UNIVERSITY OF CALIFORNIA SCRIPPS INSTITUTION OF OCEANOGRAPHY

data report

PHYSICAL, CHEMICAL AND BIOLOGICAL DATA

CalCOFI Cruise 8502
19 February - 5 March 1985

CalCOFI Cruise 8505
29 April - 18 May 1985

SIO Reference 85-14
15 August 1985

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Approved for distribution:

W. A. Nierenberg, Director

CONTENTS

INTRODUCTION

The data in this report were collected during Cruises 8502* and 8505 of the California Cooperative Oceanic Fisheries Investigations (CalCOFI) program aboard the RV *David Starr Jordan* of the National Marine Fisheries Service and the RV *McArthur* of the National Oceanic and Atmospheric Administration. The data were collected and processed by personnel of the Marine Life Research Group (MLRG), the Southwest Fisheries Center, National Marine Fisheries Service (NMFS), the Physical and Chemical Oceanographic Data Facility (PACODF), and the Instituto Nacional de Pesca (INP). Many volunteers also assisted in the collection of data at sea.

STANDARD PROCEDURES

Hydrographic Cast Data

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

At selected stations, 10-meter bottles were cast with samples being taken for temperature, salinity, oxygen, nutrients, chlorophyll-*a*, and phaeopigments.

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

Salinity samples were analyzed at sea using inductive-type salinometers. Salinometers were standardized with sub-standard seawater. The sub-standard water was prepared from filtered seawater collected in 30-liter Niskin bottles from a depth of 400 m, gently evaporated to increase the salinity to near 35. Periodic checks on the concentration of the substandard were made by comparison with Wormley Standard Seawater. Wormley Standard Seawater batch P-90 was used on RV *David Starr Jordan*, and batch P-96 was used on RV *McArthur*. The salinity values are reported to three decimal places.

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

Chlorophyll was measured with a fluorometric technique (Yentsch and Menzel, 1963; Holm-Hansen *et al.*, 1965). Subsamples (65 or 140 ml) were drawn from the Nansen bottles and filtered onto GF/C filters. The filters were placed in scintillation vials containing 10 ml of 90% acetone and the pigments were extracted in the dark in a refrigerator for a period between one and four days. The samples were then brought to room temperature and the fluorescence of the sample was determined before and after acidification with a Turner 10-005 fluorometer. The potential biases in this technique are discussed in Venrick and Hayward (1984).

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

Primary Productivity Casts

Primary production was estimated from ^{14}C uptake using a simulated *in situ* technique. Light penetration was estimated from the Secchi depth (assuming that the 1% light level is three times the

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

Secchi depth). Six depths, corresponding to predetermined levels of light penetration, were sampled with 5 l Niskin bottles. Temperature, salinity, oxygen, nutrients, chlorophyll-*a*, and phaeopigments were determined for all depths sampled. Triplicate samples (two light and one dark control) were drawn from each depth into 250 ml polycarbonate incubation bottles which were innoculated with 10 μci of ^{14}C as $NaHCO_3$. These were then incubated approximately from local apparent noon to civil twilight in seawater-cooled incubators with neutral-density screens which simulate the *in situ* light levels. At the end of the incubation, the samples were filtered onto HA milipore filters and placed in scintillation vials. One-half ml of 10% HCl was added to each sample. 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 S.I.O. where the radioactivity was determined with a scintillation counter.

Macrozooplankton Net Tows

Macrozooplankton was sampled with a 71 cm mouth diameter paired net (bongo net) equipped with 0.505 mm plankton mesh. Bottom depth permitting, the nets were towed obliquely from 210 m to the surface. The tow time for a standard tow was 21.5 minutes. Volumes filtered were determined from flowmeter readings and the mouth area of the net. Only one sample of 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

The reported hydrographic cast time is the Greenwich Mean Time (GMT) of the messenger release. Bottom depths, determined acoustically, have been corrected using Matthews (1939) tables and are reported in meters. Weather conditions have been coded using WMO code 4051.

Data tabulations are presented in the following forms:

Hydrographic Cast Data

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 (EOS80, UNESCO, 1981). Some of the differences between EOS80 and the older equations-of-state are discussed in the introduction to SIO Ref. 84-18. 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.

10-Meter Data

The 10-meter data are reported in the same format as the hydrographic data. The few 10-meter stations taken on Cruise 8502 are included in the hydrographic data section for that cruise. Ten-meter observations were taken more frequently on Cruise 8505 and have been tabulated on separate pages following the 8505 hydrographic cast data.

Primary Productivity Casts

In addition to the normal hydrographic data, the tabulated data include: the light levels at which the samples were incubated, the uptake from each of the replicate light bottles (uptake 1 and uptake 2) which have been corrected for dark uptake by subtracting the dark value, the mean of the two uptake values, the dark uptake, chlorophyll and phaeophytin. The uptake values shown are the total for the incubation period. The times of local apparent noon (LAN), civil twilight, and the vertically integrated value of the mean uptake from the surface to the deepest sample depth (assuming that the shallowest measured value extends to the surface and that negative values are zero) are also shown for each

experiment. The uptake data have been presented to two significant digits (values < 1.00) or one decimal (values > 1.00). The higher production values may not warrant all of the significant digits presented. Incubation time, LAN, and civil twilight are given in local Pacific Standard Time (PST); to convert to GMT, add eight hours to the PST time.

Secchi Disk Observations

Secchi disk observations were made on most daylight stations. The times are given in local PST (+8) time. Weather codes and cloud observations are also presented.

Macrozooplankton Data

Macrozooplankton biomass volumes are tabulated as total biomass volume ($cm^3/1000\ m^3$ strained) and as the total volume minus the volume of larger organisms under the heading "Small".

LITERATURE CITED

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

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

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

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

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

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

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

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

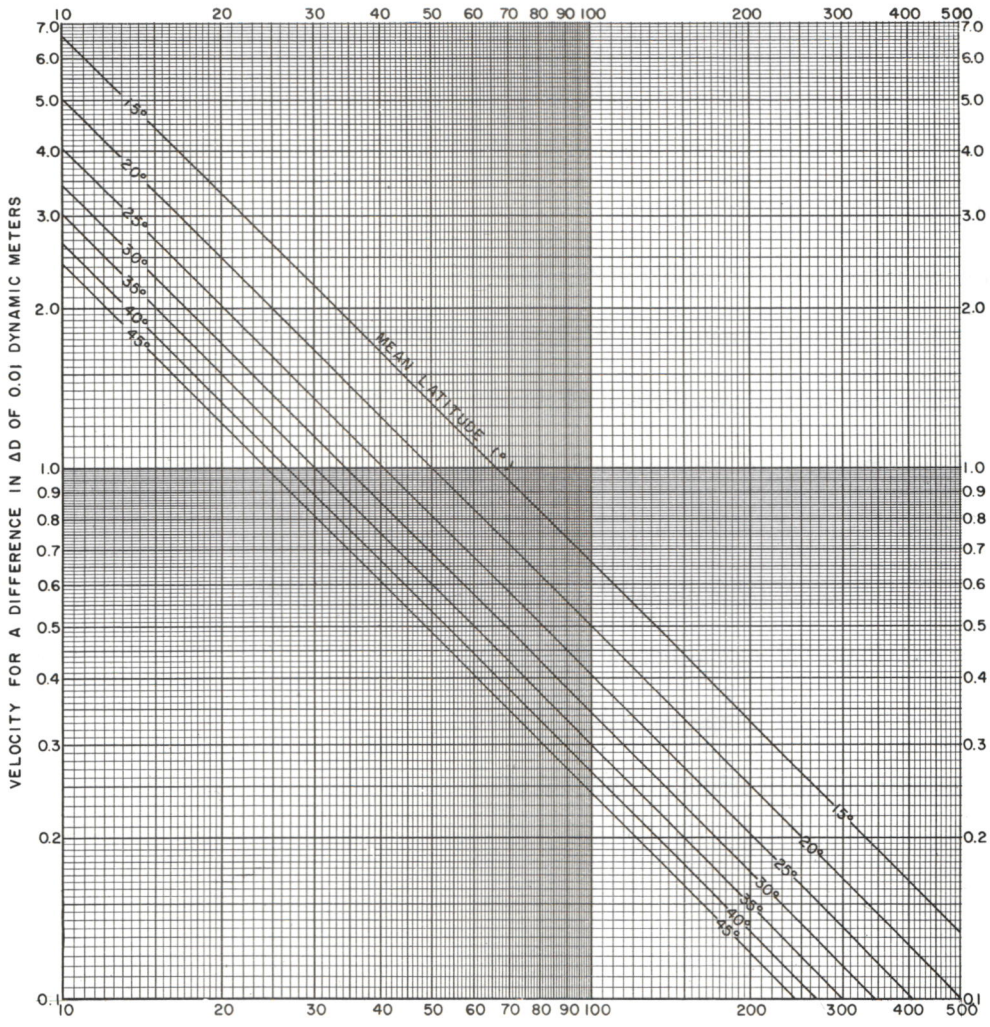
Scripps Institution of Oceanography, University of California, 1984. Physical, Chemical and Biological Data, CalCOFI Cruise 8401, 4-27 January 1984. SIO Ref. No. 84-18, 120 pp.

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

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



VELOCITY OF GEOSTROPHIC FLOW
(NAUTICAL MILES PER DAY)

cm/sec	0	1	2	3	4	5	6	7	8	9
0	KNOTS / NM/DAY	0.02 / 0.47	0.04 / 0.93	0.06 / 1.40	0.08 / 1.86	0.10 / 2.33	0.12 / 2.80	0.14 / 3.26	0.16 / 3.73	0.17 / 4.20
10	0.19 / 4.66	0.21 / 5.13	0.23 / 5.59	0.25 / 6.06	0.27 / 6.53	0.29 / 6.99	0.31 / 7.46	0.33 / 7.93	0.35 / 8.39	0.37 / 8.86
20	0.39 / 9.32	0.41 / 9.79	0.43 / 10.26	0.45 / 10.72	0.47 / 11.19	0.49 / 11.66	0.51 / 12.12	0.52 / 12.59	0.54 / 13.05	0.56 / 13.52
30	0.58 / 13.99	0.60 / 14.45	0.62 / 14.92	0.64 / 15.38	0.66 / 15.85	0.68 / 16.32	0.70 / 16.78	0.72 / 17.25	0.74 / 17.72	0.76 / 18.18
40	0.78 / 18.65	0.80 / 19.11	0.82 / 19.58	0.84 / 20.05	0.85 / 20.51	0.87 / 20.98	0.89 / 21.45	0.91 / 21.91	0.93 / 22.38	0.95 / 22.84
50	0.97 / 23.31	0.99 / 23.78	1.01 / 24.24	1.03 / 24.71	1.05 / 25.17	1.07 / 25.64	1.09 / 26.11	1.11 / 26.57	1.13 / 27.04	1.15 / 27.51
60	1.17 / 27.98	1.18 / 28.44	1.20 / 28.90	1.22 / 29.37	1.24 / 29.84	1.26 / 30.30	1.28 / 30.77	1.30 / 31.24	1.32 / 31.70	1.34 / 32.17
70	1.36 / 32.63	1.38 / 33.10	1.40 / 33.57	1.42 / 34.03	1.44 / 34.50	1.46 / 34.96	1.48 / 35.43	1.50 / 35.90	1.52 / 36.36	1.53 / 36.83
80	1.55 / 37.30	1.57 / 37.76	1.59 / 38.23	1.61 / 38.69	1.63 / 39.16	1.65 / 39.63	1.67 / 40.09	1.69 / 40.56	1.71 / 41.03	1.73 / 41.49
90	1.75 / 41.96	1.77 / 42.42	1.79 / 42.89	1.81 / 43.36	1.83 / 43.82	1.85 / 44.29	1.86 / 44.76	1.88 / 45.22	1.90 / 45.69	1.92 / 46.15
100	1.94 / 46.62	1.96 / 47.09	1.98 / 47.55	2.00 / 48.02	2.02 / 48.48	2.04 / 48.95	2.06 / 49.42	2.08 / 49.88	2.10 / 50.35	2.12 / 50.82

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

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

FIGURES

Cruise 8502

1. CalCOFI Cruise 8502, station positions.
2. Horizontal distribution of chlorophyll-*a* at 10 meters.
3. Horizontal distribution of dynamic height anomaly (0 over 500 m).
4. Horizontal distribution of sigma-theta at 10 meters.
5. Horizontal distribution of temperature at 10 meters.
6. Horizontal distribution of salinity at 10 meters.
7. Horizontal distribution of dynamic height anomaly (200 over 500 m).
8. Horizontal distribution of sigma-theta at 200 meters.
9. Horizontal distribution of temperature at 200 meters.
10. Horizontal distribution of salinity at 200 meters.

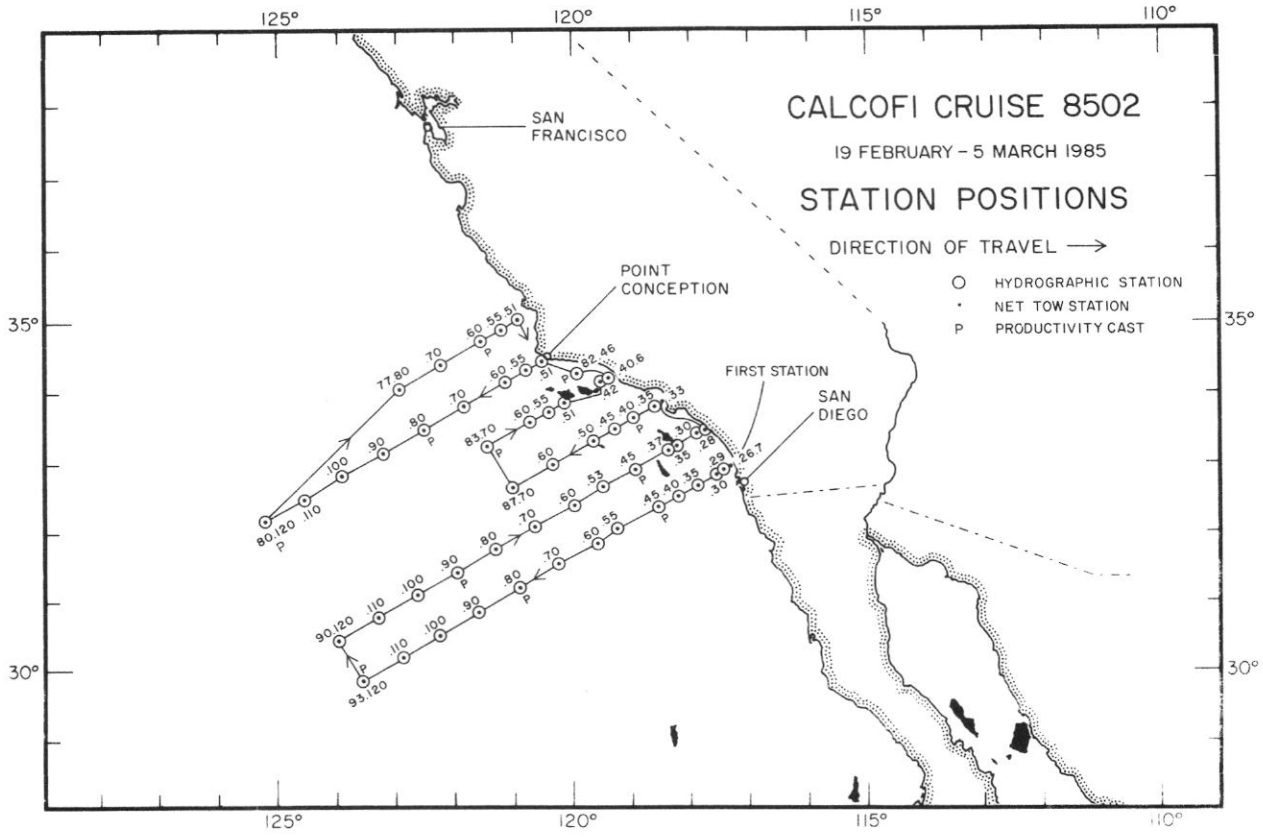
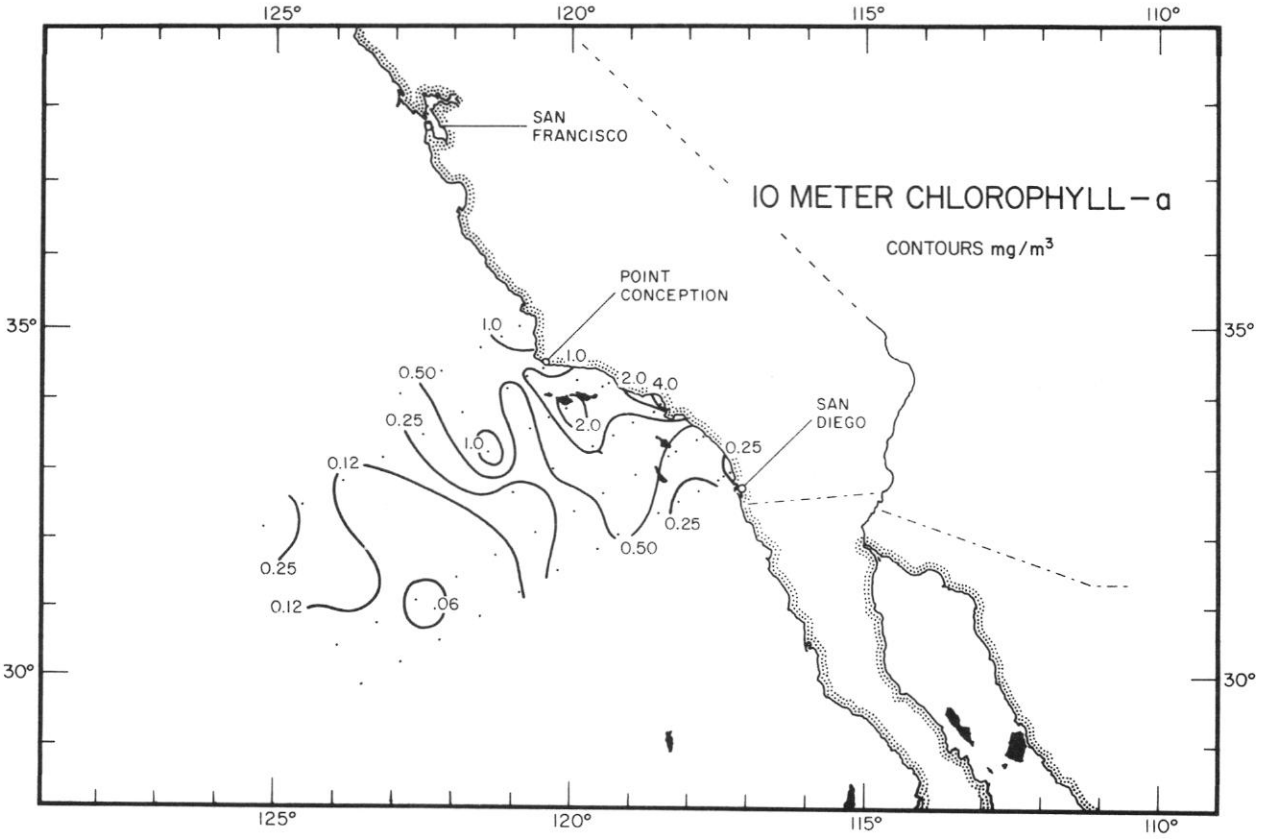


FIGURE 1



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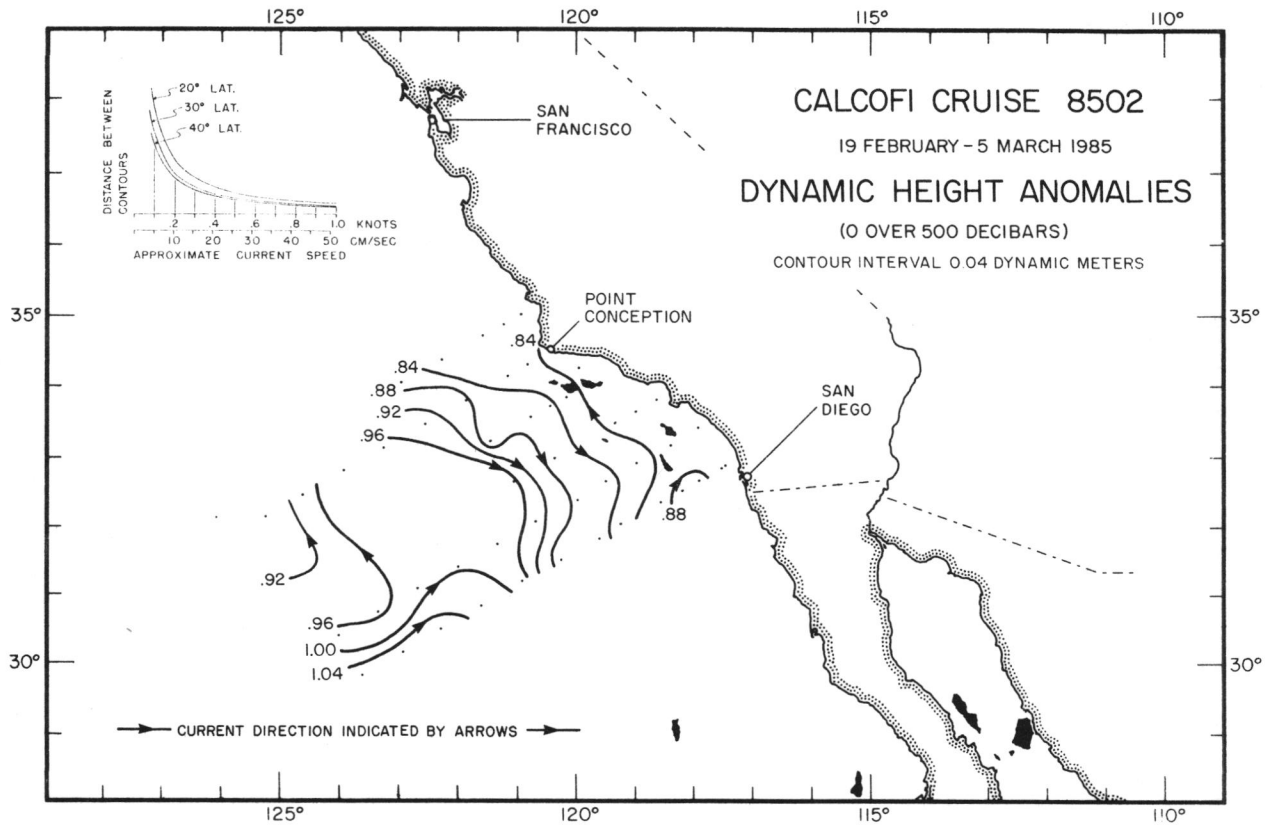


FIGURE 3

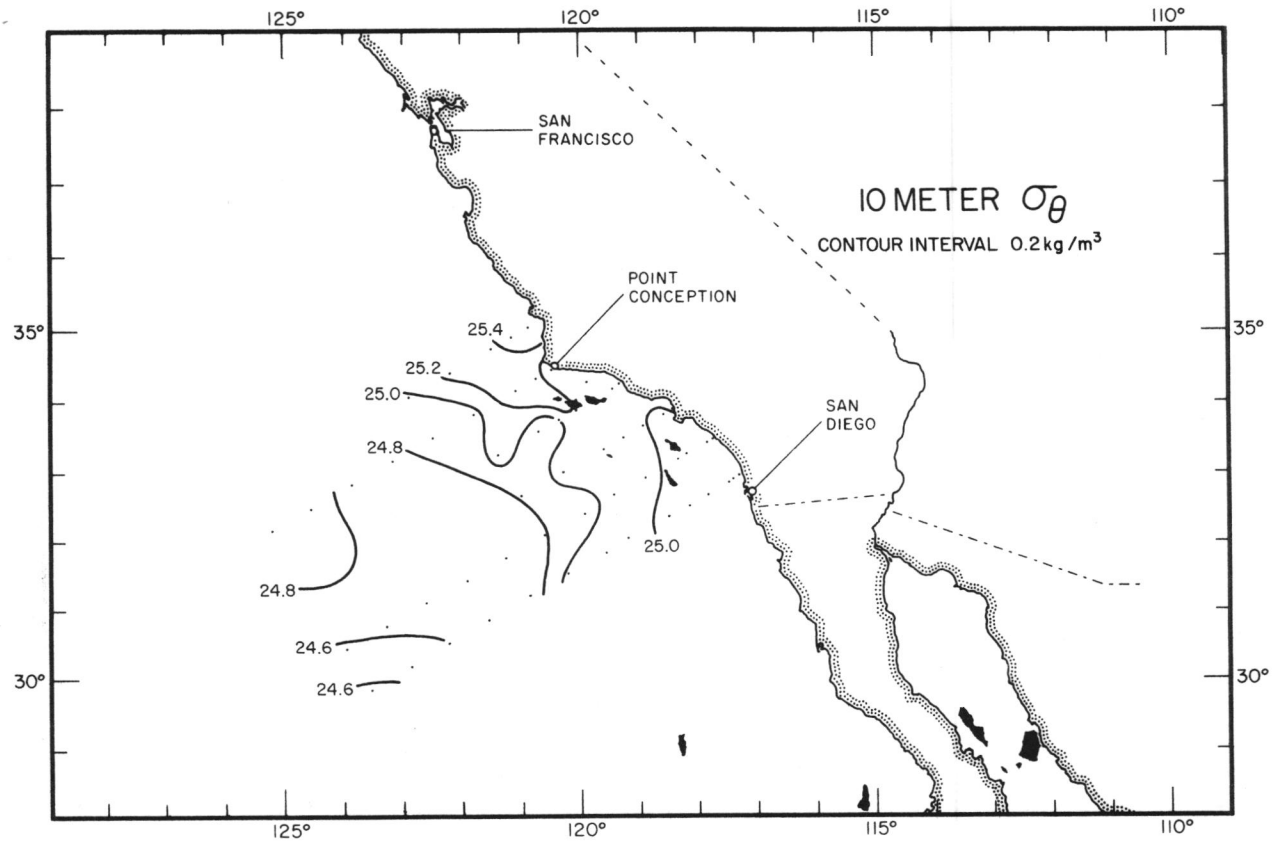
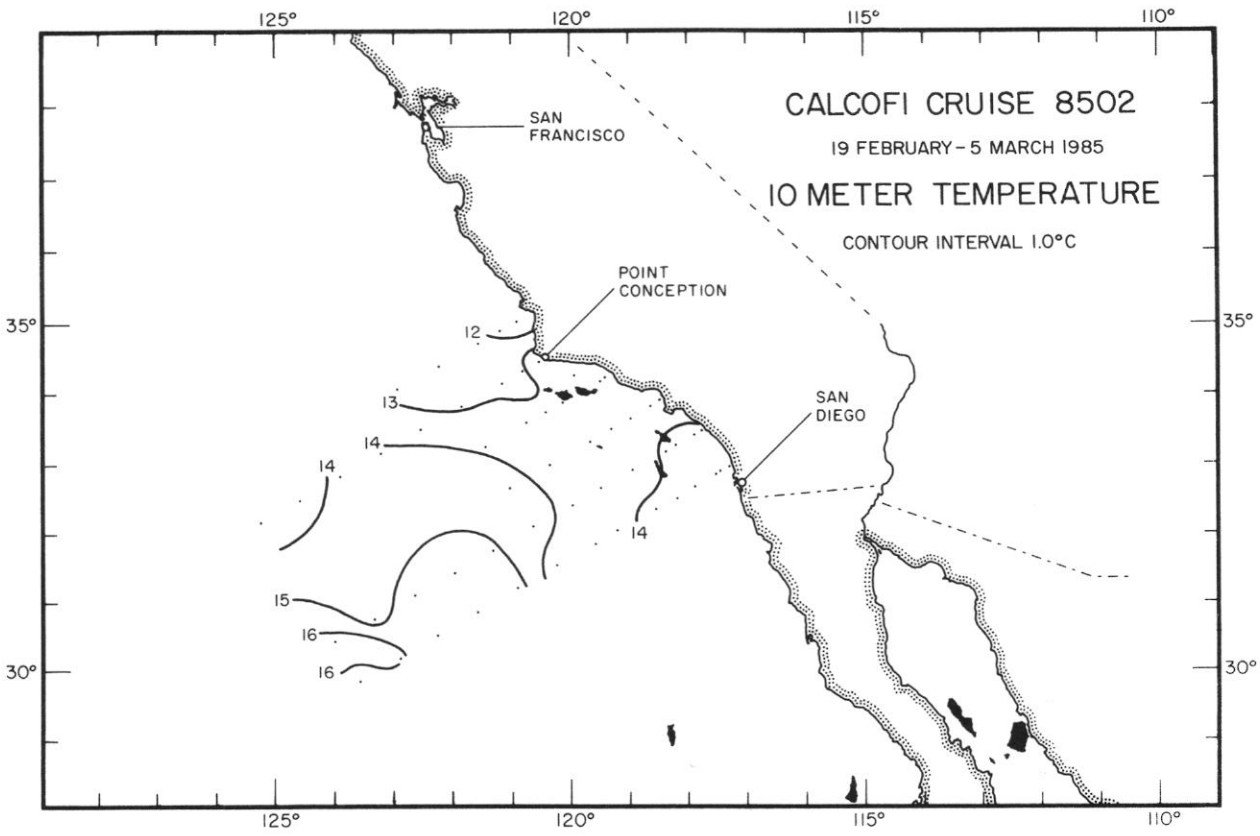


FIGURE 4



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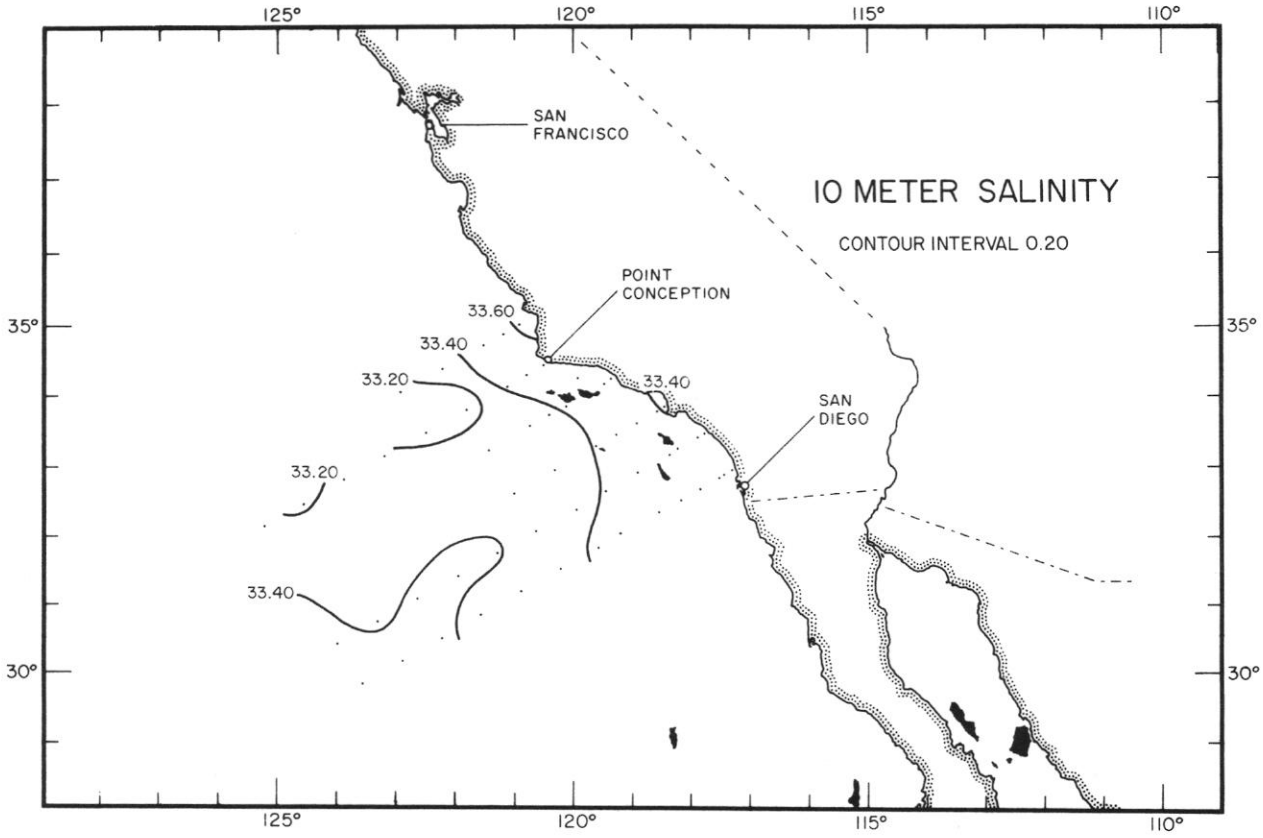

FIGURE 6

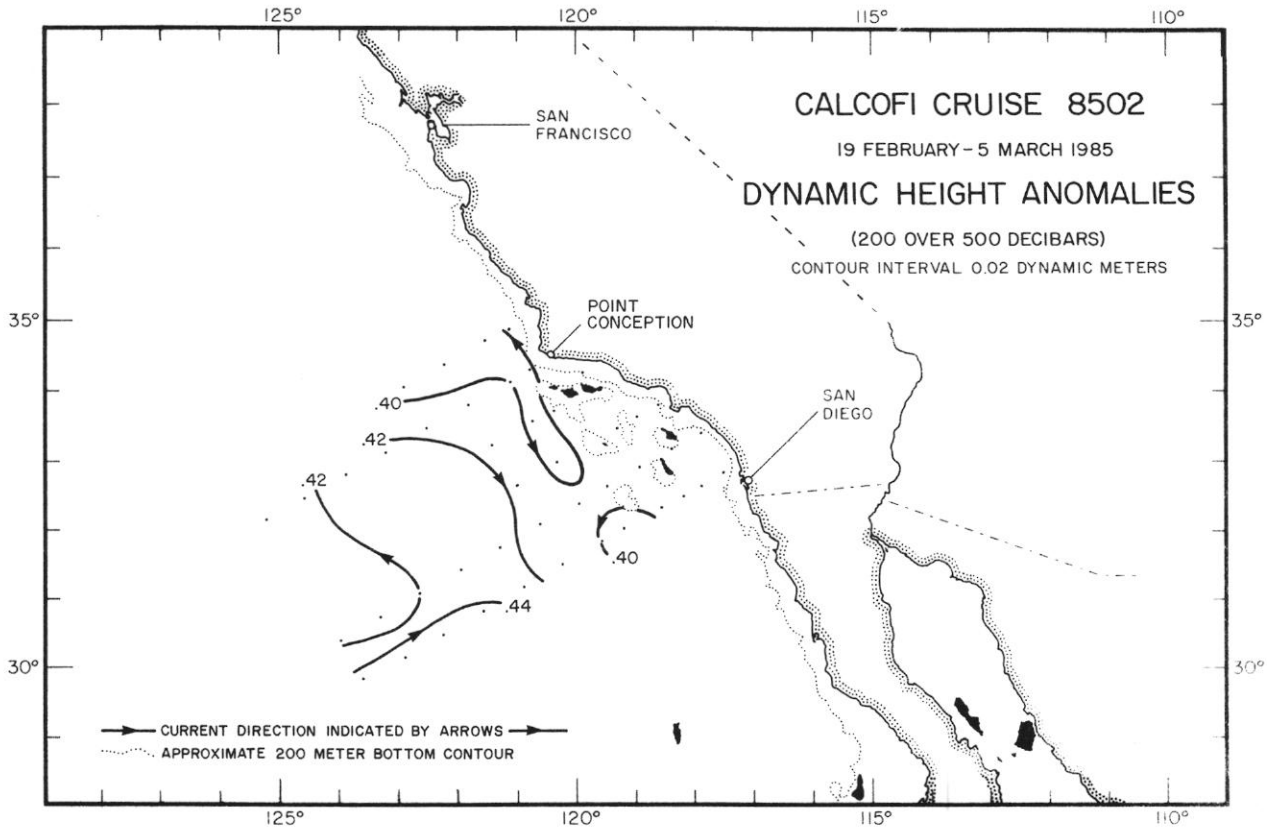

FIGURE 7

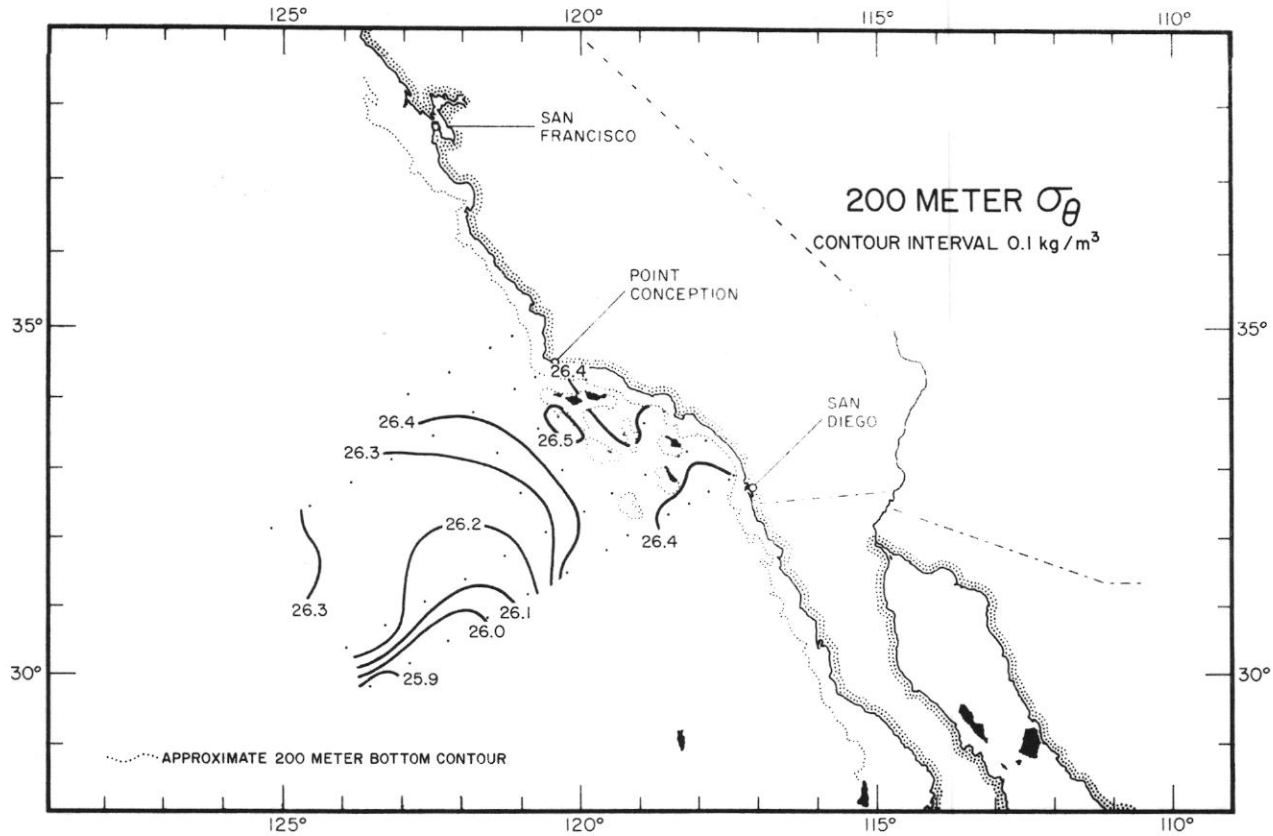

FIGURE 8

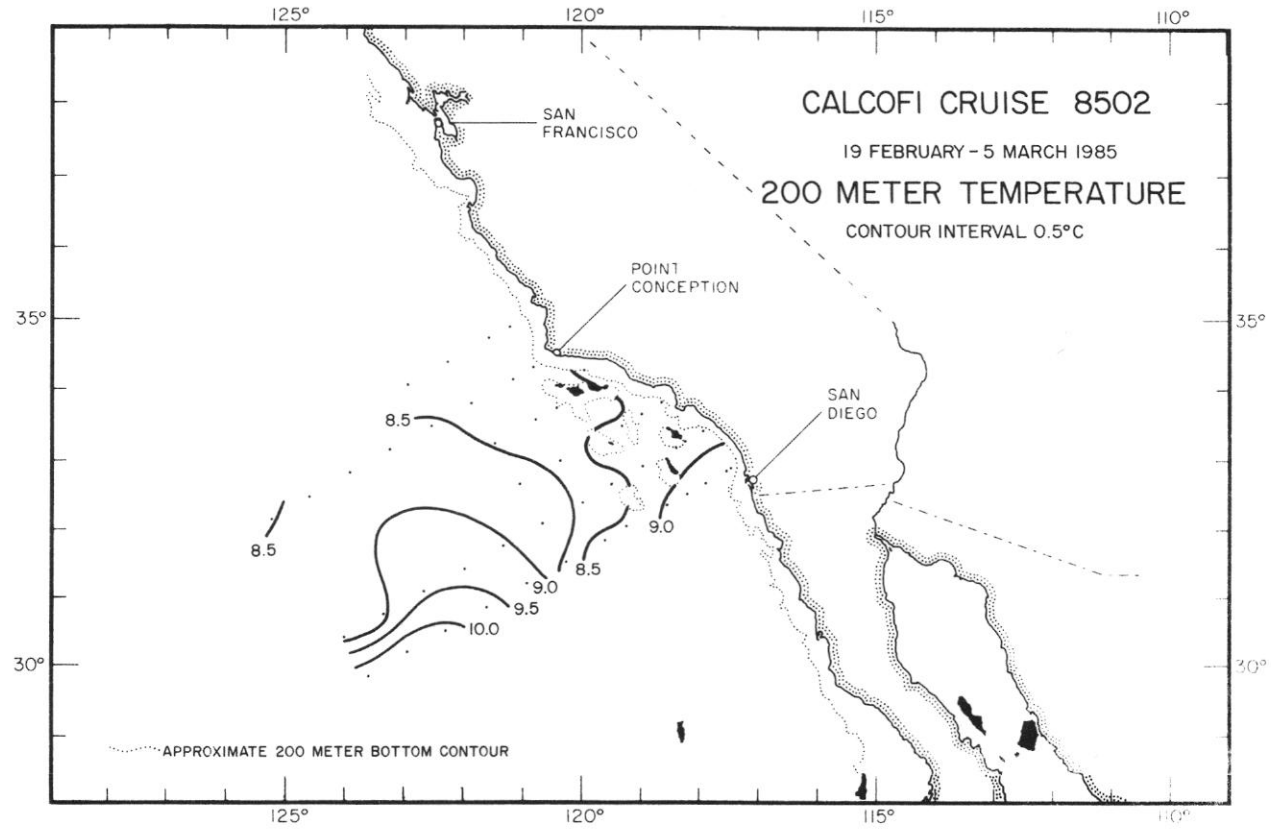

FIGURE 9

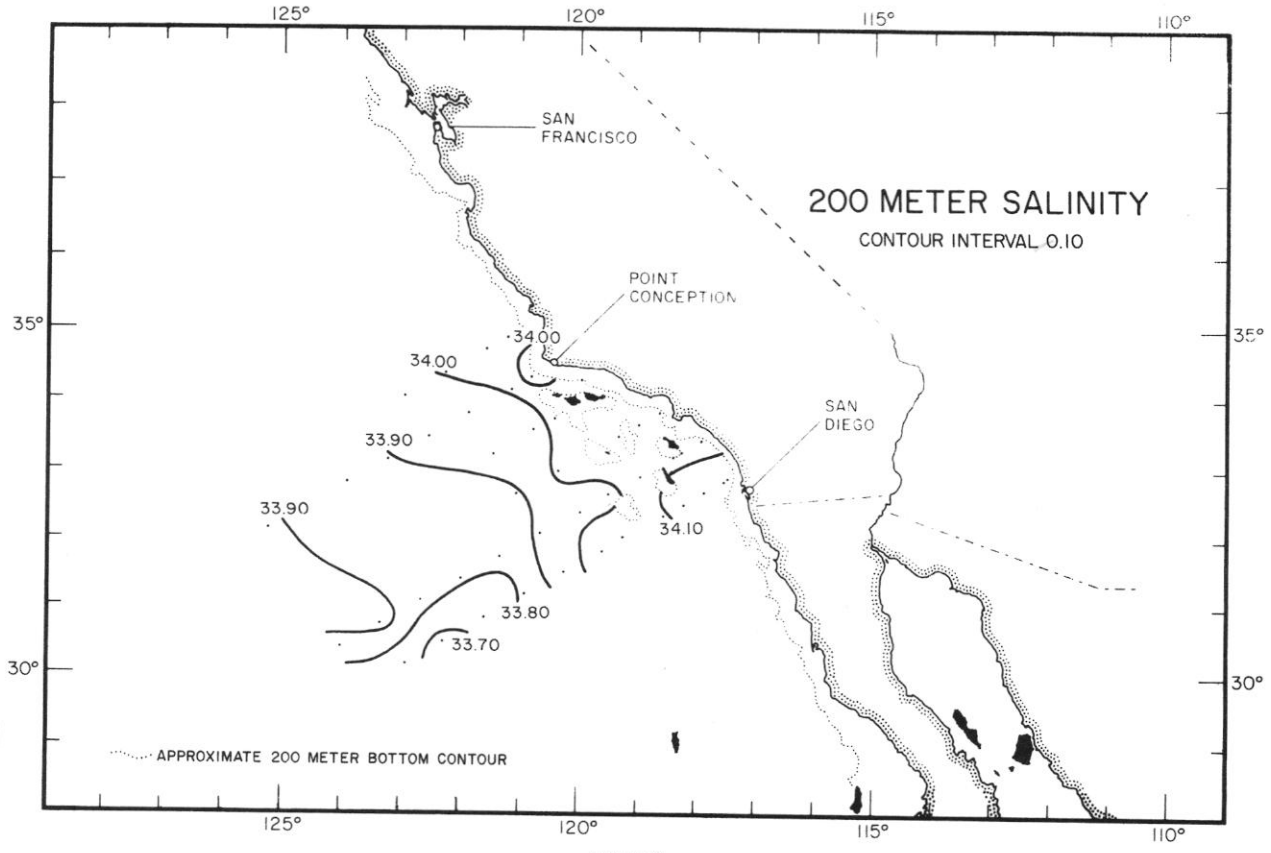

FIGURE 10

PERSONNEL

Cruise 8502

SHIP'S CAPTAIN

Frederick J. Jones, RV *McArthur*

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

RV *McArthur*

Metoyer, Jack D. (in charge)	Biological Technician, NMFS
Bryan, Walter R.	Marine Technician, SIO
Cummings, Sherry L.	Staff Research Associate, SIO
Hester, Arthur W.	Staff Research Associate, SIO
Kemper, Cecelia A.	Staff Research Associate, SIO
Marchant, Paul	Volunteer
McCallister, Tracy A.	Volunteer
Methot, Dr. Richard D.	Fishery Biologist, NMFS
Schmitt, Walter R.	Staff Research Associate, SIO

RV MCARTHUR CALCOFI CRUISE 8502 STATION 77 51

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
35 01.3 N	120 55.0 W	05/03/85	0416 GMT	228 M	320	10 KT	330 04 05	1	1018.4 MB	10.2 C	6.6 C	1/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0		11.66	11.66	33.619	25.582	239.5	.000	5.68	92.4	9.3	.91	7.3	.21	1.96	.44	0
1	10		11.67	11.67	33.616	25.577	240.2	.024	5.57	90.6	9.2	.91	7.4	.21	1.91	.42	10
1	20		11.60	11.60	33.617	25.591	239.1	.048	5.47	88.8	9.7	.93	7.8	.20	1.81	.56	20
1	30		11.31	11.31	33.611	25.639	234.7	.071	4.90	79.1	12.3	1.11	11.3	.19	1.19	.56	30
1	39		10.80	10.79	33.605	25.726	226.6	.092	4.08	65.1	16.6	1.36	17.1	.13	.25	.43	39
1	49		10.59	10.59	33.626	25.779	221.8	.114	3.91	62.1	18.0	1.43	18.2	.10	.16	.36	49
	50	ISL	10.55	10.55	33.629	25.788	221.0	.117	3.90	61.9							50
1	59		10.29	10.28	33.653	25.853	214.9	.136	3.83	60.5	19.6	1.48	19.5	.06	.13	.30	59
1	69		9.99	9.98	33.678	25.923	208.5	.157	3.74	58.7	21.3	1.55	20.7	.08	.09	.21	69
	75	ISL	9.85	9.84	33.688	25.956	205.5	.170	3.71	58.1							76
1	83		9.73	9.72	33.711	25.993	202.1	.186	3.63	56.6	22.9	1.62	22.2	.03	.09	.35	83
	100	ISL	9.74	9.72	33.868	26.115	190.9	.220	2.91	45.4							101
1	101		9.74	9.72	33.879	26.123	190.2	.223	2.85	44.5	28.0	1.85	25.1	.02	.05	.19	102
1	120		9.70	9.69	33.891	26.139	189.1	.258	2.80	43.7	28.4	1.87	25.6	.02	.04	.15	121
	125	ISL	9.62	9.60	33.905	26.164	186.8	.267	2.76	42.9							126
1	139		9.31	9.30	33.950	26.249	179.0	.293	2.61	40.4	31.9	1.99	27.6	.00	.03	.19	140
	150	ISL	9.17	9.15	33.964	26.283	175.9	.312	2.57	39.6							151
1	167		8.96	8.94	33.980	26.330	171.6	.342	2.50	38.4	34.6	2.05	28.8	.01			168
1	195		8.44	8.42	34.040	26.457	160.1	.388	2.16	32.8	41.9	2.23	31.8	.02			196

RV MCARTHUR CALCOFI CRUISE 8502 STATION 77 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 53.2 N	121 12.2 W	05/03/85	0034 GMT	550 M	320	18 KT	330 06 06	1	1019.1 MB	11.7 C	9.3 C	2/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0		12.06	12.06	33.540	25.444	252.6	.000	5.98	98.1	7.8	.73	5.2	.17	1.19	.16	0
1	10		11.89	11.89	33.538	25.475	249.8	.025	5.97	97.5	8.0	.75	5.4	.17	1.19	.27	10
	20	ISL	11.82	11.82	33.538	25.488	248.9	.050	5.91	96.3							20
1	21		11.82	11.82	33.538	25.489	248.8	.052	5.90	96.2	7.8	.75	5.5	.18	1.55	.41	21
	30	ISL	11.82	11.81	33.538	25.490	249.0	.075	5.87	95.8							30
1	31		11.82	11.81	33.538	25.490	249.0	.077	5.87	95.7	7.7	.75	5.6	.18	1.45	.32	31
1	41		11.81	11.81	33.538	25.490	249.2	.102	5.87	95.7	7.7	.76	5.6	.18	1.35	.40	41
	50	ISL	11.73	11.72	33.548	25.514	247.1	.125	5.69	92.7							50
1	52		11.71	11.71	33.550	25.519	246.7	.129	5.66	92.1	8.4	.82	6.6	.19	1.23	.47	52
1	62		10.94	10.94	33.614	25.708	229.9	.153	4.26	68.2	15.9	1.26	15.4	.17	.27	.45	62
1	72		10.70	10.70	33.664	25.790	221.4	.175	3.95	62.9	18.6	1.38	17.9	.06	.19	.46	72
	75	ISL	10.54	10.54	33.682	25.831	217.5	.182	3.83	60.9							76
1	88		9.97	9.96	33.737	25.972	204.2	.209	3.48	54.6	23.1	1.60	22.3	.01	.06	.21	88
	100	ISL	9.79	9.78	33.756	26.018	200.2	.234	3.41	53.3							101
1	102		9.77	9.76	33.759	26.023	199.6	.239	3.41	53.3	24.5	1.65	23.3	.01	.04	.18	103
1	122		9.27	9.26	33.852	26.178	185.3	.277	3.11	48.1	28.4	1.82	26.1	.01	.03	.14	123
	125	ISL	9.21	9.20	33.863	26.197	183.6	.282	3.08	47.5							126
1	148		8.77	8.76	33.938	26.325	171.7	.323	2.86	43.7	32.8	1.94	28.7	.00	.03	.10	149
	150	ISL	8.76	8.74	33.942	26.330	171.3	.326	2.85	43.5							151
1	178		8.58	8.56	33.987	26.394	165.7	.374	2.67	40.7	35.7	2.03	29.8	.00			179
	200	ISL	8.21	8.19	34.018	26.474	158.4	.409	2.55	38.5							202
1	208		8.08	8.06	34.027	26.501	155.9	.421	2.51	37.8	40.6	2.13	31.8	.00			209
1	239		7.79	7.77	34.042	26.556	151.1	.469	2.40	35.9	43.9	2.20	33.1	.00			240
	250	ISL	7.69	7.66	34.050	26.578	149.2	.486	2.31	34.5							252
1	278		7.42	7.40	34.070	26.631	144.5	.527	2.04	30.3	49.8	2.36	35.7	.00			280
	300	ISL	7.18	7.15	34.077	26.671	140.9	.558	1.85	27.2							302
1	328		6.87	6.84	34.085	26.721	136.5	.597	1.60	23.4	58.5	2.54	38.6	.02			330
1	387		6.42	6.39	34.137	26.821	127.5	.676	1.09	15.8	68.3	2.78	42.4	.00			390
	400	ISL	6.33	6.30	34.154	26.846	125.3	.692	.99	14.3							403
1	447		6.02	5.98	34.217	26.937	117.0	.748	.66	9.5	78.5	2.97	44.6	.00			450
	500	ISL	5.68	5.63	34.262	27.015	110.0	.809	.45	6.4							504
1	512		5.60	5.56	34.269	27.030	108.7	.822	.42	6.0	87.6	3.09	46.3	.00			516

RV MCARTHUR CALCOFI CRUISE 8502 STATION 77 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 43.6 N	121 33.2 W	04/03/85	2056 GMT	952 M	330	25 KT	340 05 06	1	1020.8 MB	12.8 C	10.4 C	7/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	12.31	12.31	33.515	25.377	258.9	.000	5.97	98.4	5.8	.66	3.4		.88	.18	0
1	10	12.30	12.30	33.513	25.378	259.1	.026	5.98	98.5	5.8	.65	3.4		.74	.19	10
	20 ISL	12.26	12.26	33.512	25.386	258.6	.052	5.97	98.3							20
1	26	12.23	12.23	33.512	25.391	258.2	.067	5.96	98.0	5.7	.65	3.3		.73	.25	26
	30 ISL	12.22	12.21	33.512	25.393	258.1	.078	5.95	97.9							30
1	42	12.20	12.19	33.512	25.398	258.0	.108	5.93	97.5	5.9	.64	3.4		.59	.30	42
	50 ISL	12.18	12.17	33.512	25.401	257.9	.129	5.93	97.4							50
1	57	12.17	12.16	33.511	25.403	257.9	.147	5.93	97.4	6.1	.67	3.3		.59	.29	57
1	67	11.73	11.72	33.593	25.549	244.2	.172	4.80	78.2	11.2	1.02	9.9		.21	.33	67
	75 ISL	10.94	10.93	33.618	25.712	228.8	.191	4.09	65.4							76
1	78	10.68	10.68	33.625	25.762	224.1	.197	3.92	62.4	17.6	1.39	17.9		.13	.29	78
1	93	9.93	9.92	33.702	25.953	206.2	.229	3.60	56.4	22.1	1.59	21.6		.04	.16	93
	100 ISL	9.65	9.64	33.748	26.035	198.5	.244	3.43	53.4							101
1	108	9.43	9.42	33.793	26.106	191.9	.261	3.27	50.7	26.1	1.64	24.2		.04	.14	109
1	123	9.28	9.27	33.826	26.156	187.4	.289	3.17	49.0	27.7	1.78	25.0		.02	.12	124
	125 ISL	9.25	9.24	33.832	26.166	186.5	.292	3.16	48.8							126
1	149	8.73	8.71	33.922	26.319	172.3	.336	2.98	45.5	32.3	1.90	27.8		.02	.08	150
	150 ISL	8.71	8.70	33.925	26.324	171.9	.337	2.98	45.4							151
1	169	8.41	8.39	33.970	26.406	164.3	.369	2.88	43.7	35.2	1.85	29.1		.02	.08	170
1	190	8.15	8.13	34.002	26.471	158.5	.403	2.75	41.5	37.8	1.87	30.2				191
	200 ISL	8.07	8.05	34.015	26.494	156.4	.419	2.64	39.7							202
1	210	7.99	7.97	34.026	26.514	154.7	.434	2.53	38.0	40.9	2.02	31.5				211
1	241	7.60	7.57	34.042	26.584	148.4	.480	2.44	36.3	44.5	2.16	32.9				242
	250 ISL	7.46	7.44	34.050	26.610	146.1	.494	2.30	34.2							252
1	281	7.04	7.01	34.079	26.692	138.5	.539	1.78	26.2	53.9	2.19	36.6				283
	300 ISL	6.82	6.79	34.092	26.732	135.0	.564	1.58	23.1							302
1	342	6.44	6.40	34.115	26.802	128.7	.620	1.25	18.1	64.6	2.51	40.6				344
	400 ISL	6.12	6.09	34.160	26.878	122.1	.693	.88	12.7							403
1	417	6.05	6.01	34.173	26.898	120.3	.713	.80	11.5	73.2	2.64	43.0				420
1	493	5.57	5.53	34.236	27.007	110.6	.800	.52	7.4	84.2	2.89	45.6				496
	500 ISL	5.54	5.50	34.243	27.017	109.8	.809	.50	7.1							504
1	567	5.35	5.31	34.308	27.091	103.4	.880	.38	5.4		3.03	46.0				571

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LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 23.4 N	122 14.5 W	04/03/85	1409 GMT	4011 M	340	18 KT	340 08 08	1	1020.0 MB	11.0 C	9.8 C	7/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	12.33	12.33	33.331	25.232	272.7	.000	6.04	99.5	4.4	.56	1.7		.69	.28	0
1	9	12.33	12.32	33.329	25.230	273.1	.024	6.05	99.6	4.3	.55	1.7		.71	.23	9
	10 ISL	12.33	12.32	33.329	25.231	273.1	.027	6.05	99.6							10
	20 ISL	12.32	12.32	33.329	25.232	273.2	.055	6.04	99.5							20
1	24	12.32	12.31	33.330	25.233	273.2	.065	6.04	99.4	4.4	.54	1.7		.73	.19	24
	30 ISL	12.32	12.32	33.329	25.232	273.5	.082	6.04	99.4							30
1	38	12.33	12.33	33.328	25.230	273.9	.103	6.03	99.3	4.3	.54	1.5		.73	.30	38
	50 ISL	12.33	12.33	33.330	25.231	274.1	.137	6.03	99.3							50
1	52	12.33	12.33	33.330	25.231	274.2	.142	6.03	99.3	4.2	.54	1.4		.70	.21	52
1	66	11.20	11.19	33.496	25.570	242.1	.177	4.64	74.7	12.7	1.13	12.5		.11	.19	66
1	75	10.56	10.55	33.593	25.759	224.3	.198	4.10	65.1	16.9	1.35	17.0		.05	.13	75
1	89	9.92	9.91	33.622	25.892	211.8	.229	3.96	62.0	19.9	1.49	19.9		.03	.09	89
	100 ISL	9.54	9.52	33.700	26.016	200.3	.252	3.69	57.4							101
1	107	9.35	9.34	33.756	26.090	193.4	.267	3.50	54.2	25.1	1.70	22.8		.02	.08	108
	125 ISL	9.11	9.10	33.837	26.192	184.0	.300	3.15	48.5							126
1	126	9.10	9.08	33.841	26.198	183.5	.302	3.13	48.2	28.8	1.78	25.9		.01	.07	127
1	145	8.72	8.70	33.920	26.320	172.2	.336	2.93	44.7	32.0	1.95	27.4		.02	.06	146
	150 ISL	8.68	8.66	33.928	26.332	171.1	.344	2.91	44.4							151
1	164	8.56	8.55	33.945	26.363	168.4	.368	2.88	43.8	33.6	2.00	28.6		.02	.08	165
1	182	8.20	8.18	33.989	26.453	160.1	.398	2.78	42.0	36.9	2.07	29.5				183
	200 ISL	8.01	7.99	34.008	26.496	156.3	.426	2.68	40.2							202
1	201	8.01	7.99	34.008	26.497	156.2	.427	2.67	40.1	39.5	2.14	30.9				202
1	234	7.52	7.50	34.047	26.598	146.9	.477	2.21	32.9	46.9	2.31	32.8				235
	250 ISL	7.34	7.32	34.059	26.634	143.7	.501	2.03	30.0							252
1	281	7.05	7.02	34.077	26.689	138.8	.545	1.72	25.3	54.8	2.44	36.5				283
	300 ISL	6.89	6.86	34.089	26.721	136.0	.571	1.55	22.7							302
1	335	6.61	6.58	34.111	26.775	131.3	.617	1.26	18.3	63.0	2.72	39.3				337
	400 ISL	6.13	6.10	34.141	26.862	123.6	.700	.89	12.8							403
1	419	6.00	5.97	34.152	26.887	121.4	.724	.80	11.5	74.5	2.83	43.0				422
	500 ISL	5.54	5.50	34.250	27.022	109.2	.817	.42	6.0							504
1	506	5.51	5.47	34.258	27.032	108.3	.824	.40	5.7	86.5	3.14	46.1				510
1	600	5.23	5.18	34.322	27.117	101.2	.922	.28	3.9		3.24	46.8				604

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LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 09.1 N	121 08.2 W	01/03/85	0819 GMT	2079 M	320	18 KT	310 04 05	0	1020.6 MB	12.4 C	11.5 C	0/8	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	12.82	12.82	33.458	25.235	272.4	.000	6.22	103.6	2.3	.45	.6	.05	.38	.10	0
1	10	12.70	12.69	33.458	25.259	270.4	.027	6.23	103.5	2.6	.46	.8	.06	.49	.15	10
	20 ISL	12.54	12.53	33.487	25.313	265.5	.054	6.04	100.1							20
1	26	12.41	12.40	33.504	25.351	262.0	.069	5.87	96.9	4.3	.60	2.4	.12	.54	.25	26
	30 ISL	12.26	12.26	33.497	25.373	260.0	.080	5.74	94.5							30
1	41	11.85	11.85	33.491	25.447	253.3	.108	5.30	86.5	7.9	.83	6.9	.20	.47	.38	41
	50 ISL	11.54	11.53	33.548	25.549	243.8	.131	4.77	77.3							50
1	57	11.29	11.28	33.601	25.636	235.7	.147	4.37	70.5	14.3	1.19	13.6	.19	.34	.38	57
1	72	10.58	10.57	33.687	25.830	217.5	.181	3.68	58.5	19.8	1.50	19.2	.04	.18	.26	72
	75 ISL	10.47	10.46	33.708	25.865	214.2	.188	3.59	56.9							76
1	82	10.28	10.27	33.747	25.928	208.4	.202	3.44	54.3	22.4	1.60	21.3	.04	.10	.25	82
1	97	9.85	9.84	33.819	26.057	196.3	.234	3.18	49.8	25.6	1.73	23.5	.02	.07	.17	98
	100 ISL	9.81	9.80	33.825	26.069	195.2	.239	3.16	49.3							101
1	117	9.57	9.56	33.859	26.135	189.4	.272	3.03	47.2	27.4	1.84	24.8	.01	.05	.15	118
	125 ISL	9.46	9.44	33.878	26.168	186.3	.287	2.97	46.1							126
1	138	9.22	9.21	33.912	26.233	180.4	.311	2.88	44.5	30.1	1.93	26.4	.01	.04	.17	139
	150 ISL	8.93	8.92	33.944	26.305	173.7	.332	2.85	43.7							151
1	159	8.72	8.70	33.968	26.358	168.8	.347	2.82	43.1	33.6	2.02	28.4	.02	.03	.12	160
1	179	8.43	8.41	34.004	26.430	162.2	.380	2.68	40.7	36.8	2.11	29.5	.01	.03	.15	180
1	200	8.17	8.15	34.026	26.487	157.1	.414	2.61	39.4	39.3	2.11	30.4	.01			201
1	220	8.03	8.01	34.066	26.540	152.5	.444	2.18	32.8	43.4	2.30	32.2	.01			221
	250 ISL	7.81	7.79	34.098	26.597	147.5	.490	1.90	28.4							252
1	255	7.77	7.75	34.101	26.605	146.8	.498	1.87	28.0	48.4	2.44	34.3	.01			257
	300 ISL	7.45	7.43	34.133	26.677	140.6	.562	1.59	23.6							302
1	306	7.40	7.38	34.136	26.686	139.8	.570	1.55	23.0	54.2	2.59	36.6	.01			308
1	363	6.74	6.71	34.149	26.789	130.5	.647	1.15	16.8	64.1	2.74	38.8				365
	400 ISL	6.35	6.32	34.155	26.845	125.4	.695	.96	13.9							403
1	449	5.95	5.91	34.176	26.913	119.3	.754	.76	10.9	75.3	3.00	44.0	.01			452
	500 ISL	5.72	5.68	34.235	26.989	112.6	.814	.56	7.9							504
1	534	5.60	5.56	34.278	27.037	108.3	.851	.45	6.4	85.0	3.14	46.1	.02			538
	600 ISL	5.28	5.23	34.332	27.119	101.1	.920	.37	5.3							605
1	620	5.16	5.11	34.343	27.141	99.0	.941	.35	4.9	93.2	3.23	47.5	.00			625

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LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 48.9 N	121 50.5 W	01/03/85	1313 GMT	3567 M	320	20 KT	320 04 07	2	1020.9 MB	13.2 C	11.0 C	3/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	13.01	13.01	33.150	24.958	298.8	.000	6.14	102.5	2.3	.46	.2	.00	.78	.07	0
1	10	12.98	12.98	33.147	24.962	298.7	.030	6.17	102.9	2.1	.46	.2	.00	.69	.11	10
	20 ISL	12.89	12.89	33.151	24.984	296.9	.060	6.16	102.6							20
1	25	12.84	12.83	33.157	24.999	295.5	.074	6.16	102.4	2.1	.42	.2	.00	.65	.16	25
	30 ISL	12.80	12.79	33.166	25.013	294.3	.089	6.09	101.2							30
1	40	12.70	12.69	33.196	25.056	290.4	.118	5.96	98.8	2.7	.45	.3	.00	.37	.11	40
	50 ISL	12.49	12.48	33.254	25.141	282.6	.147	5.95	98.2							50
1	55	12.40	12.39	33.285	25.183	278.8	.160	5.94	97.9	3.7	.56	1.7	.00	.36	.15	55
1	71	12.37	12.36	33.390	25.271	270.7	.204	6.02	99.2	4.0	.55	1.5	.00	.40	.24	71
	75 ISL	12.27	12.26	33.397	25.297	269.5	.216	5.91	97.2							76
1	81	12.09	12.08	33.400	25.333	265.1	.231	5.72	93.7	5.3	.64	3.5	.07	.22	.23	81
1	96	11.39	11.38	33.407	25.468	252.6	.269	5.17	83.5	8.8	.89	9.0	.13	.13	.27	96
	100 ISL	11.11	11.10	33.433	25.538	245.9	.281	4.98	79.9							101
1	115	10.25	10.24	33.554	25.782	222.9	.317	4.32	68.1	15.7	1.21	16.2	.01	.04	.09	116
	125 ISL	10.04	10.03	33.618	25.869	214.9	.338	3.97	62.3							126
1	135	9.87	9.86	33.676	25.943	208.1	.360	3.70	57.9	20.9	1.51	21.0	.02	.02	.09	136
	150 ISL	9.41	9.39	33.734	26.065	196.6	.389	3.71	57.4							151
1	155	9.23	9.22	33.754	26.109	192.5	.399	3.71	57.3	23.9	1.55	22.7		.02	.10	156
1	175	8.73	8.71	33.861	26.272	177.3	.436	3.27	49.9	30.0	1.86	26.8		.02	.20	176
1	195	8.42	8.40	33.943	26.384	166.9	.470	3.34	50.7	32.3	1.79	25.9				196
	200 ISL	8.34	8.31	33.957	26.408	164.8	.479	3.40	51.4							202
1	215	8.09	8.07	33.982	26.465	159.5	.503	3.54	53.3	34.1	1.82	27.1				216
1	250	7.52	7.50	33.989	26.553	151.5	.557	3.37	50.1	40.0	1.90	28.7				251
1	299	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				[illegible]
	300 ISL	6.95	6.93	34.015	26.653	142.5	.631	2.52	37.0							302
1	354	6.34	6.31	34.022	26.741	134.5	.705	1.97	28.5	59.9	2.55	38.3				356
	400 ISL	5.94	5.90	34.056	26.820	127.4	.766	1.43	20.5							403
1	437	5.67	5.63	34.092	26.881	121.8	.812	1.04	14.8	75.0	2.95	43.9				440
	500 ISL	5.28	5.24	34.153	26.976	113.3	.886	.66	9.4							504
1	521	5.18	5.13	34.175	27.006	110.5	.910	.58	8.2	87.2	3.07	46.7				525
	600 ISL	4.86	4.81	34.272	27.120	100.3	.993	.32	4.5							605
1	606	4.84	4.79	34.280	27.128	99.6	.998	.31	4.3		3.24	49.1				610

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LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYP
34 03.9 N	122 56.6 W	04/03/85	0939 GMT	4320 M	320	20 KT	360 15 07		1021.1 MB	11.8 C	9.9 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	12.67	12.67	33.117	25.000	294.8	.000	6.13	101.5	3.1	.46	.3	.02	.40	.07	0
1	10	12.66	12.66	33.113	24.998	295.2	.029	6.13	101.5	2.9	.45	.4	.04	.42	.06	10
	20 ISL	12.65	12.65	33.113	25.000	295.3	.059	6.12	101.3							20
1	26	12.65	12.65	33.113	25.001	295.3	.076	6.11	101.2	2.9	.44	.3	.02	.40	.10	26
	30 ISL	12.65	12.65	33.113	25.001	295.4	.089	6.11	101.2							30
1	42	12.66	12.65	33.117	25.003	295.6	.123	6.11	101.2	2.8	.43	.3	.07	.42	.06	42
	50 ISL	12.67	12.66	33.118	25.003	295.9	.148	6.13	101.5							50
1	57	12.67	12.66	33.118	25.002	296.1	.168	6.14	101.7	2.8	.42	.4	.08	.41	.06	57
1	73	11.94	11.93	33.196	25.201	277.4	.213	5.62	91.7	5.5	.66	4.3	.04	.19	.07	73
	75 ISL	11.78	11.77	33.223	25.252	272.6	.220	5.50	89.5							76
1	83	11.26	11.25	33.313	25.418	257.0	.240	5.12	82.4	8.5	.91	8.8	.03	.06	.07	83
1	99	10.45	10.44	33.391	25.621	237.9	.279	4.65	73.6	13.5	1.20	14.1	.00	.01	.07	99
	100 ISL	10.37	10.36	33.407	25.648	235.4	.283	4.59	72.5							101
1	118	9.44	9.42	33.612	25.964	205.6	.323	3.86	59.8	23.0	1.62	22.3	.03	.01	.06	119
	125 ISL	9.23	9.22	33.662	26.036	198.8	.337	3.69	56.9							126
1	139	8.91	8.90	33.747	26.154	187.9	.364	3.47	53.2	28.3	1.81	25.6	.00	.01	.04	140
	150 ISL	8.72	8.70	33.805	26.230	180.8	.384	3.48	53.1							151
1	160	8.56	8.54	33.858	26.296	174.7	.402	3.49	53.1	30.4	1.81	26.1	.00	.00	.05	161
1	180	8.24	8.22	33.971	26.433	161.9	.435	3.04	45.9	35.6	2.00	29.0	.02	.00	.04	181
	200 ISL	8.05	8.03	33.984	26.472	158.4	.468	3.20	48.1							202
1	201	8.04	8.02	33.985	26.474	158.3	.469	3.21	48.3	36.6	1.96	28.9	.02			202
1	221	7.63	7.61	33.992	26.540	152.3	.500	3.38	50.4	39.9	1.96	28.6	.02			222
	250 ISL	7.23	7.21	34.006	26.607	146.2	.543	2.89	42.7							252
1	256	7.16	7.13	34.008	26.619	145.1	.553	2.74	40.4	48.3	2.21	33.0	.01			258
	300 ISL	6.63	6.60	34.012	26.694	138.3	.615	2.29	33.4							302
1	308	6.54	6.51	34.013	26.708	137.2	.626	2.22	32.3	57.9	2.45	37.3	.01			310
1	364	6.02	5.99	34.059	26.811	127.8	.699	1.40	20.1	69.6	2.67	40.9	.01			366
	400 ISL	5.81	5.78	34.096	26.866	122.8	.745	1.04	14.8							403
1	450	5.58	5.54	34.144	26.933	116.9	.805	.71	10.1	82.5	3.03	45.9	.02			453
	500 ISL	5.28	5.24	34.178	26.996	111.4	.862	.54	7.7							504
1	535	5.08	5.04	34.200	27.037	107.7	.900	.48	6.7	96.3	3.15	48.3	.00			539
	600 ISL	4.79	4.74	34.252	27.112	101.0	.968	.34	4.7							605
1	620	4.71	4.66	34.270	27.135	98.9	.988	.30	4.2		3.23	49.4	.00			625

RV MCARTHUR CALCOFI CRUISE 8502 STATION 80 51

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TY
34 27.0 N	120 31.5 W	01/03/85	0146 GMT	75 M	300	20 KT	300 03 03	0	1019.8 MB	13.3 C	12.0 C	0/8

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	13.69	13.69	33.505	25.096	285.7	.000	6.24	105.8	.6	.35	.2	.01	.63	.14	0
1	10	13.70	13.70	33.499	25.090	286.5	.028	6.25	106.0	.5	.35	.1	.00	.66	.15	10
1	20	13.61	13.60	33.499	25.109	284.9	.057	6.21	105.1	.7	.38	.3	.01	.72	.14	20
	30 ISL	13.06	13.06	33.506	25.225	274.2	.085	5.51	92.2							30
1	31	13.00	12.99	33.507	25.238	272.9	.087	5.43	90.8	3.5	.65	2.1	.18	.55	.22	31
1	41	12.23	12.23	33.555	25.425	255.5	.114	4.67	76.8	9.6	.97	8.7	.35	.36	.38	41
	50 ISL	11.74	11.73	33.555	25.518	246.1	.137	4.26	69.4							50
1	51	11.70	11.70	33.563	25.530	245.6	.139	4.24	69.0	12.8	1.16	12.9	.19	.22	.32	51

RV MCARTHUR CALCOFI CRUISE 8502 STATION 80 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
34 19.1 N	120 48.0 W	01/03/85	0446 GMT	820 M	320	20 KT	320 04 06	0	1020.0 MB	12.4 C	11.5 C	0/8

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	12.69	12.69	33.454	25.256	270.4	.000	6.29	104.5	2.7	.50	.8	.00	1.01	.19	0
1	10	12.70	12.70	33.452	25.253	270.9	.027	6.32	105.0	2.7	.46	.3	.00	1.01	.14	10
1	20	12.61	12.61	33.462	25.279	268.8	.054	6.30	104.4	2.6	.46	.6	.00	1.12	.25	20
	30 ISL	12.40	12.40	33.496	25.346	262.6	.081	6.01	99.2							30
1	31	12.38	12.38	33.499	25.353	262.1	.083	5.98	98.7	3.8	.56	1.0	.00	1.24	.81	31
1	41	12.24	12.23	33.497	25.379	259.8	.109	5.78	95.1	5.3	.65	3.1	.00	1.37	.95	41
	50 ISL	12.16	12.15	33.521	25.412	256.9	.133	5.59	91.9							50
1	56	12.06	12.05	33.542	25.448	253.5	.147	5.42	88.8	8.3	.81	6.0	.13	.57	.66	56
1	66	11.58	11.58	33.577	25.563	242.8	.172	4.89	79.4	11.3	1.00	9.7	.12	.36	.51	66
	75 ISL	11.15	11.14	33.665	25.710	229.0	.194	4.17	67.0							76
1	76	11.13	11.12	33.671	25.720	228.0	.195	4.12	66.3	16.7	1.33	15.3	.09	.28	.34	76
1	92	10.33	10.32	33.746	25.919	209.4	.230	3.53	55.8	21.7	1.57	20.2	.02	.12	.27	92
	100 ISL	10.03	10.02	33.782	25.998	202.1	.248	3.36	52.7							101
1	111	9.72	9.70	33.818	26.079	194.6	.270	3.24	50.6	25.8	1.79	22.9	.00	.06	.19	112
	125 ISL	9.41	9.40	33.836	26.143	188.7	.296	3.27	50.8							126
1	131	9.30	9.28	33.840	26.165	186.7	.308	3.29	50.9	27.3	1.83	24.5	.00	.05	.18	132
	150 ISL	9.08	9.07	33.857	26.213	182.5	.343	3.30	50.7							151
1	157	9.01	9.00	33.867	26.232	180.9	.355	3.30	50.7	28.6	1.85	25.1	.02	.04	.15	158
1	187	8.50	8.48	33.953	26.379	167.2	.407	3.25	49.4	32.4	1.81	26.7	.01			188
	200 ISL	8.28	8.26	33.976	26.431	162.5	.429	3.21	48.6							202
1	218	8.01	7.99	34.001	26.492	157.0	.457	3.07	46.2	37.3	1.92	28.5	.01			219
	250 ISL	7.66	7.64	34.056	26.585	148.5	.507	2.31	34.4							[illegible]
1	252	7.64	7.62	34.060	26.592	147.9	.510	2.24	33.4	45.9	2.29	32.9	.01			
	300 ISL	7.30	7.28	34.151	26.712	137.2	.578	1.41	20.9							
1	303	7.28	7.25	34.156	26.719	136.5	.582	1.37	20.3	56.2	2.65	37.1	.04			305
1	359	6.57	6.54	34.161	26.820	127.4	.655	1.08	15.7	65.7	2.82	40.8	.00			361
	400 ISL	6.44	6.41	34.187	26.858	124.2	.707	.90	13.1							403
1	444	6.39	6.35	34.221	26.893	121.6	.762	.74	10.7	72.2	2.87	40.7	.00			447
	500 ISL	6.00	5.96	34.250	26.965	115.1	.828	.55	7.9							504
1	528	5.79	5.74	34.264	27.004	111.6	.860	.47	6.7	83.2	2.96	43.5	.00			532
	600 ISL	5.38	5.33	34.307	27.087	104.2	.937	.34	4.9							605
1	613	5.32	5.27	34.315	27.101	102.9	.951	.33	4.7	92.0	3.17	45.6	.01			618

RV MCARTHUR CALCOFI CRUISE 8502 STATION 80 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 29.0 N	122 31.9 W	01/03/85	1814 GMT	3894 M	310	18 KT	330 04 05	2	1023.1 MB	13.0 C	11.3 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	13.46	13.46	33.135	24.856	308.5	.000	6.07	102.2	1.7	.40	.0	.01	.36	.02	0
1	10	13.46	13.46	33.145	24.865	308.0	.031	6.08	102.4	1.7	.39	.0	.00	.35	.03	10
	20 ISL	13.50	13.50	33.169	24.875	307.2	.062	6.07	102.4							20
1	26	13.53	13.52	33.182	24.881	306.9	.080	6.07	102.4	1.6	.39	.0	.00	.39	.07	26
	30 ISL	13.53	13.52	33.182	24.881	306.9	.092	6.05	102.1							30
1	41	13.51	13.51	33.181	24.884	307.0	.125	6.02	101.5	1.7	.39	.0	.00	.42	.09	41
	50 ISL	13.51	13.50	33.180	24.884	307.2	.154	6.04	101.8							50
1	56	13.51	13.50	33.180	24.884	307.3	.171	6.05	102.0	1.7	.39	.0	.00	.37	.09	56
1	72	12.90	12.89	33.098	24.943	302.1	.220	5.99	99.7	2.0	.34	.1	.01	.22	.08	72
	75 ISL	12.83	12.82	33.127	24.979	298.7	.230	5.90	98.1							76
1	82	12.63	12.62	33.197	25.072	290.1	.249	5.69	94.2	3.1	.49	2.0	.02	.13	.09	82
1	97	11.47	11.45	33.274	25.351	263.7	.291	5.21	84.2	6.7	.70	6.9	.01	.05	.05	97
	100 ISL	11.31	11.29	33.300	25.400	259.1	.300	5.14	82.8							101
1	117	10.77	10.76	33.431	25.597	240.6	.343	4.88	77.7	10.5	.93	10.8	.01	.02	.04	118
	125 ISL	10.61	10.60	33.472	25.657	235.1	.361	4.82	76.5							126
1	138	10.28	10.27	33.543	25.770	224.6	.392	4.62	72.9	13.3	1.19	14.8	.01			139
	150 ISL	9.73	9.71	33.635	25.934	209.2	.417	4.13	64.3							151
1	158	9.33	9.32	33.702	26.052	198.0	.434	3.76	58.1	23.3	1.76	23.0	.00	.00	.03	159
1	179	8.75	8.73	33.836	26.250	179.5	.473	3.32	50.7	29.5	1.90	26.9	.00	.00	.02	180
1	199	8.54	8.52	33.928	26.353	169.9	.508	3.31	50.3	31.3	1.90	27.3	.00			200
	200 ISL	8.53	8.51	33.931	26.358	169.6	.510	3.30	50.2							202
1	220	8.28	8.26	33.965	26.423	163.6	.543	3.19	48.2	34.2	1.97	28.7	.01			221
	250 ISL	7.92	7.89	33.992	26.499	156.9	.591	3.15	47.3							252
1	256	7.85	7.82	33.994	26.510	155.8	.600	3.15	47.2	38.5	2.03	29.8	.01			257
	300 ISL	7.22	7.19	34.018	26.619	145.9	.667	2.89	42.7							302
1	307	7.12	7.09	34.021	26.635	144.3	.677	2.82	41.5	49.2	2.47	34.6	.00			309
1	364	6.48	6.45	34.046	26.741	134.8	.756	1.76	25.5	60.6	2.64	39.4	.00			366
	400 ISL	6.22	6.18	34.080	26.803	129.2	.804	1.30	18.7							403
1	450	5.92	5.88	34.132	26.882	122.2	.867	.86	12.3	74.4	2.96	44.9	.00			453
	500 ISL	5.61	5.57	34.170	26.950	116.0	.927	.62	8.8							504
1	536	5.39	5.35	34.198	26.999	111.7	.968	.51	7.2	85.9	3.11	47.6	.00			540
	600 ISL	5.04	4.99	34.260	27.090	103.4	1.036	.34	4.8							605
1	621	4.93	4.88	34.282	27.120	100.7	1.057	.30	4.2		3.21	49.3	.00			625

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LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 08.9 N	123 13.6 W	02/03/85	0016 GMT	4350 M	310	24 KT	320 05 05	2	1020.5 MB	13.2 C	11.2 C	8/8	NS

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	14.20	14.20	33.237	24.783	315.4	.000	6.01	102.8	1.6	.32	.1	.00	.14	.02	0
1	10	14.19	14.19	33.234	24.783	315.7	.031	5.95	101.8	1.6	.33	.1	.00	.13	.03	10
	20 ISL	14.18	14.17	33.234	24.787	315.5	.063	5.95	101.8							20
1	26	14.16	14.16	33.234	24.791	315.4	.082	5.95	101.7	1.4	.30	.1	.01	.14	.03	26
	30 ISL	14.14	14.14	33.236	24.796	315.0	.095	5.94	101.6							30
1	41	14.10	14.10	33.240	24.808	314.3	.129	5.93	101.3	1.3	.31	.1	.00	.18	.04	41
	50 ISL	14.10	14.10	33.235	24.804	314.9	.158	5.94	101.4							50
1	56	14.10	14.10	33.233	24.802	315.2	.176	5.94	101.4	1.3	.31	.1	.00	.20	.05	56
1	72	14.19	14.18	33.303	24.838	312.2	.226	5.87	100.5	1.4	.29	.1	.01	.21	.07	72
	75 ISL	14.17	14.16	33.303	24.843	311.9	.236	5.87	100.4							76
1	82	14.10	14.09	33.294	24.851	311.3	.257	5.86	100.1	1.4	.30	.2	.02	.18	.03	82
1	97	13.87	13.85	33.416	24.994	298.1	.302	5.64	95.9	2.4	.36	1.2	.03	.15	.10	97
	100 ISL	13.57	13.56	33.397	25.041	293.7	.312	5.57	94.2							101
1	117	11.84	11.82	33.292	25.297	269.4	.362	5.20	84.7	5.8	.72	6.8	.01	.05	.04	118
	125 ISL	11.37	11.36	33.316	25.401	259.7	.381	5.05	81.4							126
1	137	10.80	10.79	33.392	25.562	244.5	.413	4.80	76.5	10.6	1.00	12.2	.00	.03	.04	138
	150 ISL	10.33	10.31	33.484	25.716	230.1	.443	4.57	72.1							151
1	157	10.09	10.08	33.543	25.802	221.9	.459	4.42	69.4	15.2	1.23	16.7	.01	.01	.03	158
1	178	9.39	9.37	33.732	26.066	197.1	.503	3.81	59.0	22.6	1.55	22.7	.00	.01	.02	179
1	198	8.77	8.75	33.887	26.286	176.4	.540	3.33	50.9	28.9	1.80	26.9	.00			199
	200 ISL	8.74	8.72	33.895	26.298	175.4	.543	3.34	51.0							202
1	218	8.54	8.52	33.934	26.359	169.7	.574	3.39	51.6	30.8	1.83	27.3	.01			219
	250 ISL	7.98	7.95	33.985	26.484	158.3	.627	3.38	50.8							252
1	254	7.91	7.89	33.989	26.497	157.1	.633	3.38	50.7	36.0	1.89	28.8	.01			255
	300 ISL	7.36	7.34	34.011	26.593	148.4	.703	2.82	41.7							302
1	303	7.33	7.30	34.011	26.598	148.0	.708	2.76	40.8	44.7	2.16	33.0	.01			305
1	359	6.56	6.52	34.049	26.734	135.4	.787	1.77	25.7	58.6	2.57	39.3	.01			361
	400 ISL	6.16	6.13	34.075	26.806	128.9	.841	1.32	19.0							403
1	445	5.85	5.81	34.107	26.871	123.0	.898	.98	14.0	73.4	2.88	45.1	.00			448
	500 ISL	5.58	5.54	34.165	26.950	116.1	.964	.65	9.3							504
1	532	5.45	5.41	34.199	26.993	112.2	1.001	.52	7.4	86.1	3.06	48.1	.00			536
	600 ISL	5.10	5.05	34.249	27.074	105.0	1.074	.37	5.2							605
1	620	4.99	4.94	34.259	27.095	103.0	1.095	.36	5.0		3.18	49.8	.00			624

RV MCARTHUR — CALCOFI CRUISE 8502 — STATION 80 100

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 49.1 N	123 54.4 W	02/03/85	0521 GMT	4020 M	320	22 KT	320 06 05	2	1020.8 MB	12.5 C	11.0 C	3/8	NS

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	14.15	14.15	33.219	24.780	315.7	.000	5.97	102.0	2.4	.36	.1	.00	.16	.05	0
1	10	14.16	14.16	33.218	24.779	316.1	.031	5.99	102.4	2.2	.36	.1	.00	.11	.02	10
	20 ISL	14.15	14.15	33.217	24.780	316.3	.063	5.99	102.4							20
1	26	14.15	14.14	33.217	24.781	316.4	.082	5.99	102.4	2.2	.37	.1	.00	.16	.04	26
	30 ISL	14.14	14.14	33.218	24.782	316.3	.095	5.98	102.2							30
1	41	14.14	14.13	33.223	24.787	316.2	.129	5.97	102.0	2.2	.35	.0	.00	.17	.06	41
	50 ISL	14.14	14.14	33.232	24.793	315.9	.158	6.00	102.4							50
1	57	14.15	14.14	33.240	24.799	315.6	.179	6.01	102.7	2.1	.33	.0	.00	.18	.04	57
1	72	14.19	14.18	33.268	24.812	314.7	.226	5.96	102.0	2.1	.32	.0	.00	.12	.03	72
	75 ISL	14.17	14.15	33.269	24.819	314.2	.237	5.95	101.8							76
1	83	14.12	14.11	33.277	24.834	313.0	.261	5.94	101.5	2.1	.35	.0	.00	.24	.05	83
1	98	14.30	14.28	33.340	24.846	312.2	.308	5.86	100.5	2.2	.30	.1	.02	.20	.08	98
	100 ISL	14.06	14.05	33.321	24.881	309.0	.315	5.81	99.2							101
1	118	11.81	11.80	33.219	25.245	274.4	.369	5.34	86.9	6.1	.63	5.2	.01	.04	.05	119
	125 ISL	11.30	11.28	33.275	25.382	261.4	.386	5.14	82.7							126
1	138	10.55	10.53	33.427	25.633	237.7	.420	4.74	75.1	12.7	1.07	13.0	.01	.01	.03	139
	150 ISL	10.22	10.20	33.517	25.760	225.7	.447	4.48	70.6							151
1	159	10.03	10.02	33.576	25.838	218.5	.467	4.31	67.6	17.2		18.4	.00	.01	.02	160
1	180	9.42	9.40	33.701	26.037	199.9	.511	3.99	61.8	22.3	1.57	22.3	.00	.00	.02	181
	200 ISL	8.92	8.89	33.841	26.228	182.0	.549	3.54	54.3							202
1	201	8.90	8.87	33.848	26.236	181.2	.551	3.52	53.9	28.1	1.63	24.4	.03			202
1	221	8.61	8.59	33.924	26.341	171.6	.586	3.48	53.0	30.9	1.83	27.8	.00			222
	250 ISL	8.08	8.06	33.986	26.469	159.7	.634	3.07	46.3							252
1	257	7.96	7.94	33.994	26.494	157.5	.645	2.96	44.4	39.0	1.99	30.3	.01			258
	300 ISL	7.37	7.34	34.023	26.602	147.7	.711	2.47	36.6							302
1	308	7.28	7.25	34.023	26.615	146.4	.723	2.39	35.3	48.8	2.29	35.9	.00			310
1	364	6.79	6.75	34.045	26.700	138.9	.802	1.94	28.4	56.6	2.68	39.9	.00			366
	400 ISL	6.44	6.41	34.055	26.754	134.1	.852	1.65	23.9							403
1	450	6.00	5.96	34.078	26.829	127.3	.917	1.25	17.9	71.3	2.92	45.1	.00			453
	500 ISL	5.69	5.65	34.135	26.913	119.7	.979	.85	12.1							504
1	535	5.51	5.46	34.180	26.971	114.4	1.020	.61	8.7	86.4	3.14	48.7	.00			539
	600 ISL	5.17	5.12	34.237	27.057	106.8	1.091	.39	5.5							605
1	620	5.08	5.03	34.251	27.079	104.8	1.112	.37	5.2		3.21	49.4	.00			624

RV MCARTHUR — CALCOFI CRUISE 8502 — STATION 80 110

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 28.2 N	124 36.0 W	02/03/85	1149 GMT	4390 M	360	40 KT			1022.9 MB	12.0 C	8.8 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	13.75	13.75	33.188	24.840	309.9	.000	6.01	101.9							0
1	1	13.75	13.75	33.188	24.840	310.0	.003	6.01	101.9	2.3	.30	.1	.00	.23	.03	1
	10 ISL	13.76	13.76	33.186	24.836	310.7	.031	6.03	102.2							10
1	11	13.76	13.76	33.186	24.835	310.8	.034	6.03	102.2	2.1	.29	.1	.00	.22	.05	11
	20 ISL	13.76	13.75	33.185	24.836	311.0	.062	6.03	102.2							20
1	27	13.75	13.75	33.185	24.838	311.0	.084	6.03	102.2	2.0	.29	.1	.00	.22	.06	27
	30 ISL	13.75	13.75	33.185	24.837	311.2	.093	6.03	102.2							30
1	42	13.76	13.75	33.184	24.835	311.6	.130	6.02	102.0	2.0	.26	.1	.00	.23	.06	42
	50 ISL	13.75	13.74	33.185	24.839	311.5	.156	6.01	101.9							50
1	57	13.74	13.73	33.185	24.842	311.5	.177	6.01	101.8	1.9	.28	.1	.00	.28	.05	57
1	72	13.60	13.59	33.179	24.865	309.6	.223	6.01	101.5	1.8	.22	.1	.00	.34	.11	72
	75 ISL	13.57	13.56	33.179	24.870	309.3	.233	6.00	101.3							76
1	83	13.50	13.49	33.178	24.885	308.0	.257	5.98	100.8	1.9	.26	.1	.00	.28	.12	83
1	98	13.22	13.20	33.197	24.957	301.5	.302	5.95	99.7	2.3	.24	.1	.00	.13	.08	98
	100 ISL	13.11	13.10	33.208	24.986	298.8	.310	5.90	98.7							101
1	117	12.21	12.20	33.313	25.242	274.7	.360	5.41	88.8	5.3	.44	3.8	.00	.06	.07	118
	125 ISL	11.83	11.82	33.351	25.343	265.3	.380	5.18	84.4							126
1	138	11.14	11.12	33.433	25.535	247.2	.414	4.72	75.8	11.0	.93	12.1	.02	.04	.06	139
	150 ISL	10.45	10.43	33.552	25.749	227.0	.442	4.23	67.0							151
1	158	9.99	9.97	33.642	25.898	212.8	.460	3.90	61.2	20.2	1.39	20.7	.00	.01	.04	159
1	178	9.20	9.18	33.813	26.160	188.1	.500	3.35	51.7	27.5	1.66	25.4	.00	.00	.03	179
1	199	8.80	8.78	33.859	26.260	178.9	.538	3.22	49.2	30.3	1.73	26.9	.00			200
	200 ISL	8.79	8.76	33.863	26.265	178.5	.540	3.21	49.1							202
1	219	8.55	8.53	33.931	26.355	170.1	.573	2.99	45.5	33.6	1.86	28.8	.01			220
	250 ISL	8.09	8.07	34.007	26.484	159.3	.624	2.74	41.2							252
1	255	8.02	8.00	34.015	26.501	156.8	.631	2.70	40.6	39.7	2.00	31.4	.00			256
	300 ISL	7.37	7.34	34.059	26.630	144.9	.700	2.10	31.1							302
1	305	7.30	7.27	34.061	26.642	143.8	.707	2.03	30.0	50.6	2.29	36.0	.00			307
1	361	6.61	6.58	34.083	26.753	133.7	.784	1.54	22.4	61.0	2.60	39.9	.00			363
	400 ISL	6.30	6.26	34.115	26.820	127.7	.835	1.18	17.1							403
1	448	5.98	5.94	34.155	26.893	121.2	.895	.81	11.6	76.1	2.93	44.9	.00			451
	500 ISL	5.55	5.51	34.179	26.964	114.7	.957	.61	8.7							504
1	534	5.30	5.26	34.196	27.008	110.7	.995	.53	7.5	88.6	3.08	47.9	.00			538
	600 ISL	5.00	4.95	34.260	27.095	102.9	1.065	.35	4.9							605
1	622	4.93	4.88	34.287	27.123	100.4	1.087	.30	4.2		3.20	49.4	.00			626

RV MCARTHUR CALCOFI CRUISE 8502 STATION 80 120

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 09.0 N	125 15.1 W	02/03/85	1725 GMT	4300 M	330	35 KT	330 15 10	1	1026.7 MB	12.6 C	9.2 C	6/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	13.81	13.81	33.282	24.901	304.2	.000	6.03	102.4	2.4	.37	.0	.00	.45	.06	0
1	10	13.81	13.80	33.281	24.900	304.6	.030	6.05	102.7	2.4	.36	.1	.00	.46	.06	10
	20 ISL	13.80	13.80	33.287	24.905	304.3	.061	6.04	102.5							20
1	25	13.80	13.80	33.292	24.909	304.1	.076	6.03	102.4	2.3	.38	.1	.00	.46	.07	25
	30 ISL	13.78	13.77	33.287	24.911	304.1	.091	6.03	102.4							30
1	39	13.73	13.73	33.280	24.915	304.0	.118	6.04	102.4	2.4	.39	.1	.01	.47	.06	39
	50 ISL	13.41	13.40	33.279	24.981	298.1	.152	6.03	101.4							50
1	54	13.26	13.26	33.279	25.010	295.3	.163	6.02	101.0	2.7	.39	.1	.01	.49	.16	54
1	69	12.67	12.66	33.306	25.148	282.4	.206	5.73	95.0	4.0	.54	1.8	.03	.15	.11	69
	75 ISL	12.27	12.26	33.312	25.229	274.9	.224	5.43	89.3							76
1	79	12.05	12.03	33.318	25.277	270.4	.234	5.25	85.9	6.5	.74	6.1	.03	.12	.13	79
1	93	11.44	11.43	33.398	25.451	254.1	.270	4.86	78.5	9.3	.93	9.9	.01	.09	.10	93
	100 ISL	11.11	11.10	33.449	25.551	244.7	.289	4.61	74.0							101
1	112	10.56	10.54	33.533	25.714	229.4	.318	4.23	67.1	19.0		16.2	.01	.03	.05	113
	125 ISL	10.02	10.00	33.601	25.859	215.7	.346	4.01	62.9							126
1	132	9.74	9.72	33.641	25.938	208.4	.362	3.90	60.8	20.6	1.53	20.3	.01	.01	.02	133
	150 ISL	9.30	9.28	33.758	26.101	193.2	.397	3.54	54.8							151
1	152	9.25	9.24	33.773	26.120	191.4	.401	3.50	54.0	25.7	1.76	24.3		.00	.02	153
1	172	8.84	8.82	33.890	26.278	176.7	.438	3.26	49.9	29.9	1.87	27.0		.00	.02	173
1	192	8.59	8.57	33.919	26.339	171.2	.473	2.96	45.1	32.8	1.78	28.4				193
	200 ISL	8.49	8.46	33.936	26.369	168.5	.486	2.90	44.0							202
1	212	8.32	8.30	33.962	26.415	164.3	.506	2.84	43.0	36.0	1.85	29.6				213
1	248	7.79	7.77	34.028	26.544	152.4	.563	2.86	42.8	40.4	2.06	30.4				249
	250 ISL	7.76	7.73	34.030	26.551	151.8	.566	2.85	42.6							252
1	297	7.12	7.09	34.047	26.656	142.3	.636	2.42	35.6	50.3	2.34	35.1				299
	300 ISL	7.09	7.06	34.050	26.662	141.7	.640	2.38	35.0							302
1	354	6.56	6.52	34.104	26.777	131.3	.713	1.56	22.7	61.4	2.59	39.5				356
	400 ISL	6.21	6.17	34.130	26.843	125.5	.772	1.08	15.5							403
1	441	5.93	5.89	34.151	26.896	120.8	.823	.78	11.2	75.9	2.89	43.7				444
	500 ISL	5.44	5.40	34.212	27.004	110.8	.891	.54	7.7							504
1	531	5.21	5.17	34.244	27.057	105.9	.925	.47	6.6	90.1	2.99	46.3				535
	600 ISL	4.93	4.89	34.288	27.124	100.1	.996	.32	4.5							605
1	620	4.90	4.85	34.295	27.134	99.3	1.015	.29	4.1		3.20	48.9				624

RV MCARTHUR CALCOFI CRUISE 8502 STATION 82 46

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 16.4 N	119 56.3 W	28/02/85	2005 GMT	519 M	260	18 KT	300 01 03	0	1021.1 MB	13.6 C	12.0 C	0/8	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	13.87	13.87	33.507	25.060	289.0	.000	6.31	107.4	.2	.31	.1	.00	.38	.05	0
1	10	13.21	13.21	33.509	25.197	276.3	.028	6.28	105.5	1.1	.37	.4	.01	1.92	.39	10
	20 ISL	12.73	12.73	33.514	25.296	267.1	.055	5.57	92.6							20
1	21	12.70	12.70	33.515	25.303	266.5	.058	5.50	91.4	5.0	.69	4.6	.16	.71	.51	21
	30 ISL	12.56	12.56	33.522	25.335	263.7	.082	5.12	84.7							30
1	31	12.56	12.55	33.523	25.337	263.5	.084	5.09	84.3	6.1	.78	6.0	.19	.54	.46	31
1	42	12.32	12.31	33.540	25.396	258.2	.113	4.89	80.6	9.0	.97	7.4	.13	.49	.48	42
	50 ISL	11.72	11.71	33.584	25.544	244.3	.133	4.51	73.5							50
1	52	11.58	11.58	33.595	25.577	241.2	.138	4.42	71.8	12.7	1.14	11.9	.03	.34	.33	52
1	62	11.20	11.19	33.646	25.688	230.9	.161	3.95	63.6	15.8	1.31	14.7	.45	.20	.22	62
1	73			33.673			.186	3.75	60.1	17.2	1.44	16.5	.12	.18	.20	73
	75 ISL	10.85	10.84	33.680	25.778	222.6	.191	3.69	59.0							76
1	88	10.57	10.56	33.755	25.885	212.6	.219	3.41	54.2	20.6	1.58	19.6	.02	.09	.15	88
	100 ISL	10.24	10.23	33.769	25.952	206.5	.245	3.39	53.5							101
1	103	10.16	10.15	33.769	25.966	205.2	.252	3.38	53.3	22.8	1.62	20.5	.06	.06	.14	104
1	123	9.93	9.91	33.826	26.050	197.6	.292	3.18	49.9	24.9	1.63	22.1	.04	.05	.11	124
	125 ISL	9.89	9.88	33.834	26.063	196.5	.295	3.15	49.4							126
1	149	9.38	9.36	33.946	26.235	180.5	.341	2.77	42.9	30.0	1.91	25.4	.02	.03	.09	150
	150 ISL	9.37	9.36	33.948	26.238	180.3	.342	2.76	42.8							151
1	180	9.16	9.14	33.985	26.302	174.7	.395	2.59	40.0	32.6	2.04	27.0	.01			181
	200 ISL	8.92	8.90	34.021	26.367	168.8	.430	2.46	37.8							202
1	211	8.77	8.75	34.040	26.406	165.3	.448	2.36	36.1	36.5	2.15	28.5	.02			212
1	242	8.31	8.28	34.083	26.511	155.7	.497	1.78	27.0	45.1	2.40	31.7	.00			243
	250 ISL	8.20	8.17	34.091	26.535	153.6	.510	1.69	25.5							252
1	282	7.82	7.79	34.114	26.609	146.9	.559	1.46	21.9	51.4	2.59	34.3	.00			284
	300 ISL	7.64	7.61	34.124	26.643	143.9	.585	1.41	21.0							302
1	333	7.33	7.30	34.140	26.700	138.8	.631	1.31	19.4	57.1	2.44	34.6	.03			335
1	394	6.70	6.66	34.180	26.819	128.1	.713	.79	11.5	70.5	2.77	36.9	.02			397
	400 ISL	6.66	6.62	34.183	26.827	127.4	.720	.75	10.9							403
1	456	6.36	6.31	34.205	26.884	122.5	.790	.39	5.6	82.5	3.07	36.1	.03			459
	500 ISL	6.21	6.16	34.205	26.904	121.2	.844	.30	4.3							504
1	523	6.16	6.12	34.211	26.914	120.4	.872	.25	3.6		3.31	30.4	.05			527

RV MCARTHUR CALCOFI CRUISE 8502 STATION 83 40.6

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 13.5 N	119 24.6 W	28/02/85	1512 GMT	36 M	310	06 KT	310 01 04	1	1020.1 MB	12.5 C	11.4 C	1/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	13.68	13.68	33.494	25.090	286.2	.000	6.28	106.5	1.3	.35	.2		1.33	.19	0
1	10	13.60	13.59	33.496	25.109	284.7	.028	6.28	106.3	1.0	.34	.1		1.89	.22	10
	20 ISL	13.32	13.31	33.500	25.169	279.2	.057	6.26	105.4							20
1	21	13.29	13.28	33.501	25.176	278.6	.059	6.26	105.3	2.2	.45	1.2		2.68	.59	21
	30 ISL	12.98	12.98	33.512	25.245	272.2	.084	5.72	95.7							30
1	31	12.95	12.95	33.514	25.253	271.6	.087	5.65	94.4	4.8	.64	3.6	.02	1.73	.61	31

RV MCARTHUR CALCOFI CRUISE 8502 STATION 83 42

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 10.6 N	119 30.4 W	28/02/85	1248 GMT	172 M	050	04 KT	230 02 04		1019.2 MB	12.2 C	11.2 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	13.54	13.54	33.495	25.119	283.5	.000	6.28	106.2	.8	.38	.1	.00	1.43	.37	0
1	10	13.54	13.54	33.496	25.121	283.6	.028	6.29	106.3	.7	.38	.0	.00	1.69	.40	10
	20 ISL	13.45	13.44	33.497	25.141	282.0	.057	6.21	104.8							20
	30 ISL	13.29	13.29	33.498	25.173	279.1	.085	6.05	101.7							30
1	31	13.27	13.27	33.499	25.177	278.8	.087	6.03	101.4	2.2	.46	1.2	.01	2.20	.52	31
1	41	13.07	13.07	33.507	25.224	274.6	.115	5.78	96.8	3.7	.56	2.6	.05	1.37	.51	41
	50 ISL	12.75	12.74	33.516	25.295	268.0	.140	5.45	90.6							50
1	57	12.41	12.40	33.536	25.376	260.5	.157	5.12	84.6	8.0	.82	6.8	.02	.95	.53	57
1	72	11.29	11.28	33.650	25.674	232.4	.194	4.09	66.0	16.4	1.26	14.3	.04	.36	.32	72
	75 ISL	11.10	11.09	33.677	25.729	227.2	.202	3.90	62.7							76
1	88	10.53	10.52	33.767	25.901	211.1	.229	3.36	53.4	21.1	1.56	19.5	.05	.08	.17	88
	100 ISL	10.17	10.16	33.813	25.999	202.0	.255	3.17	50.0							101
1	108	10.00	9.99	33.834	26.044	197.9	.272	3.13	49.2	25.8	1.71	22.1	.05	.06	.12	109
	125 ISL	9.69	9.68	33.883	26.135	189.6	.304	2.93	45.8							126
1	134	9.57	9.55	33.906	26.173	186.1	.321	2.84	44.2	29.3	1.86	24.3	.02	.04	.12	135
	150 ISL	9.44	9.43	33.930	26.212	182.7	.350	2.76	42.8							151
1	159	9.42	9.40	33.936	26.220	182.1	.367	2.74	42.5	31.1	2.02	25.9	.03	.05	.27	160

RV MCARTHUR CALCOFI CRUISE 8502 STATION 83 51

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 52.5 N	120 07.7 W	28/02/85	0753 GMT	104 M	060	04 KT	240 02 06	0	1019.8 MB	12.3 C	10.2 C	0/8	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	13.16	13.16	33.496	25.197	276.1	.000	6.40	107.4	.5	.34	.1	.00	2.83	.26	0
1	10	13.20	13.20	33.510	25.200	276.0	.027	6.31	105.9	1.4	.38	.2	.00	3.80	.05	10
	20 ISL	12.73	12.73	33.530	25.308	266.0	.055	5.78	96.1							20
1	21	12.68	12.67	33.531	25.320	264.9	.057	5.72	95.0	4.7	.55	3.0	.00	3.29	.55	21
	30 ISL	12.20	12.20	33.515	25.399	257.6	.081	5.26	86.5							30
1	31	12.16	12.16	33.513	25.405	257.1	.083	5.23	85.9	8.2	.76	5.4	.02	.84	.59	31
1	41	12.08	12.08	33.532	25.435	254.5	.109	5.11	83.8	9.3	.87	6.8	.04	.71	.33	41
	50 ISL	11.34	11.34	33.614	25.636	235.5	.131	4.29	69.3							50
1	52	11.20	11.19	33.631	25.676	231.8	.135	4.13	66.5	16.0	1.28	13.9	.01	.30	.27	52
1	62	10.99	10.98	33.662	25.738	226.0	.158	3.96	63.5	17.7	1.37	16.0	.02	.25	.25	62
	75 ISL	10.90	10.89	33.680	25.768	223.5	.188	3.88	62.0							76
1	78	10.88	10.87	33.684	25.774	223.0	.194	3.86	61.8	18.7	1.44	16.5	.07	.27	.29	78

RV MCARTHUR CALCOFI CRUISE 8502 STATION 83 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 44.6 N	120 24.7 W	28/02/85	0448 GMT	966 M	110	10 KT	050 03 06	0	1018.0 MB	12.9 C	10.5 C	0/8	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	13.58	13.58	33.304	24.963	298.3	.000	6.06	102.4	2.4	.39	.2	.00	.64	.04	0
1	10	13.58	13.58	33.299	24.960	298.8	.030	6.09	102.9	2.4	.38	.2	.00	.61	.03	10
	20 ISL	12.99	12.99	33.328	25.100	285.8	.059	6.10	101.9							20
1	21	12.94	12.93	33.334	25.116	284.3	.062	6.10	101.7	3.3	.45	.9	.04	.75	.13	21
	30 ISL	12.74	12.74	33.413	25.215	275.1	.087	6.10	101.4							30
1	32	12.71	12.70	33.428	25.234	273.3	.092	6.10	101.3	3.1	.49	1.0	.05	.70	.24	32
1	42	12.21	12.20	33.446	25.344	263.1	.119	5.55	91.2	5.8	.70	4.7	.08	.75	.35	42
	50 ISL	12.30	12.29	33.507	25.375	260.4	.140	5.74	94.6							50
1	53	12.36	12.35	33.527	25.379	260.0	.147	5.83	96.2	4.9	.65	3.3	.07	1.44	.88	53
1	63	12.22	12.21	33.541	25.416	256.8	.173	5.63	92.6	6.6	.73	4.4	.08	.93	.92	63
1	74	11.42	11.41	33.441	25.488	250.1	.201	4.92	79.5	10.1	1.00	9.8	.18	.27	.39	74
	75 ISL	11.31	11.30	33.444	25.510	248.0	.204	4.84	78.1							76
1	90	10.24	10.23	33.557	25.787	221.9	.239	4.14	65.3	17.1	1.38	17.5	.02	.04	.12	90
	100 ISL	9.85	9.83	33.668	25.940	207.5	.261	3.74	58.5							101
1	104	9.73	9.72	33.714	25.995	202.4	.270	3.60	56.2	22.6	1.61	21.5	.05	.02	.05	105
1	125	9.22	9.21	33.831	26.170	186.1	.311	3.29	50.8	27.1	1.75	24.6	.00	.01	.04	126
	150 ISL	8.68	8.67	33.931	26.333	171.0	.355	3.15	48.0							151
1	151	8.66	8.64	33.934	26.340	170.4	.357	3.14	47.9	31.7	1.88	26.6	.01	.01	.04	152
1	182	8.07	8.05	33.981	26.467	158.7	.407	3.67	55.2	33.5	1.71	25.5	.00			183
	200 ISL	8.05	8.03	34.021	26.501	155.7	.436	3.05	45.8							202
1	212	8.03	8.01	34.039	26.518	154.4	.454	2.57	38.7	40.8	2.06	29.8	.00			213
1	243	7.71	7.69	34.048	26.573	149.6	.501	2.37	35.4	44.7	2.20	31.6	.00			244
	250 ISL	7.68	7.65	34.059	26.586	148.4	.512	2.26	33.8							252
1	282	7.57	7.55	34.116	26.646	143.3	.559	1.75	26.1	50.4	2.43	34.3	.01			284
	300 ISL	7.47	7.44	34.139	26.679	140.4	.584	1.55	23.0							302
1	343	7.19	7.16	34.179	26.750	134.2	.643	1.20	17.7	58.7	2.69	38.1	.00			345
	400 ISL	6.87	6.84	34.199	26.811	129.1	.718	.98	14.3							403
1	418	6.76	6.72	34.203	26.829	127.6	.742	.93	13.6	65.2	2.79	39.7	.00			421
1	495	6.09	6.05	34.247	26.952	116.4	.835	.63	9.1	76.6	2.91	41.4	.00			498
	500 ISL	6.06	6.01	34.251	26.960	115.8	.841	.61	8.8							504
1	572	5.65	5.60	34.295	27.045	108.1	.922	.45	6.4	85.1	3.02	43.4	.01			576

RV MCARTHUR CALCOFI CRUISE 8502 STATION 83 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 34.9 N	120 45.0 W	28/02/85	0109 GMT	1318 M	140	12 KT	320 06 05	1	1015.3 MB	14.0 C	11.5 C	7/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	13.86	13.86	33.313	24.914	303.0	.000	6.02	102.3	2.2	.37	.1		.52	.04	0
1	10	13.88	13.88	33.311	24.908	303.8	.030	6.05	102.9	2.2	.37	.1		.49	.05	10
	20 ISL	13.87	13.87	33.314	24.912	303.7	.061	6.04	102.8							20
1	26	13.87	13.86	33.315	24.914	303.7	.079	6.04	102.7	2.2	.36	.1		.42	.06	26
	30 ISL	13.80	13.80	33.307	24.922	303.1	.091	6.04	102.5							30
1	41	13.56	13.56	33.289	24.957	300.0	.124	6.03	101.9	2.4	.36	.1		.56	.15	41
	50 ISL	13.37	13.36	33.295	25.001	296.6	.151	5.97	100.5							50
1	57	13.16	13.15	33.299	25.047	291.9	.171	5.83	98.5	3.0	.39	1.1		.34	.15	57
1	67	12.61	12.60	33.342	25.188	278.6	.199	5.61	92.9	4.5	.53	3.5		.17	.12	67
	75 ISL	12.07	12.06	33.358	25.302	267.9	.222	5.30	86.9							76
1	78	11.89	11.88	33.366	25.344	264.0	.229	5.19	84.7	7.4	.82	7.7		.09	.09	78
1	93	10.69	10.68	33.500	25.665	233.6	.266	4.35	69.2	14.6	1.26	15.3		.04	.05	93
	100 ISL	10.32	10.31	33.561	25.776	223.2	.283	4.11	64.9							101
1	108	9.98	9.97	33.635	25.892	212.3	.302	3.88	60.8	19.9	1.48	19.8		.01	.04	109
1	123	9.29	9.28	33.820	26.150	187.9	.331	3.29	50.9	26.9	1.69	23.9		.00	.03	124
	125 ISL	9.28	9.27	33.822	26.154	187.7	.334	3.29	50.8							126
1	149	9.16	9.15	33.850	26.195	184.3	.380	3.22	49.6	28.2	1.76	25.2		.00	.03	150
	150 ISL	9.15	9.13	33.854	26.200	183.7	.381	3.21	49.5							151
1	170	8.68	8.66	33.942	26.343	170.4	.417	3.08	47.0	32.2	1.73	26.7		.00	.03	171
1	191	8.48	8.46	33.961	26.388	166.5	.452	3.23	49.1	32.6	1.66	26.8				192
	200 ISL	8.31	8.29	33.976	26.427	162.9	.467	3.22	48.8							202
1	212	8.08	8.05	33.998	26.479	158.1	.486	3.21	48.3	35.8	1.78	27.6				213
1	243	7.71	7.69	34.036	26.563	150.5	.533	2.47	36.9	43.9	2.13	31.7				244
	250 ISL	7.62	7.59	34.040	26.580	149.0	.544	2.39	35.6							252
1	283	7.19	7.16	34.051	26.649	142.7	.593	2.12	31.3	50.2	2.11	34.3				285
	300 ISL	6.97	6.94	34.064	26.690	139.0	.616	1.88	27.6							302
1	345	6.46	6.43	34.105	26.791	129.8	.676	1.24	18.0	63.9	2.60	39.8				347
	400 ISL	6.20	6.17	34.154	26.863	123.5	.746	.87	12.5							403
1	420	6.15	6.11	34.172	26.885	121.8	.771	.79	11.4	72.8	2.62	42.2				423
1	495	5.79	5.74	34.231	26.977	113.6	.859	.52	7.4	81.3	2.84	44.5				498
	500 ISL	5.76	5.72	34.237	26.985	113.0	.865	.50	7.2							504
1	567	5.41	5.36	34.307	27.084	104.1	.937	.32	4.5	90.0	2.99	46.1				571

RV MCARTHUR CALCOFI CRUISE 8502 STATION 83 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 14.4 N	121 26.6 W	27/02/85	1945 GMT	3719 M	150	11 KT	310 03 06	2	1015.1 MB	13.3 C	11.4 C	3/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	13.18	13.18	33.307	25.046	290.4	.000	6.15	103.1	2.3	.38	.2	.01	1.25	.05	0
1	10	13.17	13.17	33.306	25.047	290.5	.029	6.16	103.2	2.8	.37	.2	.01	1.12	.14	10
	20 ISL	12.87	12.86	33.327	25.125	283.4	.058	6.10	101.5							20
1	21	12.84	12.83	33.330	25.133	282.7	.060	6.09	101.4	3.2	.44	1.0	.06	.83	.27	21
	30 ISL	12.74	12.73	33.354	25.170	279.3	.086	6.08	101.0							30
1	31	12.73	12.73	33.356	25.173	279.1	.088	6.08	101.0	3.3	.47	1.2	.08	.61	.28	31
1	42	12.60	12.60	33.368	25.208	276.0	.119	5.93	98.2	4.0	.53	2.1	.13	.40	.22	42
	50 ISL	12.55	12.54	33.393	25.238	273.4	.141	5.88	97.4							50
1	52	12.54	12.54	33.398	25.243	273.0	.146	5.88	97.3	4.3	.55	2.3	.14	.35	.20	52
1	62	12.54	12.53	33.401	25.247	273.0	.173	5.88	97.3	4.3	.56	2.3	.14	.35	.24	62
1	73	12.51	12.50	33.412	25.261	271.9	.203	5.85	96.7	4.5	.56	2.7	.15	.36	.24	73
	75 ISL	12.41	12.40	33.415	25.283	270.1	.209	5.76	95.1							76
1	88	11.60	11.59	33.431	25.447	254.4	.242	5.06	82.1	9.0	.93	9.5	.08	.19	.25	88
	100 ISL	10.68	10.67	33.550	25.706	230.0	.272	4.22	67.2							101
1	102	10.51	10.49	33.577	25.757	225.1	.278	4.07	64.5	16.7	1.36	17.7	.01	.03	.07	103
1	123	9.81	9.80	33.696	25.968	205.3	.323	3.68	57.5	21.9	1.59	21.5	.00	.02	.07	124
	125 ISL	9.77	9.75	33.706	25.983	203.9	.326	3.64	56.8							126
1	148	9.25	9.23	33.834	26.169	186.7	.372	3.16	48.8	27.8	1.82	25.8	.00	.01	.06	149
	150 ISL	9.20	9.19	33.839	26.180	185.7	.375	3.17	48.9							151
1	179	8.60	8.58	33.891	26.315	173.2	.427	3.35	51.0	30.3	1.82	26.4	.07			180
	200 ISL	8.44	8.42	33.942	26.380	167.4	.463	3.41	51.8							202
1	209	8.37	8.35	33.961	26.406	165.1	.477	3.44	52.1	32.4	1.83	26.7	.01			210
1	239	7.74	7.71	33.997	26.528	153.7	.525	3.21	48.0	39.1	1.98	29.4	.00			240
	250 ISL	7.58	7.56	34.011	26.562	150.7	.542	2.95	43.9							252
1	278	7.28	7.26	34.042	26.629	144.7	.584	2.25	33.3	48.8	2.32	34.6	.00			280
	300 ISL	7.01	6.98	34.051	26.674	140.6	.615	1.96	28.8							302
1	339	6.61	6.58	34.071	26.744	134.2	.668	1.60	23.3	59.8	2.59	39.0	.00			341
	400 ISL	6.46	6.42	34.180	26.851	125.0	.748	.90	13.1							403
1	413	6.43	6.39	34.201	26.872	123.2	.764	.78	11.3	70.0	2.91	42.4	.00			416
1	489	5.46	5.42	34.167	26.966	114.2	.854	.65	9.2	82.8	3.03	45.6	.00			492
	500 ISL	5.42	5.38	34.181	26.982	112.9	.866	.62	8.9							504
1	565	5.23	5.19	34.266	27.072	105.0	.937	.39	5.5		3.13	46.7	.00			569

RV MCARTHUR CALCOFI CRUISE 8502 STATION 87 33

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
33 53.3 N	118 29.3 W	26/02/85	1406 GMT	61 M	290	04 KT		4	1016.3 MB	13.1 C	12.2 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	13.72	13.72	33.390	25.001	294.9	.029	6.05	102.6	1.3	.69	1.0	.05	4.43	.09	10

RV MCARTHUR CALCOFI CRUISE 8502 STATION 87 35

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
33 49.4 N	118 37.7 W	26/02/85	1622 GMT	593 M	060	03 KT		4	1017.0 MB	13.0 C	11.9 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	14.06	14.06	33.411	24.948	299.8	.000	6.15	105.0	.8	.46	.5	.04	.88	.18	0
1	10	13.86	13.86	33.422	24.997	295.4	.030	6.12	104.1	.9	.48	.6	.05	1.16	.31	10
	20 ISL	13.38	13.38	33.429	25.101	285.7	.059	5.47	92.2							20
1	21	13.34	13.34	33.430	25.110	284.9	.061	5.41	91.1	3.1	.78	3.0	.19	.72	.35	21
	30 ISL	13.24	13.23	33.435	25.135	282.7	.087	5.27	88.6							30
1	31	13.22	13.22	33.437	25.139	282.4	.090	5.26	88.3	4.0	.86	3.9	.24	.67	.42	31
1	41	12.66	12.66	33.495	25.295	267.8	.117	4.63	76.9	8.7	.99	8.8	.22	.61	.51	41
	50 ISL	12.39	12.39	33.521	25.368	261.2	.141	4.27	70.5							50
1	52	12.35	12.34	33.525	25.379	260.0	.146	4.22	69.6	9.8	1.16	12.0	.15	.40	.40	52
1	62	11.89	11.89	33.573	25.503	248.5	.171	3.99	65.2	12.3	1.23	14.6	.09	.25	.29	62
1	72	11.73	11.72	33.586	25.544	244.8	.196	4.08	66.4	12.9	1.18	15.1	.10	.20	.33	72
	75 ISL	11.61	11.60	33.588	25.567	242.7	.204	4.06	66.0							76
1	88	11.15	11.14	33.610	25.668	233.4	.234	3.99	64.2	15.3	1.27	16.2	.01	.11	.16	86
	100 ISL	10.84	10.83	33.681	25.779	223.1	.262	3.74	59.7							101
1	102	10.79	10.77	33.698	25.802	220.9	.268	3.67	58.6	18.3	1.38	18.5	.01	.05	.11	103
1	123	10.16	10.16	33.849	26.026	200.0	.312	3.00	47.3	24.5	1.71	23.5	.06	.05	.14	124
	125 ISL	10.13	10.12	33.859	26.042	198.6	.315	2.97	46.8							126
1	149	9.56	9.54	33.973	26.227	181.3	.361	2.65	41.2	29.7	1.94	27.4	.00	.02	.07	150
	150 ISL	9.54	9.52	33.976	26.232	180.9	.362	2.64	41.1							151
1	180	9.04	9.02	34.049	26.371	168.2	.415	2.41	37.1	34.4	2.03	28.6	.00			181
	200 ISL	8.85	8.83	34.068	26.417	164.2	.448	2.35	36.1							202
1	211	8.76	8.74	34.075	26.435	162.6	.466	2.32	35.5	36.6	2.11	29.9	.00			212
1	241	8.50	8.47	34.122	26.513	155.7	.513	2.06	31.3	40.1	2.25	31.8	.00			242
	250 ISL	8.38	8.35	34.130	26.537	153.4	.527	1.97	29.9							252
1	281	7.96	7.93	34.150	26.617	146.2	.574	1.66	24.9	46.7	2.43	33.8	.00			283
	300 ISL	7.74	7.71	34.167	26.662	142.2	.601	1.47	22.0							302
1	344	7.30	7.27	34.205	26.755	133.8	.662	1.07	15.8	57.4	2.60	36.9	.04			346
	400 ISL	6.85	6.82	34.237	26.843	126.1	.735	.77	11.3							403
1	418	6.73	6.70	34.244	26.865	124.2	.758	.71	10.4	67.4	2.91	40.5	.01			421
1	496	6.39	6.34	34.269	26.931	118.8	.852	.55	8.0	73.7	2.98	41.3	.00			499
	500 ISL	6.36	6.32	34.271	26.936	118.3	.857	.54	7.8							504
1	570	5.82	5.77	34.313	27.038	109.0	.936	.37	5.3	85.3	3.10	42.3	.00			574

RV MCARTHUR CALCOFI CRUISE 8502 STATION 87 40

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
33 39.3 N	118 58.4 W	26/02/85	2017 GMT	864 M	180	03 KT	270 02 05	4	1016.3 MB	12.2 C	10.9 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	14.10	14.10	33.451	24.970	297.6	.000	6.07	103.8	2.2	.36	.1	.00	.32	.05	0
1	10	13.92	13.92	33.446	25.003	294.8	.029	6.12	104.3	2.3	.36	.1	.00	.63	.10	10
	20 ISL	13.62	13.62	33.444	25.063	289.3	.059	5.91	100.0							20
1	21	13.59	13.58	33.444	25.071	288.6	.061	5.88	99.5	3.2	.46	1.4	.06	1.13	.16	21
	30 ISL	13.04	13.04	33.445	25.182	278.3	.087	5.70	95.3							30
1	31	12.99	12.98	33.445	25.193	277.3	.090	5.68	94.9	4.1	.58	3.6	.14	1.09	.23	31
1	42	12.54	12.53	33.475	25.303	267.0	.119	5.48	90.7	5.4	.67	5.3	.11	.57	.29	42
	50 ISL	12.21	12.20	33.501	25.387	259.2	.141	5.16	84.8							50
1	52	12.14	12.13	33.506	25.405	257.6	.145	5.08	83.4	9.1	.87	8.4	.18	.42	.30	52
1	63	11.77	11.76	33.554	25.511	247.7	.173	4.66	75.9	10.8	1.02	11.4	.13	.28	.26	63
1	73	11.08	11.07	33.608	25.679	231.9	.197	3.99	64.1	15.2	1.29	16.3	.05	.13	.15	73
	75 ISL	11.00	10.99	33.619	25.703	229.7	.202	3.92	62.8							76
1	89	10.71	10.70	33.681	25.802	220.5	.233	3.72	59.3	18.1	1.41	18.2	.15	.04	.12	89
	100 ISL	10.44	10.43	33.748	25.901	211.4	.258	3.51	55.7							101
1	104	10.33	10.32	33.774	25.940	207.7	.267	3.43	54.2	21.6	1.61	21.7	.01	.03	.09	105
1	124	9.81	9.79	33.879	26.112	191.7	.307	3.01	47.1	26.1	1.73	23.8	.01	.02	.08	125
	125 ISL	9.79	9.78	33.882	26.117	191.3	.308	3.00	46.9							126
1	150	9.33	9.31	33.974	26.265	177.6	.354	2.72	42.1	30.4	1.90	26.2	.02	.02	.07	151
1	181	8.85	8.83	34.035	26.390	166.3	.407	2.46	37.7	35.1	2.03	28.4	.08			182
	200 ISL	8.54	8.52	34.067	26.463	159.7	.438	2.27	34.6							202
1	211	8.39	8.37	34.082	26.498	156.4	.455	2.17	32.9	40.2	2.22	31.1	.05			212
1	242	8.14	8.11	34.115	26.562	150.8	.503	1.94	29.3	43.9	2.33	32.2	.07			243
	250 ISL	8.10	8.08	34.122	26.573	150.0	.515	1.91	28.7							252
1	282	7.97	7.94	34.144	26.610	146.9	.563	1.77	26.6	46.0	2.38	33.2	.02			284
	300 ISL	7.83	7.80	34.161	26.644	143.9	.589	1.62	24.2							302
1	343	7.42	7.39	34.201	26.735	135.8	.649	1.20	17.8	54.1	2.58	35.8	.00			345
	400 ISL	6.87	6.83	34.238	26.842	126.3	.724	.80	11.7							403
1	418	6.71	6.67	34.247	26.870	123.6	.747	.70	10.2	66.3	2.87	39.0	.00			421
1	496	6.27	6.22	34.281	26.956	116.2	.839	.52	7.5	75.1	3.05	41.6	.00			499
	500 ISL	6.24	6.20	34.284	26.962	115.8	.845	.51	7.4							504
1	574	5.77	5.72	34.321	27.051	107.7	.927	.39	5.6	85.9	3.11	42.0	.00			578

RV MCARTHUR CALCOFI CRUISE 8502 STATION 87 45

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 29.4 N	119 19.0 W	26/02/85	2348 GMT	1610 M	230	10 KT	270 02 05	2	1014.5 MB	12.2 C	10.7 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	13.80	13.80	33.461	25.041	290.9	.000	6.20	105.4	1.7	.42	.2	.00	.68	.06	0
1	10	13.51	13.51	33.455	25.094	286.1	.029	6.23	105.2	1.3	.38	.2	.01	.89	.23	10
	20 ISL	13.16	13.16	33.443	25.156	280.5	.057	6.17	103.5							20
1	21	13.13	13.13	33.442	25.161	280.1	.060	6.17	103.4	1.3	.41	1.0	.04	1.95	.18	21
	30 ISL	13.00	12.99	33.439	25.186	278.0	.085	6.02	100.6							30
1	31	12.98	12.97	33.439	25.190	277.6	.087	5.99	100.1	2.3	.48	1.9	.07	1.35	.32	31
1	41	12.26	12.26	33.469	25.352	262.4	.114	5.25	86.4	7.2	.81	7.3	.17	.50	.26	41
	50 ISL	12.14	12.13	33.489	25.391	258.9	.138	5.04	82.8							50
1	51	12.13	12.12	33.490	25.394	258.7	.140	5.03	82.6	8.3	.91	8.8	.16	.43	.35	51
1	62	11.49	11.48	33.535	25.548	244.2	.168	4.34	70.3	12.6	1.20	14.5	.07	.27	.23	62
1	72	11.14	11.13	33.576	25.644	235.2	.192	4.09	65.7	14.7	1.33	16.9	.03	.17	.24	72
	75 ISL	11.00	10.99	33.594	25.683	231.5	.199	4.01	64.4							76
1	87	10.57	10.56	33.658	25.809	219.9	.226	3.78	60.1	18.7	1.49	19.7	.02	.07	.16	87
	100 ISL	10.38	10.37	33.713	25.885	212.8	.255	3.54	56.1							101
1	102	10.36	10.35	33.723	25.896	211.8	.260	3.50	55.4	21.0	1.64	21.5	.02	.05	.12	103
1	122	10.13	10.12	33.844	26.030	199.6	.301	3.05	48.0	24.3	1.79	24.1	.01	.02	.08	123
	125 ISL	10.12	10.10	33.850	26.037	199.0	.306	3.03	47.7							126
1	148	9.95	9.94	33.877	26.086	194.8	.352	2.93	46.0	25.8	1.83	25.0	.01	.02	.07	149
	150 ISL	9.92	9.91	33.883	26.096	193.9	.355	2.91	45.7							151
1	179	9.30	9.28	33.984	26.278	177.0	.409	2.62	40.5	31.3	2.01	28.2	.01			180
	200 ISL	8.86	8.84	34.035	26.388	166.9	.445	2.43	37.3							202
1	210	8.68	8.66	34.053	26.431	162.9	.461	2.35	35.9	37.1	2.17	30.7	.01			211
1	241	8.28	8.26	34.092	26.523	154.6	.510	2.07	31.3	41.8	2.33	32.7	.00			242
	250 ISL	8.18	8.15	34.099	26.544	152.7	.525	1.99	30.0							252
1	281	7.89	7.86	34.121	26.605	147.3	.572	1.73	25.9	47.4	2.48	34.5	.00			283
	300 ISL	7.75	7.72	34.136	26.636	144.6	.599	1.59	23.8							302
1	343	7.46	7.43	34.169	26.704	138.7	.660	1.30	19.3	54.5	2.67	36.8	.00			345
	400 ISL	6.99	6.95	34.216	26.808	129.5	.736	.89	13.1							403
1	419	6.84	6.80	34.230	26.840	126.6	.761	.77	11.3	65.3	2.93	39.8	.01			422
1	494	6.39	6.34	34.265	26.928	119.0	.852	.57	8.3	73.6	3.04	41.3	.00			497
	500 ISL	6.34	6.29	34.269	26.938	118.2	.860	.55	8.0							504
1	568	5.71	5.66	34.318	27.056	107.1	.936	.35	5.0	87.5	3.19	42.8	.00			572

RV MCARTHUR CALCOFI CRUISE 8502 STATION 87 50

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 19.4 N	119 39.9 W	27/02/85	0312 GMT	80 M	190	04 KT		2	1014.0 MB	11.9 C	10.3 C	8/8	NS

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	13.19	13.19	33.411	25.124	283.0	.000	6.15	103.2	3.0	.46	1.5	.05	.86	.04	0
1	10	13.14	13.14	33.406	25.131	282.7	.028	6.17	103.4	3.0	.46	1.5	.06	1.05	.10	10
	20 ISL	12.92	12.92	33.417	25.183	277.9	.056	6.07	101.2							20
1	21	12.89	12.89	33.420	25.191	277.2	.059	6.06	101.0	3.5	.53	2.3	.08	1.49	.12	21
	30 ISL	12.44	12.43	33.465	25.316	265.5	.083	5.54	91.5							30
1	31	12.39	12.38	33.470	25.328	264.3	.086	5.48	90.4	7.1	.75	6.2	.17	.71	.26	31
1	41	11.95	11.95	33.488	25.425	255.4	.112	5.02	82.1	9.5	.91	9.1	.11	.27	.17	41
	50 ISL	11.68	11.67	33.517	25.499	248.6	.135	4.74	77.1							50
1	52	11.64	11.63	33.523	25.511	247.4	.139	4.70	76.4	11.6	1.05	11.6	.14	.18	.19	52
1	62	11.40	11.39	33.563	25.587	240.4	.163	4.49	72.6	13.5	1.14	13.1	.13	.13	.17	62
	75 ISL	11.10	11.09	33.600	25.670	232.8	.195	4.22	67.8							76
1	78	11.04	11.03	33.605	25.684	231.6	.201	4.17	66.9	16.0	1.28	15.4	.07	.08	.12	78

RV MCARTHUR CALCOFI CRUISE 8502 STATION 87 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 59.6 N	120 20.8 W	27/02/85	0757 GMT	746 M	190	02 KT		2	1014.5 MB	12.6 C	10.9 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	13.19	13.19	33.326	25.060	289.1	.000	6.07	101.8	4.5	.38	.4	.00	1.25	.16	0
1	10	13.19	13.19	33.322	25.055	289.8	.029			4.4	.41	.6	.03	.77	.17	10
1	20	13.13	13.13	33.318	25.065	289.1	.058	6.04	101.1	4.5	.42	.8	.02	.56	.14	20
	30 ISL	13.06	13.06	33.320	25.080	287.8	.087	6.05	101.2							30
1	31	13.05	13.05	33.320	25.083	287.7	.089	6.05	101.1	4.7	.43	1.0	.02	.51	.15	31
1	41	12.73	12.73	33.334	25.157	281.0	.118	6.13	101.8	5.1	.38	.3	.00	.49	.15	41
	50 ISL	12.62	12.61	33.367	25.205	276.6	.143	5.83	96.6							50
1	51	12.61	12.60	33.372	25.211	276.1	.145	5.80	96.1	5.2	.44	1.9	.01	.65	.27	51
1	62	12.24	12.23	33.484	25.369	261.3	.175	5.60	92.1	6.9	.57	3.9	.03	.65	.46	62
1	72	11.92	11.91	33.470	25.419	256.7	.200	5.29	86.4	8.7	.75	6.9	.05	.49	.42	72
	75 ISL	11.78	11.77	33.472	25.446	254.2	.209	5.17	84.2							76
1	88	11.13	11.12	33.514	25.598	240.0	.240	4.63	74.4	13.4	1.11	12.9	.12	.24	.38	88
	100 ISL	10.23	10.22	33.625	25.842	217.0	.268	3.98	62.8							101
1	103	10.07	10.06	33.651	25.889	212.4	.274	3.86	60.6	20.3	1.48	20.0	.02	.07	.18	103
1	123	9.73	9.72	33.796	26.059	196.7	.316	3.30	51.5	25.4	1.55	21.3	.01	.05	.14	124
	125 ISL	9.68	9.67	33.804	26.073	195.4	.320	3.28	51.2							126
1	147	9.02	9.00	33.897	26.255	178.5	.361	3.14	48.3	30.1	1.75	24.6	.02	.02	.11	148
	150 ISL	8.95	8.94	33.910	26.275	176.6	.366	3.10	47.6							151
1	173	8.52	8.51	33.996	26.409	164.2	.405	2.75	41.8	35.6	2.03	29.0	.00			174
	200 ISL	8.26	8.24	34.024	26.472	158.6	.449	2.63	39.8							202
2	211	8.17	8.15	34.026	26.487	157.4	.466	2.61	39.4	39.1	2.13	30.4	.00			212
2	242	7.79	7.77	34.055	26.566	150.2	.513	2.39	35.8	43.6	2.26	32.2	.00			243
	250 ISL	7.71	7.69	34.064	26.585	148.6	.526	2.28	34.1							252
2	282	7.42	7.40	34.098	26.653	142.5	.573	1.84	27.3	50.5	2.43	34.2	.02			284
	300 ISL	7.17	7.14	34.106	26.695	138.7	.598	1.66	24.4							302
2	343	6.58	6.55	34.123	26.789	130.1	.655	1.29	18.8	62.4	2.52	37.4	.01			345
	400 ISL	6.25	6.22	34.176	26.874	122.6	.728	.89	12.8							403
2	419	6.19	6.16	34.196	26.897	120.5	.751	.78	11.3	72.3	2.81	39.8	.01			422
2	500	5.83	5.79	34.272	27.004	111.2	.844	.51	7.3	81.7	3.09	44.3	.00			503
2	570	5.58	5.53	34.303	27.060	106.6	.921	.40	5.7	87.0	3.06	43.6				574

RV MCARTHUR CALCOFI CRUISE 8502 STATION 87 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 39.3 N	121 02.0 W	27/02/85	1333 GMT	3840 M	240	10 KT		2	1013.0 MB	13.1 C	11.1 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	14.47	14.47	33.356	24.819	312.1	.000	5.90	101.6	2.0	.35	.1	.00	.22	.03	0
1	10	14.48	14.48	33.357	24.817	312.5	.031	5.90	101.6	1.9	.35	.1	.00	.21	.03	10
	20 ISL	14.47	14.47	33.354	24.818	312.7	.062	5.91	101.8							20
1	21	14.47	14.47	33.354	24.818	312.7	.065	5.91	101.8	1.9	.34	.1	.00	.21	.04	21
	30 ISL	14.48	14.47	33.354	24.817	313.1	.094	5.90	101.6							30
1	31	14.48	14.48	33.354	24.817	313.1	.096	5.90	101.6	1.8	.34	.1	.00	.21	.03	31
1	41	14.49	14.49	33.354	24.814	313.7	.128	5.92	102.0	1.7	.33	.1	.00	.22	.05	41
	50 ISL	14.49	14.48	33.359	24.819	313.5	.156	5.90	101.7							50
1	52	14.49	14.48	33.360	24.820	313.5	.162	5.90	101.6	1.7	.33	.1	.00	.22	.04	52
1	62	14.48	14.47	33.357	24.820	313.7	.193	5.88	101.2	1.6	.33	.1	.00	.23	.04	62
1	72	14.51	14.50	33.358	24.815	314.5	.225	5.88	101.3	1.6	.32	.1	.00	.23	.03	72
	75 ISL	14.47	14.46	33.355	24.820	314.1	.235	5.88	101.2							76
1	88	14.35	14.34	33.346	24.840	312.6	.274	5.86	100.6	1.7	.30	.1	.00	.26	.08	88
	100 ISL	13.81	13.80	33.337	24.944	303.0	.313	5.72	97.1							101
1	103	13.67	13.66	33.336	24.973	300.2	.320	5.68	96.2	2.7	.43	.8	.00	.25	.13	103
1	123	12.27	12.25	33.375	25.280	271.3	.380	5.24	86.2	5.8	.66	6.2	.03	.17	.13	124
	125 ISL	12.15	12.13	33.384	25.310	268.5	.384	5.19	85.1							126
1	149	10.42	10.40	33.573	25.771	224.9	.444	4.28	67.7	15.3	1.20	15.3	.01	.02	.03	150
	150 ISL	10.38	10.36	33.579	25.781	223.9	.446	4.26	67.3							151
1	180	9.32	9.30	33.798	26.129	191.2	.508	3.42	52.9	25.2	1.53	22.2	.00			181
	200 ISL	8.85	8.83	33.894	26.279	177.1	.545	3.19	48.8							202
1	211	8.66	8.63	33.932	26.340	171.5	.564	3.12	47.6	30.7	1.71	25.6	.00			212
1	241	8.30	8.28	33.993	26.442	162.3	.614	2.94	44.5	34.8	1.92	27.8	.01			242
	250 ISL	8.19	8.16	34.006	26.470	159.7	.629	2.88	43.5							252
1	282	7.77	7.74	34.040	26.559	151.7	.679	2.63	39.3	41.1	2.01	29.6	.00			284
	300 ISL	7.55	7.52	34.049	26.597	148.2	.705	2.44	36.3							302
1	343	7.05	7.02	34.068	26.683	140.4	.767	1.91	28.1	51.6	2.37	34.7				345
	400 ISL	6.36	6.32	34.119	26.815	129.2	.844	1.18	17.1							403
1	419	6.15	6.12	34.140	26.859	124.2	.868	.96	13.8	68.4	2.78	40.8	.00			422
1	496	5.74	5.70	34.238	26.988	112.6	.959	.50	7.1	79.8	2.94	42.3	.00			499
	500 ISL	5.73	5.68	34.242	26.993	112.2	.964	.49	7.0							504
1	572	5.47	5.42	34.279	27.054	107.1	1.043	.37	5.2	86.3	3.00	43.5	.01			576

RV MCARTHUR CALCOFI CRUISE 8502 STATION 90 23

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 28.6 N	117 46.5 W	26/02/85	0857 GMT	183 M	060	02 KT			1016.5 MB	13.7 C	12.5 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	14.35	14.35	33.445	24.912	303.1	.000	6.18	106.2	.9	.34	.2	.00	.30	.05	0
1	10	14.11	14.11	33.457	24.973	297.6	.030	6.17	105.5	1.3	.36	.2	.00	.32	.07	10
	20 ISL	13.78	13.78	33.445	25.032	292.3	.060	5.93	100.8							20
	30 ISL	13.37	13.36	33.442	25.114	284.8	.088	5.70	96.0							30
1	31	13.33	13.32	33.441	25.122	284.0	.091	5.68	95.6	2.5	.66	2.1	.18	.49	.25	31
1	41	12.78	12.78	33.475	25.256	271.5	.118	4.68	77.9	7.2	1.04	8.3	.51	.33	.30	41
	50 ISL	12.36	12.35	33.518	25.372	260.7	.143	4.19	69.1							50
1	57	12.08	12.07	33.554	25.454	253.1	.160	3.99	65.4	12.3	1.33	14.7	.65	.19	.28	57
1	72	11.51	11.50	33.642	25.628	236.8	.197	3.68	59.7	15.4	1.40	17.8	.09	.13	.21	72
	75 ISL	11.36	11.35	33.660	25.668	233.0	.205	3.63	58.7							76
1	88	10.82	10.81	33.728	25.819	219.0	.233	3.45	55.1	19.0	1.53	20.9	.06	.05	.16	88
	100 ISL	10.38	10.37	33.810	25.960	205.8	.259	3.15	49.8							101
1	108	10.14	10.13	33.861	26.042	198.2	.276	2.95	46.5	24.8	1.79	25.0	.07	.03	.12	109
	125 ISL	9.83	9.82	33.914	26.135	189.6	.309	2.84	44.4							126
1	134	9.72	9.70	33.937	26.172	186.2	.326	2.80	43.7	28.2	1.88	26.5	.04	.01	.07	135
	150 ISL	9.54	9.52	33.997	26.248	179.3	.355	2.59	40.3							151
1	159	9.47	9.45	34.035	26.291	175.4	.371	2.43	37.8	31.8	1.99	27.5	.03	.01	.06	160

RV MCARTHUR CALCOFI CRUISE 8502 STATION 90 30

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 25.1 N	117 54.6 W	26/02/85	0634 GMT	600 M	210	03 KT			1016.2 MB	13.5 C	12.6 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	14.54	14.54	33.450	24.876	306.6	.000	6.19	106.8	1.0	.31	.2	.00	.24	.03	0
1	10	14.27	14.27	33.447	24.932	301.5	.030	6.23	106.9	.8	.31	.2	.00	.29	.05	10
	20 ISL	13.67	13.67	33.453	25.060	289.7	.060	6.10	103.4							20
1	21	13.61	13.61	33.453	25.073	288.5	.063	6.09	103.1	1.8	.39	.2	.00	.46	.16	21
	30 ISL	13.06	13.05	33.462	25.191	277.4	.088	5.13	85.9							30
1	31	13.01	13.00	33.463	25.203	276.3	.091	5.03	84.1	6.0	.83	5.7	.48	.69	.57	31
1	42	12.51	12.50	33.494	25.325	265.0	.120	4.32	71.5	10.0	1.12	11.9	.38	.36	.41	42
	50 ISL	12.00	11.99	33.546	25.462	252.1	.141	4.25	69.5							50
1	52	11.90	11.89	33.558	25.491	249.4	.146	4.23	69.1	12.1	1.15	13.7	.02	.22	.24	52
1	62	11.57	11.56	33.610	25.591	240.0	.170	3.99	64.8	14.1	1.24	15.4	.01	.10	.23	62
1	73	11.38	11.37	33.663	25.668	232.9	.196	3.80	61.4	15.9	1.27	15.8	.02	.05	.15	73
	75 ISL	11.30	11.29	33.679	25.695	230.5	.202	3.74	60.4							76
1	88	10.83	10.82	33.759	25.841	216.9	.230	3.43	54.8	19.8	1.45	18.5	.03	.02	.10	88
	100 ISL	10.56	10.55	33.814	25.933	208.4	.256	3.23	51.3							101
1	103	10.48	10.47	33.826	25.956	206.3	.263	3.19	50.6	22.7	1.67	22.3	.01	.01	.07	104
1	123	9.70	9.69	33.882	26.132	189.8	.303	3.09	48.2	26.6	1.66	23.1	.01	.01	.05	124
	125 ISL	9.67	9.66	33.890	26.143	188.8	.306	3.07	47.8							126
1	149	9.40	9.39	34.003	26.275	176.7	.350	2.70	41.9	31.2	1.83	25.3	.02	.01	.05	150
	150 ISL	9.39	9.37	34.004	26.279	176.3	.351	2.70	41.8							151
1	179	8.85	8.83	34.042	26.396	165.7	.401	2.61	40.0	34.8	1.94	27.3	.01			180
	200 ISL	8.72	8.70	34.087	26.450	160.9	.435	2.32	35.5							202
1	210	8.69	8.67	34.108	26.471	159.0	.451	2.16	33.0	38.7	2.19	30.3	.02			211
1	241	8.46	8.44	34.156	26.545	152.6	.499	1.78	27.1	42.9	2.30	30.9	.02			242
	250 ISL	8.38	8.36	34.164	26.564	151.0	.513	1.71	25.9							252
1	280	8.12	8.09	34.181	26.618	146.3	.558	1.52	22.9	47.6	2.44	32.8	.02			282
	300 ISL	7.93	7.90	34.190	26.653	143.2	.587	1.39	20.9							302
1	341	7.53	7.50	34.207	26.725	136.8	.644	1.13	16.8	55.3	2.57	34.7	.01			343
	400 ISL	6.93	6.89	34.230	26.827	127.7	.722	.81	11.8							403
1	418	6.76	6.72	34.237	26.856	125.0	.745	.72	10.5	66.9	2.79	37.8	.00			421
1	494	6.24	6.20	34.279	26.958	116.1	.836	.45	6.5	76.3	3.04	41.8	.00			497
	500 ISL	6.20	6.16	34.282	26.965	115.4	.844	.43	6.3							504
1	570	5.82	5.77	34.313	27.039	108.9	.922	.34	4.9	85.0	3.10	42.2	.01			574

RV MCARTHUR CALCOFI CRUISE 8502 STATION 90 35

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 15.2 N	118 14.9 W	26/02/85	0253 GMT	402 M	290	10 KT	290 01 02	1	1015.2 MB	12.9 C	11.9 C	1/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	14.29	14.29	33.465	24.941	300.4	.000	6.10	104.7	.3	.30	.2	.00	.28	.05	0
1	10	14.21	14.21	33.458	24.953	299.6	.030	6.13	105.1	.3	.30	.2	.00	.28	.06	10
	20 ISL	13.97	13.97	33.458	25.003	295.1	.060	6.11	104.2							20
1	21	13.95	13.94	33.458	25.008	294.6	.062	6.11	104.1	.6	.30	.2	.00	.74	.17	21
	30 ISL	13.80	13.80	33.458	25.038	291.8	.089	5.94	100.9							30
1	31	13.78	13.77	33.458	25.043	291.6	.092	5.92	100.6	1.2	.36	.7	.03	.81	.25	31
1	42	12.88	12.88	33.505	25.260	271.2	.122	4.75	79.2	6.9	.80	8.3	.11	.46	.33	42
	50 ISL	12.61	12.61	33.522	25.325	265.2	.144	4.48	74.2							50
1	52	12.57	12.56	33.525	25.337	264.1	.149	4.45	73.7	9.1	.95	10.6	.15	.35	.35	52
1	63	11.91	11.90	33.572	25.500	248.8	.177	4.14	67.7	11.8	1.09	14.0	.05	.19	.29	63
1	73	11.63	11.62	33.603	25.575	241.9	.201	3.98	64.7	13.3	1.17	15.5	.02	.11	.21	73
	75 ISL	11.55	11.54	33.612	25.597	239.9	.207	3.94	63.9							76
1	89	11.10	11.09	33.671	25.726	227.8	.239	3.69	59.3	16.3	1.29	18.0	.00	.05	.17	89
	100 ISL	10.79	10.77	33.723	25.822	219.0	.264	3.49	55.8							101
1	109	10.55	10.54	33.767	25.897	212.1	.285	3.34	53.1	20.4	1.47	21.2	.00	.02	.09	110
	125 ISL	10.17	10.15	33.844	26.024	200.2	.317	3.09	48.8							126
1	129	10.07	10.05	33.864	26.056	197.2	.325	3.03	47.7	24.6	1.64	23.7	.01	.02	.07	130
1	150	9.72	9.70	33.931	26.168	187.0	.366	2.78	43.4	27.9	1.82	26.8	.01	.01	.06	151
1	180	9.14	9.12	34.044	26.351	170.0	.419	2.43	37.5	33.7	1.98	29.0	.00			181
	200 ISL	8.75	8.72	34.081	26.442	161.7	.452	2.27	34.6							202
1	209	8.57	8.55	34.087	26.474	158.8	.467	2.21	33.7	39.1	2.14	31.3	.00			210

RV MCARTHUR CALCOFI CRUISE 8502 STATION 90 37

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 11.0 N	118 23.2 W	26/02/85	0018 GMT	1152 M	270	14 KT	280 02 05	0	1015.2 MB	13.4 C	11.9 C	0/8	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	14.41	14.41	33.463	24.914	303.0	.000	6.06	104.3	1.8	.29	.1	.00	.25	.04	0
1	10	14.07	14.06	33.458	24.983	296.7	.030	6.12	104.6	1.7	.28	.1	.00	.32	.07	10
	20 ISL	13.94	13.94	33.454	25.006	294.8	.060	6.13	104.5							20
1	21	13.93	13.93	33.454	25.008	294.7	.062	6.13	104.5	1.5	.29	.1	.00	.54	.16	21
	30 ISL	13.76	13.75	33.452	25.043	291.5	.089	6.06	102.8							30
1	31	13.73	13.72	33.452	25.049	291.0	.091	6.05	102.7	1.5	.30	.3	.02	1.21	.34	31
1	41	13.07	13.06	33.451	25.181	278.7	.120	5.53	92.6	3.0	.42	1.5	.09	.74	.32	41
	50 ISL	12.56	12.55	33.455	25.284	269.5	.145	5.08	84.2							50
1	56	12.28	12.27	33.458	25.340	263.8	.160	4.82	79.3	4.4	.53	4.1	.19	.43	.25	56
1	67	11.83	11.82	33.528	25.481	250.7	.188	4.36	71.1	11.0	1.03	13.3	.03	.24	.13	67
	75 ISL	11.55	11.54	33.583	25.575	241.9	.209	4.10	66.6							76
1	77	11.50	11.49	33.594	25.593	240.3	.213	4.06	65.8	13.5	1.19	15.7	.02	.12	.13	77
1	92	11.03	11.02	33.688	25.751	225.5	.248	3.68	59.1	16.6	1.37	18.5	.01	.05	.08	92
	100 ISL	10.75	10.73	33.724	25.829	218.2	.266	3.55	56.6							101
1	111	10.39	10.38	33.766	25.924	209.4	.291	3.40	53.8					.02	.07	112
	125 ISL	10.08	10.07	33.829	26.027	199.9	.319	3.16	49.7							126
1	132	9.94	9.92	33.862	26.076	195.3	.333	3.03	47.5	24.9	1.70	24.4	.00	.01	.06	133
	150 ISL	9.65	9.63	33.930	26.178	186.0	.367	2.79	43.6							151
1	157	9.53	9.52	33.954	26.216	182.5	.380	2.72	42.3	28.7	1.85	26.5	.00	.01	.04	158
1	187	8.94	8.92	34.028	26.370	168.4	.432	2.56	39.3	33.4	1.97	28.2	.00			188
	200 ISL	8.76	8.76	34.047	26.410	164.7	.454	2.48	37.9							202
1	217	8.60	8.58	34.066	26.453	160.9	.481	2.35	35.8	37.2	2.08	29.7	.01			218
	250 ISL	8.21	8.19	34.114	26.550	152.2	.533	2.00	30.2							252
1	252	8.20	8.17	34.116	26.554	151.8	.536	1.98	29.9	43.1	2.26	31.9	.00			253
	300 ISL	7.68	7.65	34.164	26.669	141.5	.607	1.46	21.8							302
1	302	7.66	7.63	34.166	26.673	141.1	.610	1.44	21.5	51.4	2.50	34.8	.00			304
1	357	7.00	6.97	34.200	26.793	130.2	.684	.99	14.6	61.7	2.73	37.6	.00			359
	400 ISL	6.71	6.69	34.229	26.856	124.8	.739	.75	10.9							403
1	443	6.50	6.46	34.256	26.906	120.5	.792	.58	8.4	71.7	2.92	39.9	.00			446
	500 ISL	6.10	6.06	34.292	26.986	113.3	.858	.42	6.1							504
1	529	5.91	5.86	34.309	27.024	109.9	.891	.37	5.3	83.3	3.07	41.7	.00			533
	600 ISL	5.59	5.54	34.338	27.087	104.5	.967	.31	4.5							605
1	619	5.52	5.47	34.343	27.099	103.6	.986	.30	4.3	90.7	3.16	42.6	.00			623

RV MCARTHUR CALCOFI CRUISE 8502 STATION 90 45

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 55.1 N	118 56.4 W	25/02/85	2030 GMT	1775 M	310	12 KT	310 05 07	2	1019.0 MB	12.6 C	11.3 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	13.47	13.47	33.456	25.104	284.9	.000	6.10	103.0	3.6	.39	1.5	.03	.67	.11	0
1	10	13.44	13.44	33.453	25.108	284.8	.028	6.12	103.2	3.5	.39	1.5	.05	.75	.13	10
	20 ISL	13.29	13.28	33.453	25.139	282.1	.057	6.12	102.9							20
1	21	13.27	13.26	33.453	25.143	281.8	.059	6.12	102.9	3.7	.43	1.6	.05	.87	.18	21
	30 ISL	13.00	12.99	33.454	25.198	276.7	.085	5.96	99.5							30
1	31	12.96	12.96	33.456	25.206	276.0	.087	5.93	99.0	4.2	.49	2.9	.08	1.21	.26	31
1	41	12.43	12.43	33.488	25.334	264.1	.114	5.42	89.5	7.5	.73	7.2	.11	.99	.24	41
	50 ISL	11.82	11.81	33.533	25.485	249.9	.138	4.82	78.5							50
1	57	11.40	11.39	33.569	25.592	239.9	.154	4.41	71.3	13.5	1.14	14.7	.09	.35	.17	57
1	67	10.98	10.97	33.610	25.699	229.9	.177	4.08	65.4	16.0	1.30	17.4	.02	.18	.13	67
	75 ISL	10.80	10.79	33.637	25.752	225.0	.196	3.94	63.0							76
1	78	10.75	10.74	33.646	25.767	223.6	.202	3.91	62.4	17.8	1.38	18.0	.02	.11	.11	78
1	93	10.37	10.36	33.702	25.878	213.4	.235	3.61	57.1	20.3	1.47	20.0	.00	.04	.06	93
	100 ISL	10.16	10.15	33.733	25.938	207.8	.251	3.49	55.0							101
1	113	9.80	9.78	33.790	26.044	198.0	.278	3.29	51.4	24.8	1.63	22.5	.27	.01	.06	114
	125 ISL	9.53	9.52	33.845	26.131	189.9	.300	3.10	48.2							126
1	134	9.35	9.34	33.890	26.195	183.9	.318	2.95	45.7	28.8	1.77	25.8	.00	.01	.05	135
	150 ISL	9.13	9.11	33.971	26.295	174.8	.346	2.71	41.7							151
1	159	9.03	9.01	34.011	26.342	170.4	.362	2.58	39.7	33.0	1.90	27.5	.00	.00	.03	160
1	190	8.73	8.71	34.063	26.430	162.6	.413	2.32	35.5	36.6	2.01	29.3	.01			191
	200 ISL	8.63	8.61	34.076	26.456	160.4	.429	2.25	34.3							202
1	221	8.42	8.40	34.096	26.505	156.0	.462	2.10	31.9	40.5	2.17	30.8	.01			222
	250 ISL	8.04	8.01	34.118	26.580	149.2	.507	1.87	28.1							252
1	256	7.95	7.93	34.122	26.596	147.8	.516	1.81	27.2	46.3	2.25	31.1	.04			258
	300 ISL	7.57	7.54	34.156	26.679	140.5	.579	1.41	21.0							302
1	307	7.51	7.48	34.161	26.691	139.4	.589	1.34	19.9	53.6	2.36	33.7	.02			309
1	363	6.93	6.90	34.213	26.813	128.4	.663	.83	12.2	63.7	2.69	37.3	.02			365
	400 ISL	6.68	6.65	34.233	26.863	124.0	.710	.66	9.7							403
1	449	6.43	6.39	34.254	26.913	119.7	.770	.55	8.0	72.7	2.88	39.8	.01			452
	500 ISL	6.12	6.07	34.282	26.976	114.3	.830	.43	6.2							504
1	535	5.91	5.87	34.299	27.016	110.7	.870	.37	5.3	82.7	2.93	40.3	.05			539
	600 ISL	5.60	5.54	34.327	27.078	105.4	.939	.31	4.4							605
1	623	5.50	5.45	34.336	27.096	103.8	.963	.30	4.3	90.2	3.12	42.2	.00			627

RV MCARTHUR CALCOFI CRUISE 8502 STATION 90 53

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 39.2 N	119 28.9 W	25/02/85	1404 GMT	1317 M	310	20 KT	310 07 07	2	1019.6 MB	11.8 C	11.0 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	13.33	13.33	33.419	25.103	285.0	.000	6.05	101.8	3.5	.38	1.2	.01	.58	.20	0
1	10	13.33	13.33	33.422	25.106	285.0	.028	6.07	102.1	3.5	.38	1.2	.02	.56	.15	10
1	20	13.24	13.23	33.425	25.127	283.2	.057	6.06	101.8	3.6	.39	1.3	.02	.67	.25	20
1	30	13.16	13.17	33.430	25.143	282.0	.085	6.04	101.3	3.6	.40	1.5	.04			30
1	41	12.91	12.91	33.439	25.202	276.6	.115	5.76	96.1	4.7	.51	3.3	.08	.51	.20	41
	50 ISL	12.76	12.76	33.447	25.239	273.4	.141	5.59	93.0							50
1	56	12.67	12.66	33.452	25.260	271.5	.156	5.50	91.3	5.9	.59	5.2	.10	.32	.16	56
1	66	12.46	12.45	33.463	25.310	267.0	.183	5.30	87.6	7.0	.66	6.8	.16	.25	.13	66
	75 ISL	11.58	11.57	33.540	25.536	245.6	.207	4.55	73.9							76
1	76	11.51	11.50	33.547	25.553	244.0	.208	4.50	72.9	12.7	1.04	13.5	.03	.11	.11	76
1	91	11.03	11.02	33.599	25.682	232.1	.244	4.15	66.6	15.8	1.20	16.4	.00	.06	.09	91
	100 ISL	10.86	10.84	33.618	25.728	227.9	.266	4.04	64.6							101
1	110	10.65	10.64	33.642	25.782	222.9	.289	3.93	62.5	18.1	1.32	18.5	.00	.05	.08	111
	125 ISL	10.09	10.08	33.715	25.936	208.6	.321	3.63	57.1							126
1	130	9.87	9.85	33.746	25.998	202.7	.332	3.52	55.1	23.1	1.50	22.0	.00	.01	.05	131
	150 ISL	9.19	9.17	33.855	26.195	184.2	.370	3.27	50.5							151
1	155	9.04	9.02	33.881	26.239	180.1	.379	3.23	49.7	23.3	1.59	22.8	.00	.01	.04	156
1	185	8.57	8.55	33.958	26.373	167.9	.431			32.7	1.79	27.2	.00			186
	200 ISL	8.38	8.36	33.982	26.421	163.5	.456	3.08	46.7							202
1	215	8.21	8.19	34.000	26.461	159.9	.480	3.03	45.8	36.5	1.87	28.3	.00			216
1	249	7.88	7.85	34.035	26.538	153.1	.533	2.70	40.5	41.2	2.03	29.7				250
	250 ISL	7.86	7.83	34.036	26.542	152.7	.535	2.68	40.1							252
1	298	7.27	7.24	34.089	26.668	141.2	.606	1.95	28.8	51.1	2.31	34.0	.00			300
	300 ISL	7.25	7.22	34.091	26.673	140.9	.608	1.93	28.5							302
1	351	6.77	6.74	34.121	26.763	132.8	.678	1.48	21.6	59.1	2.43	35.3	.00			353
	400 ISL	6.42	6.39	34.157	26.837	126.2	.741	1.09	15.7							403
1	434	6.21	6.17	34.185	26.887	121.8	.784	.85	12.3	71.3	2.79	40.0	.00			437
	500 ISL	5.79	5.75	34.257	26.997	111.8	.861	.51	7.2							504
1	516	5.69	5.65	34.275	27.023	109.5	.879	.45	6.4	84.2	3.00	42.1	.00			520
	600 ISL	5.38	5.33	34.336	27.110	102.0	.967	.42	6.0							605
1	601	5.38	5.33	34.337	27.111	102.0	.968	.42	5.9		3.05	42.3	.00			605

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LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 23.1 N	119 58.0 W	25/02/85	1006 GMT	823 M	330	25 KT	310 06 07	2	1021.5 MB	11.7 C	10.8 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	13.68	13.68	33.308	24.947	299.8	.000	6.00	101.6	2.5	.27	.4	.01	.38	.02	0
1	10	13.68	13.68	33.307	24.946	300.2	.030	6.05	102.5	2.5	.27	.4	.00	.41	.05	10
	20 ISL	13.52	13.51	33.303	24.977	297.6	.060	6.00	101.2							20
1	21	13.50	13.50	33.303	24.980	297.3	.063	5.99	101.1	2.7	.33	.8	.03	.54	.13	21
	30 ISL	13.37	13.36	33.305	25.009	294.7	.090	5.92	99.5							30
1	31	13.35	13.35	33.307	25.013	294.4	.092	5.91	99.4	2.9	.37	1.2	.03	.51	.21	31
1	41	13.06	13.06	33.354	25.107	285.7	.121	5.93	99.2	3.2	.39	1.4	.06	.32	.16	41
	50 ISL	12.99	12.99	33.374	25.137	283.1	.147	5.92	96.8							50
1	56	12.97	12.96	33.383	25.148	282.2	.163	5.91	98.7	3.5	.39	1.6	.07	.30	.23	56
1	67	12.78	12.77	33.408	25.206	277.0	.194	5.85	97.3	4.2	.45	2.3	.12	.21	.20	67
	75 ISL	12.16	12.15	33.371	25.296	268.5	.217	5.38	88.3							76
1	77	12.03	12.02	33.363	25.314	266.8	.221	5.28	86.4	6.8	.68	7.6	.07	.13	.19	77
1	92	11.58	11.57	33.367	25.402	258.8	.260	4.96	80.4	8.8	.83	10.7	.04	.08	.14	92
	100 ISL	11.09	11.08	33.444	25.551	244.8	.281	4.58	73.5							101
1	111	10.41	10.40	33.579	25.775	223.6	.308	4.09	64.7	16.7	1.24	19.4	.01	.02	.06	112
	125 ISL	9.96	9.95	33.696	25.943	207.8	.337	3.99	62.5							126
1	132	9.78	9.76	33.744	26.011	201.4	.352	3.93	61.4	22.8	1.50	24.4	.01	.01	.06	133
	150 ISL	9.33	9.31	33.795	26.125	190.9	.387	3.74	57.9							151
1	157	9.17	9.15	33.809	26.162	187.5	.401	3.64	56.1	26.4	1.61	26.4	.01	.01	.06	158
1	187	8.66	8.64	33.946	26.350	170.1	.454	2.94	44.8	32.7	1.76	29.5	.01			188
	200 ISL	8.41	8.39	33.981	26.415	164.1	.476	2.86	43.3							202
1	218	8.09	8.07	34.014	26.490	157.2	.504	2.79	42.0	38.1	1.89	31.0	.01			219
	250 ISL	7.62	7.59	34.058	26.594	147.6	.553	2.36	35.2							252
1	253	7.59	7.56	34.061	26.601	147.0	.557	2.32	34.6	46.0	2.11	33.7	.01			254
	300 ISL	7.21	7.18	34.104	26.689	139.3	.625	1.77	26.1							302
1	303	7.19	7.16	34.105	26.692	139.0	.630	1.74	25.7	54.0	2.35	36.6	.01			305
1	358	6.76	6.73	34.119	26.762	132.9	.704	1.42	20.7	60.2	2.49	38.4	.01			360
	400 ISL	6.36	6.32	34.134	26.827	127.1	.759	1.14	16.5							403
1	442	6.01	5.97	34.158	26.892	121.3	.811	.88	12.6	73.7	2.73	41.6	.00			445
	500 ISL	5.80	5.76	34.211	26.960	115.4	.879	.61	8.8							504
1	526	5.73	5.68	34.239	26.991	112.7	.910	.52	7.4	82.1	2.88	42.1	.00			530
	600 ISL	5.35	5.30	34.312	27.095	103.4	.989	.34	4.9							605
1	611	5.28	5.23	34.323	27.112	101.9	1.000	.33	4.7	91.1	2.99	43.0	.00			615

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LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
32 05.2 N	120 38.7 W	25/02/85	0435 GMT	3752 M	350	20 KT	340 06 07	0	1023.5 MB	13.1 C	12.2 C	0/9

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	15.01	15.01	33.371	24.715	321.9	.000	5.91	102.9	2.2	.30	.2	.00	.08	.02	0
1	10	14.67	14.67	33.350	24.772	316.7	.032	5.91	102.2	2.2	.31	.2	.00	.16	.03	10
	20 ISL	14.22	14.21	33.328	24.851	309.5	.063	5.95	101.9							20
1	26	13.98	13.98	33.317	24.892	305.8	.081	5.97	101.7	2.1	.34	.2	.01	.36	.07	26
	30 ISL	13.89	13.89	33.312	24.906	304.6	.094	5.96	101.5							30
1	42	13.76	13.76	33.302	24.926	303.0	.130	5.95	100.9	2.1	.34	.2	.02	.38	.08	42
	50 ISL	13.74	13.73	33.302	24.931	302.8	.155	5.93	100.5							50
1	57	13.72	13.72	33.302	24.935	302.6	.175	5.92	100.3	2.2	.33	.3	.03	.42	.11	57
1	68	13.72	13.71	33.301	24.935	302.9	.208	5.94	100.7	2.2	.32	.3	.02	.40	.11	68
	75 ISL	13.41	13.40	33.297	24.996	297.4	.230	5.78	97.3							76
1	78	13.27	13.26	33.296	25.022	294.8	.238	5.72	96.0	3.2	.37	1.5	.01	.16	.09	78
1	94	12.72	12.71	33.372	25.190	279.2	.284	5.82	96.6	4.3	.42	2.4	.18	.11	.09	94
	100 ISL	12.54	12.53	33.376	25.228	275.7	.301	5.70	94.3							101
1	109	12.28	12.27	33.376	25.278	271.1	.325	5.46	89.8	6.2	.55	5.0	.11	.09	.10	109
1	124	11.53	11.51	33.413	25.448	255.2	.367	4.91	79.5	9.8	.81	7.0	.01	.07	.09	125
	125 ISL	11.49	11.47	33.417	25.458	254.2	.368	4.88	79.0							126
1	150	9.88	9.86	33.680	25.945	208.2	.427	3.72	58.2	21.2	1.44	19.2	.01	.01	.04	151
1	170	9.25	9.23	33.837	26.171	186.9	.466	3.24	50.0	27.2	1.70	23.8	.00	.01	.04	171
1	191	9.02	9.00	33.885	26.245	180.2	.504	3.11	47.8	29.4	1.76	25.1	.00			192
	200 ISL	8.89	8.86	33.907	26.284	176.7	.520	3.09	47.3							202
1	212	8.69	8.66	33.934	26.337	171.9	.541	3.07	46.8	31.7	1.79	25.5	.00			213
1	243	8.11	8.08	33.991	26.469	159.5	.592	3.04	45.8	36.1	1.91	26.8	.02			244
	250 ISL	7.98	7.96	34.000	26.495	157.2	.603	2.97	44.6							252
1	283	7.47	7.44	34.031	26.594	148.2	.654	2.51	37.3	44.8	2.03	28.6	.01			285
	300 ISL	7.23	7.20	34.045	26.639	144.1	.679	2.26	33.3							302
1	344	6.73	6.70	34.089	26.743	134.5	.740	1.58	23.1	57.4	2.47	34.9	.00			346
	400 ISL	6.49	6.45	34.192	26.856	124.5	.812	.84	12.2							403
1	420	6.43	6.39	34.228	26.892	121.3	.838	.64	9.3	69.0	2.83	37.4	.00			423
1	496	5.93	5.89	34.286	27.003	111.5	.925	.43	6.2	79.0	2.97	38.9	.00			499
	500 ISL	5.91	5.86	34.288	27.008	111.0	.930	.42	6.0							504
1	571	5.52	5.48	34.316	27.077	105.0	1.007	.31	4.4	87.2	3.05	40.2	.00			575

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LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
31 45.2 N	121 19.0 W	24/02/85	2256 GMT	3670 M	350	14 KT	330 03 05	1	1023.9 MB	14.4 C	12.8 C	1/9 SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	15.41	15.41	33.402	24.652	327.9	.000	5.83	102.3	1.8	.22	.2	.00	.12	.01	0
1	10	15.06	15.06	33.401	24.728	321.0	.032	5.86	102.1	1.7	.23	.2	.00	.11	.02	10
	20 ISL	14.99	14.98	33.397	24.741	320.0	.064	5.86	102.0							20
1	26	14.94	14.94	33.395	24.749	319.5	.083	5.86	101.9	1.5	.23	.2	.00	.13	.02	26
	30 ISL	14.91	14.90	33.394	24.756	319.0	.096	5.86	101.8							30
1	41	14.83	14.82	33.390	24.771	317.9	.131	5.86	101.6	1.4	.23	.1	.00	.19	.04	41
	50 ISL	14.82	14.81	33.390	24.773	317.9	.160	5.85	101.5							50
1	56	14.81	14.80	33.389	24.775	317.9	.178	5.85	101.4	1.4	.21	.1	.00	.24	.05	56
1	66	14.72	14.71	33.386	24.792	316.5	.210	5.81	100.5	1.5	.22	.1	.01	.31	.12	66
	75 ISL	14.41	14.40	33.377	24.851	311.1	.239	5.75	98.9							76
1	77	14.34	14.33	33.376	24.864	310.0	.244	5.74	98.6	1.8	.28	.6	.03	.35	.19	77
1	92	13.93	13.91	33.363	24.941	303.0	.290	5.68	96.7	2.2	.31	1.2	.06	.37	.24	92
	100 ISL	13.32	13.31	33.327	25.036	294.1	.315	5.59	93.9							101
1	107	12.79	12.78	33.311	25.129	285.3	.334	5.48	91.1	3.7	.46	3.7	.04	.25	.19	107
1	121	11.83	11.82	33.409	25.368	260.8	.375	5.08	82.8	6.8	.70	8.0	.03	.11	.10	122
	125 ISL	11.74	11.72	33.445	25.434	256.6	.384	5.05	82.2							126
1	147	11.24	11.22	33.615	25.658	235.7	.439	4.84	78.0	9.6	.81	10.7	.01	.03	.04	148
	150 ISL	11.09	11.07	33.612	25.683	233.4	.445	4.75	76.3							151
1	167	10.12	10.10	33.594	25.838	218.7	.484	4.16	65.4	17.1	1.25	17.9	.01	.01	.03	168
1	187	9.49	9.47	33.703	26.027	201.0	.526	3.77	58.5	22.4	1.47	21.7	.01			188
	200 ISL	9.06	9.04	33.807	26.178	186.8	.551	3.45	53.0							202
1	207	8.86	8.84	33.860	26.252	179.6	.564	3.29	50.4	29.1	1.69	25.4	.00			208
1	236	8.53	8.51	33.947	26.371	169.0	.617	3.10	47.1	33.1	1.81	27.1	.00			239
	250 ISL	8.33	8.30	33.971	26.421	164.4	.638	3.04	46.1							252
1	277	7.83	7.80	34.010	26.526	154.7	.682	2.88	43.1	40.2	1.95	29.4	.00			279
	300 ISL	7.52	7.49	34.029	26.585	149.3	.716	2.61	38.7							302
1	339	7.06	7.03	34.051	26.667	141.8	.773	2.04	30.0	52.5	2.30	33.7	.00			341
	400 ISL	6.40	6.36	34.107	26.801	129.6	.855	1.22	17.7							403
1	415	6.26	6.22	34.123	26.832	126.8	.875	1.04	15.0	67.4	2.70	37.9	.00			418
1	493	5.76	5.72	34.199	26.955	115.7	.969	.58	8.3	79.0	2.90	39.7	.00			496
	500 ISL	5.72	5.68	34.206	26.966	114.8	.977	.55	7.9							504
1	572	5.37	5.32	34.267	27.057	106.6	1.057	.38	5.4	87.6	3.03	40.3	.00			576

RV MCARTHUR CALCOFI CRUISE 8502 STATION 90 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 25.3 N	121 58.2 W	24/02/85	1700 GMT	3818 M	050	05 KT	360 04 07	2	1024.9 MB	14.4 C	12.2 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	15.64	15.64	33.428	24.621	330.8	.000	5.75	101.4	1.0	.20	.1	.01	.08	.00	0
1	10	15.60	15.60	33.420	24.623	331.0	.033	5.76	101.5	.9	.20	.1	.00	.07	.01	10
	20 ISL	15.59	15.59	33.421	24.626	331.0	.066	5.76	101.5							20
1	25	15.59	15.58	33.421	24.627	331.0	.082	5.76	101.5	.8	.20	.1	.00	.07	.02	25
	30 ISL	15.58	15.58	33.420	24.629	331.1	.099	5.76	101.5							30
1	40	15.57	15.56	33.420	24.631	331.2	.132	5.77	101.6	.7	.20	.1	.00	.08	.02	40
	50 ISL	15.58	15.57	33.419	24.628	331.8	.166	5.76	101.5							50
1	55	15.59	15.58	33.419	24.627	332.0	.181	5.76	101.5	.7	.19	.1	.00	.09	.02	55
1	65	15.57	15.56	33.418	24.630	332.1	.214	5.75	101.3	.6	.17	.1	.00	.12	.02	65
	75 ISL	15.55	15.54	33.418	24.635	331.9	.249	5.74	101.0							76
1	76	15.55	15.54	33.418	24.635	331.9	.251	5.74	101.0	.5	.19	.1	.00	.12	.03	76
1	90	14.71	14.69	33.374	24.785	317.9	.296	5.74	99.3	1.0	.23	.2	.02	.28	.16	90
	100 ISL	14.32	14.31	33.435	24.914	305.9	.328	5.63	96.7							101
1	105	14.16	14.14	33.464	24.971	300.5	.342	5.57	95.3	1.7	.32	1.4	.04	.26	.17	105
1	119	13.28	13.27	33.461	25.148	284.0	.386	5.40	90.8	2.8	.40	3.1	.01	.15	.12	120
	125 ISL	12.89	12.87	33.440	25.211	278.1	.401	5.34	89.0							126
1	144	11.43	11.41	33.425	25.475	253.0	.453	4.95	80.0	7.5	.72	8.8	.02	.06	.06	145
	150 ISL	11.01	10.99	33.480	25.594	241.7	.467	4.72	75.7							151
1	164	10.08	10.06	33.643	25.883	214.4	.499	4.12	64.7	16.8	1.25	17.7	.01	.01	.02	165
1	184	9.43	9.41	33.768	26.088	195.2	.540	3.53	54.7	23.4	1.53	22.1	.00			185
	200 ISL	9.18	9.16	33.828	26.176	187.1	.570	3.36	51.8							202
1	204	9.13	9.10	33.841	26.195	185.3	.578	3.34	51.4	26.2	1.64	23.5	.00			205
1	233	8.39	8.37	33.965	26.406	165.5	.628	3.05	46.2	32.7	1.78	25.2	.01			234
	250 ISL	8.07	8.04	33.991	26.476	159.1	.656	3.02	45.5							252
1	273	7.71	7.69	34.000	26.535	153.7	.692	3.00	44.8	38.7	1.99	27.6	.01			274
	300 ISL	7.35	7.32	34.015	26.598	147.9	.733	2.71	40.2							302
1	331	7.01	6.98	34.029	26.657	142.6	.778	2.29	33.6	49.4	2.21	31.1	.01			333
	400 ISL	6.36	6.32	34.074	26.780	131.6	.873	1.47	21.3							403
1	406	6.31	6.28	34.078	26.789	130.7	.880	1.41	20.4	62.7	2.58	35.1	.01			408
1	480	5.89	5.85	34.168	26.914	119.5	.973	.72	10.3	74.6	2.84	37.5	.00			483
	500 ISL	5.79	5.74	34.191	26.945	116.8	.997	.60	8.6							504
1	555	5.52	5.47	34.247	27.023	109.8	1.059	.43	6.1	84.6	2.97	39.1	.00			559

RV MCARTHUR CALCOFI CRUISE 8502 STATION 90 100

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 05.6 N	122 39.6 W	24/02/85	1003 GMT	3897 M	070	05 KT	340 04 06	2	1023.3 MB	14.9 C	12.2 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	15.83	15.83	33.579	24.694	323.9	.000	5.73	101.5	1.7	.21	.1	.00	.05	.01	0
1	10	15.78	15.78	33.535	24.672	326.3	.032	5.76	101.9	1.6	.20	.1	.00	.05	.01	10
	20 ISL	15.69	15.69	33.525	24.684	325.4	.065	5.78	102.2							20
1	26	15.63	15.63	33.517	24.692	324.9	.084	5.79	102.1	1.6	.20	.1	.00	.06	.02	26
	30 ISL	15.58	15.58	33.510	24.697	324.6	.098	5.78	102.0							30
1	41	15.49	15.48	33.495	24.707	324.0	.133	5.77	101.5	1.5	.20	.1	.00	.08	.02	41
	50 ISL	15.47	15.47	33.491	24.707	324.2	.162	5.78	101.7							50
1	57	15.47	15.46	33.489	24.707	324.4	.184	5.79	101.8	1.5	.20	.1	.00	.08	.02	57
1	67	15.42	15.41	33.482	24.712	324.2	.217	5.77	101.3	1.5	.20	.1	.00	.13	.04	67
	75 ISL	14.86	14.85	33.492	24.843	312.0	.243	5.73	99.5							76
1	77	14.74	14.73	33.497	24.873	309.2	.248	5.72	99.1	2.0	.25	.3	.03	.37	.23	77
1	92	14.57	14.56	33.624	25.007	296.9	.293	5.55	95.9	2.5	.25	.8	.01	.32	.22	92
	100 ISL	13.92	13.90	33.538	25.078	290.2	.318	5.50	93.7							101
1	108	13.19	13.18	33.432	25.144	284.0	.340	5.45	91.4	3.6	.37	1.6	.01	.25	.22	108
1	122	12.00	11.98	33.327	25.294	269.8	.381	5.22	85.3	6.2	.60	5.4	.00	.12	.18	123
	125 ISL	11.98	11.96	33.368	25.329	266.6	.388	5.19	84.9							126
1	148	11.82	11.80	33.742	25.650	236.7	.447	4.96	81.0	8.3	.66	8.2	.01	.03	.04	149
	150 ISL	11.75	11.73	33.748	25.667	235.1	.451	4.95	80.6							151
1	168	10.80	10.78	33.760	25.849	218.0	.492	4.72	75.4	12.3	.86	11.8	.01	.01	.02	169
1	189	9.60	9.58	33.814	26.097	194.5	.535	4.11	64.0	20.9	1.28	18.6	.01			190
	200 ISL	9.30	9.28	33.848	26.171	187.5	.556	3.99	61.8							202
1	209	9.13	9.11	33.875	26.221	183.0	.572	3.93	60.5	24.5	1.42	20.3	.03			210
1	239	8.34	8.32	33.956	26.406	165.6	.624	3.43	51.9	32.5	1.72	24.7	.01			240
	250 ISL	8.13	8.10	33.973	26.453	161.3	.643	3.36	50.7							252
1	279	7.64	7.61	33.998	26.544	152.8	.689	3.20	47.7	39.6	1.87	26.8	.01			281
	300 ISL	7.28	7.25	34.013	26.606	147.1	.720	2.83	41.8							302
1	340	6.68	6.65	34.041	26.711	137.4	.777	2.00	29.2	55.5	2.34	32.2	.00			342
	400 ISL	6.14	6.10	34.101	26.830	126.6	.856	1.21	17.5							403
1	415	6.04	6.00	34.117	26.855	124.4	.875	1.07	15.4	70.2	2.72		.00			418
1	490	5.60	5.56	34.174	26.955	115.5	.964	.68	9.7	80.9	2.90		.00			493
	500 ISL	5.54	5.50	34.181	26.968	114.3	.976	.64	9.1							504
1	564	5.11	5.07	34.217	27.047	107.1	1.047	.51	7.2	91.2	3.00		.00			568

RV MCARTHUR CALCOFI CRUISE 8502 STATION 90 110

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 45.1 N	123 19.9 W	24/02/85	0413 GMT	3982 M	050	04 KT	340 06 06	2	1022.5 MB	14.3 C	11.7 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	15.13	15.13	33.430	24.735	320.0	.000	5.81	101.4	1.7	.22	.1	.00	.06	.01	0
1	10	14.79	14.79	33.392	24.780	316.1	.032	5.89	102.1	1.7	.23	.1	.00	.12	.02	10
	20 ISL	14.70	14.70	33.382	24.790	315.3	.063	5.90	102.1							20
1	26	14.65	14.65	33.376	24.796	314.9	.082	5.91	102.1	1.7	.23	.1	.00	.17	.03	26
	30 ISL	14.64	14.64	33.374	24.798	314.9	.095	5.90	102.0							30
1	41	14.61	14.60	33.369	24.801	314.9	.129	5.88	101.5	1.6	.24	.1	.00	.17	.04	41
	50 ISL	14.53	14.52	33.361	24.812	314.2	.158	5.90	101.7							50
1	57	14.48	14.47	33.358	24.821	313.5	.179	5.91	101.8	1.6	.24	.1	.00	.21	.08	57
1	67	14.47	14.46	33.369	24.831	312.8	.210	5.88	101.2	1.7	.24	.1	.00	.22	.05	67
	75 ISL	14.74	14.73	33.485	24.864	310.0	.236	5.78	100.0							76
1	78	14.79	14.78	33.527	24.885	308.1	.244	5.73	99.4	1.8	.24	.3	.00	.17	.07	78
1	93	13.85	13.83	33.621	25.157	282.5	.288	5.42	92.3	3.3	.36	2.7	.06	.19	.13	93
	100 ISL	13.21	13.19	33.603	25.273	271.6	.309	5.30	89.0							101
1	109	12.41	12.40	33.554	25.391	260.4	.332	5.16	85.2	5.9	.57	6.0	.01	.08	.07	109
1	123	11.09	11.07	33.464	25.567	243.8	.369	4.86	78.0	10.0	.88	9.1	.01	.05	.04	124
	125 ISL	11.00	10.98	33.467	25.586	242.0	.373	4.83	77.3							126
1	149	10.06	10.05	33.610	25.859	216.3	.429	4.34	68.2	16.7	1.14	15.2		.01	.02	150
	150 ISL	10.04	10.02	33.615	25.867	215.6	.430	4.33	68.0							151
1	170	9.51	9.49	33.759	26.067	196.8	.472	4.12	64.0	20.9	1.33	18.9	.00	.00	.01	171
1	190	9.13	9.11	33.867	26.214	183.2	.510	3.93	60.5	24.6	1.45	21.1	.00			191
	200 ISL	8.94	8.92	33.908	26.277	177.4	.527	3.87	59.4							202
1	211	8.74	8.72	33.943	26.335	172.0	.547	3.82	58.4	28.2	1.56	22.4	.00			212
1	242	8.27	8.25	33.983	26.436	162.6	.598	3.62	54.7	32.7	1.68	23.5				243
	250 ISL	8.12	8.10	33.996	26.471	159.5	.611	3.40	51.2							252
1	282	7.53	7.50	34.042	26.594	148.1	.661	2.46	36.6	45.2	2.09	28.2	.01			284
	300 ISL	7.30	7.27	34.051	26.634	144.6	.687	2.23	33.0							302
1	343	6.85	6.82	34.065	26.707	138.0	.748	1.89	27.7	55.6	2.39	31.8	.01			345
	400 ISL	6.40	6.36	34.142	26.829	127.0	.823	1.13	16.4							403
1	419	6.27	6.24	34.170	26.867	123.5	.848	.90	13.0	70.1	2.79		.00			422
1	495	5.94	5.89	34.229	26.957	115.7	.938	.58	8.3	78.4	2.93		.00			498
	500 ISL	5.91	5.87	34.234	26.963	115.2	.944	.56	8.1							504
1	571	5.62	5.57	34.288	27.043	108.3	1.023	.43	6.1	85.8	3.06		.00			575

RV MCARTHUR CALCOFI CRUISE 8502 STATION 90 120

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 25.0 N	124 00.0 W	23/02/85	2259 GMT	4099 M	040	09 KT	340 08 09	2	1020.9 MB	14.2 C	12.2 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	16.38	16.38	33.598	24.583	334.5	.000	5.65	101.2	1.9	.21		.00	.06	.01	0
1	10	16.33	16.33	33.597	24.594	333.7	.033	5.67	101.5	1.8	.22		.00	.08	.00	10
	20 ISL	16.31	16.31	33.596	24.598	333.7	.067	5.67	101.4							20
1	26	16.30	16.30	33.595	24.600	333.7	.086	5.67	101.4	1.8	.21		.00	.08	.01	26
	30 ISL	16.21	16.21	33.582	24.612	332.7	.100	5.68	101.4							30
1	42	15.88	15.88	33.537	24.652	329.3	.139	5.72	101.4	1.6	.22		.00	.10	.01	42
	50 ISL	15.70	15.69	33.511	24.673	327.5	.166	5.75	101.6							50
1	58	15.53	15.53	33.487	24.691	326.0	.192	5.78	101.7	1.7	.22		.00	.13	.04	58
1	69	15.30	15.28	33.452	24.718	323.8	.227	5.81	101.8	1.7	.22		.00	.15	.04	69
	75 ISL	14.91	14.90	33.407	24.767	319.3	.247	5.83	101.3							76
1	79	14.66	14.64	33.385	24.804	315.7	.259	5.84	100.9	1.8	.26		.00	.27	.18	79
1	95	13.76	13.75	33.438	25.033	294.3	.308	5.54	94.0	3.2	.39		.05	.36	.26	95
	100 ISL	13.17	13.15	33.398	25.122	285.9	.323	5.42	90.8							101
1	111	12.15	12.14	33.376	25.302	268.8	.352	5.19	85.1	6.3	.66		.01	.14	.12	111
1	125	12.07	12.06	33.680	25.553	245.3	.391	5.00	82.0	7.6	.68		.01	.06	.06	126
	150 ISL	10.45	10.44	33.602	25.787	223.3	.448	4.26	67.4							151
1	151	10.35	10.33	33.593	25.797	222.4	.451	4.21	66.5	16.3	1.24		.00	.02	.02	152
1	172	9.64	9.62	33.737	26.030	200.5	.495	3.64	56.7	22.8	1.52		.00	.01	.01	173
1	193	9.15	9.13	33.835	26.185	186.0	.536	3.15	48.5	27.9	1.73		.00			194
	200 ISL	8.97	8.95	33.870	26.242	180.7	.548	3.18	48.8							202
1	213	8.64	8.62	33.929	26.339	171.6	.571	3.23	49.2	31.1	1.78		.00			214
1	244	8.17	8.15	33.985	26.455	161.0	.622	3.14	47.4	35.5	1.87		.00			245
	250 ISL	8.07	8.04	33.995	26.479	159.8	.632	3.04	45.8							252
1	283	7.50	7.47	34.032	26.590	148.5	.684	2.44	36.3	45.2	2.16		.00			285
	300 ISL	7.22	7.19	34.035	26.633	144.6	.708	2.26	33.4							302
1	344	6.59	6.55	34.036	26.720	136.6	.770	1.89	27.5	57.2	2.40		.00			346
	400 ISL	6.27	6.24	34.096	26.809	128.8	.844	1.25	18.1							403
1	419	6.20	6.17	34.119	26.835	126.4	.869	1.05	15.1	68.4	2.73		.00			422
1	495	5.62	5.58	34.167	26.947	116.3	.961	.69	9.8	80.1	2.90		.00			498
	500 ISL	5.59	5.54	34.172	26.955	115.6	.967	.67	9.5							504
1	571	5.19	5.14	34.246	27.061	106.0	1.045	.41	5.8	90.6	3.05		.00			575

RV MCARTHUR CALCOFI CRUISE 8502 STATION 93 26.7

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 57.2 N	117 18.1 W	19/02/85	2003 GMT	62 M	320	08 KT		2	1016.4 MB	14.2 C	12.4 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	14.23	14.23	33.462	24.952	299.7	.030	6.27	107.5	2.4	.39	.0	.01	.23	.08	10

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LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 53.2 N	117 28.0 W	19/02/85	2353 GMT	637 M	270	14 KT	290 02 03	2	1015.1 MB	14.0 C	11.8 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	14.37	14.37	33.460	24.920	302.4	.000	6.14	105.6	1.9	.37	.0	.00	.40	.08	0
1	10	14.33	14.33	33.459	24.928	302.0	.030	6.17	106.0	1.9	.36	.0	.00	.32	.10	10
1	19	14.03	14.03	33.450	24.984	296.8	.057	6.33	108.1	1.7	.35	.0	.00	.42	.15	19
	20 ISL	14.00	13.99	33.453	24.994	295.9	.060	6.32	107.9							20
1	28	13.73	13.73	33.472	25.063	289.6	.083	6.17	104.7	1.9	.36	.0	.00	.67	.24	28
	30 ISL	13.66	13.65	33.463	25.071	288.9	.089	6.14	104.1							30
1	37	13.38	13.38	33.438	25.108	285.5	.109	5.88	99.0	2.1	.50	.0	.09	1.69	.54	37
1	46	12.90	12.89	33.497	25.250	272.2	.134	4.83	80.6	6.9	.89	4.1	.39	1.13	.57	46
	50 ISL	12.63	12.63	33.512	25.314	266.2	.145	4.52	74.9							50
1	55	12.31	12.30	33.532	25.392	258.9	.158	4.26	70.2	10.8	1.12	8.9	.10	.46	.48	55
1	64	11.70	11.69	33.614	25.572	242.0	.180	3.94	64.1	14.2	1.27	12.1	.11	.22	.33	64
	75 ISL	11.45	11.44	33.635	25.634	236.3	.207	3.72	60.2							76
1	77	11.43	11.42	33.635	25.636	236.1	.211	3.70	59.9	15.9	1.40	13.5	.26	.11	.30	77
1	91	11.10	11.09	33.685	25.736	226.9	.243	3.56	57.2	17.7	1.48	15.3	.22	.09	.26	91
	100 ISL	10.73	10.72	33.760	25.860	215.4	.264	3.42	54.5							101
1	108	10.41	10.40	33.825	25.968	205.3	.282	3.30	52.3	22.2	1.67	19.0	.04	.02	.10	109
	125 ISL	10.04	10.03	33.845	26.046	198.1	.315	3.24	50.9							126
1	130	9.96	9.95	33.847	26.061	196.7	.326	3.21	50.4	24.5	1.72	20.5	.01	.02	.08	131
	150 ISL	9.71	9.70	33.960	26.191	184.7	.363	2.83	44.1							151
1	156	9.66	9.64	34.000	26.232	181.0	.375	2.69	42.0	29.3	1.94	23.9	.01			157
1	183	9.50	9.47	34.093	26.332	172.1	.422	2.36	36.7	32.3	2.08	25.7	.00			184
	200 ISL	9.28	9.26	34.120	26.387	167.1	.451	2.19	33.9							202
1	210	9.13	9.11	34.127	26.418	164.3	.467	2.12	32.7	36.5	2.22	27.7	.00			211
1	246	8.45	8.43	34.121	26.519	155.1	.524	2.10	31.9	40.7	2.29	29.4	.00			247
	250 ISL	8.39	8.36	34.123	26.531	154.1	.531	2.06	31.3							252
1	299	7.83	7.80	34.166	26.649	143.5	.604	1.52	22.8	49.3	2.52	33.2	.00			301
	300 ISL	7.82	7.79	34.167	26.651	143.3	.605	1.51	22.7							302
1	370	7.26	7.22	34.220	26.773	132.5	.702	.97	14.3	58.6	2.79	36.9	.01			372
	400 ISL	6.99	6.95	34.232	26.821	128.3	.741	.82	12.1							403
1	442	6.63	6.59	34.245	26.880	123.0	.794	.68	9.9	67.3	2.91	39.6	.00			445
	500 ISL	6.25	6.21	34.263	26.944	117.4	.864	.53	7.7							504
1	519	6.15	6.14													523

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LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 50.7 N	117 32.0 W	20/02/85	0237 GMT	837 M	320	08 KT	270 02 08	2	1015.1 MB	13.3 C	11.4 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	14.48	14.48	33.463	24.899	304.4	.000	6.10	105.1	2.3	.41	.0	.01	.16	.05	0
1	10	14.20	14.20	33.451	24.949	300.0	.030	6.21	106.4	1.5	.37	.0	.00	.31	.09	10
1	19	13.85	13.85	33.449	25.020	293.5	.057	6.32	107.5	1.2	.37	.0	.00	.49	.17	19
	20 ISL	13.83	13.83	33.449	25.025	293.0	.060	6.31	107.4							20
1	29	13.62	13.62	33.447	25.066	289.3	.086	6.16	104.3	1.9	.38	.0	.00	.31	.26	29
	30 ISL	13.60	13.59	33.447	25.072	288.8	.089	6.14	103.9							30
1	38	13.33	13.33	33.451	25.128	283.6	.111	5.86	98.6	2.5	.52	.1	.09	1.57	.52	38
	50 ISL	12.56	12.55	33.480	25.303	267.3	.145	4.61	76.4							50
1	52	12.44	12.44	33.485	25.330	264.7	.150	4.45	73.5	7.9	.94	6.3	.07	.51	.27	52
1	61	12.07	12.06	33.514	25.425	255.9	.173	4.44	72.8	10.1	1.09	9.0	.05	.34	.33	61
1	71	11.73	11.72	33.590	25.548	244.5	.198	4.11	66.9	12.5	1.21	11.3	.02	.13	.18	71
	75 ISL	11.52	11.52	33.597	25.590	240.5	.208	4.06	65.9							76
1	85	11.09	11.08	33.607	25.677	232.4	.231	4.00	64.2	15.2	1.34	13.8	.01	.06	.14	85
	100 ISL	10.68	10.67	33.707	25.827	218.4	.266	3.64	58.0							101
1	102	10.63	10.62	33.727	25.852	216.1	.271	3.57	56.8	18.9	1.51	16.8	.01	.02	.10	103
1	121	10.10	10.09	33.848	26.038	198.8	.310	3.17	49.9	23.7	1.72	20.5	.01	.02	.11	122
	125 ISL	10.05	10.03	33.866	26.061	196.7	.317	3.12	49.1							126
1	144	9.84	9.83	33.946	26.158	187.8	.354	2.92	45.7	26.9	1.85	22.4	.00	.00	.06	145
	150 ISL	9.78	9.77	33.971	26.188	185.1	.365	2.83	44.3							151
1	172	9.55	9.53	34.055	26.293	175.6	.405	2.50	38.9	31.1	2.02	25.0	.00			173
1	200	9.24	9.22	34.114	26.390	166.8	.453	2.21	34.2	34.9	2.16	27.0	.00			201
1	233	8.57	8.54	34.098	26.484	158.3	.506	2.16	32.9	39.1	2.24	29.0	.00			234
	250 ISL	8.46	8.43	34.129	26.525	154.6	.533	1.94	29.4							252
1	279	8.36	8.34	34.191	26.588	149.2	.578	1.50	22.8	45.5	2.47	31.7	.00			281
	300 ISL	8.15	8.12	34.206	26.633	145.3	.608	1.34	20.2							302
1	331	7.78	7.74	34.212	26.693	139.9	.652	1.17	17.5	52.4	2.62	34.3	.00			333
	400 ISL	7.08	7.04	34.219	26.798	130.5	.745	.88	13.0							403
1	412	6.97	6.93	34.221	26.815	129.0	.761	.84	12.3	61.9	2.85	37.8	.00			415
1	500	6.43	6.39	34.260	26.918	120.0	.870	.56	8.1	70.7	2.96	41.0	.00			503
1	583	5.82	5.80													587

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LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 40.5 N	117 52.5 W	20/02/85	0722 GMT	586 M	270	06 KT	270 01 04	2	1014.8 MB	13.1 C	10.4 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	14.41	14.41	33.477	24.926	301.9	.000	6.04	103.9	3.0	.38	.0	.00	.12	.02	0
1	10	14.26	14.26	33.463	24.946	300.2	.030	6.14	105.3	2.6	.38	.0	.00	.15	.04	10
1	20	13.82	13.82	33.454	25.031	292.4	.059	6.15	104.6	2.7	.40	.0	.00	.21	.10	20
1	29	13.66	13.66	33.496	25.096	286.4	.085	6.02	102.0	3.1	.40	.0	.02	.84	.37	29
	30 ISL	13.64	13.63	33.494	25.100	286.2	.089	5.99	101.5							30
1	39	13.39	13.39	33.462	25.125	283.9	.114	5.70	96.0	4.4	.55	.4	.16	.80	.34	39
1	49	12.89	12.89	33.438	25.206	276.5	.142	5.17	86.2	6.7	.78	3.7	.08	.46	.24	49
	50 ISL	12.85	12.84	33.441	25.217	275.5	.145	5.11	85.2							50
1	59	12.62	12.61	33.497	25.305	267.3	.169	4.69	77.8	9.0	.97	6.8	.05	.38	.24	59
1	69	12.39	12.38	33.633	25.457	253.1	.195	4.06	67.1	11.9	1.13	10.0	.04	.20	.16	69
	75 ISL	12.14	12.13	33.668	25.531	246.2	.210	3.85	63.3							76
1	83	11.82	11.81	33.693	25.610	238.8	.229	3.68	60.1	15.1	1.32	13.1	.01	.06	.07	83
1	98	11.38	11.37	33.795	25.771	223.9	.263	3.25	52.6	19.1	1.48	16.5	.00	.02	.05	98
	100 ISL	11.30	11.29	33.808	25.796	221.6	.269	3.20	51.7							101
1	117	10.84	10.83	33.880	25.934	208.7	.306	2.93	46.9	23.0	1.73	19.7	.00	.02	.05	118
	125 ISL	10.80	10.78	33.895	25.954	207.0	.322	2.89	46.2							126
1	142	10.69	10.68	33.924	25.996	203.4	.358	2.80	44.7	24.5	1.78	20.6	.00	.02	.05	143
	150 ISL	10.46	10.44	33.956	26.062	197.3	.373	2.68	42.6							151
1	172	9.74	9.72	34.056	26.263	178.5	.415	2.31	36.1	31.8	2.04	25.3	.00			173
	200 ISL	9.34	9.32	34.129	26.385	167.3	.463	1.98	30.6							202
1	202	9.33	9.30	34.134	26.392	166.8	.466	1.96	30.4	36.4	2.23	27.8	.00			203
1	237	9.11	9.08	34.282	26.543	153.1	.522	1.97	30.4	39.6	2.35	29.3	.00			233
	250 ISL	9.10	9.07	34.282	26.546	152.6	.542	1.74	26.8							252
1	286	8.95	8.92	34.283	26.570	151.4	.597	1.07	16.5	45.0	2.56	31.4	.01			288
	300 ISL	8.69	8.66	34.266	26.597	149.0	.618	1.09	16.7							302
1	348	7.66	7.63	34.212	26.710	138.4	.687	1.17	17.5	54.9	2.64	34.7	.00			350
	400 ISL	6.98	6.94	34.223	26.815	128.9	.756	.92	13.5							403
1	409	6.90	6.86	34.230	26.832	127.3	.768	.84	12.3	65.7	2.85	38.4	.00			412

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LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 30.4 N	118 12.3 W	20/02/85	1140 GMT	1783 M	270	14 KT	270 02 07		1012.1 MB	11.9 C	11.1 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.33	14.33	33.480	24.944	300.2	.000	5.98	102.8							0
1	1	14.33	14.33	33.480	24.944	300.1	.003	5.98	102.8	3.4	.43	.1	.01	.16	.03	1
	10 ISL	14.31	14.31	33.486	24.953	299.6	.030	5.98	102.7							10
1	11	14.31	14.31	33.486	24.954	299.5	.033	5.98	102.7	3.3	.38	.0	.01	.16	.09	11
1	19	14.22	14.22	33.478	24.966	298.6	.057	6.01	103.0	3.3	.38	.0	.01	.22	.06	19
	20 ISL	14.21	14.20	33.478	24.969	298.3	.060	6.01	102.9							20
1	30	14.03	14.02	33.474	25.004	295.3	.089	5.97	101.9	3.3	.37	.0	.00	.35	.13	30
1	39	13.81	13.81	33.451	25.031	292.9	.116	6.00	102.0	2.9	.37	.0	.02	.51	.27	39
1	48	13.53	13.52	33.481	25.112	285.4	.141	5.01	84.7	4.9	.58	1.1	.20	.89	.16	48
	50 ISL	13.36	13.35	33.501	25.162	280.8	.148	4.80	80.8							50
1	58	12.78	12.77	33.577	25.336	264.4	.169	4.23	70.4	10.3	1.03	8.2	.04	.30	.26	58
1	66	12.55	12.54	33.628	25.421	256.5	.190	3.98	66.0	12.2	1.15	9.9	.02	.20	.17	66
	75 ISL	12.22	12.21	33.660	25.509	248.3	.213	3.82	63.0							76
1	81	12.02	12.01	33.670	25.554	244.1	.227	3.78	62.0	14.2	1.25	12.0	.01	.08	.16	81
1	95	11.65	11.63	33.680	25.633	236.9	.260	3.75	61.0	15.3	1.30	13.3	.01	.05	.13	95
	100 ISL	11.46	11.45	33.716	25.695	231.2	.273	3.60	58.4							101
1	112	11.05	11.04	33.814	25.845	217.1	.301	3.20	51.4	20.4	1.57	17.7	.01	.02	.08	113
	125 ISL	10.79	10.77	33.885	25.949	207.5	.328	2.92	46.7							126
1	136	10.59	10.58	33.939	26.025	200.5	.351	2.72	43.3	25.1	1.80	21.4	.00	.01	.06	137
	150 ISL	10.34	10.33	33.996	26.113	192.4	.378	2.53	40.0							151
1	162	10.12	10.10	34.041	26.187	185.6	.401	2.38	37.5	29.5	1.98	24.2	.00			163
1	190	9.54	9.52	34.129	26.352	170.3	.450	2.06	32.1	34.5	2.17	27.0	.00			191
	200 ISL	9.34	9.31	34.138	26.393	166.6	.467	2.03	31.4							202
1	219	9.01	8.98	34.139	26.447	161.7	.498	1.98	30.5	37.8	2.24	28.5	.00			220
	250 ISL	8.73	8.70	34.140	26.492	157.9	.548	1.70	25.9							252
1	256	8.69	8.66	34.140	26.498	157.4	.556	1.64	25.1	42.6	2.39	30.3	.00			257
	300 ISL	8.16	8.12	34.179	26.611	147.3	.624	1.37	20.7							302
1	311	8.01	7.98	34.190	26.641	144.6	.640	1.32	19.9	50.5	2.56	33.1	.00			313
1	383	7.25	7.22	34.216	26.771	132.9	.740	1.02	15.1	60.0	2.74	36.7	.00			385
	400 ISL	7.09	7.05	34.223	26.800	130.4	.762	.94	13.8							403
1	459	6.61	6.57	34.248	26.885	122.7	.837	.67	9.8	70.3	2.92	39.7	.00			462
	500 ISL	6.35	6.30	34.270	26.937	118.2	.887	.54	7.8							504
1	535	6.17	6.13	34.291	26.977	114.8	.928	.46	6.6	78.4	3.05	42.1	.00			539

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LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 20.7 N	118 33.4 W	20/02/85	1543 GMT	1346 M	310	22 KT	300 06 06	2	1011.1 MB	13.4 C	11.2 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	14.15	14.15	33.446	24.956	298.9	.000	6.01	102.9							0
1	1		14.15	14.15	33.446	24.956	299.0	.003	6.01	102.9					.35	.10	1
	10	ISL	14.17	14.17	33.444	24.950	299.8	.030	6.02	103.1							10
1	11		14.17	14.17	33.444	24.950	299.9	.033	6.02	103.1					.36	.13	11
	20	ISL	13.88	13.87	33.444	25.011	294.3	.060	5.95	101.3							20
1	21		13.84	13.84	33.443	25.018	293.7	.062	5.94	101.0							21
	30	ISL	13.70	13.70	33.443	25.046	291.3	.089	5.81	98.6							30
1	31		13.68	13.68	33.442	25.051	290.8	.091	5.80	98.3					.65	.27	31
1	41		12.82	12.81	33.441	25.223	274.6	.120	5.06	84.2					.44	.32	41
	50	ISL	12.27	12.27	33.476	25.356	262.2	.144	4.69	77.3							50
1	55		12.06	12.05	33.494	25.411	257.1	.157	4.55	74.6					.28	.25	55
1	65		11.64	11.63	33.492	25.488	249.9	.182	4.14	67.2					.17	.16	65
1	74		11.37	11.36	33.585	25.609	238.6	.204	3.82	61.7					.06	.12	74
	75	ISL	11.34	11.33	33.601	25.628	236.9	.207	3.78	61.0							76
1	89		11.06	11.05	33.757	25.799	220.9	.238	3.45	55.4					.02	.07	89
	100	ISL	10.71	10.70	33.835	25.922	209.5	.263	3.24	51.7							101
1	108		10.47	10.46	33.867	25.989	203.2	.280	3.14	49.8					.01	.06	109
	125	ISL	10.27	10.25	33.881	26.036	199.1	.313	3.09	48.8							126
1	126		10.26	10.24	33.882	26.038	198.9	.316	3.09	48.8					.01	.05	127
	150	ISL	9.86	9.85	33.976	26.179	186.0	.361	2.94	46.1							151
1	152		9.83	9.81	33.986	26.193	184.7	.366	2.92	45.7					.01	.05	153
1	181		9.53	9.51	34.044	26.288	176.2	.418	2.54	39.5							182
	200	ISL	9.20	9.18	34.087	26.375	168.2	.450	2.34	36.2							202
1	211		9.01	8.99	34.111	26.424	163.7	.468	2.23	34.3							212
1	247		8.68	8.65	34.176	26.528	154.5	.525	1.76	26.9							248
	250	ISL	8.61	8.59	34.179	26.540	153.3	.530	1.72	26.3							252
1	293		7.77	7.74	34.196	26.681	140.3	.594	1.31	19.6							295
	300	ISL	7.68	7.65	34.198	26.695	139.0	.603	1.26	18.9							302
1	347		7.24	7.20	34.209	26.768	132.6	.667	1.02	15.1							349
	400	ISL	6.82	6.78	34.224	26.838	126.5	.736	.81	11.9							403
1	431		6.61	6.57	34.236	26.876	123.2	.775	.71	10.3							434
	500	ISL	6.19	6.15	34.283	26.968	115.1	.857	.48	6.9							504
1	518		6.08	6.04	34.296	26.992	113.0	.878	.43	6.2							522
	600	ISL	5.52	5.47	34.336	27.094	103.8	.966	.36	5.2							605
1	604		5.49	5.44	34.337	27.097	103.4	.970	.36	5.1							608

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LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 20.7 N	118 33.2 W	21/02/85	1828 GMT	1273 M	330	16 KT	320 06 06	1	1011.8 MB	14.5 C	11.9 C	1/8	CS

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	13.99	13.99	33.460	25.000	294.8	.000	5.94	101.3							0
1	1		13.99	13.99	33.460	25.000	294.8	.003	5.94	101.3	3.3	.40	.1	.01	.47	.11	1
	10	ISL	13.98	13.98	33.458	25.001	294.9	.029	5.95	101.5							10
1	11		13.98	13.97	33.458	25.002	294.9	.032	5.95	101.5	3.2	.40	.1	.01	.47	.18	11
1	20		13.97	13.96	33.457	25.003	295.1	.059	5.96	101.6	3.2	.39	.0	.01	.49	.14	20
1	30		13.95	13.94	33.459	25.008	294.8	.088	5.93	101.1	3.2	.39	.0	.02	.52	.15	30
1	39		13.94	13.94	33.456	25.008	295.1	.115	5.92	100.9	3.2	.38	.0	.00	.55	.16	39
	50	ISL	13.48	13.47	33.453	25.101	286.6	.147	5.55	93.7							50
1	53		13.29	13.28	33.452	25.138	283.1	.155	5.41	91.0	5.4	.63	1.5	.12	.44	.20	53
1	63		12.40	12.39	33.460	25.319	266.0	.182	4.83	79.7	8.6	.91	6.2	.09	.34	.25	63
1	72		12.01	12.00	33.543	25.458	253.1	.205	4.35	71.2	11.2	1.08	9.5	.02	.19	.17	72
	75	ISL	11.86	11.85	33.573	25.510	248.2	.214	4.21	68.8							76
1	86		11.42	11.41	33.667	25.663	233.8	.239	3.83	62.0	15.5	1.30	13.5	.01	.06	.09	86
	100	ISL	11.13	11.12	33.791	25.813	219.9	.272	3.30	53.1							101
1	105		11.04	11.03	33.828	25.859	215.6	.284	3.14	50.4	21.0	1.59	18.0	.01	.02	.06	106
1	125		10.39	10.38	33.884	26.017	201.0	.325	3.05	48.3	24.3	1.72	20.5	.00	.01	.05	126
1	148		9.93	9.91	33.959	26.155	188.3	.370	2.84	44.6	27.9	1.86	22.7	.00	.01	.05	149
	150	ISL	9.90	9.89	33.965	26.163	187.5	.373	2.82	44.3							151
1	175		9.58	9.56	34.038	26.274	177.4	.419	2.59	40.4	31.2	1.99	24.9	.01			176
	200	ISL	9.08	9.06	34.083	26.392	166.6	.462	2.40	37.0							202
1	205		8.96	8.96	34.090	26.413	164.6	.470	2.36	36.3	35.9	2.14	27.0	.01			206
1	246		8.47	8.44	34.154	26.543	152.9	.535	1.87	28.4	42.6	2.35	29.9	.00			247
	250	ISL	8.43	8.40	34.159	26.554	151.9	.541	1.82	27.7							252
	300	ISL	7.89	7.86	34.200	26.667	141.9	.615	1.37	20.6							302
1	306		7.82	7.79	34.201	26.678	140.8	.623	1.33	19.9	51.9	2.59	33.5	.01			308
1	360		6.90	6.87	34.184	26.794	130.1	.696	1.10	16.1	62.0	2.76	37.4	.01			362
	400	ISL	6.68	6.64	34.215	26.849	125.3	.747	.87	12.8							403
1	464		6.53	6.49	34.278	26.919	119.6	.826	.55	8.0	72.1	3.00	40.5	.00			467
	500	ISL	6.27	6.22	34.293	26.966	115.4	.868	.45	6.5							504
1	559		5.79	5.74	34.313	27.042	108.4	.934	.36	5.1	85.5	3.13	43.2	.00			563
	600	ISL	5.52	5.47	34.335	27.093	103.8	.978	.34	4.8							605
1	658		5.19	5.13	34.372	27.162	97.5	1.036	.31	4.4	95.9	3.22	45.9	.00			663

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LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
32 02.1 N	119 14.2 W	22/02/85	0045 GMT	1554 M	290	18 KT	310 08 08	0	1012.9 MB	14.8 C	12.1 C	0/8

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	14.00	14.00	33.477	25.011	293.7	.000	5.92	101.0	3.4	.40	.1	.01	.53	.12	0
1	10	13.90	13.89	33.472	25.029	292.3	.029	5.93	101.0	3.4	.40	.1	.01	.51	.16	10
	20 ISL	13.81	13.81	33.472	25.046	291.0	.058	5.94	101.0							20
1	25	13.77	13.76	33.471	25.055	290.3	.073	5.95	101.1	3.4	.40	.1	.01	.65	.22	25
	30 ISL	13.69	13.69	33.464	25.066	289.4	.087	5.88	99.6							30
1	39	13.56	13.55	33.453	25.084	287.8	.113	5.75	97.2	3.9	.47	.3	.02	.53	.24	39
	50 ISL	12.61	12.61	33.557	25.353	262.5	.144	4.56	75.6							50
1	54	12.26	12.26	33.598	25.452	253.1	.153	4.15	68.4	12.3	1.10	9.9	.01	.19	.24	54
1	69	11.57	11.56	33.643	25.618	237.7	.190	3.92	63.6	15.3	1.27	12.7	.01	.08	.15	69
	75 ISL	11.12	11.11	33.668	25.720	228.1	.205	3.85	61.9							76
1	79	10.89	10.88	33.688	25.775	222.9	.213	3.79	60.6	18.2	1.40	15.4	.00	.04	.10	79
1	94	10.93	10.92	33.845	25.891	212.2	.245	3.14	50.3	22.5	1.62	18.8	.01	.02	.06	94
	100 ISL	10.72	10.71	33.868	25.946	207.2	.259	3.13	49.9							101
1	113	10.17	10.15	33.882	26.053	197.2	.286	3.10	48.9	25.2	1.73	20.6	.00	.01	.05	114
	125 ISL	9.80	9.79	33.894	26.124	190.6	.308	3.11	48.7							126
1	133	9.58	9.57	33.906	26.171	186.3	.324	3.12	48.6	27.7	1.79	22.3	.00	.01	.05	134
	150 ISL	9.21	9.19	33.957	26.271	177.0	.354	3.02	46.6							151
1	153	9.15	9.13	33.969	26.290	175.3	.360	2.98	46.0	31.3	1.89	24.2	.00	.01	.05	154
1	173	8.86	8.84	34.056	26.404	164.8	.394	2.61	40.0	35.6	2.07	26.4	.00	.01	.03	174
1	193	8.67	8.65	34.085	26.457	160.1	.426	2.43	37.1	38.1	2.18	27.6	.00			194
	200 ISL	8.55	8.53	34.093	26.482	157.9	.437	2.35	35.8							202
1	213	8.33	8.31	34.106	26.526	153.8	.457	2.20	33.3	42.2	2.23	29.5	.00			214
1	249	8.04	8.01	34.148	26.603	147.0	.511	1.77	26.6	47.4	2.42	31.6	.01			250
	250 ISL	8.02	8.00	34.148	26.605	146.8	.513	1.76	26.5							252
1	298	7.40	7.37	34.141	26.692	139.1	.582	1.54	22.8	54.1	2.55	34.6	.00			300
	300 ISL	7.37	7.34	34.142	26.695	138.8	.585	1.53	22.6							302
1	354	6.75	6.72	34.163	26.798	129.5	.657	1.10	16.1	63.3	2.76	38.2	.00			356
	400 ISL	6.45	6.42	34.214	26.878	122.4	.715	.75	10.9							403
1	439	6.28	6.24	34.257	26.935	117.4	.762	.53	7.7	75.3	3.01	41.6	.01			442
	500 ISL	5.99	5.95	34.283	26.992	112.6	.832	.47	6.7							504
1	524	5.88	5.83	34.290	27.013	110.8	.859	.44	6.3	82.6	3.08	43.5	.00			528
	600 ISL	5.40	5.35	34.332	27.104	102.6	.940	.37	5.2							605
1	609	5.34	5.29	34.337	27.115	101.6	.949	.36	5.1	92.6	3.19	45.5	.00			613

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LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
31 49.9 N	119 35.0 W	22/02/85	0433 GMT	2457 M	280	10 KT	290 08 08	0	1015.1 MB	13.2 C	10.9 C	0/3

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	13.80	13.80	33.481	25.056	289.5	.000	5.88	99.9	4.1	.43	.0	.05	.46	.14	0
1	10	13.78	13.78	33.470	25.052	290.2	.029	5.89	100.1	3.9	.43	.0	.05	.45	.15	10
	20 ISL	13.65	13.65	33.456	25.068	288.9	.058	5.92	100.3							20
1	25	13.58	13.58	33.451	25.077	288.2	.072	5.93	100.3	4.1	.45	.0	.06	.49	.16	25
	30 ISL	13.58	13.58	33.451	25.078	288.2	.087	5.92	100.1							30
1	39	13.57	13.57	33.452	25.081	288.2	.112	5.89	99.6	4.1	.44	.1	.06	.54	.18	39
	50 ISL	13.12	13.12	33.444	25.165	280.8	.144	5.61	94.0							50
1	55	12.83	12.82	33.441	25.222	275.2	.157	5.41	90.1	6.8	.70	2.9	.08	.35	.17	55
1	70	11.53	11.52	33.529	25.537	245.4	.196	4.42	71.6	13.0	1.16	11.2	.03	.23	.18	70
	75 ISL	11.13	11.12	33.565	25.637	235.9	.209	4.18	67.1							76
1	79	10.90	10.89	33.589	25.698	230.3	.217	4.05	64.8	16.5	1.34	14.6	.03	.09	.11	79
1	95	10.45	10.44	33.638	25.814	219.5	.253	3.93	62.3	18.8	1.18	13.7	.02	.04	.06	95
	100 ISL	10.38	10.37	33.675	25.854	215.8	.265	3.82	60.4							101
1	112	10.28	10.27	33.771	25.947	207.2	.291	3.51	55.4	21.7	1.43	15.8	.00	.02	.05	113
	125 ISL	10.13	10.12	33.855	26.039	198.8	.317	3.24	51.0							126
1	132	10.01	10.00	33.896	26.091	194.0	.331	3.11	48.9	25.4	1.62	19.5	.01	.01	.05	133
	150 ISL	9.53	9.51	33.956	26.218	182.2	.364	2.98	46.3							151
1	151	9.49	9.48	33.959	26.227	181.4	.367	2.97	46.2	28.9	1.86	23.4	.01	.01	.04	152
1	171	9.21	9.19	34.059	26.352	169.9	.402	2.53	39.1	33.2	2.05	26.1	.01	.01	.04	172
1	190	8.99	8.97	34.097	26.417	164.0	.433	2.31	35.5	36.1	2.13	27.4	.00			191
	200 ISL	8.84	8.82	34.097	26.440	162.0	.449	2.35	36.0							202
1	209	8.71	8.69	34.096	26.459	160.2	.464	2.38	36.4	37.6	2.12	27.5	.00			210
1	242	8.40	8.38	34.176	26.570	150.2	.515	1.73	26.3	44.3	2.39	31.0	.01			243
	250 ISL	8.30	8.28	34.187	26.594	148.1	.527	1.63	24.7							252
1	290	7.85	7.82	34.215	26.685	139.9	.585	1.32	19.8	50.2	2.58	34.0	.00			292
	300 ISL	7.77	7.74	34.220	26.699	138.7	.599	1.26	18.9							302
1	342	7.46	7.42	34.227	26.751	134.3	.656	1.04	15.5	55.2	2.69	35.9	.01			344
	400 ISL	6.73	6.69	34.228	26.852	125.0	.731	.76	11.1							403
1	422	6.45	6.41	34.231	26.892	121.3	.759	.67	9.7	69.8	2.95	41.2	.00			425
	500 ISL	5.96	5.92	34.286	26.999	111.9	.849	.43	6.1							504
1	504	5.94	5.90	34.289	27.004	111.5	.853	.42	6.0	80.4	3.04	43.7	.00			507
1	589	5.54	5.49	34.348	27.101	102.9	.945	.29	4.1	88.7	3.16	45.5	.00			593

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LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 31.4 N	120 14.5 W	22/02/85	0954 GMT	3931 M	290	13 KT	310 06 OR	0	1017.0 MB	13.2 C	11.8 C	0/8	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	13.41	13.41	33.294	24.991	295.6	.000	6.02	101.4	2.5	.42	.1	.03	.49	.10	0
1	10	13.40	13.40	33.314	25.009	294.3	.029	6.05	101.9	2.2	.41	.0	.03	.45	.10	10
	20 ISL	13.38	13.38	33.309	25.008	294.6	.059	6.04	101.7							20
1	25	13.38	13.37	33.306	25.007	294.8	.073	6.04	101.7	2.2	.41	.0	.03	.51	.11	25
	30 ISL	13.37	13.37	33.303	25.006	295.0	.088	6.03	101.5							30
1	40	13.36	13.36	33.300	25.005	295.4	.117	6.01	101.1	2.2	.41	.0	.03	.46	.14	40
	50 ISL	13.22	13.22	33.302	25.035	291.6	.147	5.91	99.1							50
1	55	13.07	13.06	33.303	25.067	289.9	.161	5.86	98.0	1.9	.44	.2	.00	.30	.17	55
1	70	11.92	11.92	33.320	25.301	267.9	.203	5.11	83.4	6.2	.86	5.7	.06	.11	.13	70
	75 ISL	11.78	11.77	33.361	25.359	262.4	.217	5.03	81.8							76
1	80	11.68	11.67	33.398	25.407	258.1	.229	4.97	80.7	7.8	.96	7.2	.04	.09	.13	80
1	95	10.98	10.97	33.450	25.575	242.3	.266	4.52	72.4	11.3	1.13	11.4	.02	.05	.07	95
	100 ISL	10.74	10.72	33.493	25.651	235.2	.279	4.34	69.2							101
1	114	10.13	10.12	33.622	25.856	215.9	.312	3.90	61.3	17.9	1.51	17.7	.00	.01	.05	115
	125 ISL	9.73	9.71	33.705	25.990	203.3	.334	3.65	56.9							126
1	134	9.42	9.40	33.764	26.087	194.2	.353	3.47	53.8	23.4	1.72	21.8	.01	.01	.04	135
	150 ISL	9.06	9.05	33.804	26.174	186.2	.382	3.27	50.3							151
1	154	8.99	8.98	33.811	26.191	184.6	.390	3.24	49.7	27.2	1.82	24.1	.01	.00	.03	155
1	174	8.70	8.68	33.887	26.297	174.9	.426	3.23	49.3	29.6	1.86	24.9	.01	.00	.02	175
1	194	8.53	8.51	33.969	26.387	166.6	.460	3.15	47.9	31.8	1.90	25.7	.00			195
	200 ISL	8.43	8.41	33.983	26.415	164.1	.470	3.10	47.0							202
1	214	8.21	8.18	34.011	26.470	159.1	.492	2.92	44.1	36.0	2.01	27.5	.00			215
1	249	8.16	8.14	34.083	26.534	153.6	.546	2.09	31.5	42.0	2.29	30.7	.01			250
	250 ISL	8.14	8.11	34.083	26.537	153.3	.549	2.09	31.5							252
1	298	7.22	7.19	34.067	26.658	142.1	.620	1.96	28.9	51.9	2.42	34.0	.01			300
	300 ISL	7.20	7.17	34.069	26.662	141.8	.622	1.94	28.6							302
1	353	6.70	6.66	34.121	26.772	131.9	.695	1.23	17.9	61.9	2.70	38.4	.02			355
	400 ISL	6.39	6.36	34.166	26.848	125.2	.755	.86	12.5							403
1	436	6.22	6.18	34.201	26.898	120.8	.800	.68	9.8	72.9	2.96	42.2	.00			439
	500 ISL	5.97	5.92	34.270	26.986	113.2	.874	.45	6.5							504
1	520	5.90	5.85	34.288	27.009	111.2	.896	.41	5.9	80.9	3.09	43.7	.00			523
	600 ISL	5.58	5.53	34.325	27.078	105.4	.983	.34	4.9							605
1	603	5.57	5.52	34.326	27.080	105.2	.986	.34	4.8	87.2	3.15	45.0	.00			607

RV MCARTHUR CALCOFI CRUISE 8502 STATION 93 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 12.0 N	120 54.1 W	22/02/85	1549 GMT	3804 M	300	12 KT	310 08 09	1	1017.9 MB	13.9 C	12.1 C	1/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	15.05	15.05	33.375	24.709	322.5	.000	5.80	101.1	2.3	.33	.0	.00	.11	.04	0
1	10	15.05	15.05	33.374	24.709	322.8	.032	5.81	101.2	1.2	.33	.0	.00	.12	.04	10
	20 ISL	15.05	15.04	33.373	24.710	323.0	.065	5.83	101.5							20
1	25	15.04	15.04	33.373	24.710	323.2	.080	5.83	101.6	1.2	.34	.0	.00	.12	.04	25
	30 ISL	15.05	15.04	33.373	24.710	323.3	.097	5.82	101.4							30
1	40	15.05	15.04	33.374	24.710	323.6	.129	5.80	101.0	1.2	.34	.0	.00	.13	.05	40
	50 ISL	15.06	15.05	33.375	24.709	324.0	.162	5.82	101.4							50
1	55	15.06	15.05	33.375	24.709	324.2	.177	5.83	101.6	1.2	.33	.0	.00	.13	.04	55
1	69	15.02	15.01	33.373	24.717	323.8	.222	5.80	101.0	1.2	.34	.0	.00	.14	.05	69
	75 ISL	14.71	14.70	33.408	24.810	315.2	.242	5.70	98.7							76
1	80	14.39	14.37	33.421	24.889	307.6	.257	5.62	96.6	2.1	.41	.0	.09	.25	.20	80
1	94	12.95	12.94	33.250	25.051	292.5	.299	5.45	90.9	3.5	.59	1.2	.03	.14	.18	94
	100 ISL	12.59	12.58	33.262	25.130	285.0	.317	5.33	88.2							101
1	115	12.03	12.01	33.358	25.312	268.0	.357	5.03	82.3	6.7	.82	5.0	.01	.06	.08	115
	125 ISL	11.53	11.51	33.399	25.437	256.2	.385	4.86	78.7							126
1	134	11.09	11.07	33.439	25.547	245.9	.408	4.70	75.4	10.5	.69	4.8	.00	.03	.05	135
	150 ISL	10.48	10.46	33.540	25.733	228.4	.445	4.33	68.6							151
1	154	10.34	10.32	33.568	25.780	224.1	.455	4.23	66.8	15.6	1.23	13.5	.01	.01	.02	155
1	174	9.85	9.83	33.653	25.930	210.1	.498	3.92	61.3	19.7	1.49	18.0	.00	.01	.02	175
1	194	9.32	9.30	33.781	26.116	192.7	.538	3.49	54.0	24.7	1.70	21.9	.00			195
	200 ISL	9.18	9.16	33.813	26.164	188.2	.550	3.42	52.7							202
1	214	8.88	8.86	33.877	26.261	179.1	.575	3.29	50.4	28.3	1.82	24.2	.00			215
1	248	8.40	8.37	33.969	26.408	165.6	.633	3.08	46.7	33.1	1.77	23.7	.03			249
	250 ISL	8.36	8.34	33.973	26.417	164.8	.637	3.06	46.4							252
1	297	7.58	7.55	34.025	26.574	150.3	.712	2.63	39.1	42.6	2.16	30.4	.00			299
	300 ISL	7.54	7.51	34.027	26.582	149.6	.716	2.59	38.5							302
1	352	6.83	6.79	34.065	26.711	137.8	.790	1.80	26.3	55.5	2.51	36.0	.00			354
	400 ISL	6.38	6.35	34.091	26.790	130.6	.855	1.33	19.3							403
1	435	6.14	6.10	34.111	26.838	126.3	.900	1.09	15.7	68.9	2.82	41.1	.00			438
	500 ISL	5.72	5.68	34.162	26.931	118.0	.979	.75	10.7							504
1	520	5.61	5.57	34.180	26.958	115.5	1.002	.67	9.5	81.6	3.02	44.2	.00			523
	600 ISL	5.23	5.18	34.263	27.070	105.5	1.091	.39	5.5							605
1	603	5.22	5.17	34.266	27.074	105.2	1.094	.38	5.4	92.9	3.16	46.3	.00			607

RV MCARTHUR

CALCOFI CRUISE 8502

STATION 93 110

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 10.1 N	122 54.7 W	23/02/85	1041 GMT	3088 M	280	12 KT	340 06 07	1	1019.0 MB	14.8 C	12.6 C	6/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.01	16.01	33.492	24.586	334.2	.000	5.78	102.7							0
1	1	16.01	16.01	33.492	24.586	334.3	.003	5.78	102.7	1.8	.31	.0	.01	.08	.01	1
	10 ISL	16.02	16.02	33.493	24.585	334.6	.033	5.70	101.3							10
1	11	16.02	16.02	33.493	24.585	334.6	.037	5.69	101.2	1.8	.32	.0	.00	.08	.01	11
	20 ISL	16.02	16.02	33.494	24.587	334.7	.067	5.69	101.1							20
1	26	16.02	16.01	33.495	24.588	334.8	.087	5.69	101.1	1.8	.32	.0	.01	.08	.02	26
	30 ISL	16.00	15.99	33.490	24.589	334.9	.100	5.69	101.1							30
1	41	15.95	15.94	33.476	24.590	335.2	.137	5.70	101.2	1.8	.32	.0	.01	.08	.02	41
	50 ISL	15.96	15.95	33.477	24.589	335.5	.167	5.72	101.5							50
1	55	15.96	15.95	33.479	24.590	335.6	.183	5.72	101.5	1.7	.31	.0	.00	.09	.02	55
1	65	15.97	15.95	33.484	24.593	335.6	.217	5.69	101.0	1.7	.31	.0	.00	.08	.02	65
1	75	15.95	15.94	33.484	24.595	335.7	.250	5.69	101.0	1.7	.31	.0	.00	.09	.02	75
1	90	16.01	15.99	33.491	24.590	336.7	.301	5.69	101.1	1.6	.30	.0	.00	.10	.02	90
	100 ISL	15.95	15.94	33.482	24.595	336.5	.335	5.70	101.1							101
1	104	15.93	15.92	33.478	24.597	336.5	.347	5.70	101.1	1.6	.29	.0	.00	.10	.03	104
1	119	14.61	14.59	33.415	24.839	313.7	.396	5.63	97.2	2.3	.35	.0	.00	.22	.13	119
	125 ISL	14.31	14.29	33.485	24.956	302.7	.416	5.53	94.9							126
1	143	13.68	13.66	33.695	25.250	275.1	.469	5.19	88.1	4.5	.47	.6	.02	.08	.08	144
	150 ISL	13.41	13.39	33.679	25.293	269.8	.487	5.12	86.4							151
1	163	12.64	12.61	33.648	25.422	258.9	.522	4.95	82.2	7.2	.73	4.2	.01	.05	.06	164
1	182	10.67	10.65	33.575	25.728	229.7	.568	4.44	70.6	14.2	1.19	12.2	.01			183
	200 ISL	10.20	10.18	33.758	25.952	208.7	.608	3.78	59.6							202
1	202	10.19	10.17	33.782	25.973	206.7	.612	3.71	58.5	20.9	1.50	17.8	.01			203
1	232	9.51	9.48	33.878	26.162	189.2	.671	3.47	53.9	25.8	1.65	20.2	.01			233
	250 ISL	9.08	9.06	33.932	26.273	178.8	.704	3.47	53.4							252
1	271	8.62	8.59	33.982	26.385	168.4	.740	3.47	52.9	31.6	1.76	23.2	.01			272
	300 ISL	8.08	8.05	34.010	26.489	158.8	.788	3.30	49.6							302
1	329	7.61	7.58	34.017	26.563	151.9	.833	3.01	44.8	42.1	2.04	28.2	.00			331
	400 ISL	6.57	6.53	34.044	26.729	136.6	.935	1.99	28.9							403
1	404	6.52	6.49	34.045	26.736	135.9	.940	1.93	28.0	58.8	2.50	36.2	.01			406
1	477	5.79	5.75	34.100	26.873	123.2	1.036	1.11	15.8	74.1	2.84	41.8	.00			480
	500 ISL	5.60	5.56	34.122	26.914	119.5	1.063	.93	13.2							504
1	550	5.23	5.19	34.176	27.000	111.5	1.122	.64	9.0	87.3	3.07	45.4	.00			554

RV MCARTHUR

CALCOFI CRUISE 8502

STATION 93 120

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
29 50.6 N	123 35.2 W	23/02/85	1714 GMT	3953 M	020	06 KT	340 07 08	2	1020.5 MB	15.0 C	12.6 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	15.84	15.84	33.469	24.606	332.3	.000	5.73	101.5	1.6	.24		.00	.08	.00	0
1	10	15.84	15.84	33.466	24.605	332.7	.033	5.74	101.7	1.6	.23		.00	.07	.01	10
	20 ISL	15.83	15.83	33.466	24.607	332.9	.067	5.74	101.6							20
1	25	15.83	15.82	33.466	24.609	332.8	.083	5.73	101.5	1.6	.23		.00	.07	.02	25
	30 ISL	15.82	15.82	33.465	24.610	332.9	.100	5.72	101.3							30
1	41	15.81	15.81	33.465	24.612	333.1	.136	5.71	101.1	1.6	.18		.00	.08	.01	41
	50 ISL	15.82	15.81	33.464	24.609	333.6	.166	5.72	101.3							50
1	56	15.83	15.82	33.464	24.608	333.8	.186	5.73	101.4	1.5	.22		.01	.09	.02	56
1	66	15.82	15.81	33.466	24.612	333.8	.219	5.72	101.2	1.6	.15		.00	.10	.03	66
	75 ISL	15.81	15.80	33.466	24.614	333.9	.250	5.71	101.1							76
1	76	15.81	15.80	33.466	24.614	333.9	.252	5.71	101.1	1.4	.14		.01	.10	.03	76
1	90	15.82	15.81	33.468	24.613	334.4	.299	5.71	101.1	1.4	.09		.00	.13	.03	90
	100 ISL	15.62	15.61	33.499	24.682	328.2	.333	5.69	100.3							101
1	106	15.47	15.45	33.524	24.737	323.2	.351	5.67	99.7	1.7	.23		.01	.20	.14	106
1	121	14.95	14.93	33.617	24.922	305.9	.398	5.57	97.0	2.3	.29		.05	.22	.16	121
	125 ISL	14.67	14.65	33.616	24.981	300.3	.412	5.53	95.7							126
1	145	13.28	13.26	33.600	25.257	274.4	.470	5.15	86.6	4.9	.54		.01	.05	.07	146
	150 ISL	13.04	13.02	33.619	25.321	268.3	.483	4.96	82.9							151
1	165	12.30	12.27	33.687	25.518	249.8	.523	4.36	71.9	10.5	.92		.00	.08	.10	166
1	185	11.42	11.40	33.714	25.703	232.5	.571	4.23	68.5	13.3	1.07		.00			186
	200 ISL	10.29	10.26	33.704	25.896	214.4	.604	3.99	62.9							202
1	205	9.91	9.89	33.700	25.956	208.2	.614	3.89	60.9	20.0	1.41		.00			206
1	235	9.14	9.12	33.842	26.193	186.1	.673	3.43	52.8	26.6	1.56		.01			236
	250 ISL	8.85	8.82	33.903	26.288	177.3	.701	3.25	49.7							252
1	274	8.45	8.42	33.979	26.409	166.0	.741	2.99	45.4	34.3	1.91		.00			275
	300 ISL	7.99	7.96	34.022	26.512	156.5	.784	2.67	40.1							302
1	332	7.47	7.44	34.046	26.606	147.8	.833	2.28	33.9	46.8	2.20		.00			334
	400 ISL	6.61	6.57	34.080	26.752	134.4	.928	1.55	22.6							403
1	406	6.55	6.51	34.082	26.762	133.5	.936	1.50	21.8	61.1	2.57		.00			408
1	478	5.90	5.86	34.134	26.886	122.2	1.029	.91	13.0	73.9	2.83		.00			481
	500 ISL	5.73	5.69	34.151	26.920	119.0	1.055	.78	11.2							504
1	552	5.38	5.33	34.190	26.994	112.3	1.115	.58	8.2	85.2	3.00		.00			555

RV McARTHUR — CALCOFI CRUISE 8502 — STATION 77 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
34°43.6'N	121°33.2'W	03/04/85	1914 GMT	18 m	1218 - 1831 PST	1218 PST	1831 PST	460.0 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
0	12.38	33.512	25.362	5.97	98.5	5.7	0.62	2.9	0.02	0.68	0.25	95	11.8	11.2	11.5	0.13
11	12.31	33.511	25.375	5.96	98.2	5.8	0.61	3.2	0.15	0.64	0.23	37	16.4	15.3	15.8	0.13
14	12.30	33.513	25.378	5.98	98.5	5.9	0.65	3.1	0.16	0.62	0.28	28	14.6	13.4	14.0	0.14
23	12.30	33.511	25.377	5.96	98.2	6.0	0.66	3.2	0.17	0.60	0.27	14	2.1	2.3	2.2	0.16
41	12.27	33.510	25.382	5.96	98.1	6.3	0.67	3.3	0.17	0.54	0.37	3	8.1	8.8	8.5	0.13
63	11.70	33.599	25.559	4.79	77.9	12.0	1.11	9.9	0.22	0.17	0.36	0.50	0.25	0.19	0.22	0.12

RV McARTHUR — CALCOFI CRUISE 8502 — STATION 80 80

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33°29.0'N	122°31.9'W	03/01/85	1855 GMT	18 m	1220 - 1830 PST	1222 PST	1830 PST	233.3 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
0	13.34	33.098	24.853	6.13	103.0	1.7	0.39	0.0	0.00	0.32	0.05	95	0.25	0.16	0.21	0.10
11	13.53	33.166	24.868	6.17	104.1	1.8	0.38	0.0	0.00	0.35	0.04	37	1.6	1.4	1.5	0.11
14	13.53	33.182	24.879	6.13	103.4	2.0	0.40	0.1	0.00	0.32	0.04	28	4.0	2.8	3.4	0.16
23	13.52	33.184	24.884	6.09	102.7	2.1	0.41	0.2	0.01	0.38	0.09	14	4.6	4.5	4.6	0.14
41	13.50	33.185	24.890	6.05	102.0	2.3	0.44	0.2	0.02	0.43	0.09	3	5.2	4.3	4.7	0.14
63	13.32	33.156	24.903	6.02	101.1	2.8	0.44	0.3	0.01	0.24	0.08	0.50	4.2	3.9	4.1	0.13

RV McARTHUR — CALCOFI CRUISE 8502 — STATION 80 120

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°09.0'N	125°15.1'W	03/02/85	1851 GMT	15 m				

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
0	13.73			6.05		2.3	0.36	0.0	0.00	0.52	0.08					
9	13.78			6.04		2.3	0.35	0.1	0.03	0.50	0.08					
11	13.77			6.04		2.5	0.35	0.1	0.03	0.50	0.08					
18	13.77			6.04		2.5	0.36	0.1	0.02	0.49	0.09					
33	13.76			6.05		2.6	0.34	0.1	0.02	0.52	0.09					
52	13.66			5.98		3.2	0.46	0.2	0.05	0.43	0.11					

RV McARTHUR — CALCOFI CRUISE 8502 — STATION 82 46

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
34°16.4'N	119°56.3'W	02/28/85	1925 GMT	15 m	1213 - 1820 PST	1213 PST	1820 PST	540.4 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
0	13.89	33.502	25.052	6.31	107.5	0.2	0.32	0.1	0.00	0.39	0.01	95	8.6	8.5	8.5	0.24
9	13.53	33.497	25.123	6.30	106.5	0.6	0.33	0.1	0.00	0.52	0.15	37	18.4	16.0	17.2	0.28
11	13.23	33.498	25.185	6.09	102.3	1.7	0.46	0.9	0.01	1.11	0.40	28	25.0	26.0	25.5	0.18
19	13.05	33.503	25.225	5.84	97.7	3.3	0.57	2.4	0.08	1.31	0.55	14	20.9	19.7	20.3	0.19
34	12.52	33.522	25.344	5.08	84.1	6.8	0.86	6.2	0.25	0.51	0.59	3	2.6	2.4	2.5	0.13
53	11.67	33.585	25.554	4.44	72.2	13.0	1.14	12.0	0.14	0.32	0.32	0.50	0.40	0.45	0.43	0.17

RV McARTHUR — CALCOFI CRUISE 8502 — STATION 83 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33°14.4'N	121°26.6'W	02/27/85	1913 GMT	14 m	1219 - 1824 PST	1219 PST	1824 PST	339.5 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
0	13.15	33.309	25.055	6.12	102.5	2.8	0.39	0.3	0.01	1.15	0.19	95	19.7	16.1	17.9	0.18
9	13.12	33.304	25.057	6.08	101.8	2.9	0.40	0.4	0.02	0.95	0.18	37	14.6	14.0	14.3	0.14
12	12.94	33.314	25.101	6.02	100.4	3.4	0.46	1.0	0.08	0.76	0.29	28	9.2	12.5	10.8	0.13
19	12.77	33.337	25.151	6.08	101.1	3.6	0.48	1.1	0.07	0.77	0.28	14	9.4	6.2*	7.8	0.12
33	12.66	33.372	25.201	6.07	100.7	3.9	0.53	1.5	0.09	0.51	0.33	3	2.7	1.7	2.2	0.12
50	12.63	33.398	25.220	6.08	100.8	4.3	0.54	1.6	0.08	0.51	0.30	0.50	0.32	0.41	0.37	0.12

* Rapid filtration noted; suggests filter was off center, resulting in some loss of sample.

RV McARTHUR — CALCOFI CRUISE 8502 — STATION 87 40

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33°39.3'N	118°58.4'W	02/26/85	1930 GMT	20 m	1209 - 1814 PST	1209 PST	1814 PST	441.1 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
0	14.24	33.455	24.945	6.06	103.9	2.2	0.36	0.1	0.08	0.25	0.06	95	4.2	4.2	4.2	0.12
12	13.88	33.444	25.010	6.08	103.5	2.1	0.35	0.1	0.00	0.38	0.19	37	9.9	8.2	9.0	0.12
17	13.65	33.445	25.059	6.07	102.8	1.9	0.43	0.6	0.03	0.65	0.19	28	10.8	11.4	11.1	0.14
26	13.45	33.444	25.098	5.74	96.8	3.9	0.56	2.6	0.10	1.01	0.35	14	14.9	13.9	14.4	0.21
47	12.24	33.491	25.373	5.21	85.7	7.4	0.85	7.4	0.19	0.50	0.28	3	1.9	2.2	2.0	0.11
70	11.08	33.608	25.679	4.01	64.4	15.3	1.34	16.2	0.01	0.13	0.16	0.50	0.17	0.14	0.15	0.09

RV McARTHUR — CALCOFI CRUISE 8502 — STATION 90 45

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°55.1'N	118°56.4'W	02/25/85	1903 GMT	18 m	1209 - 1814 PST	1209 PST	1814 PST	598.1 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
0	13.48	33.457	25.101	6.08	102.7	3.4	0.41	1.4	0.05	0.61	0.08	95	12.9	12.8	12.9	0.11
11	13.45	33.454	25.106	6.08	102.6	3.5	0.41	1.5	0.06	0.60	0.07	37	13.9	17.1	15.5	0.13
14	13.44	33.454	25.109	6.07	102.4	3.6	0.41	1.5	0.07	0.62	0.08	28	13.1	14.7	13.9	0.12
23	13.06	33.456	25.187	6.04	101.1	4.5	0.50	2.3	0.08	1.09	0.20	14	19.1	17.8	18.5	0.14
41	12.40	33.489	25.342	5.24	86.5	8.5	0.83	7.7	0.17	0.75	0.27	3	3.8	4.4	4.1	0.10
63	11.30	33.577	25.616	4.32	69.7	14.9	1.20	14.3	0.08	0.26	0.20	0.50	0.33	0.31	0.32	0.11

RV McARTHUR — CALCOFI CRUISE 8502 — STATION 90 90

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
31°25.3'N	121°58.2'W	02/24/85	1857 GMT	54 m	1221 - 1822 PST	1221 PST	1822 PST	92.7 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
0	15.84	33.428	24.575	5.75	101.8	1.0	0.20	0.1	0.00	0.07	0.01	95	0.40	0.41	0.41	0.09
32	15.60	33.422	24.626	5.75	101.3	1.2	0.20	0.1	0.00	0.08	0.02	37	0.91	0.52	0.72	0.13
43	15.59	33.420	24.626	5.75	101.3	1.3	0.21	0.2	0.01	0.09	0.02	28	0.67	0.75	0.71	0.18
69	15.58	33.431	24.638	5.75	101.3	1.6	0.23	0.2	0.01	0.10	0.02	14	0.97	0.97	0.97	0.11
123	12.70	33.450	25.255	5.33	88.5	4.9	0.53	3.4	0.02	0.12	0.12	3	0.27	0.29	0.28	0.08
185	9.53	33.750	26.058	3.66	56.8	23.0	1.53	13.8	0.01	0.01	0.04	0.50	0*	0*	0*	0

* Dark uptake exceeded light uptake.

RV McARTHUR — CALCOFI CRUISE 8502 — STATION 93 45

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°20.7'N	118°33.2'W	02/21/85	1913 GMT	23 m	1200 - 1805 PST	1208 PST	1811 PST	462.0 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
0	14.04	33.494	25.016	5.92	101.1	3.3	0.40	0.1	0.00	0.47	0.10	95	2.1	2.7	2.4	0.13
13	13.99	33.482	25.017	5.94	101.4	3.3	0.40	0.1	0.00	0.51	0.14	37	11.2	13.5	12.4	0.22
17	13.98	33.475	25.015	5.94	101.3	3.4	0.42	0.1	0.02	0.56	0.13	28	6.0	6.1	6.0	0.16
27	13.97	33.467	25.010	5.94	101.3	3.5	0.45	0.1	0.01	0.58	0.16	14	10.2	11.9	11.0	0.18
51	13.39	33.470	25.132	5.41	91.2	5.9	0.68	1.4	0.11	0.45	0.20	3	4.3	4.0	4.1	0.14
78	11.76	33.552	25.512	4.34	70.7	12.7	1.18	10.5	0.02	0.21	0.19	0.50	0.48	0.62	0.55	0.11

RV McARTHUR — CALCOFI CRUISE 8502 — STATION 93 80

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
31°12.0'N	120°54.1'W	02/22/85	1853 GMT	33 m	1212 - 1815 PST	1217 PST	1820 PST	200.7 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
0	14.36	33.349	24.836	5.96	102.4	2.7	0.38	0.0	0.02	0.23	0.06	95	1.8	1.5	1.7	0.10
20	14.22	33.350	24.868	5.85	100.2	2.7	0.39	0.0	0.02	0.27	0.09	37	4.5	3.1	3.8	0.12
26	14.21	33.331	24.856	5.85	100.2	2.7	0.39	0.0	0.02	0.26	0.07	28	2.0	1.8	1.9	0.11
41	14.19	33.335	24.862	5.85	100.1	2.7	0.41	0.0	0.02	0.20	0.19	14	3.2	3.0	3.1	0.10
73	13.62	33.335	24.982	5.61	94.9	3.9	0.54	0.3	0.05	0.20	0.19	3	1.2	1.0	1.1	0.09
111	12.10	33.350	25.292	5.10	83.6	7.5	0.84	4.6	0.01	0.08	0.09	0.50	0.14	0.18	0.16	0.08

RV McARTHUR CALCOFI CRUISE 8502 STATION 93 120

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
29°50.6'N	123°35.2'W	02/23/85	1855 GMT	43 m	1227 - 1832 PST	1227 PST	1832 PST	101.4 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
0	15.82	33.464	24.608	5.71	101.1	1.7	0.24		0.01	0.07	0.01	95	0.64	0.63	0.63	0.11
28	15.83	33.463	24.607	5.72	101.3	1.7	0.25		0.01	0.07	0.02	37	1.2	0.98	1.1	0.12
35	15.82	33.463	24.609	5.73	101.4	1.7	0.24		0.01	0.06	0.02	28	0.96	0.83	0.90	0.11
55	15.83	33.465	24.609	5.72	101.3	1.9	0.25		0.01	0.09	0.02	14	0.96	1.1	1.0	0.10
98	15.65	33.464	24.648	5.75	101.4	2.1	0.27		0.01	0.14	0.05	3	0.63	0.54	0.58	0.08
148	13.23	33.568	25.243	5.27	88.5	5.1	0.55		0.02	0.10	0.11	0.50	0.12	0.10	0.11	0.09

Secchi Disk Observations

CalCOFI Cruise 8502

Line	Sta.	Day	Mo.	Local Time (+8: PST)	Depth (m)	Weather	Clouds Type/Amt	
77	55	4	3	1634	16	1	SC	2/8
77	60	4	3	1114	18	1	SC	7/8
77	60	4	3	1256	18	1	SC	/8
77	70	4	3	0609	17	1	SC	7/8
80	51	28	2	1746	12	0	-	0
80	80	1	3	1014	18	2	SC	8/8
80	80	1	3	1055	18	2	SC	8/8
80	90	1	3	1616	26	2	NS	8/8
80	120	2	3	0925	15	1	SC	6/8
80	120	2	3	1051	15	1	SC	6/8
82	46	28	2	1125	15	0	-	0
82	46	28	2	1205	15	0	-	0
83	40.6	28	2	0712	13	1	CU	1/8
83	60	27	2	1709	16	1	SC	7/8
83	70	27	2	1113	14	2	ST	8/8
83	70	27	2	1145	14	2	ST	8/8
87	40	26	2	1130	20	4	-	-
87	40	26	2	1217	20	4	-	-
87	45	26	2	1548	15	2	ST	8/8
90	37	25	2	1618	16	0	-	0
90	45	25	2	1103	18	2	SC	8/8
90	45	25	2	1230	18	2	SC	8/8
90	80	24	2	1456	32	1	SC	1/8
90	90	24	2	0900	54	2	SC	8/8
90	90	24	2	1057	54	2	SC	8/8
90	120	23	2	1459	33	2	SC	8/8
93	29	19	2	1553	15	2	ST	8/8
93	45	21	2	1028	23	1	CS	1/8
93	45	21	2	1113	23	1	CS	1/8
93	55	21	2	1645	16	0	-	0
93	80	22	2	0749	33	1	SC	1/8
93	80	22	2	1053	33	1	SC	1/8
93	90	22	2	1523	31	1	SC	7/8
93	120	23	2	0914	43	2	SC	8/8
93	120	23	2	1055	43	2	SC	8/8

RV McARTHUR

CalCOFI Cruise 8502

MACROZOOPLANKTON BIOMASS
Net Mesh Size: 0.505 mm

Line	Sta.	Position	Date Mo/Day	Time (GMT) Start	Time (GMT) End	Water Volume Strained (m^3)	Max. Tow Depth (m)	Volume per 1000 m^3 Strained Total (cm^3)	Volume per 1000 m^3 Strained Small (cm^3)
77	51	35 01.3N 120 55.0W	3/5	0235	0257	454	208	434	434
77	55	34 53.2N 121 12.2W	3/4	2300	2324	429	217	282	282
77	60	34 43.6N 121 33.2W	3/4	1945	2008	442	225	272	272
77	70	34 23.4N 122 14.5W	3/4	1435	1459	480	217	258	258
80	51	34 27.0N 120 31.5W	3/1	0200	0207	137	64	182	182
80	55	34 19.1N 120 48.0W	3/1	0519	0542	420	215	286	286
80	60	34 09.1N 121 08.2W	3/1	0840	0902	420	208	309	309
80	70	33 48.9N 121 50.5W	3/1	1336	1358	395	220	144	144
80	80	33 29.0N 122 31.9W	3/1	1904	1926	412	221	56	56
80	90	33 08.9N 123 13.6W	3/2	0045	0108	435	219	32	32
82	46	34 16.4N 119 56.3W	2/28	1840	1902	420	216	143	143
83	40.6	34 13.5N 119 24.6W	2/28	1524	1527	54	21	262	262
83	42	34 10.6N 119 30.4W	2/28	1300	1314	255	125	251	251
83	51	33 52.5N 120 07.7W	2/28	0805	0815	182	78	297	297
83	55	33 44.6N 120 24.7W	2/28	0519	0541	423	214	288	288
83	60	33 34.9N 120 45.0W	2/28	0140	0203	439	215	55	55
83	70	33 14.4N 121 26.6W	2/27	2010	2033	435	213	143	143
87	33	33 53.3N 118 29.3W	2/26	1425	1432	124	53	257	257
87	35	33 49.4N 118 37.7W	2/26	1646	1708	418	218	129	129
87	40	33 39.3N 118 58.4W	2/26	2040	2102	401	213	192	112
87	45	33 29.4N 119 19.0W	2/27	0017	0040	427	212	260	124
87	50	33 19.4N 119 39.9W	2/27	0324	0333	161	70	261	261
87	60	32 59.6N 120 20.8W	2/27	0820	0842	433	212	205	178
87	70	32 39.3N 121 02.0W	2/27	1355	1417	457	204	44	44
90	28	33 28.6N 117 46.5W	2/26	0930	0952	425	212	125	125
90	30	33 25.1N 117 54.6W	2/26	0702	0724	416	213	178	154
90	35	33 15.2N 118 14.9W	2/26	0310	0332	420	215	138	138
90	37	33 11.0N 118 23.2W	2/26	0040	0102	439	206	23	23
90	45	32 55.1N 118 56.4W	2/25	1912	1934	414	209	254	118
90	53	32 39.2N 119 28.9W	2/25	1435	1457	413	221	126	126
90	60	32 23.1N 119 58.0W	2/25	1030	1052	428	217	136	136
90	70	32 05.2N 120 38.7W	2/25	0405	0427	461	209	98	98
90	80	31 45.2N 121 19.0W	2/24	2315	2337	415	216	24	24
90	90	31 25.3N 121 58.2W	2/24	1729	1751	440	210	23	23
90	100	31 05.6N 122 39.6W	2/24	1025	1047	422	216	52	52
90	110	30 45.1N 123 19.9W	2/24	0440	0502	426	206	150	139
90	120	30 25.0N 124 00.0W	2/23	2325	2348	436	214	18	18
93	26.7	32 57.2N 117 18.1W	2/19	2120	2126	114	46	184	184
93	29	32 53.2N 117 28.0W	2/20	0030	0054	416	208	91	91
93	30	32 50.7N 117 32.0W	2/20	0343	0405	413	215	182	82
93	35	32 40.5N 117 52.5W	2/20	0830	0853	409	224	95	95
93	40	32 30.4N 118 12.3W	2/20	1205	1230	437	211	128	78
93	45	32 20.7N 118 33.4W	2/21	1925	1951	491	211	53	53
93	55	32 02.1N 119 14.2W	2/22	0118	0143	506	213	207	34
93	60	31 49.9N 119 35.0W	2/22	0508	0533	483	215	348	99
93	70	31 31.4N 120 14.5W	2/22	1100	1125	479	214	203	203
93	80	31 12.0N 120 54.1W	2/22	1620	1645	466	215	21	21
93	90	30 50.8N 121 35.0W	2/23	0000	0024	460	213	46	17
93	100	30 30.1N 122 15.5W	2/23	0457	0520	462	207	24	24
93	110	30 10.1N 122 54.7W	2/23	1100	1123	457	216	35	35
93	120	29 50.6N 123 35.2W	2/23	1739	1801	456	210	44	44

FIGURES

Cruise 8505

1. CalCOFI Cruise 8505, station positions.
2. Horizontal distribution of chlorophyll-*a* at 10 meters.
3. Horizontal distribution of dynamic height anomaly (0 over 500 m).
4. Horizontal distribution of sigma-theta at 10 meters.
5. Horizontal distribution of temperature at 10 meters.
6. Horizontal distribution of salinity at 10 meters.
7. Horizontal distribution of dynamic height anomaly (200 over 500 m).
8. Horizontal distribution of sigma-theta at 200 meters.
9. Horizontal distribution of temperature at 200 meters.
10. Horizontal distribution of salinity at 200 meters.

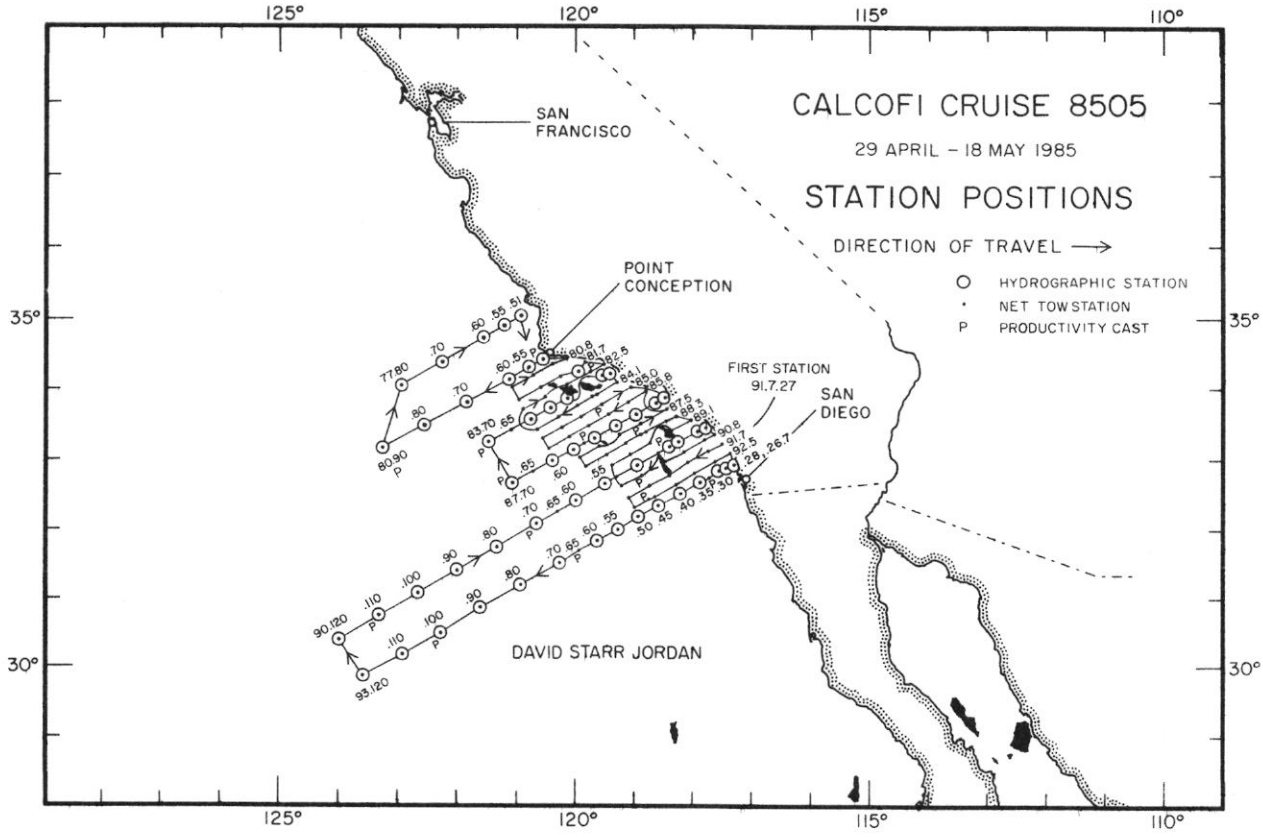

FIGURE 1

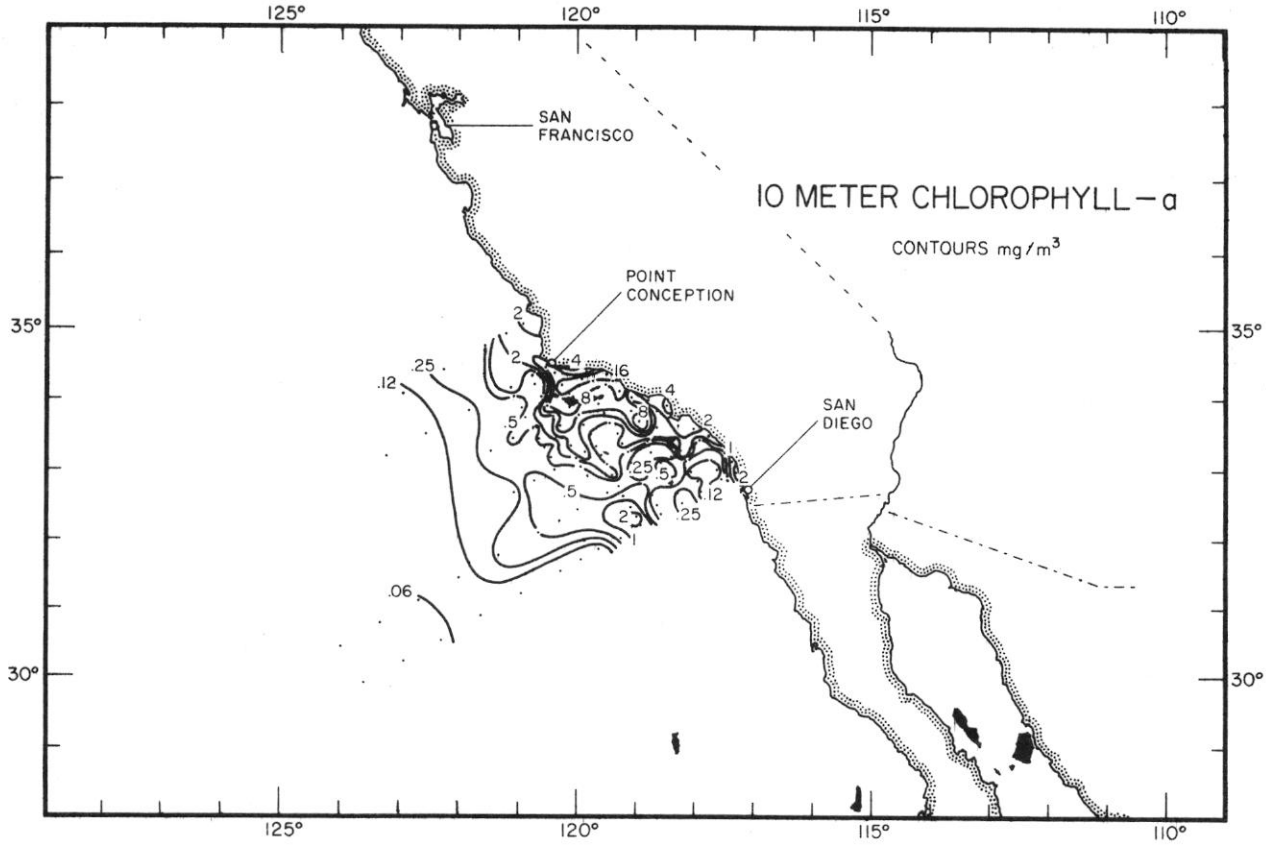

FIGURE 2

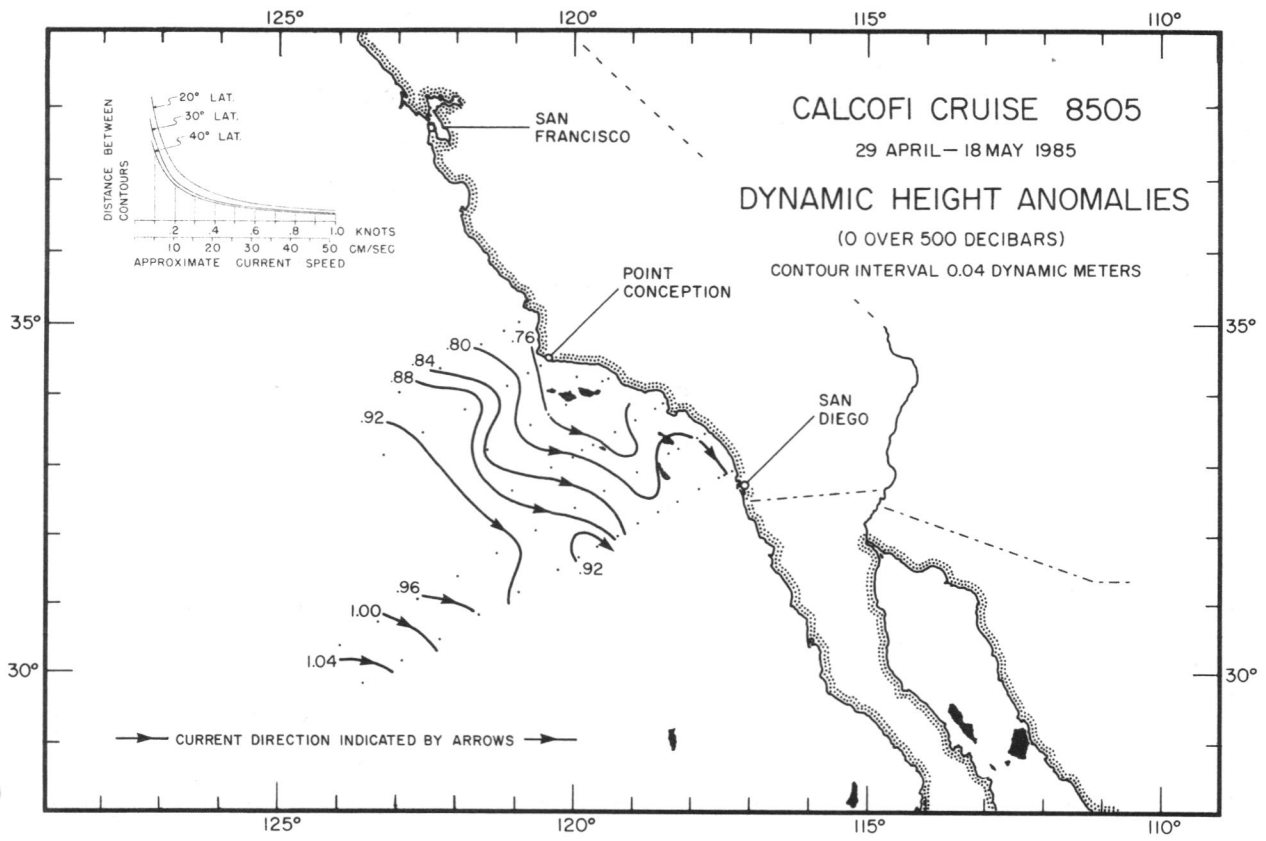

FIGURE 3

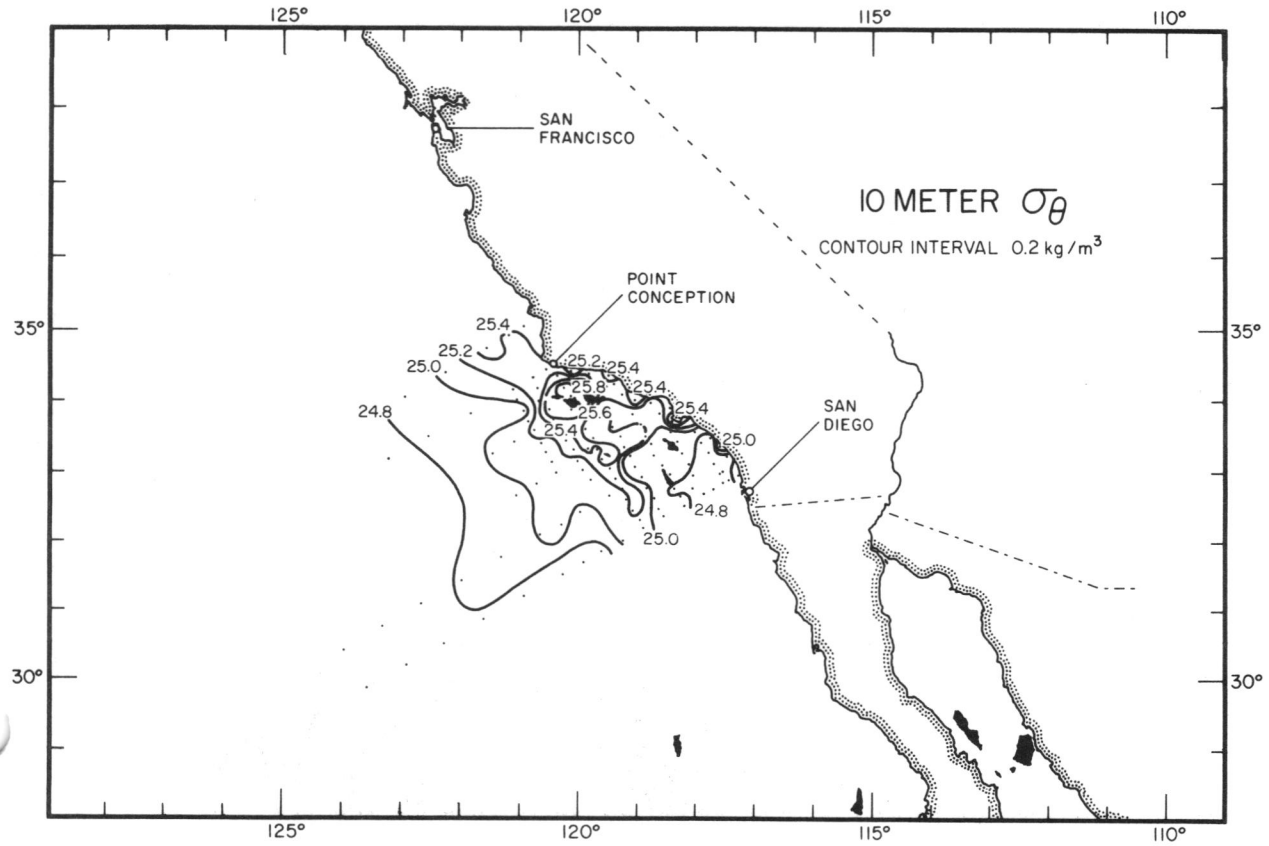

FIGURE 4

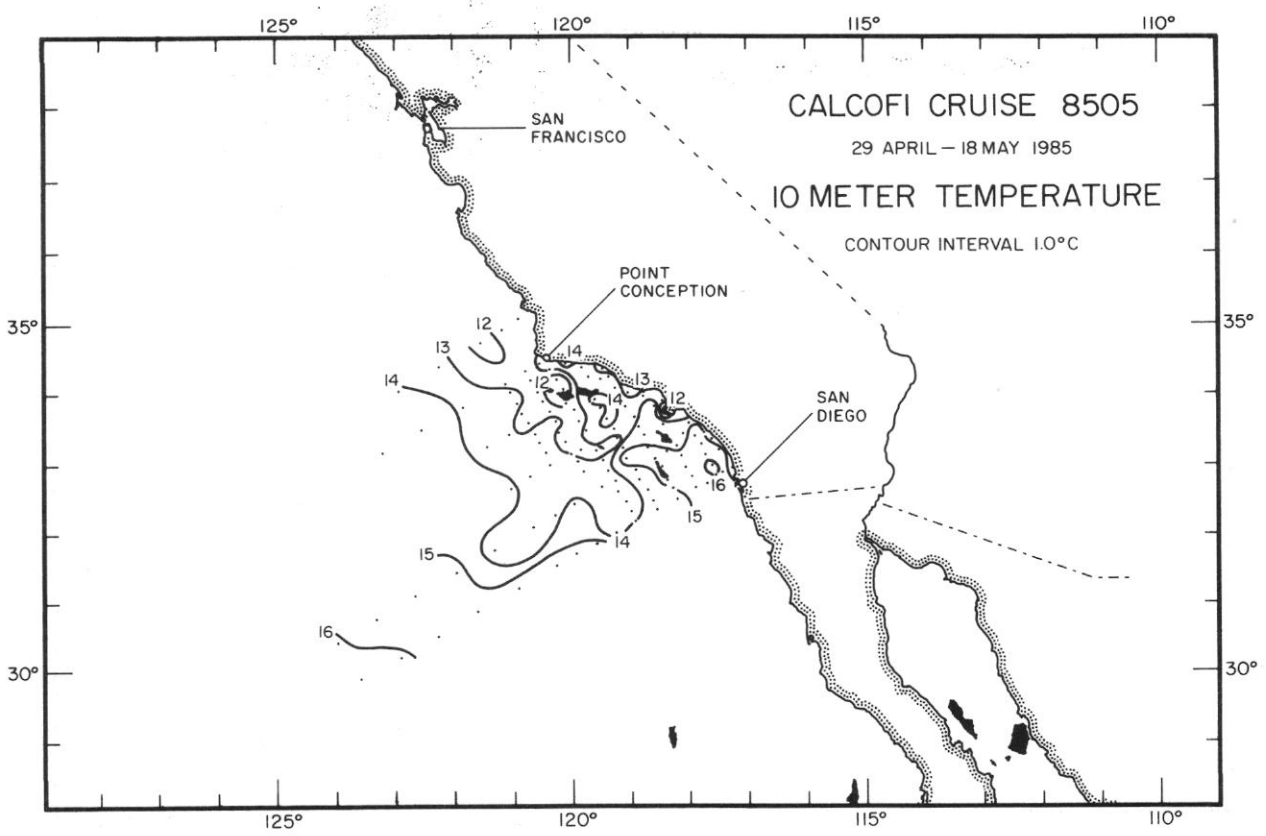

FIGURE 5

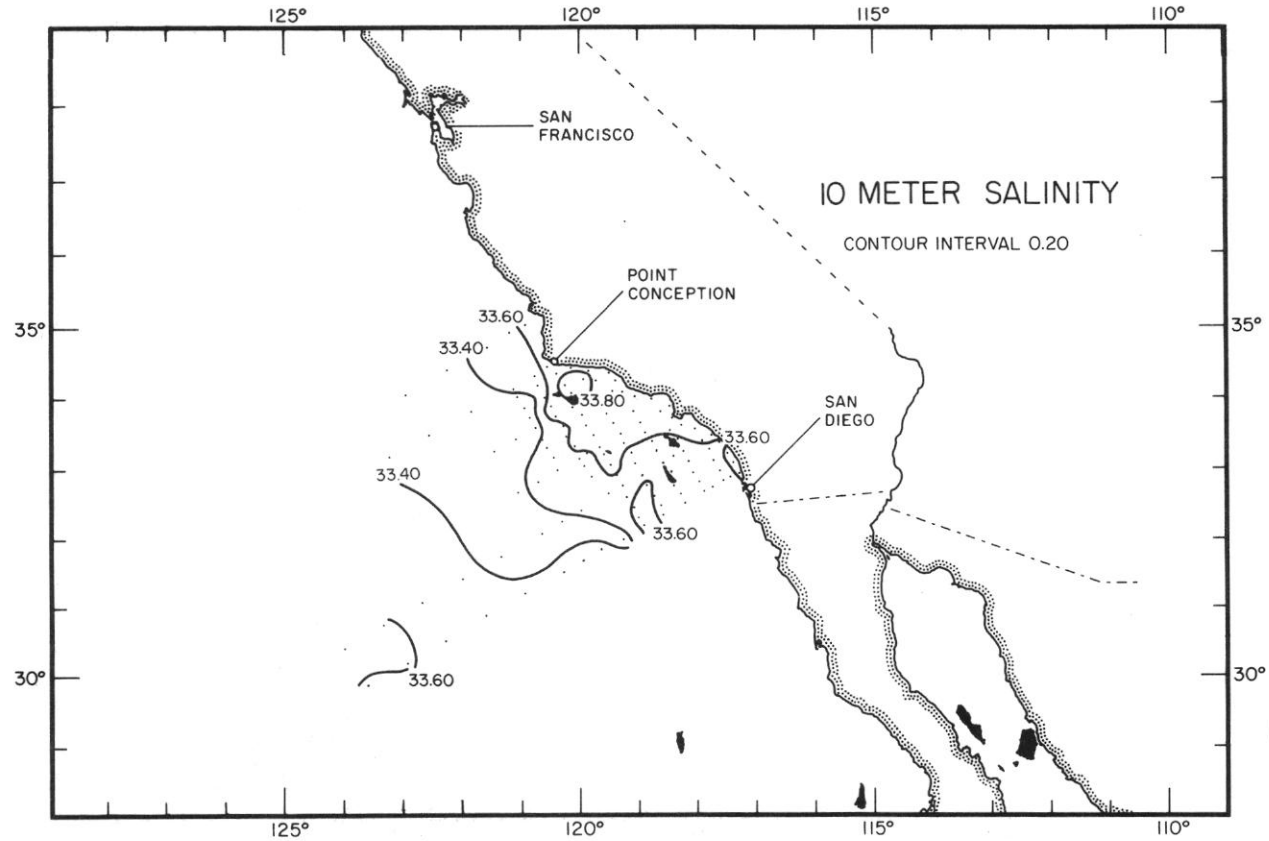

FIGURE 6

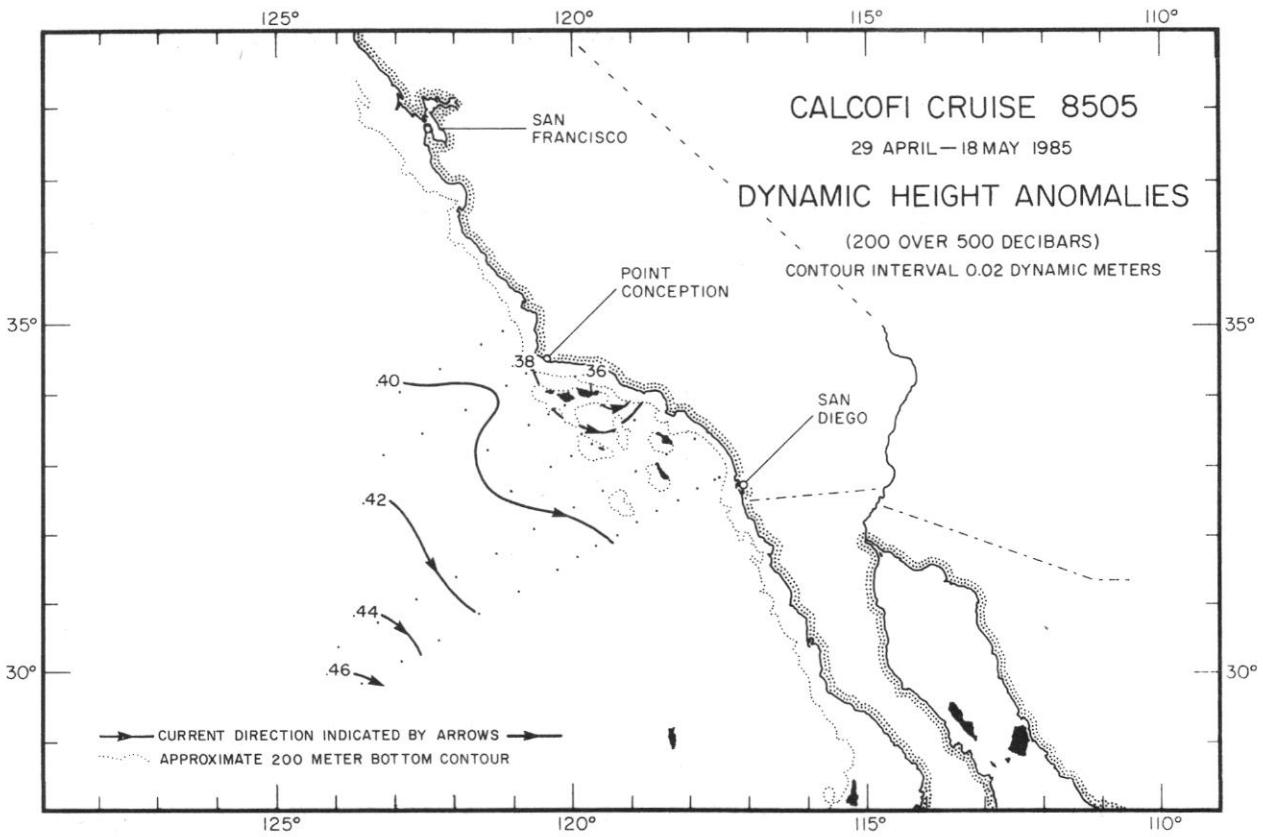

FIGURE 7

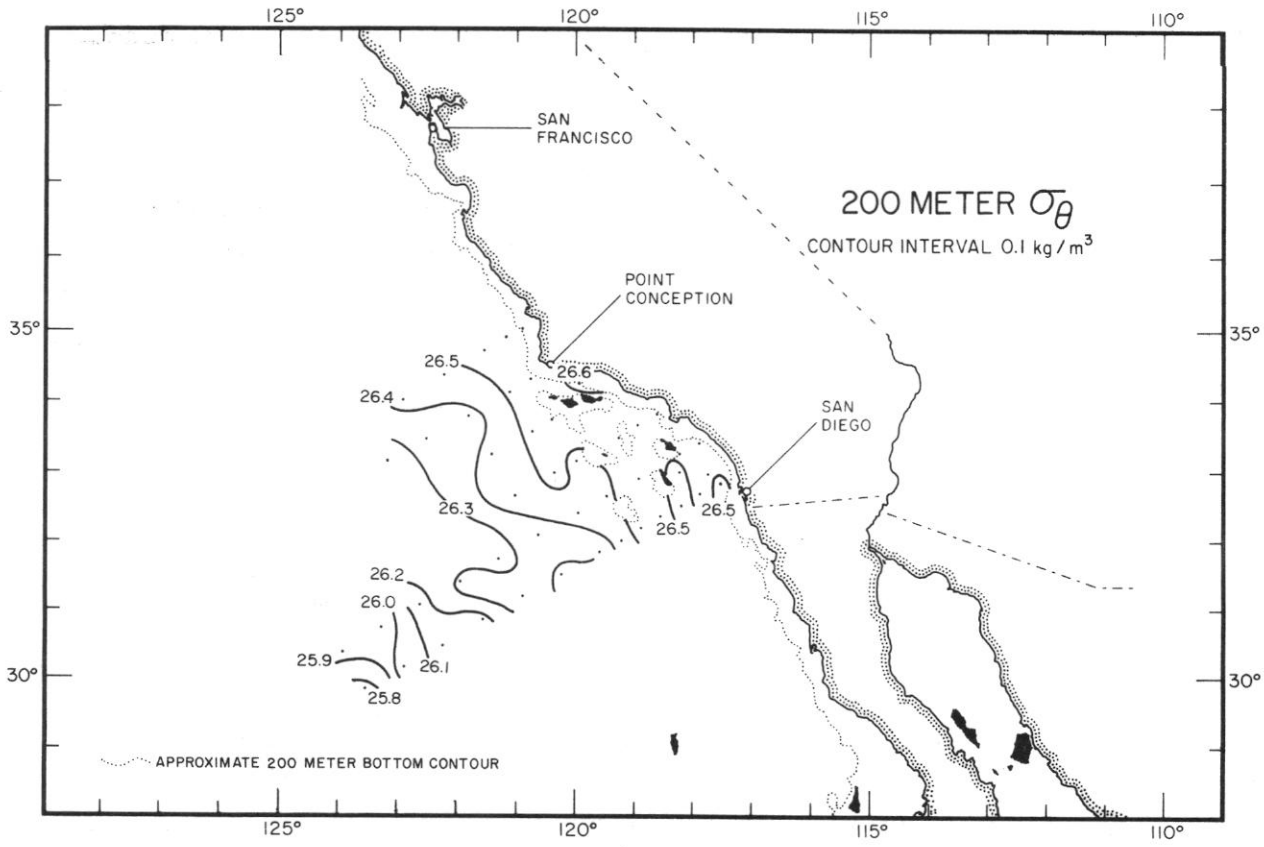

FIGURE 8

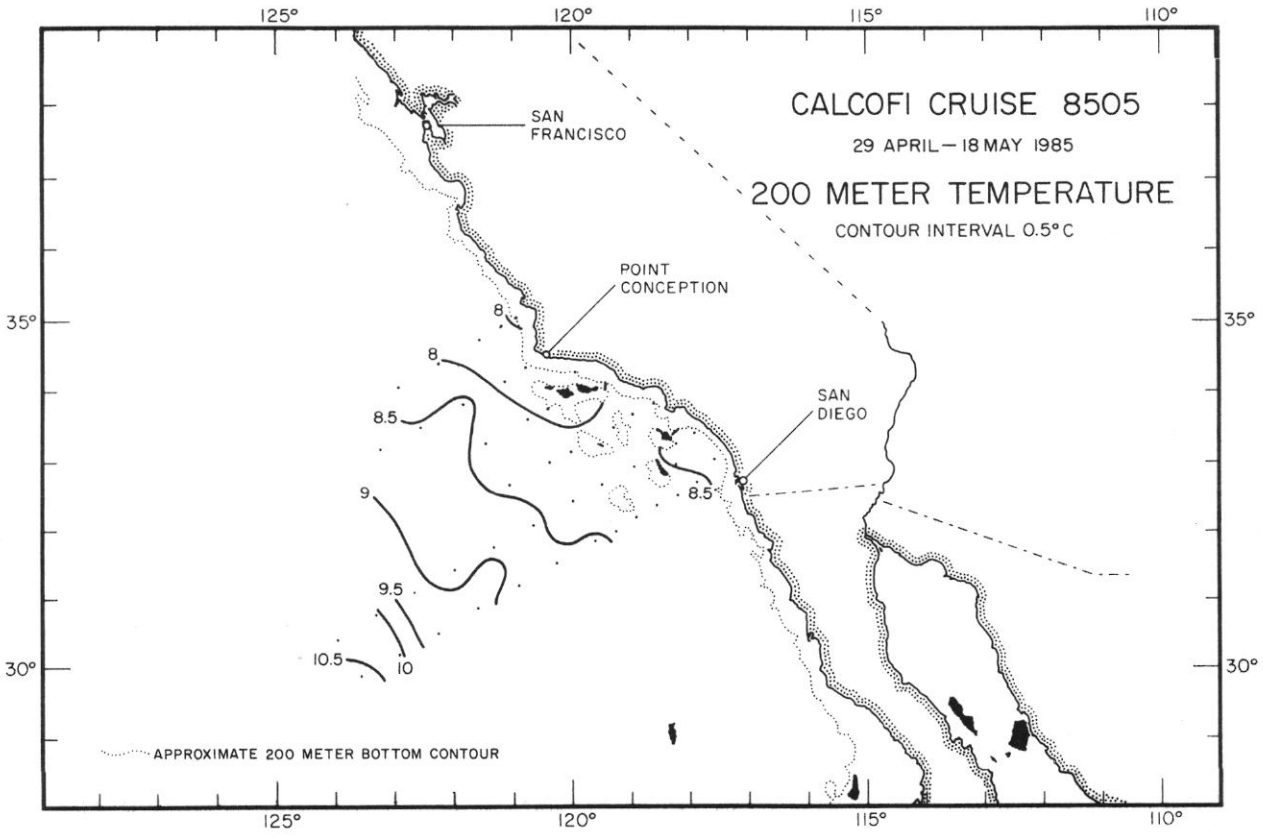

FIGURE 9

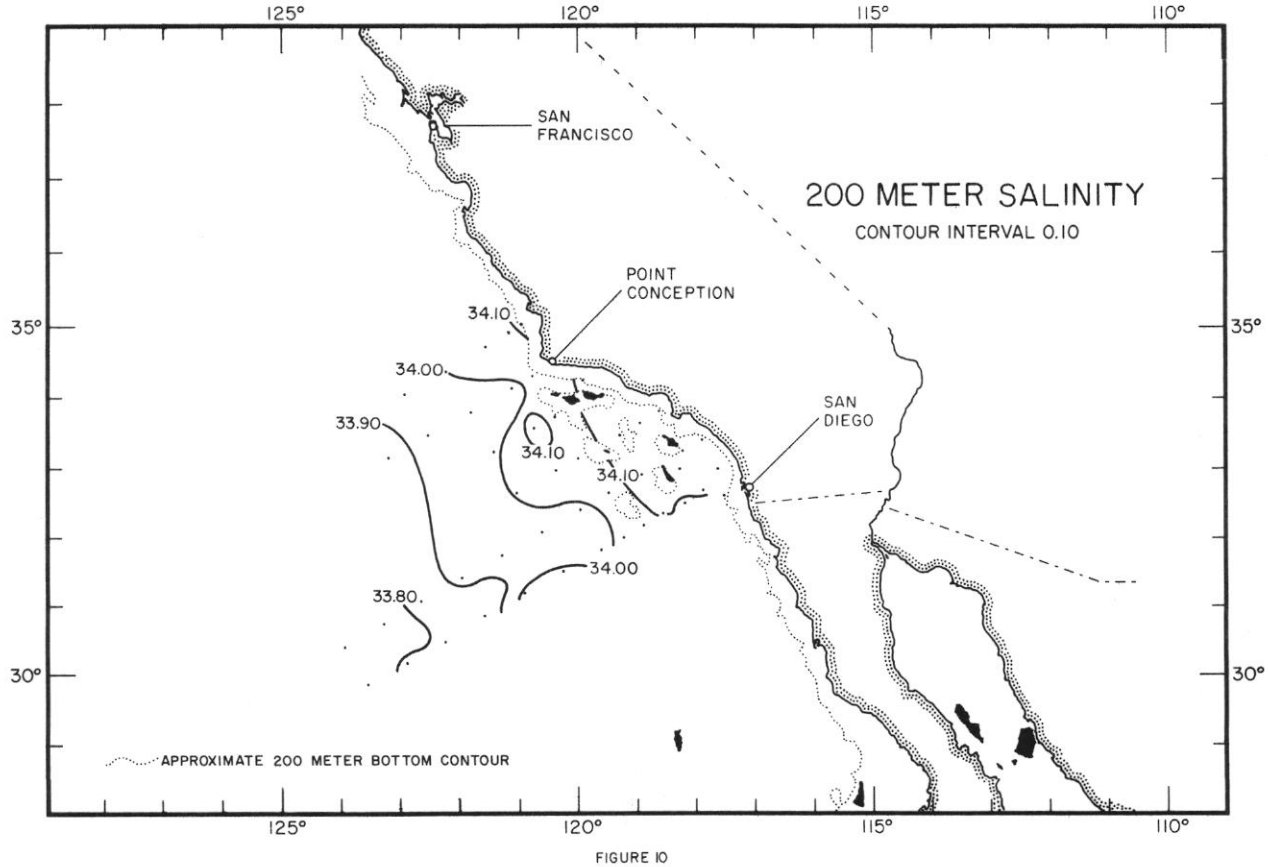

FIGURE 10

PERSONNEL

Cruise 8505

SHIP'S CAPTAIN

Milton Roll, RV *David Starr Jordan*

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

RV *David Starr Jordan*

Flerx, William C. (in charge)	Fishery Biologist, NMFS
Abramenkoff, Dimitry N.	Biological Technician, NMFS
Bos, David L.	Staff Research Associate, SIO
Bryan, Walter R.	Marine Technician, SIO
Cummings, Sherry L.	Staff Research Associate, SIO
Dickerson, Terri L.	Marine Biologist, Calif. Dept. Fish & Game
Isidro, Eduardo J.	Marine Biologist, Univ. of Azores, Portugal
Metoyer, Jack D.	Biological Technician, NMFS
Mildner, Joan M.	Volunteer
Mildner, Suzanne J.	Volunteer
Smith, Dr. Paul E.	Fishery Biologist, NMFS
Walker, Carla L.	Asst. Keypunch Operator, SIO
Wolf, Patricia	Marine Biologist, Calif. Dept. Fish & Game

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 77 51

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
35 01.2 N	120 55.7 W	18/05/85	2021 GMT	229 M	320	26 KT	310 08 07	0	1015 MB	14.8 C	12.1 C	0/8	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	12.06	12.06	33.607	25.497	247.6	.000	6.42	105.3							0
1	1	12.06	12.06	33.607	25.497	247.6	.002	6.42	105.3	2.4	.82	8.3	.22	2.04	.24	1
	10 ISL	12.04	12.04	33.605	25.499	247.6	.025	6.45	105.7							10
1	11	12.04	12.04	33.604	25.498	247.6	.027	6.45	105.7	2.4	.81	8.3	.22	1.97	.41	11
	20 ISL	11.97	11.97	33.603	25.511	246.7	.049	6.39	104.5							20
1	21	11.96	11.96	33.603	25.512	246.6	.052	6.38	104.4	2.4	.81	8.3	.22	2.10	.38	21
	30 ISL	11.07	11.07	33.612	25.683	230.6	.073	5.46	87.7							30
1	31	10.99	10.98	33.614	25.700	228.9	.075	5.37	86.1	10.4	1.23	12.8	.35	.76	.75	31
1	41	10.57	10.57	33.655	25.805	219.1	.098	4.89	77.7	14.8	1.40	15.6	.36	.22	.59	41
	50 ISL	10.36	10.35	33.705	25.882	212.1	.117	4.42	69.9							50
1	51	10.34	10.34	33.708	25.886	211.7	.119	4.39	69.4	16.8	1.49	17.4	.41	.10	.34	51
1	61	10.27	10.26	33.713	25.904	210.2	.140	4.32	68.2	17.5	1.52	18.0	.39	.11	.34	61
1	70	9.73	9.72	33.811	26.071	194.4	.158	3.63	56.7	25.2	1.83	21.6	.29	.33	.81	70
	75 ISL	9.69	9.68	33.846	26.105	191.3	.168	3.56	55.6							76
1	84	9.63	9.62	33.863	26.128	189.3	.185	3.46	53.9	27.4	1.98	21.7	.33	.60	1.23	84
	100 ISL	9.08	9.07	33.927	26.268	176.3	.215	2.90	44.6							101
1	102	8.99	8.98	33.936	26.289	174.3	.219	2.80	43.0	32.9	2.10	25.1	.36	.10	.50	103
1	121	8.67	8.66	34.005	26.393	164.8	.251	2.14	32.7	39.3	2.35	27.9	.37	.11	.82	122
	125 ISL	8.62	8.61	34.011	26.405	163.7	.257	2.16	32.9							126
1	140	8.46	8.45	34.027	26.442	160.4	.282	2.23	33.9	39.3	2.27	28.8	.25	.05	.42	141
	150 ISL	8.41	8.39	34.041	26.462	158.7	.297	2.16	32.7							151
1	171	8.30	8.28	34.072	26.503	155.2	.330	1.91	28.9	42.9	2.39	30.1	.24			172
	200 ISL	8.02	8.00	34.113	26.577	148.5	.374	1.66	24.9							202
1	205	7.97	7.95	34.120	26.591	147.3	.381	1.62	24.3	48.3	2.54	31.7	.22			206

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 77 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 53.5 N	121 11.8 W	18/05/85	1703 GMT	564 M	340	24 KT	310 08 10	1	1017 MB	14.9 C	12.5 C	1/8	AC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	12.38	12.38	33.541	25.385	258.2	.000	6.50	107.3							0
1	1	12.38	12.38	33.541	25.385	258.2	.003	6.50	107.3	1.7	.68	7.1	.00	2.28	.24	1
	10 ISL	12.36	12.36	33.540	25.388	258.1	.026	6.63	109.5							10
1	11	12.35	12.35	33.540	25.389	258.1	.028	6.64	109.5	1.6	.69	7.0	.20	2.41	.25	11
	20 ISL	12.32	12.32	33.539	25.394	257.8	.052	6.59	108.7							20
1	21	12.32	12.32	33.539	25.395	257.8	.054	6.59	108.6	1.6	.69	7.0	.20	2.16	.27	21
	30 ISL	12.21	12.21	33.544	25.420	255.6	.077	6.44	105.9							30
1	31	12.20	12.20	33.545	25.422	255.4	.079	6.42	105.6	2.5	.76	7.5	.21	2.02	.30	31
1	40	11.59	11.58	33.579	25.564	242.1	.102	6.07	98.5	5.8	.97	10.2	.28	1.71	.42	40
	50 ISL	11.13	11.12	33.612	25.673	232.0	.126	5.38	86.4							50
1	51	11.10	11.10	33.614	25.679	231.4	.128	5.33	85.6	10.6	1.16	12.8	.25	.62	.42	51
1	61	10.70	10.69	33.645	25.776	222.4	.150	5.16	82.2	14.6	1.31	15.1	.31	.38	.46	61
1	71	10.52	10.51	33.664	25.822	218.2	.172	4.99	79.2	16.3	1.38	16.2	.30	.22	.39	71
	75 ISL	10.35	10.34	33.692	25.873	213.4	.182	4.67	73.9							76
1	86	9.89	9.88	33.766	26.009	200.7	.203	3.86	60.5	22.0	1.60	20.9	.25	.06	.23	86
1	100	9.40	9.39	33.809	26.123	190.1	.232	3.56	55.2	26.1	1.73	23.1	.16	.06	.26	101
1	119	8.84	8.83	33.914	26.295	174.1	.267	3.10	47.5	31.7	1.94	26.1	.08	.05	.26	120
	125 ISL	8.76	8.75	33.926	26.317	172.0	.277	3.05	46.6							126
1	144	8.59	8.57	33.951	26.364	167.9	.309	2.95	44.9	33.5	1.98	27.0	.05	.05	.20	145
	150 ISL	8.51	8.50	33.967	26.388	165.8	.319	2.89	43.9							151
1	175	8.18	8.17	34.030	26.488	156.6	.359	2.64	39.9	38.5	2.12	28.4	.05			176
	200 ISL	7.86	7.84	34.049	26.550	151.0	.398	2.53	37.9							202
1	205	7.81	7.79	34.051	26.560	150.2	.405	2.50	37.4	42.4	2.21	29.7	.02			206
1	234	7.60	7.58	34.095	26.625	144.5	.447	1.96	29.2	48.1	2.43	32.0	.00			235
	250 ISL	7.46	7.44	34.118	26.663	141.0	.471	1.71	25.4							252
1	272	7.26	7.23	34.145	26.713	136.6	.502	1.45	21.4	55.3	2.63	34.2	.00			274
	300 ISL	7.03	7.00	34.164	26.760	132.5	.539	1.26	18.5							302
1	323	6.86	6.83	34.173	26.791	129.8	.569	1.16	17.0	61.3	2.76	35.9	.00			325
1	382	6.49	6.46	34.192	26.856	124.3	.645	.97	14.1	67.1	2.89	37.8	.00			385
	400 ISL	6.34	6.30	34.200	26.882	121.9	.666	.69	12.9							403
1	442	6.00	5.96	34.222	26.943	116.5	.716	.71	10.2	76.3	3.06	39.2	.00			445
	500 ISL	5.80	5.76	34.247	26.988	112.7	.783	.59	8.5							504
1	505	5.80	5.75	34.249	26.990	112.6	.789	.59	8.4	79.8	3.11	39.9	.00			509

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 77 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 43.2 N	121 33.1 W	18/05/85	1309 GMT	896 M	330	22 KT	320 08 06	1	1016 MB	13.0 C	11.2 C	5/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	11.68	11.68	33.450	25.445	252.4	.000	5.88	95.6	7.1	.93	8.3	.21	.50	.24	0
1	10	11.68	11.68	33.446	25.443	252.9	.025	6.09	99.0	7.1	.92	8.3	.21	.50	.22	10
1	20	11.67	11.66	33.445	25.445	252.9	.050	5.99	97.3	7.1	.92	8.3	.21	.48	.22	20
	30 ISL	11.63	11.63	33.460	25.463	251.5	.076	5.89	95.6							30
1	31	11.63	11.62	33.461	25.465	251.3	.078	5.88	95.5	7.3	.93	8.6	.22	.50	.28	31
1	40	11.42	11.42	33.497	25.530	245.3	.100	5.80	93.8	8.0	1.01	9.9	.25	.65	.30	40
	50 ISL	11.26	11.25	33.546	25.598	239.1	.125	5.74	92.5							50
1	51	11.25	11.25	33.549	25.602	238.7	.127	5.74	92.5	8.6	1.09	11.2	.24	.91	.37	51
1	61	11.24	11.23	33.576	25.625	236.8	.150	5.78	93.1	7.9	1.10	11.6	.22	1.37	.58	61
1	71	11.10	11.09	33.613	25.680	231.7	.174	5.71	91.7	13.2	1.23	13.5	.30	.32	.35	71
	75 ISL	10.84	10.83	33.602	25.718	228.2	.184	5.32	84.9							76
1	86	10.10	10.09	33.574	25.824	218.3	.207	4.28	67.3	17.3	1.44	17.8	.08	.06	.18	86
	100 ISL	9.44	9.43	33.623	25.971	204.5	.238	3.94	61.1							101
1	101	9.39	9.38	33.631	25.986	203.1	.241	3.94	61.0	21.5	1.60	20.8	.04	.04	.09	102
1	121	8.96	8.94	33.764	26.160	186.9	.279	3.61	55.4	25.8	1.75	23.5	.02	.03	.15	122
	125 ISL	8.88	8.87	33.790	26.191	184.0	.286	3.54	54.3							126
1	146	8.52	8.50	33.918	26.348	169.4	.324	3.16	48.0	32.7	1.99	26.6	.03	.04	.14	147
	150 ISL	8.47	8.45	33.934	26.369	167.5	.330	3.08	46.8							151
1	176	8.13	8.12	34.004	26.475	157.8	.372	2.66	40.1	37.8	2.16	28.9	.01			177
	200 ISL	7.75	7.73	34.018	26.542	151.8	.410	2.70	40.3							202
1	206	7.67	7.65	34.019	26.555	150.6	.418	2.71	40.4	41.2	2.21	29.8	.02			207
1	234	7.43	7.41	34.052	26.616	145.2	.459	2.30	34.1	46.2	2.37	31.2	.02			235
	250 ISL	7.26	7.23	34.063	26.649	142.2	.483	2.10	31.0							252
1	274	7.01	6.99	34.079	26.695	138.1	.517	1.83	26.9	53.0	2.59	33.9	.00			276
	300 ISL	6.85	6.82	34.112	26.744	133.9	.552	1.51	22.1							302
1	333	6.70	6.67	34.153	26.797	129.2	.595	1.17	17.1	61.9	2.83	36.6	.00			335
	400 ISL	6.36	6.33	34.179	26.862	123.8	.680	.96	13.9							403
1	405	6.34	6.30	34.180	26.866	123.4	.687	.95	13.7	67.9	2.97	38.0	.00			408
1	477	5.83	5.79	34.238	26.977	113.5	.772	.62	8.9	77.6	3.16	40.3				480
	500 ISL	5.71	5.67	34.255	27.005	111.0	.798	.55	7.8							504
1	548	5.53	5.49	34.285	27.051	107.1	.850	.46	6.5	84.0	3.24	41.1				552

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 77 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 23.4 N	122 14.9 W	18/05/85	0713 GMT	4023 M	340	18 KT			1018 MB	13.6 C	12.0 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	13.38	13.38	33.382	25.064	288.7	.000	6.29	105.9							0
1	2	13.38	13.38	33.382	25.064	288.7	.006	6.29	105.9	2.2	.56	2.1	.09	.30	.03	2
	10 ISL	13.35	13.34	33.378	25.069	288.5	.029	6.27	105.4							10
1	12	13.34	13.34	33.378	25.070	288.4	.034	6.26	105.3	2.2	.69	2.1	.08	.30	.07	12
	20 ISL	12.96	12.95	33.380	25.148	281.2	.057	6.42	107.2							20
1	21	12.91	12.91	33.381	25.158	280.3	.060	6.44	107.4	2.3	.57	2.7	.10	.59	.14	21
	30 ISL	12.64	12.64	33.386	25.215	275.1	.085	6.37	105.6							30
1	31	12.62	12.62	33.389	25.220	274.7	.088			3.2	.67	3.8	.13	.64	.16	31
1	41	12.47	12.46	33.463	25.308	266.6	.114	6.27	103.6	3.3	.76	5.4	.17	.68	.19	41
	50 ISL	12.33	12.32	33.470	25.341	263.5	.139	6.13	101.1							50
1	51	12.31	12.30	33.471	25.345	263.2	.141	6.11	100.6	3.9	.80	5.9	.20	.54	.17	51
1	61	11.67	11.66	33.461	25.457	252.8	.167	5.45	88.6	7.4	.93	8.5	.30	.23	.15	61
1	70	10.87	10.86	33.530	25.656	234.0	.188	4.64	74.1	13.9	1.23	14.3	.04	.09	.09	70
	75 ISL	10.67	10.66	33.558	25.714	228.6	.201	4.58	72.9							76
1	85	10.49	10.48	33.600	25.777	222.8	.222	4.48	71.0	15.8	1.40	16.1	.37	.08	.17	85
1	99	10.09	10.08	33.687	25.913	210.1	.255	4.05	63.7	19.3	1.55	19.5	.20	.07	.19	100
	100 ISL	10.08	10.07	33.690	25.919	209.6	.256	4.04	63.6							101
1	119	9.42	9.41	33.809	26.121	190.7	.294	3.83	59.4	26.5	1.80	23.3	.43	.07	.17	120
	125 ISL	9.26	9.25	33.839	26.170	186.2	.305	3.62	55.9							126
1	143	8.84	8.83	33.918	26.299	174.1	.338	2.90	44.4	31.3	1.97	26.1	.04	.03	.08	144
	150 ISL	8.73	8.72	33.943	26.335	170.8	.350	2.83	43.2							151
1	174	8.41	8.39	33.999	26.429	162.3	.390	2.58	39.1	36.2	2.13	28.3	.06			175
	200 ISL	8.04	8.02	34.000	26.485	157.1	.431	2.98	44.9							202
1	204	7.99	7.97	34.000	26.493	156.6	.437	3.05	45.8	36.4	2.02	27.6	.05			205
1	233	7.68	7.66	34.006	26.543	152.2	.481	3.01	44.9	39.4	2.07	28.6	.04			234
	250 ISL	7.48	7.46	34.026	26.588	148.1	.508	2.71	40.3							252
1	273	7.20	7.18	34.053	26.649	142.7	.541	2.26	33.4	47.9	2.37	32.0				275
	300 ISL	6.88	6.85	34.051	26.692	138.6	.579	2.08	30.5							302
1	333	6.50	6.47	34.048	26.740	134.4	.624	1.93	28.0	56.7	2.54	34.9	.03			335
	400 ISL	5.91	5.88	34.107	26.862	123.3	.710	1.04	14.9							403
1	407	5.87	5.83	34.116	26.875	122.2	.719	.94	13.4	71.3	2.93	39.5	.00			410
1	481	5.79	5.75	34.247	26.989	112.4	.806	.51	7.3	78.7	3.12	40.4	.00			484
	500 ISL	5.71	5.67	34.267	27.015	110.1	.827	.44	6.3							504
1	552	5.38	5.34	34.290	27.073	104.9	.883	.34	4.8	87.0	3.21	41.8	.00			556

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 77 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 03.2 N	122 56.7 W	18/05/85	0159 GMT	4118 M	310	16 KT	290 05 06	0	1019 MB	15.1 C	12.2 C	0/8	

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	14.39	14.39	33.304	24.797	314.4	.000	6.04	103.8							0
1	1		14.39	14.39	33.304	24.797	314.2	.003	6.04	103.8	2.0	.42	.3	.00	.11	.02	1
	10	ISL	14.25	14.25	33.301	24.823	312.0	.031	6.14	105.3							10
1	11		14.24	14.23	33.300	24.825	311.7	.034	6.15	105.4	2.1	.42	.3	.00	.11	.02	11
	20	ISL	14.12	14.12	33.299	24.849	309.8	.062	6.14	105.0							20
1	26		14.00	14.00	33.298	24.873	307.6	.081	6.14	104.7	1.8	.41	.3	.00	.12	.03	26
	30	ISL	13.82	13.81	33.297	24.910	304.3	.093	6.16	104.6							30
1	41		13.33	13.32	33.296	25.010	295.0	.126	6.20	104.2	2.2	.46	.3	.01	.36	.10	41
	50	ISL	13.12	13.11	33.311	25.063	290.2	.152	6.18	103.5							50
1	56		13.02	13.01	33.320	25.090	287.7	.169	6.17	103.1	2.2	.54	.9	.08	.38	.13	56
1	65		12.79	12.78	33.321	25.135	283.6	.195	6.04	100.4	2.5	.57	1.6	.16	.37	.15	65
1	75		12.13	12.12	33.251	25.209	276.7	.222	5.74	94.1	4.3	.68	3.6	.15	.29	.14	75
1	90		11.66	11.65	33.336	25.363	262.4	.263	5.30	86.0	7.5	.90	7.5	.06	.18	.03	90
	100	ISL	11.11	11.10	33.399	25.512	248.4	.289	4.84	77.7							101
1	104		10.88	10.86	33.426	25.574	242.5	.300	4.66	74.4	11.8	1.17	12.9	.03	.10	.10	105
1	119		10.43	10.42	33.498	25.709	230.0	.336	4.42	69.9	14.2	1.25	15.1	.01	.04	.07	120
	125	ISL	10.21	10.20	33.533	25.774	224.0	.348	4.30	67.7							126
1	143		9.51	9.49	33.664	25.993	203.3	.387	3.82	59.3	21.9	1.60	20.6	.01	.02	.04	144
	150	ISL	9.32	9.30	33.718	26.066	196.5	.401	3.59	55.5							151
1	163		8.99	8.97	33.819	26.198	184.1	.426	3.18	48.8	28.8	1.88	25.0	.01	.01	.04	164
1	183		8.46	8.45	33.931	26.368	168.3	.461	2.95	44.8	33.5	2.01	26.8	.01			184
	200	ISL	8.25	8.23	33.963	26.425	163.0	.489	2.97	44.8							202
1	203		8.23	8.21	33.966	26.431	162.5	.494	2.97	44.9	35.6	2.06	28.2	.01			204
1	233		7.86	7.84	34.003	26.515	154.9	.541	2.64	39.6	40.1	2.22	29.5	.01			234
	250	ISL	7.55	7.53	34.011	26.566	150.3	.567	2.55	38.0							252
1	271		7.18	7.15	34.018	26.625	144.8	.599	2.44	36.0	47.5	2.35	31.6	.01			273
	300	ISL	6.87	6.84	34.041	26.685	139.4	.640	2.06	30.2							302
1	331		6.62	6.59	34.066	26.739	134.6	.682	1.61	23.4	58.1	2.67	35.4	.01			333
	400	ISL	5.94	5.90	34.101	26.855	124.1	.771	1.04	14.9							403
1	404		5.90	5.86	34.103	26.861	123.5	.777	1.01	14.5	70.8	2.94	39.0	.00			407
1	479		5.62	5.58	34.180	26.958	115.1	.865	.60	8.5	80.3	3.13	40.5	.01			482
	500	ISL	5.50	5.46	34.196	26.985	112.7	.890	.52	7.4							504
1	552		5.15	5.11	34.225	27.049	106.8	.947	.41	5.8	89.2	3.25	41.9	.00			556

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 80 51

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 27.1 N	120 31.9 W	16/05/85	1942 GMT	75 M	180	12 KT	250 03 07	2	1018 MB	15.6 C	12.2 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	13.65	13.64	33.750	25.295	267.3	.000	7.21	122.4							0
1	1		13.65	13.64	33.750	25.295	266.7	.003	7.21	122.4	1.1	.28	.3	.01	8.80	.14	1
	10	ISL	13.29	13.29	33.745	25.365	260.4	.026	7.09	119.5							10
1	11		13.25	13.25	33.745	25.372	259.7	.029	7.08	119.2	1.5	.36	.3	.02	10.96	.04	11
	20	ISL	12.84	12.84	33.760	25.465	251.1	.052	6.66	111.1							20
1	21		12.78	12.78	33.762	25.478	249.9	.054	6.59	109.9	4.9	.58	2.5	.11	10.24	.54	21
	30	ISL	11.86	11.86	33.797	25.682	230.7	.076	5.35	87.5							30
1	31		11.77	11.77	33.801	25.702	228.8	.078	5.23	85.4	14.1	1.13	10.2	.36	6.32	1.95	31
1	41		11.00	11.00	33.830	25.865	213.5	.100	4.39	70.5	20.7	1.48	15.5	.48	1.61	1.89	41
	50	ISL	10.57	10.56	33.851	25.958	204.9	.120	3.94	62.7							50
1	51		10.55	10.54	33.851	25.963	204.4	.121	3.92	62.3	24.0	1.66	18.6	.50	1.05	.99	51

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 80 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 18.9 N	120 48.2 W	16/05/85	2313 GMT	783 M	200	19 KT	240 04 10	1	1018 MB	15.9 C	12.8 C	7/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	13.18	13.18	33.368	25.094	289.6	.000	6.09	102.1							0
1	1		13.18	13.18	33.368	25.094	285.9	.003	6.09	102.1	3.0	.60	2.3	.22	.31	.04	1
	10	ISL	12.41	12.41	33.492	25.340	262.6	.028	6.20	102.4							10
1	11		12.37	12.37	33.501	25.355	261.3	.030	6.21	102.5	3.0	.79	5.6	.28	.56	.13	11
	20	ISL	12.38	12.38	33.535	25.380	259.2	.054	6.26	103.3							20
1	21		12.39	12.38	33.539	25.382	259.0	.056	6.26	103.3	2.5	.81	5.8	.31	.66	.19	21
	30	ISL	12.09	12.08	33.528	25.431	254.5	.079	6.05	99.2							30
1	31		12.04	12.04	33.526	25.438	253.9	.081	6.01	98.5	4.1	.89	6.6	.33	.68	.27	31
1	41		11.19	11.19	33.510	25.582	240.4	.106	5.16	83.0	10.0	1.17	10.7	.34	.47	.23	41
	50	ISL	10.30	10.29	33.555	25.775	222.3	.127	4.18	66.0							50
1	51		10.24	10.24	33.561	25.789	220.9	.129	4.12	65.0	17.5	1.46	17.4	.15	.12	.10	51
1	61		10.20	10.19	33.684	25.892	211.3	.150	4.26	67.1	19.0	1.54	18.6	.30	.14	.15	61
1	71		9.88	9.87	33.735	25.987	202.5	.171	4.04	63.2	22.7	1.67	20.6	.33	.16	.20	71
	75	ISL	9.77	9.76	33.753	26.020	199.4	.180	3.83	59.8							76
1	85		9.54	9.53	33.788	26.084	193.5	.199	3.39	52.7	25.8	1.82	22.6	.04	.13	.66	85
1	99		9.09	9.08	33.834	26.192	183.5	.227	3.27	50.3	28.1	1.87	24.1	.05	.09	.20	100
	100	ISL	9.08	9.07	33.835	26.195	183.2	.228	3.28	50.4							101
1	119		8.71	8.70	33.892	26.299	173.6	.262	3.58	54.7	28.9	1.87	23.6	.07	.04	.13	120
	125	ISL	8.60	8.59	33.911	26.330	170.8	.272	3.58	54.5							126
1	144		8.27	8.25	33.966	26.424	162.1	.304	3.58	54.1	32.1	1.89	24.8	.02	.04	.06	145
	150	ISL	8.19	8.17	33.974	26.443	160.4	.313	3.50	52.8							151
1	173		7.89	7.88	33.996	26.504	155.0	.349	3.11	46.6	37.5	2.06	27.5	.02			174
	200	ISL	7.55	7.53	34.012	26.566	149.5	.391	2.81	41.8							202
1	203		7.52	7.50	34.013	26.572	148.9	.395	2.78	41.3	44.0	2.17	29.4	.01			204
1	234		7.16	7.14	34.035	26.639	142.8	.440	2.28	33.6	49.0	2.36	32.1	.01			235
	250	ISL	6.98	6.95	34.041	26.670	140.1	.463	2.10	30.8							252
1	271		6.77	6.75	34.051	26.705	137.0	.492	1.89	27.6	55.2	2.54	34.3	.01			273
	300	ISL	6.67	6.64	34.084	26.746	133.5	.531	1.59	23.1							302
1	330		6.63	6.59	34.127	26.786	130.2	.571	1.28	18.6	62.3	2.75	36.3				332
	400	ISL	6.38	6.34	34.230	26.901	120.2	.658	.66	9.6							403
1	404		6.36	6.32	34.235	26.907	119.6	.663	.63	9.1	71.0	3.04	38.6	.00			407
1	478		5.88	5.84	34.286	27.008	110.6	.748	.43	6.2	79.7	3.17	40.1	.00			481
	500	ISL	5.75	5.70	34.298	27.035	108.3	.773	.39	5.6							504
1	551		5.44	5.39	34.317	27.088	103.5	.827	.33	4.7	87.0	3.23	41.3	.00			555

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 80 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
34 09.0 N	121 08.7 W	17/05/85	0315 GMT	2194 M	250	08 KT	300 04 10	0	1017 MB	14.6 C	12.1 C	0/8

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	13.29	13.29	33.388	25.086	288.0	.000	6.24	104.9							0
1	1	13.29	13.29	33.388	25.086	286.6	.003	6.24	104.9	2.6	.52	2.0	.10	.78	.06	1
	10 ISL	12.88	12.88	33.408	25.184	277.5	.028	6.40	106.7							10
1	11	12.86	12.86	33.410	25.190	276.9	.031	6.41	106.8	2.9	.58	2.9	.13	1.35	.14	11
	20 ISL	12.82	12.82	33.427	25.211	275.2	.056	6.44	107.2							20
1	21	12.82	12.81	33.428	25.212	275.1	.058	6.44	107.2	2.7	.57	3.3	.14	1.30	.11	21
	30 ISL	12.40	12.40	33.409	25.279	269.2	.083	6.21	102.5							30
1	31	12.36	12.35	33.407	25.286	268.4	.085	6.19	102.0	3.4	.64	3.9	.20	1.16	.16	31
1	41	12.14	12.14	33.514	25.409	256.8	.112	6.13	100.7	2.9	.74	5.6	.23	1.33	.23	41
	50 ISL	11.69	11.69	33.544	25.518	246.8	.135	5.71	92.9							50
1	51	11.65	11.64	33.544	25.526	246.1	.137	5.67	92.1	6.0	.94	8.1	.28	1.14	.20	51
1	60	11.13	11.13	33.538	25.615	237.7	.158	5.30	85.2	10.4	1.11	11.3	.40	1.03	.20	60
1	69	11.01	11.00	33.588	25.677	232.1	.179	5.16	82.7	11.2	1.15	12.4	.38	.85	.25	69
	75 ISL	10.81	10.81	33.632	25.745	225.6	.194	4.96	79.2							76
1	84	10.48	10.47	33.688	25.848	216.0	.213	4.59	72.8	15.8	1.38	16.2	.47	.16	.25	84
1	99	9.77	9.76	33.740	26.009	201.0	.246	3.70	57.8	23.2	1.64	21.2	.05	.41	.28	100
	100 ISL	9.75	9.74	33.743	26.015	200.5	.247	3.68	57.5							101
1	119	9.07	9.06	33.835	26.197	183.4	.284	3.22	49.5	28.7	1.82	24.4	.04	.67	.25	120
	125 ISL	8.93	8.92	33.856	26.236	179.8	.294	3.16	48.5							126
1	144	8.56	8.54	33.916	26.342	170.1	.328	2.95	44.9	33.0	1.98	26.7	.00	.37	.08	145
	150 ISL	8.44	8.43	33.933	26.372	167.3	.338	3.07	46.6							151
1	173	8.08	8.06	33.982	26.466	158.6	.375	3.63	54.6	33.4	1.80	24.7	.00			174
	200 ISL	7.82	7.80	33.987	26.508	154.9	.417	3.61	54.1							202
1	203	7.79	7.77	33.987	26.512	154.7	.422	3.61	54.0	36.1	1.83	25.5	.01			204
1	232	7.49	7.47	33.997	26.564	150.1	.466	3.07	45.6	41.2	2.05	28.3	.00			233
	250 ISL	7.30	7.28	34.007	26.598	147.1	.493	2.79	41.3							252
1	271	7.09	7.07	34.020	26.638	143.6	.524	2.51	36.9	48.3	2.26	31.1	.00			273
	300 ISL	6.85	6.82	34.036	26.685	139.5	.565	2.14	31.3							302
1	331	6.60	6.57	34.055	26.733	135.1	.607	1.76	25.6	57.6	2.57	34.8	.00			333
	400 ISL	6.03	5.99	34.120	26.858	123.9	.697	.98	14.1							403
1	405	5.99	5.95	34.125	26.868	123.0	.703	.93	13.3	71.2	2.89	38.8	.00			408
1	477	5.48	5.44	34.189	26.981	112.7	.787	.55	7.8	82.3	3.09	41.0	.00			480
	500 ISL	5.43	5.39	34.218	27.010	110.2	.813	.48	6.7							504
1	550	5.32	5.28	34.259	27.056	106.4	.868	.40	5.7	87.2	3.20	41.7	.00			554

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 90 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
33 48.6 N	121 50.4 W	17/05/85	0842 GMT	3565 M	260	07 KT			1018 MB	15.4 C	11.6 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.07	14.07	33.275	24.841	310.1	.000	6.02	102.8							0
1	1	14.07	14.07	33.275	24.841	309.9	.003	6.02	102.8	1.8	.44	.1	.00	.17	.03	1
	10 ISL	13.99	13.98	33.271	24.855	308.8	.031	6.04	102.9							10
1	11	13.97	13.97	33.270	24.857	308.7	.034	6.04	102.9	1.8	.44	.1	.00	.19	.05	11
1	20	13.82	13.82	33.280	24.896	305.2	.061	6.12	103.9	1.9	.49	.1	.00	.20	.04	20
1	30	13.56	13.57	33.268	24.937	301.6	.092	6.12	103.4	1.9	.47	.0	.00	.28	.06	30
1	40	13.33	13.32	33.272	24.990	296.8	.121	6.11	102.7	2.0	.46	.1	.03	.47	.09	40
1	50	13.44	13.44	33.323	25.007	295.5	.151	6.14	103.5	2.2	.49	.3	.04	.47	.11	50
1	59	13.23	13.22	33.309	25.040	292.5	.177	6.09	102.2	2.3	.52	.5	.09	.69	.24	59
1	69	13.10	13.10	33.339	25.088	288.3	.206	6.13	102.6	2.3	.56	1.0	.09	.46	.12	69
	75 ISL	12.86	12.85	33.322	25.123	285.0	.224	6.04	100.5							76
1	84	12.43	12.42	33.297	25.188	279.0	.248	5.80	95.7	3.7	.66	2.8	.16	.35	.13	84
1	99	11.63	11.62	33.337	25.369	262.1	.289	5.17	83.9	7.4	.92	7.5	.04	.21	.13	99
	100 ISL	11.55	11.53	33.345	25.391	260.1	.293	5.12	82.9							101
1	117	10.61	10.59	33.464	25.652	235.4	.336	4.57	72.6	12.9	1.27	13.6	.02	.10	.07	118
	125 ISL	10.30	10.28	33.527	25.754	225.8	.353	4.35	68.6							126
1	142	9.74	9.72	33.666	25.957	206.8	.391	3.91	61.0	20.4	1.61	19.5	.01	.05	.04	143
	150 ISL	9.55	9.53	33.714	26.027	200.3	.406	3.75	58.3							151
1	173	9.07	9.05	33.830	26.194	184.7	.451	3.45	53.1	27.2	1.87	23.4	.01			174
	200 ISL	8.58	8.56	33.928	26.348	170.5	.499	3.48	52.9							202
1	204	8.51	8.49	33.939	26.367	169.8	.505	3.48	52.9	31.0	1.92	24.5	.00			205
1	233	8.00	7.98	33.993	26.486	157.7	.552	3.24	48.7	36.3	2.07	26.7	.01			234
	250 ISL	7.71	7.68	33.995	26.531	153.4	.579	3.18	47.5							252
1	273	7.34	7.32	33.997	26.585	148.8	.615	3.05	45.1	42.6	2.20	28.3	.01			275
	300 ISL	7.06	7.03	34.022	26.644	143.4	.653	2.55	37.6							302
1	334	6.78	6.75	34.061	26.714	137.1	.701	1.84	26.9	55.6	2.65	34.2	.00			336
	400 ISL	6.25	6.21	34.120	26.830	126.7	.788	1.15	16.6							403
1	407	6.19	6.16	34.126	26.842	125.6	.797	1.10	15.9	67.3	2.97	37.9	.00			410
1	481	5.68	5.64	34.181	26.950	115.9	.886	.72	10.3	77.3	3.17	40.1	.00			484
	500 ISL	5.57	5.52	34.201	26.980	113.2	.908	.63	9.0							504
1	550	5.30	5.26	34.260	27.059	106.1	.963	.43	6.1	86.9	3.32	41.4	.00			554

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 80 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 29.0 N	122 32.0 W	17/05/85	1355 GMT	3840 M	320	07 KT	270 03 07	2	1019 MB	15.4 C	12.5 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.19	14.19	33.311	24.844	309.6	.000	6.01	102.9							0
1	1	14.19	14.19	33.311	24.844	309.7	.003	6.01	102.9	1.6	.44	.1	.00	.11	.02	1
	10 ISL	14.20	14.20	33.310	24.841	310.2	.031	6.04	103.3							10
1	11	14.20	14.20	33.310	24.840	310.3	.034	6.04	103.4	1.6	.45	.1	.00	.11	.02	11
	20 ISL	14.10	14.10	33.304	24.857	309.0	.062	6.09	104.0							20
1	21	14.09	14.09	33.303	24.858	306.9	.065	6.09	104.0	1.5	.45	.1	.00	.13	.02	21
	30 ISL	14.06	14.06	33.299	24.862	308.9	.093	6.07	103.7							30
1	31	14.06	14.06	33.299	24.861	308.9	.096	6.07	103.6	1.5	.45	.1	.00	.16	.03	31
1	41	14.05	14.04	33.299	24.864	308.9	.126	6.06	103.4	1.5	.46	.1	.00	.20	.04	41
	50 ISL	14.04	14.03	33.300	24.867	308.8	.155	6.01	102.6							50
1	51	14.04	14.03	33.300	24.868	308.8	.157	6.01	102.5	1.6	.47	.1	.00	.21	.04	51
1	61	13.93	13.92	33.327	24.912	304.9	.188	5.99	102.0	1.7	.47	.0	.00	.31	.12	61
1	71	13.31	13.30	33.278	25.000	296.8	.218	5.92	99.5	2.1	.56	.5	.14	.44	.14	71
	75 ISL	13.05	13.04	33.260	25.039	293.1	.230	5.86	98.0							76
1	85	12.42	12.40	33.252	25.156	282.1	.258	5.64	93.0	3.6	.71	3.0	.16	.56	.15	85
	100 ISL	11.23	11.22	33.389	25.482	251.3	.299	4.91	78.9							101
1	101	11.19	11.18	33.395	25.494	250.2	.300	4.88	78.4	9.0	1.07	10.1	.05	.13	.12	101
1	120	10.40	10.39	33.529	25.738	227.3	.348	4.44	70.2	14.3	1.24	15.0	.03	.06	.06	121
	125 ISL	10.25	10.24	33.557	25.786	222.8	.358	4.34	68.4							126
1	144	9.68	9.67	33.671	25.970	205.6	.399	3.92	61.1	20.3	1.41	19.6	.02	.04	.04	145
	150 ISL	9.53	9.52	33.709	26.024	200.5	.411	3.79	58.9							151
1	175	8.96	8.95	33.855	26.230	181.3	.459	3.35	51.4	27.6	1.68	23.9	.01			176
	200 ISL	8.52	8.50	33.939	26.365	168.9	.502	3.31	50.3							202
1	204	8.46	8.44	33.947	26.381	167.4	.509	3.30	50.1	31.7	1.85	25.5	.00			205
1	233	7.96	7.94	33.999	26.497	156.7	.556	2.99	44.9	37.5	2.00	27.8	.01			234
	250 ISL	7.69	7.66	34.015	26.550	151.9	.582	2.79	41.7							252
1	272	7.37	7.34	34.028	26.605	146.8	.616	2.54	37.6	45.1	2.20	30.6	.00			274
	300 ISL	7.08	7.05	34.042	26.657	142.2	.656	2.26	33.2							302
1	331	6.80	6.77	34.056	26.707	137.8	.699	1.94	28.4	54.4	2.47	34.1	.00			333
	400 ISL	6.09	6.05	34.103	26.838	125.8	.790	1.17	16.9							403
1	404	6.05	6.01	34.107	26.846	125.1	.796	1.13	16.2	68.4	2.78	38.2	.00			407
1	477	5.56	5.52	34.180	26.965	114.4	.882	.66	9.4	79.7	3.01	40.5	.00			480
	500 ISL	5.44	5.40	34.205	26.998	111.4	.909	.56	8.0							504
1	549	5.28	5.23	34.260	27.062	105.8	.962	.44	6.2	87.8	3.12	41.6	.01			553

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 80 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 09.6 N	123 13.4 W	17/05/85	1920 GMT	4023 M	320	12 KT	310 03 05	2	1021 MB	16.4 C	12.5 C	3/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.91	14.91	33.353	24.723	321.4	.000	5.97	103.7							0
1	1	14.91	14.91	33.353	24.723	321.2	.003	5.97	103.7	1.8	.37	.0	.01	.09	.01	1
	10 ISL	14.82	14.82	33.350	24.740	319.9	.032	6.01	104.2							10
1	11	14.81	14.81	33.349	24.741	319.8	.035	6.01	104.2	1.8	.36	.0	.01	.09	.02	11
	20 ISL	14.77	14.77	33.343	24.746	319.6	.064	6.00	103.9							20
1	26	14.75	14.75	33.341	24.749	319.5	.083	5.99	103.7	1.7	.38	.0	.01	.10	.01	26
	30 ISL	14.72	14.72	33.335	24.750	319.4	.096	5.99	103.6							30
1	40	14.65	14.65	33.321	24.755	319.3	.127	5.98	103.3	1.7	.38	.0	.01	.11	.02	40
	50 ISL	14.31	14.30	33.301	24.812	314.2	.160	6.07	104.1							50
1	56	14.02	14.02	33.274	24.851	310.5	.178	6.13	104.5	1.8	.38	.0	.01	.17	.04	56
1	65	13.46	13.45	33.187	24.900	306.1	.205	6.19	104.3	1.8	.39	.0	.01	.20	.06	65
1	75	13.28	13.27	33.201	24.946	302.0	.235	6.17	103.6	1.7	.40	.0	.01	.37	.17	75
1	90	12.00	11.99	33.177	25.176	280.3	.279	5.97	97.5	3.4	.56	1.6	.34	.36	.24	90
	100 ISL	12.45	12.44	33.375	25.244	274.2	.308	5.65	93.3							101
1	105	12.64	12.62	33.450	25.267	272.1	.320	5.52	91.5	4.4	.62	3.7	.13	.20	.19	105
1	119	11.17	11.16	33.289	25.416	258.0	.360	5.45	87.5	7.3	.86	7.2	.03	.08	.08	120
	125 ISL	10.90	10.88	33.332	25.498	250.3	.374	5.26	84.0							126
1	143	10.34	10.33	33.566	25.778	224.0	.417	4.51	71.2	14.1	1.24	14.5	.03	.04	.06	144
	150 ISL	10.09	10.08	33.621	25.863	216.1	.432	4.31	67.8							151
1	162	9.68	9.67	33.698	25.991	203.9	.458	4.00	62.3	20.2	1.52	19.1	.03	.02	.03	163
1	183	9.30	9.28	33.785	26.123	191.8	.499	3.56	55.0	24.9	1.73	22.3	.00			184
	200 ISL	8.90	8.88	33.874	26.257	179.3	.530	3.42	52.3							202
1	203	8.83	8.81	33.889	26.279	177.2	.535	3.40	52.0	28.7	1.79	24.1	.00			204
1	231	8.31	8.28	33.970	26.423	163.8	.583	3.21	48.6	33.7	1.98	26.1	.00			232
	250 ISL	8.01	7.99	34.001	26.492	157.5	.614	2.98	44.8							252
1	270	7.74	7.71	34.020	26.547	152.5	.646	2.71	40.5	41.2	2.19	29.2	.00			272
	300 ISL	7.39	7.36	34.036	26.610	146.9	.690	2.42	35.8							302
1	330	7.06	7.02	34.046	26.664	142.0	.733	2.13	31.3	50.9	2.45	32.8	.00			332
	400 ISL	6.24	6.21	34.092	26.809	128.7	.828	1.31	18.9							403
1	404	6.19	6.16	34.095	26.817	127.9	.834	1.26	18.2	65.4	2.83	37.5	.00			407
1	479	5.71	5.67	34.162	26.931	117.7	.925	.77	11.0	75.8	3.05	40.1	.00			482
	500 ISL	5.56	5.52	34.178	26.963	114.8	.949	.68	9.6							504
1	554	5.11	5.07	34.209	27.040	107.6	1.010	.53	7.5	87.6	3.19	41.4	.00			558

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 82 46

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 16.2 N	119 56.3 W	15/05/85	2358 GMT	543 M	200	07 KT	250 04 06	1	1013 MB	15.5 C	13.1 C	6/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	13.56	13.56	33.906	25.433	256.2	.000	7.96	135.0							0
1	1	13.56	13.56	33.906	25.433	253.6	.003	7.96	135.0	1.2	.33	.0	.02	8.27	.91	1
	10 ISL	12.21	12.21	33.891	25.688	229.6	.024	7.18	118.4							10
1	11	12.07	12.06	33.890	25.715	227.0	.026	7.10	116.7	5.0	.52	2.0	.13	17.22	2.39	11
	20 ISL	10.58	10.58	33.898	25.992	200.9	.046	4.41	70.3							20
1	21	10.46	10.46	33.901	26.015	198.7	.048	4.15	65.9	23.0	1.50	17.5	.34	4.78	1.33	21
	30 ISL	10.00	10.00	33.930	26.117	189.2	.065	3.29	51.7							30
1	31	9.98	9.98	33.934	26.124	188.7	.067	3.25	51.1	28.2	1.82	21.9	.24	1.94	.94	31
1	41	9.28	9.28	33.981	26.276	174.3	.085	2.34	36.2	33.4	2.12	26.7	.13	.58	.68	41
	50 ISL	9.15	9.15	33.996	26.309	171.2	.101	2.23	34.4							50
1	51	9.14	9.14	33.997	26.311	171.2	.102	2.22	34.3	34.4	2.16	27.3	.11	.60	.78	51
1	61	9.04	9.04	34.008	26.336	169.1	.119	2.18	33.6	35.2	2.19	27.7	.09	.51	.70	61
1	71	9.01	9.00	34.018	26.349	168.0	.136	2.14	32.9	36.0	2.21	27.9	.07	.35	.70	71
	75 ISL	8.99	8.98	34.022	26.356	167.4	.143	2.13	32.7							76
1	86	8.92	8.91	34.035	26.376	165.7	.161	2.09	32.1	37.8	2.24	28.3	.06	.09	.44	86
1	100	8.85	8.84	34.062	26.410	162.8	.185	1.99	30.5	38.0	2.25	28.7	.04	.05	.33	101
1	119	8.64	8.63	34.073	26.451	159.2	.215	1.86	28.4	40.3	2.32	29.5	.11	.05	.34	120
	125 ISL	8.63	8.61	34.077	26.457	158.8	.225	1.85	28.3							126
1	144	8.58	8.57	34.094	26.477	157.2	.255	1.83	27.9	41.3	2.35	29.6	.05	.05	.30	145
	150 ISL	8.51	8.50	34.100	26.492	155.9	.264	1.79	27.2							151
1	173	8.19	8.18	34.120	26.557	150.1	.299	1.60	24.2	46.0	2.46	31.0	.00			174
	200 ISL	7.89	7.87	34.126	26.607	145.6	.339	1.45	21.7							202
1	202	7.87	7.85	34.126	26.610	145.4	.342	1.44	21.6	50.1	2.55	32.1	.00			203
1	231	7.65	7.63	34.135	26.649	142.1	.383	1.30	19.4	53.6	2.61	33.0	.00			232
	250 ISL	7.50	7.48	34.147	26.680	139.5	.410	1.27	18.9							252
1	269	7.37	7.34	34.158	26.708	137.1	.437	1.25	18.5	57.4	2.70	34.0	.00			271
	300 ISL	7.21	7.18	34.166	26.736	134.8	.479	1.12	16.5							302
1	318	7.12	7.09	34.168	26.751	133.6	.503	1.02	15.0	62.3	2.79	34.6	.00			320
1	376	6.63	6.60	34.192	26.837	126.1	.579	.66	9.6	71.9	2.96	35.6	.00			379
	400 ISL	6.50	6.46	34.202	26.863	123.8	.608	.54	7.8							403
1	435	6.35	6.31	34.214	26.893	121.4	.651	.38	5.5	81.9	3.11	34.5	.00			438
1	500	6.20	6.15	34.220	26.917	119.9	.730	.17	2.5	92.8	3.23	30.2	.00			504

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 83 40.5

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 13.9 N	119 24.4 W	14/05/85	1859 GMT	33 M	220	04 KT	150 01	4	1014 MB	16.1 C	14.1 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.81	15.80	33.726	24.813	317.4	.000	8.42	149.3							0
1	1	15.81	15.80	33.726	24.813	312.6	.003	8.42	149.3	.1	.18	.1	.00	5.45	.00	1
	10 ISL	13.66	13.66	33.718	25.268	269.8	.029	7.33	124.3							10
1	11	13.43	13.43	33.717	25.313	265.3	.032	7.21	121.8	1.7	.31	.2	.01	14.88	.43	11
	20 ISL	12.90	12.90	33.723	25.424	255.0	.055	6.06	101.3							20
1	21	12.85	12.85	33.724	25.435	253.9	.058	5.95	99.3	6.6	.62	3.7	.14	13.87	1.19	21

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 83 42

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 12.0 N	119 31.0 W	14/05/85	1629 GMT	157 M	160	08 KT	250 04 05	4	1014 MB	14.9 C	13.5 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	13.47	13.47	33.649	25.252	271.9	.000	6.35	107.3							0
1	1	13.47	13.47	33.649	25.252	270.8	.003	6.35	107.3	2.0	.44	1.6	.11	5.36	.07	1
	10 ISL	13.05	13.05	33.678	25.360	260.9	.027	6.06	101.5							10
1	11	13.00	13.00	33.680	25.370	259.8	.029	6.02	100.8	5.4	.67	4.2	.17	6.66	.59	11
	20 ISL	12.54	12.53	33.696	25.475	250.1	.052	5.54	91.8							20
	30 ISL	11.94	11.94	33.718	25.606	237.9	.077	4.87	79.8							30
1	31	11.89	11.88	33.721	25.618	236.8	.079	4.81	78.7	14.1	1.16	11.2	.31	1.35	.86	31
1	41	11.18	11.18	33.769	25.786	221.0	.101	4.08	65.7	19.1	1.46	15.7	.31	.97	.91	41
	50 ISL	10.85	10.84	33.789	25.861	214.1	.121	3.64	58.2							50
1	55	10.73	10.72	33.797	25.889	211.5	.131	3.47	55.4	21.7	1.66	19.2	.26	.41	.94	55
1	72	10.13	10.12	33.868	26.049	196.7	.166	2.99	47.1	25.6	1.84	22.5	.11	.18	.69	72
	75 ISL	10.01	10.01	33.886	26.082	193.6	.173	2.90	45.6							76
1	87	9.69	9.68	33.942	26.179	184.5	.194	2.67	41.7	29.4	2.00	24.6	.15	.09	.53	87
	100 ISL	9.49	9.48	33.973	26.237	179.3	.219	2.66	41.3							101
1	105	9.44	9.43	33.980	26.250	178.1	.228	2.65	41.2	30.7	2.15	25.6	.03	.04	.24	106
1	125	9.31	9.29	34.012	26.298	174.0	.263	2.51	38.9	32.6	2.16	26.2	.07	.05	.30	126

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 83 51

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 52.5 N	120 08.0 W	14/05/85	1028 GMT	99 M	340	12 KT			1014 MB	13.3 C	11.2 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	12.31	12.31	33.793	25.593	238.8	.000	6.50	107.3							0
1	1	12.31	12.31	33.793	25.593	238.4	.002	6.50	107.3	8.5	.66	3.7	.11	11.87	1.19	1
	10 ISL	12.04	12.04	33.796	25.647	233.5	.024	6.01	98.6							10
1	11	12.01	12.00	33.796	25.654	232.9	.026	5.95	97.6	12.2	.90	6.8	.16	8.69	1.44	11
	20 ISL	11.63	11.63	33.800	25.728	226.1	.047	5.37	87.4							20
1	21	11.58	11.58	33.802	25.738	225.1	.049	5.30	86.2	15.5	1.11	10.3	.19	5.99	1.40	21
	30 ISL	10.86	10.85	33.844	25.902	209.7	.068	4.18	66.8							30
1	31	10.79	10.78	33.849	25.918	208.2	.070	4.07	65.1	21.8	1.51	16.3	.19	2.93	1.25	31
	50 ISL	9.97	9.96	33.904	26.103	191.1	.108	3.02	47.4							50
1	51	9.95	9.95	33.905	26.107	190.7	.110	3.00	47.1	27.6	1.89	22.7	.13	.89	.52	51
	75 ISL	9.51	9.50	33.967	26.229	179.5	.155	2.61	40.5							76
1	77	9.50	9.49	33.971	26.234	179.1	.158	2.58	40.1	31.1	2.05	25.6	.09	.15	.33	77

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 83 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 44.5 N	120 24.8 W	14/05/85	0632 GMT	1006 M	320	19 KT			1015 MB	12.6 C	10.7 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	12.58	12.58	33.646	25.428	254.0	.000	6.45	107.0							0
1	1	12.58	12.58	33.646	25.428	254.1	.003	6.45	107.0	2.1	.62	5.0	.20	1.89	.31	1
	10 ISL	12.58	12.58	33.638	25.420	255.0	.025	6.66	110.4							10
1	11	12.58	12.58	33.637	25.419	255.1	.028	6.66	110.5	2.2	.67	5.0	.20	1.75	.41	11
	20 ISL	12.36	12.35	33.668	25.488	248.9	.051	6.48	107.0							20
1	21	12.33	12.33	33.671	25.495	248.3	.053	6.46	106.6	2.7	.67	5.3	.22	3.49	.77	21
1	30	11.07	11.07	33.746	25.787	220.6	.074	5.42	87.1	13.9	1.26	12.6	.34	1.14	.90	30
1	40	10.92	10.91	33.816	25.870	213.0	.095	5.14	82.4	18.6	1.45	15.6	.46	.46	.85	40
	50 ISL	10.85	10.84	33.829	25.892	211.0	.117	4.98	79.7							50
1	51	10.84	10.84	33.830	25.894	211.0	.119	4.97	79.5	21.0	1.49	16.0	.45	.42	1.04	51
1	61	10.69	10.68	33.841	25.930	207.8	.139	4.72	75.3	22.3	1.56	17.2	.47	.34	1.09	61
1	69	10.33	10.32	33.856	26.004	200.8	.156	4.25	67.2	24.6	1.70	19.4	.52	.22	.97	69
	75 ISL	9.89	9.88	33.842	26.067	194.9	.168	3.79	59.5							76
1	85	9.27	9.26	33.828	26.159	186.3	.186	3.21	49.6	27.6	1.83	23.8	.07	.06	.52	85
1	99	8.92	8.91	33.902	26.273	175.7	.213	2.96	45.4	31.0	1.92	25.5	.04	.04	.44	100
	100 ISL	8.91	8.89	33.904	26.277	175.4	.214	2.95	45.3							101
1	119	8.50	8.49	33.971	26.393	164.7	.247	2.84	43.2	34.9	2.01	26.8	.04	.03	.29	120
	125 ISL	8.45	8.43	33.978	26.406	163.5	.257	2.84	43.1							126
1	144	8.34	8.32	33.987	26.430	161.6	.288	2.84	43.0	36.1	2.02	27.2	.04	.03	.20	145
	150 ISL	8.30	8.28	33.992	26.440	160.7	.297	2.82	42.7							151
1	173	8.12	8.10	34.014	26.485	156.9	.334	2.68	40.4	38.8	2.09	28.2	.03			174
	200 ISL	7.86	7.84	34.049	26.551	150.9	.375	2.40	36.0							202
1	203	7.82	7.80	34.052	26.558	150.3	.379	2.37	35.5	43.2	2.23	29.9	.02			204
1	231	7.48	7.46	34.078	26.628	144.0	.420	2.04	30.3	48.4	2.37	31.7	.02			232
	250 ISL	7.24	7.21	34.097	26.678	139.5	.448	1.79	26.4							252
1	270	7.01	6.99	34.114	26.723	135.4	.476	1.55	22.8	55.9	2.57	34.3	.01			272
	300 ISL	6.86	6.83	34.129	26.756	132.7	.516	1.37	20.1							302
1	327	6.77	6.73	34.143	26.780	130.8	.551	1.25	18.3	60.7	2.70	35.8	.01			329
1	395	6.34	6.30	34.226	26.903	119.9	.637	.69	10.0	70.4	2.94	38.1	.00			398
	400 ISL	6.31	6.27	34.229	26.909	119.4	.642	.67	9.7							403
1	460	5.94	5.90	34.254	26.976	113.5	.712	.52	7.5	77.6	3.04	39.5	.00			463
	500 ISL	5.72	5.67	34.290	27.033	108.5	.757	.41	5.8							504
1	519	5.61	5.57	34.312	27.063	105.7	.777	.35	5.0	84.4	3.12	40.4	.00			523

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 83 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 34.3 N	120 45.2 W	14/05/85	0209 GMT	1326 M	330	19 KT	330 08 06	1	1016 MB	13.8 C	11.5 C	5/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	12.42	12.42	33.362	25.238	272.2	.000	5.77	95.2							0
1	1	12.42	12.42	33.362	25.238	272.2	.003	5.77	95.2	4.9	.77	5.1	.11	.39	.05	1
	10 ISL	12.42	12.41	33.365	25.241	272.1	.027	5.77	95.2							10
1	11	12.42	12.41	33.365	25.241	272.1	.030	5.77	95.2	4.9	.78	5.1	.12	.41	.07	11
	20 ISL	12.16	12.16	33.358	25.285	268.3	.054	5.68	93.2							20
1	21	12.13	12.12	33.357	25.291	267.6	.057	5.67	93.0	5.4	.77	5.6	.11	.40	.08	21
	30 ISL	11.77	11.76	33.433	25.417	255.9	.080	5.55	90.3							30
1	31	11.73	11.73	33.441	25.430	254.7	.083	5.53	90.0	6.3	.90	7.7	.15	.53	.18	31
1	40	11.39	11.38	33.474	25.519	246.4	.105	5.26	85.0	8.3	1.02	9.9	.15	.48	.21	40
	50 ISL	10.51	10.50	33.507	25.701	229.3	.129	4.34	68.8							50
1	51	10.45	10.44	33.510	25.714	228.0	.131	4.27	67.6	15.5	1.35	15.8	.05	.17	.13	51
1	61	10.13	10.13	33.568	25.813	218.8	.153	4.00	62.9	18.3	1.49	18.0	.04	.12	.10	61
1	71	9.97	9.96	33.594	25.862	214.4	.175	3.85	60.3	19.7	1.56	19.1	.04	.07	.10	71
	75 ISL	9.75	9.74	33.648	25.940	207.0	.184	3.75	58.5							76
1	86	9.21	9.20	33.795	26.144	187.8	.205	3.51	54.2	26.7	1.75	22.3	.02	.02	.06	86
1	100	8.95	8.94	33.871	26.244	178.6	.232	3.39	52.0	28.5	1.81	23.6	.03	.02	.10	101
1	120	8.90	8.89	33.984	26.340	169.8	.267	2.47	37.9	34.7	2.10	27.1	.04	.03	.22	121
	125 ISL	8.86	8.84	33.998	26.358	168.2	.275	2.37	36.4							126
1	145	8.64	8.63	34.042	26.427	162.0	.308	2.14	32.6	37.6	2.24	28.5	.04	.02	.22	146
	150 ISL	8.61	8.60	34.059	26.445	160.4	.316	2.06	31.5							151
1	174	8.49	8.47	34.127	26.517	153.9	.353	1.75	26.6	42.6	2.38	29.9	.04			175
	200 ISL	8.31	8.29	34.130	26.547	151.4	.393	1.68	25.5							202
1	204	8.28	8.26	34.130	26.552	151.2	.399	1.68	25.4	44.9	2.43	30.5	.04			205
1	233	8.05	8.02	34.154	26.606	146.4	.442	1.52	22.9	47.8	2.51	31.7	.06			234
	250 ISL	7.87	7.84	34.160	26.638	143.7	.467	1.44	21.6							252
1	272	7.64	7.61	34.167	26.677	140.2	.499	1.34	20.0	52.9	2.59	33.1	.01			274
	300 ISL	7.42	7.39	34.191	26.727	135.8	.537	1.16	17.2							302
1	332	7.20	7.17	34.217	26.779	131.3	.579	.96	14.2	60.3	2.79	35.1	.02			334
	400 ISL	6.69	6.65	34.216	26.849	125.3	.667	.81	11.8							403
1	405	6.64	6.60	34.215	26.854	124.9	.673	.80	11.7	66.4	2.88	37.1	.01			408
1	479	5.89	5.85	34.257	26.984	112.9	.761	.52	7.4	79.5	3.06	39.6	.00			482
	500 ISL	5.76	5.71	34.272	27.013	110.4	.785	.47	6.7							504
1	554	5.57	5.53	34.313	27.069	105.6	.843	.39	5.5	86.0	3.13	40.4	.00			558

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 83 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 14.0 N	121 27.8 W	13/05/85	1739 GMT	3658 M	350	20 KT	310 10 05	1	1019 MB	15.7 C	13.0 C	7/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	13.37	13.37	33.344	25.038	291.3	.000	6.08	102.3							0
1	1	13.37	13.37	33.344	25.038	291.2	.003	6.08	102.3	2.0	.48	1.2	.04	.39	.04	1
	10 ISL	13.32	13.32	33.347	25.049	290.4	.029	6.12	102.9							10
1	11	13.32	13.32	33.348	25.050	290.3	.032	6.12	102.9	2.1	.47	1.3	.05	.39	.05	11
1	20	13.08	13.07	33.388	25.130	282.9	.058	6.14	102.7	2.2	.57	2.1	.08	.47	.09	20
1	29	12.81	12.81	33.442	25.225	274.1	.082	6.15	102.4	2.4	.63	3.3	.12	.69	.13	29
	30 ISL	12.81	12.81	33.444	25.227	274.0	.086	6.15	102.4							30
1	40	12.81	12.80	33.470	25.248	272.3	.112	6.17	102.7	2.5	.64	3.5	.15	1.12	.38	40
1	49	12.53	12.52	33.540	25.356	262.2	.136	6.04	100.0	3.6	.67	4.7	.29	1.37	.34	49
	50 ISL	12.47	12.46	33.547	25.373	260.7	.140	6.00	99.2							50
1	59	12.07	12.06	33.588	25.482	250.4	.162	5.70	93.5	7.3	.93	7.5	.53	1.11	.62	59
1	68	11.77	11.76	33.636	25.575	241.8	.184	5.50	89.7	10.1	1.05	9.6	.60	.80	.51	68
	75 ISL	11.39	11.38	33.663	25.667	233.2	.201	5.18	83.7							76
1	83	11.01	11.00	33.683	25.751	225.3	.219	4.86	78.0	15.1	1.28	14.3	.58	.20	.29	83
1	97	10.67	10.65	33.698	25.823	218.8	.250	4.76	75.8	16.7	1.33	15.4	.45	.21	.40	97
	100 ISL	10.58	10.57	33.726	25.861	215.2	.257	4.62	73.5							101
1	115	10.13	10.12	33.866	26.047	197.9	.289	3.85	60.7	26.1	1.76	21.1	.50	.21	1.02	116
	125 ISL	9.75	9.73	33.907	26.144	188.7	.307	3.35	52.3							126
1	138	9.25	9.23	33.939	26.250	178.8	.332	2.78	43.0	31.3	1.97	25.5	.13	.10	.62	139
	150 ISL	9.07	9.05	33.958	26.294	174.8	.353	2.72	41.9							151
1	167	8.90	8.89	33.973	26.332	171.5	.382	2.63	40.3	34.0	2.05	26.9	.04			168
1	195	8.40	8.38	33.992	26.426	163.0	.429	2.64	40.0	36.5	2.11	28.0	.07			196
	200 ISL	8.33	8.31	33.997	26.440	161.6	.437	2.63	39.9							202
1	224	8.03	8.01	34.025	26.508	155.6	.475	2.53	38.1	39.9	2.17	29.0	.06			225
	250 ISL	7.67	7.64	34.059	26.588	148.3	.515	2.23	33.3							252
1	260	7.53	7.50	34.072	26.617	145.6	.530	2.10	31.2	47.6	2.39	31.6	.04			262
	300 ISL	7.12	7.09	34.099	26.697	138.4	.586	1.74	25.6							302
1	318	6.96	6.93	34.108	26.726	135.9	.611	1.60	23.5	56.6	2.62	34.6	.01			320
1	389	6.34	6.30	34.143	26.837	126.0	.704	1.12	16.2	66.9	2.84	37.5	.01			392
	400 ISL	6.25	6.22	34.152	26.855	124.4	.718	1.05	15.2							403
1	462	5.82	5.78	34.202	26.950	115.8	.792	.71	10.2	77.3	3.03	39.8	.00			465
	500 ISL	5.61	5.57	34.221	26.990	112.3	.835	.59	8.4							504
1	536	5.45	5.41	34.229	27.016	110.1	.876	.54	7.7	83.9	3.13	41.1	.00			540

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 87 33

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 53.4 N	118 29.4 W	12/05/85	0114 GMT	57 M	290	13 KT	280 01 04	1	1015 MB	15.2 C	13.3 C	2/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	14.57	14.57	33.663	25.035	291.5	.000	6.43	111.1	4.0	.56	1.4	.09	2.16	.03	0
1	10	13.78	13.78	33.668	25.204	275.6	.028	6.55	111.4	4.1	.54	1.4	.08	4.83	.43	10
1	20	12.66	12.66	33.678	25.437	253.7	.055	5.27	87.6	8.9	1.02	6.6	.21	3.12	.62	20
1	30	11.10	11.10	33.680	25.731	226.0	.078	3.09	49.7	21.4	2.07	16.9	.39	.76	.58	30
1	40	10.79	10.78	33.730	25.826	217.2	.100	2.81	44.9	23.5	2.21	18.5	.38	.53	.51	40
1	50	10.49	10.48	33.814	25.944	206.2	.122	2.35	37.3	26.1	2.27	19.5	.40	.41	.51	50

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 87 35

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 49.4 N	118 37.9 W	12/05/85	0314 GMT	681 M	300	19 KT	290 03 04	1	1015 MB	14.5 C	11.8 C	3/3	CS

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.67	14.67	33.663	25.014	293.8	.000	6.65	115.2							0
1	1	14.67	14.67	33.663	25.014	293.5	.003	6.65	115.2	2.7	.28	.2	.00	1.67	.16	1
	10 ISL	14.50	14.50	33.663	25.050	290.3	.029	6.69	115.4							10
1	11	14.48	14.48	33.663	25.054	289.9	.032	6.69	115.4	3.0	.29	.2	.00	1.72	.18	11
	20 ISL	13.19	13.19	33.662	25.320	265.0	.057	5.45	91.5							20
1	21	13.04	13.03	33.662	25.350	262.0	.059	5.29	88.6	9.0	1.24	6.4	.20	1.13	.37	21
	30 ISL	11.90	11.90	33.667	25.574	241.0	.082	3.97	64.9							30
1	31	11.82	11.82	33.669	25.591	239.4	.084	3.86	63.0	15.5	1.73	12.8	.35	.71	.43	31
1	41	11.39	11.38	33.691	25.688	230.4	.108	3.27	52.9	19.8	1.81	15.6	.37	.52	.55	41
	50 ISL	10.77	10.76	33.756	25.850	215.1	.128	3.01	48.1							50
1	51	10.72	10.71	33.762	25.863	213.9	.130	3.00	47.9	21.3	1.70	20.3	.35	.27	.49	51
1	61	10.42	10.41	33.802	25.946	206.2	.151	2.75	43.6	22.8		21.5	.28	.18	.48	61
1	71	10.17	10.16	33.855	26.031	198.3	.171	2.72	42.9	25.3	1.77	22.9	.10	.16	.49	71
	75 ISL	10.09	10.08	33.871	26.058	195.9	.179	2.70	42.4							76
1	86	9.90	9.89	33.909	26.118	190.3	.200	2.62	41.1	26.8		23.3	.07	.15	.45	86
1	100	9.56	9.55	33.990	26.239	179.2	.227	2.48	38.6	30.6	1.94	25.5	.02	.11	.28	101
1	119	9.42	9.41	34.028	26.292	174.5	.261	2.36	36.6	32.3	2.01	26.2	.01	.09	.33	120
	125 ISL	9.35	9.33	34.046	26.318	172.1	.271	2.29	35.5							126
1	144	9.05	9.04	34.103	26.410	163.7	.303	2.08	32.0	37.4	2.19	27.8	.03	.11	.31	145
	150 ISL	8.95	8.94	34.109	26.431	161.8	.312	2.08	32.0							151
1	174	8.59	8.57	34.124	26.499	155.7	.350	2.08	31.7	40.5	2.25	29.0	.02			175
	200 ISL	8.41	8.39	34.166	26.561	150.3	.390	1.73	26.3							202
1	204	8.40	8.37	34.172	26.568	149.7	.396	1.68	25.5	44.6	2.42	30.2	.02			205
1	234	8.27	8.25	34.189	26.600	147.1	.440	1.55	23.5	46.2	2.50	31.0	.00			235
	250 ISL	8.18	8.15	34.207	26.629	144.7	.464	1.39	21.0							252
1	272	8.01	7.98	34.229	26.671	141.1	.496	1.17	17.6	51.0	2.64	32.5	.01			274
	300 ISL	7.72	7.69	34.227	26.712	137.2	.534	1.05	15.6							302
1	332	7.36	7.33	34.225	26.762	132.9	.577	.96	14.2	58.0	2.79	34.6	.00			334
	400 ISL	6.76	6.72	34.250	26.867	123.7	.665	.67	9.8							403
1	405	6.72	6.68	34.253	26.875	123.1	.671	.65	9.5	67.9	2.97	37.1	.00			408
1	479	6.26	6.22	34.284	26.959	115.8	.759	.46	6.6	75.4	3.08	38.6	.00			482
	500 ISL	6.13	6.08	34.294	26.984	113.5	.783	.42	6.0							504
1	552	5.79	5.74	34.323	27.050	107.6	.841	.33	4.7	84.3	3.17	39.6	.01			556

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 87 40

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 39.1 N	118 58.4 W	12/05/85	0717 GMT	726 M	290	14 KT			1016 MB	13.9 C	11.8 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	13.58	13.58	33.698	25.267	269.4	.000	7.23	122.5							0
1	1	13.58	13.58	33.698	25.267	269.4	.003	7.23	122.5	1.5	.36	.1	.00	11.47	.08	1
1	10	13.47	13.47	33.693	25.288	267.7	.027	7.10	120.0	1.5	.36	.1	.00	11.47	.08	10
	20 ISL	13.16	13.16	33.689	25.347	262.3	.053	6.18	103.8							20
1	21	13.12	13.12	33.689	25.355	261.6	.056	6.08	102.0	5.1	.63	2.8	.14	7.28	.77	21
	30 ISL	12.52	12.52	33.694	25.476	250.3	.079	5.20	86.2							30
1	31	12.46	12.46	33.695	25.489	249.1	.081	5.12	84.7	10.1	1.02	8.0	.30	2.04	1.68	31
1	41	11.76	11.75	33.716	25.639	235.0	.105	4.33	70.6	15.1	1.34	12.8	.44	.88	1.06	41
1	50	10.89	10.88	33.766	25.837	216.4	.125	3.37	53.9	20.1	1.61	18.5	.37	.23	.73	50
1	60	10.50	10.49	33.809	25.938	206.9	.146	3.05	48.4	22.7	1.74	21.0	.18	.16	.59	60
1	70	10.05	10.04	33.878	26.069	194.6	.166	2.82	44.4	25.7		23.0	.05	.09	.53	70
	75 ISL	9.89	9.88	33.898	26.112	190.7	.177	2.81	44.0							76
1	85	9.71	9.70	33.919	26.158	186.5	.195	2.78	43.4	27.4	1.92	24.0	.04	.06	.42	85
1	99	9.63	9.62	33.945	26.193	183.5	.222	2.67	41.6	28.7	1.98	24.6	.03	.07	.59	100
	100 ISL	9.62	9.61	33.947	26.195	183.3	.223	2.67	41.5							101
1	120	9.31	9.30	34.012	26.297	174.0	.260	2.47	38.2	31.8	2.07	26.2	.02	.06	.37	121
	125 ISL	9.23	9.21	34.024	26.320	171.9	.268	2.42	37.4							126
1	143	8.92	8.90	34.062	26.399	164.6	.298	2.22	34.1	36.6	2.23	27.8	.01	.04	.39	144
	150 ISL	8.82	8.80	34.071	26.422	162.7	.310	2.17	33.3							151
1	173	8.54	8.52	34.094	26.484	157.1	.346	2.02	30.8	39.8	2.32	28.9	.02			174
	200 ISL	8.26	8.24	34.134	26.558	150.5	.388	1.77	26.7							202
1	202	8.25	8.23	34.136	26.562	150.1	.391	1.75	26.5	44.1	2.46	30.5	.02			203
1	234	8.06	8.04	34.172	26.618	145.3	.437	1.51	22.8	47.2	2.53	31.7	.02			235
	250 ISL	7.90	7.88	34.184	26.651	142.4	.461	1.38	20.7							252
1	272	7.66	7.63	34.196	26.697	138.4	.492	1.21	18.1	52.8	2.65	33.4	.02			274
	300 ISL	7.36	7.33	34.211	26.751	133.5	.530	1.03	15.3							302
1	333	7.05	7.01	34.228	26.809	128.4	.573	.85	12.5	61.7	2.86	35.8	.01			335
	400 ISL	6.66	6.62	34.263	26.889	121.5	.657	.57	8.3							403
1	407	6.63	6.59	34.266	26.896	120.9	.666	.55	8.0	68.6	2.99	37.5	.00			410
1	481	6.10	6.06	34.296	26.989	112.7	.752	.43	6.2	78.5	3.11	38.5	.01			484
	500 ISL	5.99	5.95	34.304	27.009	111.0	.773	.40	5.8							504
1	554	5.75	5.71	34.323	27.054	107.1	.832	.34	4.9	85.3	3.18	39.0	.00			558

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 87 45

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 29.6 N	119 19.1 W	12/05/85	1140 GMT	1650 M	310	19 KT			1015 MB	12.7 C	11.0 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	13.26	13.26	33.696	25.331	263.5	.000	5.97	100.5							0
1	1	13.26	13.26	33.696	25.331	263.3	.003	5.97	100.5	12.2	.61	4.3	.05	1.13	.28	1
	10 ISL	13.18	13.18	33.698	25.349	261.8	.026	5.93	99.7							10
1	11	13.17	13.17	33.698	25.351	261.7	.029	5.93	99.6	12.5	.66	4.9	.05	.96	.30	11
	20 ISL	12.63	12.62	33.709	25.468	250.8	.052	5.46	90.6							20
1	21	12.53	12.53	33.712	25.488	248.9	.054	5.37	89.0	14.6	.91	8.9	.11	.78	.35	21
	30 ISL	10.82	10.82	33.774	25.854	214.3	.075	3.73	59.7							30
1	31	10.67	10.67	33.782	25.886	211.2	.077	3.59	57.2	21.4	1.55	18.9	.15	.53	.29	31
1	41	10.47	10.46	33.796	25.933	206.9	.098	3.44	54.6	22.1	1.59	19.9	.12	.31	.21	41
	50 ISL	10.04	10.03	33.855	26.053	195.8	.116	3.03	47.7							50
1	51	10.00	10.00	33.860	26.063	194.9	.118	3.00	47.1	25.6	1.81	22.9	.06	.09	.12	51
1	61	9.74	9.73	33.894	26.134	188.3	.137	2.86	44.7	27.7	1.94	24.0	.04	.05	.13	61
1	71	9.59	9.59	33.921	26.179	184.2	.155	2.74	42.7	28.3	2.01	24.0	.03	.03	.11	71
	75 ISL	9.56	9.55	33.930	26.192	183.0	.163	2.70	42.0							76
1	85	9.46	9.45	33.954	26.227	179.9	.181	2.61	40.5	30.1	2.04	25.2	.03	.02	.10	85
1	99	9.14	9.13	34.029	26.337	169.7	.207	2.40	37.0	33.6	2.05	26.8	.01	.02	.09	100
	100 ISL	9.14	9.12	34.030	26.339	169.5	.208	2.40	37.0							101
1	120	8.98	8.96	34.058	26.386	165.4	.242	2.28	35.1	35.5	2.08	27.7	.01	.02	.08	121
	125 ISL	8.92	8.91	34.066	26.402	164.1	.249	2.24	34.5							126
1	144	8.70	8.68	34.097	26.461	158.7	.280	2.10	32.1	38.4	2.19	28.7	.01	.01	.08	145
	150 ISL	8.66	8.64	34.103	26.472	157.8	.290	2.07	31.6							151
1	174	8.49	8.47	34.122	26.514	154.3	.327	1.95	29.7	41.1	2.28	29.7	.00			175
	200 ISL	8.15	8.13	34.152	26.589	147.5	.366	1.71	25.9							202
1	203	8.11	8.09	34.155	26.597	146.8	.370	1.69	25.5	45.8	2.44	31.3	.01			204
1	233	8.02	8.00	34.169	26.622	144.9	.414	1.59	23.9	47.1	2.48	31.8	.01			234
	250 ISL	7.77	7.75	34.185	26.671	140.5	.439	1.41	21.2							252
1	272	7.42	7.40	34.206	26.738	134.3	.469	1.17	17.4	55.0	2.70	34.5	.01			274
	300 ISL	7.19	7.16	34.221	26.783	130.4	.506	1.00	14.8							302
1	332	7.00	6.97	34.234	26.820	127.3	.547	.88	12.9	61.3	2.84	36.2	.00			334
	400 ISL	6.49	6.46	34.263	26.912	119.3	.631	.66	9.6							403
1	405	6.46	6.42	34.265	26.918	118.7	.637	.65	9.4	71.0	2.99	38.0	.00			408
1	480	6.09	6.05	34.294	26.988	112.8	.723			78.0	3.09	39.0	.00			483
	500 ISL	5.98	5.93	34.303	27.011	110.8	.746	.46	6.6							504
1	553	5.64	5.59	34.332	27.076	104.9	.803	.40	5.7	87.0	3.20	39.7	.00			557

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 87 50

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 19.2 N	119 40.1 W	12/05/85	1604 GMT	79 M	310	20 KT	290 10 06	1	1017 MB	13.2 C	11.3 C	7/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	13.09	13.09	33.682	25.354	261.1	.000	5.86	98.3							0
1	1	13.09	13.09	33.682	25.354	261.1	.003	5.86	98.3	10.9	.73	5.5	.12	.79	.23	1
	10 ISL	13.10	13.10	33.680	25.350	261.7	.026	6.05	101.4							10
1	11	13.11	13.10	33.679	25.349	261.8	.029	6.05	101.5	10.8	.72	5.5	.12	.82	.28	11
	20 ISL	12.99	12.99	33.681	25.375	259.6	.052	5.91	99.0							20
1	21	12.98	12.97	33.682	25.378	259.4	.055	5.90	98.7	10.9	.76	5.9	.13	.91	.29	21
	30 ISL	11.24	11.23	33.733	25.748	224.4	.077	4.88	78.7							30
1	31	11.06	11.05	33.741	25.786	220.8	.078	4.77	76.6	18.0	1.37	15.0	.50	.62	.52	31
	50 ISL	10.16	10.16	33.801	25.990	201.8	.119	3.82	60.3							50
1	51	10.13	10.12	33.804	25.998	201.0	.120	3.82	60.2	24.0	1.77	20.1	.31	.17	.24	51

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 87 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 09.4 N	120 00.2 W	12/05/85	2031 GMT	1220 M	330	19 KT	310 06 06	1	1017 MB	14.1 C	7.8 C	7/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	13.31	13.31	33.484	25.158	279.9	.000	6.15	103.5							0
1	1		13.31	13.31	33.484	25.158	279.8	.003	6.15	103.5	3.3	.39	1.8	.12	.60	.10	1
	10	ISL	13.27	13.27	33.484	25.166	279.2	.028	6.13	103.1							10
1	11		13.26	13.26	33.484	25.167	279.2	.031	6.13	103.0	3.4	.44	1.8	.12	.62	.15	11
	20	ISL	12.88	12.88	33.513	25.266	270.0	.055	6.23	103.9							20
1	21		12.83	12.83	33.516	25.277	268.9	.058	6.23	103.8	3.3	.48	3.0	.23	1.42	.26	21
	30	ISL	12.48	12.48	33.524	25.352	262.1	.082	5.86	97.0							30
1	31		12.45	12.45	33.525	25.359	261.5	.084	5.82	96.2	5.7	.63	5.0	.32	.82	.38	31
1	41		12.07	12.06	33.567	25.465	251.6	.110	5.54	90.9	7.6	.79	7.1	.60	.59	.31	41
1	50		11.82	11.82	33.598	25.535	245.1	.132	5.33	87.0	9.3	.89	8.5	.85	.42	.22	50
1	60		11.10	11.09	33.593	25.664	233.1	.156	4.85	77.9	12.1	1.05	12.6	.38	.14	.03	60
1	70		10.59	10.58	33.640	25.790	221.2	.178	4.37	69.5	16.1	1.23	16.0	.06	.07	.07	70
	75	ISL	10.39	10.38	33.658	25.840	216.6	.190	4.21	66.6							76
1	85		10.10	10.09	33.686	25.912	209.9	.211	4.00	62.9	19.2	1.38	16.6	.02	.03	.05	85
1	99		9.77	9.76	33.730	26.001	201.7	.241	3.71	57.9	22.1	1.50	20.4	.03	.03	.06	100
	100	ISL	9.75	9.74	33.732	26.006	201.3	.242	3.70	57.7							101
1	118		9.19	9.18	33.808	26.157	187.2	.278	3.34	51.5	26.5	1.72	23.4	.02	.02	.06	119
	125	ISL	9.00	8.99	33.844	26.216	181.7	.290	3.27	50.3							126
1	143		8.57	8.56	33.938	26.356	168.7	.322	3.09	47.0	31.9	1.82	25.9	.02	.01	.10	144
	150	ISL	8.50	8.49	33.967	26.390	165.6	.333	2.93	44.5							151
1	173		8.37	8.35	34.033	26.462	159.1	.371	2.42	36.7	38.2	2.06	28.6	.01			174
	200	ISL	8.21	8.19	34.048	26.499	156.0	.413	2.33	35.2							202
1	203		8.19	8.17	34.050	26.503	155.7	.418	2.32	35.0	40.1	2.11	29.9	.01			204
1	233		7.67	7.65	34.079	26.603	146.5	.463	2.09	31.2	45.6	2.25	31.4	.01			234
	250	ISL	7.46	7.43	34.092	26.643	142.9	.488	1.93	28.7							252
1	272		7.25	7.23	34.106	26.683	139.3	.519	1.72	25.4	51.9	2.40	33.5	.01			274
	300	ISL	7.08	7.05	34.125	26.724	135.9	.558	1.49	21.9							302
1	332		6.91	6.88	34.150	26.766	132.3	.600	1.24	18.2	58.7	2.64	35.7	.01			334
	400	ISL	6.43	6.39	34.222	26.888	121.4	.687	.71	10.4							403
1	405		6.39	6.35	34.227	26.897	120.6	.693	.68	9.9	69.3	2.83	38.5	.00			406
1	479		5.74	5.70	34.249	26.997	111.6	.778	.47	6.7	79.7	2.99	40.8	.00			482
	500	ISL	5.61	5.57	34.261	27.022	109.3	.802	.42	6.0							504
1	551		5.43	5.39	34.303	27.078	104.5	.857	.33	4.7	86.2	3.08	41.9	.00			555

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 87 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 59.5 N	120 21.2 W	13/05/85	0043 GMT	733 M	320	21 KT	330 08 05	1	1016 MB	13.9 C	12.0 C	5/8	ST

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	13.72	13.71	33.474	25.067	288.4	.000	6.16	104.5							0
1	1		13.72	13.71	33.474	25.067	288.4	.003	6.16	104.5	2.6	.38	1.3	.05	.41	.07	1
	10	ISL	13.70	13.70	33.472	25.070	288.4	.029	6.20	105.1							10
1	11		13.69	13.69	33.471	25.070	288.5	.032	6.20	105.1	2.7	.41	1.3	.06	.37	.08	11
	20	ISL	13.59	13.59	33.467	25.088	287.0	.058	6.25	105.8							20
1	21		13.58	13.58	33.466	25.089	286.9	.060	6.26	105.9	2.5	.39	1.3	.05	.37	.08	21
	30	ISL	12.79	12.79	33.414	25.207	275.9	.086	6.03	100.4							30
1	31		12.70	12.69	33.410	25.222	274.5	.088	6.00	99.6	3.3	.56	3.6	.10	.66	.19	31
1	41		11.74	11.73	33.423	25.415	256.3	.115	5.49	89.3	6.6	.82	7.3	.18	.70	.25	41
1	50		11.72	11.71	33.519	25.493	249.1	.137	5.64	91.8	6.8	.89	8.1	.20	.80	.39	50
1	61		11.61	11.60	33.576	25.558	243.2	.164	5.56	90.3	7.9	.97	9.3	.21	.62	.37	61
1	70		10.94	10.93	33.584	25.686	231.2	.185	4.86	77.8	11.7	1.20	12.7	.18	.17	.22	70
	75	ISL	10.66	10.65	33.618	25.761	224.1	.198	4.62	73.5							76
1	85		10.25	10.24	33.687	25.887	212.3	.218	4.30	67.8	17.6	1.42	17.2	.24	.06	.27	85
1	99		9.52	9.51	33.735	26.047	197.4	.249	3.68	57.1	22.9	1.60	21.0	.03	.04	.18	100
	100	ISL	9.50	9.49	33.739	26.052	196.9	.250	3.66	56.8							101
1	119		9.12	9.11	33.884	26.228	180.5	.287	2.93	45.1	29.8	1.90	25.1	.01	.02	.18	120
	125	ISL	9.03	9.02	33.911	26.264	177.2	.297	2.82	43.3							126
1	144		8.75	8.74	33.971	26.354	168.9	.330	2.61	39.9	34.1	2.02	27.1	.01	.02	.16	145
	150	ISL	8.67	8.65	33.982	26.376	166.9	.340	2.61	39.8							151
1	175		8.32	8.31	34.015	26.455	159.8	.380	2.61	39.5	37.5	2.10	28.2	.02			176
	200	ISL	8.15	8.13	34.055	26.513	154.7	.420	2.29	34.5							202
1	205		8.11	8.09	34.061	26.523	153.8	.427	2.23	33.6	41.9	2.25	29.7	.01			206
1	235		7.69	7.67	34.061	26.585	148.2	.472	2.35	35.1	45.4	2.31	30.8	.01			236
	250	ISL	7.34	7.31	34.053	26.629	144.1	.495	2.24	33.2							252
1	274		6.81	6.78	34.047	26.698	137.7	.529	1.96	28.7	54.7	2.46	33.9	.00			276
	300	ISL	6.69	6.66	34.093	26.750	133.1	.564	1.61	23.5							302
1	334		6.53	6.50	34.133	26.803	128.5	.608	1.17	17.0	63.3	2.76	36.6	.00			336
	400	ISL	6.03	6.00	34.162	26.891	120.8	.690	.82	11.8							403
1	407		5.98	5.94	34.164	26.899	120.0	.699	.80	11.5	72.7	2.95	39.0	.00			410
1	480		5.71	5.67	34.230	26.986	112.5	.783	.52	7.4	79.9	3.12	40.4	.00			483
	500	ISL	5.63	5.59	34.250	27.011	110.4	.806	.46	6.6							504
1	549		5.45	5.40	34.300	27.073	104.9	.859	.35	5.0	86.3	3.19	41.3	.00			553

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 87 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 39.2 N	121 02.1 W	13/05/85	1036 GMT	3658 M	320	20 KT			1018 MB	13.2 C	11.8 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.26	14.26	33.365	24.870	307.2	.000	6.00	102.9							0
1	1	14.26	14.26	33.365	24.870	307.2	.003	6.00	102.9	2.0	.53	.0	.00	.21	.10	1
	10 ISL	14.25	14.25	33.363	24.871	307.3	.031	6.10	104.5							10
1	11	14.25	14.25	33.362	24.871	307.3	.034	6.10	104.6	2.0	.54	.0	.00	.23	.09	11
1	20	14.23	14.23	33.359	24.872	307.6	.061	6.07	104.0	1.9	.55	.0	.00	.24	.10	20
1	30	14.24	14.24	33.359	24.871	308.0	.092	6.03	103.3	1.9	.57	.0	.00	.21	.09	30
1	41	14.12	14.11	33.355	24.894	306.1	.125	6.03	103.1	1.9	.57	.0	.00	.25	.11	41
	50 ISL	13.70	13.69	33.329	24.960	300.0	.153	6.05	102.5							50
1	51	13.65	13.65	33.327	24.968	299.2	.156	6.05	102.4	2.1	.61	.1	.03	.48	.23	51
1	60	13.02	13.02	33.332	25.098	287.0	.182	5.78	96.6	3.2	.73	1.8	.27	.45	.20	60
1	69	12.49	12.48	33.358	25.223	275.3	.207	5.54	91.5	4.8	.88	4.2	.19	.45	.23	69
	75 ISL	12.48	12.47	33.406	25.263	271.7	.224	5.53	91.4							76
1	85	12.46	12.45	33.471	25.317	266.9	.250	5.50	90.9	5.3	.95	5.3	.39	.35	.31	85
1	100	11.67	11.66	33.530	25.512	248.6	.289	4.95	80.5	9.1	1.18	9.7	.08	.18	.20	100
1	119	10.53	10.52	33.643	25.804	221.0	.335	3.97	63.0	17.4	1.64	17.2	.02	.16	.14	120
	125 ISL	10.27	10.25	33.691	25.887	213.1	.347	3.76	59.3							126
1	144	9.49	9.47	33.854	26.145	189.0	.386	3.22	50.0	26.4	2.06	23.3	.01	.03	.07	145
	150 ISL	9.31	9.29	33.886	26.200	183.8	.397	3.13	48.4							151
1	173	8.72	8.70	33.971	26.360	168.9	.438	2.93	44.8	32.9	2.26	26.3	.01			174
	200 ISL	8.29	8.27	34.002	26.450	160.7	.482	2.93	44.3							202
1	204	8.23	8.21	34.003	26.460	159.9	.488	2.93	44.3	36.2	2.29	27.3	.01			205
1	232	7.66	7.64	34.027	26.562	150.4	.531	2.75	41.0	41.6	2.41	29.1	.01			233
	250 ISL	7.35	7.32	34.034	26.613	145.7	.558	2.51	37.1							252
1	270	7.06	7.04	34.045	26.662	141.2	.588	2.18	32.1	50.3	2.50	32.6	.00			272
	300 ISL	6.83	6.81	34.093	26.731	135.1	.629	1.70	24.9							302
1	331	6.69	6.66	34.148	26.794	129.5	.670	1.25	18.2	60.9	2.71	36.3	.00			333
	400 ISL	6.33	6.29	34.216	26.896	120.6	.756	.76	11.0							403
1	405	6.30	6.27	34.219	26.902	120.1	.762	.74	10.7	70.4	2.91	38.6	.00			408
1	480	6.01	5.97	34.270	26.980	113.5	.849	.54	7.8	77.1	3.04	39.8	.00			483
	500 ISL	5.90	5.86	34.278	27.000	111.7	.872	.51	7.3							504
1	554	5.54	5.50	34.286	27.051	107.2	.931	.47	6.7	84.7	3.12	41.1	.00			558

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 90 28

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 29.4 N	117 46.2 W	08/05/85	0449 GMT	36 M	310	10 KT			1017 MB	14.3 C	11.7 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.02	16.02	33.627	24.688	324.9	.000	6.19	110.1							0
1	1	16.02	16.02	33.627	24.688	324.6	.003	6.19	110.1	2.3		.3	.01	1.09	.20	1
	10 ISL	15.86	15.86	33.624	24.722	321.5	.032	6.34	112.5							10
1	11	15.84	15.84	33.623	24.726	321.2	.035	6.36	112.8	2.9		.3	.00	1.42	.29	11
	20 ISL	13.22	13.22	33.610	25.273	269.7	.062	5.09	85.6							20
1	21	12.93	12.93	33.609	25.330	263.9	.065	4.93	82.4	8.7		7.0	.35	1.48	.55	21
	30 ISL	11.51	11.51	33.641	25.626	236.0	.087	3.55	57.6							30
1	31	11.44	11.43	33.644	25.642	234.5	.089	3.45	55.8	16.5		16.9	.32	.37	.51	31
1	41	11.27	11.27	33.669	25.692	230.0	.112	3.34	53.9	17.4		17.9	.23	.36	.37	41
	50 ISL	10.92	10.91	33.726	25.800	219.9	.133	3.19	51.1							50
1	51	10.88	10.87	33.731	25.811	218.9	.134	3.18	50.9	20.0		19.7	.07	.32	.40	51

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 90 30

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 25.2 N	117 54.4 W	08/05/85	0130 GMT	613 M	310	12 KT	310 01 03	1	1015 MB	14.6 C	11.9 C	1/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.70	15.70	33.620	24.754	318.2	.000	6.28	111.0							0
1	1	15.70	15.70	33.620	24.754	318.2	.003	6.28	111.0	3.4	.34	.2	.00	.39	.12	1
	10 ISL	15.68	15.68	33.615	24.756	318.3	.032	6.32	111.7							10
1	11	15.68	15.67	33.615	24.757	318.3	.035	6.33	111.8	3.4	.32	.1	.00	.39	.15	11
	20 ISL	14.89	14.88	33.573	24.898	305.1	.063	6.42	111.6							20
1	23	14.48	14.48	33.560	24.975	297.9	.072	6.45	111.2	3.7	.35	.1	.01	1.51	.39	23
	30 ISL	13.14	13.13	33.563	25.254	271.6	.092	5.42	90.9							30
1	32	12.79	12.78	33.564	25.324	264.8	.097	5.09	84.8	8.1	.85	6.6	.31	1.11	.50	32
1	42	11.79	11.78	33.624	25.562	242.4	.122	3.64	59.4	14.3	1.42	16.0	.25	.47	.53	42
	50 ISL	11.14	11.13	33.686	25.729	226.7	.141	3.17	50.9							50
1	52	11.03	11.02	33.700	25.760	223.8	.145	3.13	50.2	18.5	1.65	19.4	.28	.26	.57	52
1	61	10.65	10.64	33.760	25.874	213.1	.165	3.15	50.2	20.7	1.68	20.4	.05	.09	.29	61
1	72	10.48	10.47	33.794	25.930	208.0	.188	3.04	48.2	22.1	1.74	21.2	.04	.07	.26	72
	75 ISL	10.40	10.39	33.811	25.957	205.5	.195	2.99	47.4							76
1	87	10.10	10.09	33.874	26.058	196.1	.218	2.84	44.7	25.0	1.87	23.0	.02	.03	.17	87
	100 ISL	9.80	9.79	33.929	26.151	187.5	.244	2.76	43.1							101
1	101	9.77	9.76	33.933	26.160	186.7	.247	2.75	43.0	27.6	1.97	24.3	.01	.02	.10	102
1	121	9.43	9.42	33.973	26.247	178.8	.283	2.73	42.4	29.7	2.02	25.1	.01	.01	.11	122
	125 ISL	9.37	9.35	33.989	26.270	176.7	.289	2.68	41.5							126
1	144	9.05	9.03	34.063	26.380	166.6	.322	2.39	36.8	34.1	2.18	27.2	.01	.02	.07	145
	150 ISL	8.95	8.93	34.066	26.399	164.9	.332	2.41	37.0							151
1	175	8.64	8.62	34.075	26.453	160.1	.373	2.44	37.2	36.8	2.23	28.0	.02			176
	200 ISL	8.74	8.72	34.168	26.510	155.2	.412	1.87	28.6							202
1	206	8.75	8.73	34.187	26.524	154.1	.421	1.73	26.5	40.9	2.44	29.6	.02			207
1	237	8.05	8.03	34.159	26.609	146.2	.467	1.71	25.8	46.0	2.55	31.2	.02			238
	250 ISL	7.99	7.97	34.197	26.648	142.8	.487	1.49	22.4							252
1	276	7.88	7.85	34.261	26.716	136.8	.523	.99	14.9	52.2	2.83	33.3	.01			278
	300 ISL	7.71	7.68	34.282	26.757	133.2	.555	.80	12.0							302
1	336	7.40	7.37	34.286	26.805	129.0	.602	.69	10.2	58.6	2.97	35.2	.00			338
	400 ISL	6.77	6.73	34.280	26.889	121.7	.683	.56	8.2							403
1	409	6.68	6.64	34.279	26.899	120.7	.694	.55	8.0	67.4	3.11	37.5	.00			412
1	483	6.25	6.21	34.297	26.970	114.7	.780	.43	6.2	74.3	3.20	39.0	.00			486
	500 ISL	6.14	6.10	34.303	26.990	113.0	.800	.40	5.8							504
1	557	5.77	5.72	34.326	27.055	107.2	.863	.32	4.6	82.2	3.31	40.2	.02			561

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 90 35

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 15.1 N	118 15.1 W	07/05/85	2147 GMT	260 M	280	17 KT	270 01 03	2	1018 MB	17.1 C	12.1 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.60	15.60	33.594	24.758	320.2	.000	6.13	108.1							0
1	1	15.60	15.60	33.594	24.758	317.9	.003	6.13	108.1	3.8	.31	.1	.00	2.27	.57	1
	10 ISL	14.57	14.57	33.588	24.978	298.4	.031	5.94	102.7							10
	20 ISL	13.59	13.59	33.581	25.177	279.3	.060	5.54	93.8							20
1	26	13.09	13.09	33.577	25.274	269.4	.076	5.21	87.3	7.5	.66	5.3	.45	.97	.58	26
	30 ISL	12.78	12.77	33.585	25.342	263.0	.087	4.92	81.8							30
1	36	12.38	12.38	33.599	25.430	254.8	.102	4.49	74.1	10.8	.96	9.9	.46	.55	.56	36
1	45	11.88	11.88	33.625	25.545	244.0	.124	3.96	64.7	13.4	1.19	13.8	.22	.38	.46	45
	50 ISL	11.48	11.48	33.652	25.640	235.1	.137	3.64	59.0							50
1	55	11.16	11.15	33.677	25.718	227.8	.148	3.41	54.9	17.3	1.45	18.0	.05	.21	.31	55
1	65	10.95	10.94	33.708	25.780	222.1	.170	3.33	53.4	18.8	1.52	19.0	.03	.15	.26	65
	75 ISL	10.69	10.68	33.754	25.862	214.6	.193	3.16	50.4							76
1	76	10.68	10.67	33.756	25.866	214.1	.194	3.15	50.2	20.7	1.61	20.4	.03	.09	.23	76
1	86	10.51	10.50	33.786	25.919	209.3	.215	3.05	48.4	22.0	1.66	21.2	.02	.06	.17	86
1	96	10.17	10.16	33.845	26.024	199.6	.235	2.95	46.5	24.4	1.77	22.6	.02	.03	.10	96
	100 ISL	10.03	10.02	33.876	26.071	195.2	.244	2.87	45.1							101
1	110	9.76	9.75	33.938	26.165	186.4	.264	2.70	42.2	27.5	1.88	24.5	.00	.02	.08	111
	125 ISL	9.51	9.49	33.971	26.233	180.2	.291	2.65	41.2							126
1	129	9.45	9.43	33.977	26.248	178.9	.299	2.64	41.0	30.3	1.97	25.4	.01	.01	.07	130
1	147	9.16	9.14	34.048	26.351	169.4	.330	2.40	37.0	33.4	2.11	27.0	.01	.01	.05	148
	150 ISL	9.12	9.10	34.055	26.362	168.4	.335	2.32	35.8							151
1	167	8.91	8.90				.363	1.88	28.9	38.3	2.26	29.2	.01			168
1	197	8.60	8.58	34.144	26.515	154.7	.410	1.84	28.1	40.9	2.31	29.9	.01			198
	200 ISL	8.55	8.53	34.144	26.522	153.8	.415	1.83	27.9							202
1	227	8.00	7.98	34.144	26.605	146.5	.455	1.74	26.2	46.2	2.41	31.5	.01			228

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 90 37

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 11.2 N	118 23.3 W	07/05/85	1855 GMT	1125 M	280	08 KT	280 02 03	2	1018 MB	16.3 C	11.7 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.18	15.18	33.573	24.833	310.8	.000	6.09	106.5							0
1	1	15.18	15.18	33.573	24.833	310.8	.003	6.09	106.5	2.5	.28	.1	.00	.22	.06	1
	10 ISL	15.14	15.13	33.571	24.842	310.1	.031	6.22	108.7							10
1	11	15.13	15.13	33.571	24.843	310.0	.034	6.23	108.9	2.3	.30	.1	.00	.23	.08	11
1	20	14.56	14.56	33.542	24.943	300.7	.061	6.23	107.6	1.9	.26	.1	.00	.43	.09	20
	30 ISL	13.98	13.97	33.527	25.055	290.4	.091	6.08	103.7							30
1	31	13.91	13.90	33.527	25.069	289.1	.094	6.05	103.1	1.5	.29	.8	.06	.34	.10	31
1	40	12.64	12.63	33.539	25.334	264.0	.118	5.52	91.6	6.0	.55	5.1	.42	.35	.17	40
1	50	11.46	11.46	33.596	25.600	238.9	.143	4.31	69.8	13.0	1.07	13.5	.25	.33	.22	50
1	60	11.34	11.33	33.610	25.634	235.9	.167	4.09	66.1	14.9	1.11	14.6	.19	.24	.16	60
1	70	10.78	10.77	33.693	25.799	220.5	.190	3.60	57.5					.10	.07	70
	75 ISL	10.61	10.60	33.721	25.851	215.6	.201	3.51	55.8							76
1	86	10.37	10.36	33.774	25.933	208.0	.224	3.41	54.0	22.2	1.55	20.4	.04	.04	.07	86
1	99	10.04	10.03	33.882	26.075	194.8	.252	3.04	47.8	25.7	1.74	22.7	.02	.02	.05	100
	100 ISL	10.02	10.01	33.885	26.081	194.3	.253	3.03	47.6							101
1	119	9.29	9.28	33.958	26.258	177.6	.289	2.81	43.5	30.9	1.94	25.2	.01	.00	.05	120
	125 ISL	9.19	9.17	33.971	26.285	175.2	.299	2.77	42.7							126
1	145	8.99	8.97	34.007	26.345	169.8	.334	2.61	40.1	33.9	2.03	26.6	.01	.01	.06	146
	150 ISL	8.95	8.93	34.019	26.361	168.4	.342	2.56	39.4							151
1	174	8.78	8.76	34.080	26.436	161.8	.381	2.28	34.9	37.2	2.19	28.2	.01			175
	200 ISL	8.71	8.69	34.148	26.500	156.2	.423	1.89	28.9							202
1	204	8.70	8.68	34.156	26.508	155.5	.429	1.84	28.1	41.0	2.34	29.6	.01			205
1	233	8.51	8.48	34.180	26.557	151.3	.473	1.66	25.3	43.2	2.46	30.5	.01			234
	250 ISL	8.28	8.25	34.186	26.597	147.7	.499	1.58	23.9							252
1	272	7.94	7.92	34.190	26.650	143.0	.531	1.47	22.1	48.6	2.58	32.2	.01			274
	300 ISL	7.62	7.59	34.198	26.704	138.1	.570	1.30	19.4							302
1	330	7.32	7.29	34.208	26.756	133.6	.611	1.12	16.6	57.0	2.78	34.7	.01			332
	400 ISL	6.79	6.75	34.241	26.854	124.9	.701	.80	11.7							403
1	404	6.76	6.73	34.243	26.860	124.5	.707	.78	11.4	65.9	3.00	37.0	.00			407
1	479	6.26	6.22	34.284	26.959	115.8	.796	.55	8.0	74.9	3.11	38.8	.00			482
	500 ISL	6.12	6.07	34.296	26.987	113.2	.820	.50	7.2							504
1	554	5.74	5.69	34.327	27.060	106.6	.880	.41	5.9	84.6	3.27	40.3	.00			558

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 90 45

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
32 55.1 N	118 56.3 W	07/05/85	1217 GMT	1706 M	280	10 KT			1016 MB	13.5 C	10.5 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.92	14.92	33.560	24.879	306.4	.000	5.94	103.4							0
1	1	14.92	14.92	33.560	24.879	306.3	.003	5.94	103.4	1.7	.32	.3	.02			1
	10 ISL	14.89	14.88	33.563	24.890	305.5	.031	6.03	104.8							10
1	11	14.88	14.88	33.564	24.892	305.4	.034	6.03	104.8	1.8	.34	.3	.02	.21	.07	11
	20 ISL	13.34	13.34	33.601	25.242	272.2	.060	6.03	101.6							20
1	21	13.15	13.15	33.607	25.285	268.3	.062	6.03	101.2	5.4	.48	2.7	.17	.71	.26	21
	30 ISL	11.77	11.77	33.638	25.575	240.8	.085	4.75	77.5							30
1	31	11.67	11.66	33.641	25.597	238.7	.087	4.62	75.2	12.2	1.06	12.2	.28	.39	.21	31
1	41	10.96	10.96	33.642	25.726	226.7	.110	4.17	66.8	16.0	1.34	15.8	.16	.35	.16	41
	50 ISL	10.74	10.73	33.673	25.791	220.8	.131	3.92	62.5							50
1	51	10.72	10.72	33.676	25.795	220.4	.133	3.90	62.2	18.0	1.42	17.4	.09	.19	.11	51
1	61	10.28	10.28	33.705	25.894	211.1	.154	3.68	58.1	20.7	1.54	19.3	.05	.12	.09	61
1	71	10.17	10.16	33.770	25.965	204.6	.175	3.29	51.8	23.0	1.69	21.2	.04	.09	.08	71
	75 ISL	10.02	10.02	33.797	26.010	200.4	.184	3.18	50.0							76
1	86	9.65	9.64	33.855	26.119	190.2	.204	2.99	46.6	27.1	1.83	23.8	.02	.03	.09	86
1	100	9.35	9.34	33.917	26.216	181.3	.232	2.77	42.9	29.9	1.95	25.1	.02	.02	.10	101
1	120	8.82	8.81	33.970	26.342	169.6	.267	2.72	41.7	33.8	2.05	26.8	.02	.01	.07	121
	125 ISL	8.81	8.80	33.991	26.360	168.0	.275	2.66	40.7							126
1	145	8.76	8.75	34.059	26.421	162.6	.308	2.33	35.7	36.7	2.21	28.1	.02	.01	.06	146
	150 ISL	8.72	8.70	34.073	26.439	160.9	.316	2.26	34.5							151
1	175	8.46	8.44	34.126	26.521	153.6	.355	1.95	29.6	41.2	2.37	29.9	.02			176
	200 ISL	8.33	8.31	34.148	26.558	150.5	.393	1.85	28.0							202
1	205	8.31	8.28	34.149	26.563	150.1	.400	1.83	27.7	43.5	2.44	30.5	.02			206
1	234	7.94	7.92	34.163	26.629	144.2	.443	1.55	23.3	48.4	2.56	32.2	.02			235
	250 ISL	7.82	7.80	34.176	26.656	141.9	.466	1.45	21.7							252
1	273	7.67	7.65	34.193	26.692	138.8	.499	1.32	19.7	52.2	2.68	33.3	.02			275
	300 ISL	7.35	7.32	34.207	26.749	133.8	.535	1.14	16.9							302
1	332	6.96	6.93	34.220	26.815	127.8	.577	.93	13.7	62.6	2.91	36.2	.01			334
	400 ISL	6.53	6.50	34.261	26.905	120.0	.661	.63	9.1							403
1	405	6.51	6.47	34.264	26.910	119.5	.668	.61	8.9	70.9	3.06	38.2	.00			408
1	479	6.01	5.97	34.297	27.002	111.4	.753	.48	6.9	79.9	3.18	39.7	.00			482
	500 ISL	5.88	5.84	34.307	27.025	109.4	.776	.45	6.4							504
1	551	5.63	5.58	34.332	27.078	104.8	.831	.39	5.6	86.1	3.26	40.7	.00			555

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 90 53

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
32 39.2 N	119 28.8 W	07/05/85	0623 GMT	1330 M	320	09 KT			1017 MB	13.9 C	10.8 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	13.52	13.52	33.497	25.125	282.9	.000	6.11	103.3	4.5	.56	3.3	.14	.25	.08	0
1	10	13.31	13.31	33.494	25.165	279.3	.028	6.18	104.0	4.4	.62	3.3	.14	.30	.12	10
1	20	12.98	12.98	33.479	25.219	274.4	.056	6.22	103.9	4.1	.58	3.3	.15	.44	.13	20
1	29	12.94	12.94	33.481	25.229	273.7	.080	6.09	101.7	4.2	.59	3.4	.16	.54	.23	29
	30 ISL	12.94	12.93	33.480	25.229	273.7	.083	6.09	101.7							30
1	39	12.90	12.89	33.478	25.236	273.4	.107	6.09	101.6	4.1	.60	3.4	.18	.53	.22	39
1	48	12.83	12.82	33.475	25.248	272.5	.132	5.99	99.8	4.1	.59	3.5	.18	.46	.19	48
	50 ISL	12.78	12.78	33.475	25.256	271.7	.138	5.97	99.3							50
1	59	12.54	12.53	33.475	25.304	267.4	.161	5.86	97.0	4.0	.64	4.2	.23	.33	.15	59
1	69	12.18	12.17	33.484	25.381	260.3	.188	5.60	92.0	5.0	.75	5.8	.26	.17	.11	69
	75 ISL	11.61	11.61	33.518	25.512	247.9	.204	5.12	84.3							76
1	84	10.90	10.89	33.570	25.683	231.8	.224	4.66	74.5	12.9	1.15	13.5	.16	.11	.08	84
1	99	10.81	10.80	33.582	25.708	229.7	.259	4.56	72.8	13.8	1.21	14.1	.14	.09	.11	99
	100 ISL	10.75	10.74	33.591	25.726	228.1	.262	4.50	71.8							101
1	117	9.91	9.89	33.722	25.972	204.8	.300	3.71	58.1	21.2	1.56	20.0	.02	.03	.08	118
	125 ISL	9.67	9.65	33.775	26.054	197.2	.315	3.46	53.9							126
1	143	9.23	9.21	33.880	26.208	182.9	.350	3.05	47.1	28.6	1.86	24.5	.04	.02	.06	144
	150 ISL	9.08	9.06	33.904	26.250	179.0	.362	3.01	46.3							151
1	173	8.64	8.62	33.967	26.368	168.1	.402	2.89	44.1	33.0	1.96	26.3	.02			174
	200 ISL	8.24	8.22	34.056	26.499	156.0	.446	2.32	35.1							202
1	203	8.21	8.19	34.065	26.512	154.9	.450	2.25	34.0	40.8	2.23	29.4	.01			204
1	233	7.93	7.90	34.140	26.613	145.7	.495	1.59	23.9	47.9	2.51	32.0	.02			234
	250 ISL	7.73	7.70	34.154	26.653	142.1	.520	1.45	21.7							252
1	273	7.45	7.42	34.159	26.698	138.2	.553	1.38	20.5	53.6	2.64	33.7	.03			275
	300 ISL	7.15	7.12	34.172	26.750	133.5	.589	1.21	17.8							302
1	333	6.83	6.80	34.190	26.809	128.2	.632	.99	14.5	62.3	2.85	36.3	.01			335
	400 ISL	6.43	6.39	34.245	26.906	119.7	.715	.63	9.1							403
1	406	6.40	6.36	34.250	26.914	119.1	.723	.60	8.7	71.6	3.04	38.3	.00			409
1	478	6.05	6.00	34.293	26.994	112.2	.805	.44	6.3	78.8	3.16	39.5	.00			481
	500 ISL	5.93	5.88	34.304	27.018	110.1	.830	.40	5.7							504
1	546	5.66	5.61	34.327	27.069	105.6	.880	.32	4.6	85.3	3.25	40.3	.00			550

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 90 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 25.2 N	119 57.7 W	07/05/85	0128 GMT	856 M	320	10 KT	320 03 10	1	1016 MB	14.5 C	11.4 C	3/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.40	14.40	33.420	24.884	306.1	.000	6.18	106.3							0
1	1	14.40	14.40	33.420	24.884	305.9	.003	6.18	106.3	1.2	.39	.0	.01	.86	.02	1
	10 ISL	14.28	14.28	33.414	24.903	304.3	.031	6.31	108.2							10
1	11	14.27	14.27	33.413	24.905	304.1	.033	6.32	108.4	1.1	.38	.0	.01	.64	.06	11
	20 ISL	13.65	13.65	33.388	25.015	294.0	.060	6.46	109.4							20
1	21	13.59	13.58	33.385	25.026	292.9	.063	6.47	109.4	.8	.38	.1	.02	.84	.15	21
	30 ISL	13.44	13.44	33.380	25.051	290.9	.090	6.46	108.9							30
1	31	13.44	13.43	33.379	25.051	290.7	.092	6.46	108.9	.7	.40	.3	.03	1.11	.14	31
1	40	13.14	13.13	33.427	25.149	281.7	.118	6.36	106.6	.9	.48	1.2	.09	1.36	.35	40
1	50	12.62	12.62	33.458	25.274	270.0	.145	5.90	97.8	3.7	.64	3.5	.20	.53	.36	50
1	61	12.58	12.57	33.509	25.322	265.7	.175	5.94	98.4	3.5	.66	3.9	.20	.46	.32	61
1	70	12.47	12.46	33.551	25.376	260.8	.198	5.86	96.9	3.9	.74	4.6	.20	.26	.21	70
	75 ISL	12.21	12.20	33.547	25.423	256.5	.212	5.58	91.8							76
1	85	11.61	11.60	33.528	25.522	247.2	.236	5.00	81.2	9.2	.97	9.5	.21	.14	.15	85
1	100	10.78	10.77	33.552	25.689	231.6	.272	4.57	72.9	13.6	1.22	13.8	.25	.08	.17	100
1	120	9.78	9.76	33.686	25.966	205.5	.317	3.85	60.1	21.0	1.52	19.7	.01	.08	.15	121
	125 ISL	9.61	9.59	33.727	26.026	199.8	.327	3.67	57.2							126
1	145	9.01	9.00	33.888	26.249	179.0	.365	3.06	47.0	29.7	1.87	25.0	.01	.02	.06	146
	150 ISL	8.92	8.90	33.907	26.278	176.3	.374	3.06	47.0							151
1	175	8.51	8.49	33.952	26.378	167.1	.417	3.07	46.7	32.9	1.93	26.1	.01			176
	200 ISL	8.04	8.02	33.984	26.474	158.4	.457	3.15	47.4							202
1	204	7.97	7.95	33.987	26.486	157.3	.463	3.16	47.5	36.8	1.98	27.0	.01			205
1	235	7.71	7.69	33.997	26.532	153.3	.511	2.98	44.5	39.8	2.07	28.4	.01			236
	250 ISL	7.51	7.49	34.009	26.570	149.8	.534	2.83	42.1							252
1	274	7.18	7.15	34.034	26.637	143.7	.570	2.54	37.5	47.1	2.28	31.0	.00			276
	300 ISL	6.90	6.87	34.058	26.694	138.6	.606	2.12	31.1							302
1	332	6.62	6.59	34.089	26.757	132.9	.650	1.59	23.2	58.9	2.66	35.3	.01			334
	400 ISL	6.26	6.22	34.179	26.876	122.4	.737	.79	11.5							403
1	406	6.23	6.20	34.187	26.885	121.5	.744	.74	10.7	70.4	3.01	38.3	.01			409
1	480	5.92	5.88	34.254	26.979	113.5	.830	.46	6.6	78.1	3.16	39.9	.00			483
	500 ISL	5.78	5.74	34.271	27.009	110.7	.853	.40	5.7							504
1	553	5.32	5.27	34.316	27.101	102.2	.910	.29	4.1	89.9	3.31	41.6	.00			557

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 90 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 04.8 N	120 39.0 W	06/05/85	1759 GMT	3840 M	310	04 KT	320 05 07	2	1017 MB	14.2 C	10.9 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	13.23	13.23	33.268	25.006	294.3	.000	6.08	102.0							0
1	1	13.23	13.23	33.268	25.006	294.2	.003	6.08	102.0	2.0	.37	.2	.03	.52	.12	1
	10 ISL	13.19	13.19	33.266	25.014	293.7	.029	6.10	102.2							10
1	11	13.18	13.18	33.266	25.014	293.7	.032	6.10	102.2	1.9	.36	.2	.03	.50	.12	11
	20 ISL	13.16	13.16	33.268	25.021	293.4	.059	6.16	103.2							20
1	25	13.15	13.15	33.269	25.024	293.2	.073	6.18	103.5	1.9	.38	.3	.04	.54	.18	25
	30 ISL	13.05	13.05	33.270	25.044	291.4	.088	6.12	102.2							30
1	41	12.86	12.86	33.280	25.089	287.4	.119	5.98	99.5	2.6	.44	1.3	.12	.48	.20	41
	50 ISL	12.88	12.87	33.303	25.105	286.1	.146	6.01	100.1							50
1	54	12.88	12.87	33.315	25.114	285.4	.156	6.02	100.3	2.4	.46	1.8	.12	.70	.21	54
1	65	12.67	12.67	33.342	25.175	279.8	.187	5.86	97.2	3.3	.53	2.6	.36	.43	.20	65
1	74	12.38	12.37	33.385	25.265	271.5	.212	5.69	93.8	4.6	.64	4.3	.32	.23	.15	74
	75 ISL	12.34	12.33	33.390	25.277	270.4	.216	5.67	93.4							76
1	89	11.90	11.89	33.454	25.410	258.0	.252	5.54	90.5	4.8	.74	6.9	.14	.18	.17	89
	100 ISL	11.48	11.46	33.552	25.564	243.6	.290	5.51	89.3							101
1	103	11.40	11.38	33.572	25.595	240.7	.286	5.51	89.1	6.0	.97	9.3	.24	.22	.34	103
1	118	11.23	11.21	33.622	25.665	234.4	.324	5.41	87.2	8.5	1.02	10.5	.34	.19	.31	119
	125 ISL	11.19	11.17	33.625	25.675	233.6	.339	5.39	86.8							126
1	141	11.08	11.07	33.655	25.717	229.9	.377	5.34	85.8	9.7	1.11	11.4	.42	.21	.37	142
	150 ISL	10.73	10.71	33.662	25.785	224.1	.397	4.82	76.8							151
1	161	10.15	10.13	33.671	25.893	213.4	.421	4.10	64.5	18.6	1.43	18.1	.14	.09	.18	162
1	182	8.99	8.97	33.832	26.208	183.5	.463	3.65	56.0	26.4	1.69	22.7	.02			183
1	200	8.77	8.75	33.912	26.306	174.5	.495	3.10	47.4	30.8	1.90	25.6	.01			201
1	231	8.31	8.28	33.994	26.442	162.0	.547	2.90	43.9	36.0	2.03	27.3	.01			232
	250 ISL	7.99	7.97	34.019	26.509	155.9	.577	2.74	41.2							252
1	269	7.68	7.65	34.032	26.565	150.7	.607	2.57	38.3	43.1	2.25	29.9	.00			271
	300 ISL	7.20	7.17	34.034	26.635	144.3	.652	2.33	34.4							302
1	328	6.83	6.80	34.039	26.689	139.4	.692	2.08	30.4	53.3	2.48	33.4	.00			330
	400 ISL	6.46	6.42	34.161	26.835	126.4	.788	1.03	15.0							403
1	401	6.46	6.42	34.164	26.838	126.2	.790	1.01	14.7	66.5	2.91	37.6	.00			404
1	474	6.22	6.18	34.269	26.952	116.2	.877	.54	7.8	75.2	3.13	39.1	.00			477
	500 ISL	6.03	5.99	34.269	26.977	113.1	.907	.50	7.3							504
1	547	5.56	5.51	34.278	27.042	107.9	.960	.44	6.3	85.0	3.23	41.0	.00			551

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 90 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 45.4 N	121 19.0 W	06/05/85	1128 GMT	3840 M	320	14 KT			1015 MB	13.9 C	10.7 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	13.73	13.73	33.284	24.918	302.6	.000	6.06	102.7	1.7	.37	.1	.00	.27	.05	0
	10 ISL	13.73	13.72	33.283	24.917	302.9	.030	6.10	103.3							10
1	11	13.73	13.72	33.282	24.917	302.9	.033	6.10	103.4	1.7	.37	.1	.00	.27	.06	11
	20 ISL	13.73	13.72	33.280	24.916	303.3	.061	6.14	104.0							20
1	21	13.73	13.72	33.280	24.916	303.4	.063	6.14	104.1	1.6	.35	.0	.00	.27	.08	21
	30 ISL	13.74	13.74	33.280	24.913	303.9	.091	6.08	103.0							30
1	31	13.74	13.74	33.280	24.913	303.9	.094	6.07	102.9	1.5	.37	.0	.00	.28	.06	31
1	40	13.74	13.73	33.279	24.913	304.2	.121	6.07	102.9	1.5	.36	.0	.00	.28	.05	40
1	50	13.73	13.73	33.281	24.916	304.2	.151	6.09	103.2	1.6	.35	.0	.00	.27	.05	50
1	60	13.71	13.71	33.282	24.921	304.0	.181	6.04	102.3	1.6	.35	.0	.00	.32	.05	60
1	70	13.58	13.57	33.291	24.957	300.9	.211	6.08	102.7	1.6	.37	.0	.02	.57	.11	70
	75 ISL	13.48	13.47	33.295	24.979	298.9	.227	6.09	102.7							76
1	85	13.25	13.24	33.308	25.034	293.8	.256	6.11	102.5	1.3	.40	.4	.07	.72	.23	85
1	99	12.74	12.73	33.348	25.167	281.5	.296	5.91	98.2	2.8	.51	2.1	.32	.52	.32	99
	100 ISL	12.69	12.68	33.352	25.181	280.3	.300	5.87	97.4							101
1	118	11.98	11.96	33.408	25.361	263.4	.350	5.29	86.5	6.8	.78	6.9	.10	.09	.16	119
	125 ISL	11.69	11.68	33.427	25.429	257.1	.367	5.11	83.0							126
1	143	10.86	10.85	33.504	25.638	237.4	.413	4.59	73.3	12.4	1.10	13.0	.03	.04	.09	144
	150 ISL	10.54	10.52	33.555	25.736	228.2	.428	4.36	69.2							151
1	173	9.54	9.52	33.753	26.059	197.7	.477	3.61	56.1	23.3	1.63	21.5	.01			174
	200 ISL	8.97	8.95	33.922	26.282	176.8	.528	3.07	47.1							202
1	202	8.94	8.92	33.932	26.295	175.7	.531	3.04	46.7	30.4	1.92	25.4	.01			203
1	232	8.56	8.53	34.064	26.458	160.7	.581	2.69	41.0	36.1	2.08	27.3	.01			233
	250 ISL	8.28	8.26	34.087	26.519	155.1	.610	2.48	37.6							252
1	272	7.96	7.93	34.094	26.573	150.3	.643	2.24	33.7	42.9	2.29	30.0	.01			273
	300 ISL	7.60	7.57	34.118	26.644	143.9	.685	1.91	28.4							302
1	331	7.26	7.22	34.144	26.714	137.5	.729	1.56	23.1	53.4	2.58	33.7	.01			333
	400 ISL	6.52	6.49	34.203	26.860	124.1	.819	.90	13.1							403
1	405	6.48	6.44	34.206	26.869	123.4	.824	.87	12.6	67.1	2.92	37.7	.00			407
1	478	5.74	5.70	34.219	26.973	113.8	.911	.61	8.7	78.5	3.06	40.4	.00			481
	500 ISL	5.59	5.55	34.231	27.001	111.3	.936	.56	7.9							504
1	550	5.35	5.31	34.268	27.059	106.1	.991	.47	6.6	86.2	3.14	41.6	.00			554

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 90 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 25.2 N	121 59.2 W	06/05/85	0526 GMT	3931 M	350	15 KT			1016 MB	13.9 C	11.4 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.09	15.09	33.510	24.805	313.4	.000	5.88	102.6							0
1	1	15.09	15.09	33.510	24.805	313.4	.003	5.88	102.6	2.1	.41	.1	.00	.09	.01	1
	10 ISL	15.08	15.08	33.510	24.807	313.4	.031	5.85	102.1							10
1	11	15.08	15.08	33.510	24.807	313.4	.034	5.85	102.1	2.4	.35	.1	.00	.08	.01	11
	20 ISL	15.06	15.08	33.507	24.806	313.9	.063	5.94	103.7							20
1	21	15.08	15.08	33.507	24.805	314.0	.066	5.95	103.8	2.4	.36	.1	.00	.09	.01	21
	30 ISL	15.08	15.08	33.507	24.805	314.2	.094	5.89	102.7							30
1	31	15.08	15.08	33.507	24.805	314.2	.097	5.88	102.6	2.0	.36	.1	.00	.09	.02	31
1	40	15.09	15.08	33.507	24.804	314.6	.125	5.88	102.6	1.8	.34	.1	.00	.09	.02	40
1	50	15.04	15.03	33.497	24.807	314.6	.156	5.80	101.1	2.0	.36	.1	.00	.09	.02	50
1	59	14.96	14.95	33.486	24.816	314.1	.185	5.87	102.1	1.9	.35	.0	.00	.11	.02	59
1	69	14.31	14.30	33.411	24.898	306.4	.215	5.95	102.1	2.0	.36	.0	.00	.21	.08	69
	75 ISL	13.79	13.78	33.346	24.954	301.2	.235	6.01	102.0							76
1	85	13.15	13.14	33.269	25.025	294.7	.263	6.07	101.6	2.3	.40	.0	.02	.50	.24	85
1	100	13.03	13.01	33.280	25.059	291.9	.307	6.02	100.5	2.6	.43	.3	.13	.50	.27	100
1	118	12.38	12.36	33.444	25.312	268.1	.360	5.10	84.1	6.6	.79	6.6	.07	.25	.24	119
	125 ISL	11.93	11.91	33.482	25.427	257.2	.377	4.85	79.3							126
1	143	10.58	10.57	33.582	25.749	226.8	.422	4.28	68.0	15.0	1.28	15.1	.01	.06	.08	144
	150 ISL	10.25	10.23	33.621	25.837	218.5	.436	4.09	64.6							151
1	173	9.36	9.35				.484	3.56	55.1	24.5	1.74	21.8	.00			174
	200 ISL	8.62	8.60	33.920	26.335	171.7	.533	3.16	48.2							202
1	203	8.56	8.54	33.935	26.357	169.7	.538	3.13	47.6	32.1	1.97	25.7	.00			204
1	232	8.13	8.11	33.995	26.469	159.5	.586	2.90	43.7	36.9	2.07	27.4	.00			233
	250 ISL	7.82	7.80	34.017	26.531	153.7	.614	2.71	40.5							252
1	272	7.50	7.47	34.037	26.595	147.9	.647	2.44	36.3	44.4	2.29	30.3	.00			273
	300 ISL	7.29	7.26	34.081	26.659	142.2	.688	1.98	29.3							302
1	332	7.14	7.11	34.128	26.717	137.1	.733	1.48	21.8	54.6	2.65	34.0	.00			334
	400 ISL	6.64	6.60	34.191	26.835	126.6	.822	.88	12.8							403
1	407	6.59	6.55	34.195	26.846	125.7	.831	.84	12.2	65.7	2.94	37.2	.00			409
1	480	5.91	5.87	34.213	26.948	116.4	.920	.53	7.6	76.3	3.12	39.7	.00			483
	500 ISL	5.76	5.71	34.221	26.974	114.1	.943	.48	6.8							504
1	552	5.41	5.37	34.250	27.038	108.2	1.001	.40	5.7	85.6	3.22	41.3	.00			556

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 90 100

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 05.4 N	122 39.7 W	05/05/85	2328 GMT	3840 M	350	23 KT	340 08 06	1	1015 MB	15.9 C	12.8 C	7/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.28	15.28	33.485	24.745	319.1	.000	5.85	102.5							0
1	1	15.28	15.28	33.485	24.745	319.1	.003	5.85	102.5	1.1	.37	.0	.00	.06	.01	1
	10 ISL	15.27	15.27	33.483	24.746	319.3	.032	5.96	104.5							10
1	11	15.27	15.27	33.483	24.746	319.3	.035	5.97	104.5	.9	.35	.0	.00	.06	.01	11
	20 ISL	15.26	15.26	33.484	24.747	319.5	.064	5.93	103.8							20
1	26	15.26	15.25	33.484	24.749	319.5	.083	5.88	102.9	.7	.34	.0	.00	.06	.01	26
	30 ISL	15.25	15.24	33.482	24.750	319.5	.096	5.88	102.9							30
1	41	15.21	15.21	33.479	24.755	319.3	.130	5.88	102.8	.5	.34	.0	.00	.07	.01	41
	50 ISL	14.93	14.92	33.445	24.792	316.1	.160	5.90	102.5							50
1	56	14.72	14.71	33.419	24.817	313.9	.178	5.91	102.3	.3	.35	.0	.00	.12	.04	56
1	67	14.45	14.44	33.380	24.844	311.6	.212	5.93	102.1	.1	.36	.0	.00	.15	.06	67
	75 ISL	14.35	14.34	33.358	24.849	311.3	.238	5.93	101.8							76
1	76	14.34	14.33	33.356	24.850	311.3	.240	5.93	101.8	.0	.35	.0	.00	.20	.08	76
1	90	13.71	13.70	33.436	25.042	293.3	.282	5.61	95.1	2.6	.52	1.6	.13	.30	.22	90
	100 ISL	13.03	13.02	33.530	25.251	273.6	.311	5.33	89.2							101
1	105	12.74	12.72	33.570	25.341	265.2	.324	5.22	86.8	5.1	.70	5.0	.04	.15	.21	105
1	119	12.00	11.99	33.620	25.520	248.4	.362	5.06	82.9	6.7	.77	7.2	.02	.10	.15	120
	125 ISL	11.68	11.67	33.620	25.581	242.7	.376	4.96	80.7							126
1	144	10.68	10.66	33.633	25.771	224.7	.421	4.60	73.2	12.4	1.13	13.0	.01	.04	.06	145
	150 ISL	10.51	10.49	33.659	25.822	220.0	.433	4.52	71.6							151
1	164	10.16	10.14	33.734	25.940	209.0	.464	4.33	68.2	16.8	1.30	16.0	.01	.02	.03	165
1	184	9.65	9.63	33.808	26.083	195.6	.504	4.10	63.9	20.2	1.47	18.6	.01			185
	200 ISL	9.15	9.12	33.847	26.196	185.2	.534	3.66	56.3							202
1	204	9.03	9.01	33.856	26.222	182.7	.542	3.54	54.4	26.3	1.76	22.9	.00			205
1	234	8.55	8.52	33.941	26.364	169.7	.594	3.16	48.1							235
	250 ISL	8.30	8.27	33.977	26.430	163.5	.621	3.14	47.5							252
1	273	7.96	7.93	34.017	26.512	156.0	.657	3.11	46.7	37.1	2.06	27.0	.00			274
	300 ISL	7.54	7.51	34.044	26.595	148.4	.699	2.62	38.9							302
1	332	7.08	7.05	34.062	26.673	141.1	.745	1.94	28.6	52.2	2.48	33.3	.00			334
	400 ISL	6.35	6.32	34.096	26.799	129.8	.837	1.30	18.8							403
1	406	6.30	6.27	34.099	26.807	129.0	.845	1.27	18.4	65.3	2.81	37.1	.00			408
1	479	5.65	5.61	34.146	26.926	118.1	.935	.78	11.1	78.6	3.04	40.0	.00			482
	500 ISL	5.52	5.48	34.165	26.957	115.3	.960	.67	9.5							504
1	553	5.29	5.25	34.220	27.028	109.0	1.020	.46	6.5	89.0	3.15	41.5	.00			557

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 90 110

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 44.9 N	123 19.5 W	05/05/85	1653 GMT	3749 M	340	14 KT	340 08 06	1	1016 MB	14.8 C	11.5 C	7/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.77	15.77	33.609	24.731	320.4	.000	5.76	102.0							0
1	1	15.77	15.77	33.609	24.731	320.4	.003	5.76	102.0	1.3	.32	.0	.01	.06	.00	1
	10 ISL	15.76	15.76	33.606	24.732	320.6	.032	5.89	104.3							10
1	11	15.76	15.76	33.606	24.731	320.7	.035	5.90	104.4	1.3	.31	.1	.00	.06	.01	11
	20 ISL	15.75	15.75	33.606	24.733	320.8	.064	5.89	104.2							20
1	26	15.74	15.74	33.606	24.735	320.8	.083	5.88	104.0	1.3	.32	.0	.00	.06	.01	26
	30 ISL	15.73	15.73	33.605	24.738	320.7	.096	5.85	103.5							30
1	40	15.70	15.70	33.604	24.743	320.5	.128	5.79	102.3	1.5	.32	.0	.00	.06	.01	40
	50 ISL	15.48	15.47	33.595	24.787	316.6	.160	5.82	102.4							50
1	55	15.38	15.37	33.592	24.807	314.9	.175	5.84	102.5	1.4	.31	.0	.00	.07	.01	55
1	64	15.36	15.35	33.597	24.814	314.5	.203	5.83	102.3	1.4	.31	.0	.01	.08	.02	64
1	75	15.34	15.33	33.597	24.819	314.3	.238	5.83	102.3	1.5	.39	.0	.00	.10	.02	75
1	89	15.44	15.43	33.686	24.865	310.4	.281	5.79	101.9	.9	.33	.0	.00	.15	.05	89
	100 ISL	15.75	15.74	33.933	24.987	299.3	.316	5.65	100.1							101
1	105	15.85	15.83	34.029	25.040	294.4	.330	5.58	99.2	1.5	.28	.1	.01	.34	.27	105
1	119	15.56	15.54	34.083	25.147	284.6	.373	5.39	95.2	2.2	.35	1.0	.13	.29	.33	120
	125 ISL	15.20	15.18	34.035	25.188	280.8	.388	5.35	93.9							126
1	144	13.55	13.53	33.797	25.355	265.1	.441	5.23	88.6	4.4	.56	3.9	.05	.16	.18	145
	150 ISL	13.03	13.01	33.740	25.416	259.3	.456	5.18	86.7							151
1	163	11.88	11.86	33.647	25.566	245.1	.489	5.02	82.0	7.5	.85	7.7	.02	.08	.08	164
1	183	10.70	10.68	33.652	25.783	224.5	.536	4.62	73.6	13.0	1.18	13.0	.01			184
	200 ISL	10.06	10.04	33.732	25.955	208.4	.573	4.31	67.8							202
1	203	9.97	9.95	33.748	25.983	205.7	.579	4.26	66.8	18.1	1.47	17.1	.01			204
1	233	9.11	9.08	33.875	26.225	183.1	.637	3.76	57.9	25.6	1.77	22.1	.00			234
	250 ISL	8.65	8.62	33.929	26.339	172.4	.667	3.63	55.4							252
1	273	8.12	8.09	33.983	26.462	160.9	.705	3.48	52.4	33.9	2.01	25.6	.01			274
	300 ISL	7.64	7.61	34.017	26.559	151.9	.748	3.00	44.7							302
1	332	7.20	7.17	34.036	26.636	144.8	.796	2.36	34.8	48.3	2.46	31.8	.01			334
	400 ISL	6.50	6.47	34.090	26.774	132.3	.890	1.46	21.2							403
1	403	6.48	6.44	34.091	26.778	131.9	.893	1.43	20.8	61.7	2.81	36.7	.00			405
1	480	5.81	5.77	34.153	26.912	119.6	.991	.84	12.0	75.0	3.10	39.8	.00			483
	500 ISL	5.67	5.63	34.167	26.941	117.0	1.014	.75	10.6							504
1	550	5.37	5.33	34.199	27.002	111.5	1.072	.62	8.8	84.5	3.18	41.1	.00			554

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 90 120

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 24.5 N	123 59.4 W	05/05/85	1052 GMT	4114 M	340	21 KT			1016 MB	14.0 C	11.0 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.09	16.09	33.662	24.698	323.6	.000	5.74	102.3							0
1	1	16.09	16.09	33.662	24.698	323.6	.003	5.74	102.3	1.7	.36	.1	.00	.06	.01	1
	10 ISL	16.07	16.07	33.662	24.704	323.3	.032	5.85	104.3							10
1	11	16.07	16.07	33.662	24.704	323.3	.035	5.86	104.4	1.8	.35	.1	.00	.05	.01	11
	20 ISL	16.06	16.06	33.662	24.706	323.4	.065	5.84	103.9							20
1	26	16.06	16.06	33.662	24.707	323.5	.084	5.82	103.6	1.7	.35	.1	.00	.05	.01	26
	30 ISL	16.06	16.05	33.661	24.707	323.7	.097	5.80	103.2							30
1	41	16.05	16.04	33.659	24.707	324.0	.132	5.75	102.4	1.7	.36	.1	.00	.06	.00	41
	50 ISL	15.84	15.84	33.642	24.741	321.1	.162	5.79	102.7							50
1	56	15.72	15.71	33.632	24.762	319.2	.180	5.82	102.9	1.7	.34	.1	.00	.07	.01	56
1	67	15.69	15.68	33.632	24.768	319.0	.215	5.81	102.7	1.6	.34	.1	.00	.08	.01	67
	75 ISL	15.65	15.64	33.633	24.779	318.2	.241	5.81	102.6							76
1	77	15.64	15.63	33.633	24.781	318.0	.247	5.81	102.6	1.5	.32	.1	.00	.10	.01	77
1	92	15.54	15.53	33.625	24.797	317.0	.294	5.80	102.2	1.5		.1	.00	.13	.02	92
	100 ISL	15.33	15.31	33.635	24.852	312.0	.321	5.77	101.2							101
1	107	15.15	15.13	33.663	24.914	306.2	.341	5.74	100.3	1.7	.38	.1	.00	.26	.16	107
1	120	14.87	14.85	33.831	25.104	288.6	.382	5.47	95.2	2.6	.39	1.2	.11	.30	.26	121
	125 ISL	14.62	14.60	33.821	25.151	284.3	.395	5.41	93.7							126
1	145	13.20	13.18	33.699	25.349	265.6	.451	5.20	87.4	4.7	.66	4.5	.03	.15	.18	146
	150 ISL	12.93	12.91	33.702	25.406	260.3	.463	5.14	85.8							151
1	165	12.03	12.01	33.719	25.593	242.6	.502	4.91	80.5	8.2	.84	8.3	.01	.07	.09	166
1	184	10.72	10.70	33.668	25.792	223.7	.546	4.64	73.9	12.4	1.09	12.8	.01			185
	200 ISL	10.10	10.08	33.706	25.929	210.8	.580	4.42	69.4							202
1	204	9.98	9.96	33.723	25.963	207.7	.589	4.36	68.4	16.7	1.29	16.4	.00			205
1	234	9.13	9.10	33.896	26.238	181.9	.647	3.98	61.3	23.4	1.56	20.9	.00			235
	250 ISL	8.72	8.69	33.947	26.342	172.2	.675	3.84	58.6							252
1	274	8.20	8.17	33.988	26.454	161.6	.715	3.62	54.6	31.9	1.79	24.8	.00			275
	300 ISL	7.76	7.73	34.011	26.536	154.1	.756	3.24	48.4							302
1	332	7.35	7.32	34.023	26.605	147.8	.805	2.71	40.1	43.9	2.20	30.0	.00			334
	400 ISL	6.61	6.57	34.083	26.754	134.2	.901	1.58	23.0							403
1	406	6.56	6.52	34.088	26.765	133.2	.908	1.50	21.8	58.9	2.66	36.2	.00			408
1	480	5.94	5.90	34.138	26.885	122.4	1.003	.92	13.2	71.0	2.92	39.2	.00			483
	500 ISL	5.80	5.75	34.153	26.914	119.7	1.027	.82	11.7							504
1	554	5.45	5.40	34.194	26.990	112.8	1.091	.65	9.2	81.9	3.09	41.0	.00			558

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 93 26.7

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 57.3 N	117 18.1 W	01/05/85	0744 GMT	62 M	220	03 KT				14.8 C	13.6 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.26	16.26	33.662	24.661	330.7	.000	6.25	111.8							0
1	1	16.26	16.26	33.662	24.661	327.1	.003	6.25	111.8	3.8	.31	.0	.01	.63	.22	1
	10 ISL	14.62	14.62	33.625	24.994	295.6	.031	6.01	103.9							10
1	11	14.45	14.45	33.621	25.029	292.4	.034	5.98	103.1	5.5	.48	.6	.05	2.75	.57	11
	20 ISL	12.76	12.76	33.597	25.354	261.8	.059	5.19	86.4							20
1	21	12.60	12.60	33.595	25.383	258.9	.062	5.08	84.3	10.3	1.01	8.5	.27	1.41	.63	21
	30 ISL	11.26	11.26	33.669	25.693	229.6	.084	3.63	58.6							30
1	31	11.17	11.16	33.678	25.717	227.3	.086	3.51	56.5	17.4	1.49	17.1	.05	.33	.25	31
1	41	10.72	10.72	33.743	25.847	215.2	.108	3.23	51.5	20.2	1.64	19.3	.04	.22	.18	41
	50 ISL	10.35	10.35	33.799	25.956	205.0	.127	3.11	49.2							50
1	51	10.32	10.32	33.804	25.964	204.3	.129	3.10	49.0	23.1	1.80	21.0	.21	.17	.22	51

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 93 29

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 52.4 N	117 27.7 W	01/05/85	1136 GMT	660 M	240	04 KT			1013 MB	15.8 C	13.8 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.80	15.80	33.549	24.678	325.7	.000	5.94	105.2							0
1	1	15.80	15.80	33.549	24.678	325.5	.003	5.94	105.2	1.1	.32	.0	.00	.15	.02	1
	10 ISL	15.70	15.70	33.550	24.701	323.6	.032	6.04	106.8							10
1	11	15.69	15.69	33.550	24.703	323.4	.036	6.05	106.9	1.0	.31	.1	.00	.16	.02	11
	20 ISL	14.77	14.77	33.542	24.898	305.1	.064	6.10	105.7							20
1	21	14.64	14.64	33.541	24.927	302.4	.067	6.10	105.5	2.1	.36	.4	.03	.67	.17	21
	30 ISL	12.82	12.82	33.542	25.299	267.1	.093	5.06	84.3							30
1	31	12.66	12.65	33.545	25.335	263.8	.095	4.94	82.0	8.1	.85	7.2	.26	1.07	.43	31
1	41	11.83	11.83	33.601	25.536	244.9	.120	4.12	67.2	13.0	1.24	13.0	.10	.61	.35	41
	50 ISL	11.16	11.15	33.686	25.726	227.0	.142	3.57	57.5							50
1	51	11.11	11.10	33.693	25.740	225.7	.144	3.54	56.9	17.6	1.48	17.4	.02	.17	.20	51
1	60	10.79	10.78	33.741	25.834	216.8	.163	3.39	54.1	19.7	1.62	18.8	.02	.11	.12	60
1	70	10.50	10.49	33.797	25.929	208.1	.185	3.17	50.3	21.6	1.65	20.2	.01	.04	.08	70
	75 ISL	10.30	10.29	33.818	25.980	203.3	.196	3.15	49.8							76
1	85	9.97	9.96	33.849	26.060	195.9	.215	3.11	48.8	24.4	1.80	22.0	.01	.02	.07	85
1	99	9.81	9.80	33.890	26.120	190.5	.243	3.04	47.6	25.9	1.85	22.7	.00	.02	.05	100
	100 ISL	9.80	9.79	33.892	26.123	190.2	.244	3.04	47.5							101
1	119	9.41	9.40	33.950	26.232	180.1	.280	2.89	44.8	28.5	1.94	24.1	.00	.01	.03	120
	125 ISL	9.35	9.34	33.964	26.254	178.2	.290	2.86	44.3							126
1	144	9.20	9.19	34.014	26.317	172.6	.324	2.70	41.7	31.2	2.04	25.7	.00	.00	.04	145
	150 ISL	9.16	9.14	34.039	26.343	170.3	.334	2.58	39.9							151
1	173	8.98	8.96	34.127	26.441	161.3	.372	2.11	32.5	36.7	2.30	27.6	.00			174
	200 ISL	8.68	8.66	34.159	26.514	154.8	.415	1.89	28.8							202
1	204	8.64	8.62	34.162	26.522	154.1	.421	1.86	28.4	40.4	2.37	29.1	.00			205
1	233	8.52	8.49	34.219	26.587	148.5	.464	1.47	22.4	44.0	2.55	30.4	.00			234
	250 ISL	8.34	8.32	34.231	26.623	145.4	.490	1.34	20.3							252
1	272	8.08	8.06	34.238	26.667	141.4	.522	1.21	18.2	48.9	2.63	33.1	.09			274
	300 ISL	7.84	7.81	34.260	26.722	136.6	.560	1.02	15.3							302
1	333	7.56	7.53	34.284	26.781	131.4	.604	.82	12.2	56.6	2.87	34.5	.02			335
	400 ISL	6.96	6.93	34.291	26.871	123.5	.690	.62	9.1							403
1	406	6.90	6.87	34.292	26.880	122.8	.698	.61	9.0	65.2	3.03	36.7	.00			409
1	481	6.18	6.14	34.321	26.999	111.9	.785	.48	6.9	75.2	3.12	38.9	.00			484
	500 ISL	6.06	6.01	34.325	27.018	110.3	.807	.45	6.5							504
1	555	5.83	5.81					.40	5.7	80.5	3.23	40.0	.01			559

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 93 30

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 51.0 N	117 31.5 W	01/05/85	1550 GMT	878 M	340	06 KT		2	1013 MB	14.2 C	12.6 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	15.99	15.99	33.559	24.642	328.9	.000	6.12	108.8	.8	.26	.2	.00	.15	.02	0
	10 ISL	15.95	15.95	33.556	24.650	328.4	.033	6.21	110.2							10
1	11	15.94	15.94	33.556	24.651	328.4	.036	6.22	110.5	.7	.25	.2	.00	.16	.02	11
	20 ISL	14.63	14.63	33.542	24.928	302.3	.065	6.38	110.4							20
1	21	14.48	14.47	33.541	24.961	299.1	.067	6.40	110.3	1.9	.31	.4	.03	.88	.17	21
	30 ISL	13.31	13.30	33.552	25.212	275.4	.093	5.67	95.5							30
1	31	13.21	13.21	33.555	25.233	273.5	.096	5.59	93.9	6.0	.64	4.6	.22	1.55	.35	31
1	41	12.66	12.65	33.567	25.352	262.3	.122	5.09	84.5	8.7	.83	7.9	.24	1.01	.41	41
	50 ISL	11.74	11.74	33.626	25.572	241.6	.146	4.26	69.4							50
1	51	11.67	11.66	33.632	25.591	239.8	.147	4.19	68.2	14.2	1.22	14.3	.10	.40	.33	51
1	61	11.08	11.07	33.695	25.747	225.2	.171	3.64	58.5	17.8	1.42	17.6	.02	.17	.18	61
1	70	10.63	10.62	33.750	25.869	213.7	.190	3.57	56.8	20.4	1.55	19.5	.02	.07	.11	70
	75 ISL	10.43	10.42	33.779	25.928	208.3	.201	3.50	55.5							76
1	87	10.09	10.09	33.837	26.030	198.8	.225	3.35	52.7	23.9	1.72	21.8	.01	.02	.08	87
	100 ISL	9.88	9.87	33.903	26.119	190.6	.251	3.28	51.3							101
1	101	9.86	9.85	33.909	26.126	189.9	.254	3.27	51.2	25.8	1.80	23.0	.03	.01	.04	102
1	121	9.56	9.55	33.943	26.202	183.0	.291	3.14	48.9	27.9	1.86	24.0	.01	.01	.04	122
	125 ISL	9.52	9.50	33.953	26.218	181.6	.298	3.11	48.4							126
1	146	9.27	9.27				.335	2.88	44.6	31.0	1.94	25.4	.01			147
	150 ISL	9.23	9.21	34.032	26.327	171.8	.342	2.81	43.4							151
1	175	8.95	8.94	34.107	26.429	162.4	.384	2.36	36.3	36.4	2.18	27.7	.01			176
	200 ISL	8.76	8.74	34.132	26.479	158.2	.424	2.22	34.0							202
1	205	8.73	8.71	34.135	26.487	157.5	.431	2.20	33.6	39.7	2.30	28.9	.01			206
1	235	8.57	8.54	34.207	26.569	150.2	.477	1.79	27.3	43.5	2.47	30.4	.01			236
	250 ISL	8.33	8.30	34.222	26.618	145.9	.500	1.59	24.2							252
1	273	7.94	7.91	34.235	26.687	139.5	.533	1.33	20.0	51.0	2.66	32.8	.02			275
	300 ISL	7.67	7.64	34.257	26.743	134.5	.570	1.11	16.6							302
1	333	7.43	7.39	34.279	26.796	129.9	.613	.93	13.8	58.5	2.87	34.9	.01			335
	400 ISL	6.86	6.82	34.289	26.883	122.3	.698	.89	13.1							403
1	407	6.80	6.77	34.290	26.892	121.6	.707	.89	13.0	66.9	3.03	37.1	.01			410
1	481	6.38	6.33	34.326	26.978	114.1	.793	.62	9.0	73.4	3.17	38.4	.00			484
	500 ISL	6.25	6.21	34.332	26.999	112.3	.815	.61	8.8							504
1	554	5.88	5.83	34.341	27.053	107.4	.875	.57	8.2	80.9	3.23	40.0	.00			558

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 93 35

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 40.4 N	117 52.2 W	01/05/85	2318 GMT	582 M	280	11 KT	270 02 05	0		17.5 C	14.1 C	0/8	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.45	16.45	33.522	24.510	343.4	.000	5.88	105.4							0
1	1	16.45	16.45	33.522	24.510	341.5	.003	5.88	105.4	1.3	.31	.2	.00	.08	.01	1
	10 ISL	15.83	15.82	33.518	24.648	328.6	.034	5.92	104.8							10
1	11	15.78	15.78	33.517	24.658	327.6	.037	5.92	104.7	1.2	.30	.2	.00	.08	.01	11
	20 ISL	15.50	15.50	33.511	24.715	322.5	.066	6.03	106.1							20
1	21	15.47	15.46	33.509	24.722	321.9	.069	6.04	106.2	1.2	.30	.2	.00	.10	.01	21
	30 ISL	14.46	14.45	33.475	24.914	303.8	.097	6.19	106.5							30
1	31	14.34	14.34	33.473	24.938	301.6	.100	6.19	106.4	1.1	.30	.1	.00	.17	.04	31
1	41	13.00	12.99	33.470	25.210	276.0	.129	5.90	98.6	3.0	.50	2.6	.18	.98	.25	41
	50 ISL	12.06	12.05	33.468	25.390	259.1	.153	5.10	83.6							50
1	51	11.99	11.99	33.468	25.403	257.8	.155	5.02	82.1	8.6	.85	9.4	.16	.82	.38	51
1	61	11.38	11.37	33.568	25.595	239.7	.180	4.16	67.2	13.7	1.19	13.9	.08	.48	.23	61
1	72	11.16	11.15	33.640	25.690	230.8	.206	3.80	61.1	16.3	1.35	16.3	.04	.28	.18	72
	75 ISL	11.04	11.04	33.671	25.735	226.7	.214	3.69	59.2							76
1	87	10.55	10.54	33.771	25.900	211.2	.239	3.38	53.7	21.0	1.58	19.9	.01	.05	.07	87
	100 ISL	9.84	9.83	33.819	26.059	196.3	.266	3.30	51.7							101
1	102	9.77	9.76	33.823	26.074	194.8	.269	3.30	51.6	24.8	1.68	21.9	.01	.01	.05	102
1	121	9.40	9.39	33.919	26.210	182.3	.307	3.02	46.8	28.1	1.85	23.9	.01	.01	.03	122
	125 ISL	9.34	9.33	33.933	26.231	180.4	.313	2.99	46.3							126
1	146	9.04	9.02	34.002	26.333	171.0	.351	2.81	43.2	31.9	1.96	25.6	.00	.01	.03	147
	150 ISL	9.01	8.99	34.015	26.349	169.7	.357	2.76	42.4							151
1	176	8.78	8.76	34.082	26.438	161.6	.400	2.41	36.9	36.3	2.12	27.5	.00			177
	200 ISL	8.37	8.35	34.101	26.516	154.5	.438	2.24	34.0							202
1	206	8.26	8.24	34.102	26.533	153.0	.447	2.21	33.4	40.8	2.24	29.2	.01			207
1	235	7.84	7.82	34.098	26.593	147.6	.490	2.05	30.7	45.4	2.37	30.8	.00			236
	250 ISL	7.70	7.68	34.110	26.623	145.0	.513	1.91	28.5							252
1	273	7.54	7.51	34.137	26.667	141.1	.546	1.66	24.7	50.2	2.46	32.6	.00			275
	300 ISL	7.34	7.32	34.164	26.716	136.8	.583	1.36	20.2							302
1	322	7.18	7.15	34.184	26.755	133.4	.613	1.14	16.8	57.5	2.65	34.9	.00			324
1	381	6.70	6.67	34.220	26.849	125.0	.689	.78	11.4	65.2	2.92	37.0	.01			393
	400 ISL	6.68	6.65	34.244	26.872	123.2	.713	.68	9.9							403
1	439	6.64	6.60	34.290	26.914	119.8	.760	.51	7.4	69.2	3.05	37.9	.00			442
	500 ISL	6.12	6.07	34.290	26.982	112.2	.831	.37	5.4							504
1	503	6.09	6.04	34.309	27.001	111.8	.834	.37	5.3	77.4	3.15	39.3	.00			506

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 93 40

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 30.6 N	118 13.0 W	02/05/85	0358 GMT	1641 M	310	10 KT				13.6 C	12.3 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.58	14.58	33.513	24.917	302.7	.000	6.11	105.5							0
1	1	14.58	14.58	33.513	24.917	302.7	.003	6.11	105.5	2.0	.37	.2	.02	.30	.06	1
	10 ISL	14.57	14.57	33.513	24.920	302.7	.030	6.21	107.2							10
1	11	14.57	14.57	33.513	24.920	302.7	.033	6.22	107.4	2.2	.34	.2	.05	.28	.06	11
1	20	14.41	14.40	33.510	24.952	299.9	.060	6.30	108.4	2.0	.38	.3	.04	.31	.06	20
1	30	14.04	14.04	33.503	25.023	293.4	.090	6.18	105.6	2.4	.36	.5	.08	.42	.08	30
1	40	13.20	13.20				.118	6.04	101.4	3.8	.51	2.1	.30			40
	50 ISL	12.10	12.09	33.536	25.435	254.7	.145	5.27	86.5							50
1	51	12.02	12.01	33.537	25.451	253.2	.147	5.20	85.2	9.3	.90	7.7	.83	.47	.22	51
1	61	11.29	11.28	33.563	25.607	238.5	.171	4.42	71.3	13.4	1.20	13.3	.11	.35	.16	61
1	69	10.85	10.85	33.661	25.761	224.0	.190	3.75	59.9	17.6	1.43	17.3	.03	.19	.10	69
	75 ISL	10.72	10.72	33.729	25.837	216.9	.204	3.43	54.7							76
1	84	10.65	10.64	33.802	25.906	210.5	.222	3.17	50.5	21.4	1.67	20.2	.03	.06	.08	84
1	99	10.39	10.38	33.869	26.005	201.5	.253	2.95	46.7	24.1	1.78	21.8	.03	.04	.06	99
	100 ISL	10.36	10.35	33.876	26.015	200.6	.256	2.93	46.4							101
1	118	10.02	10.00	33.936	26.121	190.8	.292	2.75	43.2	26.9	1.90	23.5	.01	.03	.06	119
	125 ISL	9.85	9.84	33.944	26.156	187.6	.304	2.77	43.3							126
1	145	9.33	9.32	33.964	26.257	178.3	.341	2.85	44.1	29.6	1.93	24.8	.01	.02	.05	146
	150 ISL	9.24	9.22	33.976	26.281	176.1	.350	2.83	43.8							151
1	174	8.83	8.81	34.033	26.392	166.0	.391	2.69	41.2	33.7	2.04	26.4	.00			175
	200 ISL	8.43	8.41	34.064	26.478	158.1	.433	2.50	38.0							202
1	203	8.39	8.37	34.066	26.486	157.4	.438	2.48	37.6	38.1	2.16	28.3	.01			204
1	234	7.99	7.97	34.086	26.561	150.7	.485	2.24	33.7	42.5	2.29	30.0	.01			235
	250 ISL	7.90	7.87	34.112	26.595	147.7	.509	2.02	30.3							252
1	273	7.78	7.76	34.150	26.642	143.6	.543	1.68	25.1	48.2	2.50	31.9	.01			275
	300 ISL	7.49	7.46	34.170	26.701	138.4	.581	1.39	20.7							302
1	334	7.09	7.05	34.187	26.771	132.0	.627	1.10	16.2	58.7	2.76	35.3	.00			336
	400 ISL	6.66	6.62	34.244	26.875	122.9	.711	.66	9.6							403
1	408	6.62	6.58	34.251	26.886	121.9	.721	.62	9.0	67.9	2.96	37.7	.01			411
1	482	6.10	6.06	34.295	26.989	112.8	.808	.42	6.0	76.8	3.12	39.7	.01			485
	500 ISL	5.98	5.94	34.303	27.010	111.0	.828	.39	5.5							504
1	554	5.66	5.62	34.315	27.059	106.6	.887	.32	4.6	83.6	3.18	41.3	.00			558

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 93 45

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 21.2 N	118 33.0 W	02/05/85	0823 GMT	1350 M	310	12 KT				13.2 C	11.9 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.64	14.64	33.546	24.929	301.5	.000	6.07	105.0							0
1	1	14.64	14.64	33.546	24.929	301.6	.003	6.07	105.0	2.2	.35	.3	.03	.17	.07	1
	10 ISL	14.64	14.64	33.543	24.927	302.1	.030	6.04	104.5							10
1	11	14.64	14.64	33.543	24.927	302.1	.033	6.04	104.5	2.0	.34	.3	.03	.16	.07	11
1	20	14.62	14.62	33.543	24.932	301.8	.060	6.09	105.3	2.0	.34	.3	.03	.16	.07	20
	30 ISL	14.27	14.26	33.542	25.006	295.1	.090	6.00	103.0							30
1	31	14.23	14.22	33.542	25.015	294.3	.093	5.99	102.7	2.8	.39	1.0	.09	.21	.09	31
1	41	13.72	13.72	33.537	25.116	284.9	.122	5.91	100.3	3.9	.48	2.1	.14	.25	.15	41
1	50	12.86	12.85	33.547	25.298	267.8	.146	5.71	95.2	6.2	.63	4.6	.41	.36	.23	50
1	60	11.59	11.58	33.570	25.557	243.2	.172	5.29	85.9	11.3	1.06	10.9	.47	.88	.30	60
1	70	11.00	10.99	33.614	25.698	230.0	.195	4.07	65.2	16.3	1.30	15.7	.07	.25	.12	70
	75 ISL	10.72	10.71	33.645	25.772	223.1	.207	3.78	60.3							76
1	85	10.27	10.26	33.708	25.900	211.1	.228	3.54	55.9	21.2	1.56	20.0	.05	.13	.04	85
1	99	9.69	9.68	33.817	26.082	194.1	.256	3.18	49.6	25.5	1.75	22.9	.03	.03	.02	99
	100 ISL	9.67	9.65	33.827	26.094	192.9	.259	3.15	49.0							101
1	117	9.49	9.48	33.934	26.207	182.6	.292	2.79	43.4	29.0	1.91	24.9	.02	.01	.03	118
	125 ISL	9.47	9.46	33.982	26.248	178.8	.306	2.65	41.2							126
1	143	9.42	9.40	34.083	26.336	170.8	.338	2.41	37.4	32.2	2.05	26.5		.00	.02	144
	150 ISL	9.25	9.23	34.093	26.371	167.6	.349	2.41	37.4							151
1	172	8.63	8.62				.385	2.43	37.1	37.3	2.14	28.1	.02			173
	200 ISL	8.25	8.23	34.106	26.537	152.5	.428	2.19	33.1							202
1	201	8.25	8.23	34.106	26.539	152.4	.430	2.18	33.0	41.4	2.26	29.7	.02			202
1	231	7.87	7.85	34.123	26.608	146.1	.474	1.91	28.6	46.3	2.40	31.4	.01			232
	250 ISL	7.77	7.75	34.170	26.659	141.6	.502	1.60	24.0							252
1	269	7.71	7.68	34.218	26.707	137.4	.529	1.31	19.6	52.0	2.61	33.5	.01			271
	300 ISL	7.44	7.41	34.222	26.749	133.0	.570	1.29	19.2							302
1	331	7.13	7.10	34.226	26.796	129.7	.611	1.27	18.7	59.7	2.80	35.8	.01			333
	400 ISL	6.56	6.53	34.241	26.885	121.9	.698	.72	10.5							403
1	406	6.52	6.48	34.243	26.893	121.1	.706	.67	9.7	69.5	2.98	38.1	.01			409
1	481	6.06	6.02	34.301	26.998	111.9	.792	.48	6.9	77.7	3.08	39.8	.00			484
	500 ISL	5.95	5.91	34.312	27.021	109.8	.814	.45	6.4							504
1	554	5.64	5.59	34.334	27.077	104.9	.872	.40	5.7	85.5	3.18	40.9	.00			558

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 93 50

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 10.8 N	118 53.5 W	03/05/85	0505 GMT	1480 M	310	18 KT				14.0 C	12.5 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	14.10	14.10	33.615	25.098	285.5	.000	6.37	109.0							0
1	1	14.10	14.10	33.615	25.098	285.5	.003	6.37	109.0	5.0	.42	.3	.01	1.80	.28	1
	10 ISL	14.08	14.08	33.615	25.101	285.4	.029	6.40	109.4							10
1	11	14.08	14.08	33.615	25.102	285.4	.031	6.40	109.5	5.0	.41	.4	.01	1.78	.34	11
	20 ISL	14.03	14.03	33.610	25.108	285.1	.057	6.50	111.1							20
1	21	14.03	14.03	33.610	25.108	285.1	.060	6.51	111.3	5.3	.47	.6	.03	1.56	.28	21
1	30	13.16	13.15	33.594	25.274	269.5	.084	5.87	98.5	6.6	.67	3.3	.23	.61	.23	30
1	41	13.03	13.03	33.591	25.297	267.6	.114	5.87	98.2	6.7	.75	3.8	.28	.54	.17	41
	50 ISL	12.90	12.90	33.595	25.325	265.1	.138	5.66	94.4							50
1	51	12.88	12.88	33.595	25.330	264.8	.140	5.63	93.9	7.0	.79	4.5	.37	.29	.13	51
1	61	12.18	12.17	33.563	25.442	254.3	.166	5.10	83.8	9.0	.98	8.2	.50	.16	.10	61
1	71	11.27	11.27				.191	4.43	71.4	13.3	1.27	13.5	.11	.13	.09	71
	75 ISL	11.00	10.99	33.620	25.703	229.7	.201	4.22	67.7							76
1	86	10.50	10.49	33.664	25.825	218.2	.224	3.83	60.8	19.2	1.54	18.1	.04	.08	.08	86
1	100	9.97	9.95	33.754	25.988	203.1	.256	3.41	53.5	23.7	1.79	21.2	.02	.05	.08	101
1	120	9.48	9.47	33.882	26.168	186.2	.295	2.97	46.1	27.9	1.97	24.1	.01	.01	.05	121
	125 ISL	9.39	9.38	33.901	26.197	183.6	.303	2.92	45.2							126
1	145	9.07	9.06	33.962	26.297	174.5	.339	2.75	42.3	31.5	2.07	26.0	.02	.01	.04	146
	150 ISL	9.01	9.00	33.980	26.320	172.3	.348	2.68	41.3							151
1	175	8.67	8.65	34.053	26.432	162.1	.389	2.37	36.2	36.9	2.22	28.1	.00			176
	200 ISL	8.14	8.12	34.067	26.523	153.7	.429	2.29	34.6							202
1	206	8.04	8.02	34.070	26.541	152.1	.438	2.26	34.0	42.2	2.33	29.9	.00			207
1	233	7.96	7.94	34.140	26.608	146.2	.478	1.69	25.4	46.5	2.50	31.9	.00			234
	250 ISL	7.81	7.79	34.155	26.642	143.2	.503	1.54	23.0							252
1	273	7.56	7.54	34.163	26.684	139.5	.536	1.42	21.2	52.0	2.68	33.7	.01			275
	300 ISL	7.29	7.26	34.186	26.742	134.4	.572	1.18	17.4							302
1	332	6.99	6.96	34.213	26.804	128.7	.614	.90	13.2	61.4	2.90	36.5	.00			334
	400 ISL	6.60	6.56	34.248	26.885	121.8	.700	.64	9.3							403
1	406	6.57	6.54	34.250	26.891	121.4	.707	.63	9.2	69.9	3.03	38.0	.00			409
1	479	6.28	6.23	34.276	26.951	116.5	.794	.51	7.4	74.2	3.14	39.9	.00			482
	500 ISL	6.20	6.16	34.282	26.966	115.3	.818	.48	6.9							504

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 93 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 00.4 N	119 14.2 W	03/05/85	0926 GMT	1605 M	310	22 KT			1015 MB	13.8 C	12.5 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	13.47	13.47	33.389	25.052	289.9	.000	6.19	104.4							0
1	1	13.47	13.47	33.389	25.052	289.9	.003	6.19	104.4	2.1	.57	.5	.04	.52	.10	1
	10 ISL	13.47	13.47	33.388	25.052	290.1	.029	6.23	105.2							10
1	11	13.47	13.47	33.388	25.052	290.2	.032	6.24	105.3	2.0	.56	.5	.04	.51	.12	11
	20 ISL	13.45	13.45	33.387	25.055	290.1	.058	6.33	106.8							20
1	21	13.45	13.45	33.387	25.055	290.1	.061	6.34	106.9	2.0	.55	.5	.04	.54	.16	21
1	30	12.96	12.96	33.381	25.147	281.6	.086	6.32	105.5	2.1	.68	1.4	.10	.57	.23	30
1	39	12.68	12.67	33.471	25.273	269.8	.111	5.87	97.5	4.4	.82	3.6	.23	.42	.21	39
1	50	12.59	12.59	33.509	25.319	265.7	.140	5.75	95.3	6.0	.87	5.0	.34	.43	.24	50
1	59	12.39	12.38	33.540	25.383	259.8	.164	5.83	96.2	7.2	.94	6.1	.29	.41	.25	59
1	69	12.19	12.18	33.553	25.432	255.5	.189	5.68	93.4	7.7	1.01	7.1	.32	.37	.36	69
	75 ISL	11.93	11.92	33.574	25.497	249.4	.205	5.27	86.1							76
1	84	11.46	11.45	33.608	25.610	238.8	.226	4.60	74.5	13.4	1.31	12.5	.27	.17	.15	84
1	98	10.53	10.52	33.657	25.815	219.5	.258	3.86	61.3	18.7	1.64	17.6	.03	.09	.10	98
	100 ISL	10.42	10.41	33.668	25.843	217.0	.264	3.78	59.9							101
1	118	9.83	9.81	33.745	26.004	201.9	.302	3.45	53.9	23.3	1.85	21.4	.02	.04	.05	119
	125 ISL	9.68	9.67	33.769	26.047	197.9	.315	3.38	52.7							126
1	142	9.34	9.33	33.834	26.153	188.1	.349	3.26	50.5	27.0	2.08	23.6	.01	.02	.05	143
	150 ISL	9.12	9.10	33.869	26.217	182.1	.363	3.21	49.4							151
1	172	8.52	8.50	33.963	26.384	166.6	.402	3.06	46.5	33.3	2.15	26.3	.01			173
	200 ISL	8.23	8.21	34.018	26.472	158.6	.447	2.87	43.4							202
1	201	8.22	8.20	34.020	26.474	158.4	.448	2.86	43.2	37.1	2.27	27.6	.01			202
1	231	8.17	8.15	34.135	26.573	149.7	.494	1.91	28.8	44.1	2.61	30.8	.01			232
	250 ISL	8.07	8.04	34.161	26.609	146.5	.523	1.66	25.0							252
1	269	7.91	7.88	34.168	26.638	144.0	.551	1.54	23.1	48.4	2.72	32.4	.01			271
	300 ISL	7.55	7.52	34.185	26.704	138.2	.594	1.30	19.3							302
1	328	7.21	7.18	34.197	26.761	132.9	.632	1.11	16.4	58.0	2.95	35.4	.01			330
	400 ISL	6.71	6.67	34.239	26.864	123.9	.725	.79	11.6							403
1	401	6.70	6.66	34.240	26.866	123.8	.726	.79	11.5	66.9	3.14	37.6	.00			404
1	475	6.25	6.21	34.279	26.957	115.9	.814	.50	7.2	75.2	3.28	39.1	.00			478
	500 ISL	6.09	6.05	34.292	26.987	113.2	.843	.48	6.9							504
1	549	5.79	5.74	34.318	27.046	107.9	.898	.43	6.1	82.4	3.36	40.6	.00			553

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 93 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 50.7 N	119 34.6 W	03/05/85	1441 GMT	1829 M	330	26 KT	330 06 05	2	1016 MB	15.0 C	13.2 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.13	15.13	33.464	24.761	317.6	.000	5.85	102.2							0
1	1	15.13	15.13	33.464	24.761	317.6	.003	5.85	102.2	1.8	.68	.1	.00	.08	.01	1
	10 ISL	15.13	15.13	33.462	24.759	318.1	.032	5.84	102.0							10
1	11	15.13	15.13	33.462	24.759	318.1	.035	5.84	102.0	1.7	.69	.1	.00	.08	.01	11
1	20	15.13	15.13	33.463	24.760	318.2	.063	5.92	103.4	1.8	.69	.1	.00	.08	.02	20
1	30	15.14	15.13	33.463	24.760	318.6	.095	5.84	102.0	1.8	.69	.1	.00			30
1	40	15.14	15.14	33.462	24.757	319.1	.127	5.87	102.5	1.7	.67	.1	.00	.08	.01	40
	50 ISL	15.04	15.03	33.455	24.775	317.7	.159	5.86	102.2							50
1	60	14.93	14.93	33.447	24.792	316.4	.190	5.86	101.9	1.7	.67	.1	.00	.16	.05	60
1	65	14.73	14.72	33.436	24.828	313.1	.206	5.86	101.5	1.9	.70	.1	.00	.23	.09	65
1	75	14.03	14.02	33.440	24.979	299.0	.236	5.89	100.5	2.3	.75	.2	.04	.40	.22	75
1	90	12.87	12.86	33.423	25.200	278.1	.279	5.18	86.3	5.6	1.06	5.2	.10	.38	.30	90
	100 ISL	12.60	12.59	33.431	25.260	272.7	.308	5.11	84.7							101
1	110	12.39	12.37	33.453	25.318	267.4	.334	5.08	83.8	6.8	1.18	6.9	.19	.20	.19	110
	125 ISL	11.34	11.33	33.537	25.579	242.8	.373	4.44	71.7							126
1	128	11.10	11.09	33.559	25.639	237.1	.381	4.29	68.9	13.4	1.58	14.0	.01	.08	.08	129
	150 ISL	10.34	10.33	33.643	25.838	218.5	.430	4.00	63.2							151
1	152	10.29	10.27	33.653	25.855	216.9	.435	3.98	62.8	17.8	1.79	17.8	.01	.02	.02	153
1	182	9.39	9.37	33.887	26.187	185.7	.495	3.22	49.9	26.8	2.16	23.5	.01			183
	200 ISL	8.99	8.97	33.950	26.302	175.1	.528	3.09	47.5							202
1	213	8.77	8.75	33.982	26.361	169.6	.550	3.01	46.0	31.7	2.30	25.7	.01			214
1	248	8.52	8.50	34.121	26.509	156.2	.607	2.15	32.7	39.6	2.66	29.3	.00			249
	250 ISL	8.50	8.47	34.127	26.517	155.5	.610	2.11	32.1							252
1	297	7.98	7.95	34.180	26.637	144.7	.681	1.55	23.3	47.6	2.91	32.1	.00			299
	300 ISL	7.95	7.92	34.181	26.642	144.2	.685	1.53	23.0							302
1	351	7.33	7.29	34.188	26.739	135.5	.756	1.26	18.7	55.5	3.10	34.5	.00			353
	400 ISL	6.64	6.60	34.187	26.833	127.3	.821	1.01	14.8							403
1	434	6.23	6.19	34.186	26.886	121.9	.864	.85	12.3	69.6	3.33	38.6	.01			437
	500 ISL	5.97	5.93	34.267	26.983	113.4	.941	.54	7.7							504
1	518	5.94	5.89	34.291	27.006	111.4	.961	.47	6.7	78.4	3.52	40.0	.00			521
1	600	5.47	5.42	34.344	27.106	102.6	1.049	.37	5.3	86.9	3.60	41.7	.00			604

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 93 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 30.8 N	120 15.0 W	03/05/85	2315 GMT	3749 M	330	28 KT	330 10 05	1		15.9 C	13.5 C	3/8	AC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.30	15.29	33.475	24.733	320.4	.000	5.88	103.0							0
1	1	15.30	15.29	33.475	24.733	320.2	.003	5.88	103.0	2.0	.72	.0	.00	.08	.01	1
	10 ISL	15.25	15.25	33.476	24.744	319.5	.032	5.95	104.1							10
1	12	15.24	15.24	33.476	24.746	319.4	.038	5.95	104.1	2.2	.76	.0	.00	.08	.01	12
	20 ISL	15.23	15.23	33.476	24.748	319.4	.064	5.92	103.5							20
1	22	15.23	15.23	33.476	24.749	319.4	.070	5.91	103.4	2.0	.71	.0	.00	.08	.02	22
	30 ISL	15.19	15.18	33.476	24.758	318.8	.096	6.01	105.0							30
1	32	15.18	15.18	33.475	24.759	318.7	.102			2.0	.70	.0	.00	.08	.01	32
1	42	14.76	14.76	33.462	24.840	311.3	.133	6.17	106.9	1.9	.70	.0	.00	.09	.02	42
	50 ISL	14.72	14.71	33.461	24.850	310.6	.159	6.14	106.4							50
1	57	14.68	14.67	33.461	24.858	310.0	.180	6.11	105.7	1.9	.70	.0	.00	.13	.03	57
1	66	14.13	14.12	33.402	24.927	303.6	.207	6.18	105.7	2.1	.70	.0	.01	.28	.09	66
	75 ISL	12.70	12.69	33.368	25.189	278.8	.234	6.15	102.1							76
1	76	12.60	12.59	33.367	25.209	276.8	.236	6.15	101.9	3.3	.88	2.1	.29	.47	.24	76
1	91	11.98	11.97	33.436	25.381	260.8	.276	5.78	94.5	6.1	1.11	5.5	.62	.30	.20	91
	100 ISL	11.44	11.43	33.490	25.522	247.5	.300	5.07	82.1							101
1	110	10.88	10.87	33.556	25.675	233.1	.323	4.31	68.9	14.1	1.59	14.8	.02	.10	.10	110
	125 ISL	10.10	10.08	33.682	25.910	211.0	.357	3.67	57.7							126
1	129	9.91	9.90	33.721	25.970	205.3	.366	3.55	55.6	22.0	1.98	20.9	.01	.02	.03	130
	150 ISL	9.50	9.48	33.917	26.193	184.6	.407	3.08	47.8							151
1	153	9.46	9.45	33.943	26.219	182.1	.412	3.03	47.1	28.0	2.19	23.9	.01	.01	.02	154
1	182	8.98	8.96	33.979	26.326	172.4	.464	2.93	45.0	31.4	2.27	25.7	.01			183
	200 ISL	8.60	8.58	34.009	26.408	164.8	.494	2.84	43.3							202
1	211	8.40	8.38	34.029	26.455	160.5	.512	2.77	42.0	36.3	2.40	27.3	.01			212
1	245	8.17	8.14	34.094	26.542	152.8	.564	2.36	35.6	41.2	2.56	29.2	.00			246
	250 ISL	8.08	8.06	34.093	26.553	151.6	.573	2.31	34.8							252
1	293	7.34	7.31	34.088	26.657	142.2	.636	1.92	28.4	50.2	2.78	32.6	.01			295
	300 ISL	7.24	7.21	34.091	26.674	140.7	.646	1.84	27.2							302
1	347	6.66	6.63	34.125	26.780	131.1	.709	1.27	18.5	60.8	3.04	36.2	.01			349
	400 ISL	6.37	6.33	34.183	26.865	123.6	.777	.82	11.9							403
1	428	6.28	6.24	34.214	26.901	120.5	.811	.66	9.5	70.9	3.28	38.6	.00			431
	500 ISL	5.98	5.93	34.268	26.983	113.5	.895	.45	6.4							504
1	513	5.92	5.88	34.276	26.996	112.3	.910	.43	6.2	78.8	3.41	40.1	.00			516
1	597	5.50	5.45	34.332	27.093	103.8	1.001	.28	4.0	86.4	3.50	41.3	.00			601

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 93 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 10.8 N	120 55.1 W	04/05/85	0456 GMT	3749 M	320	25 KT			1018 MB	14.5 C	11.7 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.22	15.22	33.477	24.751	318.3	.000	5.93	103.7							0
1	1	15.22	15.22	33.477	24.751	318.5	.003	5.93	103.7	1.7	.29	.1	.00	.06	.01	1
	10 ISL	15.25	15.25	33.474	24.743	319.6	.032	5.97	104.5							10
1	11	15.25	15.25	33.474	24.742	319.6	.035	5.97	104.5	1.6	.28	.0	.00	.06	.02	11
1	20	15.23	15.23	33.474	24.746	319.5	.064	5.98	104.6	1.8	.27	.0	.01	.07	.01	20
1	30	15.24	15.24	33.474	24.745	320.0	.095	5.94	104.0	1.6	.28	.0	.01	.06	.01	30
1	40	14.83	14.82	33.470	24.832	312.0	.127	5.96	103.4	1.7	.27	.0	.01	.08	.02	40
	50 ISL	14.76	14.75	33.472	24.848	310.8	.159	5.97	103.5							50
1	54	14.73	14.72	33.473	24.855	310.2	.170	5.98	103.6	1.7	.27	.0	.00	.10	.03	54
1	63	14.32	14.31	33.474	24.943	302.0	.198	5.94	102.0	2.2	.29	.1	.02	.29	.13	63
1	72	13.16	13.15	33.435	25.151	282.3	.224	5.74	96.2	3.8	.43	2.0	.11	.37	.33	72
	75 ISL	12.88	12.87	33.438	25.209	276.9	.233	5.61	93.5							76
1	85	12.26	12.25	33.469	25.354	263.3	.259	5.20	85.6	6.5	.70	6.5	.05	.32	.36	85
	100 ISL	11.22	11.21	33.536	25.599	240.2	.298	4.70	75.7							101
1	104	11.02	11.01	33.553	25.648	235.6	.306	4.60	73.7	11.3	1.00	12.0	.02	.10	.10	104
1	123	10.52	10.51	33.635	25.799	221.5	.352	4.04	64.1	16.1	1.28	16.3	.01	.07	.05	124
	125 ISL	10.47	10.45	33.649	25.820	219.6	.355	3.98	63.0							126
1	144	9.78	9.76	33.817	26.069	196.3	.395	3.29	51.4	23.8	1.64	22.1	.01	.01	.03	145
	150 ISL	9.63	9.62	33.841	26.112	192.3	.406	3.20	49.9							151
1	172	9.20	9.18	33.902	26.230	181.3	.448	3.04	46.9	28.1	1.80	24.4	.00			173
1	198	8.78	8.76	34.005	26.376	167.9	.493	2.79	42.7	32.3	1.92	26.1	.00			199
	200 ISL	8.75	8.73	34.008	26.384	167.2	.496	2.79	42.6							202
1	229	8.27	8.24	34.024	26.471	159.3	.543	2.73	41.3	36.3	2.02	27.5	.00			230
	250 ISL	7.99	7.96	34.058	26.540	153.0	.576	2.51	37.8							252
1	270	7.75	7.72	34.093	26.603	147.3	.607	2.24	33.5	43.5	2.24	30.0	.00			272
	300 ISL	7.44	7.41	34.123	26.671	141.1	.650	1.84	27.3							302
1	317	7.25	7.22	34.136	26.708	137.8	.674	1.61	23.8	51.4	2.48	32.9	.00			319
1	383	6.30	6.27	34.172	26.865	123.2	.759	.95	13.7	64.5	2.79	36.8	.00			385
	400 ISL	6.14	6.11	34.179	26.891	120.9	.780	.84	12.0							403
1	452	5.80	5.76	34.202	26.953	115.4	.842	.59	8.4	76.0	2.99	39.6	.00			455
	500 ISL	5.54	5.50	34.236	27.011	110.3	.896	.45	6.4							504
1	517	5.47	5.43	34.250	27.031	108.6	.914	.42	6.0	82.2	3.07	40.6	.00			520

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 93 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 51.0 N	121 36.3 W	04/05/85	1044 GMT	3840 M	350	30 KT			1017 MB	14.0 C	11.2 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.13	15.13	33.491	24.781	315.6	.000	5.85	102.2							0
1	1	15.13	15.13	33.491	24.781	315.6	.003	5.85	102.2	1.7	.28	.2	.00	.08	.01	1
	10 ISL	15.14	15.14	33.490	24.780	316.1	.032	5.85	102.2							10
1	11	15.14	15.14	33.490	24.779	316.1	.035	5.85	102.2	1.6	.27	.1	.00	.08	.02	11
	20 ISL	15.14	15.13	33.490	24.780	316.3	.063	5.91	103.2							20
1	26	15.13	15.13	33.490	24.781	316.5	.082	5.94	103.7	1.6	.28	.1	.00	.08	.02	26
	30 ISL	15.13	15.13	33.490	24.781	316.6	.095	5.92	103.5							30
1	40	15.14	15.13	33.490	24.780	316.9	.126	5.87	102.5	1.5	.27	.1	.00	.08	.02	40
	50 ISL	15.10	15.09	33.514	24.808	314.6	.158	5.85	102.2							50
1	55	15.08	15.07	33.526	24.822	313.4	.173	5.85	102.1	1.6	.27	.1	.00	.09	.02	55
1	70	15.04	15.03	33.529	24.833	312.8	.220	5.83	101.6	1.8	.27	.1	.00	.12	.04	70
	75 ISL	15.03	15.02	33.530	24.836	312.7	.236	5.84	101.7							76
1	80	15.02	15.01	33.530	24.838	312.7	.251	5.84	101.8	1.7	.27	.1	.00	.18	.07	80
1	94	13.92	13.91	33.427	24.991	298.3	.294	5.81	98.9	2.1	.35	.5	.09	.32	.23	94
	100 ISL	13.45	13.43	33.470	25.122	286.0	.312	5.58	94.1							101
1	113	12.61	12.60	33.589	25.380	261.6	.347	5.07	84.1	5.9	.64	6.1	.05	.18	.25	113
	125 ISL	11.95	11.94	33.597	25.512	249.7	.378	4.88	79.9							126
1	133	11.56	11.54	33.602	25.589	242.1	.399	4.81	78.0	8.8	.86	9.5	.02	.10	.11	134
	150 ISL	10.80	10.79	33.658	25.769	225.1	.438	4.54	72.5							151
1	153	10.66	10.64	33.670	25.803	221.9	.445	4.48	71.3	13.4	1.06	13.5	.01	.04	.04	154
1	173	9.88	9.86	33.705	25.964	206.8	.488	4.02	62.9	19.3	1.35	18.1	.00	.01	.03	174
1	192	9.33	9.31	33.801	26.130	191.3	.525	3.70	57.2	23.7	1.53	21.3	.00			193
	200 ISL	9.15	9.13	33.840	26.189	185.8	.540	3.55	54.7							202
1	213	8.89	8.87	33.897	26.275	177.7	.564	3.34	51.2	28.5	1.71	24.1	.00			214
1	248	8.17	8.14	33.986	26.457	160.9	.623	3.22	48.6	34.8	1.86	26.2	.00			249
	250 ISL	8.13	8.10	33.991	26.467	160.0	.626	3.18	47.9							252
1	297	7.34	7.31	34.040	26.619	145.9	.699	2.28	33.8	47.2	2.22	31.5	.00			299
	300 ISL	7.30	7.27	34.042	26.626	145.3	.703	2.25	33.3							302
1	354	6.63	6.59	34.056	26.730	135.7	.778	1.86	27.1	57.2	2.46	34.8	.00			356
	400 ISL	6.21	6.17	34.088	26.811	128.5	.839	1.40	20.3							403
1	437	5.91	5.87	34.118	26.873	122.9	.886	1.05	15.0	71.6	2.79	38.8	.00			440
	500 ISL	5.33	5.29	34.165	26.980	112.9	.960	.68	9.6							504
1	522	5.16	5.12	34.182	27.014	109.8	.984	.59	8.3	87.0	3.00	41.7	.01			525
	600 ISL	4.89	4.85	34.259	27.106	101.7	1.067	.42	5.9							605
1	605	4.89	4.84	34.264	27.110	101.4	1.072	.42	5.9	95.1	3.12	42.6	.00			609

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 93 100

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 29.9 N	122 15.8 W	04/05/85	1639 GMT	4023 M	340	21 KT	020 11 05	1	1018 MB	15.6 C	12.3 C	5/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	15.59	15.59	33.556	24.730	320.5	.000	5.86	103.3							0
1	1	15.59	15.59	33.556	24.730	320.5	.003	5.86	103.3	1.1	.28	.1	.00	.06	.01	1
	10 ISL	15.59	15.59	33.552	24.728	321.0	.032	5.87	103.5							10
1	11	15.59	15.59	33.552	24.728	321.0	.035	5.87	103.5	1.2	.27	.1	.00	.06	.01	11
	20 ISL	15.58	15.58	33.552	24.730	321.2	.064	5.89	103.9							20
1	25	15.58	15.57	33.551	24.730	321.2	.080	5.90	104.0	.8	.27	.1	.00	.06	.01	25
	30 ISL	15.37	15.36	33.522	24.754	319.1	.096	5.89	103.4							30
1	39	15.00	15.00	33.472	24.796	315.4	.124	5.87	102.2	.7	.28	.1	.00	.09	.02	39
	50 ISL	14.98	14.98	33.472	24.800	315.4	.159	5.88	102.3							50
1	54	14.98	14.97	33.472	24.801	315.4	.171	5.88	102.4	.7	.28	.0	.00	.11	.02	54
1	69	14.95	14.94	33.474	24.808	315.1	.219	5.86	102.0	.7	.28	.1	.00	.14	.04	69
	75 ISL	14.95	14.93	33.473	24.810	315.1	.238	5.86	101.9							76
1	79	14.94	14.93	33.472	24.811	315.1	.250	5.86	101.9	.7	.28	.1	.00	.13	.05	79
1	96	14.81	14.80	33.460	24.830	313.9	.303	5.84	101.3	.9	.30	.1	.00	.28	.14	96
	100 ISL	14.53	14.52	33.468	24.896	307.7	.317	5.76	99.4							101
1	114	13.47	13.46	33.505	25.144	284.2	.357	5.44	91.8	3.0	.48	2.7	.18	.30	.32	114
	125 ISL	12.73	12.72	33.536	25.315	268.2	.389	5.15	85.7							126
1	132	12.27	12.25	33.550	25.416	258.6	.408	4.96	81.7	6.3	.77	7.5	.05	.17	.21	133
	150 ISL	11.03	11.01	33.553	25.647	237.0	.452	4.51	72.3							151
1	153	10.82	10.80	33.553	25.685	233.1	.459	4.43	70.7	12.1	1.17	13.9	.01	.07	.08	154
1	172	10.07	10.05	33.672	25.908	212.2	.501	4.11	64.6	17.0	1.35	17.7	.01	.01	.03	173
1	194	9.47	9.45	33.772	26.085	195.6	.546	3.68	57.1	22.4	1.63	21.4	.00			195
	200 ISL	9.31	9.29	33.802	26.135	191.0	.558	3.55	54.9							202
1	212	9.01	8.99	33.859	26.226	182.3	.580	3.34	51.3	26.8	1.75	24.0	.00			213
1	249	8.43	8.41	33.952	26.390	167.4	.644	3.44	52.2	30.8	1.84	25.1	.00			250
	250 ISL	8.41	8.38	33.954	26.395	166.9	.646	3.44	52.1							252
1	297	7.65	7.62	34.007	26.551	152.6	.722	3.05	45.5	39.4	2.07	28.3	.00			299
	300 ISL	7.61	7.58	34.010	26.559	151.9	.726	3.00	44.7							302
1	352	6.88	6.85	34.056	26.696	139.2	.802	1.95	28.6	54.3	2.47	33.9	.00			354
	400 ISL	6.36	6.32	34.085	26.788	130.7	.866	1.41	20.4							403
1	436	6.03	5.99	34.106	26.847	125.3	.913	1.15	16.5	69.7	2.78	38.5	.01			439
	500 ISL	5.54	5.50	34.166	26.956	115.4	.990	.76	10.7							504
1	519	5.41	5.37	34.185	26.986	112.7	1.011	.67	9.5	82.9	3.04	41.1	.02			522
1	599	4.95	4.90	34.263	27.102	102.1	1.097	.43	6.0	93.8	3.21	42.6	.00			603

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 93 110

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 10.8 N	122 55.5 W	04/05/85	2250 GMT	4023 M	350	20 KT	350 10 08	1	1017 MB	16.0 C	13.0 C	6/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.27	16.27	33.605	24.614	331.7	.000	5.71	102.1							0
1	2	16.27	16.27	33.605	24.614	331.6	.007	5.71	102.1	1.4	.26	.2	.00	.05	.00	2
	10 ISL	16.26	16.25	33.605	24.618	331.5	.033	5.79	103.5							10
1	12	16.25	16.25	33.605	24.618	331.5	.040	5.80	103.7	1.4	.25	.2	.00	.05	.01	12
	20 ISL	16.25	16.25	33.605	24.619	331.8	.066	5.78	103.3							20
1	27	16.25	16.25	33.605	24.619	332.0	.089	5.76	102.9	1.3	.25	.1	.00	.05	.00	27
	30 ISL	16.24	16.24	33.605	24.621	331.9	.100	5.76	102.8							30
1	42	16.17	16.16	33.601	24.636	330.8	.139	5.74	102.4	1.3	.25	.1	.00	.06	.01	42
	50 ISL	16.06	16.05	33.595	24.656	329.1	.166	5.76	102.6							50
1	57	15.97	15.97	33.592	24.674	327.7	.188	5.78	102.7	1.1	.24	.1	.00	.06	.01	57
1	72	15.93	15.92	33.597	24.688	326.8	.237	5.77	102.4	1.1	.24	.1	.00	.07	.01	72
	75 ISL	15.86	15.85	33.594	24.700	325.7	.248	5.79	102.7							76
1	81	15.71	15.70	33.586	24.728	323.2	.266	5.83	103.1	1.1	.24	.1	.00	.11	.02	81
1	96	15.20	15.18	33.569	24.830	313.9	.314	5.76	100.8	1.3	.25	.1	.00	.18	.11	96
	100 ISL	14.92	14.90	33.570	24.892	309.7	.327	5.67	98.5							101
1	115	13.98	13.96	33.574	25.094	289.2	.371	5.33	90.9	2.9	.46	2.4	.09	.27	.26	115
	125 ISL	13.70	13.68	33.664	25.222	277.3	.400	5.26	89.3							126
1	135	13.36	13.34	33.742	25.351	265.1	.429	5.15	86.8	4.2	.52	4.4	.02	.15	.21	136
	150 ISL	12.05	12.03	33.704	25.576	243.8	.466	4.63	76.0							151
1	155	11.57	11.55	33.687	25.654	236.5	.478	4.42	71.8	10.7	.96	11.8	.00	.17	.23	156
1	175	10.86	10.83	33.746	25.829	220.0	.524	3.88	62.0	15.7	1.25	16.4	.00	.08	.16	176
1	195	10.22	10.20	33.813	25.992	204.8	.566	3.64	57.4	20.0	1.42	19.2	.00			196
	200 ISL	10.09	10.07	33.838	26.033	201.0	.576	3.54	55.6							202
1	215	9.74	9.71	33.911	26.150	190.0	.605	3.22	50.3	24.9	1.64	22.4	.00			216
1	249	9.13	9.10	34.004	26.322	174.2	.667	2.93	45.2	30.2	1.83	25.1	.00			250
	250 ISL	9.10	9.08	34.006	26.328	173.7	.669	2.92	45.0							252
1	298	8.14	8.10	34.063	26.523	155.5	.749	2.55	38.5	39.2	2.04	28.6	.00			300
	300 ISL	8.12	8.09	34.067	26.529	155.1	.751	2.52	38.0							302
1	353	7.63	7.59	34.159	26.673	141.9	.830	1.56	23.3	49.7	2.42	32.6	.00			355
	400 ISL	7.14	7.10	34.199	26.775	132.8	.894	1.06	15.6							403
1	436	6.75	6.71	34.211	26.837	127.2	.942	.83	12.1	63.0	2.75	36.9	.00			439
	500 ISL	6.14	6.10	34.205	26.913	120.5	1.020	.66	9.5							504
1	521	5.98	5.93	34.203	26.932	118.5	1.045	.63	9.0	74.1	2.89	39.6	.00			524
	600 ISL	5.71	5.65	34.318	27.057	107.5	1.135	.30	4.3							605
1	604	5.70	5.65	34.327	27.065	106.8	1.139	.28	4.0	82.7	3.06	41.1	.00			606

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 93 120

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
29 50.9 N	123 35.2 W	05/05/85	0438 GMT	4114 M	360	18 KT			1017 MB	14.5 C	11.6 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.24	16.24	33.594	24.612	331.7	.000	5.75	102.7							0
1	1	16.24	16.24	33.594	24.612	331.8	.003	5.75	102.7	1.7	.34	.0	.00	.05	.00	1
	10 ISL	16.26	16.26	33.595	24.608	332.4	.033	5.84	104.4							10
1	12	16.27	16.26	33.595	24.608	332.5	.040	5.85	104.6	1.5	.33	.0	.00	.05	.01	12
	20 ISL	16.26	16.26	33.595	24.610	332.6	.066	5.82	104.0							20
1	25	16.25	16.25	33.595	24.611	332.6	.083	5.78	103.3	1.6	.32	.0	.00	.05	.01	25
	30 ISL	16.25	16.25	33.595	24.612	332.8	.100	5.76	102.9							30
1	41	16.25	16.24	33.594	24.612	333.1	.136	5.73	102.4	1.4	.32	.0	.00	.05	.01	41
	50 ISL	16.21	16.20	33.591	24.619	332.6	.166	5.74	102.5							50
1	55	16.18	16.17	33.589	24.625	332.3	.182	5.75	102.6	1.4	.31	.0	.00	.06	.01	55
1	66	16.14	16.13	33.587	24.633	331.9	.219	5.74	102.3	1.3	.30	.0	.00	.06	.01	66
1	75	16.00	15.98	33.579	24.659	329.6	.248	5.77	102.6	1.4	.31	.0	.00	.07	.02	75
1	89	15.71	15.70	33.587	24.729	323.4	.294	5.78	102.2	1.3	.30	.0	.00	.14	.04	89
	100 ISL	15.46	15.45	33.560	24.765	320.3	.330	5.80	102.1							101
1	104	15.40	15.38	33.551	24.773	319.6	.342	5.81	102.0	1.4	.31	.0	.00	.17	.07	104
1	119	15.33	15.31	33.549	24.786	318.8	.389	5.80	101.7	1.2	.29	.0	.00	.19	.11	119
	125 ISL	15.18	15.16	33.583	24.845	313.4	.410	5.70	99.7							126
1	143	14.44	14.42	33.679	25.079	291.5	.466	5.32	91.7	3.1	.45	1.9	.10	.18	.10	144
	150 ISL	14.06	14.04	33.677	25.158	283.6	.485	5.19	88.7							151
1	162	13.25	13.23	33.674	25.321	268.8	.519	4.96	83.4	5.8	.67	5.4	.03	.12	.13	163
1	184	11.71	11.68	33.614	25.572	244.9	.575	4.68	76.2	9.5	.94	10.0	.01			185
	200 ISL	10.96	10.94	33.700	25.775	225.8	.612	4.10	65.6							202
1	205	10.77	10.75	33.738	25.839	219.8	.623	3.89	62.1	16.5	1.37	16.5	.00			206
1	234	9.95	9.93	33.907	26.112	194.2	.683	3.17	49.7	24.2	1.74	22.0	.00			235
	250 ISL	9.53	9.51	33.982	26.240	182.2	.713	2.93	45.6							252
1	275	8.95	8.92	34.064	26.398	167.4	.756	2.69	41.3	33.0	2.02	26.2	.00			276
	300 ISL	8.39	8.36	34.067	26.488	158.4	.798	2.59	39.2							302
1	334	7.79	7.75	34.070	26.580	150.6	.851	2.41	36.1	42.9	2.26	29.9	.00			336
	400 ISL	7.35	7.31	34.200	26.745	135.8	.945	1.19	17.6							403
1	408	7.33	7.29	34.215	26.761	134.4	.955	1.04	15.4	56.1	2.75	34.6	.00			410
1	481	6.75	6.71	34.256	26.872	124.4	1.050	.64	9.4	66.0	2.96	37.3	.00			484
	500 ISL	6.58	6.53	34.265	26.903	121.7	1.073	.56	8.2							504
1	552	6.03	5.99	34.283	26.988	113.7	1.134	.39	5.6	77.4	3.12	39.7	.00			555

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 80.8 47.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 26.8 N	120 08.9 W	16/05/85	1724 GMT	58 M	180	06 KT	260 01	2	1018 MB	14.8 C	10.9 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	14.37	14.37	33.712	25.115	284.1	.028	7.67	132.1	.3	.15	.2	.01	2.24	.16	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 80.8 50.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 20.7 N	120 21.6 W	16/05/85	1543 GMT	282 M	190	10 KT	250 03 12	1	1017 MB	14.1 C	11.6 C	7/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	12.98	12.98	33.785	25.457	251.6	.025	6.82	114.2	3.6	.41	1.0	.05	9.07	1.31	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 80.8 55.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 10.7 N	120 42.2 W	16/05/85	1259 GMT	706 M	180	12 KT	300 03 10	2	1016 MB	14.0 C	11.0 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	12.64	12.64	33.492	25.296	266.8	.027	6.23	103.4	2.3	.67	4.2	.40	.69	.14	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 80.8 60.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 00.8 N	121 03.1 W	16/05/85	1025 GMT	1124 M	170	09 KT			1015 MB	14.2 C	10.8 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	13.48	13.48	33.338	25.010	294.1	.029	6.19	104.4	2.3	.44	.4	.03	.47	.12	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 81.7 44.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 23.3 N	119 50.1 W	15/05/85	2226 GMT	53 M	120	10 KT	290 03 07	1	1013 MB	16.4 C	13.5 C	7/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	13.28	13.28	33.718	25.345	262.2	.026	7.42	124.9	1.5	.31	.1	.02	8.10	.50	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 81.7 50.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 11.3 N	120 15.2 W	16/05/85	0337 GMT	484 M	170	09 KT			1014 MB	14.1 C	12.1 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	11.35	11.35	33.899	25.856	213.6	.021	6.02	97.4	13.0	.93	8.1	.16	16.94	2.66	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 81.7 55.1

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 01.1 N	120 36.1 W	16/05/85	0637 GMT	903 M	190	12 KT			1015 MB	14.1 C	11.2 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	12.33	12.33	33.542	25.395	257.5	.026	6.18	101.9	4.6	.88	6.8	.18	.91	.31	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 81.7 60.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 51.2 N	120 56.8 W	16/05/85	0903 GMT	2560 M	160	07 KT			1015 MB	14.3 C	11.0 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	13.98	13.97	33.292	24.873	307.1	.031	6.05	103.1	2.1	.43	.2	.00	.30	.07	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 82.5 40.5

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 22.0 N	119 29.9 W	15/05/85	2039 GMT	22 M	160	10 KT	160 01 03	2	1013 MB	17.3 C	14.2 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	12.60	12.60	33.751	25.505	247.0	.025	5.74	95.3	2.6	.52	.8	.04	26.27	.61	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 82.5 43.9

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 15.2 N	119 44.3 W	15/05/85	1829 GMT	208 M	130	12 KT	130 03 02	2	1013 MB	16 0 C	13.1 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	13.24	13.24	33.755	25.382	258.8	.026	6.73	113.3	3.3	.37	1.5	.08	9.20	1.13	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 82.5 50.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 03.0 N	120 09.5 W	15/05/85	1535 GMT	37 M	120	12 KT	310 02 04	2	1012 MB	13.4 C	11.7 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	11.59	11.59	33.802	25.735	225.1	.023	5.81	94.5	14.4	1.03	9.5	.25	10.67	.27	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 82.5 55.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 53.0 N	120 30.3 W	15/05/85	1300 GMT	1216 M	350	09 KT	090 05 05	2	1011 MB	11.2 C	10.5 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	12.05	12.04	33.760	25.618	236.3	.024	6.42	105.4	7.2	.79	6.4	.26	8.27	2.01	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 82.5 60.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 42.7 N	120 51.0 W	15/05/85	1007 GMT	1201 M	330	20 KT			1011 MB	13.2 C	11.4 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	12.90	12.90	33.370	25.150	280.7	.028	6.17	102.9	2.7	.61	2.5	.12	.58	.09	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 83.3 65.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 24.7 N	121 06.0 W	13/05/85	2242 GMT	3474 M	340	19 KT	340 08 06	1	1017 MB	15.0 C	12.8 C	6/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	13.39	13.38	33.354	25.042	291.1	.029	6.12	103.1	2.6	.53	1.8	.06	.53	.06	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 84.1 40.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 06.4 N	119 16.6 W	14/05/85	2120 GMT	59 M	190	04 KT	290 01	4	1013 MB	15.6 C	13.7 C	7/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	13.55	13.55	33.725	25.295	267.0	.027	7.24	122.6	1.9	.35	.2	.02	10.14	.95	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 84.1 45.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 56.4 N	119 37.4 W	14/05/85	2349 GMT	534 M	250	08 KT	300 01	4	1012 MB	15.6 C	14.0 C	7/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	14.24	14.23	33.640	25.088	286.7	.029	6.88	118.1	.3	.28	.1	.01	4.26	.11	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 84.1 50.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 46.4 N	119 58.2 W	15/05/85	0227 GMT	762 M	300	14 KT	300 02 07	0	1011 MB	15.0 C	12.5 C	0/8	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	12.79	12.79	33.716	25.440	253.1	.025	6.32	105.3	11.3	.73	5.8	.17	3.84	.53	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 84.1 55.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 36.4 N	120 18.8 W	15/05/85	0509 GMT	1251 M	330	20 KT			1012 MB	13.4 C	11.1 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	13.23	13.23	33.584	25.251	271.2	.027	6.22	104.5	2.5	.66	3.9	.19	4.01	.56	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 84.1 60.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 26.4 N	120 39.4 W	15/05/85	0750 GMT	1340 M	320	20 KT			1012 MB	13.2 C	11.8 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	13.50	13.50	33.534	25.157	280.1	.028	6.21	104.9	2.5	.53	2.3	.14	.64	.13	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 85 38.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 01.0 N	119 02.0 W	11/05/85	2220 GMT	196 M	300	13 KT	300 02	1	1017 MB	15.3 C	12.2 C	1/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	12.31	12.31	33.724	25.540	243.7	.024	5.06	83.5	12.6	1.07	9.5	.31	1.55	.96	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 85 45.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 46.9 N	119 31.2 W	11/05/85	1827 GMT	1910 M	310	08 KT	300 03 04	1	1018 MB	16.0 C	12.9 C	1/8	CC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	13.39	13.39	33.618	25.245	271.7	.027	5.91	99.7	5.6	.65	3.6	.14	2.05	.30	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 85 50.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 37.0 N	119 51.8 W	11/05/85	1544 GMT	289 M	310	23 KT	320 05 04	1	1018 MB	13.2 C	11.0 C	4/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	12.93	12.93	33.674	25.381	258.8	.026	5.86	97.9	11.3	.81	5.5	.12	1.89	.43	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 85 55.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 27.0 N	120 12.5 W	11/05/85	1302 GMT	667 M	320	23 KT	310 05 05	1	1017 MB	12.1 C	9.9 C	3/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	12.87	12.87	33.584	25.322	264.4	.026	6.20	103.4	2.6	.66	4.0	.19	1.07	.18	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 85 60.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 17.1 N	120 33.1 W	11/05/85	1010 GMT	1423 M	330	20 KT			1018 MB	13.0 C	10.4 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	13.61	13.61	33.492	25.103	285.3	.029	6.12	103.6	3.7	.52	1.8	.08	.32	.06	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 85.8 34.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
34 00.6 N	118 39.9 W	10/05/85	1837 GMT	57 M	260	06 KT	250 01 04	1	1018 MB	16.0 C	12.1 C	1/8	AC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	13.75	13.75	33.652	25.199	276.1	.028	6.38	108.4	4.0	.37	1.3	.10	2.04	.48	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 85.8 40.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 48.7 N	119 04.8 W	10/05/85	2203 GMT	883 M	270	20 KT	270 05 04	1	1018 MB	16.1 C	12.7 C	1/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	13.90	13.90	33.664	25.177	278.2	.028	6.65	113.4	3.2	.43	.4	.03	4.81	.19	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 85.8 45.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 38.8 N	119 25.6 W	11/05/85	0055 GMT	1646 M	290	30 KT	290 10 08	1	1017 MB	13.8 C	11.6 C	1/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	14.17	14.17	33.602	25.073	288.1	.029	6.04	103.5	5.9	.52	1.9	.07	.80	.21	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 85.8 50.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 28.6 N	119 46.2 W	11/05/85	0344 GMT	245 M	300	26 KT			1017 MB	13.8 C	11.5 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	13.70	13.70	33.655	25.210	275.1	.028	6.02	102.2	10.0	.62	3.4	.09	.77	.24	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 85.8 55.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 18.6 N	120 06.8 W	11/05/85	0625 GMT	1123 M	330	15 KT			1018 MB	13.6 C	12.0 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	12.81	12.80	33.606	25.352	261.6	.026	6.55	109.1	1.8	.63	3.9	.24	2.85	.08	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 85.8 60.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 08.7 N	120 27.5 W	11/05/85	0859 GMT	1253 M	310	22 KT			1018 MB	13.7 C	11.9 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	13.72	13.72	33.464	25.060	289.4	.029	6.21	105.4	2.8	.46	.9	.05	.60	.06	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 86.7 65.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 49.2 N	120 41.5 W	13/05/85	0414 GMT	3658 M	320	17 KT			1017 MB	13.6 C	11.5 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	13.35	13.35	33.477	25.144	281.4	.028	6.26	105.4	2.4	.65	1.9	.11	.96	.33	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 87.5 33.4

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 44.2 N	118 25.8 W	10/05/85	1613 GMT	216 M	270	10 KT	270 04 05	1	1017 MB	15.0 C	11.4 C	6/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	11.69	11.69	33.650	25.599	238.0	.024	3.86	62.8	14.7	1.47	12.2	.38	.45	.16	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 87.5 40.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 31.2 N	118 52.9 W	10/05/85	1244 GMT	914 M	300	20 KT	290 04 04	1	1015 MB	13.4 C	11.0 C	7/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	14.12	14.12	33.630	25.105	285.1	.029	6.35	108.7	1.5	.26	.4	.03	2.92	.21	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 87.5 45.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 21.2 N	119 13.6 W	10/05/85	0948 GMT	1055 M	280	21 KT			1016 MB	12.6 C	10.7 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	12.97	12.97	33.659	25.361	260.8	.026	5.93	99.2	10.4	.61	4.9	.15	1.47	.43	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 87.5 50.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 11.0 N	119 34.2 W	10/05/85	0641 GMT	461 M	300	18 KT			1016 MB	13.2 C	11.1 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	12.40	12.40	33.639	25.457	251.5	.025	5.84	96.5	9.3	.83	7.8	.30	.63	.34	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 87.5 55.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 01.1 N	119 54.8 W	10/05/85	0410 GMT	1040 M	290	15 KT			1016 MB	13.7 C	11.8 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	13.92	13.92	33.451	25.007	294.4	.029	6.30	107.3	2.5	.35	.6	.03	.42	.06	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 88.3 33.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 36.7 N	118 18.4 W	09/05/85	1359 GMT	470 M	270	11 KT	270 01 02	1	1014 MB	15.2 C	12.8 C	6/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10			33.649				6.52		3.1	.30	.8	.05	2.25	.46	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 88.3 35.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 32.7 N	118 26.7 W	09/05/85	1517 GMT	900 M	270	09 KT	270 01 02	1	1014 MB	15.8 C	13.1 C	6/8	AC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	14.76	14.76	33.634	24.972	297.7	.030	6.57	114.0	2.6	.23	.1	.01	1.49	.28	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 88.3 40.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 22.7 N	118 47.1 W	09/05/85	1758 GMT	1317 M	270	10 KT	280 02 04	1	1015 MB	17.0 C	13.8 C	5/8	AC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	14.72	14.71	33.541	24.909	303.7	.030	6.14	106.4	2.5	.27	.2	.02	.24	.05	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 88.3 45.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 12.7 N	119 08.1 W	09/05/85	2146 GMT	1178 M	300	20 KT	290 04 05	1	1015 MB	16.8 C	12.4 C	1/8	CC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	14.84	14.84	33.577	24.911	303.6	.030	6.12	106.3	3.7	.27	.2	.00	.28	.05	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 88.3 50.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 02.7 N	119 28.7 W	10/05/85	0025 GMT	750 M	300	18 KT	300 05 05	1	1015 MB	14.1 C	11.5 C	2/8	AS

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	13.29	13.29	33.650	25.290	267.5	.027	6.08	102.4	10.4	.66	5.0	.16	1.16	.40	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 88.3 55.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 52.7 N	119 49.1 W	10/05/85	0258 GMT	1148 M	310	15 KT	310 06 06	1	1015 MB	14.6 C	11.9 C	4/8	AS

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	13.72	13.71	33.475	25.069	288.6	.029	6.19	105.0	3.6	.41	1.6	.06	.44	.08	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 89.1 30.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 34.4 N	118 00.5 W	09/05/85	1215 GMT	79 M	280	07 KT			1014 MB	14.0 C	12.3 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	14.96	14.96	33.622	24.919	302.8	.030	6.15	107.1	2.7	.34	.6	.05	2.88	.37	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 89.1 35.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 24.4 N	118 21.2 W	09/05/85	0935 GMT	168 M	310	08 KT			1015 MB	13.4 C	12.5 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	14.67	14.67	33.591	24.957	299.1	.030	6.15	106.5	5.9	.36	1.0	.06	.99	.17	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 89.1 40.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 14.4 N	118 41.8 W	09/05/85	0603 GMT	1221 M	300	09 KT			1016 MB	13.6 C	11.9 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	15.13	15.13	33.554	24.831	311.2	.031	6.00	104.8	2.2	.26	.1	.00	.13	.05	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 89.1 45.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 04.5 N	119 02.4 W	09/05/85	0330 GMT	1755 M	320	16 KT			1015 MB	13.8 C	11.3 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	15.11	15.11	33.535	24.820	312.3	.031	6.02	105.1	2.7	.27	.1	.00	.19	.06	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 89.1 50.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 54.6 N	119 23.0 W	09/05/85	0056 GMT	216 M	320	18 KT	350 03 08	2	1016 MB	14.2 C	11.2 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	13.35	13.34	33.589	25.232	273.0	.027	6.25	105.3	7.6	.58	4.1	.17	.96	.36	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 90 40.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 05.1 N	118 35.6 W	07/05/85	1633 GMT	1633 M	250	10 KT	290 02 03	2	1018 MB	15.1 C	11.0 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	15.02	15.02	33.551	24.852	309.2	.031	6.06	105.6	1.3	.29	.1	.00	.56	.12	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 90 50.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 45.2 N	119 16.6 W	07/05/85	0910 GMT	910 M	310	06 KT			1016 MB	14.1 C	10.5 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	13.07	13.07	33.576	25.277	268.7	.027	6.17	103.4	7.4	.64	4.6	.21	.40	.30	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 90 65.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 15.2 N	120 18.0 W	05/05/85	2244 GMT	2239 M	330	07 KT	320 03 10	1	1016 MB	15.6 C	11.8 C	3/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	13.11	13.11	33.383	25.120	283.7	.028	6.27	105.0	1.2	.40	1.3	.07	.83	.18	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 90.8 27.5

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 21.8 N	117 38.7 W	08/05/85	0646 GMT	646 M	010	06 KT			1018 MB	14.4 C	11.9 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	14.39	14.39	33.580	25.008	294.3	.029	6.32	108.8	3.3		.2	.00	1.43	.47	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 90.8 30.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 16.8 N	117 49.0 W	08/05/85	0808 GMT	808 M	260	09 KT			1018 MB	14.8 C	11.6 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	15.52	15.52	33.562	24.751	318.8	.032	6.03	106.2	1.5		.1	.00	.25	.07	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 90.8 35.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 06.8 N	118 09.7 W	08/05/85	1100 GMT	1100 M	310	08 KT			1018 MB	14.6 C	11.3 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	15.10	15.10	33.560	24.842	310.2	.031	6.04	105.5	2.2		.1	.00	.18	.04	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 90.8 40.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 56.8 N	118 30.0 W	08/05/85	1340 GMT	77 M	310	05 KT	360 01	2	1016 MB	14.4 C	11.1 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	15.18	15.18	33.558	24.823	311.9	.031	6.18	108.1	1.0		.1	.00	.96	.09	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 90.8 45.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 46.8 N	118 50.5 W	08/05/85	1748 GMT	1467 M	320	12 KT	310 02 03	1	1019 MB	17.0 C	13.0 C	6/8	CI

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	14.21	14.21	33.606	25.066	288.8	.029	6.15	105.5	5.6		1.4	.07	.59	.15	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 90.8 50.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 36.8 N	119 11.2 W	08/05/85	2234 GMT	205 M	310	12 KT	300 01 05	1	1018 MB	15.7 C	12.0 C	7/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	13.49	13.49	33.546	25.169	279.0	.028	6.23	105.3	6.2	.52	3.3	.14	.71	.15	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 91.7 27.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 13.3 N	117 30.4 W	30/04/85	0303 GMT	159 M	320	14 KT	300 02	1	1018 MB	14.4 C	13.0 C	7/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	15.71	15.71	33.603	24.739	320.0	.032	6.11	108.0	3.3	.46	.0	.00	.30	.09	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 91.7 30.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 07.3 N	117 42.7 W	30/04/85	0443 GMT	820 M	330	10 KT			1018 MB	14.1 C	13.0 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	15.80	15.80	33.550	24.679	325.6	.033	5.95	105.4	1.7	.42	.0	.01	.11	.02	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 91.7 35.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 57.5 N	118 03.2 W	30/04/85	0723 GMT	927 M	330	10 KT			1017 MB	13.6 C	12.2 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	15.33	15.33	33.531	24.768	317.2	.032	5.99	105.1	1.2	.43	.0	.00	.11	.03	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 91.7 40.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 47.4 N	118 23.8 W	30/04/85	1018 GMT	86 M	290	13 KT			1016 MB	13.2 C	11.8 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	15.39	15.38	33.547	24.769	317.1	.032	5.95	104.5	1.1	.53	.0	.00	.15	.03	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 91.7 45.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 37.5 N	118 44.3 W	30/04/85	1314 GMT	990 M	330	15 KT	320 03 05	1	1016 MB	13.0 C	11.5 C	7/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	14.62	14.62	33.549	24.937	301.1	.030	5.99	103.6	1.9	.50	.1	.04	.19	.07	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 91.7 50.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 27.5 N	119 04.7 W	30/04/85	1600 GMT	91 M	340	14 KT	310 04 05	2	1017 MB	13.1 C	11.8 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 92.5 35.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 49.1 N	117 57.8 W	01/05/85	0153 GMT	615 M	300	17 KT	320 04 05	1	1012 MB	15.6 C	14.4 C	1/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	15.48	15.48	33.538	24.740	319.8	.032	6.01	105.7	1.1	.48	.0	.00	.23	.03	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION [illegible]

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 39.1 N	118 18.3 W	30/04/85	2311 GMT	1313 M	290	16 KT	310 04 05	1	1014 MB	15.3 C	12.1 C	7/8	AS

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	14.97	14.96	33.533	24.849	309.4	.031	6.07	105.7	1.8	.32	.1	.01	.33	.06	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 92.5 45.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 29.1 N	118 38.8 W	30/04/85	2034 GMT	878 M	300	15 KT	310 04 05	1	1016 MB	15.2 C	13.1 C	7/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	14.54	14.54	33.558	24.960	298.9	.030	5.98	103.2	2.2	.47	.4	.05	.20	.05	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 92.5 50.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 19.2 N	118 59.1 W	30/04/85	1708 GMT	778 M	320	15 KT	310 04 05	2	1017 MB	13.4 C	11.8 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	13.64	13.64	33.613	25.190	277.0	.028	6.33	107.3	6.5	.65	1.0	.08	2.48	.33	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 93.3 65.0

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 40.8 N	119 54.5 W	03/05/85	1843 GMT	1843 M	330	30 KT	330 07 06	1	1018 MB	16.8 C	13.9 C	1/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	10	15.25	15.25	33.467	24.737	320.1	.032	5.84	102.2	2.2	.67	.1	.01	.07	.01	10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 80 51

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
34°27.0'N	120°31.7'W	05/16/85	1930 GMT	5 m	1154 - 1920 PST	1154 PST	1920 PST	2337.0 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
1	13.50	33.750	25.324	7.27	123.0	1.2	0.28	0.3	0.02	8.52	0.75	93	90.3	149.7	120.0	1.1
5*	13.43	33.747	25.337	7.26	122.7	1.3	0.33	0.3	0.02	8.61	1.01	34*	306.6	286.2	296.4	1.5
5*	13.43	33.747	25.337	7.26	122.7	1.3	0.33	0.3	0.02	8.61	1.01	28*	169.6	177.4	173.5	1.6
7	13.31	33.745	25.360	7.17	120.8	1.4	0.27	0.3	0.02	9.73	1.35	15	251.8	241.7	246.7	1.8
12	13.24	33.745	25.374	6.99	117.6	1.4	0.29	0.3	0.02	9.66	1.79	3	74.5	77.7	76.1	2.8
17	13.07	33.752	25.413	6.79	113.9	2.9	0.36	2.3	0.05	9.66	1.19	0.75	10.4	12.1	11.3	1.1

* Depths of 28% and 34% transmission too close for separate samples; both drawn from 5 m bottle.

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 80 90

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33°09.4'N	123°13.5'W	05/17/85	1857 GMT	25 m	1142 - 1934 PST	1142 PST	1934 PST	166.4 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
2	14.76	33.337	24.743	5.95	103.0	2.1	0.39	0.1	0.00	0.10	0.02	93	0.72	0.74	0.73	0.26
19	14.74	33.336	24.747	5.94	102.8	2.0	0.39	0.1	0.00	0.10	0.01	34	2.9	2.8	2.8	0.23
22	14.72	33.334	24.750	5.95	103.0	1.9	0.39	0.1	0.00	0.09	0.02	28	2.8	2.6	2.7	0.27
32	14.69	33.326	24.750	5.96	103.1	2.0	0.39	0.1	0.00	0.10	0.01	15	2.9	3.1	3.0	0.26
58	13.91	33.259	24.864	6.12	104.1	2.0	0.39	0.1	0.00	0.19	0.05	3	1.8	1.9	1.9	0.24
81	12.80	33.259	25.086	5.98	99.4	2.7	0.48	0.6	0.21	0.50	0.28	0.75	1.1	1.0	1.1	0.19

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 82.5 43.9

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
34°15.1'N	119°44.2'W	05/15/85	1844 GMT	5 m	1154 - 1922 PST	1154 PST	1923 PST	1734.5 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
1	13.89	33.755	25.249	7.78	132.7	0.5	0.18	0.2	0.00	6.08	0.41	93	104.7	99.6	102.2	1.1
5*	13.86	33.755	25.254	7.94	135.4	0.3	0.20	0.1	0.00	6.20	0.72	34*	172.9	164.2	168.5	1.5
7	13.81	33.755	25.266	7.83	133.3	0.3	0.22	0.1	0.00	6.53	0.86	15	147.7	150.2	148.9	1.4
12	12.92	33.755	25.446	6.35	106.2	5.4	0.63	2.6	0.13	9.40	1.46	3	83.1	73.9	78.5	1.5
17	12.18	33.770	25.600	5.25	86.4	13.5	1.03	8.3	0.30	3.64	2.58	0.75	3.7	3.3	3.5	1.1

* Depths at 28% and 34% transmission too close for separate samples; 28% omitted.

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 83 40.5

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
34°13.8'N	119°24.5'W	05/14/85	1845 GMT	5 m	1154 - 1922 PST	1153 PST	1922 PST	2829.5 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %*	UPTAKE (mgC/m3) 1	2	MEAN	DARK
1	15.14	33.719	24.954	8.53	149.2	0.2	0.37	0.2	0.01	5.02	0.27	93	99.9	106.9	103.4	6.4
5	14.30	33.718	25.135	8.58	147.5	0.2	0.21	0.2	0.00	5.62	0.35	34	154.2	164.2	159.2	1.4
7	14.07	33.717	25.182	8.41	143.9	0.5	0.20	0.1	0.00	6.82	0.62	28	116.9	106.5	111.7	1.0
12	13.26	33.726	25.355	6.80	114.5	2.8	0.34	0.6	0.02	16.32	0.48	15	268.3	256.5	262.4	1.4
17	12.84	33.731	25.442	5.86	97.8	7.2	0.64	4.2	0.14	11.62	1.02	3	148.0	123.0	135.5	2.7

* Sample incubation inadvertently offset; should have been incubated at 93%, 34(or 28)%, 15%, 3%, 0.75%.

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 83 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33°13.2'N	121°29.5'W	05/13/85	1913 GMT	17 m	1151 - 1918 PST	1151 PST	1916 PST	599.5 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
2	13.51	33.330	24.998	6.09	102.8	2.3	0.47	1.0	0.04	0.38	0.02	93	3.4	4.2	3.8	0.21
13	13.41	33.338	25.025	6.09	102.6	2.3	0.48	1.1	0.04	0.38	0.03	34	15.3	15.1	15.2	0.18
15	13.36	33.345	25.040	6.11	102.8	2.3	0.47	1.3	0.05	0.41	0.04	28	10.9	10.3	10.6	0.21
22	13.18	33.371	25.096	6.12	102.6	2.4	0.51	1.7	0.06	0.44	0.06	15	13.3	13.4	13.3	0.23
40	12.83	33.450	25.228	6.21	103.4	2.4	0.58	3.3	0.13	0.90	0.21	3	14.6	14.0	14.3	0.25
54	12.76	33.483	25.268	6.15	102.3	2.9	0.61	3.7	0.17	1.16	0.36	0.75	3.0	5.3	4.2	0.22

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 85 45

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33°46.9'N	119°31.2'W	05/11/85	1846 GMT	11 m	1157 - 1912 PST	1154 PST	1912 PST	1493.8 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
2	13.64	33.620	25.197	5.89	99.9	5.6	0.64	3.7	0.14	1.77	0.08	93	36.1	32.3	34.2	0.49
9	13.39	33.620	25.247	5.91	99.7	5.6	0.61	3.6	0.14	1.92	0.18	34	63.9	68.2	66.1	0.37
10	13.36	33.620	25.253	5.92	99.8	5.5	0.62	3.6	0.14	1.91	0.20	28	58.1	71.7	64.9	0.58
15	13.33	33.619	25.259	5.91	99.6	5.4	0.62	3.6	0.14	2.04	0.25	15	59.8	62.3	61.0	0.47
26	13.29	33.621	25.269	5.88	99.0	5.5	0.63	3.7	0.14	2.31	0.28	3	30.6	33.7	32.1	0.41
36	13.94	33.638	25.350	5.57	93.1	8.3	0.74	5.7	0.19	1.51	0.32	0.75	2.8	5.7	4.3	0.35

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 85.8 34.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
34°00.2'N	118°40.2'W	05/10/85	1900 GMT	9 m	1151 - 1915 PST	1151 PST	1915 PST	980.7 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
1	14.11	33.662	25.131	6.63	113.5	2.8	0.27	0.3	0.02	2.36	0.42	93	38.3	18.1	28.2	0.59
7	14.10	33.663	25.135	6.62	113.3	2.8	0.29	0.3	0.02	2.31	0.40	34	64.3	89.0	76.7	0.67
8	13.97	33.655	25.154	6.51	111.2	3.1	0.31	0.6	0.06	2.26	0.45	28	57.4	62.1	59.8	0.56
12	13.40	33.643	25.263	5.99	101.1	5.1	0.52	3.0	0.19	1.68	0.41	15	43.2	43.8	43.5	0.44
22	12.28	33.675	25.508	4.87	80.3	11.5	1.03	9.5	0.45	1.02	0.47	3	17.0	16.0	16.5	0.77
29	11.38	33.729	25.719	4.00	64.7	17.3	1.39	15.4	0.39	0.50	0.52	0.75	1.6	1.3	1.5	0.42

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 87 53

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33°13.1'N	119°52.2'W	05/12/85	1906 GMT	8 m	1156 - 1918 PST	1156 PST	1918 PST	1823.6 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
1	12.53	33.654	25.443	6.47	107.2	1.4	0.67	4.5	0.31	5.19	1.01	93	67.5	58.4	63.0	0.47
7	12.52	33.652	25.444	6.47	107.2	1.5	0.65	4.5	0.31	5.12	1.14	34	133.3	135.1	134.2	0.67
8	12.51	33.651	25.444	6.47	107.2	1.5	0.66	4.4	0.31	5.37	1.22	28	111.8	107.6	109.7	0.73
11	12.51	33.650	25.445	6.47	107.2	1.3	0.65	4.4	0.31	5.49	0.86	15	86.9	85.3	86.1	0.56
19	12.48	33.651	25.451	6.45	106.8	1.2	0.64	4.4	0.31	5.41	1.03	3	53.7	44.9	49.3	0.57
26	12.46	33.651	25.454	6.44	106.6	1.2	0.63	4.5	0.31	5.70	1.12	0.75	9.0	13.3	11.2	1.4

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 88.3 41.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33°20.7'N	118°51.4'W	05/09/85	1931 GMT	21 m	1202 - 1913 PST	1152 PST	1913 PST	434.3 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
2	15.04	33.544	24.841	5.97	104.1	1.9	0.25	0.1	0.00	0.13	0.03	93	1.4	1.5	1.4	0.17
16	14.89	33.541	24.872	5.99	104.1	2.0	0.27	0.1	0.00	0.15	0.04	34	6.8	7.0	6.9	0.22
18	14.83	33.538	24.884	6.01	104.3	2.0	0.24	0.1	0.00	0.20	0.04	28	7.9	9.2	8.6	0.27
27	13.42	33.545	25.182	5.84	98.5	4.5	0.41	2.6	0.17	0.38	0.08	15	12.5	13.2	12.9	0.30
49	10.88	33.628	25.730	4.04	64.6	16.6	1.25	16.0	0.09	0.42	0.23	3	5.4*	6.7	6.0	0.16
66	10.22	33.735	25.928	3.44	54.3	21.8	1.53	20.3	0.02	0.15	0.04	0.75	0.24	0.28	0.26	0.12

* Some sample lost during transport.

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 90 37

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33°11.2'N	118°23.4'W	05/07/85	1827 GMT	17 m	1150 - 1914 PST	1150 PST	1916 PST	433.6 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
2	15.16	33.574	24.839	6.08	106.3	2.6	0.30	0.1	0.00	0.22	0.06	93	4.1	3.0	3.6	0.22
13	15.11	33.570	24.847	6.09	106.4	2.6	0.30	0.0	0.00	0.23	0.07	34	11.1	10.9	11.0	0.25
15	14.91	33.560	24.883	6.14	106.8	2.1	0.29	0.0	0.00	0.31	0.08	28	10.3	10.0	10.1	0.22
22	14.36	33.529	24.976	6.15	105.8	1.4	0.29	0.0	0.00	0.30	0.08	15	14.0	13.5	13.7	0.27
40	12.67	33.536	25.326	5.57	92.5	5.6	0.62	4.9	0.45	0.34	0.16	3	7.0	7.0	7.0	0.16
54	11.43	33.593	25.604	4.27	69.1	12.9	1.18	13.6	0.24	0.29	0.22	0.75	0.83	1.0	0.92	0.16

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 90 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°04.3'N	120°39.5'W	05/06/85	1842 GMT	17 m	1200 - 1915 PST	1200 PST	1917 PST	366.8 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
2	13.24	33.269	25.006	6.11	102.5	2.1	0.39	0.2	0.02	0.50	0.12	93	2.0	2.0	2.0	0.15
13	13.20	33.270	25.013	6.11	102.4	1.9	0.38	0.2	0.02	0.52	0.13	34	9.7	11.1	10.4	0.17
15	13.20	33.270	25.014	6.12	102.6	1.9	0.38	0.2	0.03	0.51	0.13	28	6.5	7.5	7.0	0.14
22	13.20	33.268	25.014	6.11	102.4	1.8	0.38	0.2	0.03	0.55	0.13	15	11.3	13.4	12.3	0.17
40	12.85	33.277	25.089	5.99	99.7	2.5	0.44	1.1	0.11	0.48	0.19	3	6.0	5.5	5.7	0.14
54	12.82	33.289	25.105	5.98	99.5	2.5	0.47	1.4	0.12	0.47	0.17	0.75	0.76	1.4	1.1	0.16

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 90 110

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
30°45.5'N	123°19.9'W	05/05/85	1849 GMT	32 m	1214 - 1915 PST	1211 PST	1915 PST	91.8 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
4	15.68	33.599	24.743	5.79	102.3	1.5	0.33	0.1	0.00	0.06	0.01	93	0.29	0.34	0.32	0.12
24	15.69	33.600	24.743	5.79	102.3	1.3	0.33	0.1	0.00	0.06	0.01	34	1.5	1.5	1.5	0.12
29	15.68	33.600	24.745	5.80	102.5	1.2	0.32	0.0	0.00	0.06	0.02	28	0.91	0.73	0.82	0.12
42	15.63	33.595	24.752	5.80	102.4	0.9	0.32	0.0	0.00	0.06	0.01	15	1.2	1.3	1.3	0.12
75	15.38	33.601	24.815	5.84	102.5	0.8	0.32	0.0	0.00	0.10	0.02	3	0.64	0.64	0.64	0.17
103	15.61	33.893	24.989	5.68	100.4	1.7	0.29	0.0	0.00	0.26	0.20	0.75	0.63	1.1	0.84	0.11

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 90.8 46.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°44.6'N	118°54.5'W	05/08/85	1846 GMT	12 m	1153 - 1911 PST	1152 PST	1911 PST	365.6 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
2	14.95	33.643	24.938	6.13	106.8	3.7		0.1	0.00	0.25	0.04	93	7.2	6.4	6.8	0.25
9	14.78	33.642	24.975			3.7		0.1	0.00	0.30	0.07	34	13.0	13.2	13.1	0.35
11	14.76	33.641	24.978	6.15	106.7	3.6		0.1	0.00	0.33	0.07	28	12.4	11.6	12.0	0.37
16	14.11	33.627	25.105	6.25	107.0	3.6		0.1	0.00	0.56	0.17	15	13.8	13.5	13.6	0.46
28	12.70	33.634	25.395	5.16	85.8	8.4		6.7	0.47	1.11	0.30	3	8.7	9.9	9.3	0.27
39	12.21	33.639	25.494	4.78	78.7	10.8		9.7	0.40	0.93	0.26	0.75	0.77	0.93	0.85	0.29

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 92.5 46.0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°27.0'N	118°43.0'W	04/30/85	1943 GMT	18 m	1222 - 1907 PST	1151 PST	1907 PST	380.0 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
2	14.72	33.554	24.918	5.94	102.9	1.9	0.40	0.2	0.03	0.21	0.04	93	2.6	2.2	2.4	0.15
14	14.65	33.551	24.932	5.95	102.9	1.7	0.37	0.2	0.04	0.25	0.04	34	11.5	11.5	11.5	0.21
16	14.62	33.551	24.938	5.96	103.1	1.7	0.37	0.2	0.04	0.25	0.04	28	9.5	7.9	8.7	0.19
23	14.52	33.545	24.954	5.97	103.0	1.7	0.38	0.2	0.04	0.22	0.04	15	8.3	8.5	8.4	0.24
42	11.50	33.573	25.575	4.44	71.9	13.3	1.18	12.1	0.26	0.45	0.25	3	7.2	7.5	7.4	0.19
58	10.44	33.683	25.851	3.59	56.9	20.1	1.62	18.6	0.09	0.21	0.07	0.75	0.34	0.28	0.31	0.10

RV DAVID STARR JORDAN — CALCOFI CRUISE 8505 — STATION 93 33

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°44.4'N	117°43.6'W	05/01/85	1928 GMT	26 m	1210 - 1905 PST	1148 PST	1903 PST	752.8 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
1	16.23	33.558	24.588	5.95	106.3	1.1	0.27	0.1	0.00	0.12	0.01	93	2.7	3.4	3.0	0.15
9	15.85	33.557	24.673	5.97	105.8	1.6	0.27	0.1	0.00	0.15	0.02	34	7.4	7.5	7.5	0.20
23	15.52	33.551	24.742	6.03	106.2	1.1	0.28	0.1	0.00	0.25	0.05	28	10.0	9.1	9.5	0.23
33	13.78	33.520	25.090	5.97	101.5	2.6	0.41	0.8	0.08	1.20	0.29	15	26.4	27.8	27.1	0.35
60	11.18	33.545	25.613	4.15	66.8	13.7	1.22	14.4	0.12	0.42	0.33	3	2.1	0.88	1.5	0.11
84	10.59	33.715	25.850	3.52	56.0	19.3	1.52	18.9	0.02	0.08	0.09	0.75	0.14	0.15	0.14	0.11

RV DAVID STARR JORDAN | CALCOFI CRUISE 8505 | STATION 93 65

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
31°40.8'N	119°54.5'W	05/03/85	2000 GMT	26 m	1232 - 1910 PST	1157 PST	1910 PST	81.6 mg C/m2

DEPTH	TEMP	SALINITY	SIGMA	DISS O2	OXY	SIO3	PO4	NO3	NO2	CHL	PHAEO	LIGHT	UPTAKE (mgC/m3)			
m	DEG C		THETA	ml/L	PCT	um/l	um/l	um/l	um/l	ug/l	ug/l	%	1	2	MEAN	DARK
1	15.25	33.467	24.736	5.87	102.8	2.1	0.66	0.1	0.00	0.07	0.01	93	0.46	0.51	0.48	0.16
18	15.22	33.472	24.747	5.84	102.2	2.1	0.67	0.1	0.00	0.07	0.01	34	1.7	1.9	1.8	0.21
23	15.22	33.464	24.742	5.90	103.2	2.0	0.69	0.1	0.00	0.07	0.01	28	1.1	1.2	1.2	0.14
33	15.22	33.466	24.743	5.88	102.9	1.9		0.1	0.00	0.07	0.01	15	1.8	1.8	1.8	0.15
60	15.13	33.461	24.761	5.85	102.1	1.9		0.1	0.00	0.08	0.02	3	0.48	0.50	0.49	0.19
83	14.91	33.451	24.801	5.88	102.2	2.0		0.1	0.00	0.15	0.05	0.75	0.16	0.31	0.23	0.17

RV DAVID STARR JORDAN | CALCOFI CRUISE 8505 | STATION 93 100

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
30°29.8'N	122°16.8'W	05/04/85	1822 GMT	28 m	1210 - 1905 PST	1207 PST	1905 PST	64.5 mg C/m2

DEPTH	TEMP	SALINITY	SIGMA	DISS O2	OXY	SIO3	PO4	NO3	NO2	CHL	PHAEO	LIGHT	UPTAKE (mgC/m3)			
m	DEG C		THETA	ml/L	PCT	um/l	um/l	um/l	um/l	ug/l	ug/l	%	1	2	MEAN	DARK
1	15.56	33.557	24.737	5.81	102.4	1.5	0.29	0.1	0.00	0.06	0.01	93	0.31	0.27	0.29	0.14
21	15.55	33.556	24.740	5.81	102.4	1.4	0.29	0.1	0.00	0.06	0.01	34	1.4	1.5	1.4	0.14
24	15.55	33.551	24.736	5.80	102.2	1.3	0.29	0.1	0.00	0.06	0.01	28	0.4	0.6	0.5	0.13
36	15.53	33.548	24.739	5.81	102.3	1.2	0.27	0.1	0.00	0.06	0.01	15	1.1	1.1	1.1	0.14
67	14.97	33.477	24.807	5.87	102.2	1.1	0.30	0.1	0.00	0.12	0.03	3	0.62	0.55	0.58	0.19
89	14.93	33.478	24.818	5.87	102.1	1.1	0.28	0.1	0.00	0.22	0.07	0.75	0*	0.44	0.22	0.16

* Dark uptake exceeded light uptake.

Secchi Disk Observations

CalCOFI Cruise 8505

Line	Sta.	Day	Mo	Local Time (+8: PST)	Depth (m)	Weather	Clouds Type	Clouds Amt
77	51	18	5	1221	8	0	-	0
77	55	18	5	0903	10	1	AC	1/8
77	80	17	5	1759	27	0	-	0
80	51	16	5	1130	5	2	SC	8/8
80	55	16	5	1513	17	1	SC	7/8
80	80	17	5	0555	27	2	SC	8/8
80	90	17	5	1057	25	2	SC	8/8
80.8	47.0	16	5	0924	10	2	SC	8/8
80.8	50.0	16	5	0743	5	1	SC	7/8
81.7	44.0	15	5	1426	7	1	ST	7/8
82.5	40.5	15	5	1239	8	2	ST	8/8
82.5	43.9	15	5	1044	5	2	SC	8/8
83.0	40.5	14	5	1045	5	4	-	-
83	42	14	5	0829	8	4	-	-
83	65	13	5	1442	14	1	ST	6/8
83	70	13	5	1113	17	1	SC	7/8
84.1	40.0	14	5	1320	4	4	ST	7/8
84.1	45.0	14	5	1549	7	4	ST	7/8
85.0	38.0	11	5	1420	7	1	ST	1/8
85.0	45.0	11	5	1046	11	1	CC	1/8
85.0	50.0	11	5	0744	10	1	CU	4/8
85.8	34.0	10	5	1100	9	1	AC	1/8
85.8	40.0	10	5	1403	8	1	CU	1/8
85.8	45.0	10	5	1655	8	1	CU	1/8
87	50	12	5	0804	11	1	SC	7/8
87	53	12	5	1106	8	-	-	-
87	55	12	5	1231	13	1	SC	7/8
87	60	12	5	1643	14	1	ST	5/8
87.5	33.4	10	5	0813	13	1	SC	6/8
88.3	33.0	9	5	0559	8	1	SC	6/8
88.3	35.0	9	5	0717	9	1	AC	6/8
88.3	40.0	9	5	0958	19	1	AC	5/8
88.3	41.0	9	5	1131	21	-	-	-
88.3	45.0	9	5	1346	12	1	CC	1/8
88.3	50.0	9	5	1625	7	1	AS	2/8
90	35	7	5	1347	8	2	SC	8/8
90	37	7	5	1027	17	2	SC	8/8
90	40	7	5	0833	15	2	SC	8/8
90	65	5	5	1444	17	1	ST	3/8
90	70	6	5	1042	17	2	SC	8/8
90	100	5	5	1528	26	1	SC	7/8
90	110	5	5	1049	32	1	SC	7/8
90.8	40.0	8	5	0540	13	2	SC	8/8
90.8	46.0	8	5	1046	12	-	-	-
90.8	50.0	8	5	1434	12	1	SC	7/8
92.5	46.0	30	4	1143	18	-	-	-
93	33	1	5	1128	26	-	-	-
93	35	1	5	1518	27	0	-	0
93	60	3	5	0641	20	2	SC	8/8
93	65	3	5	1200	26	1	CU	1/8
93	70	3	5	1515	29	1	AC	3/8
93	100	4	5	1022	28	1	CU	5/8
93	110	4	5	1450	29	1	ST	6/8

RV DAVID STARR JORDAN

CalCOFI Cruise 8505

MACROZOOPLANKTON BIOMASS
Net Mesh Size: 0.505 mm

Line	Sta.	Position		Date Mo/Day	Time (GMT) Start	End	Water Volume Strained (m^3)	Max. Tow Depth (m)	Volume per 1000 m^3 Strained Total (cm^3)	Small (cm^3)
77	51	35 01.2N	120 55.2W	5/18	2038	2100	411	208	234	234
77	55	34 53.3N	121 11.9W	5/18	1746	1808	388	214	469	469
77	60	34 43.3N	121 33.0W	5/18	1353	1415	468	204	227	227
77	70	34 23.2N	122 14.9W	5/18	0750	0812	402	215	331	331
77	80	34 03.2N	122 56.5W	5/18	0233	0255	406	210	200	200
80	51	34 27.1N	120 31.5W	5/16	2017	2025	119	72		
80	55	34 19.0N	120 48.2W	5/17	0002	0024	408	210	255	255
80	60	34 09.0N	121 09.0W	5/17	0354	0416	401	209	302	302
80	70	33 48.7N	121 50.5W	5/17	0932	0954	398	210	272	272
80	80	33 29.0N	122 32.0W	5/17	1440	1502	416	207	113	99
80	90	33 09.0N	123 13.3W	5/17	1956	2018	413	213	56	56
82	46	34 16.1N	119 56.3W	5/16	0053	0115	352	207	1376	1376
83	40.6	34 13.5N	119 24.6W	5/14	1935	1938	44	21	3098	3098
83	42	34 10.5N	119 30.6W	5/14	1725	1734	155	77	5868	5868
83	51	33 52.7N	120 08.0W	5/14	1120	1129	149	85	1153	1046
83	55	33 44.6N	120 24.7W	5/14	0718	0740	404	214	609	609
83	60	33 34.7N	120 45.2W	5/14	0257	0319	391	214	261	261
83	70	33 14.4N	121 26.9W	5/13	1817	1839	397	217	282	282
87	33	33 53.4N	118 29.4W	5/12	0140	0147	105	56	706	706
87	35	33 49.4N	118 37.9W	5/12	0357	0419	359	210	367	367
87	40	33 39.3N	118 58.5W	5/12	0759	0821	392	214	331	331
87	45	33 29.4N	119 19.1W	5/12	1240	1302	419	207	3401	3401
87	50	33 19.4N	119 39.8W	5/12	1650	1657	128	63	3425	3425
87	55	33 09.4N	120 00.4W	5/12	2104	2126	368	218	3629	3629
87	60	32 59.4N	120 21.1W	5/13	0111	0133	413	215	526	526
87	70	32 39.4N	121 02.1W	5/13	1126	1148	411	213	268	268
90	28	33 29.1N	117 46.2W	5/8	0519	0526	130	64	355	355
90	30	33 25.2N	117 54.4W	5/8	0312	0334	396	210	379	379
90	35	33 15.1N	118 15.0W	5/7	2229	2251	406	212	946	182
90	37	33 11.2N	118 23.3W	5/7	1947	2009	402	209	3276	3276
90	45	32 55.1N	118 56.0W	5/7	1320	1342	381	204	5138	5138
90	53	32 39.1N	119 28.9W	5/7	0705	0727	404	207	5469	5385
90	60	32 25.2N	119 57.7W	5/7	0209	0231	408	208	316	294
90	70	32 05.0N	120 38.3W	5/6	1910	1932	416	208	149	149
90	80	31 45.3N	121 19.0W	5/6	1233	1255	454	204	810	810
90	90	31 25.1N	121 59.3W	5/6	0611	0633	416	217	135	135
90	100	31 05.1N	122 39.7W	5/6	0026	0048	420	209	60	60
90	110	30 44.9N	123 19.8W	5/5	1752	1814	436	220	37	37
90	120	30 25.0N	123 59.8W	5/5	1140	1202	436	218	32	32
93	26.7	32 57.4N	117 18.2W	5/1	0838	0846	155	70	233	233
93	29	32 52.8N	117 27.9W	5/1	1313	1335	418	207	69	69
93	30	32 50.8N	117 32.0W	5/1	1645	1707	396	211	86	86
93	35	32 40.8N	117 52.4W	5/2	0027	0048	392	209	713	646
93	40	32 30.7N	118 12.8W	5/2	0447	0509	420	210	248	200
93	45	32 20.8N	118 33.3W	5/2	0959	1021	419	215	3617	3617
93	50	32 10.7N	118 53.5W	5/3	0546	0608	416	217	2042	2042
93	55	32 00.7N	119 14.0W	5/3	1042	1104	449	210	343	321
93	60	31 50.8N	119 34.6W	5/3	1530	1552	418	213	72	60
93	65	31 40.8N	119 54.5W	5/3	1904	1926	444	213	97	97
93	70	31 30.8N	120 14.8W	5/4	0000	0023	452	209	594	594
93	80	31 10.8N	120 55.1W	5/4	0526	0548	443	215		
93	90	30 50.8N	121 35.6W	5/4	1129	1151	446	218	323	323
93	100	30 29.9N	122 15.6W	5/4	1726	1748	451	215	40	40
93	110	30 10.8N	122 55.4W	5/4	2329	2351	453	212	24	24
93	120	29 50.9N	123 35.2W	5/5	0504	0526	415	215	29	29

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Kobe, 650
Japan

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