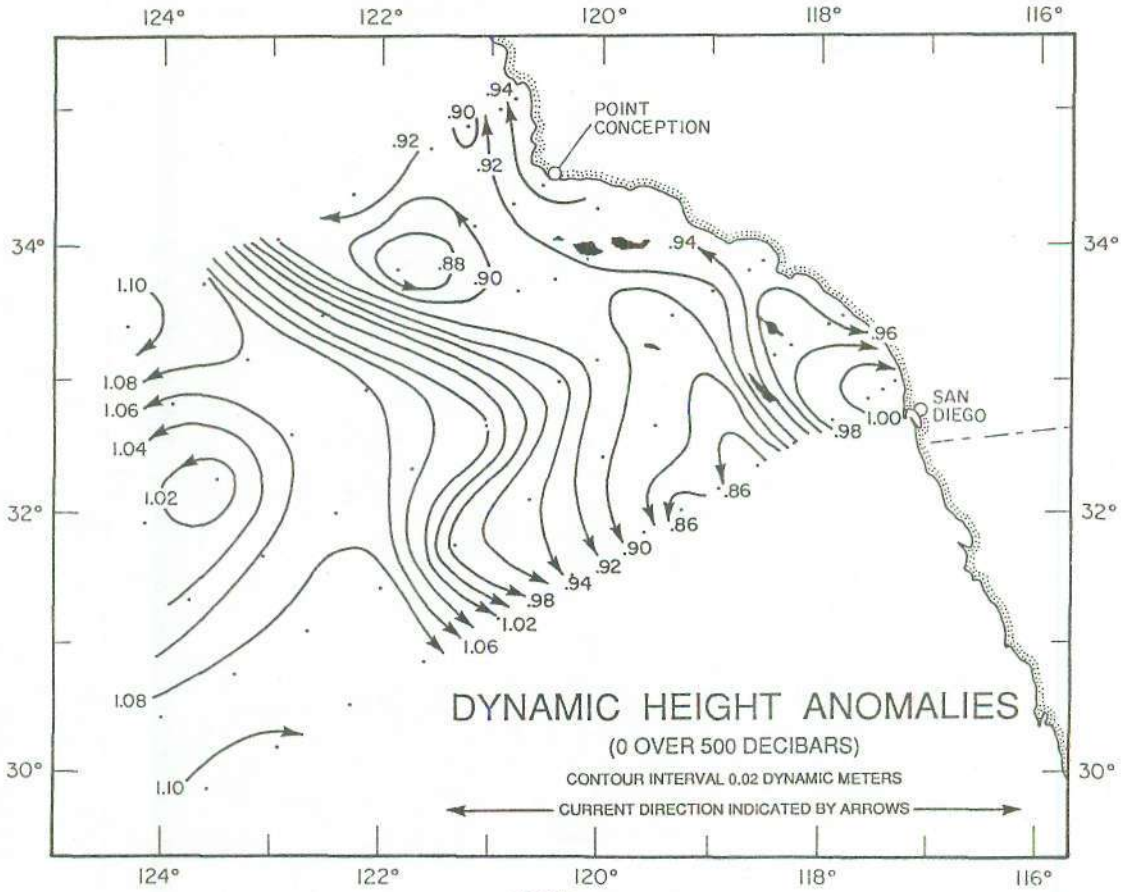

FIGURE 2

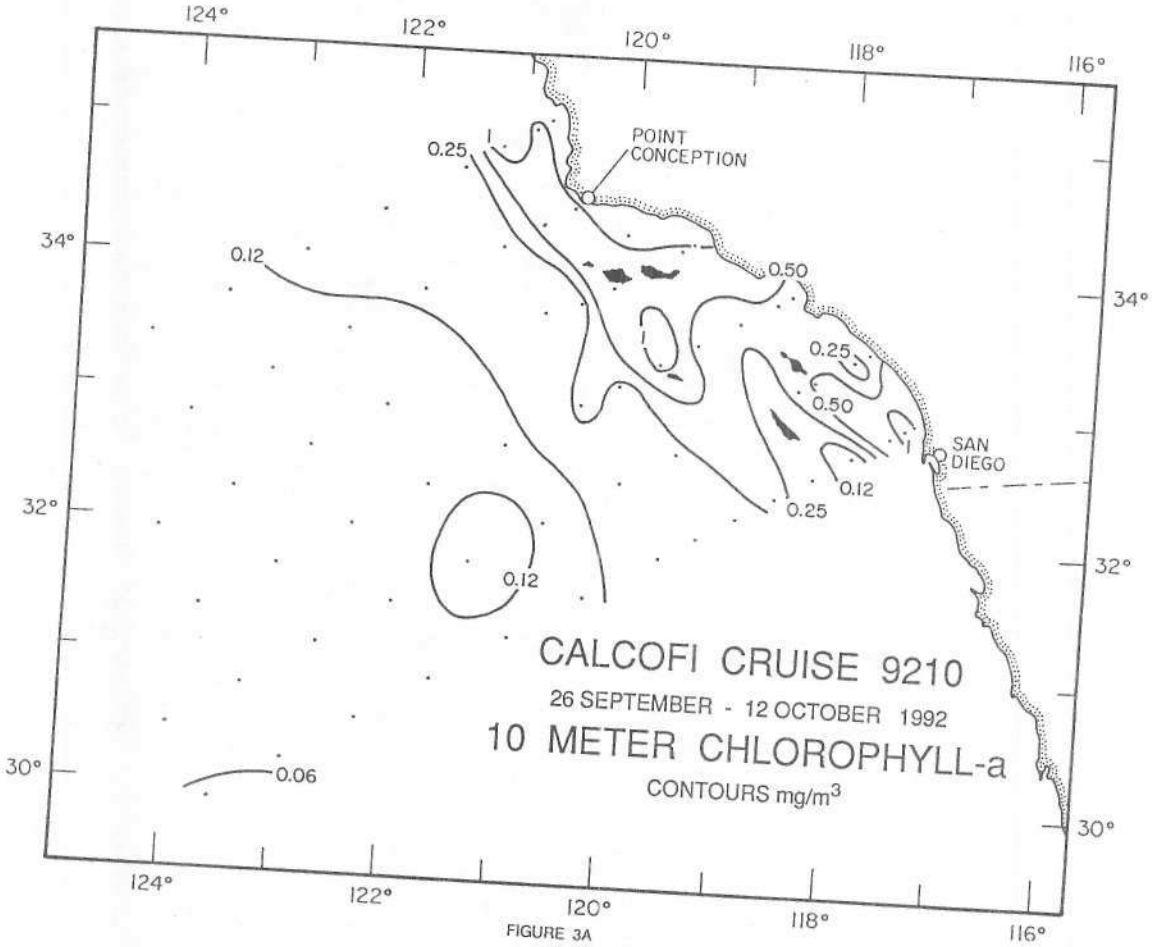

FIGURE 3A

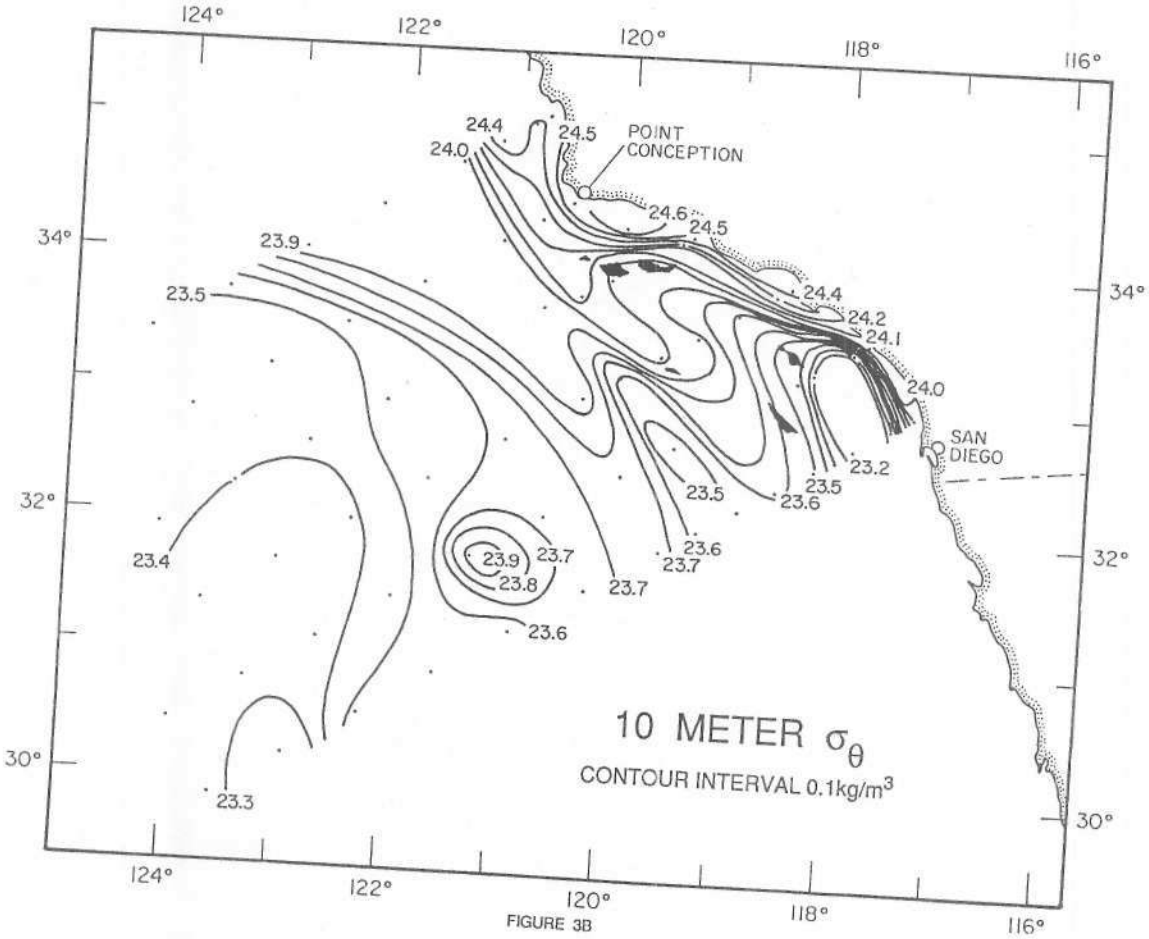

FIGURE 3B

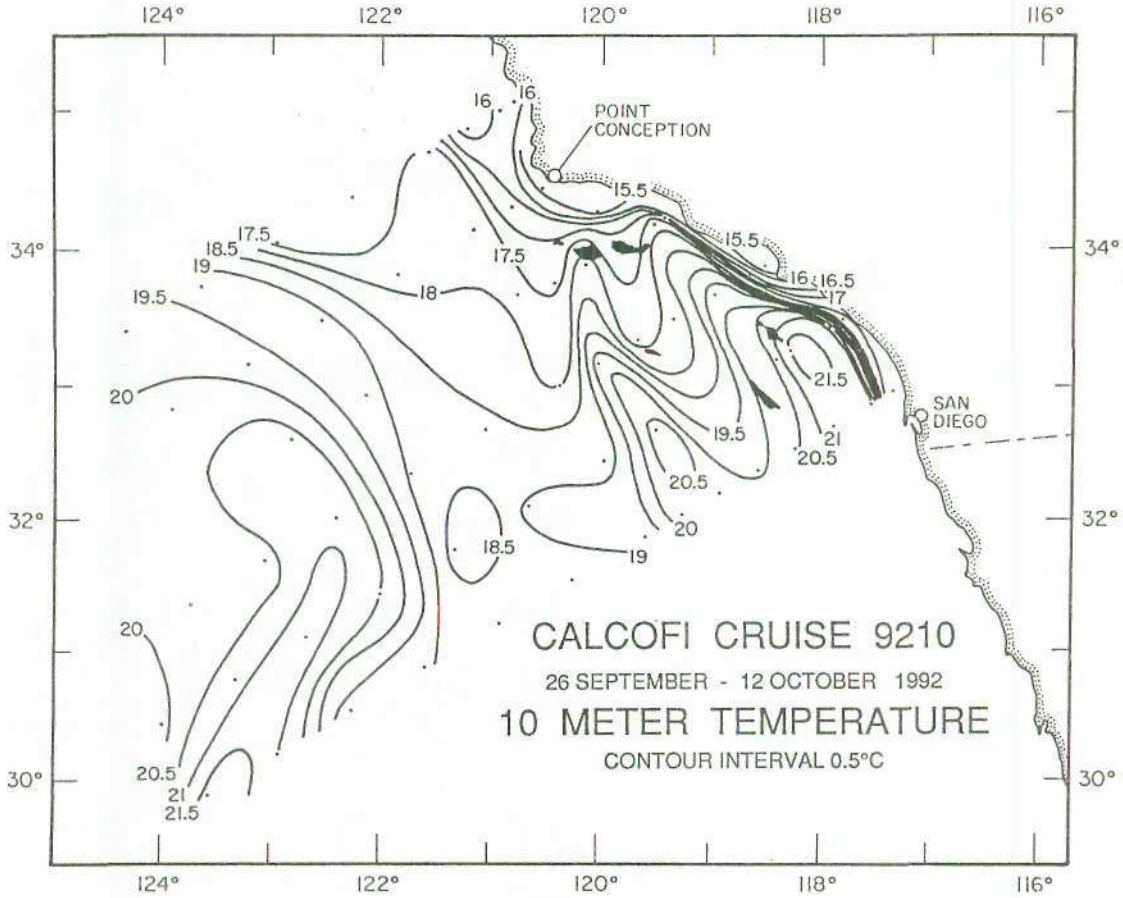

FIGURE 3C

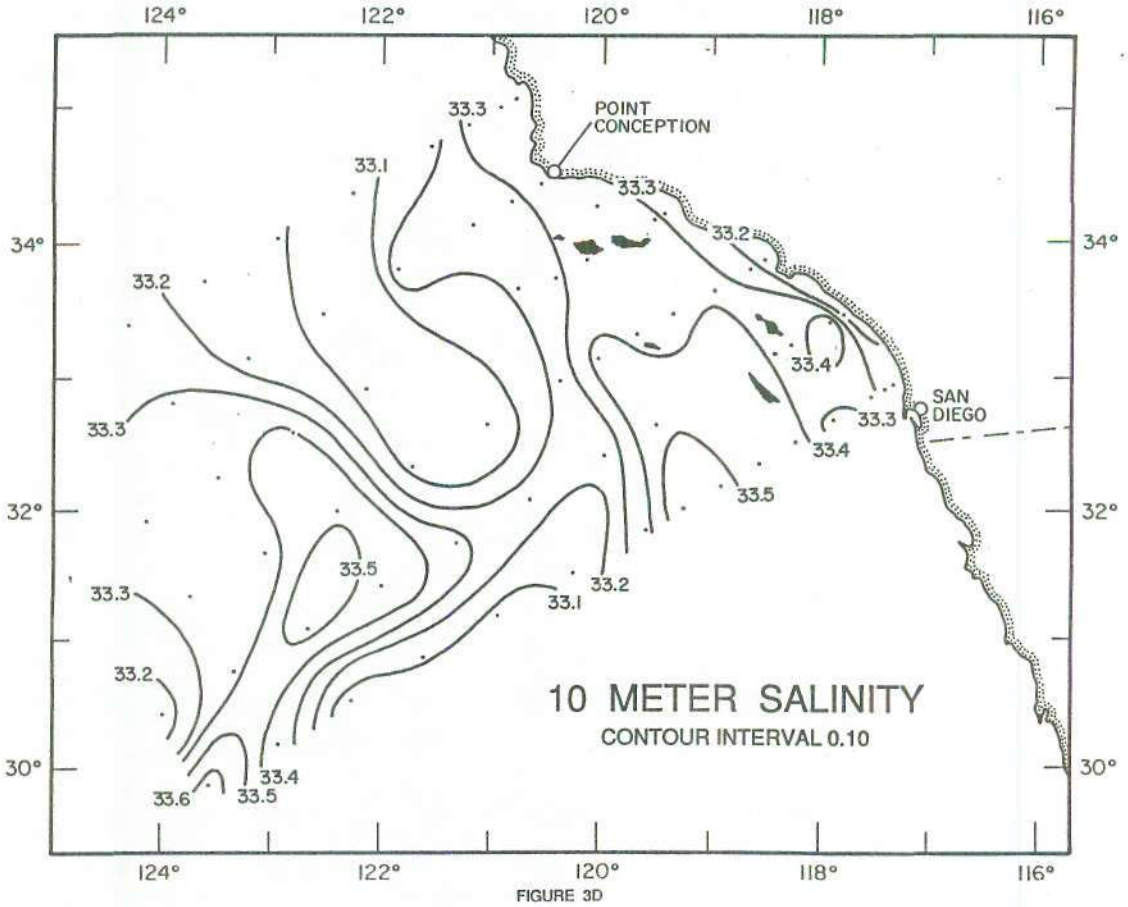

FIGURE 3D

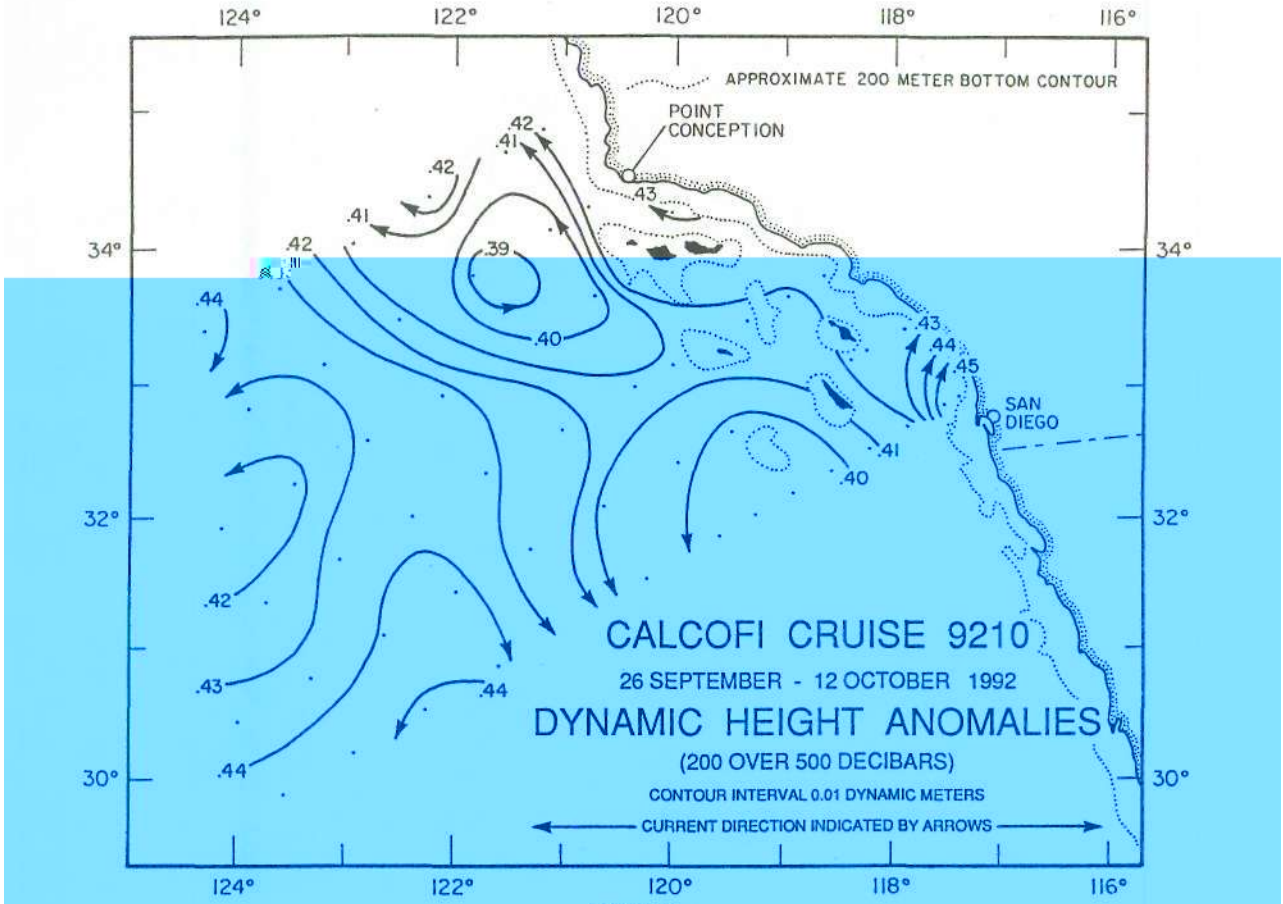

FIGURE 4A

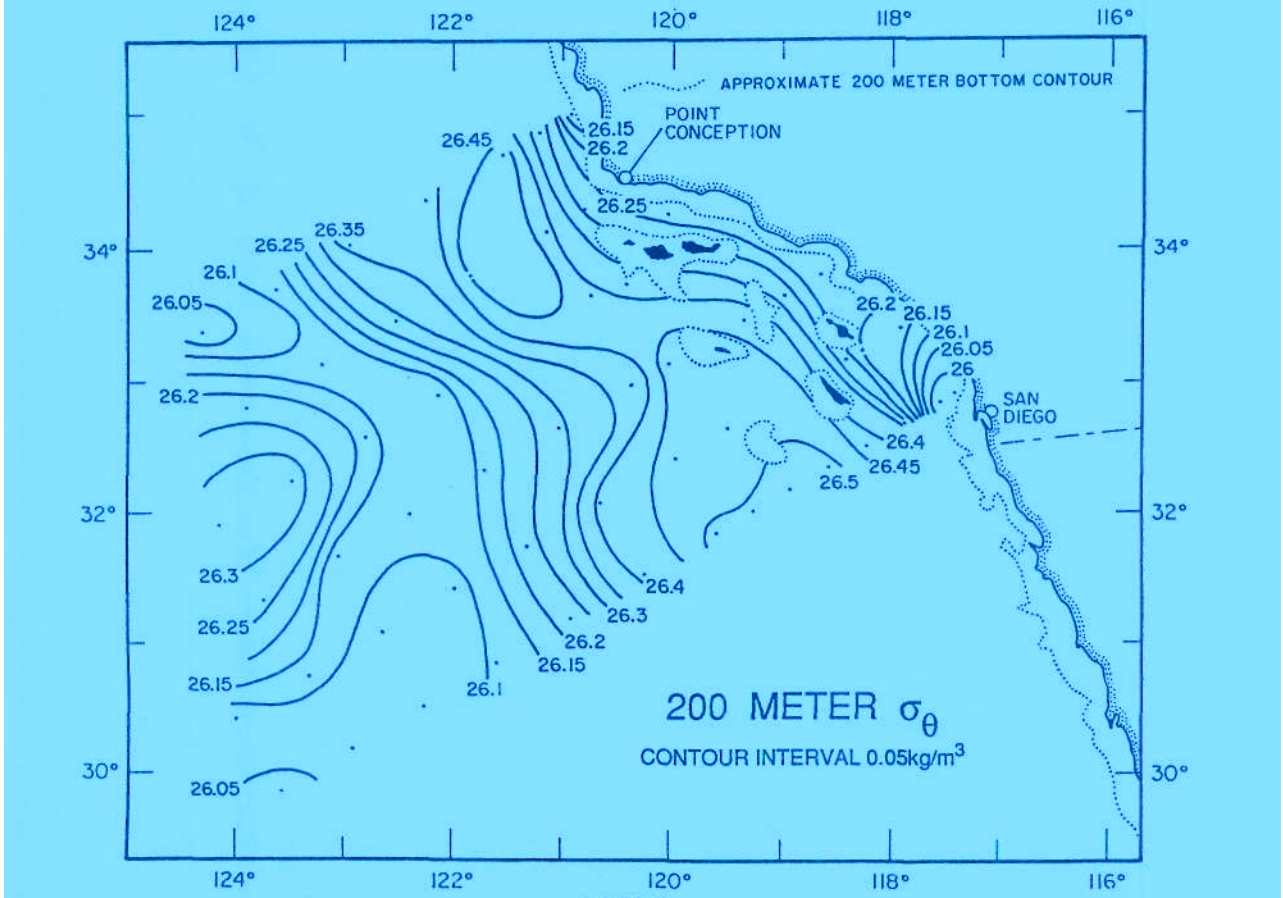

FIGURE 4B

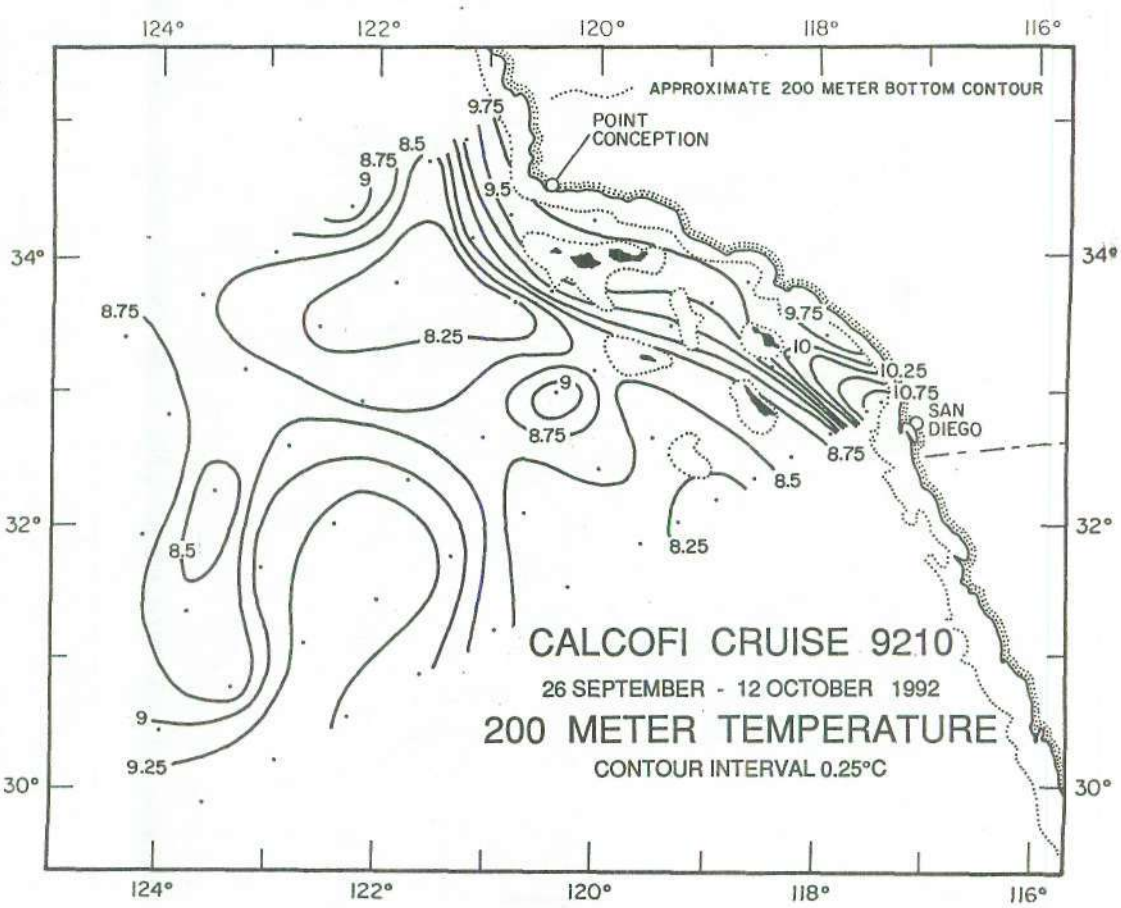

FIGURE 4C

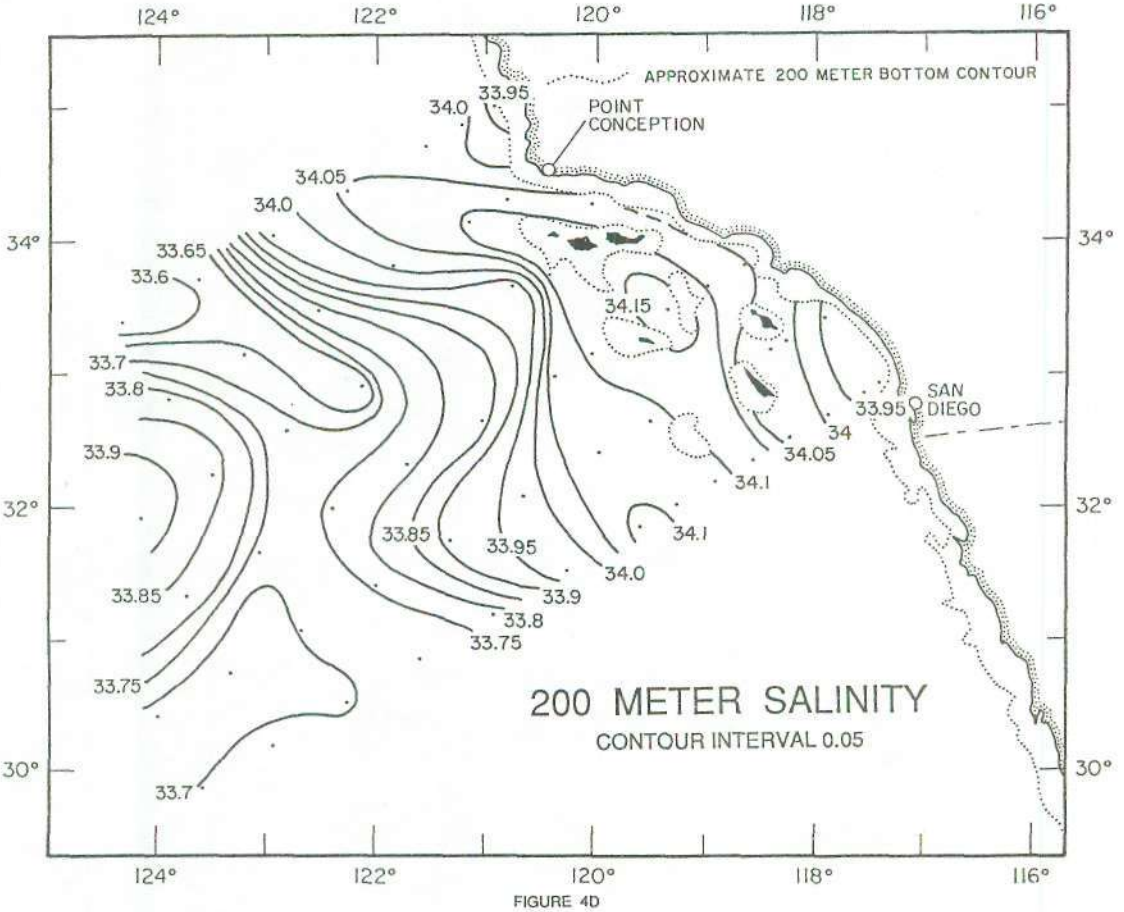

FIGURE 4D

CALCOFI CRUISE 9210

29 SEPTEMBER - 2 OCTOBER 1992

POTENTIAL DENSITY (σ_θ) ALONG CALCOFI LINE 90

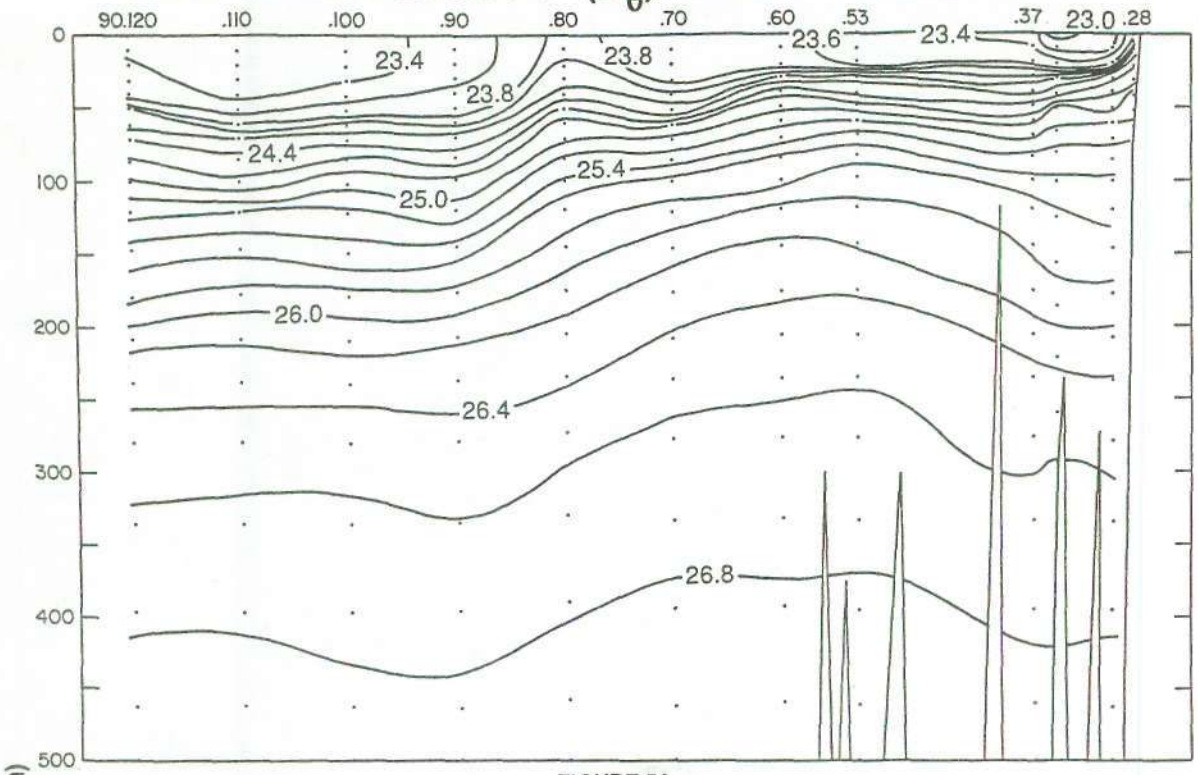

FIGURE 5A

TEMPERATURE (°C) ALONG CALCOFI LINE 90

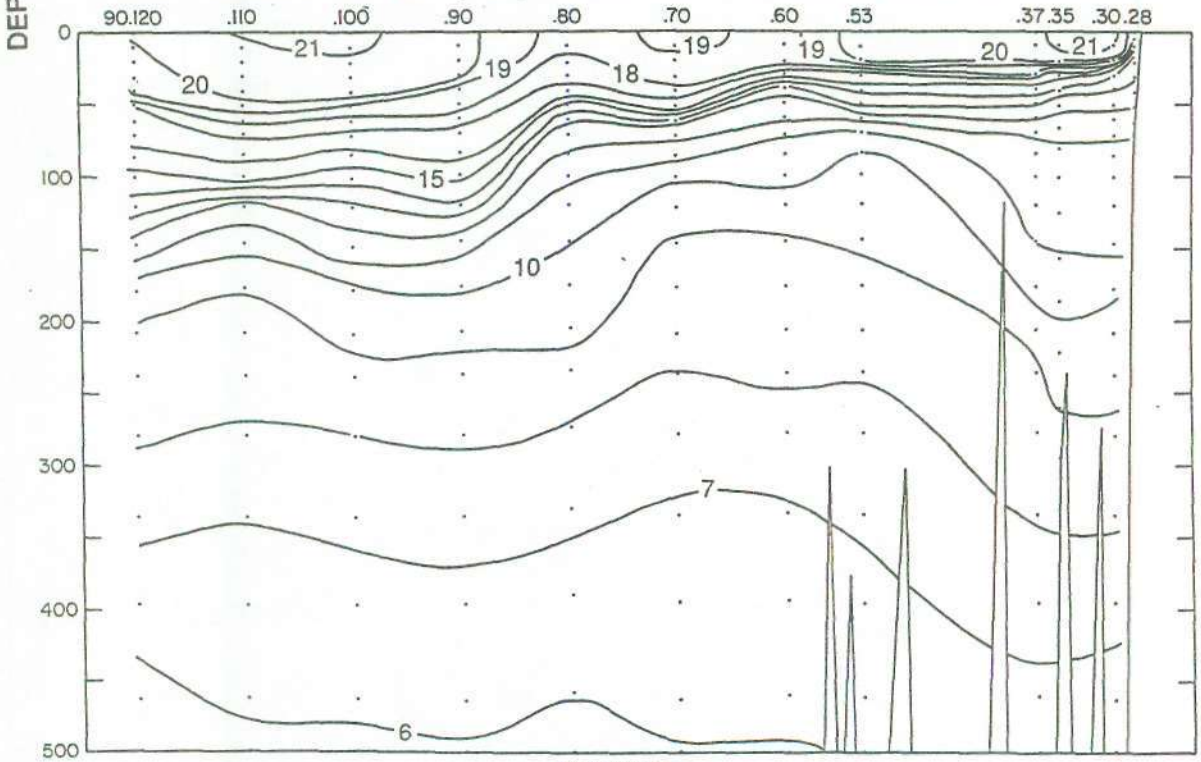

FIGURE 5B

CALCOFI CRUISE 9210

29 SEPTEMBER - 2 OCTOBER 1992

SALINITY ALONG CALCOFI LINE 90

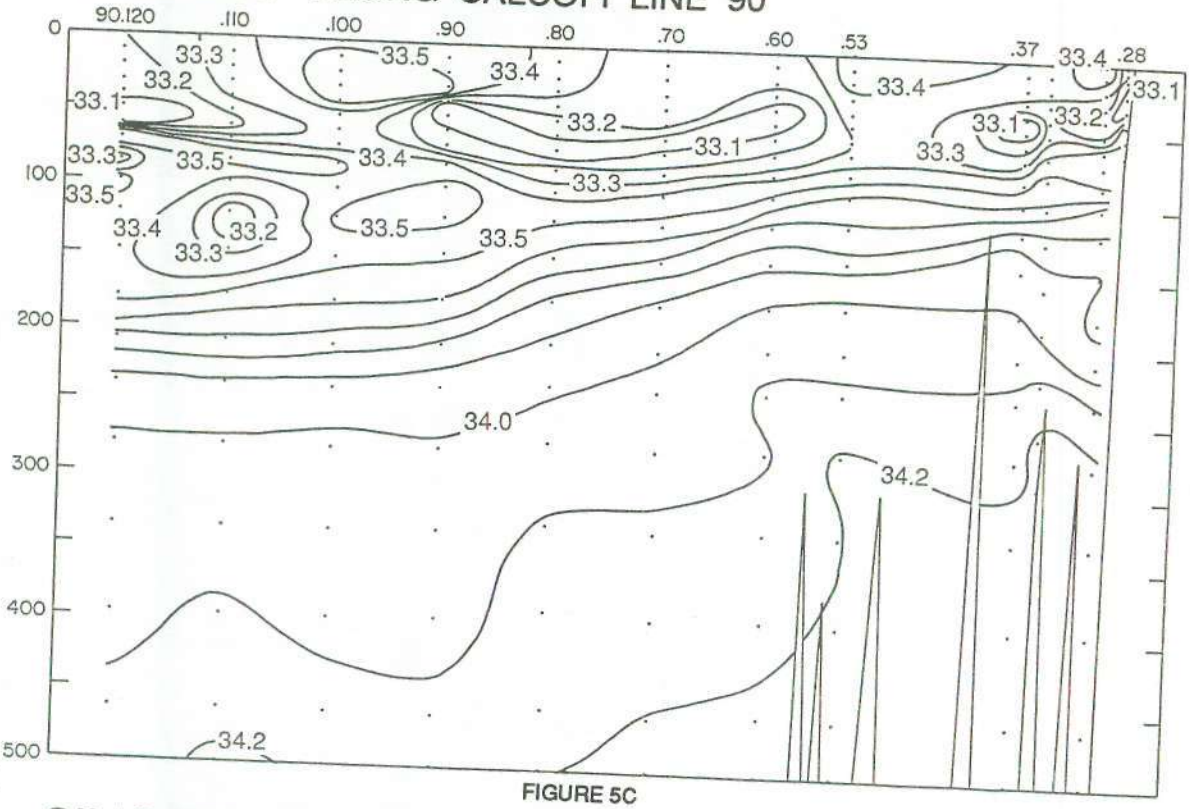

FIGURE 5C

SILICATE (µM/l) ALONG CALCOFI LINE 90

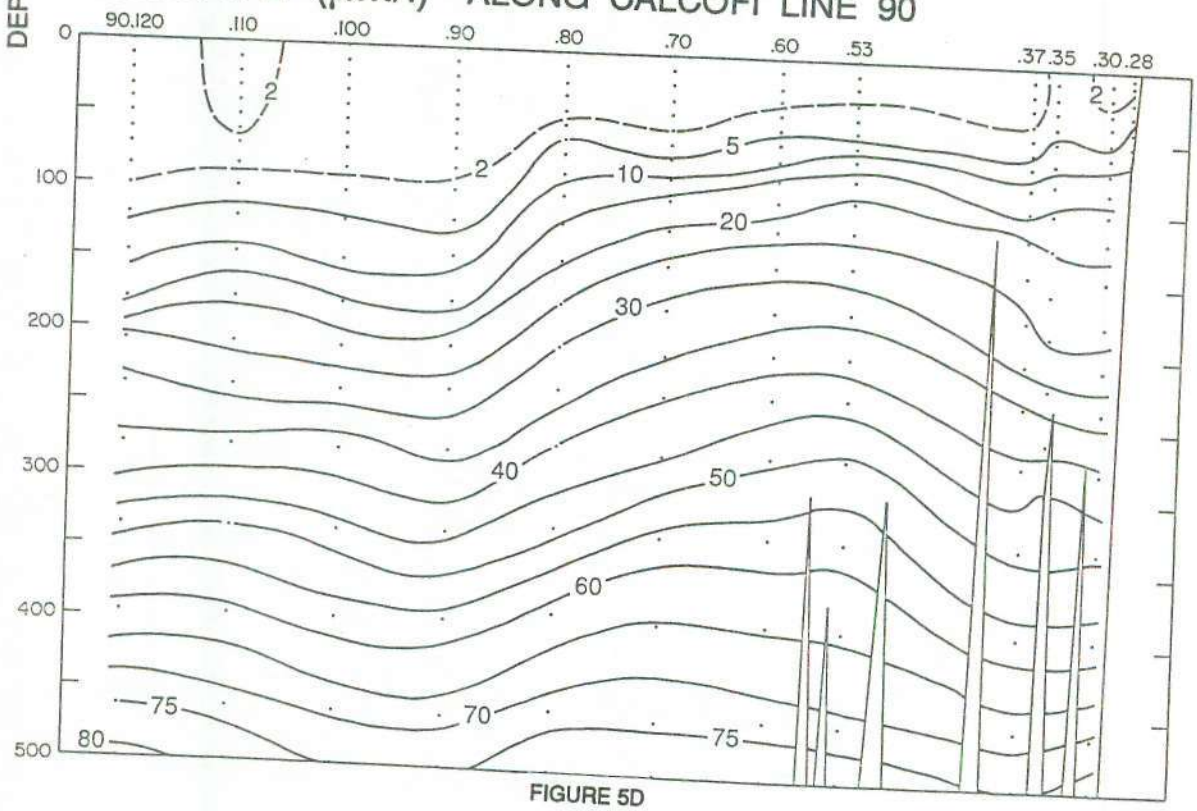

FIGURE 5D

CALCOFI CRUISE 9210

29 SEPTEMBER - 2 OCTOBER 1992

NITRATE (µM/l) ALONG CALCOFI LINE 90

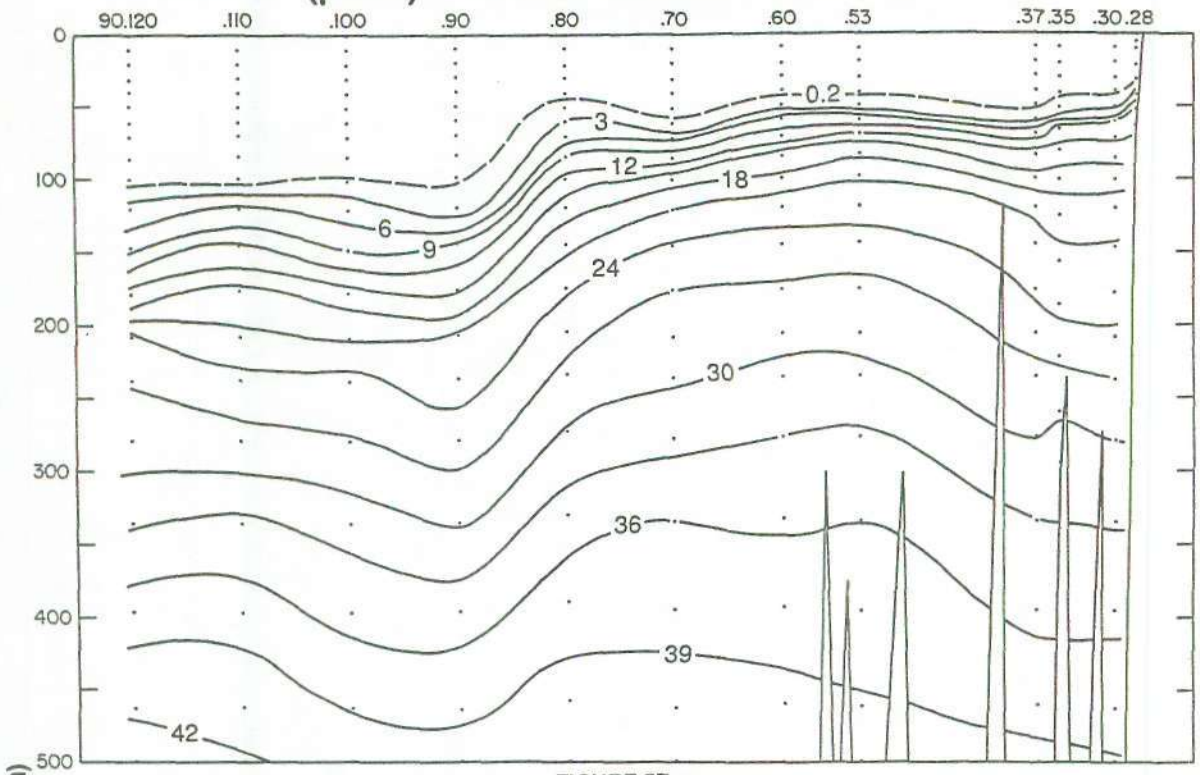

FIGURE 5E

PHOSPHATE (µM/l) ALONG CALCOFI LINE 90

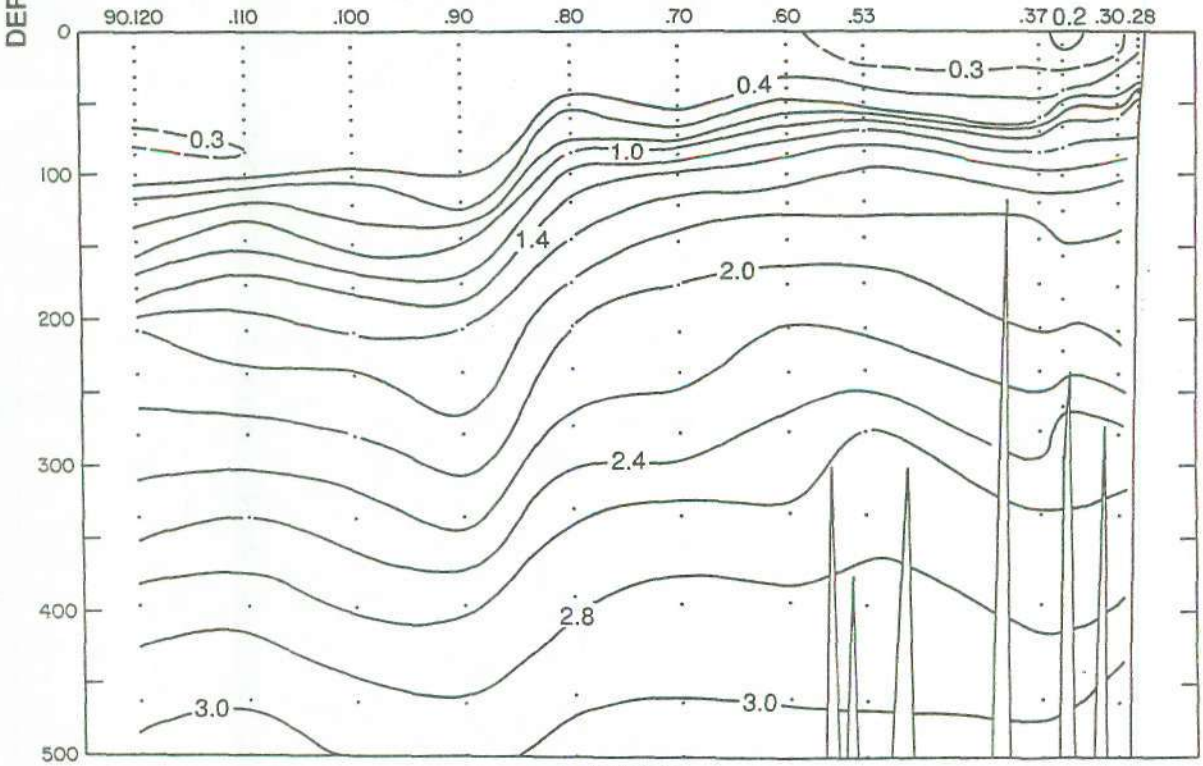

FIGURE 5F

CALCOFI CRUISE 9210

29 SEPTEMBER - 2 OCTOBER 1992

CHLOROPHYLL-a (µg/l) ALONG CALCOFI LINE 90

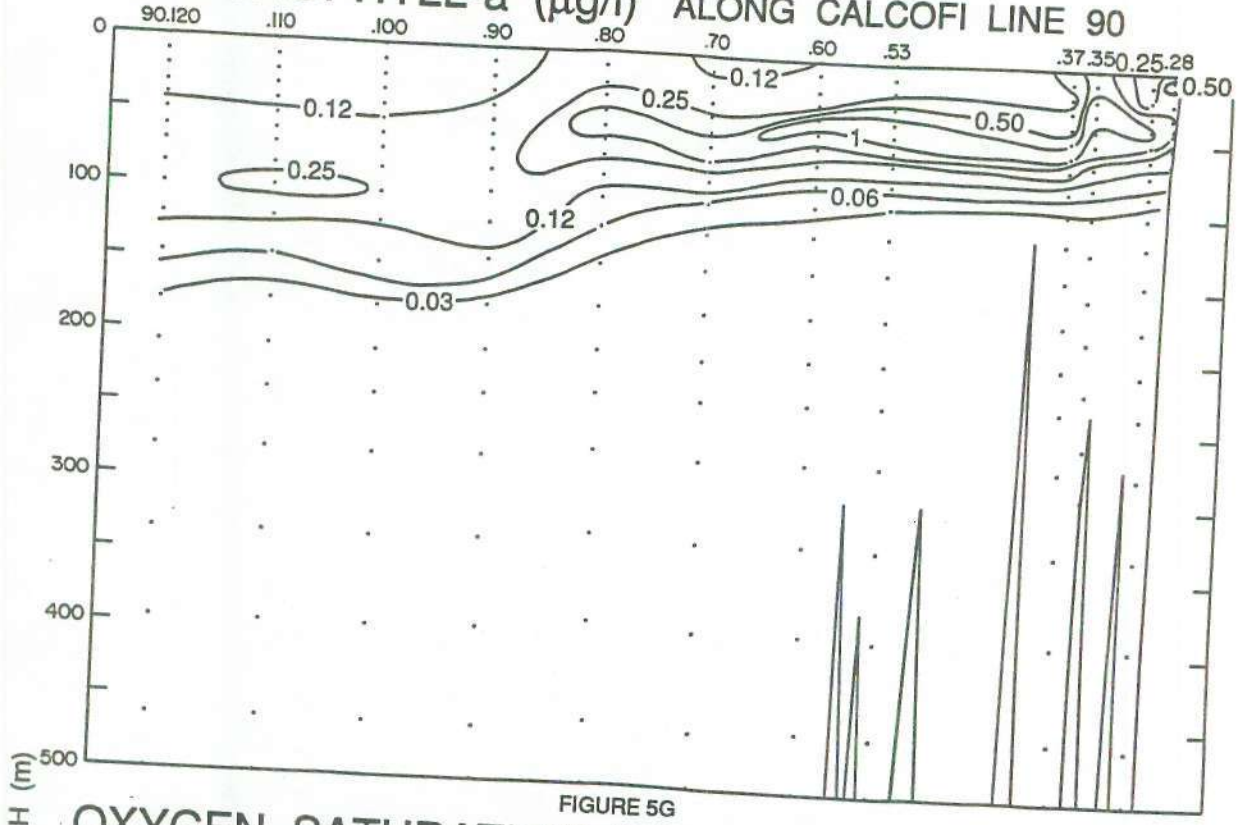

FIGURE 5G

OXYGEN SATURATION (%) ALONG CALCOFI LINE 90

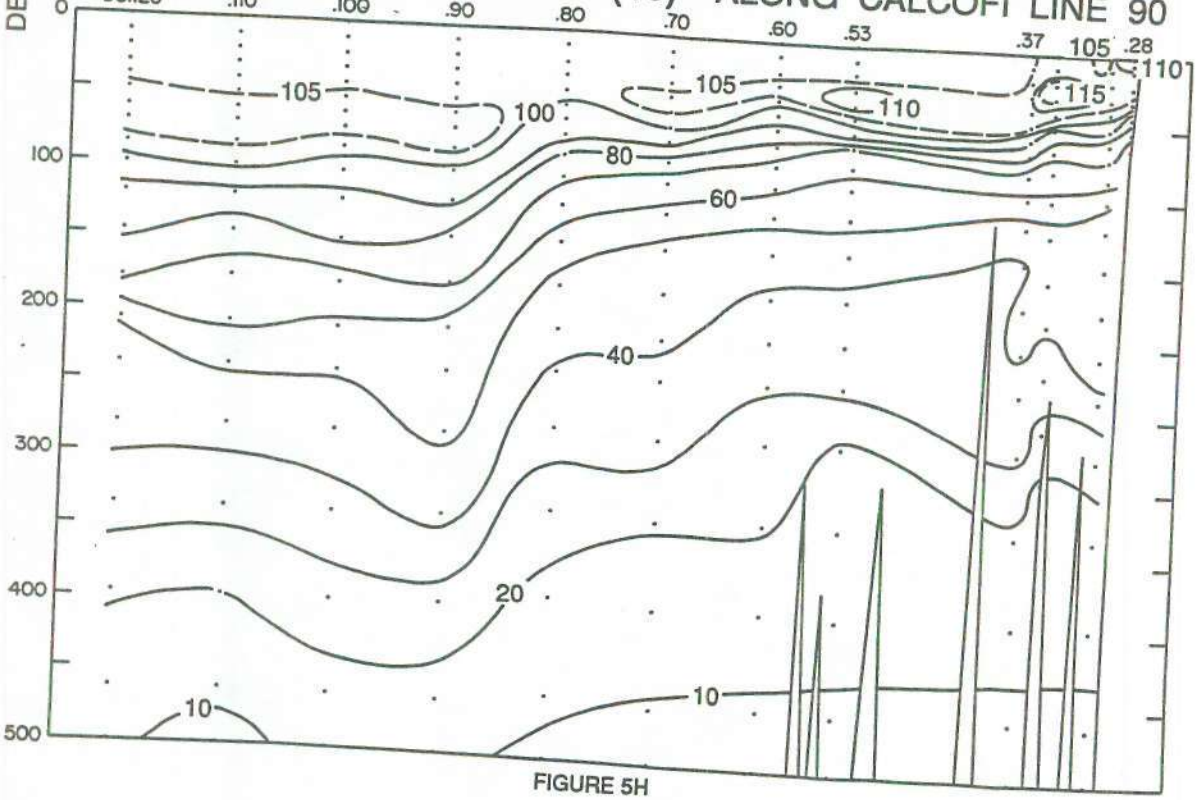

FIGURE 5H

CALCOFI CRUISE 9210

29 SEPTEMBER - 2 OCTOBER 1992

OXYGEN (ml/l) ALONG CALCOFI LINE 90

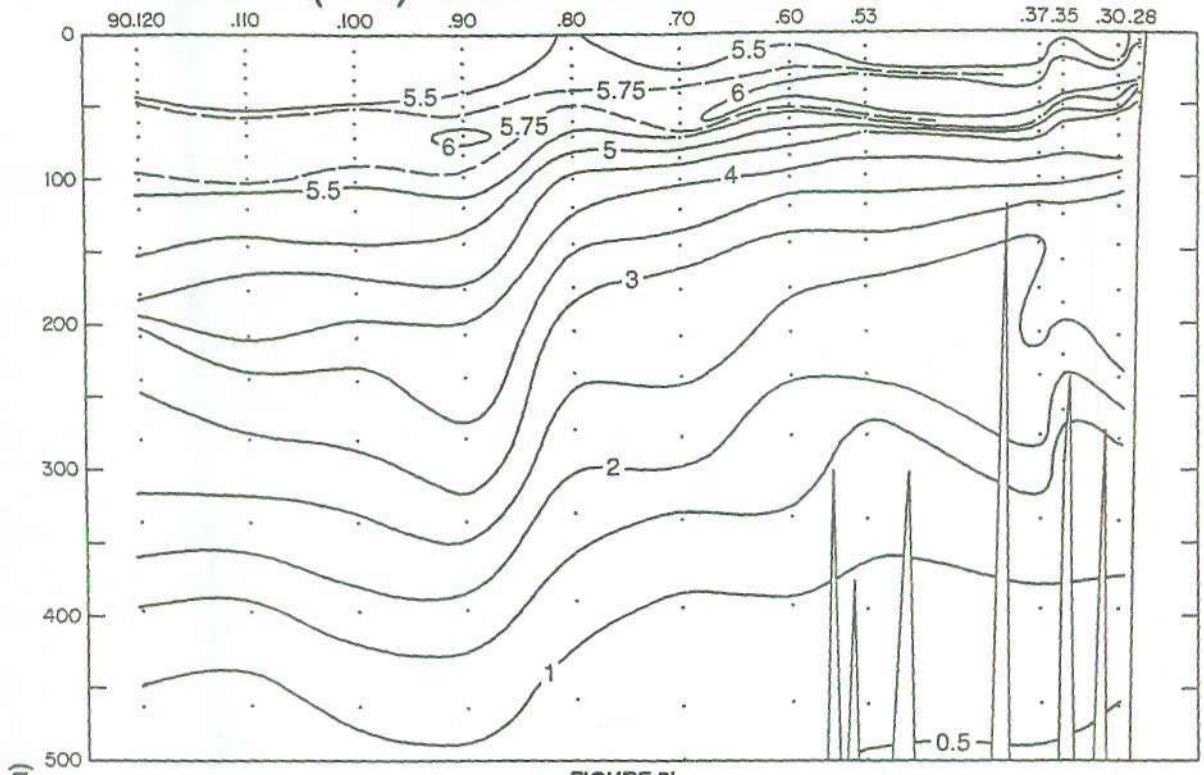

FIGURE 5I

NITRITE (µM/l) ALONG CALCOFI LINE 90

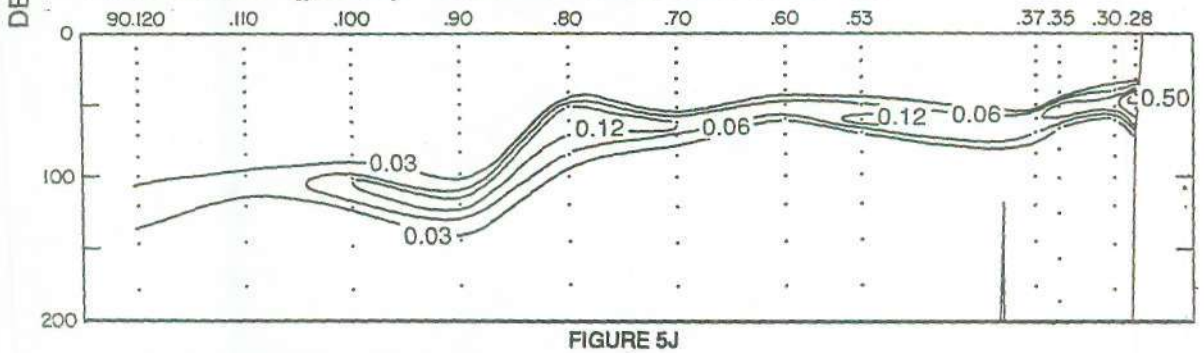

FIGURE 5J

PHAEOPIGMENTS (µg/l) ALONG CALCOFI LINE 90

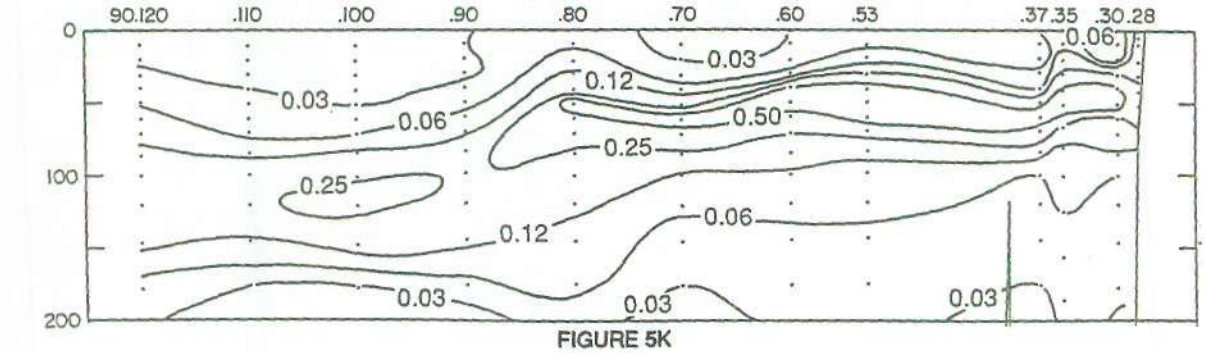

FIGURE 5K

PERSONNEL

CalCOFI Cruise 9210

SHIP'S CAPTAIN

Christopher H. Curl, RV *New Horizon*

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

Renger, Edward H. (In Charge)	Staff Research Associate, SIO
Abramenkoff, Dimitry N.	Fishery Biologist, NMFS
Bos, David L.	Staff Research Associate, SIO
Griffith, David A.	Fishery Biologist, NMFS
Gripp, Sherry L.	Staff Research Associate, SIO
Gruber, Dennis W.	Marine Technician, SIO
Hallman, Craig M.	Staff Research Associate, SIO
Manion, Susan M.	Fishery Biologist, NMFS
McEvoy, Elizabeth M.	Staff Research Associate, SIO
Morgan, Robert A.	Graduate Student, University of Illinois
Veit, Richard R.	Post Doctoral Fellow, University of Washington
Wilkinson, James R.	Staff Research Associate, SIO

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 77 49

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
35 5.4 N	120 46.9 W	09/10/92	2239 UTC	70 a								

CAST	DEPTH -	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN al/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	16.38	16.38	33.310	24.362	355.5	0.000	6.00	107.3	2.5	0.31	0.0	0.00	0.96	0.27	0
1	1	16.38	16.38	33.310	24.362	355.5	0.004	6.00	107.3	2.5	0.31	0.0	0.00	0.96	0.27	1
	10 ISL	16.03	16.03	33.302	24.436	348.8	0.035	6.00	106.6	2.7	0.37	0.0	0.02	1.16	0.35	10
1	11	15.97	15.97	33.301	24.449	347.6	0.039	6.00	106.4	2.7	0.38	0.0	0.02	1.21	0.36	11
	20 ISL	15.45	15.45	33.299	24.564	336.9	0.070	6.02	105.7	2.8	0.40	0.2	0.03	1.85	0.50	20
1	22	15.30	15.30	33.300	24.598	333.8	0.076	6.02	105.4	2.8	0.40	0.2	0.03	1.99	0.55	22
	30 ISL	14.45	14.45	33.314	24.792	315.5	0.102	5.87	101.0	3.4	0.47	1.3	0.09	5.75	0.93	30
1	32	14.23	14.23	33.320	24.843	310.7	0.108	5.80	99.3	3.6	0.50	1.7	0.12	6.49	1.01	32
1	43	13.40	13.39	33.366	25.049	291.3	0.142	4.99	84.0	7.4	0.81	5.9	0.36	2.63	0.75	43
	50 ISL	12.91	12.90	33.394	25.169	280.1	0.162	4.56	76.0	10.0	1.00	8.2	0.45	0.94	0.53	50
1	53	12.74	12.73	33.404	25.210	276.2	0.170	4.42	73.4	10.9	1.07	9.0	0.47	0.46	0.45	53
1	64	12.56	12.55	33.416	25.254	272.2	0.200	4.30	71.2	12.2	1.13	9.9	0.41	0.40	0.51	64

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 77 51

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
35 1.3 N	120 55.2 W	09/10/92	2032 UTC	235 a	270 01 kn	270 02 06	1	1012.1 ab	16.1 C	15.4 C	12m 04	7/8 SC

CAST	DEPTH a	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN al/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
1	0	17.00	17.00	33.310	24.219	369.2	0.000	5.73	103.7	1.9	0.31	0.0	0.00	0.29	0.07	0
1	9	16.43	16.43	33.316	24.356	356.4	0.033	5.84	104.6	2.6	0.32	0.0	0.00	0.53	0.19	9
	10 ISL	16.28	16.28	33.306	24.382	353.9	0.036	5.83	104.1	2.6	0.33	0.1	0.01	0.61	0.23	10
	20 ISL	14.55	14.55	33.234	24.709	323.1	0.070	5.70	98.2	3.7	0.48	1.5	0.12	1.18	0.56	20
1	21	14.36	14.36	33.231	24.746	319.5	0.073	5.69	97.7	3.9	0.50	1.6	0.14	1.21	0.58	21
	30 ISL	13.01	13.01	33.329	25.098	286.2	0.101	4.82	80.5	8.0	0.86	7.1	0.35	0.52	0.42	30
1	31	12.89	12.89	33.341	25.131	283.1	0.103	4.72	78.6	8.4	0.90	7.7	0.36	0.43	0.39	31
1	40	12.49	12.48	33.344	25.211	275.7	0.129	4.55	75.2	9.5	0.99	9.4	0.19	0.31	0.29	40
	50 ISL	12.23	12.22	33.443	25.338	263.9	0.155	4.10	67.4	12.7	1.16	11.7	0.33	0.24	0.34	50
1	51	12.20	12.19	33.453	25.352	262.6	0.158	4.06	66.7	13.0	1.18	11.9	0.34	0.24	0.35	51
1	61	11.78	11.77	33.445	25.425	255.9	0.184	4.11	66.9	12.6	1.22	13.2	0.09	0.18	0.43	61
1	70	11.79	11.78	33.507	25.471	251.7	0.207	3.84	62.6	14.8	1.31	14.0	0.14	0.18	0.37	70
	75 ISL	11.69	11.68	33.541	25.516	247.5	0.219	3.73	60.7	15.3	1.35	14.8	0.11	0.14	0.30	75
1	85	11.42	11.41	33.599	25.611	238.7	0.244	3.56	57.6	15.7	1.41	16.5	0.02	0.06 A	0.15 A	85
	100 ISL	11.20	11.19	33.631	25.676	232.8	0.279	3.47	55.9	16.6	1.47	17.4	0.01	0.05	0.14	101
1	106	11.14	11.13	33.635	25.690	231.6	0.293	3.46	55.6	17.0	1.49	17.6	0.01	0.05	0.13	107
	125 ISL	10.95	10.93	33.655	25.740	227.3	0.337	3.41	54.6	17.9	1.54	18.3	0.02	0.04	0.13	126
1	126	10.94	10.92	33.657	25.744	227.0	0.339	3.41	54.6	18.0	1.54	18.3	0.02	0.04	0.13	127
1	146	10.72	10.70	33.716	25.829	219.3	0.383	3.17	50.5	25.3 U	1.87 U	22.7 U	0.20 U	0.03	0.13	147
	150 ISL	10.66	10.64	33.733	25.853	217.1	0.392	3.10	49.4	21.1	1.69	20.2	0.12	0.03	0.13	151
1	176	10.26	10.24	33.849	26.013	202.4	0.447	2.66	42.0	25.3	1.87	22.6	0.20	0.02	0.15	177
	200 ISL	9.90	9.88	33.925	26.134	191.4	0.494	2.49	39.0	28.5	1.97	24.1	0.15	0.01	0.13	201
1	207	9.79	9.77	33.948	26.170	188.0	0.507	2.44	38.2	29.4	2.00	24.6	0.13	0.01	0.13	208

A) SECOND FLUOROMETER READING NOT RECORDED, CHLOROPHYLL AND PHAEOPIGMENTS
CALCULATED WITH ASSUMED ACID RATIO INTERPOLATED FROM ADJACENT LEVELS.

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 77 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
34 53.3 N	121 12.6 W	09/10/92	1638 UTC	563 a	340 07 kn	330 03 05	2	1012.5 Bb	15.9 C	15.1 C	14a 04	8/8 SC

CAST	DEPTH a	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN al/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	16.00	16.00	33.326	24.461	346.1	0.000	5.97	106.0	2.7	0.38	0.0	0.00	0.82	0.32	0
1	1	16.00	16.00	33.326	24.461	346.1	0.003	5.97	106.0	2.7	0.38	0.0	0.00	0.82	0.32	1
	10 ISL	15.93	15.93	33.322	24.474	345.1	0.035	5.94	105.3	3.0	0.39	0.0	0.01	1.08	0.41	10
1	11	15.92	15.92	33.322	24.476	345.0	0.038	5.94	105.3	3.0	0.39	0.0	0.01	1.13	0.43	11
	20 ISL	14.90	14.90	33.328	24.706	323.3	0.068	5.66	98.3	4.5	0.55	1.3	0.10	1.64	0.56	20
1	21	14.76	14.76	33.330	24.738	320.3	0.071	5.62	97.3	4.7	0.57	1.5	0.11	1.67	0.57	21
	30 ISL	13.87	13.87	33.343	24.935	301.8	0.099	5.17	87.9	7.0	0.77	4.4	0.24	1.19	0.54	30
1	31	13.79	13.79	33.345	24.953	300.1	0.102	5.12	86.9	7.3	0.79	4.7	0.25	1.12	0.54	31
1	41	13.17	13.16	33.374	25.101	286.3	0.132	4.75	79.6	9.6	0.96	7.3	0.31	0.82	0.51	41
	50 ISL	12.38	12.37	33.428	25.298	267.7	0.157	4.28	70.6	11.9	1.15	10.9	0.27	0.40	0.40	50
1	52	12.21	12.20	33.440	25.340	263.8	0.162	4.19	68.9	12.3	1.19	11.6	0.26	0.32	0.37	52
1	60	11.79	11.78	33.459	25.434	255.0	0.183	4.10	66.8	12.8	1.28	13.0	0.09	0.19	0.32	60
1	70	11.47	11.46	33.507	25.530	246.0	0.208	3.94	63.8	14.2	1.37	14.8	0.04	0.15	0.23	70
	75 ISL	11.28	11.27	33.529	25.582	241.2	0.220	3.90	62.9	15.0	1.41	15.6	0.03	0.12	0.21	75
1	84	10.84	10.83	33.545	25.673	232.7	0.241	3.83	61.2	16.2	1.46	16.9	0.02	0.08	0.18	84
1	99	9.80	9.79	33.475	25.797	221.1	0.275	4.07	63.5	17.5	1.54	18.1	0.02	0.06	0.11	99
	100 ISL	9.78	9.77	33.477	25.802	220.6	0.277	4.07	63.5	17.6	1.54	18.2	0.02	0.06	0.11	101
1	120	9.37	9.36	33.487	25.877	213.8	0.321	4.01	62.0	19.6	1.63	19.7	0.01	0.05	0.07	121
	125 ISL	9.40	9.39	33.512	25.892	212.5	0.332	3.92	60.6	20.0	1.65	20.1	0.01	0.05	0.07	126
1	145	9.64	9.62	33,650	25.961	206.5	0.373	3.45	53.7	22.0	1.77	21.6	0.00	0.03	0.07	146
	150 ISL	9.62	9.60	33.685	25.992	203.6	0.384	3.33	51.8	22.8	1.81	22.1	0.00	0.03	0.07	151
1	175	9.54	9.52	33.882	26.159	188.3	0.433	2.74	42.6	27.5	1.99	24.7	0.01	0.02	0.06	176
	200 ISL	9.33	9.31	34.029	26.309	174.6	0.478	2.29	35.5	32.6	2.16	26.7	0.04	0.02	0.08	201
1	206	9.25	9.23	34.055	26.342	171.5	0.488	2.21	34.2	33.8	2.20	27.2	0.04	0.02	0.08	207
1	236	8.51	8.49	34.108	26.500	156.7	0.538	2.00	30.4	40.0	2.36	29.5	0.02			237
	250 ISL	8.35	8.32	34.127	26.540	153.2	0.559	1.91	29.0	41.9	2.42	30.2	0.01			251
1	277	8.16	8.13	34.150	26.587	149.1	0.600	1.74	26.3	45.1	2.51	31.1	0.00			279
	300 ISL	7.89	7.86	34.151	26.628	145.5	0.634	1.64	24.6	48.2	2.57	32.0	0.00			302
1	334	7.48	7.45	34.145	26.683	140.6	0.683	1.50	22.3	S2.9	2.65	33.2	0.00			336
1	394	6.99	6.95	34.167	26.769	133.0	0.765	1.16	17.0	60.5	2.83	35.3	0.00			397
	400 ISL	6.94	6.90	34.168	26.777	132.3	0.773	1.13	16.6	61.3	2.85	35.5	0.00			403
1	459	6.43	6.39	34.180	26.855	125.4	0.849	0.85	12.3	69.8	3.00	37.5	0.00			462
	500 ISL	6.01	5.97	34.197	26.922	119.1	0.899	0.69	9.9	76.6	3.09	38.9	0.01			503
1	529	5.72	5.67	34.210	26.969	114.8	0.933	0.57	8.1	81.4	3.16	39.9	0.01			533

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 77 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	NIND SPEED	NAVES	NEA	BAROMETER	DRY	NET	SECCBI/FOREL	CLD AMT TYPE
34 43.3 N	121 33.1 N	09/10/92	1242 UTC	945 ▪	330 15 k.n			1011.5 «t>	16.5 C	15.7 C		

CAST	DEPTH ▪	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA TBETA	SVA	DYN BT	OXYGEN »1/1	OXY PCT	SIO3 UM/1	PO4 uM/1	NO3 UM/1	NO2 UM/1	CHL-A Ug/1	PBAEO uq/1	PRESS db
1	0	17.68	17.68	33.178	23.956	394.3	0.000	5.59	102.5	1.7	0.44	0.0	0.00	0.20	0.03	0
1	10	17.71	17.71	33.178	23.949	395.3	0.039	5.58	102.3	1.7	0.35	0.0	0.00	0.20	0.05	10
	20 ISL	17.52	17.52	33.187	24.002	390.5	0.079	5.65	103.2	1.5	0.37	0.0	0.00	0.23	0.06	20
1	22	17.48	17.48	33.205	24.025	388.4	0.087	5.67	103.5	1.5	0.37	0.0	0.00	0.24	0.07	22
	30 ISL	16.80	16.80	33.204	24.185	373.4	0.117	5.83	105.1	1.4	0.37	0.0	0.00	0.39	0.12	30
1	32	16.54	16.53	33.194	24.238	368.4	0.124	5.88	105.4	1.4	0.37	0.0	0.00	0.42	0.14	32
1	42	14.58	14.57	33.030	24.546	339.3	0.160	6.17	106.2	1.9	0.40	0.0	0.00	0.44	0.25	42
	50 ISL	13.96	13.95	33.027	24.673	327.3	0.186	6.18	105.1	2.1	0.43	0.0	0.01	0.58	0.40	50
1	52	13.85	13.84	33.032	24.700	324.8	0.193	6.18	104.8	2.2	0.45	0.0	0.01	0.61	0.43	52
1	61	12.84	12.83	33.023	24.895	306.3	0.221	5.81	96.5	3.6	0.59	1.7	0.12	0.52	0.43	61
1	72	11.98	11.97	33.076	25.101	286.9	0.254	5.36	87.5	6.5	0.87	7.3	0.10	0.25	0.28	72
	75 ISL	11.69	11.68	33.110	25.181	279.3	0.263	5.19	84.2	7.7	0.96	8.9	0.08	0.20	0.25	75
1	86	10.69	10.68	33.253	25.472	251.8	0.292	4.61	73.2	12.1	1.26	14.0	0.03	0.10	0.16	86
	100 ISL	9.97	9.96	33.377	25.692	231.1	0.326	4.23	66.2	16.0	1.48	17.5	0.02	0.05	0.11	100
1	101	9.93	9.92	33.385	25.705	229.9	0.328	4.21	65.8	16.3	1.49	17.7	0.02	0.05	0.11	101
1	121	9.04	9.03	33.564	25.990	203.0	0.371	3.75	57.6	22.0	1.74	21.8	0.01	0.02	0.08	122
	125 ISL	8.96	8.95	33.610	26.038	198.5	0.379	3.63	55.6	23.2	1.79	22.5	0.01	0.02	0.07	126
1	147	8.74	8.72	33.832	26.247	179.1	0.421	3.04	46.4	28.7	2.01	25.5	0.01	0.01	0.04	148
	150 ISL	8.69	8.67	33.844	26.264	177.5	0.426	3.02	46.1	29.1	2.02	25.7	0.01	0.01	0.04	151
1	178	8.34	8.32	33.913	26.372	167.7	0.474	2.93	44.4	32.4	2.10	26.8	0.00	0.01	0.03	179
	200 ISL	8.29	8.27	34.005	26.453	160.5	0.510	2.53	38.3	36.3	2.21	28.4	0.00	0.00	0.03	201
1	208	8.28	8.26	34.035	26.478	158.2	0.523	2.38	36.0	37.6	2.25	28.9	0.00	0.00	0.03	209
1	238	8.11	8.09	34.056	26.520	154.7	0.570	2.28	34.4	40.2	2.29	29.6	0.00			239
	250 ISL	7.99	7.96	34.068	26.547	152.3	0.589	2.19	32.9	42.0	2.33	30.1	0.00			251
1	279	7.69	7.66	34.103	26.619	145.8	0.632	1.90	28.4	46.9	2.45	31.6	0.00			281
	300 ISL	7.60	7.57	34.140	26.661	142.1	0.662	1.62	24.1	50.1	2.55	32.6	0.00			302
1	336	7.41	7.38	34.191	26.729	136.2	0.712	1.17	17.4	55.9	2.71	34.2	0.00			338
1	396	6.51	6.47	34.176	26.841	125.9	0.791	0.92	13.4	67.3	2.89	37.0	0.00			399
	400 ISL	6.48	6.44	34.177	26.845	125.5	0.796	0.91	13.2	67.7	2.90	37.1	0.00			403
1	462	6.20	6.16	34.202	26.902	120.8	0.872	0.69	10.0	73.4	3.02	38.3	0.00			465
	500 ISL	5.89	5.85	34.227	26.961	115.4	0.917	0.55	7.9	79.4	3.11	39.4	0.00			503
1	533	5.63	5.58	34.250	27.012	110.7	0.954	0.42	6.0	84.7	3.18	40.4	0.00			537

RV NEN HORIZON CALCOFI CRUISE 9210 STATION 77 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	NIND SPEED	NAVES	NEA	BAROMETER	DRY	NET	SECCHI/FOREL	CLD AMT TYPE
34 23.2 N	122 15.5 N	09/10/92	0651 UTC	4019 ▪	320 17 kn			1013.3 ab	17.0 C	16.4 C		

CAST	DEPTH ▪	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA TBETA	SVA	DYN BT	OXYGEN al/1	OXY PCT	SIO3 UM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PBAEO ug/1	PRESS db
	0 ISL	17.32	17.32	33.084	23.970	392.9	0.000	5.66	103.0	2.3	0.33	0.0	0.00	0.12	0.03	0
1	1	17.32	17.32	33.084	23.970	392.9	0.004	5.66	103.0	2.3	0.33	0.0	0.00	0.12	0.03	1
	10 ISL	17.32	17.32	33.083	23.969	393.3	0.039	5.69	103.5	2.3	0.33	0.0	0.00	0.16	0.04	10
1	11	17.32	17.32	33.083	23.969	393.3	0.043	5.69	103.5	2.3	0.33	0.0	0.00	0.17	0.04	11
	20 ISL	17.10	17.10	33.089	24.026	388.2	0.078	5.74	104.0	2.4	0.33	0.0	0.00	0.19	0.05	20
1	21	17.06	17.06	33.090	24.036	387.3	0.082	5.75	104.1	2.4	0.33	0.0	0.00	0.19	0.05	21
	30 ISL	16.34	16.34	33.109	24.218	370.2	0.116	5.91	105.5	2.3	0.34	0.0	0.00	0.28	0.11	30
1	31	16.24	16.24	33.113	24.244	367.8	0.120	5.93	105.6	2.3	0.34	0.0	0.00	0.29	0.12	31
1	41	15.39	15.38	33.187	24.492	344.4	0.156	6.06	106.2	2.0	0.37	0.0	0.01	0.52	0.23	41
	50 ISL	13.72	13.71	33.100	24.779	317.2	0.185	6.03	102.1	3.0	0.47	0.8	0.08	1.31	0.60	50
1	51	13.53	13.52	33.091	24.810	314.2	0.189	6.03	101.7	3.2	0.49	1.0	0.09	1.38	0.64	51
1	61	12.61	12.60	33.148	25.037	292.8	0.219	5.45	90.2	5.6	0.73	4.7	0.28	0.70	0.54	61
1	71	11.99	11.98	33.239	25.226	275.0	0.247	4.87	79.6	8.8	1.02	9.6	0.09	0.47	0.43	71
	75 ISL	11.61	11.60	33.245	25.301	267.9	0.258	4.76	77.1	9.9	1.10	11.1	0.05	0.37	0.37	75
1	84	10.89	10.88	33.280	25.458	253.1	0.282	4.52	72.1	12.3	1.25	13.9	0.02	0.17	0.23	84
1	99	10.89	10.88	33.569	25.683	232.1	0.318	3.66	58.5	16.9	1.51	17.5	0.01	0.04	0.13	99
	100 ISL	10.87	10.86	33.578	25.694	231.1	0.320	3.63	58.0	17.1	1.52	17.7	0.01	0.04	0.13	100
1	119	10.36	10.35	33.681	25.864	215.3	0.363	3.33	52.7	20.3	1.69	20.1	0.01	0.02	0.09	120
	125 ISL	10.24	10.23	33.724	25.918	210.3	0.376	3.17	50.0	21.6	1.76	21.0	0.01	0.02	0.08	126
1	1*5	9.94	9.92	33.860	26.075	195.7	0.416	2.66	41.7	26.0	1.97	23.9	0.01	0.01	0.07	14c
	150 ISL	9.88	9.86	33.885	26.105	193.0	0.426	2.58	40.4	26.B	2.00	24.4	0.01	0.01	0.07	151
1	175	9.59	9.57	33.986	26.232	181.4	0.473	2.32	36.1	30.1	2.12	26.1	0.01	0.01	0.06	176
	200 ISL	9.16	9.14	34.059	26.359	169.6	0.517	2.15	33.2	34.0	2.25	27.6	0.01	0.01	0.05	201
1	203	9.10	9.08	34.064	26.373	168.4	0.522	2.14	33.0	34.4	2.26	27.7	0.01	0.01	0.05	204
1	232	8.52	8.50	34.050	26.453	161.1	0.569	2.33	35.4	37.E	2.26	28.6	0.01			233
	250 ISL	8.02	7.99	34.018	26.504	156.4	0.598	2.60	39.1	39.3	2.23	28.8	0.01			251
1	273	7.43	7.40	33.98s	26.563	150.8	0.633	2.86	42.4	41.7	2.21	29.2	0.01			275
	300 ISL	7.19	7.16	34.003	26.611	146.5	0.673	2.60	38.3	45.6	2.32	30.6	0.01			307
1	328	7.08	7.05	34.038	26.654	142.9	0.714	2.13	31.3	50.3	2.48	32.4	0.00			330
1	387	6.56	6.52	34.075	26.754	133.9	0.796	1.50	21.8	60.7	2.74	35.8	0.00			389
	400 ISL	6.47	6.43	34.084	26.773	132.2	0.813	1.38	20.0	62.7	2.79	36.4	0.00			403
1	454	6.12	6.08	34.124	26.850	125.4	0.882	0.97	14.0	70.7	2.97	38.3	0.00			457
	500 ISL	5.77	5.73	34.161	26.924	118.7	0.939	0.71	10.1	78.7	3.11	39.8	0.00			503.
1	524	5.58	5.54	34.181	26.963	115.1	0.967	0.57	8.1	82.9	3.19	40.6	0.00			528!

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 77 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
34 3.1 N	122 56.6 K	09/10/92	0006 UTC	4235 m	330 16 kn	330 03 06	1	1014.3 Mb	18.7 C	17.3 C	22a 02	1/8	SC

CAST	DEPTH n	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN »1/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	17.49	17.49	33.114	23.952	394.6	0.000	5.68	103.7	1.8	0.40	0.0	0.00	0.15	0.04	0
1	1	17.49	17.49	33.114	23.952	394.6	0.004	5.68	103.7	1.8	0.40	0.0	0.00	0.15	0.04	1
	10 ISL	17.44	17.44	33.127	23.974	392.8	0.039	5.68	103.6	1.7	0.39	0.0	0.00	0.17	0.05	10
1	16	17.40	17.40	33.136	23.991	391.4	0.063	5.68	103.5	1.6	0.39	0.0	0.00	0.18	0.05	16
	20 ISL	17.18	17.18	33.132	24.040	386.9	0.078	5.75	104.3	1.6	0.40	0.0	0.00	0.20	0.06	20
	30 ISL	16.03	16.03	33.083	24.269	365.4	0.116	5.94	105.3	2.0	0.41	0.0	0.00	0.31	0.15	30
1	31	15.87	15.87	33.076	24.299	362.5	0.120	5.96	105.4	2.0	0.41	0.0	0.00	0.33	0.16	31
1	41	13.53	13.52	32.977	24.722	322.4	0.154	5.99	100.9	2.7	0.50	0.7	0.07	0.58	0.38	41
	50 ISL	12.55	12.54	33.006	24.938	301.9	0.182	5.68	93.8	4.3	0.70	3.9	0.06	0.41	0.36	50
1	52	12.42	12.41	33.016	24.971	298.9	0.188	5.61	92.4	4.7	0.75	4.7	0.06	0.35	0.35	52
1	63	11.78	11.77	33.026	25.099	286.9	0.220	5.53	89.8	9.1	V 1.10 U	11.1 U	0.02 U	0.24	0.31	63
1	72	11.09	11.08	33.085	25.271	270.7	0.245	5.16	82.6	9.1	1.09	11.2	0.02	0.11	0.15	72
	75 ISL	10.73	10.72	33.096	25.343	263.9	0.253	5.10	81.0	10.0	1.15	12.1	0.02	0.11	0.15	75
1	80	10.14	10.13	33.115	25.459	252.8	0.266	5.02	78.7	11.5	1.24	13.6	0.02	0.12	0.14	80
1	96	9.34	9.33	33.209	25.664	233.5	0.305	4.79	73.8	15.0	1.40	16.6	0.01	0.05	0.10	96
	100 ISL	9.32	9.31	33.271	25.716	228.7	0.314	4.62	71.2	16.1	1.45	17.5	0.01	0.04	0.09	100
1	111	9.26	9.25	33.426	25.847	216.5	0.339	4.10	63.2	19.0	1.60	19.7	0.01	0.03	0.06	112
	125 ISL	9.22	9.21	33.574	25.969	205.1	0.368	3.70	57.0	21.9	1.74	21.7	0.01	0.02	0.08	126
1	127	9.21	9.20	33.592	25.985	203.7	0.373	3.65	56.2	22.3	1.76	21.9	0.01	0.02	0.08	128
	150 ISL	9.06	9.04	33.770	26.148	188.6	0.418	3.18	48.9	26.1	1.94	24.2	0.01	0.01	0.05	151
1	151	9.05	9.03	33.776	26.155	188.0	0.420	3.16	48.6	26.3	1.95	24.3	0.01	0.01	0.05	152
1	178	8.71	8.69	33.893	26.300	174.7	0.468	2.81	42.9	30.6	2.09	26.5	0.01	0.00	0.04	179
	200 ISL	8.56	8.54	33.978	26.390	166.5	0.506	2.59	39.4	33.8	2.18	27.6	0.00	0.00	0.04	201
1	209	8.52	8.50	34.009	26.421	163.8	0.521	2.50	38.0	35.0	2.21	28.0	0.00	0.00	0.04	210
1	239	8.46	8.44	34.099	26.501	156.7	0.569	2.07	31.5	38.7	2.34	29.3	0.00			240
	250 ISL	8.36	8.33	34.118	26.531	154.0	0.586	1.93	29.3	40.7	2.41	29.9	0.00			251
1	280	7.95	7.92	34.142	26.612	146.7	0.631	1.65	24.8	46.9	2.58	31.7	0.00			282
	300 ISL	7.55	7.52	34.129	26.660	142.2	0.660	1.58	23.5	50.9	2.65	32.9	0.00			302
1	336	6.84	6.81	34.101	26.737	135.0	0.710	1.50	22.0	57.5	2.75	34.9	0.01			338
1	397	6.34	6.30	34.129	26.826	127.1	0.790	1.07	15.5	66.4	2.90	37.1	0.00			400
	400 ISL	6.32	6.28	34.131	26.830	126.8	0.794	1.05	15.2	66.8	2.91	37.2	0.00			403
1	462	5.97	5.93	34.171	26.907	120.1	0.870	0.75	10.8	74.7	3.04	39.0	0.00			465
	500 ISL	5.71	5.67	34.198	26.961	115.2	0.915	0.59	8.4	80.2	3.11	39.9	0.00			503
1	533	5.48	5.44	34.222	27.008	110.9	0.952	0.46	6.5	84.9	3.18	40.7	0.00			537

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 77 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
33 43.3 N	123 38.2 W	08/10/92	1721 UTC	4133 B>	320 15 kn	330 02 03	2	1016.0 *Kb*	20.6 C	18.3 C		1/8	CI

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN »1/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
1	0	19.45	19.45	33.162	23.504	437.4	0.000	5.38	102.0	1.8	0.34	0.0	0.00	0.08	0.02	0
	10 ISL	19.45	19.45	33.163	23.505	437.6	0.044	5.39	102.2	1.8	0.33	0.0	0.00	0.08	0.01	10
1	15	19.45	19.45	33.163	23.505	437.8	0.066	5.39	102.2	1.8	0.33	0.0	0.00	0.08	0.01	15
	20 ISL	19.44	19.44	33.164	23.509	437.6	0.088	5.39	102.1	1.8	0.33	0.0	0.00	0.08	0.01	20
	30 ISL	19.41	19.40	33.166	23.518	437.1	0.131	5.39	102.1	1.8	0.34	0.0	0.00	0.08	0.01	30
1	31	19.41	19.40	33.166	23.518	437.1	0.136	5.39	102.1	1.8	0.34	0.0	0.00	0.08	0.01	31
1	41	19.39	19.38	33.164	23.523	437.1	0.179	5.40	102.2	1.8	0.34	0.0	0.00	0.09	0.02	41
	50 ISL	19.39	19.38	33.164	23.523	437.4	0.219	5.41	102.4	1.8	0.34	0.0	0.00	0.10	0.02	50
1	51	19.39	19.38	33.164	23.523	437.4	0.223	5.41	102.4	1.8	0.34	0.0	0.00	0.10	0.02	51
1	61	17.98	17.97	33.086	23.815	409.8	0.265	5.79	106.7	1.8	0.34	0.0	0.00	0.16	0.06	61
1	71	16.33	16.32	33.031	24.162	376.8	0.305	6.02	107.4	1.8	0.35	0.0	0.00	0.16	0.06	71
	75 ISL	15.87	15.86	33.037	24.271	366.6	0.320	6.02	106.4	1.8	0.35	0.0	0.00	0.17	0.07	75
1	80	15.42	15.41	33.052	24.382	356.0	0.338	6.01	105.3	1.8	0.36	0.0	0.00	0.19	0.10	80
1	95	14.56	14.55	33.062	24.576	337.9	0.390	5.96	102.6	1.9	0.37	0.0	0.00	0.23	0.20	95
	100 ISL	14.08	14.07	33.055	24.671	328.9	0.406	5.92	100.9	2.1	0.41	0.2	0.06	0.23	0.21	100
1	110	13.00	12.99	33.044	24.881	309.0	0.438	5.79	96.5	3.0	0.53	0.7	0.15	0.24	0.23	110
	125 ISL	11.39	11.37	33.052	25.192	279.4	0.482	5.41	87.1	6.4	0.85	7.2	0.03	0.12	0.19	125
1	126	11.29	11.27	33.054	25.212	277.6	0.485	5.38	86.5	6.7	0.87	7.7	0.02	0.11	0.19	126
	150 ISL	9.89	9.87	33.179	25.552	245.4	0.548	4.90	76.4	12.2	1.25	14.4	0.01	0.04	0.07	151
1	151	9.85	9.83	33.186	25.564	244.3	0.550	4.88	76.1	12.4	1.26	14.6	0.01	0.04	0.07	152
1	176	8.94	8.92	33.404	25.881	214.4	0.608	4.39	67.1	18.3	1.53	19.1	0.00	0.02	0.03	177
	200 ISL	8.51	8.49	33.610	26.109	193.0	0.657	3.99	60.5	23.3	1.69	22.0	0.00	0.00	0.02	201
1	207	8.43	8.41	33.668	26.167	187.7	0.670	3.88	58.8	24.7	1.72	22.7	0.00	0.00	0.02	208
1	236	8.13	8.11	33.902	26.396	166.4	0.721	3.42	51.5	31.1	1.86	25.3	0.00			237
	250 ISL	7.98	7.95	33.950	26.456	160.9	0.744	3.29	49.4	33.5	1.91	26.2	0.00			251
1	277	7.66	7.63	33.984	26.530	154.2	0.787	3.09	46.1	37.8	2.01	27.7	0.00			278
	300 ISL	7.36	7.33	33.995	26.581	149.5	0.822	2.89	42.8	41.8	2.11	29.2	0.00			302
1	333	6.94	6.91	34.000	26.644	143.8	0.870	2.55	37.4	48.1	2.28	31.4	0.00			335
1	394	6.36	6.32	34.053	26.763	133.0	0.954	1.58	22.9	61.3	2.65	35.9	0.00			396
	400 ISL	6.29	6.25	34.055	26.774	132.0	0.962	1.52	22.0	62.5	2.68	36.2	0.00			402
1	460	5.67	5.63	34.080	26.872	123.0	1.039	1.09	15.5	73.9	2.89	39.0	0.00			463
	500 ISL	5.52	5.48	34.127	26.927	118.1	1.087	0.81	11.5	79.5	3.00	40.1	0.00			503
1	532	5.40	5.36	34.164	26.971	114.2	1.124	0.59	8.3	83.9	3.08	40.9	0.00			536

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 77 100

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
33 23.5 N	124 19.6 W	08/10/92	1127 UTC	4535 m	310 13 kn			1015.7 mto	20.0 C	17.8 C		

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO'3 uM/1	PO4 uM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
1	0	19.77	19.77	33.235	23.477	439.9	0.000	5.35	102.1	1.8	0.34	0.0	0.00	0.07	0.01	0
1	10	19.78	19.78	33.235	23.475	440.5	0.044	5.37	102.5	1.9	0.34	0.0	0.00	0.07	0.02	10
	20 ISL	19.77	19.77	33.237	23.479	440.4	0.088	5.36	102.2	1.8	0.34	0.0	0.00	0.08	0.01	20
1	21	19.77	19.77	33.237	23.480	440.5	0.092	5.36	102.2	1.8	0.34	0.0	0.00	0.08	0.01	21
	30 ISL	19.79	19.78	33.235	23.473	441.4	0.132	5.38	102.7	1.7	0.36	0.0	0.00	0.07	0.02	30
1	31	19.79	19.78	33.235	23.473	441.4	0.137	5.38	102.7	1.7	0.36	0.0	0.00	0.07	0.02	31
1	41	19.78	19.77	33.233	23.475	441.7	0.181	5.38	102.6	1.7	0.33	0.0	0.00	0.08	0.02	41
	50 ISL	19.73	19.72	33.232	23.487	440.8	0.220	5.39	102.7	1.9	0.33	0.0	0.00	0.08	0.02	50
1	51	19.72	19.71	33.232	23.490	440.6	0.225	5.39	102.7	1.9	0.33	0.0	0.00	0.08	0.02	51
1	61	19.61	19.60	33.222	23.511	438.9	0.269	5.41	102.9	1.7	0.33	0.0	0.00	0.11	0.03	61
1	71	17.00	16.99	33.044	24.017	390.7	0.310	6.01	108.6	1.8	0.34	0.0	0.00	0.17	0.06	71
	75 ISL	16.42	16.41	33.035	24.145	378.6	0.326	6.02	107.5	1.8	0.34	0.0	0.00	0.19	0.08	75
1	86	15.34	15.33	33.057	24.404	354.2	0.366	6.05	105.8	1.8	0.36	0.0	0.00	0.23	0.14	86
	100 ISL	13.92	13.91	33.056	24.705	325.6	0.414	5.96	101.3	2.5	0.43	0.0	0.00	0.29	0.25	100
1	101	13.83	13.82	33.056	24.724	323.9	0.417	5.95	100.9	2.6	0.44	0.0	0.00	0.29	0.26	101
1	121	12.40	12.38	33.123	25.059	292.2	0.478	5.60	92.2	4.2	0.64	3.4	0.13	0.19	0.19	121
	125 ISL	12.05	12.03	33.121	25.124	286.1	0.490	5.52	90.2	5.0	0.71	4.7	0.12	0.17	0.18	125
1	146	10.34	10.32	33.133	25.440	256.1	0.547	5.12	80.6	10.3	1.12	12.1	0.01	0.07	0.11	147
	150 ISL	10.12	10.10	33.150	25.491	251.3	0.557	5.05	79.2	11.2	1.17	13.1	0.01	0.06	0.10	151
1	177	9.13	9.11	33.335	25.797	222.4	0.621	4.54	69.7	16.8	1.46	18.1	0.00	0.02	0.04	17B
	200 ISL	8.85	8.83	33.581	26.034	200.3	0.670	4.00	61.1	21.6	1.64	21.3	0.00	0.01	0.02	20L
1	207	8.83	8.81	33.657	26.097	194.5	0.683	3.83	58.5	23.1	1.69	22.1	0.00	0.01	0.02	208
1	237	8.68	8.65	33.889	26.302	175.6	0.739	3.18	48.5	29.2	1.89	25.3	0.00			238
	250 ISL	8.46	8.43	33.931	26.369	169.3	0.761	3.22	48.9	31.1	1.91	25.8	0.00			251
1	278	7.91	7.88	33.971	26.483	158.8	0.807	3.31	49.6	35.1	1.94	26.6	0.00			279
	300 ISL	7.59	7.56	33.996	26.550	152.7	0.842	3.06	45.5	39.5	2.06	28.2	0.00			302
1	334	7.17	7.14	34.024	26.631	145.2	0.892	2.50	36.9	47.0	2.29	31.1	0.00			33S
1	394	6.59	6.55	34.078	26.753	134.2	0.976	1.62	23.6	59.6	2.64	35.4	0.00			396
	400 ISL	6.55	6.51	34.083	26.762	133.4	0.984	1.55	22.5	60.5	2.67	35.7	0.00			402
1	460	6.19	6.15	34.126	26.843	126.2	1.062	1.04	15.0	69.0	2.88	38.0	0.00			463
	500 ISL	5.80	5.76	34.148	26.910	120.1	1.111	0.81	11.6	76.4	2.99	39.5	0.00			503
1	531	5.50	5.46	34.166	26.961	115.3	1.148	0.64	9.1	82.2	3.07	40.7	0.00			531

RV NEN HORIZON CALCOFI CRUISE 9210 STATION 80 51

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
34 27.1 N	120 31.5 W	06/10/92	2359 UTC	74 m	310 08 k.n	310 01 05	2	1014.4 Bib	15.9 C	15.3 C	14B 03	7/8 ST

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN Hi/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 UM/1	NO2 uM/l	CHL-A ug/1	PHAEO ug/l	PRESS db
1	0	17.14	17.14	33.341	24.209	370.1	0.000	5.79	105.1	3.7	0.40	0.2	0.03	0.85	0.35	0
	10 ISL	15.43	15.43	33.322	24.586	334.5	0.035	5.53	97.1	5.1	0.57	1.7	0.13	0.96	0.37	10
1	11	15.26	15.26	33.322	24.623	331.0	0.039	5.50	96.2	5.2	0.59	1.8	0.14	0.97	0.37	11
	20 ISL	14.41	14.41	33.318	24.803	314.1	0.068	5.25	90.3	6.2	0.72	3.3	0.23	1.00	0.47	20
1	22	14.28	14.28	33.317	24.830	311.6	0.074	5.20	89.2	6.4	0.74	3.6	0.25	1.00	0.49	22
	30 ISL	13.86	13.86	33.319	24.919	303.3	0.098	5.10	86.7	6.9	0.79	4.4	0.28	1.01	0.51	30
1	32	13.79	13.79	33.320	24.934	301.9	0.104	5.08	86.2	7.0	0.80	4.6	0.28	1.01	0.52	32
1	42	13.53	13.52	33.324	24.990	296.9	0.134	4.91	82.9	7.6	0.87	5.6	0.33	0.83	0.49	42
	50 ISL	13.44	13.43	33.328	25.012	295.0	0.158	4.90	82.6	7.7	0.88	5.8	0.32	0.86	0.47	50
1	53	13.41	13.40	33.330	25.020	294.4	0.167	4.90	82.5	7.7	0.88	5.9	0.31	0.87	0.46	53
1	62	13.17	13.16	33.343	25.078	289.0	0.193	4.77	79.9	8.2	0.95	6.9	0.33	0.63	0.57	62

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 80 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
34 19.1 N	120 48.2 W	07/10/92	0249 UTC	759 m	290 07 kn			1013.6 nib	15.8 C	15.2 C		

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN »1/1	OXY PCT	SIO3 UM/1	PO4 uM/1	NO3 UM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	16.81	16.81	33.290	24.248	366.4	0.000	5.81	104.8	2.1	0.36	0.0	0.01	0.49	0.16	I)
1	1	16.81	16.81	33.290	24.248	366.5	0.004	5.81	104.8	2.1	0.36	0.0	0.01	0.49	0.16	I
	10 ISL	16.72	16.72	33.290	24.269	364.7	0.037	5.84	105.1	2.1	0.36	0.0	0.00	0.81	0.24	ID
1	11	16.70	16.70	33.290	24.274	364.3	0.040	5.85	105.3	2.1	0.36	0.0	0.00	0.85	0.25	11
	20 ISL	16.54	16.54	33.287	24.309	361.3	0.073	5.87	105.3	2.1	0.37	0.0	0.00	0.95	0.33	20
1	21	16.52	16.52	33.287	24.313	360.9	0.076	5.87	105.3	2.1	0.37	0.0	0.00	0.95	0.34	21
	30 ISL	14.70	14.70	33.152	24.614	332.4	0.108	5.82	100.5	3.0	0.49	0.8	0.07	0.93	0.44	3D
1	31	14.46	14.46	33.144	24.659	328.2	0.111	5.81	99.9	3.1	0.51	0.9	0.08	0.93	0.45	31
1	41	12.93	12.92	33.341	25.123	284.1	0.142	4.87	81.2	7.4	0.90	6.6	0.17	0.54	0.47	4L
	50 ISL	12.67	12.66	33.378	25.203	276.8	0.167	4.64	77.0	9.0	1.02	8.7	0.14	0.46	0.38	5D
1	51	12.66	12.65	33.379	25.206	276.5	0.170	4.62	76.6	9.1	1.03	8.9	0.14	0.46	0.37	5L
1	61	11.98	11.97	33.489	25.422	256.2	0.196	4.04	66.1	12.1	1.27	12.9	0.03	0.24	0.24	61
1	71	11.79	11.78	33.524	25.484	250.5	0.222	3.90	63.6	12.9	1.33	14.1	0.02	0.20	0.25	7L
	75 ISL	11.68	11.67	33.550	25.525	246.7	0.232	3.80	61.8	13.7	1.37	14.8	0.02	0.17	0.22	75
1	85	11.43	11.42	33.611	25.619	238.0	0.256	3.57	57.8	15.6	1.46	16.3	0.02	0.09	0.14	85
1	100	11.36	11.35	33.632	25.648	235.5	0.291	3.51	56.7	16.1	1.50	16.8	0.02	0.07	0.12	100
1	119	10.94	10.93	33.689	25.768	224.5	0.335	3.37	54.0	18.2	1.61	18.5	0.01	0.04	0.09	120
	125 ISL	10.88	10.86	33.704	25.791	222.5	0.348	3.33	53.3	18.6	1.63	18.8	0.01	0.03	0.08	126
1	146	10.70	10.68	33.772	25.876	214.9	0.394	3.10	49.4	20.8	1.71	20.0	0.01	0.02	0.07	147
	150 ISL	10.62	10.60	33.796	25.909	211.8	0.403	3.01	47.9	21.7	1.75	20.5	0.01	0.02	0.07	151
1	176	10.03	10.01	33.961	26.140	190.4	0.455	2.39	37.6	28.5	2.03	24.4	0.01	0.01	0.06	177
	200 ISL	9.59	9.57	34.067	26.296	175.9	0.499	1.92	29.9	33.0	2.23	27.3	0.01	0.01	0.04	201
1	207	9.48	9.46	34.092	26.334	172.4	0.511	1.82	28.3	34.1	2.27	27.9	0.01	0.01	0.04	208
1	237	9.05	9.02	34.177	26.470	159.9	0.561	1.76	27.1	38.0	2.34	28.8	0.01			238
	250 ISL	8.80	8.77	34.168	26.503	156.9	0.582	1.81	27.7	39.4	2.35	29.2	0.01			251
1	277	8.31	8.28	34.133	26.551	152.6	0.623	1.89	28.6	42.3	2.39	30.1	0.01			279
	300 ISL	8.18	8.15	34.159	26.591	149.1	0.658	1.72	26.0	44.8	2.47	30.8	0.01			302
1	335	8.04	8.01	34.204	26.648	144.3	0.710	1.37	20.6	49.2	2.61	32.0	0.00			337
1	396	7.06	7.02	34.165	26.758	134.2	0.794	1.14	16.8	60.5	2.80	34.9	0.01			399
	400 ISL	7.01	6.97	34.165	26.765	133.5	0.800	1.12	16.5	61.1	2.81	35.1	0.01			403
1	462	6.39	6.35	34.183	26.863	124.7	0.880	0.86	12.5	69.2	2.95	37.5	0.00			465
	500 ISL	6.10	6.06	34.209	26.921	119.4	0.926	0.68	9.8	74.9	3.04	38.7	0.00			503
1	533	5.85	5.80	34.232	26.971	114.9	0.965	0.53	7.6	79.8	3.12	39.8	0.00			537

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 80 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	KIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
3« 9.4 N	121 9.3 W	07/10/92	0656 UTC	2171 m	310	12 kn			1014.4 mb	15.8 C	15.5 C			

CAST	DEPTH B	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	17.83	17.83	33.223	23.954	394.4	0.000	5.58	102.6	1.3	0.34	0.0	0.00	0.17	0.05	0
1	2	17.83	17.83	33.223	23.954	394.5	0.008	5.58	102.6	1.3	0.34	0.0	0.00	0.17	0.05	2
	10 ISL	17.85	17.85	33.223	23.949	395.2	0.039	5.59	102.8	1.3	0.34	0.0	0.00	0.16	0.04	10
1	11	17.85	17.85	33.223	23.950	395.2	0.043	5.59	102.8	1.3	0.34	0.0	0.00	0.16	A 0.04 A	11
	20 ISL	17.80	17.80	33.250	23.983	392.4	0.079	5.60	102.9	1.2	0.34	0.0	0.00	0.24	0.06	20
1	21	17.79	17.79	33.253	23.987	392.0	0.083	5.60	102.9	1.2	0.34	0.0	0.00	0.25	0.07	21
	30 ISL	16.78	16.78	33.210	24.194	372.5	0.117	5.86	105.6	1.1	0.35	0.0	0.00	0.38	0.16	30
1	32	16.45	16.44	33.195	24.259	366.4	0.125	5.93	106.1	1.1	0.36	0.0	0.00	0.41	0.19	32
1	42	14.41	14.40	33.121	24.652	329.1	0.159	6.29	108.0	1.3	0.42	0.0	0.00	0.46	0.35	42
	50 ISL	13.58	13.57	33.067	24.782	316.9	0.185	6.10	102.9	2.2	0.50	0.9	0.08	0.95	0.65	50
1	52	13.41	13.40	33.062	24.812	314.1	0.192	6.05	101.7	2.6	0.54	1.1	0.10	1.03	0.70	52
1	62	12.06	12.05	33.183	25.169	280.2	0.221	5.09	83.3	7.5	0.98	8.9	0.05	0.34	0.36	62
1	72	11.36	11.35	33.257	25.356	262.6	0.248	4.63	74.6	11.1	1.19	12.8	0.02	0.15	0.22	72
	75 ISL	11.13	11.12	33.249	25.391	259.3	0.256	4.63	74.3	11.6	1.22	13.4	0.02	0.14	0.20	75
1	86	10.41	10.40	33.246	25.515	247.7	0.284	4.60	72.6	13.2	1.32	15.1	0.02	0.11	0.16	86
	100 ISL	10.07	10.06	33.493	25.766	224.1	0.317	3.78	59.3	18.5	1.58	19.6	0.01	0.03	0.09	100
1	101	10.05	10.04	33.511	25.783	222.5	0.319	3.72	58.4	18.9	1.60	19.9	0.01	0.03	0.09	101
1	121	9.01	9.00	33.498	25.943	207.5	0.362	4.03	61.8	20.6	1.65	20.9	0.01	0.02	0.04	122
	125 ISL	9.03	9.02	33.551	25.981	203.9	0.371	3.90	59.8	21.6	1.69	21.5	0.01	0.02	0.04	126
1	147	9.12	9.10	33.826	26.183	185.3	0.413	2.97	45.7	27.5	1.93	25.0	0.01	0.01	0.04	148
	150 ISL	9.12	9.10	33.848	26.200	183.7	0.419	2.89	44.5	28.0	1.95	25.3	0.01	0.01	0.04	151
1	178	9.16	9.14	34.015	26.325	172.5	0.469	2.38	36.7	32.1	2.11	27.0	0.00	0.00	0.04	179
	200 ISL	8.96	8.94	34.108	26.430	162.9	0.506	2.03	31.2	36.2	2.25	28.5	0.00	0.00	0.03	201
1	208	8.82	8.80	34.124	26.464	159.7	0.519	1.97	30.2	37.6	2.28	29.0	0.00	0.00	0.03	209
1	238	7.88	7.86	34.047	26.547	152.0	0.565	2.46	36.9	40.7	2.22	29.7	0.00			239
	250 ISL	7.59	7.57	34.030	26.576	149.4	0.583	2.44	36.3	42.6	2.23	30.2	0.00			251
1	280	7.01	6.98	34.014	26.644	143.0	0.627	2.40	35.3	48.3	2.33	31.9	0.00			282
	300 ISL	6.73	6.70	34.027	26.693	138.5	0.655	2.13	31.1	52.9	2.45	33.4	0.00			302
1	336	6.34	6.31	34.063	26.773	131.2	0.704	1.56	22.6	61.4	2.69	36.1	0.00			338
1	397	5.73	5.70	34.098	26.878	121.6	0.781	1.05	15.0	73.2	2.92	39.0	0.00			400
	400 ISL	5.71	5.68	34.100	26.882	121.3	0.785	1.03	14.7	73.7	2.93	39.1	0.00			403
1	462	5.38	5.34	34.149	26.961	114.3	0.858	0.69	9.8	82.8	3.07	40.7	0.00			465
	500 ISL	5.29	5.25	34.201	27.013	109.7	0.900	0.51	7.2	86.8	3.14	41.3	0.00			503
1	531	5.22	5.18	34.243	27.055	106.1	0.934	0.37	5.2	90.0	3.20	41.8	0.00			535

A) SECOND FLUOROMETER READING NOT RECORDED, CHLOROPHYLL AND PHAEOPIGMENTS CALCULATED WITH ASSUMED ACID RATIO INTERPOLATED FROM ADJACENT LEVELS.

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 80 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
33 48.9 N	121 50.6 W	07/10/92	1222 UTC	3626 a	320	34 kn			1014.4 nb	15.3 C	15.1 C			

CAST	DEPTH B	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN «1/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
1	0	17.82	17.82	33.213	23.949	394.9	0.000	5.57	102.4	1.3	0.36	0.0	0.00	0.15	0.04	0
1	10	17.82	17.82	33.213	23.949	395.2	0.040	5.57	102.4	1.3	0.36	0.0	0.00	0.14	0.04	10
	20 ISL	17.65	17.65	33.263	24.029	388.0	0.079	5.62	103.0	1.1	0.36	0.0	0.00	0.22	0.07	20
1	21	17.63	17.63	33.279	24.046	386.4	0.083	5.63	103.2	1.1	0.36	0.0	0.00	0.23	0.07	21
	30 ISL	16.32	16.32	33.259	24.338	358.8	0.116	5.83	104.1	1.1	0.38	0.0	0.00	0.36	0.17	30
1	31	16.13	16.13	33.254	24.377	355.0	0.120	5.85	104.1	1.1	0.39	0.0	0.00	0.39	0.19	31
1	41	14.30	14.29	33.155 -,	24.701	324.4	0.154	5.92	101.4	2.4	0.51	0.5	0.09	0.92	0.56	41
1	50	12.78	12.77	33.154	25.008	295.3	0.181	5.54	92.0	5.0	0.78	4.7	0.14	0.55	0.46	50
1	61	11.11	11.10	33.193	25.351	262.8	0.212	4.83	77.4	10.3	1.17	12.2	0.02	0.17	0.27	61
1	71	10.26	10.25	33.295	25.579	241.3	0.237	4.42	69.6	14.1	1.39	16.1	0.02	0.08	0.13	71
	75 ISL	10.08	10.07	33.360	25.660	233.6	0.247	4.23	66.4	15.7	1.46	17.3	0.02	0.06	0.12	75
1	85	9.78	9.77	33.506	25.824	218.2	0.269	3.83	59.7	19.0	1.61	19.7	0.01	0.04	0.08	85
1	100	9.28	9.27	33.555	25.944	207.0	0.301	3.73	57.6	21.5	1.70	21.3	0.01	0.01	0.06	100
1	120	9.24	9.23	33.722	26.082	194.4	0.342	3.23	49.8	25.2	1.86	23.7	0.01	0.01	0.06	121
	125 ISL	9.19	9.18	33.759	26.119	190.9	0.351	3.12	48.1	26.2	1.89	24.2	0.01	0.01	0.06	126
1	146	8.92	8.90	33.883	26.259	178.0	0.390	2.75	42.2	30.0	2.01	26.2	0.01	0.01	0.04	147
	150 ISL	8.85	8.83	33.898	26.282	175.9	0.397	2.74	42.0	30.6	2.03	26.5	0.01	0.01	0.04	151
1	176	8.41	8.39	33.964	26.402	164.9	0.441	2.67	40.5	34.3	2.10	27.8	0.01	0.00	0.03	177
	200 ISL	8.13	8.11	34.008	26.479	157.9	0.480	2.61	39.3	37.3	2.15	28.6	0.01	0.00	0.03	201
1	207	8.07	8.05	34.020	26.497	156.3	0.491	2.59	39.0	38.2	2.17	28.8	0.01	0.00	0.03	208
1	236	7.92	7.90	34.081	26.568	150.1	0.535	2.21	33.2	42.9	2.32	30.3	0.00			237
	250 ISL	7.68	7.66	34.088	26.608	146.3	0.556	2.04	30.5	46.2	2.40	31.4	0.00			251
1	277	7.17	7.14	34.094	26.686	139.2	0.595	1.72	25.4	52.7	2.55	33.5	0.00			279
	300 ISL	6.97	6.94	34.123	26.736	134.6	0.626	1.44	21.1	57.1	2.67	34.7	0.00			302
1	334	6.79	6.76	34.167	26.796	129.4	0.671	1.09	15.9	62.5	2.81	36.0	0.00			336
1	395	6.38	6.34	34.201	26.877	122.3	0.748	0.78	11.3	70.6	2.97	38.0	0.00			398
	400 ISL	6.33	6.29	34.202	26.885	121.6	0.754	0.76	11.0	71.4	2.98	38.2	0.00			403
1	462	5.75	5.71	34.210	26.965	114.3	0.827	0.53	7.6	80.6	3.11	40.2	0.00			465
	500 ISL	5.55	5.51	34.228	27.004	111.0	0.870	0.45	6.4	84.8	3.16	40.9	0.00			503
1	534	5.38	5.34	34.244	27.037	108.0	0.907	0.37	5.2	88.5	3.20	41.5	0.00			538

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 80 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	HIND SPEED	HAVES	HEA	BAROMETER	DRY	HET	SECCHI/FOREL	CLD AMT	TYPE
33 29.0 N	122 31.7 H	07/10/92	1805 UTC	3973 •	320 06 kn	320 01 07	2	1016.0 ab	17.0 C	16.1 C		8/8	AS

CAST	DEPTH B		TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN »1/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0	ISL	19.16	19.16	33.063	23.502	437.6	0.000	5.43	102.3	1.4	0.34	0.0	0.00	0.09	0.02	0
1	1		19.16	19.16	33.063	23.502	437.6	0.004	5.43	102.3	1.4	0.34	0.0	0.00	0.09	0.02	1
	10	ISL	19.15	19.15	33.062	23.504	437.7	0.044	5.44	102.5	1.4	0.34	0.0	0.00	0.08	0.03	10
1	11		19.15	19.15	33.062	23.504	437.7	0.048	5.44	102.5	1.4	0.34	0.0	0.00	0.08	0.03	11
	20	ISL	19.12	19.12	33.062	23.512	437.3	0.088	5.44	102.4	1.4	0.34	0.0	0.00	0.10	0.02	20
1	21		19.12	19.12	33.062	23.512	437.3	0.092	5.44	102.4	1.4	0.34	0.0	0.00	0.10	0.02	21
	30	ISL	19.16	19.15	33.065	23.505	438.4	0.131	5.44	102.5	1.4	0.33	0.0	0.00	0.10	0.02	30
1	31		19.16	19.15	33.065	23.505	438.4	0.136	5.44	102.5	1.4	0.33	0.0	0.00	0.10	0.02	31
1	41		17.28	17.27	33.114	24.004	391.0	0.177	6.00	109.1	1.6	0.32	0.0	0.00	0.13	0.04	41
	50	ISL	15.85	15.84	33.071	24.301	362.9	0.211	6.10	107.8	1.6	0.34	0.0	0.00	0.16	0.05	50
1	51		15.71	15.70	33.064	24.326	360.5	0.215	6.11	107.7	1.6	0.34	0.0	0.00	0.16	0.05	51
1	61		14.45	14.44	33.024	24.569	337.6	0.250	6.12	105.1	1.7	0.35	0.0	0.00	0.18	0.09	61
1	71		13.77	13.76	33.046	24.728	322.7	0.283	6.01	101.8	2.0	0.37	0.0	0.01	0.28	0.29	71
	75	ISL	13.30	13.29	33.024	24.805	315.3	0.295	5.90	98.9	2.6	0.45	1.1	0.01	0.27	0.27	75
1	85		12.12	12.11	32.976	24.997	297.1	0.326	5.61	91.7	4.7	0.69	4.6	0.02	0.24	0.22	85
1	100		11.30	11.29	33.034	25.194	278.7	0.369	5.32	85.5	7.4	0.93	8.8	0.01	0.11	0.13	100
1	121		9.82	9.81	33.106	25.506	249.2	0.42S	5.09	79.3	11.4	1.18	13.4	0.01	0.06	0.13	122
	125	ISL	9.63	9.62	33.124	25.551	244.9	0.434	5.07	78.6	11.9	1.20	13.9	0.01	0.05	0.12	126
1	146		8.93	8.91	33.255	25.766	224.7	0.484	4.94	75.5	14.6	1.30	16.0	0.01	0.02	0.04	147
	150	ISL	8.83	8.81	33.295	25.813	220.3	0.493	4.87	74.3	15.4	1.33	16.6	0.01	0.02	0.04	151
1	177		8.38	8.36	33.584	26.108	192.7	0.548	4.24	64.1	22.1	1.59	21.0	0.00	0.00	0.01	178
	200	ISL	8.20	8.18	33.783	26.292	175.6	0.591	3.47	52.3	28.6	1.84	25.0	0.00	0.00	0.01	201
1	207		8.17	8.15	33.831	26.334	171.8	0.603	3.27	49.3	30.4	1.90	26.0	0.00	0.00	0.01	208
1	237		7.97	7.95	33.936	26.446	161.6	0.653	3.16	47.4	34.0	1.94	26.8	0.00			238
	250	ISL	7.82	7.80	33.961	26.488	157.8	0.674	3.09	46.2	36.0	1.98	27.4	0.00			251
1	278		7.43	7.40	33.990	26.567	150.5	0.717	2.87	42.6	41.2	2.11	29.1	0.00			280
	300	ISL	7.04	7.01	33.995	26.626	145.1	0.749	2.63	38.7	46.3	2.23	30.8	0.00			302
1	335		6.50	6.47	34.007	26.708	137.5	0.799	2.17	31.5	54.5	2.44	33.5	0.00			337
1	396		6.32	6.28	34.108	26.812	128.4	0.880	1.22	17.6	65.4	2.77	36.8	0.00			398
	400	ISL	6.30	6.26	34.113	26.818	127.8	0.885	1.18	17.1	66.1	2.79	37.0	0.00			402
1	462		5.89	5.85	34.171	26.917	119.0	0.962	0.72	10.3	75.3	2.98	39.1	0.00			465
	500	ISL	5.71	5.67	34.200	26.962	115.1	1.006	0.58	8.3	79.8	3.05	39.9	0.00			503
1	531		5.56	5.52	34.223	26.999	111.8	1.041	0.46	6.5	83.4	3.11	40.6	0.00			535

RV NEN HORIZON CALCOFI CRUISE 9210 STATION 80 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	HIND SPEED	HAVES	HEA	BAROMETER	DRY	HET	SECCHI/FOREL	CLD AMT	TYPE
33 8.9 N	123 13.4 N	08/10/92	0036 UTC	4232 n	320 09 kn	320 03 07	1	1015.5 Mb	19.0 C	18.0 C	41a 01	1/8	SC

CAST	DEPTH •		TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN «1/1	OXY PCT	SIO3 uM/1	PO4 UM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0	ISL	19.80	19.80	33.194	23.438	443.7	0.000	5.39	102.9	2.0	0.34	0.0	0.00	0.06	0.01	0
1	1		19.80	19.80	33.194	23.438	443.7	0.004	5.39	102.9	2.0	0.34	0.0	0.00	0.06	0.01	1
	10	ISL	19.59	19.59	33.188	23.488	439.2	0.044	5.40	102.6	1.8	0.34	0.0	0.00	0.07	0.01	10
1	11		19.56	19.56	33.187	23.495	438.6	0.049	5.40	102.6	1.8	0.34	0.0	0.00	0.07	0.01	11
	20	ISL	19.51	19.51	33.189	23.510	437.5	0.088	5.40	102.5	1.9	0.34	0.0	0.00	0.07	0.02	20
1	21		19.50	19.50	33.187	23.511	437.5	0.092	5.40	102.5	1.9	0.34	0.0	0.00	0.07	0.02	21
	30	ISL	19.51	19.50	33.184	23.507	438.2	0.132	5.41	102.7	1.8	0.34	0.0	0.00	0.07	0.02	30
1	31		19.51	19.50	33.184	23.507	438.3	0.136	5.41	102.7	1.8	0.34	0.0	0.00	0.07	0.02	31
1	42		19.33	19.32	33.167	23.540	435.4	0.184	5.45	103.1	1.8	0.33	0.0	0.00	0.09	0.03	42
	50	ISL	19.07	19.06	33.164	23.604	429.6	0.219	5.51	103.7	1.9	0.33	0.0	0.00	0.14	0.05	50
1	52		19.00	18.99	33.163	23.621	428.1	0.227	5.S3	103.9	1.9	0.33	0.0	0.00	0.15	0.05	52
1	62		16.53	16.52	33.066	24.143	378.4	0.268	6.06	108.5	1.7	0.35	0.0	0.00	0.14	0.0S	62
1	72		15.47	15.46	33.062	24.379	356.1	0.304	6.06	106.3	1.7	0.36	0.0	0.00	0.20	0.08	72
	75	ISL	15.37	15.36	33.107	24.436	350.8	0.315	6.05	105.9	1.7	0.35	0.0	0.00	0.21	0.09	75
1	86		15.22	15.21	33.282	24.603	335.2	0.353	5.98	104.5	1.8	0.32	0.0	0.00	0.24	0.15	86
	100	ISL	14.54	14.53	33.301	24.765	320.1	0.399	5.89	101.5	2.2	0.34	0.0	0.00	0.23	0.22	100
1	102		14.39	14.38	33.290	24.788	317.9	0.405	5.87	100.8	2.2	0.34	0.0	0.00	0.23	0.23	102
1	121		11.92	11.90	33.119	25.147	283.8	0.462	5.52	90.0	5.0	0.71	5.0	0.04	0.17	0.16	121
	125	ISL	11.48	11.46	33.109	25.220	276.8	0.473	5.47	88.3	5.8	0.78	6.2	0.04	0.15	0.15	125
1	146		9.73	9.71	33.167	25.569	243.7	0.528	5.16	80.2	10.7	1.14	12.6	0.01	0.05	0.08	147
	150	ISL	9.56	9.54	33.206	25.627	238.2	0.538	5.03	77.9	11.9	1.21	13.7	0.01	0.04	0.07	151
1	177		8.99	8.97	33.500	25.949	208.0	0.598	4.16	63.7	19.7	1.59	20.1	0.00	0.01	0.03	178
	200	ISL	8.67	8.65	33.663	26.126	191.5	0.644	3.75	57.1	24.2	1.75	22.8	0.00	0.00	0.01	201
1	207		8.60	8.58	33.705	26.170	187.5	0.657	3.65	55.5	25.4	1.78	23.4	0.00	0.00	0.01	208
1	237		8.47	8.45	33.904	26.347	171.3	0.711	3.15	47.8	30.6	1.93	25.9	0.00			238
	250	ISL	8.30	8.27	33.940	26.401	166.3	0.733	3.12	47.2	32.3	1.95	26.4	0.00			251
1	278		7.88	7.85	33.978	26.493	157.8	0.778	3.08	46.1	36.2	2.01	27.4	0.00			279
	300	ISL	7.63	7.60	34.013	26.557	152.0	0.812	2.76	41.1	40.6	2.14	29.0	0.00			302
1	334		7.29	7.26	34.056	26.640	144.5	0.863	2.17	32.1	47.9	2.38	31.7	0.00			336
1	395		6.66	6.62	34.095	26.757	133.9	0.948	1.48	21.6	59.0	2.67	35.3	0.00			397
	400	ISL	6.61	6.57	34.099	26.767	133.0	0.954	1.43	20.8	60.0	2.69	35.6	0.00			402
1	463		6.11	6.07	34.151	26.873	123.4	1.035	0.88	12.7	71.0	2.94	38.3	0.00			466
	500	ISL	5.96	5.92	34.196	26.928	118.6	1.080	0.67	9.6	75.5	3.02	39.1	0.00			503
1	534		5.82	5.77	34.238	26.979	114.1	1.119	0.47	6.7	79.7	3.10	39.9	0.00			538

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RV NEW HORIZON CALCOFI CRUISE 9210 STATION 80 100

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
32 49.3 N	123 54.7 W	08/10/92	0600 UTC	4549 *a*	330 11 kn			1016.4 mb	19.0 C	18.5 C		

CAST	DEPTH -	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN Hi/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	20.09	20.09	33.307	23.449	442.6	0.000	5.33	102.3	1.8	0.33	0.0	0.00	0.07	0.02	0
1	1	20.09	20.09	33.307	23.449	442.7	0.004	5.33	102.3	1.8	0.33	0.0	0.00	0.07	0.02	1
	10 ISL	20.11	20.11	33.317	23.451	442.7	0.044	5.33	102.4	1.8	0.32	0.0	0.00	0.08	0.01	10
1	11	20.11	20.11	33.318	23.452	442.7	0.049	5.33	102.4	1.8	0.32	0.0	0.00	0.08	0.01	11
	20 ISL	20.20	20.20	33.333	23.441	444.2	0.089	5.34	102.7	1.8	0.32	0.0	0.00	0.08	0.01	20
1	21	20.21	20.21	33.337	23.441	444.2	0.093	5.34	102.8	1.8	0.32	0.0	0.00	0.08	0.01	21
	30 ISL	20.37	20.36	33.412	23.456	443.0	0.133	5.31	102.5	1.7	0.32	0.0	0.00	0.08	0.02	30
1	31	20.38	20.37	33.420	23.460	442.8	0.137	5.31	102.5	1.7	0.32	0.0	0.00	0.08	0.02	31
1	41	20.36	20.35	33.420	23.466	442.6	0.182	5.32	102.7	1.7	0.32	0.0	0.00	0.08	0.02	41
	50 ISL	19.98	19.97	33.399	23.550	434.9	0.221	5.39	103.3	1.7	0.32	0.0	0.00	0.11	0.04	50
1	51	19.94	19.93	33.397	23.559	434.0	0.225	5.40	103.4	1.7	0.32	0.0	0.00	0.12	0.04	51
1	61	16.46	16.45	33.072	24.163	376.4	0.266	6.05	108.2	1.9	0.34	0.0	0.00	0.17	0.06	61
1	71	15.42	15.41	33.106	24.424	351.8	0.302	6.07	106.4	1.9	0.34	0.0	0.00	0.18	0.07	71
	75 ISL	15.20	15.19	33.120	24.483	346.3	0.316	6.05	105.5	1.9	0.34	0.0	0.00	0.18	0.08	75
1	85	14.63	14.62	33.138	24.620	333.5	0.350	5.96	102.8	1.9	0.35	0.0	0.00	0.17	0.12	85
1	100	12.85	12.84	33.111	24.962	301.0	0.398	5.73	95.2	4.3	0.63	2.5	0.12	0.28	0.29	100
1	120	11.30	11.29	33.181	25.309	268.2	0.455	5.06	81.4	8.6	1.03	10.3	0.03	0.15	0.19	120
	125 ISL	10.97	10.95	33.213	25.393	260.3	0.468	4.91	78.5	10.0	1.12	11.9	0.03	0.12	0.16	125
1	145	9.90	9.88	33.374	25.702	231.1	0.517	4.36	68.1	15.6	1.43	17.2	0.01	0.04	0.08	146
	150 ISL	9.72	9.70	33.425	25.772	224.5	0.529	4.21	65.5	17.0	1.49	18.3	0.01	0.04	0.07	151
1	176	9.12	9.10	33.681	26.070	196.6	0.583	3.53	54.3	23.4	1.75	22.7	0.00	0.01	0.03	177
	200 ISL	8.80	8.78	33.832	26.239	180.9	0.629	3.25	49.7	27.6	1.86	24.7	0.00	0.00	0.02	201
1	206	8.75	8.73	33.862	26.270	178.1	0.639	3.20	48.9	28.5	1.88	25.0	0.00	0.00	0.02	207
1	236	8.49	8.47	33.999	26.418	164.5	0.691	2.72	41.3	34.2	2.06	27.4	0.00			237
	250 ISL	8.27	8.24	34.023	26.470	159.7	0.714	2.63	39.8	36.7	2.11	28.2	0.00			251
1	277	7.79	7.76	34.039	26.554	152.0	0.756	2.54	38.0	41.2	2.19	29.5	0.00			278
	300 ISL	7.46	7.43	34.045	26.607	147.2	0.790	2.39	35.5	44.9	2.28	30.7	0.00			302
1	334	7.05	7.02	34.051	26.669	141.6	0.839	2.11	31.0	50.5	2.42	32.6	0.00			336
1	394	6.46	6.42	34.087	26.777	131.8	0.921	1.44	20.9	62.3	2.71	36.1	0.00			396
	400 ISL	6.39	6.35	34.088	26.787	130.9	0.929	1.39	20.1	63.5	2.73	36.4	0.00			402
1	461	5.75	5.71	34.102	26.879	122.4	1.006	0.99	14.1	74.4	2.94	39.3	0.00			464
	500 ISL	5.53	5.49	34.140	26.936	117.3	1.053	0.77	10.9	79.9	3.03	40.2	0.00			503
1	531	5.36	5.32	34.170	26.981	113.3	1.089	0.60	8.5	84.3	3.10	41.0	0.00			534

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 82 47

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
34 17.3 N	120 1.9 W	06/10/92	1949 UTC	579 *n*	230 02 kn	230 01 05	2	1015.8 Bb	16.2 C	15.1 C		8/8 AS

CAST	DEPTH a	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 UM/1	NO3 uM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
1	0 A	16.37	16.37	33.345	24.391	352.7	0.000	5.77	103.2	4.3	0.48	0.5	0.03	1.10	0.37	0
	10 ISL	15.26	15.26	33.334	24.632	330.1	0.034	5.52	96.6	5.3	0.62	2.3	0.09	1.19	0.43	10
1	17	14.49	14.49	33.336	24.800	314.3	0.057	5.34	92.0	6.0	0.72	3.5	0.13	1.26	0.47	17
	20 ISL	14.20	14.20	33.352	24.873	307.4	0.066	5.12	87.7	7.0	0.80	5.1	0.17	1.03	0.43	20
1	26	13.73 B	13.73	33.378	24.991	296.4	0.084	4.73	80.2	8.6	0.95	7.7	0.27	0.60	0.34	26
	30 ISL	13.58	13.58	33.371	25.016	294.0	0.096	4.73	80.0	8.6	0.95	7.5	0.35	0.60	0.34	30
1	35	13.43	13.43	33.359	25.037	292.2	0.111	4.73	79.7	8.5	0.96	7.2	0.40	0.59	0.35	3!i>
1	47	12.81	12.80	33.393	25.187	278.2	0.145	4.58	76.2	9.6	1.05	9.3	0.13	0.32	0.26	47
	50 ISL	12.61	12.60	33.382	25.218	275.3	0.153	4.57	75.7	9.7	1.07	9.7	0.13	0.34	0.28	50
1	55	12.29 C	12.28	33.365	25.266	270.8	0.167	4.56	75.0	9.9	1.10	10.3	0.13	0.39	0.31	5%
1	65	11.83	11.82				0.193	4.30	70.1	11.4	1.22	12.4	0.06	0.28	0.25	6!»
1	74	11.69	11.68	33.507	25.490	250.0	0.216	3.92	63.7	13.7	1.35	14.3	0.03	0.13	0.17	711
	75 ISL	11.68	11.67	33.514	25.497	249.3	0.219	3.89	63.2	13.9	1.36	14.5	0.03	0.13	0.16	7'>
1	89	11.55	11.54	33.597	25.586	241.2	0.253	3.58	58.1	15.6	1.47	16.2	0.03	0.07	0.12	89
	100 ISL	11.45	11.44	33.620	25.622	238.0	0.279	3.50	56.7	16.2	1.51	16.7	0.03	0.06	0.11	100
1	105	11.40	11.39	33.625	25.635	236.9	0.291	3.48	56.3	16.4	1.52	16.9	0.03	0.06	0.11	106
1	123	11.26	11.24	33.665	25.693	231.8	0.333	3.35	54.0	17.6	1.58	17.8	0.03	0.05	0.10	124
	125 ISL	11.22	11.20	33.672	25.705	230.7	0.338	3.33	53.7	17.8	1.59	18.0	0.03	0.05	0.10	126
1	142	10.84	10.82	33.747	25.832	219.0	0.376	3.12	49.9	20.2	1.71	19.9	0.01	0.02	0.08	143
	150 ISL	10.69	10.67	33.792	25.894	213.3	0.394	2.99	47.7	21.4	1.77	20.8	0.01	0.02	0.08	151
1	171	10.32	10.30	33.916	26.055	198.3	0.437	2.59	41.0	25.1	1.93	23.2	0.01	0.01	0.07	172
	200 ISL	9.83	9.81	34.053	26.245	180.7	0.492	1.94	30.4	31.3	2.19	26.9	0.02	0.01	0.06	201
1	201	9.81	9.79	34.057	26.252	180.1	0.494	1.92	30.1	31.5	2.20	27.0	0.02	0.01	0.06	20(2
1	229	8.99	8.97	34.120	26.435	163.0	0.542	1.55	23.8	40.1	2.43	29.9	0.01			230
	250 ISL	8.67	8.64	34.135	26.497	157.4	0.575	1.50	22.9	42.8	2.51	30.8	0.01			2 lil
1	257	8.60	8.57	34.136	26.509	156.4	0.586	1.48	22.6	43.4	2.52	31.0	0.01			2!»9
	300 ISL	8.18	8.15	34.142	26.578	150.4	0.652	1.37	20.7	47.9	2.61	32.1	0.01			302
1	316	8.05	8.02	34.142	26.598	148.7	0.676	1.32	19.9	49.6	2.64	32.4	0.01			318
1	373	7.51	7.47	34.164	26.694	140.2	0.758	1.11	16.5	57.4	2.78	33.9	0.01			375
	400 ISL	7.14	7.10	34.184	26.762	133.9	0.795	0.88	13.0	65.2	2.92	34.2	0.01			403
1	437	6.69	6.65	34.211	26.845	126.3	0.844	0.53	7.7	77.2	3.14	34.6	0.01			440
	500 ISL	6.52	6.47	34.218	26.874	124.3	0.923	0.15	2.2	94.5	3.41	30.2	0.01			503
1	512	6.49	6.44	34.219	26.879	124.0	0.937	0.11	1.6	97.0	3.45	29.2	0.01			516
1	532	6.48	6.43	34.223	26.883	123.9	0.962	0.09	1.3	99.7	3.49	28.2	0.01			J,36
1	546	6.47	6.42	34.225	26.886	123.8	0.980			104.7	3.56	25.9	0.01			!i50
1	557	6.46	6.41	34.227	26.889	123.6	0.993	0.03	0.4	105.9	3.59	25.2	0.00			!i61
1	562	6.46	6.41	34.227	26.890	123.7	0.999	0.03	0.4	109.7	3.66	23.6	0.01			!;66
1	567	6.45	6.40	34.228	26.892	123.6	1.006	0.01	0.1	114.2	3.75	21.3	0.01			571
1	572	6.44	6.39	34.228	26.893	123.5	1.012	0.01	0.1	114.8	3.81	20.9	0.02			:i76

A) SANTA BARBARA BASIN STATION.
B) MEAN VALUE OF 13.63 AND 13.83 DEGREES CELSIUS.
C) MEAN VALUE OF 12.23 AND 12.36 DEGREES CELSIUS.

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 83 40.6

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
34 13.6 N	119 24.7 W	06/10/92	1437 UTC	36 in	330 01 Jen	290 01 06	2	1014.5 mb	16.8 C	15.9 C	18B 03	8/8	ST

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/l	CHL-A ug/l	PBAEO ug/l	PRESS db
1	0	18.13	18.13	33.356	23.983	391.7	0.000	5.69	105.3	3.0	0.35	0.0	0.00	0.51	0.21	0
1	5	17.56	17.56	33.348	24.115	379.2	0.019	5.70	104.3	3.1	0.37	0.0	0.00	0.61	0.25	5
1	10	15.74	15.74	33.270	24.477	344.9	0.037	5.79	102.2	3.7	0.47	0.2	0.04	1.00	0.51	10
	20 ISL	14.27	14.27	33.204	24.745	319.6	0.071	5.68	97.3	4.2	0.58	0.9	0.14	1.32	0.62	20
1	21	14.23	14.23	33.200	24.750	319.2	0.074	5.66	96.9	4.2	0.59	1.0	0.15	1.33	0.63	21
	30 ISL	14.07	14.07	33.215	24.795	315.1	0.102	5.55	94.7	4.8	0.64	1.5	0.20	1.33	0.64	3d
1	31	14.05	14.05	33.216	24.800	314.7	0.105	5.54	94.5	4.9	0.65	1.5	0.20	1.33	0.64	31

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 83 42

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
34 10.7 N	119 30.5 W	06/10/92	1240 UTC	142 m	230 01 Jen			1013.5 mb	16.3 C	15.5 C			

CAST	DEPTH D	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/l	PHAEO ug/l	PRESS db
	0 ISL	18.12	18.12	33.339	23.972	392.7	0.000	5.72	105.8	3.0	0.36	0.0	0.00	0.66	0.20	0
1	1	18.12	18.12	33.339	23.972	392.7	0.004	5.72	105.8	3. CI	0.36	0.0	0.00	0.66	0.20	1
	10 ISL	17.97	17.97	33.342	24.011	389.3	0.039	5.73	105.7	3.1	0.36	0.0	0.00	0.66	0.23	10
1	11	17.95	17.95	33.342	24.016	388.9	0.043	5.73	105.7	3.1	0.36	0.0	0.00	0.66	0.23	11
	20 ISL	16.88	16.88	33.331	24.264	365.6	0.077	5.64	101.9	4.0	0.44	0.5	0.04	0.80	0.39	20
1	22	16.58	16.58	33.326	24.329	359.4	0.084	5.62	100.9	4.2	0.46	0.6	0.05	0.82	0.42	22
	30 ISL	15.53	15.53	33.282	24.533	340.1	0.112	5.58	98.1	4.3	0.53	1.0	0.10	0.64	0.36	30
1	32	15.24	15.24	33.268	24.586	335.1	0.119	5.58	97.5	4.3	0.55	1.1	0.11	0.59	0.34	32
1	43	13.32	13.31	33.180	24.921	303.4	0.154	5.59	93.9	4.9	0.64	1.4	0.19	0.55	0.45	43
	50 ISL	12.48	12.47	33.233	25.128	283.9	0.175	5.05	83.4	7.1	0.87	5.7	0.09	0.37	0.41	50
1	53	12.25	12.24	33.277	25.206	276.5	0.183	4.76	78.2	8.3	0.98	7.9	0.04	0.28	0.39	53
1	63	12.23	12.22	33.505	25.387	259.6	0.210	3.88	63.8	12.2	1.28	12.9	0.02	0.09	0.17	63
1	73	12.07	12.06	33.568	25.466	252.3	0.235	3.70	60.7	13.5	1.36	14.4	0.01	0.06	0.12	73
	75 ISL	12.04	12.03	33.578	25.479	251.0	0.240	3.67	60.1	13.7	1.38	14.6	0.01	0.06	0.12	75
1	87	11.86	11.85	33.622	25.548	244.8	0.270	3.52	57.5	14.8	1.45	15.7	0.01	0.04	0.10	87
	100 ISL	11.65	11.64	33.638	25.599	240.2	0.302	3.47	56.4	15.6	1.48	16.4	0.01	0.03	0.08	100
1	102	11.62	11.61	33.640	25.607	239.6	0.307	3.46	56.2	15.7	1.48	16.5	0.01	0.03	0.08	102
	125 ISL	11.14	11.12	33.698	25.740	227.4	0.360	3.26	52.4	18.5	1.62	18.3	0.03	0.03	0.08	126
1	127	11.10	11.08	33.703	25.751	226.4	0.365	3.24	52.1	18.7	1.63	18.5	0.03	0.03	0.08	128

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 83 51

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	NAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
33 52.6 N	120 8.3 W	06/10/92	0656 UTC	106 m	300 18 kn			1013.1 mb	16.3 C	15.8 C			

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/l	PHAEO ug/l	PRESS db
1	0	18.27	18.27	33.327	23.926	397.1	0.000	5.74	106.5	2.5	0.34	0.0	0.02	0.81	0.17	0
1	5	18.27	18.27	33.324	23.924	397.5	0.020	5.76	106.9	2.5	0.35	0.0	0.02	0.78	0.20	5
	10 ISL	18.15	18.15	33.319	23.950	395.2	0.040	5.80	107.4	2.4	0.34	0.0	0.02	0.75	0.22	10
1	11	18.13	18.13	33.318	23.954	394.8	0.044	5.80	107.3	2.4	0.34	0.0	0.02	0.74	0.22	11
	20 ISL	15.55	15.55	33.288	24.533	339.8	0.077	5.62	98.9	4.4	0.55	1.5	0.08	0.79	0.34	20
1	22	14.91	14.91	33.294	24.678	326.1	0.083	5.55	96.4	4.9	0.61	1.9	0.10	0.79	0.36	22
	30 ISL	14.21	14.21	33.321	24.848	310.1	0.109	5.28	90.4	6.0	0.73	3.4	0.14	0.61	0.35	30
1	32	14.10	14.10	33.329	24.877	307.4	0.115	5.19	88.7	6.3	0.76	3.9	0.15	0.56	0.35	32
1	43	12.52	12.51	33.424	25.268	270.4	0.147	4.36	72.1	10.1	1.12	10.0	0.12	0.36	0.38	43
	50 ISL	12.20	12.19	33.481	25.373	260.5	0.165	4.09	67.2	11.8	1.23	12.0	0.11	0.26	0.29	50
1	53	12.16	12.15	33.499	25.395	258.5	0.173	4.02	66.0	12.4	1.26	12.5	0.11	0.23	0.24	53
1	63	12.06	12.05	33.520	25.430	255.4	0.199	3.94	64.6	13.2	1.30	13.1	0.10	0.20	0.19	63
1	73	11.93	11.92	33.548	25.477	251.2	0.224	3.80	62.1	13.6	1.36	13.9	0.07	0.13	0.19	73
	75 ISL	11.87	11.86	33.562	25.499	249.2	0.229	3.74	61.1	14.0	1.38	14.3	0.06	0.12	0.17	75
1	82	11.67	11.66	33.612	25.575	242.1	0.246	3.54	57.6	15.3	1.47	15.8	0.04	0.07	0.12	82

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 83 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
33 44.6 N	120 24.6 W	06/10/92	0330 UTC	959 m	300 14 kn			1012.8 mb	15.9 C	15.6 C			

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 UM/1	CHL-A ug/l	PHAEO ug/l	PRESS db
	0 ISL	17.22	17.22	33.252	24.122	378.4	0.000	5.74	104.3	1.8	0.36	0.0	0.00	0.24	0.07	0
1	1	17.22	17.22	33.252	24.122	378.4	0.004	5.74	104.3	1.8	0.36	0.0	0.00	0.24	0.07	1
1	10	17.23	17.23	33.252	24.120	378.9	0.038	5.75	104.5	1.8	0.35	0.0	0.00	0.24	0.08	10
	20 ISL	16.98	16.98	33.235	24.166	374.8	0.076	5.79	104.7	1.8	0.35	0.0	0.00	0.32	0.10	20
1	21	16.96	16.96	33.233	24.170	374.6	0.079	5.79	104.7	1.8	0.35	0.0	0.00	0.33	0.10	21
1	30	14.91	14.91	33.022	24.469	346.3	0.112	6.09	105.6	1.7	0.38	0.0	0.00	0.28	0.13	30
1	41	13.22	13.21	32.996	24.799	315.0	0.148	5.95	99.6	2.9	0.50	0.5	0.04	0.41	0.28	41
1	50	12.56	12.55	33.017	24.945	301.3	0.176	5.75	94.9	4.0	0.62	2.3	0.07	0.43	0.30	50
1	60	11.49	11.48	33.088	25.201	277.1	0.205	5.25	84.8	7.9	1.00	8.6	0.07	0.30	0.30	60
1	71	11.27	11.26	33.290	25.398	258.6	0.234	4.66	75.0	10.9	1.20	12.2	0.03	0.22	0.23	71
	75 ISL	11.07	11.06	33.385	25.508	248.2	0.244	4.37	70.1	12.8	1.31	13.9	0.03	0.17	0.19	75
1	85	10.57	10.56	33.597	25.761	224.3	0.268	3.71	58.9	17.5	1.55	17.7	0.02	0.04	0.10	85
1	100	10.38	10.37	33.702	25.876	213.7	0.301	3.39	53.6	20.2	1.67	19.6	0.01	0.02	0.09	100
1	120	10.48	10.47	33.893	26.008	201.6	0.342	2.72	43.2	23.8	1.86	22.0	0.01	0.01	0.05	121
	125 ISL	10.46	10.45	33.912	26.027	200.0	0.352	2.69	42.7	24.2	1.88	22.3	0.01	0.01	0.05	126
1	146	10.23	10.21	33.952	26.098	193.7	0.394	2.58	40.8	25.7	1.95	23.2	0.01	0.01	0.04	147
	150 ISL	10.16	10.14	33.961	26.117	192.0	0.401	2.55	40.2	26.2	1.97	23.4	0.01	0.01	0.04	151
1	176	9.72	9.70	34.032	26.247	180.1	0.450	2.33	36.4	30.1	2.09	25.2	0.01	0.01	0.05	177
	200 ISL	9.46	9.44	34.126	26.364	169.4	0.492	2.03	31.6	33.8	2.23	26.8	0.01	0.01	0.04	201
1	208	9.38	9.36	34.153	26.398	166.3	0.505	1.94	30.1	35.0	2.27	27.3	0.01	0.01	0.04	209
1	238	9.04	9.01	34.175	26.470	159.9	0.554	1.77	27.3	38.6	2.36	28.7	0.00			239
	250 ISL	8.91	8.88	34.183	26.497	157.5	0.573	1.70	26.1	40.0	2.40	29.2	0.00			251
1	279	8.59	8.56	34.199	26.560	152.0	0.618	1.54	23.5	43.6	2.48	30.3	0.00			281
	300 ISL	8.31	8.28	34.203	26.606	147.8	0.650	1.45	22.0	46.5	2.54	31.2	0.00			302
1	336	7.84	7.81	34.202	26.676	141.6	0.702	1.31	19.6	51.4	2.65	32.6	0.00			338
1	397	7.21	7.17	34.195	26.761	134.1	0.786	1.10	16.2	58.7	2.79	34.6	0.00			400
	400 ISL	7.17	7.13	34.195	26.767	133.6	0.790	1.08	15.9	59.2	2.80	34.7	0.00			403
1	463	6.48	6.44	34.216	26.877	123.4	0.871	0.74	10.7	70.0	2.98	37.5	0.00			466
	500 ISL	6.27	6.23	34.231	26.917	120.0	0.916	0.64	9.2	73.9	3.04	38.2	0.00			503
1	535	6.07	6.02	34.246	26.954	116.7	0.957	0.54	7.8	77.5	3.10	38.9	0.00			539

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 83 59

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
33 40.2 N	120 45.3 W	05/10/92	2335 UTC		320 11 Jen	320 05 07	1	1013.6 mb	17.8 C	17.0 C	26m 01	7/8 ST

CAST	DEPTH B	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN Bl/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 UM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
1	0	18.00	18.00	33.225	23.914	398.2	0.000	5.56	102.6	1.6	0.36	0.0	0.00	0.15	0.04	0
1	10	17.99	17.99	33.225	23.917	398.3	0.040	5.57	102.7	1.4	0.36	0.0	0.00	0.15	0.03	10
	20 ISL	17.85	17.85	33.259	23.977	392.9	0.079	5.61	103.2	1.4	0.37	0.0	0.00	0.22	0.05	20
1	21	17.84	17.84	33.271	23.989	391.8	0.083	5.61	103.2	1.4	0.37	0.0	0.00	0.23	0.05	21
	30 ISL	16.97	16.97	33.274	24.199	372.0	0.118	5.75	104.0	1.4	0.36	0.0	0.00	0.36	0.13	30
1	31	16.81	16.80	33.272	24.235	368.7	0.121	5.77	104.0	1.4	0.36	0.0	0.00	0.39	0.14	31
1	40	14.57	14.56	33.232	24.703	324.2	0.153	6.04	104.1	1.9	0.51	0.2	0.07	0.85	0.62	40
	50 ISL	13.22	13.21	33.158	24.925	303.3	0.184	5.72	95.9	3.9	0.68	2.8	0.24	0.57	0.46	50
1	51	13.12	13.11	33.149	24.937	302.1	0.187	5.67	94.8	4.1	0.70	3.1	0.25	0.52	0.43	51
1	61	11.99	11.98	33.104	25.121	284.8	0.216	5.45	89.0	5.8	0.85	6.2	0.18	0.39	0.39	61
1	71	10.81	10.80	33.053	25.295	268.3	0.244	5.27	83.8	8.5	1.02	9.9	0.04	0.20	0.25	71
	75 ISL	10.73	10.72	33.136	25.374	260.9	0.255	5.00	79.4	10.2	1.13	11.7	0.03	0.19	0.24	75
1	86	10.52	10.51	33.332	25.563	243.1	0.282	4.26	67.5	14.5	1.40	16.1	0.01	0.28 U	0.61 U	86
	100 ISL	9.90	9.89	33.350	25.683	231.9	0.316	4.22	65.9	16.5	1.50	17.8	0.01	0.12	0.17	100
1	101	9.86	9.85	33.350	25.689	231.3	0.318	4.22	65.9	16.6	1.50	17.9	0.01	0.15 U	0.38 U	101
1	121	9.78	9.77	33.653	25.940	208.0	0.362	3.31	51.7	22.2	1.76	21.8	0.01	0.06 U	0.29 U	122
	125 ISL	9.59	9.58	33.660	25.977	204.5	0.370	3.35	52.1	22.7	1.76	22.1	0.01	0.06	0.09	126
1	147	8.47	8.45	33.644	26.141	189.0	0.413	3.76	57.0	24.8	1.78	23.1	0.01	0.00	0.03	148
	150 ISL	8.45	8.43	33.666	26.161	187.1	0.419	3.73	56.5	25.3	1.79	23.4	0.01	0.00	0.03	151
1	177	8.29	8.27	33.839	26.322	172.4	0.467	3.26	49.3	30.3	1.93	25.8	0.00	0.00	0.02	178
	200 ISL	8.04	8.02	33.932	26.432	162.2	0.506	3.03	45.6	34.0	2.01	27.3	0.00	0.00	0.02	201
1	208	7.94	7.92	33.953	26.464	159.4	0.519	2.98	44.7	35.3	2.04	27.8	0.00	0.00	0.02	209
1	238	7.49	7.47	33.986	26.555	151.0	0.565	2.89	42.9	40.7	2.13	29.2	0.00			239
	250 ISL	7.39	7.37	34.003	26.583	148.6	0.583	2.73	40.5	42.8	2.19	29.9	0.00			251
1	278	7.24	7.21	34.044	26.636	143.9	0.624	2.25	33.2	47.6	2.36	31.7	0.00			280
	300 ISL	7.09	7.06	34.072	26.679	140.1	0.656	1.91	28.1	51.6	2.49	33.1	0.00			302
1	335	6.87	6.84	34.118	26.746	134.2	0.704	1.42	20.8	57.7	2.68	35.1	0.00			337
1	394	6.66	6.62	34.211	26.848	125.3	0.780	0.82	12.0	66.4	2.92	37.1	0.00			397
	400 ISL	6.60	6.56	34.213	26.858	124.4	0.788	0.79	11.5	67.4	2.94	37.3	0.00			403
1	462	5.97	5.93	34.219	26.944	116.5	0.862	0.58	8.3	76.7	3.07	39.5	0.00			465
	500 ISL	5.76	5.72	34.236	26.984	113.0	0.906	0.48	6.9	80.8	3.10	40.2	0.00			503
1	533	5.58	5.53	34.252	27.019	110.0	0.943	0.40	5.7	84.4	3.13	40.9	0.00			537

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 83 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
32 54.6 N	122 7.8 K	05/10/92	1215 UTC	4183 •	320 18 Itn			1013.1 mb	18.5 C	17.3 C		

CAST	DEPTH •	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN »1/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	19.06	19.06	33.088	23.546	433.3	0.000	5.46	102.7	2.0	0.35	0.0	0.00	0.09	0.02	0
1	1	19.06	19.06	33.088	23.546	433.3	0.004	5.46	102.7	2.0	0.35	0.0	0.00	0.09	0.02	1
	10 ISL	19.07	19.07	33.086	23.543	434.0	0.043	5.45	102.5	1.9	0.35	0.0	0.00	0.08	0.02	10
1	16	19.07	19.07	33.084	23.542	434.3	0.069	5.44	102.3	1.9	0.35	0.0	0.00	0.08	0.02	16
	20 ISL	18.87	18.87	33.046	23.563	432.4	0.087	5.47	102.5	1.9	0.35	0.0	0.00	0.09	0.02	20
	30 ISL	18.33	18.32	32.957	23.630	426.4	0.130	5.55	102.9	1.9	0.36	0.0	0.00	0.12	0.04	30
1	31	18.27	18.26	32.949	23.638	425.6	0.134	5.56	102.9	1.9	0.36	0.0	0.00	0.12	0.04	31
1	41	18.06	18.05	32.949	23.690	421.0	0.176	5.62	103.6	1.9	0.36	0.0	0.00	0.14	0.05	41
	50 ISL	17.64	17.63	32.914	23.765	414.1	0.214	5.67	103.7	1.8	0.36	0.0	0.00	0.17	0.05	50
1	51	17.55	17.54	32.897	23.774	413.3	0.218	5.68	103.7	1.8	0.36	0.0	0.00	0.17	0.05	51
1	61	15.67	15.66	32.921	24.226	370.4	0.257	6.06	106.6	2.0	0.37	0.0	0.00	0.26	0.14	61
1	71	14.74	14.73	33.061	24.536	341.0	0.293	6.07	104.9	1.9	0.36	0.0	0.00	0.28	0.21	71
	75 ISL	14.73	14.72	33.181	24.631	332.1	0.306	5.98	103.4	2.0	0.35	0.0	0.00	0.26	0.21	75
1	80	14.72	14.71	33.305	24.729	322.9	0.323	5.85	101.2	2.1	0.35	0.0	0.00	0.23	0.21	80
1	95	14.10	14.09	33.362	24.904	306.6	0.370	5.68	97.0	2.5	0.40	0.0	0.06	0.17	0.18	95
	100 ISL	13.64	13.63	33.313	24.961	301.3	0.385	5.63	95.2	3.0	0.46	0.8	0.10	0.16	0.19	100
1	110	12.72	12.71	33.206	25.062	291.8	0.415	5.55	92.0	4.1	0.59	2.7	0.15	0.15	0.20	110
1	125	12.07	12.05	33.181	25.167	282.0	0.458	5.47	89.5	5.0	0.69	4.7	0.06	0.15	0.17	125
1	150	9.87	9.85	33.180	25.556	245.0	0.524	5.17	80.6	10.7	1.12	12.2	0.01	0.05	0.09	151
1	176	8.94	8.92	33.334	25.826	219.6	0.584	4.67	71.4	16.5	1.45	17.4	0.00	0.02	0.04	177
	200 ISL	8.48	8.46	33.603	26.108	193.1	0.633	3.94	59.7	24.2	1.72	22.5	0.00	0.00	0.02	201
1	206	8.40	8.38	33.672	26.175	186.9	0.645	3.77	57.1	26.0	1.78	23.6	0.00	0.00	0.01	207
1	236	8.10	8.08	33.869	26.375	168.4	0.698	3.37	50.7	31.0	1.90	25.5	0.00			237
	250 ISL	7.94	7.91	33.918	26.437	162.7	0.721	3.29	49.3	33.3	1.94	26.2	0.00			251
1	277	7.61	7.58	33.970	26.526	154.5	0.764	3.15	46.9	37.8	2.02	27.6	0.00			278
	300 ISL	7.33	7.30	33.994	26.585	149.2	0.799	2.89	42.8	42.2	2.14	29.2	0.00			302
1	333	6.93	6.90	34.010	26.653	143.0	0.847	2.45	35.9	48.8	2.34	31.7	0.00			335
1	394	6.28	6.25	34.031	26.756	133.6	0.932	1.71	24.7	60.6	2.64	35.6	0.00			396
	400 ISL	6.23	6.19	34.034	26.765	132.8	0.940	1.65	23.8	61.7	2.67	35.9	0.00			402
1	459	5.77	5.73	34.079	26.859	124.3	1.015	1.12	16.0	72.3	2.90	38.6	0.00			462
	500 ISL	5.55	5.51	34.128	26.924	118.4	1.065	0.81	11.5	79.0	3.02	40.0	0.00			503
1	528	5.40	5.36	34.162	26.969	114.3	1.098	0.59	8.3	83.6	3.11	40.9	0.00			531

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 83 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	SEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
32 34.8 N	122 48.9 N	05/10/92	0634 UTC	4268 -	330 12 kn			1014.6 *b	19.0 C	18.0 C		

CAST	DEPTH -	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ML/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL-A UG/1	PHAEO UG/1	PRESS DB
1	0	20.50	20.50	33.400	23.411	446.2	0.000	5.29	102.4	2.1	0.36	0.1	0.00	0.07	0.02	0
	10 ISL	20.52	20.52	33.401	23.407	447.0	0.045	5.29	102.4	2.1	0.35	0.1	0.00	0.07	0.02	10
1	17	20.53	20.53	33.402	23.406	447.4	0.076	5.29	102.4	2.1	0.34	0.1	0.00	0.07	0.02	17
	20 ISL	20.53	20.53	33.402	23.406	447.5	0.089	5.29	102.4	2.1	0.34	0.1	0.00	0.07	0.02	20
	30 ISL	20.51	20.50	33.400	23.410	447.5	0.134	5.31	102.8	1.9	0.33	0.1	0.00	0.07	0.01	30
1	31	20.51	20.50	33.400	23.410	447.5	0.139	5.31	102.8	1.9	0.33	0.1	0.00	0.07	0.01	31
1	41	20.50	20.49	33.395	23.410	447.9	0.183	5.32	102.9	1.9	0.34	0.1	0.00	0.08	0.02	41
	50 ISL	18.67	18.66	33.134	23.682	422.2	0.223	5.68	106.1	1.9	0.35	0.1	0.00	0.13	0.04	5(1
1	52	18.19	18.18	33.080	23.759	414.8	0.231	5.77	106.7	1.9	0.35	0.1	0.00	0.14	0.04	52
1	62	16.70	16.69	33.060	24.099	382.6	0.271	6.05	108.7	1.9	0.36	0.0	0.00	0.16	0.06	62
	75 ISL	14.73	14.72	33.084	24.556	339.2	0.318	6.04	104.4	2.2	0.41	0.0	0.00	0.21	0.16	75
1	76	14.58	14.57	33.087	24.591	336.0	0.321	6.04	104.0	2.2	0.42	0.0	0.00	0.22	0.17	76
1	91	12.78	12.77	33.083	24.954	301.5	0.369	5.68	94.3	4.0	0.63	2.6	0.05	0.33	0.35	91
	100 ISL	11.93	11.92	33.126	25.150	283.0	0.395	5.31	86.6	6.5	0.87	6.8	0.04	0.24	0.29	10C
1	106	11.48	11.47	33.160	25.259	272.6	0.412	5.07	81.9	8.2	1.02	9.6	0.02	0.17	0.23	106
1	121	10.90	10.89	33.215	25.406	258.9	0.452	4.79	76.4	10.7	1.19	12.7	0.01	0.11	0.17	121
	125 ISL	10.73	10.72	33.232	25.450	254.8	0.462	4.78	76.0	11.1	1.21	13.1	0.01	0.10	0.15	12S
1	141	10.09	10.07	33.309	25.620	238.9	0.501	4.71	73.9	12.7	1.27	14.5	0.01	0.05	0.09	142
	150 ISL	9.87	9.85	33.357	25.694	231.9	0.523	4.48	69.9	14.5	1.38	16.2	0.01	0.04	0.06	151
1	162	9.63	9.61	33.431	25.792	222.8	0.550	4.14	64.3	17.3	1.53	18.6	0.01	0.03	0.04	163
1	187	8.98	8.96	33.645	26.064	197.3	0.602	3.73	57.2	22.6	1.72	22.0	0.00	0.01	0.02	188
	200 ISL	8.81	8.79	33.747	26.171	187.4	0.627	3.56	54.4	24.9	1.78	23.1	0.00	0.01	0.02	201
1	222	8.63	8.61	33.888	26.309	174.6	0.667	3.34	50.9	28.4	1.84	24.4	0.00	0.00	0.02	223
	250 ISL	8.36	8.33	33.990	26.431	163.5	0.715	3.27	49.5	32.1	1.89	25.4	0.00			251
1	258	8.28	8.25	34.008	26.457	161.1	0.728	3.23	48.9	33.3	1.91	25.8	0.00			259
1	299	7.83	7.80	34.073	26.575	150.4	0.791	2.24	33.5	43.0	2.29	30.4	0.00			301
	300 ISL	7.82	7.79	34.074	26.578	150.2	0.793	2.23	33.4	43.2	2.30	30.5	0.00			302
1	355	7.25	7.22	34.100	26.680	141.0	0.873	1.73	25.6	52.0	2.53	33.3	0.00			357
	400 ISL	6.80	6.76	34.127	26.764	133.5	0.935	1.30	19.0	60.1	2.72	35.9	0.00			402
1	422	6.58	6.54	34.140	26.803	129.9	0.964	1.11	16.2	64.0	2.81	37.2	0.00			425
1	492	5.93	5.89	34.171	26.912	119.9	1.051	0.74	10.6	75.0	3.00	40.5	0.00			495
	500 ISL	5.89	5.85	34.177	26.922	119.1	1.061	0.71	10.2	76.0	3.01	40.7	0.00			503
1	573	5.50	5.45	34.230	27.012	111.1	1.145	0.43	6.1	84.9	3.14	42.5	0.00			577

RV NEN HORIZON CALCOFI CRUISE 9210 STATION 83 100

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	SEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
32 14.8 N	123 29.5 N	05/10/92	0041 UTC	4166 -	350 14 kn	350 04 04	1	1013.5 *mb*	19.0 C	17.1 C	31a 01	6/8 ST

CAST	DEPTH -	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN *ml/1*	OXY PCT	SIO3 UM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	20.53	20.53	33.390	23.396	447.7	0.000			2.1	0.34	0.0	0.00	0.08	0.01	0
1	1	20.53	20.53	33.390	23.396	447.7	0.004	5.39 U	104.4 U	2.1	0.34	0.0	0.00	0.08	0.01	1
	10 ISL	20.51	20.51	33.389	23.401	447.6	0.045			2.1	0.34	0.0	0.00	0.08	0.02	10
1	16	20.50	20.50	33.388	23.403	447.6	0.072	5.29	102.4	2.1	0.34	0.0	0.00	0.08	0.02	16
	20 ISL	20.41	20.41	33.385	23.425	445.7	0.089	5.30	102.4	2.1	0.34	0.0	0.00	0.08	0.02	20
	30 ISL	20.16	20.15	33.374	23.483	440.5	0.134	5.34	102.7	2.1	0.34	0.0	0.00	0.08	0.02	30
1	31	20.14	20.13	33.373	23.487	440.1	0.138	5.34	102.6	2.1	0.34	0.0	0.00	0.08	0.02	31
1	41	20.06	20.05	33.354	23.494	439.8	0.182	5.34	102.5	1.9	0.34	0.0	0.00	0.10	0.02	41
	50 ISL	19.98	19.97	33.353	23.515	438.2	0.222	5.39	103.3	1.9	0.34	0.0	0.00	0.14	0.04	50
1	51	19.97	19.96	33.353	23.517	438.0	0.226	5.39	103.3	1.9	0.34	0.0	0.00	0.15	0.04	51
1	61	16.44	16.43	33.137	24.218	371.2	0.267	6.10	109.1	2.1	0.37	0.0	0.00	0.23	0.09	61
1	71	14.90	14.89	33.123	24.550	339.8	0.302	6.18	107.2	2.6	0.42	0.0	0.00	0.27	0.14	71
	75 ISL	14.18	14.17	33.123	24.702	325.2	0.315	6.12	104.6	3.2	0.47	0.2	0.01	0.35	0.25	75
1	82	13.00	12.99	33.133	24.950	301.7	0.337	5.93	98.9	4.5	0.58	1.3	0.04	0.48	0.44	82
1	97	11.65	11.64	33.146	25.217	276.4	0.381	5.23	84.8	7.5	0.93	8.1	0.03	0.30	0.31	97
	100 ISL	11.52	11.51	33.154	25.247	273.6	0.389	5.15	83.2	7.9	0.97	8.9	0.03	0.28	0.30	100
1	112	11.01	11.00	33.202	25.377	261.5	0.421	4.88	78.0	10.0	1.12	11.8	0.02	0.20	0.24	112
	125 ISL	9.79	9.78	33.294	25.658	234.8	0.453	4.49	69.9	15.0	1.40	16.6	0.01	0.07	0.11	125
1	127	9.60	9.59	33.312	25.703	230.5	0.458	4.43	68.7	15.8	1.44	17.3	0.01	0.05	0.09	128
	150 ISL	8.83	8.81	33.557	26.018	200.9	0.508	3.85	58.8	22.7	1.71	22.0	0.00	0.01	0.03	151
1	151	8.82	8.80	33.568	26.028	199.9	0.510	3.83	58.5	22.9	1.72	22.1	0.00	0.01	0.03	152
1	176	8.48	8.46	33.762	26.233	180.9	0.557	3.37	51.1	28.2	1.87	24.9	0.00	0.00	0.03	177
	200 ISL	8.36	8.34	33.865	26.332	171.9	0.600	3.41	51.6	29.6	1.86	24.9	0.00	0.01	0.02	201
1	208	8.31	8.29	33.888	26.358	169.6	0.613	3.42	51.7	29.9	1.85	24.9	0.00	0.01	0.02	209
1	237	7.85	7.83	33.970	26.491	157.3	0.661	3.49	52.3	34.4	1.88	25.8	0.00			238
	250 ISL	7.69	7.67	33.984	26.525	154.2	0.681	3.38	50.4	36.5	1.94	26.6	0.00			251
1	278	7.40	7.37	33.996	26.576	149.7	0.723	3.01	44.6	41.2	2.10	28.6	0.00			279
	300 ISL	7.19	7.16	34.010	26.617	146.0	0.756	2.68	39.5	45.3	2.23	30.3	0.00			302
1	334	6.93	6.90	34.039	26.676	140.8	0.805	2.14	31.4	51.7	2.43	32.8	0.00			336
1	395	6.66	6.62	34.131	26.785	131.2	0.888	1.22	17.8	62.9	2.78	36.3	0.00			397
	400 ISL	6.63	6.59	34.136	26.793	130.5	0.894	1.17	17.0	63.7	2.80	36.5	0.00			402
1	462	6.18	6.14	34.185	26.891	121.8	0.972	0.75	10.8	72.7	2.99	38.7	0.00			465
	500 ISL	5.97	5.93	34.216	26.943	117.2	1.018	0.58	8.3	77.2	3.06	39.6	0.00			503
1	534	5.79	5.74	34.244	26.987	113.2	1.057	0.42	6.0	81.2	3.13	40.4	0.00			538

KV NEW HORIZON CALCOFI CRUISE 9210 STATION 83 110

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
31 54.6 N	124 10.3 W	04/10/92	1745 UTC	4184 m	330 10 Jen	330 03 07	1	1015.5 mb	21.2 C	18.2 C		3/8	CC

CAST	DEPTH n	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
1	0	20.40	20.40	33.365	23.411	446.2	0.000	5.29	102.2	1.8	0.34	0.0	0.00	0.08	0.02	0
	10 ISL	20.38	20.38	33.364	23.416	446.1	0.045	5.29	102.1	1.7	0.34	0.0	0.00	0.09	0.02	10
1	15	20.37	20.37	33.364	23.419	446.0	0.067	5.29	102.1	1.7	0.34	0.0	0.00	0.09	0.02	15
	20 ISL	20.31	20.31	33.361	23.433	444.9	0.089	5.30	102.2	1.7	0.34	0.0	0.00	0.09	0.02	20
1	30	20.19	20.18	33.356	23.461	442.6	0.134	5.33	102.5	1.7	0.35	0.0	0.00	0.09	0.02	30
1	40	20.15	20.14	33.356	23.472	441.9	0.178	5.34	102.6	1.6	0.34	0.0	0.00	0.10	0.03	40
1	50	20.27	20.26	33.427	23.495	440.1	0.222	5.32	102.5	1.6	0.33	0.0	0.00	0.13	0.04	50
1	60	19.22	19.21	33.262	23.641	426.4	0.265	5.49	103.7	1.7	0.34	0.0	0.00	0.18	0.07	60
1	69	16.24	16.23	33.163	24.284	365.2	0.301	6.18	110.1	2.0	0.38	0.0	0.00	0.29	0.11	69
	75 ISL	15.00	14.99	33.128	24.532	341.6	0.322	6.16	107.0	2.3	0.40	0.0	0.00	0.29	0.16	75
1	79	14.36	14.35	33.112	24.656	329.8	0.335	6.14	105.3	2.6	0.43	0.0	0.00	0.29	0.19	79
1	94	12.15	12.14	33.154	25.130	284.7	0.382	5.50	90.1	6.0	0.80	5.2	0.17	0.34	0.31	94
	100 ISL	11.41	11.40	33.168	25.278	270.7	0.398	5.22	84.2	8.1	0.97	8.3	0.13	0.27	0.27	100
1	110	10.48	10.47	33.211	25.476	251.9	0.424	4.78	75.6	11.5	1.22	13.2	0.02	0.13	0.17	110
1	125	10.11	10.10	33.358	25.654	235.2	0.461	4.34	68.1	14.8	1.42	16.6	0.01	0.07	0.11	125
1	150	9.37	9.35	33.571	25.943	208.1	0.516	3.78	58.4	20.7	1.67	20.9	0.00	0.02	0.05	151
1	176	9.04	9.02	33.806	26.180	186.1	0.568	3.18	48.9	26.4	1.87	24.5	0.00	0.00	0.03	177
	200 ISL	8.75	8.73	33.929	26.322	173.0	0.611	2.89	44.2	30.6	1.99	26.4	0.00	0.00	0.02	201
1	206	8.68	8.66	33.949	26.349	170.6	0.621	2.84	43.3	31.5	2.01	26.8	0.00	0.00	0.02	207
1	236	8.27	8.25	34.018	26.466	159.8	0.671	2.63	39.8	36.1	2.12	28.5	0.00			237
	250 ISL	8.12	8.09	34.036	26.503	156.5	0.693	2.52	38.0	38.1	2.17	29.3	0.00			251
1	277	7.83	7.80	34.056	26.562	151.3	0.734	2.31	34.6	42.3	2.27	30.8	0.00			278
	300 ISL	7.50	7.47	34.065	26.617	146.3	0.768	2.13	31.7	46.5	2.37	32.2	0.00			302
1	333	7.04	7.01	34.077	26.691	139.5	0.816	1.84	27.1	53.0	2.53	34.3	0.00			335
1	394	6.49	6.45	34.129	26.806	129.1	0.897	1.15	16.7	64.6	2.82	37.9	0.00			396
	400 ISL	6.45	6.41	34.133	26.814	128.3	0.905	1.10	16.0	65.5	2.84	38.2	0.00			402
1	460	6.08	6.04	34.174	26.895	121.2	0.980	0.75	10.8	73.6	3.00	40.3	0.00			463
	500 ISL	5.76	5.72	34.201	26.957	115.6	1.027	0.58	8.3	79.9	3.09	41.6	0.00			503
1	530	5.52	5.48	34.222	27.003	111.4	1.061	0.45	6.4	84.7	3.15	42.6	0.00			533

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 87 33

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
33 53.3 N	118 29.6 W	02/10/92	0858 UTC	59 a	260 13 Jul			1010.2 mb	17.8 C	16.9 C			

CAST	DEPTH -	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
1	0	17.46	17.46	33.229	24.047	385.5	0.000	5.97	109.0	2.1	0.35	0.0	0.00	0.49	0.17	0
1	10	15.43	15.43	33.133	24.440	348.4	0.037	6.23	109.2	2.3	0.41	0.0	0.00	0.42	0.18	10
	20 ISL	13.58	13.58	33.173	24.863	308.4	0.070	5.37	90.7	5.7	0.92	2.0	0.08	0.75	0.37	20
1	21	13.45	13.45	33.182	24.896	305.2	0.073	5.27	88.8	6.1	0.97	2.2	0.09	0.78	0.39	21
	30 ISL	13.42	13.42	33.275	24.974	298.0	0.100	4.92	82.9	6.6	0.93	3.5	0.39	0.62	0.33	30
1	31	13.42	13.42	33.276	24.975	298.0	0.103	4.89	82.4	6.6	0.92	3.6	0.42	0.59	0.32	31
1	42	13.11	13.10	33.346	25.092	287.2	0.135	4.47	74.8	8.0	1.02	6.0	0.48	0.33	0.30	42
	50 ISL	12.94	12.93	33.379	25.151	281.7	0.158	4.35	72.6	8.6	1.06	7.7	0.42	0.23	0.25	50
1	51	12.92	12.91	33.383	25.158	281.1	0.160	4.33	72.2	8.7	1.07	7.9	0.41	0.22	0.24	51

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 87 35

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
33 49.1 N	118 37.9 W	02/10/92	1056 UTC	696 m	280 15 kn			1009.8 mb	18.1 C	16.9 C			

CAST	DEPTH B	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	16.50	16.50	33.214	24.261	365.1	0.000	5.84	104.6	3.1	0.43	0.1	0.04	0.50	0.16	0
1	1	16.50	16.50	33.214	24.261	365.2	0.004	5.84	104.6	3.1	0.43	0.1	0.04	0.50	0.16	1
	10 ISL	16.36	16.36	33.217	24.296	362.1	0.036	5.81	103.8	3.3	0.46	0.2	0.05	0.48	0.18	10
1	11	16.34	16.34	33.217	24.301	361.7	0.040	5.80	103.6	3.3	0.47	0.2	0.05	0.48	0.18	11
	20 ISL	15.57	15.57	33.212	24.470	345.8	0.072	5.78	101.7	3.6	0.51	0.2	0.07	0.56	0.22	20
1	21	15.47	15.47	33.210	24.491	343.9	0.075	5.78	101.5	3.6	0.51	0.2	0.07	0.58	0.23	21
	30 ISL	14.68	14.68	33.155	24.620	331.8	0.106	5.92	102.2	3.6	0.53	0.2	0.05	0.83	0.34	30
1	31	14.59	14.59	33.148	24.634	330.5	0.109	5.93	102.2	3.6	0.53	0.2	0.05	0.85	0.35	31
1	41	13.70	13.69	33.099	24.782	316.7	0.141	5.06	85.6	7.6	1.29	3.0	0.25	0.64	0.30	41
	50 ISL	13.34	13.33	33.283	24.997	296.4	0.169	4.70	79.0	7.4	1.04	4.3	0.46	0.38	0.27	50
1	51	13.31	13.30	33.307	25.022	294.1	0.172	4.67	78.5	7.4	0.99	4.5	0.48	0.35	0.27	51
1	61	12.93	12.92	33.392	25.163	280.8	0.201	4.30	71.7	9.0	1.07	8.2	0.39	0.19	0.19	61
1	70	12.81	12.80	33.404	25.197	277.9	0.226	4.27	71.1	9.2	1.09	8.8	0.30	0.18	0.21	70
	75 ISL	12.69	12.68	33.459	25.263	271.8	0.240	4.09	67.9	10.3	1.16	10.3	0.19	0.14	0.19	75
1	84	12.48	12.47	33.569	25.389	260.0	0.263	3.73	61.7	12.6	1.31	13.1	0.01	0.07	0.13	84
1	99	12.34	12.33	33.618	25.454	254.1	0.302	3.51	57.9	13.9	1.39	14.5	0.01	0.05	0.10	99
	100 ISL	12.33	12.32	33.619	25.457	253.9	0.305	3.49	57.6	14.0	1.39	14.6	0.01	0.05	0.10	100
1	119	12.10	12.08	33.669	25.540	246.4	0.352	3.33	54.7	15.3	1.47	15.9	0.01	0.02	0.08	120
	125 ISL	11.70	11.68	33.637	25.590	241.7	0.367	3.46	56.3	15.5	1.47	16.3	0.01	0.02	0.07	126
1	145	10.36	10.34	33.581	25.786	223.3	0.413	3.79	59.9	17.2	1.52	18.0	0.01	0.02	0.05	146
	150 ISL	10.36	10.34	33.642	25.834	218.8	0.424	3.64	57.5	18.3	1.58	18.8	0.01	0.02	0.05	151
1	176	10.36	10.34	33.942	26.068	197.2	0.478	2.61	41.3	24.9	1.91	23.1	0.01	0.01	0.05	177
	200 ISL	9.92	9.90	34.066	26.240	181.3	0.524	2.27	35.6	29.4	2.07	25.6	0.01	0.01	0.04	201
1	205	9.81	9.79	34.082	26.271	178.4	0.533	2.23	34.9	30.3	2.10	26.0	0.01	0.01	0.04	206
1	235	9.36	9.33	34.173	26.417	165.0	0.584	1.88	29.2	35.6	2.28	28.1	0.01			236
	250 ISL	9.16	9.13	34.204	26.474	159.9	0.609	1.72	26.6	38.0	2.36	29.1	0.01			251
1	277	8.80	8.77	34.237	26.557	152.3	0.651	1.46	22.4	42.3	2.48	30.6	0.00			279
	300 ISL	8.45	8.42	34.240	26.614	147.2	0.685	1.32	20.1	46.0	2.56	31.6	0.00			302
1	333	7.95	7.92	34.231	26.683	141.0	0.733	1.17	17.6	51.3	2.67	32.9	0.01			335
1	393	7.21	7.17	34.241	26.797	130.6	0.814	0.84	12.4	61.0	2.85	36.1	0.01			395
	400 ISL	7.14	7.10	34.244	26.809	129.5	0.823	0.80	11.8	62.1	2.87	36.4	0.01			403
1	460	6.64	6.60	34.275	26.902	121.2	0.899	0.54	7.9	71.2	3.04	38.4	0.00			463
	500 ISL	6.33	6.28	34.300	26.963	115.7	0.946	0.41	5.9	77.4	3.12	39.1	0.00			503
1	530	6.09	6.04	34.319	27.009	111.5	0.980	0.32	4.6	82.1	3.18	39.7	0.00			534

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 87 40

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
33 39.7 N	118 58.3 W	02/10/92	1433 UTC	798 m	280 17 kn	280 03 04	1	1010.6 mb	18.6 C	16.7 C	16m 02	1/8	NS

CAST	DEPTH B		TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PBAEO ug/1	PRESS db
	0	ISL	20.18	20.18	33.386	23.485	439.2	0.000	5.41	104.1	1.6	0.29	0.1	0.00	0.29	0.07	0
1	1		20.18	20.18	33.386	23.485	439.2	0.004	5.41	104.1	1.6	0.29	0.1	0.00	0.29	0.07	1
1	10		19.29 A	19.29	33.364	23.699	419.1	0.043	5.47	103.5	1.6	0.30	0.1	0.00	0.26	0.08	10
	20	ISL	16.24	16.24	33.173	24.290	363.0	0.082	6.03	107.5	1.8	0.37	0.0	0.00	0.49	0.19	20
1	21		15.90	15.90	33.157	24.354	356.9	0.086	6.08	107.6	1.8	0.38	0.0	0.00	0.52	0.21	21
	30	ISL	13.88	13.88	33.093	24.740	320.4	0.116	6.02	102.2	3.1	0.51	0.7	0.02	0.86	0.48	30
1	32		13.57	13.57	33.087	24.799	314.8	0.123	6.01	101.4	3.4	0.54	0.9	0.03	0.92	0.53	32
1	42		13.18	13.17	33.090	24.880	307.4	0.154	5.94	99.4	3.9	0.59	1.4	0.04	0.88	0.54	42
	50	ISL	12.49	12.48	33.138	25.052	291.1	0.178	5.54	91.4	5.7	0.76	4.5	0.07	0.75	0.53	50
1	52		12.31	12.30	33.154	25.099	286.7	0.183	5.42	89.1	6.2	0.81	5.4	0.07	0.71	0.53	52
1	62		11.75	11.74	33.222	25.257	271.8	0.211	5.06	82.2	7.9	0.97	8.5	0.05	0.42	0.35	62
1	72		11.34	11.33	33.306	25.397	258.7	0.238	4.88	78.7	9.2	1.06	10.3	0.04	0.28	0.27	72
	75	ISL	11.35	11.34	33.386	25.458	253.0	0.245	4.54	73.2	10.7	1.16	11.8	0.03	0.22	0.22	75
1	86		11.38	11.37	33.664	25.669	233.2	0.272	3.37	54.5	16.3	1.52	17.1	0.01	0.02	0.07	86
	100	ISL	10.51	10.50	33.614	25.785	222.4	0.304	3.68	58.4	17.7	1.55	18.2	0.01	0.03	0.06	100
1	101		10.45	10.44	33.606	25.789	222.0	0.306	3.72	58.9	17.7	1.55	18.3	0.01	0.03	0.06	101
1	122		10.52	10.51	33.798	25.927	209.4	0.352	3.04	48.3	21.3	1.75	20.9	0.00	0.01	0.05	123
	125	ISL	10.47	10.46	33.803	25.940	208.2	0.358	3.04	48.2	21.5	1.75	21.0	0.00	0.01	0.05	126
1	146		9.99	9.97	33.819	26.035	199.6	0.401	3.17	49.8	22.8	1.77	21.8	0.00	0.01	0.04	147
	150	ISL	9.93	9.91	33.839	26.060	197.2	0.409	3.13	49.1	23.4	1.79	22.1	0.00	0.01	0.04	151
1	178		9.63	9.61	34.007	26.242	180.5	0.462	2.64	41.2	28.3	1.98	24.9	0.01	0.00	0.03	179
	200	ISL	9.53	9.51	34.099	26.331	172.5	0.500	2.26	35.2	31.8	2.13	26.5	0.00	0.01	0.04	201
1	208		9.49	9.47	34.128	26.360	169.9	0.514	2.12	33.0	33.1	2.19	27.1	0.00	0.01	0.04	209
1	237		9.09	9.06	34.222	26.499	157.2	0.562	1.60	24.7	39.4	2.42	29.6	0.00			238
	250	ISL	8.95	8.92	34.236	26.532	154.2	0.582	1.49	22.9	41.0	2.47	30.2	0.00			251
1	279		8.64	8.61	34.238	26.583	149.9	0.626	1.37	20.9	44.1	2.53	31.1	0.00			281
	300	ISL	8.33	8.30	34.236	26.629	145.7	0.657	1.27	19.3	47.3	2.59	32.1	0.00			302
1	334		7.82	7.79	34.231	26.702	139.1	0.705	1.12	16.8	52.7	2.70	33.9	0.00			336
1	395		7.19	7.15	34.239	26.798	130.5	0.787	0.84	12.4	61.3	2.86	36.3	0.00			398
	400	ISL	7.15	7.11	34.241	26.806	129.9	0.794	0.82	12.1	61.9	2.87	36.4	0.00			40!l
1	462		6.75	6.71	34.268	26.882	123.2	0.872	0.60	8.8	69.1	3.00	38.0	0.00			46!i
	500	ISL	6.49	6.44	34.286	26.931	118.9	0.918	0.48	7.0	74.1	3.07	38.8	0.00			503
1	533		6.27	6.22	34.303	26.974	115.2	0.957	0.37	5.3	78.4	3.13	39.5	0.00			537

A) MEAN VALUE OF 19.22 AND 19.36 DEGREES CELSIUS.

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 87 45

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	HIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE:
33 29.3 N	119 20.2 N	02/10/92	1945 UTC	1617 m	290 20 kn	280 06 05	4	1012.1 Bib	18.8 C	16.9 C		1/8	AS

CAST	DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIOJ UM/1	PO4 uM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0	ISL	18.17	18.17	33.333	23.955	394.3	0.000	5.65	104.6	1.9	0.33	0.1	0.00	0.37	0.11	0
1	1		18.17	18.17	33.333	23.955	394.3	0.004	5.65	104.6	1.9	0.33	0.1	0.00	0.37	0.11	1
	10	ISL	18.17	18.17	33.331	23.954	394.8	0.039	5.64	104.4	1.9	0.34	0.1	0.00	0.38	0.12	10
1	11		18.17	18.17	33.331	23.954	394.8	0.043	5.64	104.4	1.9	0.34	0.1	0.00	0.38	0.12	11
	20	ISL	17.32	17.32	33.307	24.141	377.2	0.078	5.75	104.7	1.9	0.37	0.1	0.01	0.50	0.20	20
1	21		17.14	17.14	33.301	24.179	373.6	0.082	5.76	104.5	1.9	0.37	0.1	0.01	0.52	0.21	21
	30	ISL	13.99	13.99	33.203	24.802	314.4	0.113	5.62	95.7	4.3	0.65	2.7	0.10	0.88	0.59	30
1	31		13.64	13.64	33.200	24.872	307.8	0.116	5.59	94.5	4. iS	0.68	3.0	0.11	0.91	0.63	31
1	41		12.68	12.67	33.240	25.094	286.9	0.146	5.20	86.2	6.5	0.84	5.4	0.14	0.68	0.53	41
	50	ISL	11.86	11.85	33.358	25.342	263.5	0.170	4.56	74.3	9.7	1.10	10.3	0.06	0.30	0.32	50
1	52		11.71	11.70	X3.387	25.392	258.7	0.176	4.42	71.8	10.4	1.16	11.4	0.04	0.22	0.27	52
1	61		11.34	11.33	33.476	25.530	245.9	0.198	4.11	66.3	12.9	1.31	13.9	0.02	0.12	0.19	61
1	71		11.04	11.03	33.534	25.629	236.6	0.223	3.88	62.2	14.IS	1.41	15.7	0.02	0.07	0.13	71
	75	ISL	10.93	10.92	33.572	25.678	232.0	0.232	3.76	60.2	15.6	1.46	16.5	0.02	0.05	0.11	75
1	85		10.75	10.74	33.680	25.794	221.2	0.255	3.42	54.6	18.1	1.60	18.5	0.01	0.02	0.07	85
1	100		10.82	10.81	33.823	25.894	212.1	0.287	2.92	46.7	20.8	1.75	20.5	0.01	0.01	0.07	100
1	120		10.22	10.21	33.833	26.006	201.8	0.328	3.00	47.3	22.5	1.79	21.5	0.01	0.01	0.05	121
	125	ISL	10.07	10.06	33.853	26.047	197.9	0.338	2.97	46.7	23.5	1.82	22.1	0.01	0.01	0.05	126
1	145		9.57	9.55	33.953	26.209	182.9	0.377	2.72	42.3	28.0	1.95	24.5	0.01	0.01	0.06	146
	150	ISL	9.50	9.48	33.975	26.238	180.3	0.386	2.65	41.2	29.0	1.98	25.0	0.01	0.01	0.06	151
1	175		9.29	9.27	34.075	26.351	170.0	0.429	2.24	34.7	33.2	2.14	27.0	0.01	0.01	0.04	176
	200	ISL	9.23	9.21	34.169	26.434	162.6	0.471	1.83	28.3	36.3	2.29	28.5	0.00	0.01	0.05	201
1	205		9.22	9.20	34.183	26.447	161.5	0.479	1.77	27.4	36.13	2.32	28.7	0.00	0.01	0.05	206
1	236		8.99	8.96	34.199	26.497	157.3	0.528	1.70	26.2	39.0	2.37	29.5	0.00			237
	250	ISL	8.87	8.84	34.207	26.522	155.1	0.550	1.63	25.0	40.3	2.41	29.9	0.00			251
1	276		8.61	8.58	34.218	26.572	150.8	0.590	1.49	22.7	43.3	2.48	30.8	0.00			278
	300	ISL	8.30	8.27	34.219	26.620	146.5	0.626	1.37	20.8	46.5	2.55	31.9	0.00			302
1	331		7.88	7.85	34.218	26.683	140.9	0.670	1.22	18.3	51.1	2.64	33.3	0.00			333
1	391		7.22	7.18	34.235	26.791	131.1	0.752	0.87	12.9	60.3	2.85	35.7	0.00			394
	400	ISL	7.13	7.09	34.238	26.806	129.8	0.764	0.83	12.2	61.6	2.88	36.1	0.00			403
1	458		6.63	6.59	34.260	26.892	122.1	0.837	0.60	8.7	69.9	3.02	38.3	0.00			461
	500	ISL	6.33	6.28	34.288	26.954	116.6	0.887	0.46	6.7	75.9	3.08	39.4	0.00			503
1	527		6.14	6.09	34.306	26.993	113.1	0.918	0.37	5.3	79.8	3.12	40.1	0.00			531

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 87 50

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
33 19.6 N	119 40.1 W	02/10/92	2347 UTC	79 m	300 28 kn	300 06 07	0	1010.7 mL}	18.0 C	16.0 C	09m 03	0/8	

CAST	DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN «1/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0	ISL	17.80	17.80	33.332	24.045	385.8	0.000	5.81	106.8	0.9	0.33	0.0	0.00	1.26	0.51	0
1	1		17.80	17.80	33.332	24.045	385.8	0.004	5.81	106.8	0.9	0.33	0.0	0.00	1.26	0.51	1
1	10		17.81	17.81	33.332	24.042	386.3	0.039	5.82	107.0	0.9	0.32	0.0	0.00	1.25	0.48	10
	20	ISL	17.73	17.73	33.329	24.060	385.0	0.077	5.80	106.5	0.9	0.33	0.2	0.00	1.32	0.51	20
1	22		17.71	17.71	33.328	24.064	384.7	0.085	5.80	106.5	0.9	0.33	0.2	0.00	1.33	0.51	22
	30	ISL	16.66	16.66	33.253	24.255	366.7	0.115	5.90	106.1	1.2	0.36	0.2	0.00	1.62	0.59	30
1	32		16.31	16.30	33.231	24.319	360.7	0.122	5.92	105.7	1.3	0.38	0.2	0.00	1.66	0.61	32
1	42		14.48	14.47	33.149	24.658	328.5	0.157	5.89	101.3	3.1	0.53	1.4	0.04	1.03	0.57	42
	50	ISL	14.01	14.00	33.138	24.749	320.1	0.183	5.80	98.8	3.7	0.59	2.2	0.06	0.89	0.53	50
1	52		13.88	13.87	33.145	24.781	317.1	0.189	5.78	98.2	3.9	0.60	2.4	0.06	0.86	0.51	52
1	63		11.42	11.41	33.335	25.405	257.7	0.221	4.60	74.3	11.2	1.17	12.7	0.06	0.23	0.27	63

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 87 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
33 9.2 N	120 0.6 W	03/10/92	0321 UTC	1209 n	300 21 kn			1011.1 mb	17.9 C	16.0 C			

CAST	DEPTH B	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN »1/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
1	0	19.87	19.87	33.437	23.605	427.7	0.000	5.42	103.7	1.4	0.30	0.0	0.00	0.25	0.07	0
	10 ISL	19.89	19.89	33.435	23.599	428.7	0.043	5.42	103.7	1.4	0.29	0.0	0.00	0.24	0.07	10
1	11	19.89	19.89	33.435	23.599	428.7	0.047	5.42	103.7	1.4	0.29	0.0	0.00	0.24	0.07	11
	20 ISL	19.87	19.87	33.435	23.604	428.5	0.086	5.42	103.7	1.4	0.29	0.0	0.00	0.24	0.07	20
1	21	19.87	19.87	33.435	23.605	428.5	0.090	5.42	103.7	1.4	0.29	0.0	0.00	0.24	0.07	21
	30 ISL	19.19	19.18	33.399	23.752	414.7	0.128	5.58	105.4	1.0	0.30	0.0	0.00	0.41	0.16	30
1	32	18.89	18.88	33.383	23.816	408.8	0.136	5.64	105.9	0.9	0.30	0.0	0.00	0.45	0.18	32
1	41	16.48	16.47	33.278	24.316	361.2	0.171	6.04	108.2	1.4	0.41	0.0	0.01	1.30	0.59	41
1	50	13.89 A	13.88	33.328	24.920	303.8	0.201	5.47	93.0	5.8	0.80	4.7	0.16	0.74	0.58	50
1	61	12.39	12.38	33.354	25.239	273.6	0.232	4.92	81.1	9.2	1.06	8.9	0.14	0.52	0.48	61
1	72	10.92	10.91	33.455	25.589	240.4	0.261	4.05	64.7	15.6	1.42	16.1	0.03	0.20	0.29	72
	75 ISL	10.61	10.60	33.491	25.671	232.6	0.268	3.92	62.3	17.0	1.49	17.3	0.03	0.15	0.24	75
1	85	9.87	9.86	33.603	25.885	212.4	0.290	3.65	57.1	20.4	1.64	20.0	0.01	0.05	0.11	85
	100 ISL	9.66	9.65	33.671	25.973	204.3	0.321	3.49	54.3	22.2	1.72	21.3	0.01	0.02	0.08	100
1	101	9.65	9.64	33.670	25.974	204.3	0.323	3.49	54.3	22.2	1.72	21.3	0.01	0.02	0.08	101
1	121	9.32	9.31	33.776	26.111	191.6	0.363	3.31	51.2	24.7	1.80	22.8	0.01	0.01	0.06	122
	125 ISL	9.26	9.25	33.801	26.140	188.9	0.371	3.28	50.7	25.3	1.81	23.1	0.01	0.01	0.05	126
1	146	8.94	8.92	33.924	26.288	175.3	0.409	3.10	47.6	28.6	1.89	24.6	0.00	0.01	0.03	147
	150 ISL	8.88	8.86	33.939	26.309	173.3	0.416	3.07	47.1	29.3	1.90	24.9	0.00	0.01	0.03	151
1	177	8.55	8.53	34.021	26.425	162.8	0.461	2.80	42.6	33.8	2.03	27.0	0.00	0.01	0.03	178
	200 ISL	8.55	8.53	34.106	26.492	156.8	0.498	2.34	35.6	37.6	2.20	28.5	0.00	0.01	0.02	201
1	208	8.55	8.53	34.129	26.510	155.3	0.510	2.17	33.1	38.9	2.26	29.0	0.00	0.01	0.02	209
1	238	8.42	8.40	34.178	26.569	150.2	0.556	1.68	25.5	43.6	2.44	30.8	0.01			239
	250 ISL	8.41	8.38	34.192	26.582	149.3	0.574	1.58	24.0	44.3	2.47	31.1	0.01			251
1	280	8.37	8.34	34.223	26.613	146.9	0.619	1.43	21.7	45.8	2.51	31.5	0.01			282
	300 ISL	8.15	8.12	34.224	26.647	143.9	0.648	1.34	20.2	48.2	2.57	32.3	0.01			302
1	338	7.67	7.64	34.216	26.712	138.1	0.701	1.20	17.9	53.4	2.69	34.0	0.00			340
1	397	7.24	7.20	34.230	26.784	131.9	0.781	0.96	14.2	53.5 U	2.69 U	34.0 U	0.00 U			400
	400 ISL	7.23	7.19	34.230	26.786	131.8	0.785	0.95	14.0	58.6	2.80	35.8	0.00			403
1	464	6.85	6.81	34.234	26.842	127.2	0.868	0.80	11.7	65.3	2.91	37.8	0.00			467
	500 ISL	6.34	6.29	34.227	26.904	121.3	0.912	0.67	9.7	72.3	3.00	39.8	0.00			503
1	534	5.86	5.81	34.224	26.963	115.6	0.953	0.55	7.9	78.9	3.09	41.6	0.00			538

A) MEAN VALUE OF 13.86 AND 13.93 DEGREES CELSIUS.

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 87 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
32 58.9 N	120 21.7 W	03/10/92	0712 UTC	719 m	300 20 k.n			1011.9 mb	17.5 C	16.2 C			

CAST	DEPTH a	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	18.01	18.01	33.279	23.953	394.5	0.000	5.63	103.9	1.9	0.34	0.0	0.00	0.28	0.08	0
1	1	18.01	18.01	33.279	23.953	394.5	0.004	5.63	103.9	1.9	0.34	0.0	0.00	0.28	0.08	1
	10 ISL	18.01	18.01	33.277	23.952	395.0	0.039	5.64	104.1	1.8	0.34	0.0	0.00	0.28	0.09	10
1	11	18.01	18.01	33.277	23.952	395.0	0.043	5.64	104.1	1.8	0.34	0.0	0.00	0.28	0.09	11
1	20	17.99	17.99	33.246 U			0.079	5.65	104.2	1.9	0.35	0.0	0.00	0.28	0.09	20
	30 ISL	17.78	17.77	33.249	23.987	392.3	0.118	5.68	104.3	1.8	0.34	0.0	0.00	0.28	0.08	30
1	32	17.74	17.73	33.246	23.994	391.7	0.126	5.69	104.4	1.8	0.34	0.0	0.00	0.28	0.08	32
1	41	15.65	15.64	33.045	24.325	360.3	0.160	6.03	106.1	1.8	0.38	0.0	0.00	0.25	0.11	41
	50 ISL	14.70	14.69	32.981	24.483	345.5	0.192	6.10	105.3	2.0	0.40	0.0	0.00	0.29	0.18	50
1	51	14.63	14.62	32.978	24.495	344.3	0.195	6.11	105.3	2.0	0.40	0.0	0.00	0.30	0.19	51
1	61	13.46	13.45	32.973	24.734	321.8	0.229	5.99	100.8	2.7	0.48	0.4	0.02	0.45	0.31	61
1	71	12.01	12.00	33.004	25.039	292.8	0.259	5.58	91.1	5.6	0.78	4.3	0.05	0.35	0.32	71
	75 ISL	11.53	11.52	33.033	25.151	282.2	0.271	5.41	87.4	7.0	0.90	6.4	0.04	0.29	0.29	75
1	84	10.63	10.62	33.127	25.384	260.1	0.295	5.05	80.1	10.4	1.16	11.2	0.02	0.15	0.19	84
1	99	9.69	9.68	33.344	25.713	229.0	0.332	4.48	69.7	15.8	1.44	16.4	0.02	0.05	0.09	99
	100 ISL	9.69	9.68	33.362	25.727	227.7	0.334	4.44	69.1	16.1	1.45	16.6	0.02	0.05	0.09	100
1	118	9.65	9.64	33.604	25.923	209.5	0.374	3.83	59.6	19.7	1.62	19.3	0.02	0.02	0.06	119
	125 ISL	9.68	9.67	33.682	25.979	204.3	0.388	3.62	56.4	21.0	1.68	20.2	0.02	0.02	0.05	126
1	144	9.72	9.70	33.859	26.111	192.2	0.426	3.10	48.4	24.4	1.82	22.5	0.01	0.01	0.03	145
	150 ISL	9.68	9.66	33.909	26.157	188.0	0.437	2.94	45.9	25.7	1.87	23.2	0.01	0.01	0.03	151
1	174	9.44	9.42	34.055	26.311	173.8	0.481	2.47	38.4	30.6	2.06	25.7	0.01	0.00	0.03	175
	200 ISL	9.14	9.12	34.080	26.379	167.8	0.525	2.37	36.6	33.7	2.13	27.3	0.00	0.01	0.04	201
1	203	9.10	9.08	34.079	26.385	167.3	0.530	2.37	36.5	34.0	2.14	27.5	0.00	0.01	0.04	204
1	233	8.52	8.50	34.103	26.495	157.2	0.579	2.16	32.9	38.9	2.26	30.3	0.00			234
	250 ISL	8.31	8.28	34.124	26.544	152.8	0.605	2.00	30.3	41.7	2.34	31.1	0.00			251
1	273	8.10	8.07	34.152	26.597	148.0	0.640	1.78	26.8	45.3	2.45	31.9	0.00			275
	300 ISL	7.90	7.87	34.174	26.645	143.9	0.679	1.58	23.7	48.5	2.54	32.9	0.00			302
1	330	7.69	7.66	34.192	26.690	140.0	0.722	1.37	20.5	52.0	2.64	34.0	0.00			332
1	390	7.04	7.00	34.227	26.810	129.2	0.802	0.90	13.2	62.1	2.87	37.1	0.00			392
	400 ISL	7.00	6.96	34.231	26.818	128.5	0.815	0.86	12.6	62.8	2.89	37.3	0.00			403
1	459	6.78	6.74	34.246	26.861	125.2	0.890	0.71	10.4	66.9	2.95	38.5	0.00			462
	500 ISL	6.39	6.34	34.254	26.919	119.9	0.940	0.61	8.8	73.4	3.04	40.0	0.00			503
1	531	6.10	6.05	34.261	26.962	116.0	0.977	0.53	7.6	78.3	3.11	41.1	0.00			535

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 87 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
32 39.2 N	121 2.4 W	03/10/92	1219 UTC	3795 n	310 18 kn			1012.5 lib	18.3 C	16.2 C		

CAST	DEPTH B	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	18.68	18.68	33.059	23.620	426.3	0.000	5.49	102.5	2.0	0.36	0.0	0.00	0.10	0.03	0
1	1	18.68	18.68	33.059	23.620	426.4	0.004	5.49	102.5	2.0	0.36	0.0	0.00	0.10	0.03	1
	10 ISL	18.68	18.68	33.059	23.620	426.6	0.043	5.49	102.5	2.0	0.38	0.0	0.00	0.10	0.03	10
1	11	18.68	18.68	33.059	23.620	426.7	0.047	5.49	102.5	2.0	0.38	0.0	0.00	0.10	0.03	11
	20 ISL	18.61	18.61	33.054	23.634	425.6	0.085	5.53	103.1	2.0	0.36	0.0	0.00	0.11	0.03	20
1	21	18.60	18.60	33.054	23.637	425.4	0.090	5.53	103.1	2.0	0.36	0.0	0.00	0.11	0.03	21
	30 ISL	18.44	18.43	33.072	23.690	420.6	0.128	5.55	103.1	1.9	0.36	0.0	0.00	0.12	0.03	30
1	31	18.41	18.40	33.071	23.697	420.0	0.132	5.55	103.1	1.9	0.36	0.0	0.00	0.12	0.03	31
1	41	17.69	17.68	32.965	23.792	411.3	0.173	5.68	104.0	1.9	0.38	0.0	0.00	0.16	0.05	41
1	50	16.83	16.82	33.058	24.067	385.3	0.209	5.82	104.8	1.9	0.38	0.0	0.00	0.22	0.08	50
1	60	16.02	16.01	33.107	24.290	364.2	0.247	5.91	104.8	1.7	0.38	0.0	0.00	0.31	0.16	60
1	70	14.52	14.51	33.110	24.621	332.9	0.282	6.02	103.6	2.1	0.38	0.0	0.00	0.24	0.18	70
	75 ISL	14.19	14.18	33.147	24.719	323.7	0.298	5.96	101.9	2.2	0.40	0.0	0.01	0.24	0.19	75
1	83	13.78	13.77	33.188	24.835	312.8	0.323	5.80	98.3	2.6	0.43	0.1	0.02	0.25	0.20	B3
1	99	11.97	11.96	33.060	25.091	288.5	0.372	5.54	90.4	5.2	0.73	4.2	0.03	0.26	0.24	99
	100 ISL	11.88	11.87	33.058	25.106	287.1	0.374	5.52	89.9	5.4	0.75	4.5	0.03	0.25	0.24	100
1	119	10.42	10.41	33.095	25.396	259.7	0.426	5.24	82.7	9.3	1.06	9.9	0.01	0.12	0.15	119
	125 ISL	10.05	10.04	33.123	25.481	251.7	0.442	5.17	80.9	10.6	1.14	11.3	0.01	0.09	0.12	126
1	145	9.12	9.10	33.274	25.750	226.2	0.489	4.84	74.3	15.3	1.38	15.6	0.01	0.03	0.05	146
	150 ISL	9.00	8.98	33.338	25.820	219.7	0.501	4.66	71.3	16.9	1.45	16.9	0.01	0.03	0.05	151
1	176	8.71	8.69	33.668	26.124	191.3	0.554	3.68	56.1	24.8	1.79	22.7	0.00	0.01	0.03	177
	200 ISL	8.55	8.53	33.839	26.283	176.6	0.598	3.14	47.7	29.4	1.94	25.3	0.00	0.00	0.02	201
1	207	8.51	8.49	33.872	26.315	173.7	0.610	3.05	46.3	30.4	1.96	25.7	0.00	0.00	0.02	208
1	237	8.24	8.22	33.978	26.439	162.4	0.661	3.10	46.8	33.6	1.97	26.0	0.00			238
	250 ISL	8.13	8.10	33.999	26.473	159.4	0.682	3.00	45.2	35.3	2.02	26.6	0.00			251
1	278	7.91	7.88	34.027	26.527	154.6	0.726	2.65	39.7	39.3	2.16	28.4	0.00			280
	300 ISL	7.75	7.72	34.057	26.575	150.4	0.759	2.34	35.0	42.8	2.28	29.7	0.00			302
1	335	7.49	7.46	34.104	26.649	143.8	0.811	1.82	27.0	49.0	2.49	31.9	0.00			337
1	395	6.88	6.84	34.174	26.790	131.0	0.893	1.10	16.1	61.8	2.81	35.5	0.00			3>7
	400 ISL	6.82	6.78	34.176	26.799	130.1	0.900	1.06	15.5	62.7	2.83	35.8	0.00			402
1	461	6.19	6.15	34.192	26.895	121.4	0.976	0.74	10.7	72.6	2.99	38.3	0.00			464
	500 ISL	5.99	5.95	34.219	26.942	117.3	1.023	0.58	8.3	77.0	3.07	39.3	0.00			503
1	528	5.84	5.79	34.239	26.977	114.2	1.055	0.47	6.7	80.1	3.12	40.0	0.00			531

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 87 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
32 19.6 N	121 43.1 W	03/10/92	1734 UTC	3991 m	320 12 kn	330 03 06	1	1015.2 mb	20.1 C	17.4 C		4/8 AC

CAST	DEPTH -	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	*PRESS* dfo
	0 ISL	19.00	19.00	33.069	23.547	433.2	0.000	5.44	102.2	1.5	0.36	0.1	0.00	0.09	0.02	0
1	2	19.00	19.00	33.069	23.547	433.3	0.009	5.44	102.2	1.5	0.36	0.1	0.00	0.09	0.02	2
	10 ISL	18.99	18.99	33.069	23.550	433.3	0.043	5.44	102.2	1.5	0.36	0.1	0.00	0.09	0.02	10
1	13	18.99	18.99	33.069	23.550	433.4	0.056	5.44	102.2	1.5	0.36	0.1	0.00	0.09	0.02	13
	20 ISL	18.97	18.97	33.068	23.555	433.2	0.087	5.44	102.1	1.6	0.36	0.0	0.00	0.09	0.02	20
1	22	18.97	18.97	33.068	23.555	433.3	0.095	5.44	102.1	1.6	0.36	0.0	0.00	0.09	0.02	22
	30 ISL	19.32	19.31	33.227	23.588	430.4	0.130	5.41	102.3	1.6	0.35	0.0	0.00	0.10	0.02	30
1	32	19.38	19.37	33.262	23.599	429.4	0.138	5.41	102.5	1.6	0.35	0.0	0.00	0.10	0.02	32
1	42	18.88	18.87	33.162	23.650	424.9	0.181	5.47	102.6	1.6	0.35	0.0	0.00	0.13	0.03	12
	50 ISL	17.36	17.35	33.075	23.955	396.0	0.214	5.84	106.3	1.6	0.37	0.0	0.00	0.17	0.05	50
1	52	16.95	16.94	33.062	24.042	387.7	0.222	5.94	107.3	1.6	0.37	0.0	0.00	0.18	0.06	!>2
1	62	15.95	15.94	33.060	24.270	366.2	0.260	6.04	106.9	1.7	0.37	0.0	0.00	0.22	0.10	152
1	71	15.18	15.17	33.136	24.499	344.6	0.292	6.01	104.8	1.7	0.37	0.0	0.00	0.24	0.16	71
	75 ISL	14.72	14.71	33.133	24.596	335.4	0.305	5.99	103.5	1.9	0.39	0.2	0.03	0.27	0.21	75
1	86	13.36	13.35	33.103	24.855	310.9	0.341	5.84	98.1	3.0	0.53	0.6	0.09	0.32	0.31	86
1	100	11.86	11.85	33.132	25.168	281.3	0.382	5.33	86.8	6.2	0.86	6.4	0.03	0.20	0.23	100
1	120	11.27	11.26	33.379	25.468	253.1	0.436	5.04	81.1	8.2	0.98	9.3	0.01	0.09	0.14	120
	125 ISL	11.06	11.04	33.403	25.525	247.8	0.448	4.99	80.0	8.8	1.01	10.0	0.01	0.08	0.12	126
1	146	10.19	10.17	33.465	25.725	229.0	0.498	4.70	73.9	12.2	1.21	13.6	0.00	0.04	0.07	117
	150 ISL	10.06	10.04	33.485	25.762	225.5	0.507	4.56	71.5	13.4	1.28	14.7	0.00	0.03	0.06	151
1	176	9.43	9.41	33.635	25.984	204.8	0.563	3.62	56.1	21.4	1.69	21.2	0.00	0.01	0.03	177
	200 ISL	9.05	9.03	33.787	26.164	188.1	0.610	3.29	50.6	25.7	1.85	23.8	0.00	0.00	0.02	201
1	206	8.97	8.95	33.822	26.204	184.4	0.622	3.25	49.9	26.5	1.87	24.2	0.00	0.00	0.02	207
1	236	8.58	8.56	33.946	26.363	169.8	0.675	2.99	45.5	31.1	1.98	26.4	0.00			237
	250 ISL	8.37	8.34	33.978	26.420	,164.5	0.698	2.96	44.9	33.1	2.01	27.1	0.00			251
1	277	7.96	7.93	34.014	26.510	156.3	0.741	2.89	43.4	37.3	2.08	28.3	0.00			278
	300 ISL	7.60	7.57	34.030	26.575	150.3	0.777	2.67	39.8	41.7	2.19	30.0	0.00			302
1	333	7.14	7.11	34.048	26.654	143.0	0.825	2.24	33.0	48.6	2.38	32.6	0.00			335
1	394	6.65	6.61	34.111	26.771	132.6	0.909	1.36	19.8	60.9	2.74	36.7	0.00			3)6
	400 ISL	6.62	6.58	34.118	26.780	131.7	0.917	1.30	18.9	61.8	2.77	37.0	0.00			402
1	461	6.29	6.25	34.183	26.875	123.3	0.995	0.82	11.9	70.3	2.97	39.3	0.00			4«4
	500 ISL	5.97	5.93	34.204	26.933	118.1	1.042	0.64	9.2	76.2	3.05	40.9	0.00			503
1	531	5.72	5.67	34.222	26.979	113.9	1.078	0.50	7.1	80.9	3.12	42.1	0.00			534

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 87 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
31 59.6 N	122 23.7 W	04/10/92	0003 UTC	4092 in	330 13 kn	330 03 07	1	1013.6 *b	19.9 C	18.2 C	37« 01	3/8	CU

CAST	DEPTH B	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
1	0	20.92	20.92	33.494	23.371	450.1	0.000	5.24	102.3	1.9	0.34	0.1	0.00	0.07	0.01	0
1	10	20.93	20.93	33.498	23.372	450.4	0.045	5.25	102.5	1.9	0.34	0.1	0.00	0.07	0.01	10
	20 ISL	20.89	20.89	33.506	23.389	449.1	0.090	5.26	102.6	1.9	0.34	0.2	0.00	0.07	0.02	20
1	21	20.89	20.89	33.507	23.390	449.1	0.094	5.26	102.6	1.9	0.34	0.2	0.00	0.07	0.02	21
	30 ISL	20.89	20.88	33.521	23.401	448.4	0.135	5.26	102.6	1.8	0.34	0.2	0.00	0.08	0.02	30
1	31	20.89	20.88	33.523	23.402	448.3	0.139	5.26	102.6	1.8	0.34	0.2	0.00	0.08	0.02	31
1	41	18.96	18.95	33.238	23.688	421.3	0.183	5.58	104.8	1.8	0.35	0.1	0.00	0.12	0.04	41
	50 ISL	17.38	17.37	33.068	23.945	396.9	0.220	5.91	107.6	1.9	0.36	0.1	0.00	0.15	0.05	50
1	51	17.23	17.22	33.056	23.971	394.4	0.224	5.94	107.8	1.9	0.36	0.1	0.00	0.15	0.05	51
1	62	16.18	16.17	33.033	24.197	373.2	0.266	6.04	107.4	1.9	0.38	0.1	0.00	0.20	0.08	62
1	72	15.35	15.34	33.102	24.436	350.7	0.302	6.04	105.7	1.9	0.37	0.1	0.00	0.20	0.14	72
	75 ISL	15.11	15.10	33.104	24.490	345.6	0.312	6.03	105.0	2.0	0.38	0.1	0.00	0.21	0.16	75
1	86	14.39	14.38	33.108	24.647	330.8	0.350	5.97	102.4	2.3	0.42	0.1	0.01	0.27	0.23	86
	100 ISL	14.49	14.48	33.448	24.889	308.3	0.394	5.59	96.3	2.8	0.46	0.1	0.07	0.26	0.27	100
1	101	14.50	14.49	33.474	24.907	306.6	0.397	5.56	95.8	2.9	0.47	0.1	0.07	0.26	0.27	101
1	122	12.77	12.75	33.471	25.258	273.5	0.458	5.16	85.8	5.6	0.76	4.7	0.03	0.17	0.22	122
	125 ISL	12.53	12.51	33.469	25.303	269.2	0.467	5.12	84.7	6.1	0.79	5.4	0.03	0.16	0.21	125
1	147	10.95	10.93	33.477	25.602	240.9	0.523	4.86	77.7	10.0	1.04	10.4	0.01	0.08	0.10	148
	150 ISL	10.77	10.75	33.484	25.639	237.4	0.530	4.83	77.0	10.6	1.07	11.1	0.01	0.07	0.09	151
1	177	9.60	9.58	33.599	25.928	210.2	0.590	4.28	66.5	16.9	1.40	17.4	0.00	0.02	0.03	178
	200 ISL	9.31	9.29	33.781	26.118	192.6	0.637	3.11	48.1	24.7	1.78	23.4	0.00	0.01	0.02	201
1	208	9.26	9.24	33.842	26.174	187.4	0.652	2.75	42.5	27.2	1.90	25.2	0.00	0.00	0.02	209
1	238	8.71	8.68	33.940	26.338	172.2	0.706	2.77	42.3	31.9	2.00	28.0	0.00			239
	250 ISL	8.56	8.53	33.971	26.386	167.9	0.726	2.71	41.2	33.6	2.04	28.8	0.00			251
1	279	8.24	8.21	34.031	26.482	159.2	0.774	2.47	37.3	37.7	2.15	30.4	0.00			280
	300 ISL	7.99	7.96	34.061	26.543	153.6	0.806	2.27	34.1	41.4	2.24	31.7	0.00			302
1	335	7.55	7.52	34.090	26.630	145.7	0.859	1.95	29.0	48.1	2.40	34.0	0.00			337
1	395	6.62	6.58	34.081	26.751	134.4	0.943	1.59	23.1	60.0	2.64	37.5	0.00			397
	400 ISL	6.57	6.53	34.084	26.760	133.6	0.949	1.55	22.5	60.9	2.66	37.8	0.00			402
1	461	6.05	6.01	34.135	26.868	123.8	1.028	1.03	14.8	72.0	2.89	41.0	0.00			464
	500 ISL	5.74	5.70	34.154	26.922	118.9	1.075	0.82	11.7	78.5	2.99	42.3	0.00			503
1	532	5.49	5.45	34.170	26.965	114.9	1.113	0.65	9.2	83.8	3.08	43.4	0.00			535

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 87 100

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	NIND SPEED	NAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
31 39.6 N	123 4.4 N	04/10/92	0538 UTC	4117 B>	330 10 Jin			1014.0 lib	19.6 C	16.9 C			

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	20.38	20.38	33.304	23.370	450.1	0.000	5.32	102.7	2.2	0.42	0.1	0.00	0.07	0.02	0
1	2	20.38	20.38	33.304	23.370	450.2	0.009	5.32	102.7	2.2	0.42	0.1	0.00	0.07	0.02	2
	10 ISL	20.39	20.39	33.302	23.366	450.9	0.045	5.31	102.5	2.1	0.38	0.1	0.00	0.07	0.02	10
1	11	20.39	20.39	33.302	23.366	450.9	0.050	5.31	102.5	2.1	0.37	0.1	0.00	0.07	0.02	11
	20 ISL	20.18	20.18	33.331	23.444	443.8	0.090	5.35	102.9	2.0	0.36	0.1	0.00	0.06	0.01	20
1	22	20.13	20.13	33.338	23.463	442.1	0.099	5.36	103.0	2.0	0.36	0.1	0.00	0.06	0.01	22
	30 ISL	20.08	20.07	33.342	23.479	440.8	0.134	5.38	103.3	2.0	0.36	0.1	0.00	0.07	0.02	30
1	32	20.07	20.06	33.341	23.481	440.7	0.143	5.38	103.3	2.0	0.36	0.1	0.00	0.07	0.02	32
1	41	19.96	19.95	33.331	23.503	439.0	0.182	5.36	102.7	2.0	0.36	0.1	0.00	0.10	0.02	41
	50 ISL	18.39	18.38	33.187	23.792	411.7	0.221	5.65	105.0	2.0	0.37	0.1	0.00	0.14	0.04	50
1	52	17.96	17.95	33.152	23.870	404.2	0.229	5.73	105.6	2.0	0.37	0.1	0.00	0.15	0.04	52
1	62	16.39	16.38	33.043	24.157	377.0	0.268	6.06	108.2	2.1	0.38	0.1	0.00	0.17	0.07	62
1	72	15.23	15.22	33.064	24.433	351.0	0.304	6.08	106.1	2.1	0.39	0.0	0.00	0.20	0.09	72
	75 ISL	14.86	14.85	33.070	24.518	342.9	0.315	6.06	105.0	2.1	0.41	0.0	0.02	0.25	0.14	75
1	85	13.70	13.69	33.087	24.774	318.7	0.348	5.92	100.1	2.7	0.50	0.1	0.08	0.42	0.30	85
1	100	12.34	12.33	33.094	25.048	292.8	0.394	5.53	90.9	5.1	0.76	4.2	0.03	0.31	0.27	100
1	120	11.01	11.00	33.144	25.332	266.0	0.450	5.11	81.7	8.6	1.03	9.7	0.01	0.14	0.15	120
	125 ISL	10.71	10.70	33.151	25.390	260.5	0.463	5.05	80.2	9.5	1.09	10.8	0.01	0.12	0.13	125
1	145	9.71	9.69	33.209	25.605	240.2	0.513	4.83	75.1	13.2	1.31	14.6	0.01	0.06	0.09	146
	150 ISL	9.52	9.50	33.242	25.662	234.8	0.525	4.73	73.2	14.4	1.37	15.7	0.01	0.05	0.08	151
1	176	8.90	8.88	33.468	25.938	209.0	0.582	4.08	62.4	20.7	1.68	20.9	0.00	0.01	0.04	177
	200 ISL	9.01	8.99	33.725	26.122	192.1	0.630	3.34	51.3	25.2	1.85	23.7	0.00	0.00	0.03	201
1	205	9.05	9.03	33.775	26.155	189.1	0.640	3.20	49.2	26.0	1.88	24.1	0.00	0.00	0.03	206
1	235	8.61	8.59	33.939	26.352	170.7	0.694	2.93	44.6	31.3	2.00	26.4	0.00			236
	250 ISL	8.43	8.40	33.985	26.416	164.9	0.719	2.83	42.9	33.6	2.05	27.2	0.00			251
1	275	8.13	8.10	34.029	26.496	157.6	0.759	2.68	40.4	37.4	2.14	28.5	0.00			276
	300 ISL	7.71	7.68	34.044	26.570	150.8	0.798	2.52	37.6	42.1	2.24	30.0	0.00			302
1	332	7.19	7.16	34.051	26.650	143.5	0.845	2.28	33.6	48.3	2.38	32.0	0.00			334
1	392	6.66	6.62	34.098	26.759	133.6	0.928	1.57	22.9	59.2	2.68	35.6	0.00			394
	400 ISL	6.56	6.52	34.100	26.774	132.3	0.939	1.49	21.7	60.9	2.72	36.2	0.00			402
1	460	5.89	5.85	34.123	26.879	122.6	1.015	0.98	14.0	72.9	2.95	39.8	0.00			463
	500 ISL	5.79	5.75	34.181	26.937	117.5	1.063	0.70	10.0	77.5	3.05	40.8	0.00			503
1	532	5.71	5.66	34.228	26.984	113.4	1.100	0.47	6.7	81.2	3.13	41.6	0.00			535

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 87 IIO

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	KIND	SPEED	NAVES	NEA	BAROMETER	DRY	NET	SECCHI/FOREL	CID	AMT	TYPE
31 19.7 N	123 44.5 N	04/10/92	1155 UTC	4008 n	360	11 kn			1014.0 ab	19.6 C	17.0 C				

CAST	DEPTH ▪	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN »1/1	OXY PCT	SIO3 uM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL-A Ug/1	PBAEO ug/1	PRESS «tt>
1	0	20.49	20.49	33.335	23.365	450.7	0.000	5.28	102.1	2.2	0.36	0.1	0.00	0.08	0.02	0
	10 ISL	20.47	20.47	33.334	23.370	450.6	0.045	5.28	102.1	2.2	0.35	0.1	0.00	0.09	0.02	10
1	16	20.45	20.45	33.333	23.374	450.3	0.072	5.28	102.1	2.2	0.35	0.1	0.00	0.09	0.02	16
	20 ISL	20.27	20.27	33.315	23.408	447.2	0.090	5.31	102.3	2.2	0.35	0.1	0.00	0.09	0.02	20
	30 ISL	19.87	19.86	33.281	23.488	440.0	0.134	5.36	102.5	2.1	0.35	0.1	0.00	0.08	0.02	30
1	31	19.83	19.82	33.279	23.496	439.2	0.139	5.37	102.6	2.1	0.35	0.1	0.00	0.08	0.02	31
1	41	19.89	19.88	33.311	23.506	438.7	0.183	5.35	102.3	2.1	0.3s	0.1	0.00	0.10	0.02	41
	50 ISL	19.01	19.00	33.208	23.653	425.0	0.222	5.60	105.3	2.1	0.36	0.1	0.00	0.15	0.07	50
1	53	18.53	18.52	33.163	23.739	416.8	0.234	5.71	106.3	2.1	0.36	0.1	0.00	0.17	0.08	53
1	62	16.60	16.59	33.071	24.130	379.6	0.270	6.02	108.0	2.1	0.37	0.1	0.00	0.22	0.08	62
1	72	14.91	14.90	33.079	24.514	343.2	0.306	6.07	105.3	2.3	0.42	0.1	0.00	0.27	0.19	72
	75 ISL	14.55	14.54	33.086	24.596	335.4	0.316	6.06	104.3	2.5	0.43	0.1	0.00	0.31	0.23	75
1	81	13.94	13.93	33.100	24.734	322.3	0.336	6.03	102.5	2.9	0.47	0.1	0.01	0.38	0.30	81
1	96	12.70	12.69	33.114	24.994	297.8	0.383	5.59	92.6	4.8	0.69	3.2	0.10	0.22	0.27	96
	100 ISL	12.35	12.34	33.117	25.064	291.3	0.394	5.47	90.0	5.6	0.77	4.7	0.09	0.19	0.25	100
1	112	11.33	11.32	33.133	25.266	272.1	0.428	5.14	82.7	8.2	1.00	9.3	0.02	0.12	0.17	112
	125 ISL	10.40	10.39	33.170	25.458	253.9	0.462	4.93	77.8	11.0	1.19	12.7	0.01	0.08	0.11	125
1	127	10.28	10.27	33.179	25.486	251.3	0.467	4.90	77.1	11.4	1.22	13.1	0.01	0.07	0.10	127
	150 ISL	9.44	9.42	33.383	25.785	223.2	0.522	4.34	67.1	16.9	1.49	18.0	0.00	0.02	0.04	151
1	151	9.41	9.39	33.393	25.797	222.0	0.524	4.32	66.8	17.1	1.50	18.2	0.00	0.02	0.04	152
1	178	8.50	8.48	33.602	26.104	193.1	0.580	3.98	60.4	23.4	1.71	22.2	0.00	0.00	0.04	*119*
	200 ISL	8.52	8.50	33.824	26.276	177.3	0.621	3.81	57.9	26.1	1.72	22.9	0.00	0.00	0.02	201
1	207	8.53	8.51	33.877	26.316	173.6	0.633	3.76	57.2	26.9	1.72	23.0	0.00	0.00	0.01	208
1	238	8.17	8.15	33.957	26.433	162.9	0.685	3.43	51.7	32.2	1.87	25.5	0.00			239
	250 ISL	8.00	7.97	33.972	26.470	159.5	0.70s	3.34	50.2	34.1	1.92	26.3	0.00			251
1	278	7.58	7.55	33.988	26.544	152.8	0.748	3.15	46.9	38.8	2.04	28.1	0.00			279
	300 ISL	7.19	7.16	33.988	26.599	147.7	0.782	2.97	43.8	43.2	2.14	29.7	0.00			302
1	333	6.67	6.64	33.992	26.674	140.8	0.829	2.61	38.0	50.2	2.31	32.2	0.00			335
1	394	6.28	6.25	34.064	26.782	131.2	0.912	1.56	22.5	62.9	2.70	36.9	0.00			396
	400 ISL	6.24	6.20	34.070	26.792	130.3	0.920	1.49	21.5	64.0	2.73	37.2	0.00			402
1	460	5.82	5.78	34.121	26.886	121.8	0.996	0.96	13.7	74.1	2.95	40.0	0.00			463
	500 ISL	5.60	5.56	34.157	26.941	116.9	1.043	0.74	10.5	79.8	3.04	41.3	0.00			503
1	530	5.43	5.39	34.185	26.984	113.0	1.078	0.57	8.1	84.0	3.11	42.2	0.00			533

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 90 28

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	HIND	SPEED	HAVES	HEA	BAROMETER	DRY	HET	SECCHI/FOREL	CLD	AMT	TYPE
33 28.9 N	117 46.1 H	02/10/92	0256 UTC	70 ▪	330	09 kn			1008.9 Mb	20.5 C	19.9 C				

CAST	DEPTH ▪	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN al/1	OXY PCT	SIO3 uM/1	PO4 uM/I	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS (lb
	0 ISL	19.64	19.64	33.287	23.550	432.9	0.000	5.86	111.6	2.2	0.36	0.1	0.00	0.49	0.13	0
1	1	19.64	19.64	33.287	23.550	433.0	0.004	5.86	111.6	2.2	0.36	0.1	0.00	0.49	0.13	1
1	6	19.63	19.63	33.287	23.553	432.9	0.026	5.87	111.7	2.1	0.36	0.1	0.00	0.60	0.13	6
	10 ISL	17.21	17.21	33.151	24.047	385.8	0.042	6.07	110.2	1.9	0.38	0.1	0.00	0.47	0.15	10
1	11	16.52	16.52	33.124	24.188	372.5	0.046	6.12	109.6	1.9	0.38	0.1	0.00	0.43	0.15	11
	20 ISL	14.87	14.87	33.057	24.504	342.6	0.078	6.14	106.4	2.1	0.43	0.1	0.00	0.39	0.16	20
1	22	14.50	14.50	33.046	24.574	335.9	0.085	6.15	105.7	2.1	0.44	0.1	0.00	0.38	0.16	22
	30 ISL	14.23	14.23	33.052	24.636	330.3	0.112	6.13	104.8	2.5	0.44	0.1	0.00	0.49	0.19	30
1	32	14.21	14.21	33.066	24.651	328.9	0.118	6.13	104.8	2.6	0.44	0.1	0.00	0.52	0.20	32
1	43	13.40	13.39	33.314	25.009	295.1	0.153	4.80	80.8	6.7	0.87	4.1	0.60	0.49	0.43	43
	50 ISL	13.10	13.09	33.381	25.121	284.6	0.173	4.38	73.3	8.8	1.15	7.9	0.48	0.27	0.36	50
1	53	13.01	13.00	33.397	25.151	281.8	0.181	4.27	71.3	9.5	1.24	9.3	0.37	0.17	0.31	53
1	64	12.86	12.85	33.459	25.229	274.7	0.212	4.10	68.3	9.8	1.16	9.9	0.13	0.13	0.26	64

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 90 30

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	HIND	SPEED	NAVES	HEA	BAROMETER	DRY	NET	SECCHI/FOREL	CLD	AMT	TYPE
33 25.1 N	117 54.0 N	02/10/92	0043 UTC	625 ▪	300	18 kn	290 03 04	1	1008.7 Mb	22.9 C	20.1 C	23a 02	1/8		CI

CAST	DEPTH ▪	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN »1/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
1	0	21.34	21.34	33.411	23.194	467.0	0.000	5.31	104.4	1.7	0.30	0.1	0.00	0.23	0.04	0
1	10	21.34	21.34	33.411	23.194	467.3	0.047	5.31	104.4	1.7	0.29	0.1	0.00	0.23	0.03	10
1	20	20.02	20.02	33.372	23.517	436.8	0.092	5.50	105.5	1.4	0.32	0.1	0.00	0.20	0.05	20
	30 ISL	15.53	15.53	33.209	24.477	345.5	0.131	6.20	109.0	2.8	0.42	0.1	0.00	0.65	0.43	30
1	31	15.09	15.09	33.203	24.569	336.7	0.134	6.26	109.0	3.0	0.43	0.1	0.00	0.71	0.47	31
1	41	14.08	14.07	33.144	24.738	320.8	0.167	5.96	101.7	3.4	0.50	0.1	0.06	1.15	0.53	41
	50 ISL	13.36	13.35	33.188	24.920	303.8	0.195	5.52	92.8	4.4	0.66	2.4	0.15	0.63	0.51	50
1	51	13.29	13.28	33.199	24.942	301.6	0.198	5.45	91.5	4.6	0.69	2.8	0.15	0.55	0.51	51
1	61	12.75	12.74	33.408	25.211	276.3	0.227	4.42	73.5	8.6	1.05	9.2	0.02	0.16	0.23	61
1	72	12.13	12.12	33.426	25.344	263.8	0.257	4.33	71.0	10.3	1.17	11.5	0.02	0.11	0.17	72
	75 ISL	11.96	11.95	33.433	25.382	260.3	0.265	4.31	70.5	10.7	1.19	12.0	0.02	0.10	0.16	75
1	86	11.56	11.55	33.501	25.509	248.4	0.293	4.07	66.0	12.4	1.29	13.8	0.01	0.05	0.11	86
	100 ISL	11.87	11.86	33.728	25.629	237.5	0.327	3.17	51.8	16.5	1.56	17.1	0.00	0.01	0.06	L00
1	101	11.90	11.89	33.744	25.635	236.9	0.329	3.10	50.7	16.8	1.58	17.3	0.00	0.01	0.06	101
1	121	11.69	11.67	33.807	25.724	228.9	0.376	2.86	46.6	18.9	1.69	18.8	0.00	0.01	0.05	122
	125 ISL	11.63	11.61	33.825	25.749	226.6	0.385	2.80	45.6	19.4	1.72	19.2	0.00	0.01	0.05	126
1	147	11.21	11.19	33.903	25.887	214.0	0.433	2.59	41.8	21.9	1.84	21.1	0.00	0.01	0.06	148
	150 ISL	11.12	11.10	33.900	25.901	212.7	0.440	2.62	42.2	22.0	1.84	21.2	0.00	0.01	0.06	151
1	178	10.19	10.17	33.867	26.039	200.0	0.498	2.95	46.5	23.3	1.84	22.3	0.00	0.01	0.04	179
	200 ISL	9.52	9.50	33.923	26.195	185.4	0.540	2.91	45.2	26.4	1.90	23.9	0.00	0.00	0.03	201
1	208	9.33	9.31	33.956	26.252	180.1	0.555	2.89	44.7	27.8	1.93	24.6	0.00	0.00	0.02	209
1	238	9.09	9.06	34.102	26.405	166.1	0.607	2.41	37.1	33.3	2.13	27.0	0.00			239
	250 ISL	9.06	9.03	34.150	26.448	162.3	0.626	2.13	32.8	35.6	2.23	27.9	0.00			251
1	279	8.95	8.92	34.234	26.531	154.9	0.672	1.51	23.2	40.9	2.46	29.9	0.00			281
	300 ISL	8.68	8.65	34.250	26.587	149.9	0.704	1.30	19.9	44.3	2.56	31.0	0.00			302
1	335	8.14	8.11	34.244	26.665	142.9	0.756	1.14	17.2	49.5	2.67	32.6	0.00			337
1	396	7.41	7.37	34.235	26.765	133.9	0.840	0.91	13.5	58.1	2.82	35.1	0.00			398
	400 ISL	7.36	7.32	34.237	26.773	133.1	0.845	0.88	13.0	58.9	2.84	35.3	0.00			403
1	463	6.56	6.52	34.276	26.914	120.1	0.925	0.49	7.1	72.1	3.08	38.4	0.01			466
	500 ISL	6.27	(.23	34.298	26.969	115.1	0.969	0.38	5.5	77.5	3.15	39.1	0.00			503
1	534	6.01	5.96	34.320	27.020	110.4	1.007	0.28	4.0	82.5	3.22	39.8	0.00			538

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 90 35

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CID AMT TYPE
33 15.3 N	118 15.2 W	01/10/92	2109 UTC	295 m	290 14 kn	290 03 04	1	1010.4 mb	23.2 C	21.2 C	09» 04	1/8 CI

CAST	DEPTH -	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
1	0	22.00	22.00	33.388	22.995	486.0	0.000	5.48	109.0	2.4	0.16	0.1	0.00	0.69	0.09	0
1	10	21.52	21.52	33.391	23.130	473.5	0.048	5.52	108.8	2.3	0.20	0.1	0.00	0.57	0.07	10
	20 ISL	20.30	20.30	33.333	23.414	446.7	0.094	6.03	116.2	2.5	0.21	0.1	0.00	1.12	0.17	20
1	21	20.10	20.10	33.324	23.460	442.4	0.098	6.09	116.9	2.5	0.21	0.1	0.00	1.17	0.19	21
	30 ISL	17.17	17.17	33.241	24.127	378.9	0.135	6.45	117.1	2.8	0.30	0.1	0.00	1.04	0.33	30
1	31	16.83	16.82	33.237	24.203	371.7	0.139	6.47	116.7	2.9	0.31	0.1	0.00	1.03	0.35	31
1	42	14.99	14.98	33.211	24.597	334.4	0.178	6.08	105.7	3.8	0.40	0.1	0.00	0.97	0.55	42
	50 ISL	13.45	13.44	33.251	24.950	300.9	0.203	5.38	90.6	5.5	0.63	1.4	0.18	0.83	0.62	50
1	52	13.12	13.11	33.269	25.030	293.3	0.209	5.19	86.9	6.0	0.70	1.9	0.22	0.78	0.64	52
1	67	12.75	12.74	33.456	25.249	272.9	0.252	4.35	72.3	9.1	1.03	9.4	0.03	0.18	0.22	67
	75 ISL	12.29	12.28	33.502	25.373	261.2	0.273	4.16	68.5	10.7	1.15	11.6	0.02	0.12	0.14	75
1	81	11.93	11.92	33.526	25.460	253.0	0.289	4.07	66.5	11.8	1.22	12.8	0.01	0.08	0.11	81
	100 ISL	11.36	11.35	33.622	25.640	236.3	0.335	3.62	58.5	15.2	1.43	16.2	0.01	0.03	0.07	100
1	101	11.34	11.33	33.628	25.649	235.5	0.337	3.59	58.0	15.4	1.44	16.3	0.01	0.03	0.07	101
	125 ISL	11.32	11.30	33.835	25.814	220.4	0.392	2.80	45.3	19.8	1.70	19.8	0.01	0.01	0.06	126
1	126	11.32	11.30	33.842	25.819	219.9	0.394	2.77	44.8	20.0	1.71	19.9	0.01	0.01	0.06	127
	150 ISL	11.09	11.07	33.925	25.926	210.3	0.446	2.64	42.5	22.1	1.82	21.5	0.00	0.01	0.04	151
1	157	10.98	10.96	33.935	25.954	207.8	0.461	2.60	41.7	22.5	1.83	21.8	0.00	0.01	0.04	158
1	187	10.31	10.29	33.963	26.094	195.1	0.521	2.64	41.8	24.8	1.89	23.3	0.01	0.01	0.04	188
	200 ISL	10.03	10.01	34.015	26.182	186.8	0.546	2.50	39.3	27.1	1.96	24.5	0.01	0.01	0.04	201
1	222	9.59	9.56	34.117	26.336	172.6	0.585	2.16	33.7	31.8	2.12	26.7	0.02	0.01	0.03	223
	250 ISL	9.19	9.16	34.206	26.471	160.2	0.632	1.70	26.3	37.5	2.32	29.0	0.01	0.02	0.03	251
1	260	9.06	9.03	34.227	26.508	156.8	0.648	1.55	23.9	39.5	2.39	29.7	0.01	0.02	0.03	261
1	295	8.53	8.50	34.246	26.606	147.9	0.701	1.30	19.8	45.2	2.54	31.6	0.01			297

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 90 37

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
33 11.2 N	118 23.8 W	01/10/92	1836 UTC	1182 n	300 15 kn	300 02 05	1	1012.2 mb	22.8 C	20.9 C	18B 03	5/8 AC

CAST	DEPTH B	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN «l/l	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/l	PRESS db
	0 ISL	20.74	20.74	33.398	23.346	452.5	0.000	5.31	103.2	1.7	0.24	0.0	0.00	0.29	0.06	0
1	1	20.74	20.74	33.398	23.346	452.5	0.005	5.31	103.2	1.7	0.24	0.0	0.00	0.29	0.06	1
1	10	20.53	20.53	33.396	23.401	447.6	0.045	5.33	103.2	1.7	0.26	0.0	0.00	0.26	0.05	10
1	20	20.29	20.29	33.389	23.460	442.4	0.090	5.37	103.5	1.6	0.27	0.0	0.00	0.23	0.04	20
1	30	18.01	18.00	33.289	23.962	394.7	0.131	5.77	106.5	1.6	0.32	0.0	0.00	0.27	0.09	30
1	40	15.84	15.83	33.089	24.316	361.1	0.169	6.07	107.2	2.0	0.36	0.0	0.00	0.32	0.12	40
1	50	14.35	14.34	33.082	24.635	331.0	0.204	6.15	105.4	2.6	0.41	0.0	0.00	0.65	0.35	50
1	60	13.37	13.36	33.150	24.889	307.0	0.236	5.76	96.8	4.3	0.56	0.6	0.11	1.09	0.74	60
1	70	12.33	12.32	33.268	25.184	279.1	0.265	4.93	81.1	7.3	0.90	6.7	0.06	0.37	0.40	70
	75 ISL	12.10	12.09	33.350	25.291	268.9	0.279	4.60	75.4	8.9	1.03	9.1	0.04	0.28	0.28	75
1	84	11.90	11.89	33.492	25.439	255.1	0.302	4.14	67.6	11.5	1.21	12.4	0.02	0.11	0.14	84
1	100	11.58	11.57	33.636	25.611	239.1	0.342	3.65	59.3	14.4	1.41	15.6	0.01	0.02	0.06	100
1	120	11.06	11.05	33.854	25.875	214.4	0.387	2.83	45.5	20.8	1.75	20.4	0.01	0.01	0.04	121
	125 ISL	11.06	11.04	33.893	25.906	211.6	0.398	2.71	43.6	21.5	1.79	21.0	0.01	0.01	0.04	126
1	145	11.05	11.03	33.987	25.981	205.0	0.439	2.48	39.9	23.2	1.88	22.2	0.00	0.01	0.04	146
	150 ISL	10.95	10.93	33.994	26.005	202.8	0.450	2.49	40.0	23.6	1.89	22.4	0.00	0.01	0.04	151
1	176	10.28	10.26	34.002	26.129	191.4	0.501	2.57	40.6	25.8	1.92	23.6	0.00	0.01	0.03	177
	200 ISL	9.67	9.65	34.033	26.256	179.7	0.545	2.58	40.3	28.6	1.97	25.0	0.00	0.01	0.02	201
1	206	9.52	9.50	34.044	26.290	176.6	0.556	2.58	40.1	29.5	1.99	25.4	0.00	0.01	0.02	207
1	236	8.85	8.82	34.128	26.463	160.4	0.607	2.28	35.0	35.9	2.16	28.1	0.00			237
	250 ISL	8.65	8.62	34.134	26.499	157.2	0.629	2.22	33.9	37.6	2.20	28.8	0.00			251
1	277	8.39	8.36	34.133	26.539	153.8	0.671	2.08	31.6	40.4	2.28	29.9	0.00			279
	300 ISL	8.27	8.24	34.175	26.590	149.3	0.706	1.73	26.2	43.9	2.41	31.2	0.00			302
1	334	8.12	8.09	34.239	26.664	142.9	0.755	1.19	18.0	49.2	2.61	33.0	0.00			336
1	394	7.54	7.50	34.242	26.752	135.2	0.839	0.94	14.0	56.3	2.75	35.2	0.00			396
	400 ISL	7.47	7.43	34.243	26.762	134.2	0.847	0.91	13.5	57.3	2.77	35.5	0.00			402
1	461	6.75	6.71	34.261	26.877	123.7	0.926	0.61	8.9	68.0	2.96	38.3	0.00			464
	500 ISL	6.43	6.38	34.282	26.936	118.4	0.973	0.47	6.8	74.2	3.05	39.4	0.00			503
1	531	6.18	6.13	34.30	26.983	114.1	1.009	0.35	5.0	79.1	3.12	40.3	0.00			535

RV NEN HORIZON CALCOFI CRUISE 9210 STATION 90 53

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
32 39.2 N	119 29.4 W	01/10/92	0919 UTC	1318 -	310 25 kn			1012.6 «b	19.0 C	18.8 C		

CAST	DEPTH -	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN »1/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS <U>
	0 ISL	20.55	20.55	33.483	23.461	441.4	0.000	5.33	103.3	1.3	0.25	0.0	0.00	0.22	0.06	0
1	1	20.55	20.55	33.483	23.461	441.5	0.004	5.33	103.3	1.3	0.25	0.0	0.00	0.22	0.06	1
	10 ISL	20.55	20.55	33.483	23.462	441.8	0.044	5.34	103.5	1.2	0.24	0.0	0.00	0.21	0.06	10
1	11	20.55	20.55	33.483	23.462	441.8	0.049	5.34	103.5	1.2	0.24	0.0	0.00	0.21	0.06	11
1	20	20.40	20.40	33.479	23.499	438.6	0.088	5.40	104.4	1.2	0.25	0.0	0.00	0.23	0.06	20
	30 ISL	17.01	17.01	33.369	24.262	366.0	0.128	6.05	109.6	2.1	0.34	0.0	0.00	0.52	0.28	30
1	31	16.65	16.65	33.364	24.343	358.4	0.132	6.12	110.1	2.2	0.35	0.0	0.00	0.56	0.31	31
1	41	15.65	15.64	33.333	24.546	339.2	0.167	6.25	110.2	2.5	0.42	0.1	0.01	1.06	0.66	41
1	50	14.17	14.16	33.320	24.856	309.9	0.196	6.04	103.3	3.5	0.57	1.3	0.07	1.09	0.69	50
1	60	12.03	12.02	33.299	25.265	271.1	0.225	6.58 U	107.6 U	9.0	1.00	8.8	0.12	0.55	0.54	60
1	70	10.95	10.94	33.379	25.524	246.5	0.251	4.31	68.9	13.4	1.28	14.1	0.03	0.21	0.28	70
	75 ISL	10.53	10.52	33.408	25.620	237.4	0.263	4.16	65.9	14.9	1.37	15.8	0.03	0.14	0.21	75
1	84	10.00	9.99	33.464	25.755	224.8	0.284	4.01	62.8	17.1	1.49	18.0	0.02	0.08	0.14	84
1	99	9.73	9.72	33.622	25.923	209.1	0.317	3.64	56.8	20.8	1.63	20.6	0.02	0.03	0.09	99
	100 ISL	9.71	9.70	33.628	25.931	208.3	0.319	3.63	56.6	20.9	1.64	20.7	0.02	0.03	0.09	100
1	119	9.38	9.37	33.707	26.047	197.6	0.357	3.43	53.1	23.3	1.73	22.3	0.02	0.02	0.06	120
	125 ISL	9.33	9.32	33.741	26.082	194.4	0.369	3.32	51.3	24.2	1.76	22.8	0.02	0.02	0.06	126
1	144	9.21	9.19	33.855	26.191	184.5	0.405	2.95	45.5	27.4	1.88	24.6	0.01	0.01	0.06	145
	150 ISL	9.12	9.10	33.892	26.234	180.5	0.416	2.83	43.6	28.8	1.93	25.3	0.01	0.01	0.06	151
1	175	8.72	8.70	34.018	26.396	165.5	0.459	2.44	37.3	34.4	2.10	27.9	0.02	0.01	0.04	176
	200 ISL	8.48	8.46	34.064	26.470	158.9	0.500	2.30	35.0	37.4	2.18	28.9	0.01	0.01	0.04	201
1	206	8.43	8.41	34.069	26.482	157.9	0.509	2.28	34.6	38.0	2.19	29.1	0.01	0.01	0.04	207
1	235	8.07	8.05	34.108	26.567	150.2	0.554	2.04	30.7	43.0	2.32	30.8	0.01			236
	250 ISL	7.96	7.93	34.145	26.612	146.1	0.576	1.77	26.6	45.9	2.43	31.8	0.01			251
1	277	7.79	7.76	34.206	26.686	139.6	0.615	1.29	19.3	51.1	2.61	33.5	0.00			279
	300 ISL	7.53	7.50	34.211	26.727	135.9	0.646	1.21	18.0	54.6	2.69	34.6	0.00			302
1	334	7.15	7.12	34.198	26.771	132.0	0.692	1.09	16.1	58.9	2.75	35.9	0.00			336
1	396	6.82	6.78	34.208	26.825	127.7	0.772	0.89	13.0	64.4	2.85	37.4	0.00			399
	400 ISL	6.80	6.76	34.210	26.829	127.3	0.777	0.87	12.7	64.8	2.86	37.5	0.00			403
1	462	6.43	6.39	34.246	26.907	120.5	0.854	0.62	9.0	71.9	2.99	39.3	0.00			465
	500 ISL	6.10	6.06	34.273	26.971	114.7	0.899	0.48	6.9	78.3	3.07	40.5	0.00			503
1	532	5.82	5.77	34.297	27.026	109.7	0.935	0.37	5.3	83.6	3.13	41.5	0.00			536

RV NEN HORIZON CALCOFI CRUISE 9210 STATION 90 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	NIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
32 24.9 N	119 57.6 W	01/10/92	0445 UTC	840 -	310 17 kn			1014.0 ab	19.0 C	18.8 C		

CAST	DEPTH -	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN »1/1	OXY PCT	SIO3 uM/1	PO4 UM/1	NO3 UM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	18.74	18.74	33.228	23.734	415.4	0.000	5.48	102.5	1.5	0.32	0.0	0.00	0.12	0.03	0
1	1	18.74	18.74	33.228	23.734	415.5	0.004	5.48	102.5	1.5	0.32	0.0	0.00	0.12	0.03	1
1	10	18.74	18.74	33.227	23.733	415.8	0.042	5.51	103.1	1.5	0.32	0.1	0.00	0.13	0.03	10
	20 ISL	18.64	18.64	33.223	23.756	414.0	0.083	5.52	103.1	1.4	0.32	0.0	0.00	0.14	0.03	20
1	21	18.63	18.63	33.223	23.758	413.8	0.087	5.52	103.1	1.4	0.32	0.0	0.00	0.14	0.03	21
1	30	16.38	16.38	33.149	24.240	368.1	0.122	5.98	106.8	1.4	0.35	0.0	0.00	0.23	0.07	30
1	40	13.50	13.49	33.037	24.774	317.3	0.157	6.14	103.4	2.9	0.46	0.1	0.01	1.06	0.54	40
1	50	12.61	12.60	33.044	24.956	300.3	0.188	5.79	95.7	4.3	0.64	2.6	0.06	0.95	0.58	50
1	60	12.15	12.14	33.174	25.145	282.5	0.217	5.23	85.7	7.1	0.89	7.2	0.03	0.45	0.42	60
1	71	11.14	11.13	33.205	25.355	262.6	0.247	4.90	78.6	9.8	1.10	11.1	0.01	0.22	0.2s	71
	75 ISL	10.80	10.79	33.245	25.446	254.0	0.257	4.73	75.3	11.4	1.19	12.8	0.01	0.16	0.22	75
1	85	10.19	10.18	33.367	25.647	235.1	0.281	4.29	67.5	15.1	1.39	16.4	0.01	0.06	0.17	85
1	100	10.22	10.21	33.526	25.766	224.1	0.316	3.87	61.0	17.3	1.49	18.1	0.01	0.05	0.11	100
1	120	9.70	9.69	33.736	26.018	200.5	0.358	3.27	51.0	23.1	1.73	22.2	0.01	0.01	0.07	121
	125 ISL	9.53	9.52	33.775	26.076	195.0	0.368	3.18	49.4	24.5	1.78	23.0	0.01	0.01	0.06	126
1	145	8.95	8.93	33.897	26.265	177.4	0.405	2.90	44.5	29.1	1.93	25.6	0.01	0.01	0.05	146
	150 ISL	8.93	8.91	33.924	26.290	175.2	0.414	2.84	43.6	29.8	1.95	26.0	0.01	0.01	0.05	151
1	176	8.84	8.82	34.009	26.371	168.0	0.459	2.53	38.8	33.1	2.06	27.3	0.01	0.01	0.05	177
	200 ISL	8.56	8.54	34.074	26.465	159.4	0.498	2.27	34.6	37.3	2.18	28.8	0.01	0.00	0.04	201
1	206	8.48	8.46	34.086	26.487	157.4	0.508	2.21	33.6	38.4	2.21	29.2	0.01	0.00	0.04	207
1	236	8.19	8.17	34.119	26.557	151.2	0.554	2.03	30.7	42.5	2.33	30.6	0.01			237
	250 ISL	7.93	7.90	34.114	26.592	148.0	0.575	1.98	29.7	44.8	2.37	31.4	0.01			251
1	277	7.43	7.40	34.099	26.653	142.4	0.614	1.87	27.8	49.4	2.44	33.0	0.01			279
	300 ISL	7.19	7.16	34.105	26.692	139.0	0.646	1.70	25.1	52.7	2.52	34.1	0.01			302
1	333	6.97	6.94	34.125	26.738	135.0	0.692	1.43	21.0	57.1	2.63	35.6	0.00			335
1	394	6.61	6.57	34.173	26.825	127.4	0.772	0.98	14.3	64.9	2.83	37.9	0.00			396
	400 ISL	6.57	6.53	34.177	26.833	126.7	0.779	0.95	13.8	65.7	2.85	38.1	0.00			403
1	460	6.19	6.15	34.213	26.912	119.8	0.853	0.66	9.5	73.3	2.99	39.9	0.00			463
	500 ISL	5.97	5.93	34.235	26.958	115.8	0.900	0.53	7.6	77.8	3.06	40.9	0.00			503
1	530	5.81	5.76	34.252	26.991	112.9	0.935	0.43	6.1	81.2	3.11	41.6	0.00			534

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 90 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
32 5.1 N	120 38.7 W	30/09/92	2307 UTC	3818 m	320 12 kn	320 02 04	1	1014.5 ab	20.1 C	19.5 C	31m 02	1/8	&C

CAST	DEPTH ▪	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 UM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	19.23	19.23	33.232	23.613	426.9	0.000	5.40	102.0	1.7	0.36	0.0	0.00	0.11	0.02	0
1	1	19.23	19.23	33.232	23.613	427.0	0.004	5.40	102.0	1.7	0.36	0.0	0.00	0.11	0.02	1
	10 ISL	19.14	19.14	33.236	23.640	424.8	0.043	5.45	102.7	1.4	0.36	0.0	0.00	0.11	0.02	10
1	11	19.12	19.12	33.236	23.645	424.3	0.047	5.46	102.9	1.4	0.36	0.0	0.00	0.11	0.02	11
	20 ISL	18.86	18.86	33.239	23.713	418.1	0.085	5.49	103.0	1.4	0.35	0.0	0.00	0.14	0.03	20
1	21	18.83	18.83	33.239	23.721	417.4	0.089	5.49	102.9	1.4	0.35	0.0	0.00	0.14	0.03	21
	30 ISL	18.68	18.67	33.249	23.766	413.4	0.126	5.52	103.2	1.3	0.34	0.0	0.00	0.16	0.04	II0
1	32	18.62	18.61	33.252	23.783	411.8	0.135	5.53	103.2	1.3	0.34	0.0	0.00	0.16	0.04	:I2
1	42	17.71	17.70	33.285	24.032	388.4	0.175	5.78	106.1	1.2	0.34	0.0	0.00	0.26	0.08	42
	50 ISL	16.54	16.53	33.298	24.318	361.3	0.205	5.88	105.5	1.8	0.38	0.0	0.00	0.41	0.19	50
1	52	16.15	16.14	33.287	24.399	353.7	0.212	5.90	105.0	2.0	0.39	0.0	0.00	0.47	0.23	52
1	62	13.41	13.40	33.061	24.812	314.4	0.245	5.97	100.4	3.3	0.51	0.3	0.12	0.97	0.58	62
1	72	12.34	12.33	33.106	25.056	291.2	0.275	5.49	90.3	5.7	0.78	4.6	0.04	0.50	0.46	72
	75 ISL	12.08	12.07	33.132	25.126	284.7	0.284	5.33	87.2	6.7	0.87	6.1	0.04	0.41	0.41	75
1	86	11.24	11.23	33.247	25.370	261.6	0.314	4.74	76.2	10.7	1.17	11.5	0.02	0.18	0.22	86
	100 ISL	10.22	10.21	33.399	25.667	233.5	0.349	4.12	64.8	16.0	1.46	16.9	0.02	0.05	0.11	100
1	101	10.16	10.15	33.409	25.685	231.8	0.351	4.08	64.1	16.4	1.48	17.2	0.02	0.05	0.11	101
1	122	9.51	9.50	33.533	25.890	212.6	0.398	3.69	57.2	20.8	1.69	20.8	0.01	0.02	0.07	123
	125 ISL	9.43	9.42	33.557	25.922	209.6	0.404	3.63	56.2	21.5	1.72	21.3	0.01	0.02	0.07	126
1	147	8.94	8.92	33.735	26.140	189.3	0.448	3.21	49.2	26.4	1.88	24.4	0.00	0.01	0.04	148
	150 ISL	8.90	8.88	33.757	26.163	187.1	0.454	3.15	48.2	27.0	1.90	24.7	0.00	0.01	0.04	151
1	177	8.65	8.63	33.914	26.326	172.2	0.502	2.77	42.2	31.7	2.03	27.0	0.00	0.01	0.03	17B
	200 ISL	8.43	8.41	33.975	26.408	164.8	0.541	2.75	41.7	34.0	2.06	27.5	0.00	0.00	0.02	201.
1	209	8.34	8.32	33.989	26.432	162.6	0.556	2.74	41.5	34.9	2.07	27.6	0.00	0.00	0.02	210
1	237	7.98	7.96	34.031	26.520	154.6	0.600	2.53	38.0	39.4	2.17	29.5	0.00			238
	250 ISL	7.82	7.80	34.037	26.548	152.1	0.620	2.50	37.4	41.0	2.20	30.0	0.00			251
1	278	7.50	7.47	34.045	26.601	147.4	0.662	2.40	35.7	44.8	2.28	31.2	0.00			280
	300 ISL	7.21	7.18	34.070	26.661	141.8	0.694	2.05	30.3	50.1	2.43	33.1	0.00			302
1	335	6.83	6.80	34.118	26.752	133.6	0.742	1.42	20.8	58.5	2.68	36.1	0.00			337
1	395	6.64	6.60	34.187	26.832	126.8	0.820	0.94	13.7	65.2	2.87	38.0	0.00			397
	400 ISL	6.60	6.56	34.188	26.838	126.3	0.826	0.92	13.4	65.9	2.88	38.2	0.00			402
1	463	6.09	6.05	34.202	26.916	119.3	0.904	0.67	9.6	74.3	3.01	40.2	0.00			466
	500 ISL	5.99	5.95	34.245	26.963	115.3	0.947	0.51	7.3	78.1	3.09	40.9	0.00			503
1	535	5.89	5.84	34.285	27.007	111.5	0.987	0.36	5.2	81.6	3.16	41.5	0.00			539

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 90 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
31 44.8 N	121 18.6 W	30/09/92	1545 UTC	3630 is	350 11 kn	360 01 04	1	1016.0 mb	18.6 C	18.6 C		2/8	ST

CAST	DEPTH D	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 UM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
1	0	18.49	18.49	33.347	23.887	400.8	0.000	5.53	103.0	1.4	0.33	0.1	0.00	0.22	0.05	0
1	10	18.34	18.34	33.345	23.923	397.7	0.040	5.56	103.3	1.4	0.33	0.1	0.00	0.19	0.05	10
	20 ISL	17.74	17.74	33.340	24.066	384.4	0.079	5.65	103.8	1.3	0.33	0.1	0.00	0.23	0.08	20
1	22	17.62	17.62	33.339	24.094	381.8	0.087	5.67	103.9	1.3	0.33	0.1	0.00	0.24	0.09	22
	30 ISL	17.51	17.50	33.339	24.121	379.5	0.117	5.67	103.7	1.3	0.34	0.0	0.00	0.30	0.13	30
1	31	17.48	17.47	33.338	24.127	379.0	0.121	5.67	103.6	1.3	0.34	0.0	0.00	0.31	0.14	31
1	41	16.47	16.46	33.293	24.330	359.9	0.158	5.78	103.5	1.3	0.39	0.0	0.00	0.52	0.22	41
	50 ISL	14.62	14.61	33.189	24.660	328.6	0.189	5.74	99.0	2.9	0.52	0.6	0.13	0.70	0.53	50
1	51	14.41 A	14.40	33.179	24.697	325.1	0.192	5.73	98.4	3.1	0.54	0.7	0.14	0.71	0.56	51
1	61	13.07	13.06	33.124	24.928	303.2	0.224	5.52	92.2	5.1	0.71	3.2	0.17	0.44	0.43	61
1	71	12.60	12.59	33.095	24.998	296.8	0.254	5.48	90.6	5.3	0.76	4.3	0.10	0.29	0.39	71
	75 ISL	12.40	12.39	33.136	25.068	290.2	0.265	5.32	87.6	6.3	0.84	5.7	0.08	0.24	0.35	75
1	85	11.91	11.90	33.268	25.264	271.8	0.293	4.83	78.8	9.3	1.08	9.7	0.04	0.15	0.23	85
1	100	11.23	11.22	33.372	25.469	252.5	0.333	4.43	71.3	12.0	1.25	13.1	0.02	0.09	0.17	100
1	120	10.40	10.39	33.500	25.716	229.4	0.381	4.02	63.6	15.8	1.45	17.0	0.01	0.06	0.15	121
	125 ISL	10.30	10.29	33.526	25.753	225.9	0.392	3.94	62.2	16.6	1.48	17.6	0.01	0.05	0.14	126
1	145	10.03	10.01	33.624	25.876	214.6	0.436	3.63	57.0	19.6	1.61	19.7	0.01	0.02	0.08	146
	150 ISL	9.94	9.92	33.657	25.917	210.8	0.447	3.53	55.3	20.5	1.65	20.4	0.01	0.02	0.08	151
1	175	9.52	9.50	33.816	26.111	192.8	0.497	3.06	47.5	25.3	1.84	23.6	0.01	0.01	0.06	176
	200 ISL	9.23	9.21	33.928	26.246	180.4	0.544	2.72	42.0	29.5	1.98	25.8	0.01	0.01	0.06	201
1	205	9.18	9.16	33.944	26.266	178.6	0.553	2.67	41.2	30.2	2.00	26.1	0.01	0.01	0.06	206
1	234	8.83	8.80	33.990	26.358	170.3	0.604	2.58	39.5	32.8	2.06	27.5	0.01			235
	250 ISL	8.50	8.47	34.018	26.432	163.5	0.630	2.49	37.9	35.7	2.13	28.6	0.01			251
1	274	7.97	7.94	34.058	26.543	153.1	0.668	2.31	34.7	41.0	2.25	30.5	0.00			276
	300 ISL	7.55	7.52	34.087	26.627	145.3	0.707	2.01	29.9	46.9	2.40	32.5	0.00			302
1	330	7.18	7.15	34.109	26.697	139.0	0.750	1.65	24.3	53.4	2.57	34.6	0.00			332
1	390	6.66	6.62	34.132	26.786	131.1	0.831	1.20	17.5	62.1	2.77	37.4	0.00			392
	400 ISL	6.56	6.52	34.136	26.802	129.6	0.844	1.13	16.4	63.8	2.80	37.9	0.00			402
1	458	6.03	5.99	34.160	26.890	121.6	0.917	0.79	11.3	73.2	2.98	40.4	0.00			461
	500 ISL	5.75	5.71	34.183	26.944	116.8	0.967	0.63	9.0	78.8	3.05	41.6	0.00			503
1	531	5.54	5.50	34.201	26.984	113.2	1.002	0.52	7.4	83.0	3.11	42.4	0.00			535

A) ALTERNATE VALUE, 13.59 DEGREES CELSIUS.

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 90 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
31 25.0 N	121 59.5 W	30/09/92	1007 UTC	3835 *m*	330 09 kn			1015.5 mb	18.8 C	18.7 C		

CAST	DEPTH B	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
1	0	20.49	20.49	33.486	23.480	439.7	0.000	5.26	101.8	1.6	0.33	0.0	0.00	0.08	0.02	0
1	10	20.50	20.50	33.489	23.480	440.1	0.044	5.27	102.1	1.6	0.34	0.0	0.00	0.10	0.03	10
1	20	20.45	20.45				0.088	5.29	102.3	1.6	0.32	0.0	0.00	0.08	0.01	20
1	30	20.31	20.30	33.503	23.542	434.9	0.132	5.30	102.3	1.6	0.32	0.0	0.00	0.09	0.02	30
1	40	18.49	18.48	33.050	23.662	423.7	0.175	5.51	102.5	1.6	0.35	0.0	0.00	0.15	0.04	40
1	50	18.42	18.41	33.046	23.676	422.7	0.217	5.51	102.3	1.6	0.35	0.0	0.00	0.16	0.05	50
1	60	17.71	17.70	33.139	23.921	399.6	0.258	5.87	107.6	1.6	0.35	0.0	0.00	0.20	0.07	60
1	70	16.31	16.30	33.138	24.249	368.6	0.296	6.04	107.7	1.6	0.35	0.0	0.00	0.23 A	0.11 A	70
	75 ISL	16.30	16.29	33.272	24.354	358.7	0.315	6.02	107.4	1.6	0.34	0.0	0.00	0.23	0.12	75
1	84	16.27	16.26	33.468	24.512	343.9	0.346	5.90	105.4	1.7	0.34	0.0	0.00	0.23	0.14	84
1	99	15.15	15.14	33.539	24.817	315.2	0.396	5.67	99.1	2.3	0.38	0.0	0.01	0.23	0.24	99
	100 ISL	15.09	15.07	33.541	24.832	313.8	0.399	5.66	98.8	2.3	0.38	0.0	0.02	0.23	0.24	100
1	120	13.88	13.86	33.523	25.075	291.1	0.459	5.39	91.8	3.7	0.54	1.8	0.15	0.20	0.23	120
	125 ISL	13.35	13.33	33.507	25.171	282.0	0.474	5.28	88.9	4.6	0.62	3.3	0.13	0.18	0.22	125
1	145	11.30	11.28	33.487	25.547	246.2	0.526	4.86	78.3	8.6	0.98	9.8	0.01	0.09	0.15	146
	150 ISL	11.03	11.01	33.498	25.604	240.8	0.539	4.80	76.9	9.3	1.03	10.7	0.01	0.07	0.13	151
1	176	10.13	10.11	33.602	25.842	218.5	0.598	4.47	70.3	13.8	1.26	14.7	0.00	0.02	0.04	177
	200 ISL	9.36	9.34	33.761	26.094	194.9	0.648	3.90	60.3	20.8	1.56	20.0	0.00	0.00	0.02	201
1	207	9.18	9.16	33.809	26.161	188.6	0.661	3.75	57.8	22.7	1.63	21.3	0.00	0.00	0.02	208
1	237	8.81	8.78	33.950	26.330	173.0	0.716	3.74	57.2	26.3	1.67	22.3	0.00			238
	250 ISL	8.61	8.58	33.979	26.384	168.0	0.738	3.67	55.9	28.4	1.72	23.2	0.00			251
1	279	8.14	8.11	34.010	26.480	159.3	0.785	3.43	51.7	33.7	1.86	25.5	0.00			280
	300 ISL	7.84	7.81	34.019	26.531	154.5	0.818	3.24	48.5	37.3	1.96	27.1	0.00			302
1	336	7.37	7.34	34.027	26.606	147.8	0.873	2.81	41.6	43.7	2.16	29.8	0.00			338
1	397	6.69	6.65	34.069	26.733	136.3	0.959	1.75	25.5	56.8	2.58	35.1	0.00			399
	400 ISL	6.67	6.63	34.071	26.737	135.9	0.963	1.72	25.1	57.3	2.59	35.3	0.00			402
1	464	6.20	6.16	34.118	26.836	127.0	1.047	1.21	17.4	67.2	2.82	38.4	0.00			467
	500 ISL	5.90	5.86	34.154	26.902	120.9	1.092	0.90	12.9	74.0	2.95	40.1	0.00			503
1	533	5.62	5.57	34.188	26.964	115.2	1.131	0.62	8.8	80.2	3.06	41.6	0.00			536

A) SECOND FLUOROMETER READING NOT RECORDED, CHLOROPHYLL AND PHAEOPIGMENTS
CALCULATED WITH ASSUMED ACID RATIO INTERPOLATED FROM ADJACENT LEVELS.

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 90 100

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
31 5.3 N	122 39.9 W	30/09/92	0438 UTC	3990 m	010 02 kn			1015.3 mb	20.0 C	19.6 C		

CAST	DEPTH B	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN «1/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	21.11	21.11	33.497	23.322	454.8	0.000	5.28	103.4	1.5	0.32	0.0	0.00	0.08	0.02	0
1	1	21.11	21.11	33.497	23.322	454.8	0.005	5.28	103.4	1.5	0.32	0.0	0.00	0.08	0.02	1
	10 ISL	21.05	21.05	33.512	23.3S0	452.5	0.045	5.25	102.7	1.5	0.32	0.0	0.00	0.07	0.01	10
1	11	21.04	21.04	33.515	23.355	452.0	0.050	5.25	102.7	1.5	0.32	0.0	0.00	0.07	0.01	11
	20 ISL	20.96	20.96	33.534	23.391	448.9	0.090	5.26	102.7	1.5	0.32	0.0	0.00	0.07	0.01	20
1	22	20.95	20.95	33.537	23.396	448.5	0.099	5.26	102.7	1.5	0.32	0.0	0.00	0.07	0.01	22
	30 ISL	20.94	20.93	33.536	23.399	448.6	0.135	5.25	102.5	1.6	0.32	0.0	0.00	0.07	0.01	30
1	32	20.94	20.93	33.537	23.400	448.6	0.144	5.25	102.5	1.6	0.32	0.0	0.00	0.07	0.01	32
1	42	20.90	20.89	33.528	23.404	448.5	0.189	5.26	102.6	1.6	0.32	0.0	0.00	0.09	0.02	42
	50 ISL	19.42	19.41	33.391	23.688	421.6	0.224	5.65	107.2	1.6	0.32	0.0	0.00	0.11	0.03	50
1	52	18.99	18.98	33.362	23.776	413.3	0.232	5.75	108.2	1.6	0.32	0.0	0.00	0.12	0.03	52
1	62	17.74	17.73	33.394	24.109	381.8	0.272	5.93	108.9	1.7	0.31	0.0	0.00	0.14	0.04	62
1	72	16.80	16.79	33.386	24.326	361.3	0.309	5.93	107.0	1.7	0.32	0.0	0.00	0.15	0.06	72
	75 ISL	16.56	16.55	33.412	24.402	354.2	0.320	5.91	106.1	1.7	0.32	0.0	0.00	0.15	0.07	75.
1	86	15.73	15.72	33.510	24.666	329.2	0.358	5.79	102.3	1.7	0.33	0.0	0.00	0.17	0.14	86
	100 ISL	14.56	14.55	33.500	24.914	305.9	0.402	5.59	96.5	2.4	0.42	0.3	0.11	0.22	0.23	100
1	102	14.39	14.38	33.495	24.946	302.9	0.408	5.56	95.6	2.6	0.44	0.3	0.12	0.23	0.24	102
1	122	12.87	12.85	33.521	25.277	271.7	0.466	5.19	86.5	5.1	0.71	5.0	0.03	0.14	0.27	122
	125 ISL	12.71	12.69	33.516	25.304	269.1	0.474	5.17	85.9	5.4	0.74	5.5	0.03	0.13	0.26	12!i
1	149	11.54	11.52	33.480	25.498	251.0	0.536	4.97	80.5	8.1	0.94	9.0	0.01	0.09	0.14	150
	150 ISL	11.48	11.46	33.481	25.510	249.9	0.539	4.95	80.1	8.3	0.95	9.2	0.01	0.09	0.14	151
1	179	9.81	9.79	33.587	25.884	214.5	0.606	4.35	67.9	15.6	1.36	16.3	0.00	0.02	0.03	180
	200 ISL	9.35	9.33	33.710	26.056	198.4	0.649	3.96	61.2	20.1	1.54	19.6	0.00	0.01	0.02	201
1	209	9.25	9.23	33.767	26.117	192.9	0.667	3.81	58.8	22.0	1.60	20.7	0.00	0.00	0.02	210
1	239	8.73	8.70	33.949	26.342	171.9	0.722	3.33	50.9	29.1	1.83	24.5	0.00			240
	250 ISL	8.52	8.49	33.983	26.401	166.4	0.740	3.25	49.4	31.4	1.88	25.3	0.00			25:t
1	280	7.99	7.96	34.031	26.519	155.5	0.788	3.07	46.1	37.1	2.01	27.2	0.00			28:i
	300 ISL	7.70	7.67	34.043	26.571	150.7	0.819	2.86	42.7	40.8	2.11	28.7	0.00			302
1	337	7.26	7.23	34.048	26.637	144.7	0.874	2.44	36.1	47.3	2.31	31.5	0.00			339
1	397	6.67	6.63	34.073	26.738	135.7	0.958	1.85	27.0	57.3	2.57	35.0	0.00			399
	400 ISL	6.64	6.60	34.075	26.744	135.2	0.962	1.82	26.5	57.9	2.58	35.2	0.00			40:i!
1	463	6.11	6.07	34.128	26.855	125.1	1.044	1.12	16.1	69.3	2.87	38.9	0.00			4641
	500 ISL	5.90	5.86	34.166	26.912	120.0	1.089	0.85	12.2	74.8	2.98	40.2	0.00			50:1
1	533	5.71	5.66	34.201	26.963	115.4	1.128	0.61	8.7	79.7	3.07	41.4	0.00			53«

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 90 110

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
30 45.3 N	123 20.0 W	29/09/92	2307 UTC	4005 B	00 kn	320 03 06	2	1014.6 Bb	20.6 C	20.1 C	4 5m 01	8/8	SC

CAST	DEPTH -	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN Bl/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
1	0	21.15	21.15	33.374	23.217	464.7	0.000	5.25	102.8	2.2	0.34	0.1	0.00	0.08	0.01	0
	10 ISL	20.73	20.73	33.350	23.313	456.0	0.046	5.28	102.6	2.2	0.35	0.1	0.00	0.08	0.01	10
1	11	20.69	20.69	33.348	23.322	455.2	0.051	5.28	102.5	2.2	0.35	0.1	0.00	0.08	0.01	11
	20 ISL	20.62	20.62	33.364	23.353	452.5	0.091	5.28	102.4	2.2	0.34	0.1	0.00	0.08	0.02	20
1	21	20.61	20.61	33.363	23.355	452.4	0.096	5.28	102.4	2.2	0.34	0.1	0.00	0.08	0.02	21
	30 ISL	20.56	20.55	33.356	23.363	451.9	0.137	5.29	102.5	2.1	0.34	0.1	0.00	0.08	0.02	30
1	31	20.56	20.55	33.355	23.363	452.0	0.141	5.29	102.5	2.1	0.34	0.1	0.00	0.08	0.02	31
1	41	20.55	20.54	33.357	23.367	452.0	0.186	5.29	102.4	2.1	0.34	0.0	0.00	0.10	0.03	41
	50 ISL	19.92	19.91	33.257	23.457	443.7	0.227	5.39	103.1	2.1	0.34	0.0	0.00	0.13	0.04	50
1	51	19.81	19.80	33.244	23.476	441.9	0.231	5.41	103.3	2.1	0.34	0.0	0.00	0.13	0.04	51
1	61	18.22	18.21	33.154	23.809	410.4	0.274	5.83	107.9	2.1	0.34	0.0	0.00	0.13	0.04	61
1	71	17.12	17.11	33.341	24.217	371.7	0.313	6.00	108.9	1.9	0.32	0.0	0.00	0.16	0.05	71
	75 ISL	16.95	16.94	33.410	24.310	363.0	0.328	5.99	108.4	1.9	0.31	0.0	0.00	0.16	0.06	75
1	85	16.61	16.60	33.508	24.464	348.6	0.363	5.89	105.9	1.9	0.30	0.0	0.00	0.18	0.09	85
	100 ISL	15.15	15.13	33.371	24.688	327.5	0.414	5.80	101.2	2.5	0.39	0.1	0.03	0.28	0.21	100
1	101	15.02	15.00	33.356	24.704	325.9	0.417	5.79	100.8	2.5	0.40	0.1	0.03	0.28	0.22	101
1	121	11.51	11.49	33.129	25.230	275.7	0.477	5.26	85.0	7.2	0.91	7.3	0.02	0.14	0.24	121
	125 ISL	11.19	11.17	33.140	25.297	269.4	0.488	5.20	83.4	7.8	0.96	8.2	0.02	0.12	0.22	125
1	146	10.28	10.26	33.284	25.568	243.9	0.542	4.94	77.8	11.1	1.15	12.2	0.01	0.06	0.10	147
	150 ISL	10.09	10.07	33.312	25.622	238.8	0.552	4.85	76.1	12.1	1.20	13.2	0.01	0.05	0.09	151
1	177	9.03	9.01	33.502	25.944	208.5	0.612	4.26	65.3	19.0	1.54	19.0	0.00	0.01	0.03	178
	200 ISL	8.57	8.55	33.654	26.135	190.7	0.658	4.11	62.4	22.8	1.65	21.2	0.00	0.00	0.02	201
1	208	8.49	8.47	33.706	26.188	185.7	0.673	4.06	61.6	23.9	1.67	21.7	0.00	0.00	0.02	209
1	238	8.55	8.53	33.915	26.343	171.7	0.727	3.44	52.3	28.9	1.82	24.6	0.00			239
	250 ISL	8.40	8.37	33.957	26.399	166.5	0.747	3.29	49.9	31.3	1.88	25.7	0.00			251
1	279	7.88	7.85	34.009	26.518	155.5	0.794	2.99	44.8	37.5	2.05	28.2	0.00			280
	300 ISL	7.53	7.50	34.024	26.580	149.7	0.826	2.72	40.4	42.3	2.18	30.2	0.00			302
1	336	7.02	6.99	34.039	26.664	142.1	0.878	2.23	32.8	50.2	2.40	33.5	0.00			338
1	397	6.66	6.62	34.114	26.772	132.5	0.962	1.35	19.7	61.0	2.74	37.6	0.00			399
	400 ISL	6.63	6.59	34.117	26.778	131.9	0.966	1.32	19.2	61.6	2.75	37.8	0.00			402
1	462	6.10	6.06	34.175	26.894	121.4	1.044	0.77	11.1	73.1	2.99	41.1	0.00			465
	500 ISL	5.90	5.86	34.211	26.947	116.7	1.090	0.59	8.5	77.8	3.08	42.2	0.00			503
1	531	5.74	5.69	34.241	26.991	112.8	1.125	0.45	6.4	81.6	3.15	43.1	0.00			534

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 90 120

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
30 25.1 N	123 59.9 W	29/09/92	1523 UTC	4238 B	090 03 kn	330 02 07	1	1014.5 Bb	18.9 C	19.0 C		4/8	ST

CAST	DEPTH -	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN Bl/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	20.21	20.21	33.201	23.336	453.4	0.000	5.32	102.3	1.9	0.35	0.0	0.00	0.08	0.02	0
1	1	20.21	20.21	33.201	23.336	453.4	0.005	5.32	102.3	1.9	0.35	0.0	0.00	0.08	0.02	1
	10 ISL	19.98	19.98	33.188	23.387	448.9	0.045	5.36	102.6	1.8	0.35	0.0	0.00	0.08	0.02	10
1	11	19.95	19.95	33.186	23.393	448.3	0.050	5.36	102.6	1.8	0.35	0.0	0.00	0.08	0.02	11
	20 ISL	19.85	19.85	33.181	23.416	446.5	0.090	5.36	102.4	1.8	0.35	0.0	0.00	0.08	0.03	20
1	21	19.85	19.85	33.181	23.416	446.5	0.094	5.36	102.4	1.8	0.35	0.0	0.00	0.08	0.03	21
	30 ISL	19.83	19.82	33.175	23.417	446.8	0.135	5.37	102.5	1.8	0.35	0.0	0.00	0.08	0.03	30
1	32	19.82	19.81	33.174	23.419	446.7	0.143	5.37	102.5	1.8	0.35	0.0	0.00	0.08	0.03	32
1	41	19.54	19.53	33.161	23.482	441.0	0.183	5.45	103.5	1.8	0.35	0.0	0.00	0.11	0.04	41
	50 ISL	17.27	17.26	33.058	23.964	395.2	0.221	5.90	107.2	1.8	0.36	0.0	0.00	0.14	0.06	50
1	51	17.01	17.00	33.050	24.019	390.0	0.225	5.95	107.6	1.8	0.36	0.0	0.00	0.14	0.06	51
1	62	16.51	16.50	33.070	24.150	377.7	0.267	6.00	107.4	1.8	0.35	0.0	0.00	0.15	0.07	62
1	72	16.90	16.89	33.518	24.404	353.9	0.304	5.94	107.4	1.7	0.29	0.0	0.00	0.18	0.08	72
	75 ISL	16.60	16.59	33.494	24.456	349.1	0.314	5.93	106.6	1.7	0.30	0.0	0.00	0.18	0.09	75
1	87	15.16	15.15	33.294	24.626	333.0	0.355	5.87	102.4	1.8	0.35	0.0	0.00	0.20	0.16	87
	100 ISL	14.93	14.92	33.494	24.830	314.0	0.397	5.71	99.3	2.0	0.37	0.0	0.02	0.23	0.22	100
1	101	14.92	14.90	33.513	24.847	312.4	0.400	5.69	98.9	2.0	0.37	0.0	0.02	0.23	0.22	101
1	121	13.26	13.24	33.478	25.166	282.3	0.460	5.31	89.2	4.5	0.65	3.7	0.05	0.15	0.23	121
	125 ISL	12.93	12.91	33.465	25.222	277.0	0.471	5.27	87.9	5.0	0.69	4.5	0.05	0.14	0.22	125
1	147	11.27	11.25	33.411	25.494	251.3	0.529	5.08	81.8	8.1	0.93	8.9	0.01	0.07	0.13	148
	150 ISL	11.08	11.06	33.402	25.521	248.7	0.537	5.05	81.0	8.6	0.96	9.5	0.01	0.06	0.12	151
1	179	9.62	9.60	33.429	25.792	223.1	0.605	4.54	70.5	14.9	1.35	16.0	0.00	0.03	0.05	180
	200 ISL	9.06	9.04	33.667	26.069	197.1	0.649	3.62	55.6	23.2	1.73	22.4	0.00	0.01	0.04	201
1	208	8.92	8.90	33.765	26.167	187.9	0.665	3.29	50.4	26.2	1.85	24.5	0.00	0.00	0.03	209
1	238	8.55	8.53	33.921	26.348	171.2	0.719	3.02	45.9	31.0	1.94	26.6	0.00			239
	250 ISL	8.43	8.40	33.956	26.393	167.0	0.739	2.99	45.4	32.4	1.97	27.0	0.00			251
1	279	8.11	8.08	34.005	26.481	159.2	0.786	2.91	43.8	35.9	2.04	28.1	0.00			280
	300 ISL	7.78	7.75	34.024	26.544	153.3	0.819	2.73	40.8	40.0	2.14	29.7	0.00			302
1	336	7.19	7.16	34.043	26.643	144.1	0.872	2.31	34.1	48.0	2.34	32.9	0.00			338
1	397	6.48	6.44	34.083	26.771	132.4	0.957	1.49	21.6	61.3	2.69	37.8	0.00			399
	400 ISL	6.44	6.40	34.085	26.778	131.8	0.961	1.46	21.2	62.0	2.70	38.0	0.00			402
1	463	5.77	5.73	34.120	26.891	121.3	1.041	0.94	13.4	75.0	2.95	41.8	0.00			466
	500 ISL	5.56	5.52	34.152	26.942	116.7	1.085	0.75	10.7	80.3	3.04	43.0	0.00			503
1	532	5.37	5.33	34.179	26.987	112.7	1.121	0.58	8.2	84.9	3.12	44.1	0.00			535

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 93 26.8

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	NIND SPEED	WAVES	WEA	BAROMETER	DRY	NET	SECCHI/FOREL	CLD AMT	TYPE
32 57.3 N	117 18.6 N	26/09/92	1835 UTC	69 a	280 04 kn	260 01 08	1	1013.0 ab	20.0 C	19.5 C		3/8	AC

CAST	DEPTH a	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN al/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 uM/1	CHL-A ug/1	PBAEO ug/1	PRESS db
	0 ISL	21.78	21.78	33.355	23.031	482.5	0.000	5.31	105.2	2.4	0.26	0.2	0.00	0.85	0.08	0
1	1	21.78	21.78	33.355	23.031	482.6	0.005	5.31	105.2	2.4	0.26	0.2	0.00	0.85	0.08	1
1	5	21.67	21.67	33.345	23.054	480.6	0.024	5.63	111.3	2.2	0.25	0.2	0.00	0.94	0.13	5
1	10	17.96	17.96	33.253	23.946	395.6	0.046	6.39	117.8	2.6	0.30	0.2	0.00	0.93	0.21	10
	20 ISL	15.46	15.46	33.246	24.521	341.0	0.083	5.97	104.8	3.9	0.44	0.2	0.03	1.36	0.70	20
1	21	15.42	15.42	33.243	24.527	340.4	0.086	5.93	104.0	4.0	0.46	0.2	0.03	1.39	0.75	21
	30 ISL	14.58	14.58	33.248	24.713	322.9	0.116	5.58	96.2	4.8	0.60	0.5	0.09	0.75	0.69	30
1	31	14.53	14.53	33.249	24.725	321.9	0.119	5.55	95.6	4.9	0.61	0.6	0.10	0.67	0.68	31
1	42	14.16	14.15	33.292	24.836	311.6	0.154	5.27	90.1	5.7	0.69	1.2	0.20	0.65	0.80	42
	50 ISL	14.13	14.12	33.296	24.846	310.9	0.179	5.18	88.5	5.9	0.73	1.3	0.22	0.63	0.68	50
1	52	14.12	14.11	33.297	24.849	310.7	0.185	5.16	88.2	6.0	0.74	1.3	0.22	0.62	0.65	52

RV NEN HORIZON CALCOFI CRUISE 9210 STATION 93 28

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	NIND SPEED	NAVES	NEA	BAROMETER	DRY	NET	SECCHI/FOREL	CLD ANT	TYPE
32 54.7 N	117 24.0 N	26/09/92	2152 UTC	635 a	290 08 kn	280 02 08	1	1012.3 ab	21.1 C	20.9 C	08a 04	3/8	AC

CAST	DEPTH a	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN al/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 UM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
1	0	20.76	20.76	33.339	23.296	457.3	0.000	5.88	114.3	2.6	0.33	0.2	0.01	1.28	0.16	0
1	10	17.94	17.94	33.269	23.963	393.9	0.043	6.37	117.4	2.7	0.36	0.2	0.00	1.28	0.23	10
1	20	15.54	15.54	33.198	24.466	346.2	0.080	6.30	110.7	2.8	0.45	0.2	0.00	1.02	0.37	20
1	30	14.28	14.28	33.221	24.756	318.9	0.113	5.71	97.8	3.9	0.55	0.6	0.08	1.48	0.85	30
1	40	13.93	13.92	33.307	24.895	305.9	0.144	5.19	88.3	5.3	0.71	2.7	0.13	0.87	0.60	40
1	50	13.51	13.50	33.382	25.039	292.4	0.174	4.73	79.9	7.0	0.88	5.0	0.12	0.48	0.50	50
1	60	13.27	13.26	33.441	25.134	283.7	0.203	4.31	72.4	8.9	1.03	7.3	0.11	0.25	0.34	60
1	70	13.23	13.22	33.472	25.166	280.9	0.231	4.13	69.4	9.6	1.13	8.3	0.10	0.22	0.32	70
	75 ISL	13.10	13.09	33.502	25.215	276.3	0.245	3.98	66.7	10.4	1.19	9.2	0.08	0.17	0.29	75
1	84	12.85	12.84	33.556	25.307	267.8	0.269	3.72	62.0	12.0	1.29	11.0	0.04	0.09	0.23	84
1	99	12.68	12.67	33.600	25.375	261.8	0.309	3.54	58.8	13.7	1.39	12.6	0.03	0.05	0.18	99
	100 ISL	12.66	12.65	33.602	25.380	261.3	0.312	3.53	58.6	13.8	1.40	12.7	0.03	0.05	0.18	100
1	119	12.34	12.32	33.647	25.477	252.5	0.361	3.34	55.1	15.0	1.49	14.4	0.03	0.03	0.12	120
	125 ISL	12.28	12.26	33.665	25.503	250.2	0.376	3.28	54.1	15.4	1.52	14.7	0.03	0.03	0.11	126
1	144	12.00	11.98	33.711	25.592	242.1	0.422	3.17	51.9	16.6	1.59	15.5	0.02	0.02	0.09	145
	150 ISL	11.77	11.75	33.707	25.632	238.4	0.437	3.23	52.7	16.8	1.60	15.8	0.02	0.02	0.08	151
1	174	10.92	10.90	33.726	25.802	222.6	0.492	3.38	54.1	18.2	1.66	17.4	0.01	0.01	0.06	175
	200 ISL	10.82	10.80	33.916	25.968	207.4	0.548	2.69	43.0	22.7	1.93	20.9	0.02	0.01	0.04	201
1	204	10.82	10.80	33.950	25.995	205.0	0.556	2.57	41.1	23.5	1.97	21.5	0.02	0.01	0.04	205
1	234	10.05	10.02	34.107	26.251	181.1	0.614	2.24	35.3	29.6	2.16	24.7	0.01			235
	250 ISL	9.79	9.76	34.150	26.329	174.0	0.643	2.05	32.1	32.3	2.26	26.1	0.01			251
1	274	9.48	9.45	34.186	26.409	166.8	0.683	1.79	27.8	35.9	2.40	27.7	0.02			276
	300 ISL	9.16	9.13	34.218	26.486	159.8	0.726	1.59	24.6	39.3	2.50	28.6	0.02			302
1	329	8.81	8.77	34.239	26.558	153.3	0.771	1.42	21.8	42.9	2.59	29.5	0.01			331
1	389	8.01	7.97	34.244	26.685	141.9	0.860	1.13	17.0	50.9	2.78	33.0	0.01			391
	400 ISL	7.85	7.81	34.244	26.708	139.7	0.875	1.07	16.0	53.1	2.82	33.7	0.01			402
1	455	7.07	7.03	34.250	26.825	128.9	0.949	0.74	10.9	64.8	3.05	36.8	0.04			458
	500 ISL	6.56	6.51	34.276	26.914	120.6	1.005	0.52	7.6	72.3	3.19	38.2	0.04			503
1	525	6.28	6.23	34.292	26.964	116.0	1.035	0.40	5.8	76.5	3.27	38.9	0.04			528

RV NEN HORIZON CALCOFI CRUISE 9210 STATION 93 30

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	NIND SPEED	NAVES	NEA	BAROMETER	DRY	NET	SECCHI/FOREL	CLD AMT	TYPE
32 50.7 N	117 32.0 N	27/09/92	0016 UTC	864 a	310 06 kn	270 03 06	1	1011.6 ab	21.8 C	20.9 C	12a 03	3/8	CI

CAST	DEPTH a	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN al/1	OXY PCT	SIO3 uM/1	PO4 UM/1	NO3 UM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
1	0	22.13	22.13	33.383	22.955	489.8	0.000	5.42	108.0	1.5	0.27	0.2	0.02	0.56	0.09	0
1	10	21.14	21.14	33.352	23.204	466.4	0.048	5.75	112.6	1.6	0.26	0.2	0.02	0.58	0.09	10
	20 ISL	17.01	17.01	33.143	24.089	382.2	0.090	6.22	112.5	2.0	0.35	0.2	0.00	0.68	0.20	20
1	21	16.56	16.56	33.135	24.187	372.9	0.094	6.24	111.9	2.0	0.37	0.2	0.00	0.70	0.22	21
	30 ISL	14.39	14.39	33.258	24.761	318.4	0.125	5.55	95.3	4.1	0.59	1.4	0.16	0.90	0.63	30
1	31	14.24	14.24	33.278	24.808	313.9	0.128	5.44	93.2	4.4	0.62	1.6	0.18	0.91	0.67	31
1	41	13.63	13.62	33.416	25.041	292.0	0.159	4.57	77.4	7.3	0.93	6.2	0.18	0.33	0.39	41
	50 ISL	13.51	13.50	33.451	25.093	287.3	0.185	4.35	73.5	8.4	1.01	7.4	0.16	0.28	0.32	50
1	51	13.50	13.49	33.452	25.096	287.1	0.188	4.34	73.3	8.5	1.01	7.5	0.16	0.27	0.32	51
1	61	13.17	13.16	33.479	25.183	279.0	0.216	4.11	68.9	9.8	1.11	9.0	0.0S	0.19	0.29	61
1	71	13.00	12.99	33.532	25.258	272.1	0.243	3.88	64.9	10.9	1.21	10.4	0.04	0.13	0.23	71
	75 ISL	12.87	12.86	33.550	25.298	268.4	0.254	3.80	63.4	11.5	1.25	11.0	0.04	0.11	0.21	75
1	84	12.61	12.60	33.582	25.374	261.4	0.278	3.66	60.7	12.6	1.32	12.2	0.03	0.08	0.19	84
	100 ISL	12.55	12.54	33.588	25.391	260.3	0.320	3.63	60.1	12.9	1.33	12.6	0.02	0.06	0.17	100
1	101	12.55	12.54	33.588	25.391	260.3	0.322	3.63	60.1	12.9	1.33	12.6	0.02	0.06	0.17	101
1	120	12.25	12.23	33.660	25.504	249.9	0.371	3.33	54.8	14.8	1.45	14.8	0.03	0.04	0.11	121
	125 ISL	12.10	12.08	33.678	25.547	245.9	0.383	3.28	53.9	15.4	1.48	15.3	0.03	0.04	0.10	126
1	146	11.50	11.48	33.740	25.708	231.1	0.433	3.16	51.2	17.5	1.59	17.2	0.02	0.02	0.08	147
	150 ISL	11.46	11.44	33.742	25.716	230.3	0.443	3.15	51.0	17.6	1.60	17.3	0.02	0.02	0.08	151
1	176	11.25	11.23	33.772	25.779	225.0	0.502	3.11	50.2	18.5	1.65	18.2	0.01	0.01	0.07	177
	200 ISL	10.89	10.87	33.923	25.961	208.1	0.554	2.74	43.9	22.1	1.84	21.1	0.01	0.00	0.05	201
1	207	10.71	10.69	33.962	26.024	202.3	0.568	2.66	42.5	23.3	1.89	22.0	0.01	0.00	0.04	208
1	237	9.19	9.16	33.920	26.247	181.1	0.626	3.04	46.9	27.3	1.88	24.4	0.00			238
	250 ISL	9.18	9.15	34.005	26.315	174.9	0.649	2.82	43.5	29.8	1.97	25.4	0.00			251
1	278	9.16	9.13	34.143	26.427	164.9	0.696	2.12	32.7	35.1	2.22	27.5	0.00			280
	300 ISL	9.06	9.03	34.198	26.486	159.7	0.732	1.84	28.4	37.9	2.33	28.6	0.00			302
1	335	8.74	8.70	34.229	26.561	153.1	0.787	1.55	23.7	42.0	2.46	30.2	0.00			337
1	396	7.69	7.65	34.212	26.706	139.6	0.876	1.21	18.1	52.4	2.68	34.0	0.01			398
	400 ISL	7.65	7.61	34.214	26.714	139.0	0.882	1.18	17.6	53.0	2.69	34.2	0.01			402
1	462	7.07	7.03	34.252	26.826	128.8	0.965	0.72	10.6	63.2	2.90	37.4	0.00			465
	500 ISL	6.64	6.59	34.273	26.901	121.9	1.012	0.56	8.2	70.0	3.01	38.9	0.00			503
1	534	6.26	6.21	34.293	26.967	115.8	1.053	0.42	6.1	76.1	3.11	40.3	0.00			538

RV KEN HORIZON CALCOFI CRUISE 9210 STATION 93 35

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	NAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
32 40.8 N	117 52.4 W	27/09/92	0347 UTC	623 m	350 06 kn			1012.0 mb	21.1 C	20.2 C		

CAST	DEPTH ▪	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN Hl/1	OXY PCT	SIO3 UM/1	PO4 uM/1	NO3 UM/1	NO2 llM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
1	0	21.29	21.29	33.295	23.119	474.1	0.000	5.24	102.8	1.4	0.35	0.1	0.01	0.09	0.02	0
1	9	21.22	21.22	33.292	23.136	472.8	0.043	5.25	102.9	1.4	0.35	0.1	0.01	0.09	0.01	9
	10 ISL	21.08	21.08	33.298	23.179	468.8	0.047	5.27	103.0	1.4	0.35	0.1	0.01	0.09	0.01	II)
1	19	19.69	19.69	33.374	23.605	428.5	0.088	5.46	104.1	1.2	0.32	0.1	0.01	0.10	0.02	l i t
	20 ISL	19.67	19.67	33.386	23.619	427.1	0.092	5.46	104.0	1.2	0.32	0.1	0.01	0.10	0.02	20
1	30	19.25	19.24	33.406	23.742	415.7	0.134	5.53	104.6	1.2	0.32	0.1	0.01	0.14	0.04	30
1	40	16.90	16.89	33.176	24.141	377.9	0.174	5.94	107.2	1.4	0.35	0.2	0.00	0.21	0.07	40
1	50	15.27	15.26	33.079	24.435	350.1	0.210	6.10	106.5	2.0	0.39	0.2	0.00	0.26	0.12	50
1	60	14.43	14.42	33.097	24.630	331.8	0.244	6.07	104.2	2.3	0.44	0.2	0.00	0.29	0.24	60
1	70	13.27	13.26	33.092	24.864	309.6	0.276	5.83	97.8	3.5	0.56	1.0	0.09	0.57	0.48	7«>
	75 ISL	12.89	12.88	33.103	24.948	301.7	0.292	5.68	94.5	4.2	0.64	2.2	0.08	0.51	0.44	7.1
1	84	12.30	12.29	33.138	25.089	288.4	0.318	5.39	88.6	5.7	0.81	5.2	0.07	0.41	0.38	84
1	99	11.14	11.13	33.240	25.383	260.7	0.359	4.83	77.5	9.8	1.12	11.2	0.03	0.14	0.24	99
	100 ISL	11.09	11.08	33.248	25.398	259.2	0.362	4.81	77.1	10.0	1.13	11.4	0.03	0.14	0.23	100
1	119	10.38	10.37	33.406	25.646	236.0	0.409	4.46	70.4	13.1	1.30	14.9	0.02	0.05	0.11	119
	125 ISL	10.15	10.14	33.447	25.717	229.3	0.423	4.34	68.2	14.5	1.37	16.2	0.02	0.04	0.09	126
1	145	9.50	9.48	33.587	25.935	208.9	0.467	3.93	60.9	19.4	1.58	20.3	0.01	0.01	0.04	146
	150 ISL	9.42	9.40	33.637	25.987	204.0	0.477	3.81	59.0	20.5	1.63	21.1	0.01	0.01	0.04	151
1	175	9.14	9.12	33.867	26.212	183.1	0.526	3.25	50.1	25.8	1.82	24.3	0.02	0.00	0.02	176
	200 ISL	8.84	8.82	33.984	26.351	170.3	0.570	2.92	44.7	30.7	1.96	26.3	0.01	0.00	0.02	201
1	206	8.77	8.75	34.000	26.375	168.1	0.580	2.87	43.9	31.7	1.99	26.6	0.01	0.00	0.02	207
1	235	8.42	8.40	34.044	26.464	160.1	0.627	2.75	41.7	35.0	2.06	27.9	0.01			236
	250 ISL	8.24	8.21	34.060	26.504	156.5	0.651	2.64	39.9	37.2	2.12	28.7	0.01			251
1	276	7.96	7.93	34.085	26.566	151.0	0.691	2.37	35.6	41.4	2.24	30.3	0.01			278
	300 ISL	7.77	7.74	34.119	26.620	146.1	0.727	2.01	30.1	45.6	2.39	32.0	0.01			302
1	333	7.52	7.49	34.164	26.692	139.7	0.774	1.51	22.5	51.6	2.60	34.2	0.01			335
1	393	6.97	6.93	34.211	26.807	129.5	0.855	0.93	13.7	61.6	2.85	37.4	0.01			395
	400 ISL	6.92	6.88	34.216	26.818	128.5	0.864	0.89	13.1	62.4	2.87	37.7	0.01			402
1	460	6.57	6.53	34.255	26.896	121.7	0.939	0.62	9.0	69.1	2.99	39.5	0.01			463
	500 ISL	6.28	6.24	34.273	26.948	117.0	0.987	0.49	7.1	74.4	3.07	40.5	0.01			503
1	530	6.06	6.01	34.287	26.988	113.5	1.021	0.39	5.6	78.4	3.13	41.3	0.01			534

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 93 40

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
32 31.4 N	118 13.3 W	27/09/92	0742 UTC	1628 m	340 05 kn			1013.2 mb	20.1 C	19.8 C		

CAST	DEPTH »	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
1	0	20.32	20.32	33.459	23.504	437.4	0.000	5.31	102.5	1.3	0.28	0.0	0.01	0.17	0.04	0
1	10	20.20	20.20	33.457	23.534	434.8	0.044	5.35	103.0	1.3	0.28	0.0	0.00	0.17	0.04	10
1	20	19.52	19.52	33.434	23.694	419.9	0.086	5.45	103.6	1.3	0.28	0.0	0.00	0.19	0.06	20
1	30	17.97	17.96	33.359	24.025	388.7	0.127	5.83	107.6	1.3	0.33	0.0	0.00	0.41	0.16	30
1	40	15.71	15.70	33.229	24.453	348.1	0.164	6.06	106.9	1.8	0.42	0.0	0.00	0.68	0.40	40
	50 ISL	13.78	13.77	33.252	24.884	307.2	0.196	5.77	97.9	3.8	0.65	2.0	0.13	1.14	0.71	50
1	51	13.61	13.60	33.259	24.924	303.4	0.199	5.72	96.7	4.1	0.68	2.4	0.14	1.16	0.73	51
1	61	12.33	12.32	33.308	25.215	275.9	0.228	4.95	81.5	8.6	1.00	8.2	0.17	0.44	0.43	61
1	71	11.42	11.41	33.313	25.388	259.5	0.255	4.63	74.8	11.3	1.17	11.5	0.04	0.21	0.25	71
	75 ISL	11.07	11.06	33.333	25.467	252.1	0.265	4.48	71.8	12.7	1.25	13.0	0.03	0.17	0.22	75
1	85	10.33	10.32	33.416	25.661	233.7	0.290	4.13	65.2	16.0	1.42	16.5	0.02	0.11	0.19	85
1	100	9.81	9.80	33.597	25.891	212.2	0.323	3.74	58.4	19.5	1.58	19.2	0.01	0.04	0.11	100
1	120	9.46	9.45	33.764	26.079	194.7	0.364	3.30	51.2	23.8	1.75	21.9	0.01	0.01	0.06	121
	125 ISL	9.36	9.35	33.794	26.119	191.0	0.373	3.21	49.7	24.8	1.79	22.5	0.01	0.01	0.06	126
1	146	9.00	8.98	33.895	26.256	178.3	0.412	2.92	44.9	28.8	1.92	24.8	0.01	0.01	0.07	147
	150 ISL	8.96	8.94	33.914	26.277	176.4	0.419	2.86	43.9	29.5	1.94	25.2	0.01	0.01	0.07	151
1	177	8.76	8.74	34.014	26.387	166.4	0.466	2.59	39.6	33.3	2.05	26.9	0.01	0.01	0.07	178
	200 ISL	8.51	8.49	34.035	26.443	161.5	0.503	2.64	40.1	35.1	2.07	27.5	0.01	0.01	0.05	201
1	207	8.43	8.41	34.037	26.456	160.3	0.515	2.66	40.4	35.6	2.07	27.6	0.01	0.01	0.04	208
1	237	8.10	8.08	34.071	26.533	153.4	0.562	2.39	36.0	39.9	2.19	29.3	0.01			238
	250 ISL	7.99	7.96	34.081	26.557	151.3	0.581	2.29	34.4	41.6	2.23	30.0	0.01			251
1	278	7.74	7.71	34.097	26.607	147.0	0.623	2.08	31.1	45.4	2.33	31.5	0.01			280
	300 ISL	7.48	7.45	34.109	26.654	142.7	0.655	1.88	27.9	49.0	2.43	32.8	0.01			302
1	335	7.07	7.04	34.132	26.730	135.9	0.704	1.53	22.5	55.3	2.59	34.8	0.01			337
1	395	6.54	6.50	34.187	26.845	125.4	0.782	0.92	13.4	66.3	2.85	37.6	0.00			397
	400 ISL	6.53	6.49	34.191	26.850	125.1	0.788	0.89	12.9	66.7	2.86	37.8	0.00			403
1	460	6.37	6.33	34.238	26.909	120.3	0.862	0.62	9.0	71.4	2.98	39.3	0.00			463
	500 ISL	6.03	5.99	34.270	26.978	114.0	0.909	0.47	6.8	77.7	3.07	40.4	0.00			503
1	528	5.80	5.75	34.293	27.025	109.6	0.940	0.36	5.1	82.1	3.13	41.2	0.00			532

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 93 45

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
32 20.9 N	118 33.3 W	27/09/92	1121 UTC	1335 in	000 09 k.n			1013.5 Job	20.0 C	19.5 C		

CAST	DEPTH -	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL-A Ug/1	PBAEO ug/1	PRESS db
	0 ISL	20.58	20.58	33.507	23.472	440.5	0.000	5.29	102.6	1.3	0.32	0.1	0.00	0.17	0.05	0
1	1	20.58	20.58	33.507	23.472	440.5	0.004	5.29	102.6	1.3	0.32	0.1	0.00	0.17	0.05	1
	10 ISL	19.64	19.64	33.479	23.697	419.3	0.043	5.62	107.1	1.3	0.35	0.1	0.00	0.27	0.07	10
1	11	19.54	19.54	33.477	23.721	417.0	0.047	5.68	108.0	1.3	0.35	0.1	0.00	0.28	0.07	11
	20 ISL	14.75	14.75	33.365	24.767	317.5	0.080	6.12	106.0	3.1	0.57	1.0	0.04	1.40	0.77	20
1	21	14.20	14.20	33.368	24.886	306.2	0.083	6.13	105.0	3.4	0.60	1.1	0.05	1.51	0.84	21
	30 ISL	12.36	12.36	33.361	25.249	271.8	0.109	5.21	85.9	8.1	0.97	7.3	0.12	1.14	0.72	30
1	31	12.27	12.27	33.358	25.264	270.4	0.112	5.08	83.6	8.7	1.01	8.1	0.13	1.06	0.71	31
1	41	11.44	11.43	33.364	25.424	255.4	0.138	4.54	73.4	11.8	1.23	12.7	0.06	0.59	0.48	41
	50 ISL	10.82	10.81	33.378	25.546	244.0	0.161	4.32	68.9	13.9	1.36	15.0	0.03	0.36	0.35	50
1	51	10.77	10.76	33.380	25.556	243.0	0.163	4.31	68.7	14.1	1.37	15.2	0.03	0.34	0.34	51
1	61	10.52	10.51	33.406	25.620	237.1	0.187	4.18	66.2	15.4	1.43	16.5	0.02	0.26	0.30	61
1	71	10.09	10.08	33.497	25.765	223.5	0.210	3.82	60.0	17.9	1.56	18.9	0.02	0.13	0.18	71
	75 ISL	9.97	9.96	33.522	25.805	219.8	0.219	3.75	58.7	18.7	1.59	19.5	0.02	0.10	0.15	75
1	85	9.75	9.74	33.582	25.888	212.1	0.241	3.64	56.8	20.5	1.66	20.8	0.01	0.06	0.12	85
1	100	9.48	9.47	33.709	26.032	198.7	0.272	3.33	51.7	23.4	1.78	22.9	0.01	0.03	0.09	100
1	120	9.32	9.31	33.870	26.184	184.6	0.310	2.99	46.3	26.7	1.88	24.8	0.01	0.01	0.07	121
	125 ISL	9.26	9.25	33.894	26.213	182.0	0.319	2.94	45.4	27.4	1.90	25.1	0.01	0.01	0.07	126
1	146	9.01	8.99	33.975	26.317	172.5	0.356	2.71	41.7	30.6	2.00	26.3	0.01	0.01	0.06	147
	150 ISL	8.97	8.95	33.995	26.339	170.5	0.363	2.61	40.1	31.6	2.04	26.8	0.01	0.01	0.06	151
1	177	8.69	8.67	34.110	26.473	158.3	0.408	1.98	30.3	38.2	2.29	29.8	0.01	0.01	0.06	178
	200 ISL	8.49	8.47	34.132	26.522	154.0	0.444	1.89	28.7	40.7	2.36	30.7	0.01	0.01	0.05	201
1	208	8.41	8.39	34.130	26.532	153.1	0.456	1.86	28.2	41.3	2.37	30.8	0.01	0.01	0.04	209
1	238	7.98	7.96	34.109	26.581	148.9	0.501	1.99	29.9	43.7	2.36	31.4	0.00			239
	250 ISL	7.85	7.83	34.107	26.599	147.3	0.519	1.95	29.2	44.9	2.37	31.7	0.00			251
1	279	7.58	7.55	34.113	26.643	143.5	0.561	1.87	27.9	48.1	2.43	32.5	0.00			281
	300 ISL	7.45	7.42	34.130	26.675	140.8	0.591	1.69	25.1	50.9	2.51	33.6	0.00			302
1	336	7.23	7.20	34.166	26.735	135.6	0.641	1.32	19.5	56.1	2.66	35.6	0.01			338
1	397	6.69	6.65	34.216	26.848	125.3	0.720	0.83	12.1	65.8	2.90	38.1	0.00			400
	400 ISL	6.66	6.62	34.217	26.853	124.9	0.724	0.81	11.8	66.3	2.91	38.2	0.00			403
1	463	6.10	6.06	34.244	26.948	116.4	0.800	0.53	7.6	75.8	3.05	40.7	0.00			466
	500 ISL	5.91	5.87	34.278	26.999	111.8	0.842	0.42	6.0	80.2	3.11	41.3	0.00			503
1	532	5.74	5.69	34.307	27.043	107.9	0.877	0.33	4.7	84.0	3.17	41.8	0.00			536

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 93 50

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
32 10.8 N	118 53.8 W	27/09/92	1514 UTC	1471 B	310 10 Xn	290 03 05	4	1014.0 mb	21.6 C	20.2 C	19m 02	1/8 CC

CAST	DEPTH -	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN »1/1	OXY PCT	SIO3 uM/1	PO4 UM/1	NO3 uM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
1	0	20.43	20.43	33.508	23.512	436.6	0.000	5.31	102.7	1.0	0.30	0.1	0.00	0.18	0.04	0
	10 ISL	20.44	20.44	33.511	23.512	436.9	0.044	5.32	102.9	1.0	0.30	0.1	0.00	0.18	0.04	10
1	11	20.44	20.44	33.511	23.512	437.0	0.048	5.32	102.9	1.0	0.30	0.1	0.00	0.18	0.04	11
	20 ISL	20.41	20.41	33.508	23.518	436.8	0.087	5.33	103.0	1.0	0.30	0.1	0.00	0.19	0.05	20
1	21	20.41	20.41	33.508	23.519	436.8	0.092	5.33	103.0	1.0	0.30	0.1	0.00	0.19	0.0S	21
	30 ISL	19.83	19.82	33.498	23.663	423.3	0.130	5.52	105.6	0.9	0.32	0.0	0.00	0.24	0.07	30
1	31	19.76	19.75	33.494	23.679	421.9	0.135	5.56	106.2	0.9	0.33	0.0	0.00	0.25	0.07	31
1	41	17.13 A	17.12	33.390	24.251	367.5	0.174	6.40	116.2	1.5	0.43	0.0	0.00	0.82	0.38	41
	50 ISL	12.93	12.92	33.371	25.147	282.1	0.203	5.00	83.4	9.0	1.04	8.9	0.10	0.91	0.65	50
1	51	12.49 B	12.48	33.381	25.240	273.2	0.206	4.81	79.5	9.9	1.11	10.0	0.11	0.92	0.66	51
1	61	10.91	10.90	33.433	25.573	241.7	0.232	4.11	65.7	15.1	1.44	16.1	0.03	0.32	0.37	61
1	71	10.22	10.21	33.540	25.776	222.5	0.255	3.68	58.0	18.9	1.63	19.6	0.01	0.11	0.18	71
	75 ISL	9.99	9.98	33.572	25.841	216.4	0.264	3.59	56.3	20.0	1.68	20.6	0.01	0.09	0.16	75
1	85	9.56	9.55	33.647	25.970	204.3	0.285	3.45	53.6	22.2	1.76	22.4	0.01	0.03	0.11	85
	100 ISL	9.38	9.37	33.781	26.105	191.8	0.315	3.22	49.9	24.5	1.84	23.4	0.01	0.06	0.16	100
1	101	9.38	9.37	33.790	26.112	191.1	0.317	3.20	49.6	24.7	1.85	23.4	0.01	0.06	0.16	101
1	121	9.06	9.05	33.920	26.265	176.9	0.353	2.84	43.7	29.3	2.00	26.1	0.01	0.01	0.07	122
	125 ISL	9.00	8.99	33.934	26.286	175.1	0.360	2.83	43.5	29.8	2.01	26.3	0.01	0.01	0.07	126
1	146	8.69	8.67	33.981	26.372	167.2	0.396	2.79	42.6	32.1	2.05	27.2	0.01	0.01	0.06	147
	150 ISL	8.65	8.63	33.992	26.386	165.9	0.403	2.76	42.1	32.7	2.07	27.4	0.01	0.01	0.06	151
1	178	8.34	8.32	34.056	26.484	157.1	0.448	2.49	37.7	37.1	2.19	29.1	0.01	0.01	0.05	179
	200 ISL	8.03	8.01	34.076	26.547	151.4	0.482	2.35	35.4	40.8	2.28	30.2	0.01	0.00	0.05	201
1	207	7.93	7.91	34.079	26.564	149.9	0.493	2.31	34.7	42.0	2.31	30.5	0.01	0.00	0.05	208
1	238	7.62	7.60	34.096	26.623	144.7	0.538	2.05	30.6	46.4	2.41	31.6	0.00			239
	250 ISL	7.52	7.50	34.104	26.644	142.9	0.556	1.96	29.2	47.9	2.45	32.3	0.00			251
1	279	7.32	7.29	34.124	26.688	139.1	0.596	1.74	25.8	51.4	2.56	34.0	0.00			281
	300 ISL	7.21	7.18	34.134	26.712	137.1	0.625	1.59	23.5	53.5	2.62	34.7	0.00			302
1	333	7.07	7.04	34.155	26.748	134.1	0.670	1.34	19.7	57.0	2.71	35.6	0.00			335
1	394	6.77	6.73	34.230	26.849	125.3	0.749	0.76	11.1	65.5	2.96	38.5	0.00			397
	400 ISL	6.72	6.68	34.236	26.860	124.3	0.757	0.72	10.5	66.4	2.98	38.7	0.00			403
1	462	6.24	6.20	34.284	26.962	115.2	0.831	0.43	6.2	75.5	3.12	40.3	0.00			465
	500 ISL	6.04	6.00	34.297	26.998	112.1	0.874	0.38	5.5	79.1	3.16	41.1	0.00			503
1	533	5.86	5.81	34.308	27.029	109.4	0.911	0.33	4.7	82.3	3.20	41.8	0.00			537

A) MEAN VALUE OF 17.08 AND 17.17 DEGREES CELSIUS.
B) MEAN VALUE OF 12.45 AND 12.53 DEGREES CELSIUS.

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 93 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
32 0.7 N	119 14.5 W	27/09/92	2015 UTC	1605 m	310 10 kn	310 03 08	1	1014.6 mb	21.1 C	19.8 C	20B 03	1/8	CC

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS; db
	0 ISL	20.63	20.63	33.540	23.483	439.3	0.000	5.34	103.7	1.4	0.33	0.1	0.00	0.17	0.04	(1
1	1	20.63	20.63	33.540	23.484	439.4	0.004	5.34	103.7	1.4	0.33	0.1	0.00	0.17	0.04	1
	10 ISL	20.47	20.47	33.544	23.529	435.3	0.044	5.36	103.8	1.4	0.32	0.1	0.00	0.20	0.04	10
1	11	20.45	20.45	33.544	23.535	434.8	0.048	5.36	103.7	1.4	0.32	0.1	0.00	0.21	0.04	11
	20 ISL	19.91	19.91	33.519	23.658	423.4	0.087	5.48	105.0	1.2	0.33	0.1	0.00	0.27	0.06	20
1	22	19.79	19.79	33.514	23.686	420.9	0.095	5.54	105.9	1.2	0.33	0.1	0.00	0.28	0.07	22
	30 ISL	15.42	15.42	33.350	24.610	332.8	0.125	6.05	106.2	3.0	0.54	1.4	0.04	1.40	0.68	30
1	32	14.26	14.26	33.343	24.854	309.6	0.132	6.10	104.6	3.8	0.62	1.7	0.06	1.64	0.82	32
1	42	11.96	11.95	33.373	25.335	264.0	0.160	4.76	77.8	10.6	1.13	10.4	0.17	1.06	0.64	42
	50 ISL	11.17	11.16	33.428	25.523	246.2	0.181	4.21	67.7	14.2	1.33	14.3	0.10	0.61	0.51	50
1	52	11.06	11.05	33.441	25.552	243.4	0.186	4.12	66.1	14.9	1.36	15.0	0.07	0.51	0.48	52
1	62	10.48	10.47	33.497	25.698	229.7	0.209	3.81	60.3	17.6	1.51	17.8	0.04	0.24	0.28	62
1	72	9.97	9.96	33.592	25.859	214.6	0.232	3.53	55.3	20.5	1.65	20.3	0.02	0.11	0.17	72
	75 ISL	9.88	9.87	33.615	25.892	211.5	0.238	3.47	54.3	21.1	1.68	20.8	0.02	0.09	0.15	75
1	86	9.65	9.64	33.686	25.986	202.8	0.261	3.28	51.1	23.0	1.77	22.3	0.01	0.04	0.10	86
	100 ISL	9.37	9.36	33.771	26.099	192.4	0.288	3.07	47.5	25.5	1.86	23.4	0.02	0.02	0.08	100
1	101	9.35	9.34	33.777	26.107	191.6	0.290	3.06	47.4	25.7	1.87	23.5	0.02	0.02	0.08	101
1	121	9.14	9.13	33.859	26.205	182.7	0.328	2.92	45.0	28.2	1.93	24.8	0.01	0.01	0.06	122
	125 ISL	9.09	9.08	33.876	26.226	180.7	0.335	2.89	44.5	28.7	1.94	25.1	0.01	0.01	0.06	126
1	146	8.84	8.82	33.955	26.328	171.4	0.372	2.77	42.4	31.4	2.00	26.3	0.01	0.01	0.06	147
	150 ISL	8.80	8.78	33.965	26.342	170.1	0.379	2.76	42.2	31.8	2.01	26.4	0.01	0.01	0.06	151
1	177	8.54	8.52	34.018	26.424	162.8	0.424	2.66	40.5	34.5	2.08	27.3	0.01	0.01	0.05	178
	200 ISL	8.22	8.20	34.059	26.505	155.4	0.460	2.49	37.6	38.3	2.18	28.8	0.01	0.01	0.05	201
1	207	8.12	8.10	34.069	26.528	153.4	0.471	2.44	36.8	39.6	2.21	29.3	0.01	0.01	0.05	208
1	236	7.72	7.70	34.080	26.596	147.3	0.515	2.29	34.2	44.1	2.30	30.8	0.01			237
	250 ISL	7.56	7.54	34.093	26.629	144.3	0.535	2.09	31.1	46.9	2.38	31.8	0.01			251
1	277	7.31	7.28	34.126	26.691	138.8	0.573	1.65	24.4	52.4	2.56	33.7	0.00			279
	300 ISL	7.22	7.19	34.164	26.734	135.0	0.605	1.34	19.8	55.8	2.67	34.8	0.00			302
1	334	7.12	7.09	34.213	26.787	130.5	0.650	0.98	14.4	60.0	2.80	36.1	0.00			336
1	393	6.67	6.63	34.230	26.862	124.0	0.725	0.73	10.7	67.0	2.95	38.4	0.00			396
	400 ISL	6.63	6.59	34.234	26.871	123.2	0.734	0.71	10.3	67.7	2.96	38.6	0.00			403
1	460	6.33	6.29	34.275	26.943	117.0	0.806	0.53	7.7	73.4	3.05	40.4	0.00			463
	500 ISL	6.12	6.08	34.293	26.985	113.5	0.852	0.43	6.2	77.7	3.11	41.2	0.00			503
1	536	5.93	5.88	34.309	27.022	110.2	0.892	0.34	4.9	81.6	3.16	42.0	0.00			540

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 93 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
31 50.6 N	119 34.6 W	27/09/92	2351 UTC	1808 m	310 10 kn	310 03 08	0	1012.9 mb	20.0 C	19.0 C	21m 02	0/8	

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 UM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0 ISL	19.48	19.48	33.385	23.666	421.9	0.000	5.46	103.7	1.7	0.31	0.1	0.00	0.20	0.04	0
1	1	19.48	19.48	33.385	23.666	421.9	0.004	5.46	103.7	1.7	0.31	0.1	0.00	0.20	0.04	1
	10 ISL	19.17	19.17	33.374	23.737	415.4	0.042	5.49	103.6	1.8	0.30	0.1	0.00	0.21	0.05	10
1	11	19.11	19.11	33.372	23.751	414.2	0.046	5.50	103.7	1.8	0.30	0.1	0.00	0.21	0.05	11
	20 ISL	18.67	18.67	33.354	23.848	405.2	0.083	5.55	103.8	1.6	0.31	0.0	0.00	0.26	0.07	20
1	21	18.60	18.60	33.348	23.861	404.0	0.087	5.56	103.8	1.6	0.31	0.0	0.00	0.27	0.07	21
	30 ISL	17.40	17.40	33.217	24.054	385.9	0.123	5.78	105.4	1.5	0.36	0.0	0.00	0.25	0.10	30
1	31	17.21	17.20	33.197	24.083	383.1	0.126	5.81	105.5	1.5	0.37	0.0	0.00	0.25	0.10	31
1	42	14.15	14.14	32.957	24.580	336.0	0.166	6.22	106.1	2.2	0.43	0.0	0.00	0.28	0.19	42
	50 ISL	13.01	13.00	32.969	24.820	313.3	0.192	5.98	99.7	3.4	0.58	1.2	0.08	0.61	0.50	50
1	52	12.82	12.81	32.987	24.871	308.4	0.198	5.87	97.4	3.8	0.63	1.7	0.10	0.68	0.56	52
1	62	12.07	12.06	33.140	25.134	283.6	0.228	5.30	86.7	6.9	0.91	6.5	0.02	0.39	0.36	62
1	72	10.83	10.82	33.247	25.443	254.3	0.255	4.67	74.4	11.8	1.26	12.9	0.01	0.11	0.20	72
	75 ISL	10.54	10.53	33.283	25.521	246.8	0.262	4.53	71.7	13.1	1.33	14.3	0.01	0.10	0.17	75
1	86	9.77	9.76	33.420	25.759	224.4	0.288	4.13	64.4	17.3	1.54	18.0	0.01	0.05	0.08	86
	100 ISL	9.40	9.39	33.592	25.954	206.1	0.318	3.70	57.3	21.3	1.71	21.1	0.01	0.02	0.04	100
1	102	9.38	9.37	33.615	25.975	204.1	0.322	3.65	56.5	21.8	1.73	21.4	0.01	0.02	0.04	102
1	121	9.05	9.04	33.796	26.170	186.0	0.359	3.16	48.6	26.9	1.92	24.8	0.01	0.00	0.04	122
	125 ISL	9.04	9.03	33.825	26.194	183.7	0.367	3.08	47.3	27.6	1.94	25.2	0.01	0.00	0.04	126
1	147	9.00	8.98	33.952	26.300	174.1	0.406	2.70	41.5	30.9	2.05	26.5	0.00	0.00	0.04	148
	150 ISL	8.96	8.94	33.968	26.319	172.4	0.411	2.66	40.9	31.5	2.07	26.7	0.00	0.00	0.04	151
1	177	8.58	8.56	34.079	26.466	158.9	0.456	2.35	35.8	37.1	2.23	28.7	0.00	0.00	0.03	178
	200 ISL	8.41	8.39	34.114	26.520	154.1	0.492	2.14	32.5	40.1	2.34	29.7	0.00	0.00	0.03	201
1	207	8.36	8.34	34.117	26.530	153.3	0.503	2.09	31.7	40.9	2.36	30.0	0.00	0.00	0.03	208
1	237	7.99	7.97	34.115	26.584	148.6	0.548	2.06	31.0	44.1	2.40	31.1	0.00			238
	250 ISL	7.86	7.83	34.128	26.614	145.9	0.567	1.91	28.6	46.3	2.46	31.9	0.00			251
1	279	7.63	7.60	34.166	26.677	140.3	0.609	1.50	22.4	51.6	2.63	33.8	0.00			281
	300 ISL	7.52	7.49	34.188	26.711	137.4	0.638	1.29	19.2	54.2	2.72	34.7	0.00			302
1	334	7.33	7.30	34.218	26.761	133.1	0.684	1.02	15.1	58.2	2.84	35.9	0.00			336
1	395	6.76	6.72	34.252	26.867	123.6	0.762	0.67	9.8	67.7	3.02	38.5	0.00			397
	400 ISL	6.73	6.69	34.254	26.873	123.1	0.768	0.65	9.5	68.3	3.03	38.6	0.00			403
1	462	6.42	6.38	34.278	26.934	118.0	0.843	0.49	7.1	74.0	3.12	39.8	0.00			465
	500 ISL	6.25	6.21	34.290	26.966	115.4	0.887	0.43	6.2	77.1	3.16	40.4	0.00			503
1	533	6.11	6.06	34.301	26.993	113.2	0.925	0.37	5.3	79.7	3.19	40.9	0.00			537

RV NEK HORIZON CALCOFI CRUISE 9210 STATION 93 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	SEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
31 31.0 N	120 15.0 W	28/09/92	0518 UTC	3943 m	310 11 kn			1013.8 mb	18.4 C	17.9 C			

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS DB
	0 ISL	18.77	18.77	33.166	23.679	420.7	0.000	5.52	103.3	1.6	0.38	0.1	0.00	0.10	0.02	0
1	1	18.77	18.77	33.166	23.679	420.7	0.004	5.52	103.3	1.6	0.38	0.1	0.00	0.10	0.02	1
	10 ISL	18.75	18.75	33.173	23.690	420.0	0.042	5.51	103.1	1.6	0.40	0.0	0.00	0.10	0.02	10
1	11	18.75	18.75	33.174	23.690	419.9	0.046	5.51	103.1	1.6	0.40	0.0	0.00	0.10	0.02	11
	20 ISL	18.50	18.50	33.208	23.779	411.8	0.084	5.53	103.0	1.4	0.37	0.0	0.00	0.13	0.04	20
1	22	18.44	18.44	33.231	23.812	408.8	0.092	5.53	102.9	1.4	0.36	0.0	0.00	0.14	0.04	22
	30 ISL	17.54	17.53	33.182	23.993	391.7	0.124	5.71	104.4	1.3	0.38	0.0	0.00	0.19	0.06	30
1	32	17.29	17.28	33.167	24.042	387.1	0.132	5.76	104.8	1.3	0.39	0.0	0.00	0.21	0.07	32
1	42	16.56	16.55	33.136	24.189	373.4	0.170	5.88	105.4	1.6	0.38	0.0	0.00	0.37	0.18	42
	50 ISL	15.29	15.28	33.179	24.508	343.2	0.198	5.89	103.0	2.0	0.48	0.2	0.04	0.84	0.49	50
1	52	14.94	14.93	33.191	24.593	335.1	0.205	5.89	102.3	2.2	0.52	0.3	0.06	0.93	0.56	52
1	62	13.46	13.45	33.160	24.878	308.1	0.237	5.68	95.7	3.9	0.69	2.1	0.20	0.55	0.47	62
1	72	12.04	12.03	33.125	25.128	284.4	0.267	5.31	86.8	6.6	0.93	6.5	0.04	0.26	0.31	72
	75 ISL	11.67	11.66	33.146	25.213	276.3	0.275	5.15	83.5	7.9	1.02	8.2	0.03	0.21	0.27	75
1	86	10.55	10.54	33.257	25.500	249.1	0.304	4.59	72.7	12.8	1.31	14.0	0.01	0.10	0.15	86
	100 ISL	9.(9	9.68	33.344	25.713	229.0	0.338	4.26	66.2	16.8	1.52	17.9	0.01	0.04	0.10	100
1	101	9.65	9.64	33.349	25.723	228.1	0.340	4.25	66.0	17.0	1.53	18.1	0.01	0.04	0.10	101
1	121	9.38	9.37	33.483	25.872	214.3	0.384	3.88	60.0	20.2	1.67	20.6	0.00	0.02	0.05	122
	125 ISL	9.28	9.27	33.509	25.909	210.9	0.393	3.83	59.1	20.9	1.70	21.1	0.00	0.02	0.05	126
1	147	8.79	8.77	33.663	26.107	192.4	0.437	3.53	53.9	25.2	1.83	23.9	0.00	0.00	0.04	148
	150 ISL	8.76	8.74	33.690	26.133	190.0	0.443	3.45	52.7	25.9	1.85	24.4	0.00	0.00	0.04	151
1	177	8.61	8.59	33.904	26.324	172.3	0.492	2.85	43.4	31.3	2.02	27.3	0.00	0.00	0.04	178
	200 ISL	8.38	8.36	33.959	26.403	165.2	0.531	3.09	46.8	32.3	1.96	26.5	0.00	0.00	0.02	201
1	207	8.29	8.27	33.964	26.420	163.6	0.542	3.19	48.2	32.6	1.94	26.2	0.00	0.00	0.02	208
1	237	7.84	7.82	34.013	26.526	154.0	0.590	2.91	43.6	38.1	2.07	28.7	0.00			238
	250 ISL	7.68	7.66	34.022	26.556	151.2	0.610	2.80	41.8	40.3	2.13	29.6	0.00			251
1	278	7.38	7.35	34.033	26.608	146.6	0.651	2.52	37.3	44.9	2.28	31.3	0.00			280
	300 ISL	7.16	7.13	34.052	26.654	142.5	0.683	2.21	32.6	49.1	2.40	33.0	0.00			302
1	334	6.87	6.84	34.086	26.721	136.5	0.730	1.72	25.2	55.6	2.59	35.6	0.00			336
1	395	6.50	6.46	34.142	26.815	128.3	0.811	1.08	15.7	65.0	2.84	38.5	0.00			397
	400 ISL	6.45	6.41	34.143	26.823	127.6	0.818	1.05	15.2	65.7	2.85	38.7	0.00			402
1	462	5.94	5.90	34.163	26.904	120.3	0.894	0.79	11.3	74.4	2.99	41.1	0.00			465
	500 ISL	5.84	5.80	34.227	26.968	114.7	0.939	0.57	8.2	79.1	3.09	42.0	0.00			503
1	533	5.75	5.70	34.282	27.022	109.9	0.976	0.37	5.3	83.2	3.17	42.7	0.00			537

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 93 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	SEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
31 10.6 N	120 55.2 N	28/09/92	1102 UTC		300 09 kn			1013.5 Mb	18.9 C	18.5 C			

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS DB
	0 ISL	18.77	18.77	33.051	23.591	429.1	0.000	5.47	102.3	1.8	0.36	0.0	0.00	0.09	0.02	0
1	1	18.77	18.77	33.051	23.591	429.1	0.004	5.47	102.3	1.8	0.36	0.0	0.00	0.09	0.02	1
	10 ISL	18.76	18.76	33.048	23.592	429.3	0.043	5.50	102.8	1.7	0.36	0.0	0.00	0.10	0.02	10
1	11	18.76	18.76	33.047	23.591	429.4	0.047	5.50	102.8	1.7	0.36	0.0	0.00	0.10	0.02	11
	20 ISL	18.75	18.75	33.080	23.619	427.1	0.086	5.50	102.8	1.7	0.36	0.0	0.00	0.10	0.02	20
1	22	18.75	18.75	33.087	23.625	426.6	0.094	5.50	102.8	1.7	0.36	0.0	0.00	0.10	0.02	22
	30 ISL	18.24	18.23	33.075	23.742	415.7	0.128	5.55	102.8	1.6	0.36	0.0	0.00	0.11	0.03	30
1	32	18.10	18.09	33.073	23.775	412.6	0.136	5.57	102.8	1.6	0.36	0.0	0.00	0.11	0.03	32
1	42	17.78	17.77	33..122	23.890	401.9	0.177	5.65	103.7	1.5	0.35	0.0	0.00	0.16	0.05	42
	50 ISL	16.83	16.82	33.096	24.096	382.5	0.208	5.97	107.6	1.8	0.35	0.0	0.00	0.18	0.06	50
1	51	16.70	16.69	33.092	24.123	380.0	0.212	6.01	108.0	1.8	0.35	0.0	0.00	0.18	0.06	51
1	61	15.89	15.88	33.103	24.317	361.8	0.249	6.06	107.2	1.8	0.37	0.0	0.00	0.21	0.11	61
1	71	14.75	14.74	33.096	24.561	338.6	0.284	6.02	104.1	2.2	0.40	0.0	0.01	0.21	0.13	71
	75 ISL	14.49	14.48	33.154	24.661	329.2	0.298	5.94	102.2	2.4	0.42	0.1	0.02	0.23	0.16	75
1	85	14.11	14.10	33.334	24.880	308.6	0.330	5.71	97.6	2.8	0.46	0.2	0.07	0.26	0.22	85
1	100	13.84	13.83	33.504	25.068	291.2	0.375	5.42	92.2	3.6	0.54	1.7	0.19	0.20	0.25	100
1	120	12.19	12.17	33.338	25.266	272.5	0.431	5.25	86.2	6.4	0.82	6.2	0.04	0.14	0.17	120
	125 ISL	11.68	11.66	33.303	25.334	266.0	0.444	5.16	83.8	7.7	0.92	7.9	0.03	0.12	0.15	125
1	146	9.77	9.75	33.258	25.633	237.6	0.497	4.67	72.7	14.1	1.36	15.2	0.01	0.04	0.08	147
	150 ISL	9.57	9.55	33.280	25.683	232.8	0.507	4.58	71.0	15.1	1.42	16.2	0.01	0.03	0.07	151
1	176	8.86	8.84	33.509	25.976	205.4	0.564	3.97	60.7	21.6	1.70	21.3	0.01	0.01	0.03	177
	200 ISL	8.63	8.61	33.771	26.217	182.9	0.610	3.24	49.3	27.9	1.92	25.3	0.00	0.00	0.02	201
1	206	8.60	8.58	33.832	26.270	178.0	0.621	3.09	47.0	29.4	1.96	26.1	0.00	0.00	0.02	207
1	235	8.37	8.35	33.984	26.424	163.8	0.671	2.92	44.2	34.1	2.02	27.5	0.00			236
	250 ISL	8.13	8.10	34.007	26.479	158.8	0.695	2.86	43.1	36.5	2.07	28.3	0.00			251
1	275	7.71	7.68	34.016	26.548	152.5	0.734	2.72	40.6	40.7	2.18	29.9	0.01			276
	300 ISL	7.46	7.43	34.046	26.607	147.1	0.771	2.35	34.9	45.4	2.32	31.8	0.01			302
1	331	7.20	7.17	34.078	26.669	141.6	0.816	1.88	27.7	51.2	2.50	34.1	0.01			333
1	391	6.52	6.48	34.082	26.765	132.9	0.898	1.53	22.2	61.1	2.70	37.3	0.01			393
	400 ISL	6.42	6.38	34.085	26.781	131.5	0.910	1.46	21.2	62.7	2.73	37.8	0.01			402
1	458	5.88	5.84	34.115	26.873	123.0	0.984	1.02	14.6	72.9	2.93	40.9	0.01			461
	500 ISL	5.63	5.59	34.149	26.931	117.8	1.035	0.80	11.4	78.9	3.04	42.3	0.01			503
1	529	5.45	5.41	34.173	26.972	114.1	1.068	0.65	9.2	83.0	3.11	43.3	0.01			532

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 93 9(1

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
30 51.0 N	121 35.6 W	28/09/92	1638 UTC	4118 in	330 10 Xn	320 03 06	1	1014.5 mb	22.0 C	20.9 C	33m 01	2/8	AC

CAST	DEPTH ▪	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 UM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
1	0	20.06	20.06	33.289	23.443	443.2	0.000	5.33	102.3	1.6	0.34	0.0	0.00	0.09	0.02	0
1	10	19.18	19.18	33.114	23.536	434.6	0.044	5.41	102.0	1.6	0.35	0.0	0.00	0.09	0.02	10
1	20	19.03	19.03	33.090	23.556	433.1	0.087	5.44	102.3	1.6	0.35	0.0	0.00	0.10	0.02	20
	30 ISL	18.99	18.98	33.081	23.560	433.1	0.131	5.45	102.4	1.5	0.35	0.0	0.00	0.11	0.03	30
1	31	18.99	18.98	33.080	23.559	433.2	0.135	5.45	102.4	1.5	0.35	0.0	0.00	0.11 A	0.03 A	31
1	41	18.82	18.81	33.085	23.606	429.1	0.178	5.50	103.0	1.5	0.35	0.0	0.00	0.13	0.04	41
	50 ISL	18.16	18.15	33.101	23.782	412.5	0.216	5.68	105.0	1.5	0.35	0.0	0.00	0.15	0.05	50
1	51	18.06	18.05	33.102	23.807	410.2	0.220	5.70	105.2	1.5	0.35	0.0	0.00	0.15	0.05	51
1	61	16.98	16.97	33.062	24.035	388.7	0.260	5.89	106.4	1.5	0.35	0.0	0.00	0.18	0.07	61
1	71	16.10	16.09	33.013	24.201	373.2	0.298	6.04	107.2	1.6	0.36	0.0	0.00	0.22	0.11	71
	75 ISL	16.09	16.08	33.161	24.317	362.2	0.313	5.99	106.4	1.6	0.35	0.0	0.00	0.23	0.13	75
1	85	16.08	16.07	33.529	24.602	335.4	0.348	5.80	103.2	1.8	0.34	0.0	0.00	0.24	0.19	85
	100 ISL	15.09	15.07	33.503	24.803	316.6	0.397	5.66	98.7	2.3	0.39	0.1	0.04	0.27	0.27	100
1	101	15.00	14.98	33.491	24.813	315.7	0.400	5.65	98.4	2.3	0.40	0.1	0.04	0.27	0.27	101
1	121	13.34	13.32	33.404	25.093	289.3	0.460	5.38	90.5	3.9	0.61	2.5	0.14	0.19	0.25	121
	125 ISL	12.83	12.81	33.382	25.177	281.3	0.472	5.29	88.0	5.0	0.70	4.0	0.13	0.17	0.23	125
1	146	10.41	10.39	33.357	25.603	240.6	0.526	4.73	74.7	11.7	1.19	12.8	0.01	0.08	0.14	147
	150 ISL	10.31	10.29	33.403	25.656	235.7	0.536	4.59	72.4	12.9	1.26	14.0	0.01	0.07	0.12	151
1	177	9.61	9.59	33.598	25.926	210.4	0.596	3.75	58.3	20.0	1.62	20.1	0.00	0.01	0.04	1L78
	200 ISL	9.09	9.07	33.723	26.108	193.4	0.643	3.60	55.4	23.3	1.72	22.2	0.00	0.00	0.03	201
1	208	8.95	8.93	33.763	26.161	188.5	0.658	3.57	54.7	24.3	1.74	22.7	0.00	0.00	0.03	A09
1	237	8.71	8.68	33.929	26.329	173.0	0.710	3.02	46.1	30.2	1.94	25.9	0.00			238
	250 ISL	8.59	8.56	33.978	26.386	167.8	0.732	2.85	43.4	32.5	2.01	26.9	0.00			251
1	278	8.30	8.27	34.044	26.483	159.1	0.778	2.58	39.0	37.0	2.13	28.7	0.00			279
	300 ISL	8.00	7.97	34.060	26.540	153.8	0.813	2.46	37.0	40.1	2.20	29.9	0.00			;I02
1	334	7.50	7.47	34.062	26.615	147.0	0.864	2.27	33.7	45.2	2.32	31.8	0.00			336
1	395	6.71	6.67	34.084	26.742	135.4	0.950	1.60	23.3	58.0	2.63	36.5	0.00			397
	400 ISL	6.67	6.63	34.088	26.750	134.6	0.957	1.55	22.6	58.8	2.65	36.8	0.00			402
1	462	6.27	6.23	34.142	26.846	126.1	1.037	1.05	15.2	68.0	2.88	39.6	0.00			465
	500 ISL	6.04	6.00	34.182	26.907	120.7	1.084	0.79	11.4	73.6	2.99	41.0	0.00			503
1	534	5.84	5.79	34.219	26.961	115.7	1.125	0.55	7.9	78.6	3.09	42.2	0.00			537

A) FIRST FLUOROMETER READING NOT RECORDED, CHLOROPHYLL AND PHAEOPIGMENTS
CALCULATED WITH ASSUMED ACID RATIO INTERPOLATED FROM ADJACENT LEVELS.

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 93 100

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT	TYPE
30 30.7 N	122 15.9 W	28/09/92	2258 UTC	4198 m	310 04 kn	310 03 08	0	1013.6 mb	21.5 C	20.0 C	42m 01	0/8	

CAST	DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
1	0	20.21	20.21	33.145	23.294	457.4	0.000	5.37	103.2	1.9	0.36	0.1	0.00	0.09	0.02	0
1	10	19.21	19.21	33.092	23.512	437.0	0.045	5.44	102.6	1.9	0.35	0.1	0.00	0.08	0.02	10
1	20	19.08	19.08	33.090	23.544	434.3	0.088	5.46	102.7	1.8	0.35	0.1	0.00	0.09	0.02	20
1	30	19.05	19.04	33.090	23.552	433.9	0.132	5.46	102.7	1.8	0.35	0.1	0.00	0.10	0.02	30
1	40	18.89	18.88	33.066	23.574	432.1	0.175	5.49	102.9	1.6	0.36	0.1	0.00	0.11	0.03	40
1	50	18.10	18.09	33.073	23.775	413.2	0.217	5.65	104.3	1.6	0.36	0.1	0.00	0.14	0.04	50
1	60	17.86	17.85	33.105	23.859	405.6	0.258	5.68	104.4	1.7	0.37	0.1	0.00	0.18	0.06	61)
1	70	17.47	17.46	33.431	24.203	373.1	0.297	5.91	108.0	1.7	0.32	0.1	0.00	0.19	0.07	71)
	75 ISL	17.19	17.18	33.445	24.280	365.9	0.316	5.90	107.3	1.7	0.33	0.1	0.00	0.21	0.09	7!i
1	85	16.49	16.48	33.460	24.455	349.4	0.351	5.87	105.3	1.7	0.34	0.1	0.00	0.26	0.15	8>
1	99	15.10	15.09	33.525	24.817	315.2	0.398	5.64	98.4	2.4	0.40	0.1	0.02	0.27	0.25	99
	100 ISL	15.01	14.99	33.525	24.837	313.4	0.401	5.62	97.9	2.5	0.41	0.2	0.02	0.27	0.25	100
1	120	13.11	13.09	33.452	25.176	281.3	0.461	5.19	86.9	5.0	0.71	4.3	0.07	0.17	0.21	12(1
	125 ISL	12.55	12.53	33.401	25.246	274.6	0.474	5.08	84.1	6.3	0.83	6.2	0.06	0.15	0.20	12!)
1	145	10.60	10.58	33.264	25.498	250.7	0.527	4.66	73.9	11.9	1.26	13.4	0.01	0.08	0.16	146
	150 ISL	10.34	10.32	33.291	25.563	244.5	0.539	4.60	72.5	12.7	1.30	14.3	0.01	0.07	0.14	151
1	175	9.61	9.59	33.517	25.862	216.4	0.597	4.29	66.7	16.5	1.44	17.3	0.01	0.02	0.04	17«
	200 ISL	9.16	9.14	33.693	26.073	196.8	0.649	3.68	56.7	22.4	1.69	21.7	0.00	0.00	0.04	201
1	206	9.09	9.07	33.734	26.116	192.8	0.660	3.50	53.8	24.0	1.75	22.8	0.00	0.00	0.04	207
1	236	8.96	8.93	33.979	26.329	173.1	0.715	2.59	39.8	31.9	2.05	27.0	0.00			237
	250 ISL	8.70	8.67	34.010	26.395	167.1	0.739	2.65	40.5	33.6	2.04	27.2	0.00			251
1	277	8.13	8.10	34.016	26.486	158.6	0.783	2.93	44.2	36.2	2.03	27.7	0.00			278
	300 ISL	7.86	7.83	34.043	26.548	153.0	0.819	2.68	40.2	40.1	2.14	29.4	0.00			302
1	332	7.52	7.49	34.073	26.620	146.5	0.867	2.16	32.1	46.5	2.35	32.3	0.00			334
1	393	6.54	6.50	34.084	26.764	133.1	0.952	1.50	21.8	60.2	2.65	37.1	0.00			395
	400 ISL	6.45	6.41	34.090	26.781	131.5	0.961	1.42	20.6	61.9	2.69	37.6	0.00			402
1	459	5.83	5.79	34.147	26.905	120.0	1.035	0.86	12.3	75.2	2.96	41.5	0.00			462
	500 ISL	5.61	5.57	34.179	26.958	115.4	1.084	0.66	9.4	80.6	3.04	42.9	0.00			503
1	528	5.46	5.42	34.201	26.993	112.2	1.116	0.53	7.5	84.3	3.10	43.8	0.00			531

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 93 110

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
30 10.9 N	122 55.6 W	29/09/92	0422 UTC	3975 B	330 05 kn			1013.2 »b	20.4 C	19.8 C		

CAST	DEPTH IB		TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
1	0		21.35	21.35	33.327	23.127	473.3	0.000	5.23	102.8	2.0	0.35	0.1	0.00	0.07	0.02	0
1	9		21.04	21.04	33.312	23.200	466.7	0.042	5.26	102.8	2.0	0.36	0.1	0.00	0.06	0.01	9
	10	ISL	21.01	21.01	33.311	23.208	466.0	0.047	5.26	102.7	2.0	0.36	0.1	0.00	0.06	0.01	10
1	20		20.81	20.81	33.307	23.259	461.5	0.093	5.27	102.5	2.0	0.35	0.1	0.00	0.06	0.01	20
1	30		20.80	20.79	33.307	23.262	461.6	0.139	5.28	102.7	2.0	0.35	0.1	0.00	0.06	0.01	30
1	41		20.76	20.75	33.305	23.272	461.1	0.190	5.29	102.8	2.0	0.35	0.1	0.00	0.08	0.02	41
	50	ISL	18.05	18.04	33.076	23.790	411.8	0.230	5.83	107.5	2.0	0.36	0.1	0.00	0.10	0.03	50
1	51		17.72	17.71	33.055	23.854	405.7	0.234	5.89	107.9	2.0	0.36	0.1	0.00	0.10	0.03	51
1	61		16.60	16.59	33.022	24.093	383.1	0.273	5.99	107.4	1.9	0.37	0.1	0.00	0.14	0.06	61
1	71		16.01	16.00	33.077	24.270	366.5	0.311	5.99	106.2	1.9	0.37	0.1	0.00	0.18	0.12	71
	75	ISL	15.83	15.82	33.100	24.328	361.1	0.325	5.99	105.8	1.9	0.37	0.1	0.00	0.20	0.14	75
1	85		15.35	15.34	33.156	24.478	347.1	0.361	5.95	104.1	1.9	0.37	0.0	0.00	0.25	0.19	85
1	100		14.21	14.20	33.234	24.782	318.4	0.410	5.81	99.4	2.4	0.43	0.1	0.05	0.22	0.22	100
1	120		12.32	12.30	33.258	25.179	280.8	0.470	5.40	88.8	5.3	0.73	4.6	0.04	0.14	0.18	120
	125	ISL	11.93	11.91	33.264	25.258	273.4	0.484	5.33	87.0	6.0	0.80	5.8	0.03	0.12	0.16	125
1	146		10.64	10.62	33.329	25.541	246.5	0.539	5.04	80.0	9.5	1.05	10.5	0.01	0.06	0.10	147
	150	ISL	10.47	10.45	33.360	25.595	241.5	0.549	4.96	78.5	10.3	1.09	11.3	0.01	0.05	0.09	151
1	176		9.73	9.71	33.584	25.895	213.3	0.608	4.40	68.6	15.7	1.35	16.2	0.00	0.02	0.04	177
	200	ISL	9.39	9.37	33.736	26.070	197.2	0.657	3.99	61.8	19.8	1.52	19.4	0.00	0.00	0.02	201
1	206		9.33	9.31	33.768	26.105	194.0	0.669	3.91	60.5	20.8	1.56	20.1	0.00	0.00	0.02	207
1	236		8.91	8.88	33.911	26.284	177.4	0.724	3.60	55.2	25.9	1.72	22.9	0.00			237
	250	ISL	8.69	8.66	33.957	26.354	170.9	0.749	3.43	52.3	28.7	1.80	24.3	0.00			251
1	277		8.26	8.23	34.018	26.468	160.4	0.793	3.11	47.0	34.2	1.96	26.8	0.00			278
	300	ISL	7.94	7.91	34.037	26.531	154.7	0.830	2.93	44.0	37.9	2.06	28.3	0.00			302
1	333		7.52	7.49	34.048	26.601	148.4	0.880	2.65	39.4	43.4	2.20	30.4	0.00			335
1	394		6.87	6.83	34.109	26.740	135.7	0.966	1.64	24.0	56.9	2.61	35.6	0.00			396
	400	ISL	6.80	6.76	34.111	26.751	134.7	0.974	1.58	23.1	58.1	2.64	36.0	0.00			402
1	461		6.14	6.10	34.129	26.852	125.4	1.054	1.11	16.0	69.1	2.87	39.7	0.00			464
	500	ISL	5.83	5.79	34.156	26.912	119.9	1.102	0.88	12.6	75.6	2.98	41.3	0.00			503
1	533		5.57	5.52	34.179	26.963	115.2	1.140	0.69	9.8	81.1	3.07	42.6	0.00			536

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 93 120

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI/FOREL	CLD AMT TYPE
29 50.9 N	123 35.1 W	29/09/92	0948 UTC	4077 •	020 01 kn			1013.5 Bb	19.5 C	19.0 C		

CAST	DEPTH a		TEMP DEG C	POT TEMP DEG C	SALINITY PSS 78	SIGMA THETA	SVA	DYN HT	OXYGEN Bl/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL-A ug/1	PHAEO ug/1	PRESS db
	0	ISL	21.93	21.93	33.716	23.263	460.3	0.000	5.14	102.3	1.6	0.31	0.1	0.00	0.08	0.02	0
1	1		21.93	21.93	33.716	23.263	460.4	0.005	5.14	102.3	1.6	0.31	0.1	0.00	0.08	0.02	1
	10	ISL	21.63	21.63	33.698	23.333	454.1	0.046	5.16	102.1	1.6	0.31	0.1	0.00	0.06	0.02	10
1	12		21.54	21.54	33.693	23.354	452.1	0.055	5.17	102.2	1.6	0.31	0.1	0.00	0.06	0.02	12
	20	ISL	21.44	21.44	33.691	23.381	449.9	0.091	5.18	102.2	1.6	0.31	0.1	0.00	0.06	0.02	20
1	22		21.43	21.43	33.691	23.383	449.7	0.100	5.18	102.1	1.6	0.31	0.1	0.00	0.06	0.02	22
	30	ISL	21.41	21.40	33.691	23.389	449.5	0.136	5.18	102.1	1.6	0.30	0.1	0.00	0.07	0.02	30
1	31		21.41	21.40	33.691	23.389	449.5	0.140	5.18	102.1	1.6	0.30	0.1	0.00	0.07	0.02	31
1	42		20.70	20.69	33.550	23.474	441.8	0.189	5.44	105.8	1.6	0.31	0.1	0.00	0.11	0.04	42
	50	ISL	18.41	18.40	33.329	23.895	401.8	0.223	5.85	108.8	1.6	0.33	0.1	0.00	0.10	0.04	50
1	52		17.82	17.81	33.289	24.009	391.0	0.231	5.94	109.2	1.6	0.33	0.1	0.00	0.10	0.04	52
1	63		16.85	16.84	33.299	24.248	368.5	0.273	6.00	108.3	1.6	0.33	0.1	0.00	0.11	0.04	63
1	73		16.15	16.14	33.333	24.435	350.9	0.309	5.92	105.4	1.6	0.34	0.1	0.00	0.15	0.07	73
	75	ISL	16.06	16.05	33.328	24.452	349.4	0.316	5.92	105.2	1.6	0.34	0.1	0.00	0.15	0.07	75
1	86		15.72	15.71	33.334	24.533	341.9	0.354	5.89	104.0	1.7	0.34	0.1	0.00	0.16	0.09	86
	100	ISL	15.47	15.45	33.577	24.776	319.2	0.400	5.68	99.9	2.0	0.35	0.1	0.01	0.22	0.20	10c
1	102		15.42	15.40	33.613	24.815	315.5	0.406	5.64	99.1	2.1	0.35	0.1	0.01	0.23	0.22	102
1	123		13.86	13.84	33.572	25.117	287.2	0.470	5.35	91.1	3.8	0.55	2.3	0.13	0.18	0.21	123
	125	ISL	13.69	13.67	33.561	25.143	284.7	0.475	5.33	90.4	4.0	0.57	2.7	0.12	0.17	0.20	125
1	148		11.77	11.75	33.458	25.439	256.7	0.538	5.09	82.9	7.2	0.87	7.8	0.01	0.09	0.13	149
	150	ISL	11.62	11.60	33.456	25.465	254.2	0.543	5.06	82.1	7.6	0.90	8.3	0.01	0.08	0.12	151
1	179		9.93	9.91	33.533	25.822	220.4	0.612	4.60	72.0	13.7	1.26	14.7	0.00	0.02	0.04	180
	200	ISL	9.40	9.38	33.705	26.044	199.6	0.656	4.09	63.3	19.2	1.50	18.8	0.00	0.01	0.02	201
1	210		9.27	9.25	33.788	26.130	191.6	0.675	3.86	59.6	21.6	1.59	20.4	0.00	0.00	0.01	211
1	239		8.89	8.86	33.900	26.278	178.0	0.729	3.58	54.9	25.9	1.72	22.9	0.00			240
	250	ISL	8.76	8.73	33.938	26.329	173.3	0.748	3.49	53.3	27.7	1.77	23.8	0.00			251
1	280		8.38	8.35	34.017	26.449	162.3	0.799	3.24	49.1	33.1	1.92	26.2	0.00			281
	300	ISL	8.01	7.98	34.034	26.518	155.9	0.830	3.05	45.8	37.3	2.03	27.9	0.00			302
1	336		7.37	7.34	34.044	26.619	146.6	0.885	2.63	39.0	45.2	2.25	31.0	0.00			338
1	396		6.79	6.75	34.086	26.732	136.3	0.970	1.71	25.0	56.9	2.59	35.7	0.00			398
	400	ISL	6.75	6.71	34.089	26.740	135.6	0.975	1.66	24.2	57.8	2.61	36.0	0.00			401!
1	462		6.12	6.08	34.140	26.863	124.3	1.056	0.99	14.2	70.4	2.91	40.2	0.00			46!i
	500	ISL	5.94	5.90	34.175	26.914	119.9	1.102	0.78	11.2	75.2	3.01	41.4	0.00			50:i
1	533		5.78	5.73	34.205	26.958	116.0	1.141	0.59	8.4	79.3	3.09	42.5	0.00			53«i

PRIMARY PRODUCTIVITY CASTS

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 77 52

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
35 0.6 N	120 57.5 W	9/10/92	1941 UTC	18 m	03	1205 - 1801 PST	1150 PST	1801 PST	551.5 *q C/«2

DEPTH a	TEMP DEG C	SALINITY PSS 78	SIGMA THETA	DISS O2 Ml/1	OXY PCT	SIO3 UM/1	PO4 uM/1	NO3 UM/1	NO2 uM/1	CHL ug/1	PHAEO ug/1	LIGHT PCT	UPTAKE (Bg C/B3) 1	2	MEAN	DARK
2	17.06	33.318	24.211	5.74	104.0	2.2	0.27	0.0	0.00	0.24	0.10	84. A	6.5	6.5	6.5	0.11
11	16.52	33.321	24.339	5.87	105.3	2.3	0.27	0.0	0.00	0.50	0.17	39.	12.3	12.4	12.4	0.16
21	15.39	33.322	24.595	5.81	101.9	3.8	0.37	0.4	0.04	1.41	0.65	17.	25.9	26.2	26.0	0.19
37	12.53	33.142	25.047	5.30	87.5	6.4	0.73	5.9	0.25	0.58	0.44	4.3	2.8	3.0	2.9	0.06
45	12.27	33.319	25.234	4.62	76.0	9.5	0.97	9.7	0.12	0.31	0.29	2.2	1.1	0.98	1.0	0.05
60	12.10	33.418	25.344	4.28	70.2	11.2	1.10	11.4	0.06	0.20	0.28					
73	11.86	33.502	25.454	3.89	63.5	14.3	1.25	13.5	0.15	0.21	0.27	0.20	0.05	0.04	0.05	0.04
104	11.08	33.585	25.662	3.65	58.6	17.4	1.44	17.1	0.10							

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 77 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33 44.2 N	123 39.3 W	8/10/92	1857 UTC	32 a	01	1202 - 1813 PST	1202 PST	1813 PST	97.7 ag C/a2

DEPTH ill	TEMP DEG C	SALINITY PSS 78	SIGMA THETA	DISS O2 al/1	OXY PCT	SIO3 uM/1	PO4 UM/1	NO3 UM/1	NO2 uM/1	CHL ug/1	PHAEO ug/1	LIGHT PCT	UPTAKE (ag C/B3) 1	2	MEAN	DARK
2	19.51	33.163	23.489	5.38	102.1	2.0	0.35	0.0	0.00	0.08	0.01	91. A	0.80	0.95	0.87	0.06
21	19.47	33.162	23.500	5.38	102.0	1.9	0.34	0.0	0.00	0.08	0.02	37.	1.6	1.6	1.6	0.06
35	19.46	33.174	23.512	5.40	102.4	1.9	0.34	0.0	0.00	0.09	0.02	19.	1.3	1.3	1.3	0.07
64	17.06	33.042	24.001	5.96	107.8	2.0	0.35	0.0	0.00	0.15	0.05	4.6	0.66	0.75	0.70	0.10
78	15.67	33.046	24.322	6.02	106.0	1.9	0.36	0.0	0.00	0.19	0.09	2.4	0.50	0.51	0.51	0.05
104	14.53	33.061	24.582	5.94	102.2	2.1	0.38	0.0	0.00	0.23	0.20					
128	11.68	33.044	25.133	5.47	88.7	5.7	0.80	6.0	0.02	0.15	0.18	0.22	0.08	0.08	0.08	0.02

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 80 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33 28.1 N	122 31.3 W	7/10/92	1849 UTC	32 a	01	1200 - 1813 PST	1156 PST	1813 PST	208.2 mg C/a2

DEPTH m	TEMP DEG C	SALINITY PSS 78	SIGMA THETA	DISS O2 Bl/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL ug/1	PHAEO ug/1	LIGHT PCT	UPTAKE (ag C/*3) 1	2	MEAN	DARK
2	19.20	33.059	23.489	5.43	102.4	1.8	0.34	0.0	0.00	0.09	0.01	91. A	1.5	1.3	1.4	0.07
22	19.15	33.064	23.506	5.44	102.5	1.6	0.35	0.0	0.00	0.09	0.02	35.	2.7	2.4	2.5	0.07
36	19.11	33.094	23.540	5.47	103.0	1.7	0.34	0.0	0.00	0.12	0.04	18.	2.6	2.3	2.5	0.07
65	14.62	33.027	24.535	6.10	105.1	1.8	0.36	0.0	0.00	0.20	0.08	4.4	1.2	1.3	1.2	0.14
81	13.23	32.980	24.786	5.91	98.9	2.5	0.48	0.9	0.11	0.38	0.32	2.1	2.3	1.9	2.1	0.04
106	10.92	33.045	25.270	5.26	83.9	7.8	1.00	9.6	0.02	0.11	0.11					
129	9.60	33.191	25.608	5.21	80.8	11.0	1.14	12.7	0.01	0.06	0.08	0.21	0.04	0.04	0.04	0.02

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 82 47

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
34 16.8 N	120 1.6 K	6/10/92	1838 UTC	14 a	04	1154 - 1801 PST	1148 PST	1801 PST	1052.4 ag C/a2

DEPTH a	TEMP DEG C	SALINITY PSS 78	SIGMA THETA	DISS O2 Bl/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 UM/1	CHL ug/1	PHAEO ug/1	LIGHT PCT	UPTAKE (Bg C/«3) 1	2	MEAN	DARK
1	16.19	33.339	24.428	5.84	104.1	4.2	0.45	0.2	0.03	1.78	0.60	90. A	51.5	57.6	54.6	0.28
10	15.46	33.319	24.577	5.85	102.7	4.6	0.52	0.6	0.05	2.33	0.53	33.	55.0	51.7	53.4	0.37
17	14.92	33.304	24.683	5.74	99.7	5.1	0.59	1.3	0.07	1.64	0.61	16.	26.6	28.0	27.3	0.18
30	13.54	33.374	25.027	4.78	80.7	8.4	0.93	7.3	0.26	0.58	0.37	3.7	2.9	3.1	3.0	0.07
36	13.14	33.364	25.099	4.61	77.2	8.9	1.02	7.8	0.43	0.56	0.37	1.9	1.8	1.5	1.6	0.06
47	12.83	33.362	25.159	4.64	77.2	9.0	1.03	8.4	0.28	0.47	0.32					
58	12.23	33.378	25.288	4.51	74.1	10.2	1.12	10.5	0.11	0.33	0.28	0.17	0.10	0.09	0.09	0.04

A) INCUBATION LIGHT INTENSITIES WERE 95, 37, 18, 4.3, 2.1 AND 0.18 PERCENT RESPECTIVELY.

PRIMARY PRODUCTIVITY CASTS

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 83 110

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
31 54.5 N	124 10.6 W	4/10/92	1830 UTC	34 m	01	1210 - 1816 PST	1206 PST	1816 PST	187.7 mg C/m2

DEPTH n	TEMP DEG C	SALINITY PSS 78	SIGMA THETA	DISS O2 ml/1	OXY PCT	SIO3 uM/1	PO4 UM/1	NO3 uM/1	NO2 UM/1	CHL ug/1	PHAEO ug/1	LIGHT PCT	UPTAKE (mg C/»3) 1	2	MEAN	DARK
2	20.43	33.380	23.415	5.29	102.2	2.1	0.37	0.0	0.00	0.08	0.02	91. A	1.1	1.2	1.1	0.07
22	20.38	33.375	23.425	5.29	102.1	2.1	0.36	0.0	0.00	0.08	0.02	37.	2.0	2.0	2.0	0.08
38	20.13	33.353	23.475	5.33	102.4	1.9	0.36	0.0	0.00	0.10	0.03	18.	1.6	1.4	1.5	0.11
71	15.26	33.155	24.496	6.20	108.3	2.6	0.37	0.0	0.00	0.29	0.13	4.1	1.6	1.5	1.6	0.06
85	12.80	33.136	24.991	5.80	96.3	4.5	0.63	2.0	0.06	0.47	0.37	2.2	1.7	1.8	1.8	0.04
114	10.33	33.283	25.558	4.54	71.6	13.1	1.32	14.9	0.01	0.10	0.14					
141	9.67	33.484	25.826	3.93	61.1	18.4	1.59	19.4	0.01	0.05	0.07	0.17	0.04	0.04	0.04	0.01

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 87 45

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33 29.4 N	119 19.6 K	2/10/92	1853 UTC	14 m	03	1145 - 1812 PST	1146 PST	1809 PST	350.8 mg C/m2

DEPTH m	TEMP DEG C	SALINITY PSS 78	SIGMA THETA	DISS O2 ml/1	OXY PCT	SIO3 UM/1	PO4 uM/1	NO3 UM/1	NO2 UM/1	CHL ug/1	PHAEO ug/1	LIGHT PCT	UPTAKE (mg C/m3) 1	2	MEAN	DARK
2	18.17	33.332	23.954	5.63	104.3	2.1	0.33	0.1	0.00	0.39	0.12	80. A	6.1	6.2	6.1	0.16
9	18.18	33.337	23.956	5.64	104.5	2.1	0.33	0.1	0.00	0.37	0.10	37.	11.1	11.5	11.3	0.17
16	17.94	33.328	24.008	5.67	104.5	1.9	0.33	0.1	0.00	0.41	0.13	17.	10.5	10.9	10.7	0.17
29	13.42	33.207	24.922	5.50	92.6	5.3	0.73	3.8	0.12	0.86	0.51	4.2	6.8	7.5	7.1	0.09
35	13.23	33.234	24.981	5.35	89.7	5.9	0.77	4.1	0.14	0.81	0.50	2.2	4.5	4.0	4.2	0.07
46	11.96	33.329	25.301	4.67	76.3	9.0	1.05	9.2	0.07	0.35	0.35					
59	11.39	33.476	25.520	4.11	66.4	13.0	1.31	13.9	0.02	0.12	0.17	0.16	0.06	0.06	0.06	0.03

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 87 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32 19.8 N	121 43.5 W	3/10/92	1823 UTC	27 m	02	1200 - 1818 PST	1156 PST	1817 PST	117.6 mg C/m2

DEPTH m	TEMP DEG C	SALINITY PSS 78	SIGMA THETA	DISS O2 ml/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL ug/1	PHAEO ug/1	LIGHT PCT	UPTAKE (mg C/m3) 1	2	MEAN	DARK
2	19.35	33.157	23.526	5.40	102.2	1.7	0.36	0.0	0.00	0.09	0.02	89. A	1.5	1.6	1.5	0.08
18	19.42	33.210	23.549	5.40	102.3	1.8	0.36	0.0	0.00	0.10	0.02	36.	2.1	2.2	2.2	0.09
29	19.66	33.339	23.586	5.38	102.5	1.8	0.36	0.0	0.00	0.10	0.02	19.	1.7	1.5	1.6	0.09
54	18.24	33.200	23.839	5.65	104.7	1.8	0.36	0.0	0.00	0.17	0.05	4.6	1.0	1.2	1.1	0.07
69	15.77	33.061	24.311	6.05	106.7	1.8	0.38	0.1	0.00	0.22	0.10	2.0	0.73	0.67	0.70	0.05
91	13.59	33.105	24.810	5.85	98.7	3.0	0.51	0.5	0.08	0.33	0.28					
111	11.69	33.134	25.201	5.27	85.5	6.6	0.90	7.1	0.03	0.16	0.19	0.18	0.10	0.10	0.10	0.01

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 90 37

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33 11.3 N	118 23.4 W	1/10/92	1744 UTC	0 m		1142 - 1803 PST	1142 PST	1801 PST	186.8 mg C/m2

DEPTH m	TEMP DEG C	SALINITY PSS 78	SIGMA THETA	DISS O2 ml/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 uM/1	NO2 uM/1	CHL ug/1	PHAEO ug/1	LIGHT PCT	UPTAKE (mg C/m3) 1	2	MEAN	DARK
2	20.74	33.395	23.344	5.31	103.2	1.8	0.25	0.0	0.00	0.28	0.07	95.	3.1	2.7	2.9	0.20
13	20.56	33.394	23.392	5.33	103.3	1.8	0.26	0.0	0.00	0.27	0.06	37.	5.3	5.4	5.3	0.18
20	20.33	33.388	23.448	5.35	103.2	1.5	0.29	0.0	0.00	0.23	0.05	18.	5.5	5.3	5.4	0.12
38	16.13	33.099	24.259	6.03	107.2	1.8	0.36	0.0	0.00	0.30	0.10	4.3	1.5	1.8	1.7	0.10
46	14.48	33.070	24.598	6.15	105.7	2.4	0.42	0.0	0.00	0.53	0.29	2.1	1.4	1.4	1.4	0.07
60	13.04	33.179	24.977	5.59	93.3	4.8	0.61	1.2	0.15	0.93	0.67					
75	12.02	33.273	25.247	4.89	80.0	7.5	0.93	7.2	0.05	0.34	0.38	0.18	0.12	0.14	0.13	0.04

A) INCUBATION LIGHT INTENSITIES WERE 95, 37, 18, 4.3, 2.1 AND 0.18 PERCENT RESPECTIVELY.

PRIMARY PRODUCTIVITY CASTS

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 90 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
31 44.9 N	121 18.4 W	30/ 9/92	1820 UTC	23 •	02	1158 - 1810 PST	11.55 PST	1805 PST	436.9 ag C/a2

DEPTH a	TEMP DEG C	SALINITY PSS 78	SIGMA THETA	DISS O2 ml/1	OXY PCT	SIO3 uM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL ug/1	PHAEO ug/1	LIGHT PCT	UPTAKE (ag C/a3) 1	2	MEAN	DARK
1	18.61	33.275	23.802	5.56	103.8	1.8	0.34	0.1	0.00	0.19	0.05	94. A	3.7	3.6	3.7	0.14
15	17.37	33.193	24.042	5.71	104.0	1.8	0.35	0.1	0.00	0.28	0.08	37.	7.3	7.5	7.4	0.26
27	17.08	33.226	24.136	5.74	104.0	1.8	0.34	0.1	0.00	0.33	0.11	16.	6.6	6.6	6.6	0.15
47	16.55	33.230	24.264	5.78	103.7	1.8	0.37	0.0	0.00	0.58	0.27	4.3	5.4	5.8	5.6	0.09
58	15.26	33.268	24.583	5.72	100.0	2.4	0.51	0.2	0.09	0.83	0.59	2.1	4.8	4.9	4.9	0.04
75	12.57	33.177	25.067	5.25	86.8	6.8	0.87	5.8	0.13	0.31	0.37					
95	11.33	33.397	25.471	4.36	70.3	12.4	1.26	13.1	0.03	0.11	0.19	0.18	0.05	0.06	0.06	0.03

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 90 120

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
30 26.2 N	124 1.3 W	29/ 9/92	1745 UTC	37 a	01	1200 - 1830 PST	1206 PST	1827 PST	164.5 ag C/a2

DEPTH •	TEMP DEG C	SALINITY PSS 78	SIGMA THETA	DISS O2 Bl/1	OXY PCT	SIO3 UM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL ug/1	PHAEO ug/1	LIGHT PCT	UPTAKE (ag C/a3) 1	2	MEAN	DARK
1	20.65	33.215	23.231	5.28	102.4	2.1	0.36	0.0	0.00	0.09	0.02	96. A	2.3	2.4	2.4	0.04
24	19.85	33.173	23.410	5.34	102.0	2.1	0.36	0.0	0.00	0.08	0.02	37.	1.6	1.6	1.6	0.07
41	19.81	33.192	23.436	5.35	102.1	2.1	0.35	0.0	0.00	0.11	0.02	18.	1.7	1.8	1.8	0.06
76	16.89	33.618	24.484	5.85	105.8	2.0	0.28	0.0	0.00	0.20	0.09	4.3	1.0	0.93	0.97	0.02
92	15.60	33.507	24.693	5.74	101.2	2.2	0.34	0.0	0.01	0.20	0.18	2.2	0.74	0.83	0.79	0.02
122	13.35	33.472	25.143	5.37	90.4	4.3	0.61	2.9	0.09	0.17	0.22					
152	11.26	33.436	25.515	5.04	81.1	8.4	0.94	9.0	0.01	0.06	0.13	0.18	0.04	0.03	0.03	0.01

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 93 27.1

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32 57.1 N	117 20.2 W	26/ 9/92	1940 UTC	8 in	04	1210 - 1816 PST	1140 PST	1816 PST	434.6 »g C/a2

DEPTH m	TEMP DEG C	SALINITY PSS 78	SIGMA THETA	DISS O2 al/1	OXY PCT	SIO3 uM/1	PO4 uM/1	NO3 UM/1	NO2 uM/1	CHL ug/1	PHAEO ug/1	LIGHT PCT	UPTAKE (ag C/a3) 1	2	MEAN	DARK
2	21.96	33.350	22.977	5.65	112.3	2.1	0.28	0.2	0.00	0.99	0.14	68. A	25.5	27.9	26.7	0.65
5	21.67	33.347	23.055	5.73	113.3	2.0	0.27	0.2	0.00	0.91	0.15	38.	24.5	25.5	25.0	0.91
9	20.23	33.326	23.427	6.15	118.4	2.2	0.28	0.2	0.00	1.33	0.21	18.	26.7	26.8	26.7	0.72
16	16.80	33.264	24.230	6.15	110.9	3.5	0.42	0.1	0.01	1.70	0.48	4.6	12.5	13.3	12.9	0.36
19	15.96	33.236	24.402	6.08	107.8	3.5	0.45	0.1	0.01	1.27	0.59	2.6	5.4	5.4	5.4	0.25
24	15.35	33.230	24.533	5.97	104.6	3.8	0.51	0.1	0.02							
31	14.91	33.266	24.657	5.54	96.2	4.8	0.63	0.3	0.08	0.83	0.68	0.26	0.31	0.28	0.30	0.18

RV NEW HORIZON CALCOFI CRUISE 9210 STATION 93 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
30 52.0 N	121 36.9 W	28/ 9/92	1817 UTC	33 in	01	1203 - 1825 PST	1157 PST	1821 PST	192.9 ag C/a2

DEPTH m	TEMP DEG C	SALINITY PSS 78	SIGMA THETA	DISS O2 ml/1	OXY PCT	SIO3 uM/1	PO4 UM/1	NO3 UM/1	NO2 UM/1	CHL ug/1	PHAEO ug/1	LIGHT PCT	UPTAKE (ag C/a3) 1	2	MEAN	DARK
2	20.45	33.355	23.391	5.29	102.3	1.8	0.34	0.0	0.00	0.08	0.02	91. A	1.5	1.5	1.5	0.05
21	19.68	33.303	23.553	5.36	102.1	1.8	0.34	0.0	0.00	0.08	0.02	38.	2.1	2.0	2.0	0.10
36	19.14	33.160	23.583	5.43	102.3	1.8	0.34	0.0	0.00	0.11	0.02	19.	2.4	2.3	2.4	0.07
69	16.78	33.399	24.341	5.93	106.9	1.8	0.32	0.0	0.00	0.20	0.09	4.0	1.5	1.4	1.5	0.06
83	15.83	33.444	24.593	5.82	103.0	1.9	0.34	0.0	0.00	0.26	0.22	2.1	1.4	1.5	1.4	0.03
110	13.87	33.418	24.995	5.49	93.4	3.5	0.53	1.2	0.14	0.25	0.28					
135	11.40	33.257	25.350	5.12	82.6	7.8	0.94	8.2	0.02	0.13	0.21	0.19	0.10	0.10	0.10	0.02

A) INCUBATION LIGHT INTENSITIES WERE 95, 37, 18, 4.3, 2.1 AND 0.18 PERCENT RESPECTIVELY.

MACROZOOPLANKTON BIOMASS
Net Mesh Size: 0.505 mm

Line	Sta.	Position		Date Mo/Day	Time(PST) Start	End	Water Volume Strained (m^3)	Max. Tow Depth (m)	Volume per 1000 m Strained Total (cm)	Small (cm)
77	49	35 05.7N	120 47.5W	10/09	1537	1544	158	57	188	188
77	51	35 01.4N	120 55.9W	10/09	1306	1328	465	214	226	226
77	55	34 53.5N	121 13.7W	10/09	0920	0942	451	211	71	71
77	60	34 43.8N	121 33.7W	10/09	0528	0550	462	211	132	132
77	70	34 23.5N	122 16.5W	10/08	2337	2359	460	209	120	120
77	80	34 03.3N	122 56.6W	10/08	1741	1803	425	215	75	75
77	90	34 43.8N	123 38.7W	10/08	1005	1027	448	214	20	20
77	100	33 24.0N	124 20.3W	10/08	0425	0447	447	209	34	34
80	51	34 27.0N	120 32.0W	10/06	1624	1632	150	67	127	127
80	55	34 19.2N	120 49.0W	10/06	1935	1957	468	206	96	96
80	60	34 09.4N	121 10.2W	10/06	2338	0000	439	212	114	114
80	70	33 49. IN	121 51.3W	10/07	0505	0527	446	213	159	159
80	80	33 29.0N	122 31.3W	10/07	1136	1158	411	211	37	37
80	90	33 09.2N	123 13.8W	10/07	1715	1737	452	210	40	40
80	100	32 49.7N	123 55.2W	10/07	2242	2304	454	212	42	42
82	47	34 17.4N	120 02.3W	10/06	1243	1305	441	220	52	52
83	40.6	34 14. IN	119 25.4W	10/06	0707	0710	51	22	215	215
83	42	34 10.5N	119 30.2W	10/06	0513	0528	295	126	115	115
83	51	33 52.6N	120 08.9 W	10/05	2326	2336	201	95	45	45
83	55	33 44.7N	120 25.3W	10/05	2011	2033	438	215	91	91
83	59	33 40.6N	120 46.1W	10/05	1616	1638	484	213	128	128
83	80	32 54.6N	122 08.3W	10/05	0500	0522	451	211	29	29
83	90	32 35.2N	122 49.2W	10/04	2315	2337	470	215	40	40
83	100	32 15.3N	123 29.9W	10/04	1727	1749	504	212	40	40
83	110	31 54.9N	124 11.3W	10/04	1119	1142	492	213	49	49
87	33	33 53.0N	118 30.3W	10/02	0130	0135	92	43	65	65
87	35	33 49.0N	118 38.7W	10/02	0340	0402	420	214	79	79
87	40	33 40.0N	118 58.9W	10/02	0750	0812	456	209	40	40
87	45	33 28.9N	119 21.6W	10/02	1302	1324	441	213	39	39
87	50	33 19.7N	119 40.4W	10/02	1612	1623	148	69	81	81
87	55	33 09. IN	120 01.7W	10/02	2012	2034	423	210	85	85
87	60	32 58.3N	120 22.7 W	10/02	2354	0016	487	202	94	94
87	70	32 39. IN	121 03.1W	10/03	0504	0526	441	211	45	45
87	80	32 20.4N	121 44.1W	10/03	1112	1134	436	214	23	23
87	90	31 00.1N	122 24.2W	10/03	1644	1706	439	212	23	23
87	100	31 40.8N	123 05.8W	10/03	2309	2331	442	215	52	52
87	110	31 20.3N	123 44.4W	10/04	0440	0502	455	211	48	48
90	28	33 28.7N	117 46.4W	10/01	1924	1934	186	91	64	64
90	30	33 25.3N	117 54.2W	10/01	1726	1748	401	213	170	20
90	35	33 15.3N	118 15.7W	10/01	1345	1407	412	218	44	44
90	37	33 11.3N	118 24.5W	10/01	1118	1140	462	216	15	15
90	53	32 39.5N	119 29.9W	10/01	0205	0227	444	213	115	115
90	60	32 25.2N	119 58.4W	09/30	2126	2148	412	215	78	78
90	70	32 05.4N	120 39.0W	09/30	1551	1613	419	209	41	41
90	80	31 44.9N	121 18.5W	09/30	0827	0849	380	214	205	205
90	90	31 25.0N	121 59.9 W	09/30	0255	0317	424	213	40	40
90	100	31 06. IN	122 40.4W	09/29	2121	2143	427	208	47	47
90	110	30 45.8N	123 20.3W	09/29	1550	1612	408	214	42	42
90	120	30 25.5N	124 00.3W	09/29	0810	0832	421	207	62	62
93	26.8	32 57.4N	117 18.7W	09/26	1238	1249	229	101	17	17
93	28	32 54.3N	117 25.1W	09/26	1441	1503	443	206	34	34
93	30	32 50.8N	117 32.9W	09/26	1658	1719	488	193	14	14
93	35	32 41.6N	117 52.9W	09/26	2033	2055	429	208	70	70
93	40	32 32.2N	118 14.2W	09/27	0030	0052	462	213	126	126
93	45	32 21.2N	118 34.0W	09/27	0415	0437	418	211	117	117
93	50	32 11.0N	118 54.6W	09/27	0755	0817	435	210	67	67
93	55	32 00.7N	119 15.0W	09/27	1300	1322	422	217	73	73
93	60	31 50.6N	11935.1W	09/27	1629	1651	413	208	32	32
93	70	3131.8N	120 16.0W	09/27	2212	2234	431	212	88	88
93	80	31 10.4N	120 55.7W	09/28	0350	0412	452	212	71	71
93	90	30 51.5N	121 36.1W	09/28	0920	0942	421	205	43	43
93	100	30 30.8N	122 16.6W	09/28	1541	1603	425	211	52	52
93	110	30 11.4N	122 56.2W	09/28	2102	2124	409	208	49	49
93	120	29 51.IN	123 35.6W	09/29	0235	0257	434	214	405	37