

**UNIVERSITY OF CALIFORNIA, SAN DIEGO
SCRIPPS INSTITUTION OF OCEANOGRAPHY
LA JOLLA, CALIFORNIA 92093-0227**

PHYSICAL, CHEMICAL AND BIOLOGICAL DATA

**CalCOFI Cruise 0701
11 – 30 January 2007**

**CC Reference 08-05
25 June 2008**

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INTRODUCTION

The data in this report were collected during cruises 0701 of the California Cooperative Oceanic Fisheries Investigations (CalCOFI) program aboard the NOAA ship RV *David Starr Jordan*. The CalCOFI program was organized in the late 1940's to study the causes of variations in population size of fishes of importance to the State of California. It is carried out by NOAA's National Marine Fisheries Service Southwest Fisheries Science Center, the California Department of Fish and Game, and the Integrative Oceanography Division (IOD) at Scripps Institution of Oceanography (SIO). IOD contributes to this program by investigations of the physical, chemical and biological structure of the California Current. Data from the cruises were collected and processed by personnel of the Integrative Oceanography Division and the Southwest Fisheries Science Center. Volunteers and other SIO staff members also assisted in the collection of data and chemical analyses at sea. CalCOFI data presented in this report and collected on previous cruises can be accessed at <http://www.calcofi.org>.

STANDARD PROCEDURES

CTD/Rosette Cast Data

A Sea-Bird Electronics, Inc., Conductivity-Temperature-Depth (CTD) instrument with a rosette was deployed at each station on these cruises. The rosette was equipped with 24 ten-liter plastic (PVC) bottles. The CTD/rosette cast usually sampled 20 depths to a maximum sampling depth of 525 meters, bottom depth permitting. Occasional stations have multiple bottles tripped at the same depth to provide more water for ancillary programs. The sample spacing was designed to sample depth intervals as close as 10 meters around the sharp upper thermocline features such as the chlorophyll, oxygen, nitrite maxima and the shallow salinity minimum. Salinity, oxygen and nutrients were determined at sea for all depths sampled. Chlorophyll-*a* and phaeopigments were determined at sea within the top 200 meters, bottom depth permitting.

Pressures and temperatures assigned to the water sample data were derived from the CTD signals recorded just prior to the bottle trip. Pressures have been converted to depths by the Saunders (1981) pressure-to-depth conversion technique. CTD temperatures reported with the bottle data have been rounded to the nearest hundredth of a degree Celsius.

Salinity samples were collected from all rosette bottles and analyzed at sea using a Guildline model 8410 Portasal salinometer. Salinity samples were drawn in to 200 ml Kimax high-alumina borosilicate bottles that were rinsed three times with sample prior to filling. The results were compared with the CTD salinity in order to verify that the rosette bottle did not mis-trip or leak. The salinometer was standardized before and after each group of samples with substandard seawater. Periodic checks on the conductivity of the substandard were made by comparison with IAPSO Standard Seawater batch P144. Salinity values have been calculated using the algorithms for the Practical Salinity Scale, 1978 (UNESCO, 1981a) and were reported to three decimal places, provided that accepted standards were met.

Dissolved oxygen samples were collected in calibrated 100 ml iodine flasks, allowing at least 200% overflow. The dissolved oxygen samples were analyzed at sea 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).

Nutrient samples were analyzed at sea for dissolved silicate, phosphate, nitrate and nitrite using procedures similar to those described in Gordon et al., 1993. Samples were collected in 45 ml high-density polypropylene screw-capped tubes which were rinsed three times prior to filling. Standardizations were done at the beginning and end of each group of samples with a set of mid-concentration range standards prepared fresh for each run. Samples

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

not analyzed immediately after collection were refrigerated and run the following day. Sets of six different concentration standards were analyzed periodically to determine the deviation from linearity as a function of concentration, primarily for the silicate and nitrate analyses. Final sample concentrations were corrected for deviations from linearity.

Samples for chlorophyll-*a* and phaeopigments were collected in calibrated 138 ml polyethylene bottles and filtered onto Whatman GF/F filters. The pigments were extracted with a cold extraction technique in 90% acetone (Venrick and Hayward, 1984), and the fluorescence determined before and after acidification with a Turner Designs Fluorometer Model 10-AU-005-CE (Yentsch and Menzel, 1963; Holm-Hansen *et al.*, 1965).

As part of broadening CalCOFI program, phytoplankton pigment concentrations have been added to the regular sampling during cruises. They were made by filtering sufficient 10m water samples to analyze pigments using HPLC and absorption coefficients of particulate soluble material.

Evaluation of the water sample data involved comparisons with the CTD cast profiles, adjacent stations and consideration of the variation of a property as a function of density or depth and the relationships with other properties (Klein, 1973). Precision estimates for the routine analyses were made on CalCOFI cruise 9003 and are reported in SIO Ref. 91-4.

Primary Productivity Sampling

Primary productivity samples were taken each day shortly before local apparent noon (LAN). Primary production was estimated from ^{14}C uptake using a simulated *in situ* technique. Light penetration was estimated from the Secchi depth (assuming that the 1% light level is three times the Secchi depth). The depths with ambient light intensities corresponding to light levels simulated by the on-deck incubators were identified and sampled on the up rosette cast. Occasionally an extra bottle or two were tripped in addition to the usual 20 levels sampled in the combined rosette-productivity cast in order to maintain the normal sampling depth resolution. The ten-liter bottles were equipped with epoxy-coated springs and Viton O-rings. Triplicate samples (two light and one dark control) were drawn from each productivity sample depth into 250 ml polycarbonate incubation bottles. Samples were inoculated with 44.00 μCi of ^{14}C as NaHCO_3 (200 μl of 335.90 $\mu\text{Ci}/\text{ml}$ stock) prepared in a 0.3 g/liter solution of sodium carbonate (Fitzwater *et al.*, 1982). Samples were incubated from LAN to civil twilight in seawater-cooled incubators with neutral-density screens which simulate *in situ* light levels. At the end of the incubation, the samples were filtered onto Millipore HA filters and placed in scintillation vials. One half ml of 10% 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 SIO where the radioactivity was determined with a scintillation counter. Salinity, oxygen, nutrients, chlorophyll-*a* and phaeopigments were determined from all rosette productivity bottles.

Macrozooplankton Net Tows

Macrozooplankton was sampled with a 71 cm mouth diameter paired net (bongo net) equipped with 0.505mm plankton mesh. Bottom depth permitting, the nets were towed obliquely from 210 meters 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). An Optical Plankton Counter (OPC) was routinely used in one side of the paired bongo net frame. The purpose of the OPC is to obtain information on the vertical distributions of size categories of zooplankton, using data from the counter, without affecting the ongoing time series of data obtained from the catches of the integrative bongo net.

Avifauna Observations

Sea birds were counted within a 300-meter wide strip off to one side of the ship. Counts were made while underway between stations during periods of daylight. These counts were summed over 20 nautical mile (nm) intervals, or the distance between consecutive stations, whichever was less. Included at the end of this report are individual maps of the most numerous bird species (individuals/nm).

Ancillary Programs

Several ancillary programs produced data on these cruises that are not presented in this report. These programs include:

- 1) *Underway Data.* Continuous near surface measurements of temperature, salinity and *in vivo* chlorophyll fluorescence were recorded from seawater pumped through the ship's uncontaminated seawater system from a depth of approximately 3 meters. The data were logged in one-minute averages using a Sea-Bird Electronics, Inc., SBE 21 TSG Thermosalinograph and a Turner Designs SCUFA®II fluorometer.
- 2) *ADCP.* Continuous profiles of ocean currents and acoustic backscatter between 20 and 500 meters deep were measured along the shiptrack from a hull-mounted 150 kHz Acoustic Doppler Current Profiler (ADCP). The ADCP data were averaged over 5-minute intervals. Sixty 8-meter depth bins were recorded.
- 3) *Organic carbon.* At each station several samples were drawn from the CTD for total organic carbon concentration profiles. At half of the stations 10 to 15L of surface water were filtered for stable isotope measurements of particulate organic carbon. Several solid phase extracts from filtered seawater were taken for chemical and isotope analyses of dissolved organic carbon. (L. Aluwihare, SIO)
- 4) *California Current Ecosystem Long Term Ecological Research Program.* The CCE-LTER program augments standard CalCOFI measurements to further characterize the lower trophic levels as well as the carbon system. These additional samples, taken at all CalCOFI stations, are for measurements of particulate organic carbon and nitrogen, dissolved organic carbon and nitrogen, taxon-specific phytoplankton pigments, flow-cytometric counts of bacteria and picoautotrophs, microscopic counts of nano- microplankton, determination of mesozooplankton size structure using a Laser Optical Plankton Counter, and mesozooplankton community structure. (M. Ohman, SIO)
- 5) *SCCOOS Nearshore and Bio-optical Observations:* The objective of these observations is to extend CalCOFI time series to the nearshore and make bio-optical observations for the development of empirical proxies for particle size load and structure and phytoplankton biomass and rates of primary production. The nearshore observations consist of 9 stations at the ends and interspersed with current CalCOFI lines on the 20 m isobath with a standard set of CalCOFI observations. Bio-optical measurements at all CalCOFI and SCCOOS stations consist of irradiance at 9 wavelengths, light transmission at three wavelengths, fluorescence of Chl a, CDOM and phycoerythrin and light scattering at three wavelengths.
- 6) *Underway Sea Surface xCO₂.* Continuous measurements of the partial pressure of CO₂ were made from the ship's uncontaminated seawater system. The seawater was equilibrated in a membrane contactor with a gas loop that was analyzed with a Licor 6262 infrared CO₂/H₂O analyzer. One-minute averages were recorded and the mole fraction of CO₂ (xCO₂) at sea surface temperature was calculated. The system was calibrated with standard gases traceable to CMDL every two hours; at that time absolute zero and atmospheric samples were also collected.
- 7) *Marine mammal observations.* During daylight transits, visual line-transect surveys were conducted by marine mammal observers focusing on cetaceans. Acoustic line-transect surveys were performed using a towed hydrophone array which consists of multiple hydrophone elements that sample sounds up to 100 kHz allowing for localization of calling animals. Acoustic monitoring also takes place on individual stations using sonobuoys.

TABULATED DATA

CTD/Rosette Cast Data

The time reported is the Coordinated Universal Time (UTC) of the first rosette bottle trip on the up cast. The rosette bottles tripped on the up cast are reported as cast 2, where cast 1 is considered to be the down CTD profile. The sample number reported is the cast number followed by a two-digit rosette bottle number. Bottom depths, determined acoustically, have been corrected using British Admiralty Tables (Carter, 1980) and are reported in meters. Weather conditions have been coded using WMO code 4501. Secchi depths are reported for most daylight stations.

Observed data from individual CTD/rosette trip levels are interpolated and reported for standard depths. Interpolated or extrapolated standard level data are noted by the footnote "ISL" printed after the depth. Multiple bottles tripped at the same depth to provide water for ancillary programs are not used in the calculation of standard depth data. Density-related parameters have been calculated from the International Equation of State of Seawater 1980 (UNESCO, 1981b). Computed values of potential temperature, sigma-theta, specific volume anomaly (SVA), and dynamic height or geopotential anomaly are included with both observed and interpolated standard depth levels.

On stations where primary productivity samples were drawn a footnote appears after each productivity depth sampled. The corresponding primary productivity data are reported in a separate section following the tabulated rosette cast data.

Primary Productivity Data

In addition to the normal hydrographic data also reported in the rosette cast data section, the tabulated data include: the *in situ* light levels at which the samples were collected, the uptake from each of the replicate light bottles, uptake 1 and uptake 2 (which have been corrected for dark uptake by subtracting the dark value), the mean of the two uptake values and the dark uptake. The uptake values are totals for the incubation period. Also shown are the times of LAN, civil twilight, and the value of the mean uptake integrated from the surface to the deepest sample, assuming the shallowest value continues to the surface and that negative values (when dark uptake exceeds light

uptake) are zero. The uptake data have been presented to two significant digits (values <1.00) or one decimal (values >1.00). Precision of the higher production values may not warrant all of the digits presented. Incubation time, LAN, and civil twilight are given in local Pacific Standard Time (PST); to convert to UTC, add eight hours to the PST time. Incubation light intensities are listed in a footnote at the bottom of each page.

Macrozooplankton Data

Macrozooplankton biomass volumes are tabulated as total biomass volume ($\text{cm}^3/1000\text{m}^3$ strained) and as the total volume minus the volume of larger organisms under the heading "Small." Tow times are given in local PST (+8) time.

FOOTNOTES

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

ISL: Values for standard levels from CTD sensors corrected as noted, nutrients calculated as double reciprocal regression.
CSL: Values for standard levels from CTD sensors corrected as noted, nutrients not calculated due to uncertainty.

D: CTD values listed in place of ship board analysis, corrected as noted.

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

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FIGURES

Cruise 0701

1. CalCOFI Cruise 0701 track and station positions.
2. Horizontal distribution of dynamic height anomaly (0 over 500m). In areas shallower than 500 m, the dynamic heights were extrapolated on the basis of the offshore deeper steric height as described in Reid and Mantyla (1976).
3. Horizontal distributions at 10 meters: A) chlorophyll-*a*; B) potential density; C) temperature; and D) salinity.
4. Horizontal distributions at 200 meters: A) dynamic height anomaly (200 over 500 m); B) potential density; C) temperature; and D) salinity.
5. Sections along CalCOFI line 90 (vertical exaggeration, 1000): A) potential density; B) temperature; C) salinity; D) silicate; E) nitrate; F) phosphate; G) chlorophyll-*a*; H) oxygen saturation; I) oxygen; J) nitrite; and K) phaeopigments.

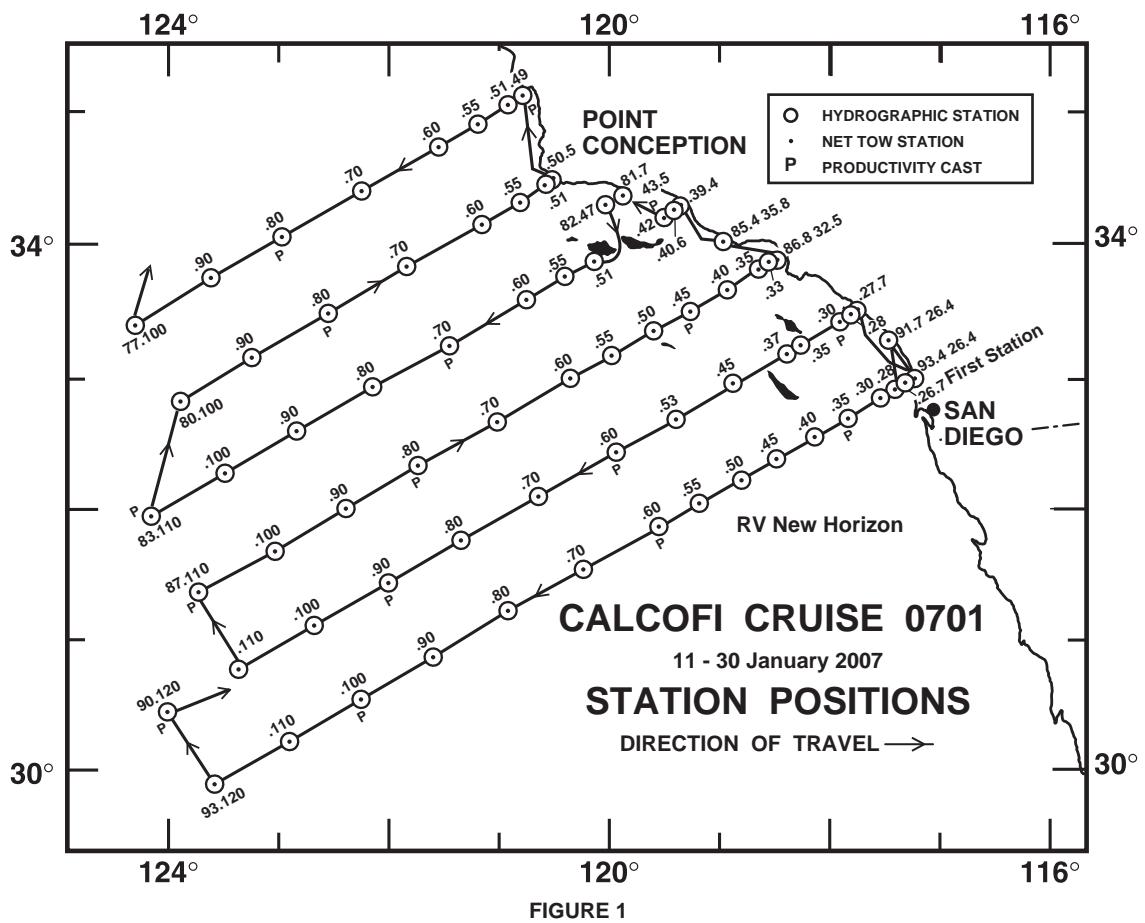


FIGURE 1

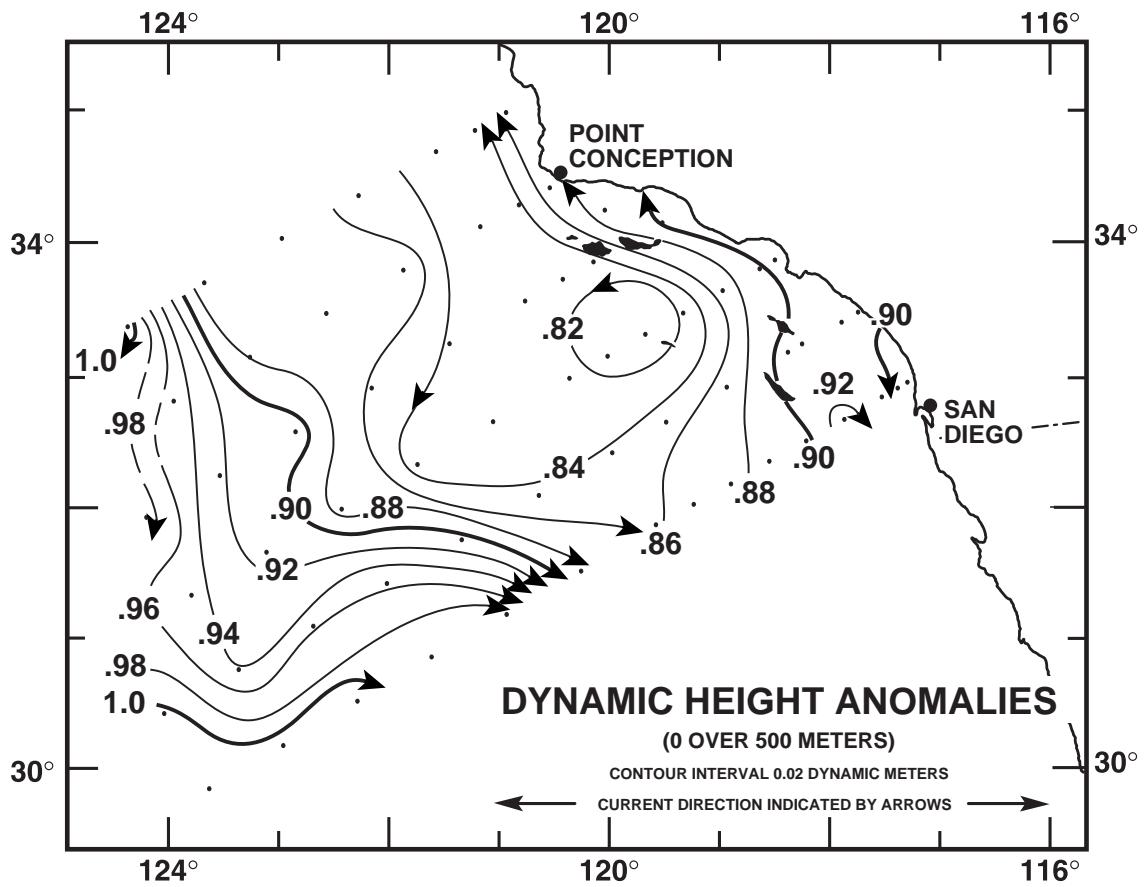


FIGURE 2

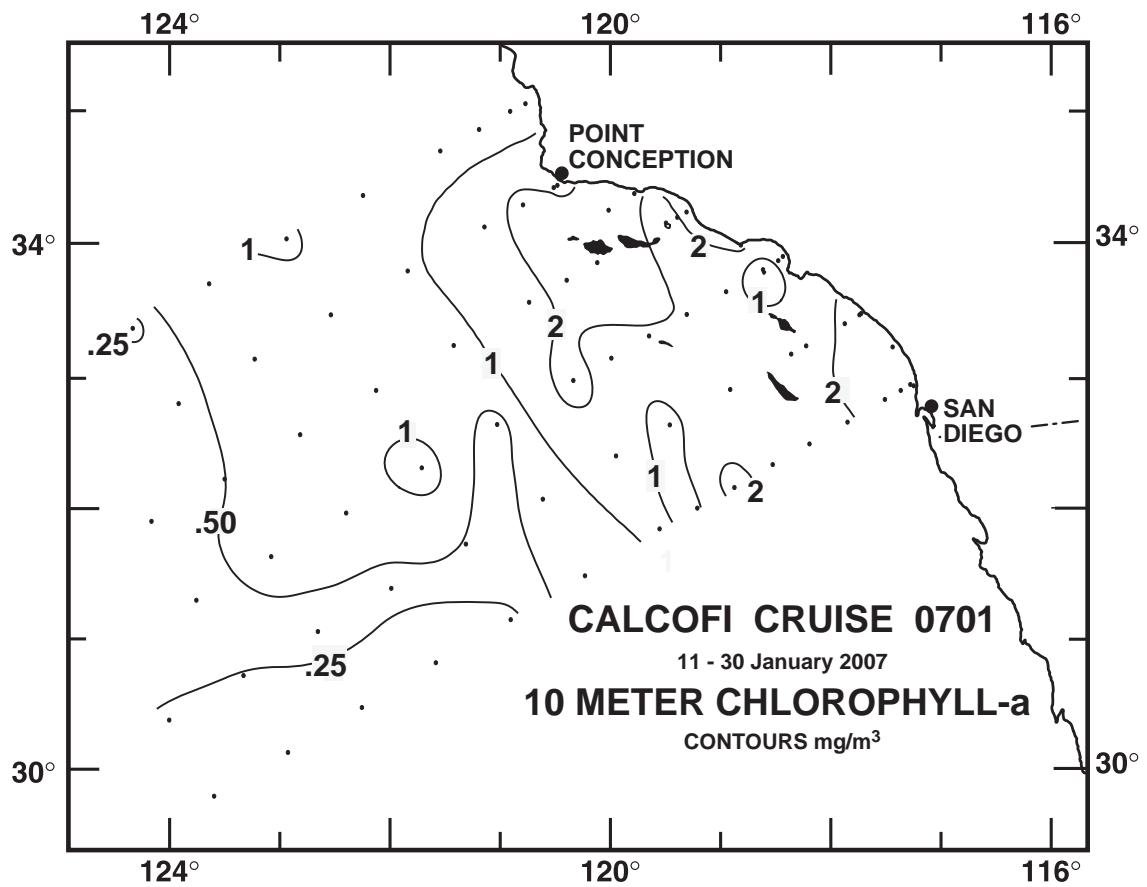


FIGURE 3A

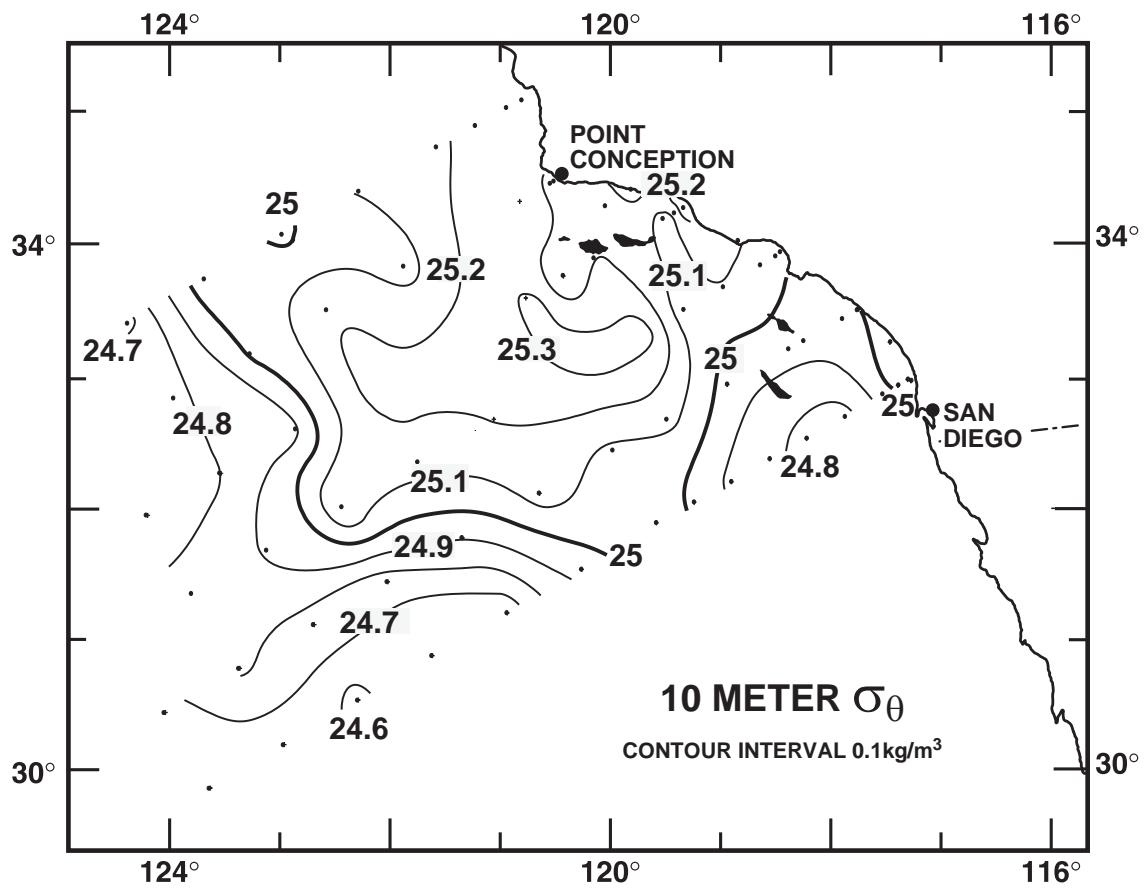


FIGURE 3B

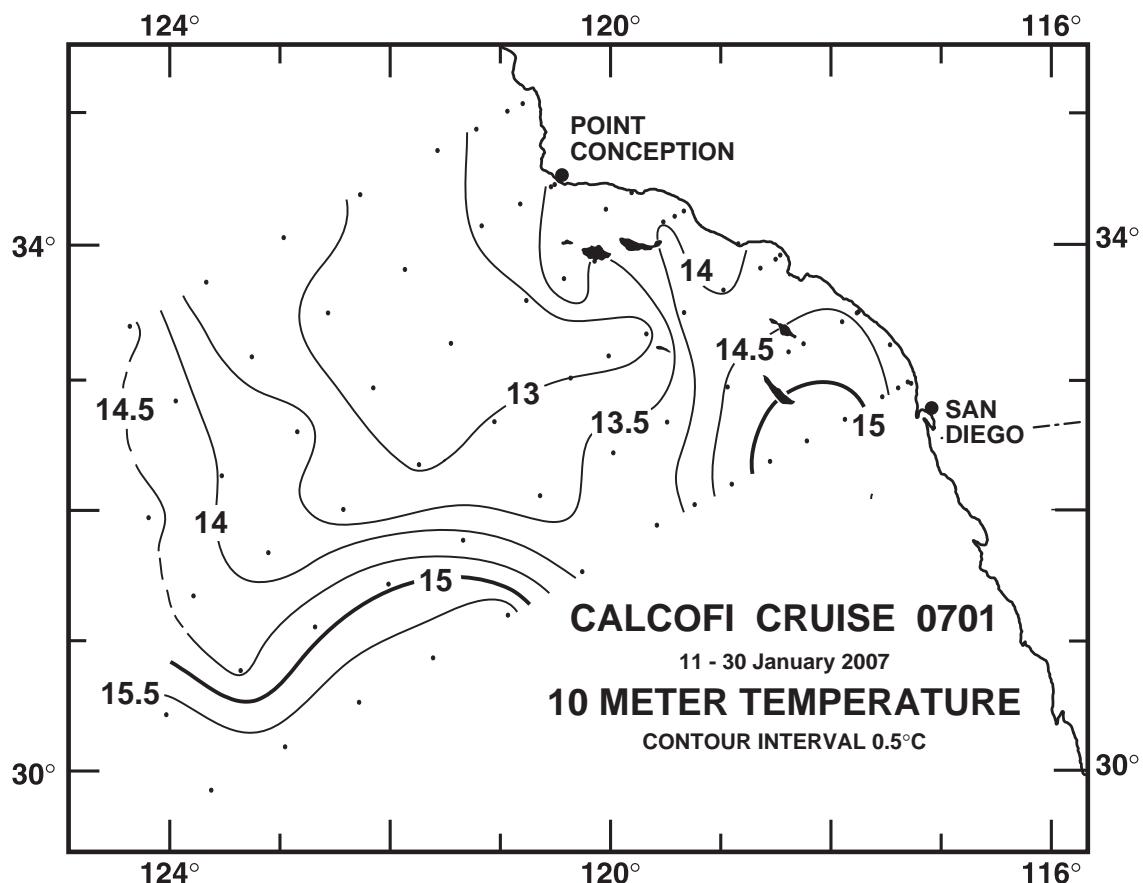


FIGURE 3C

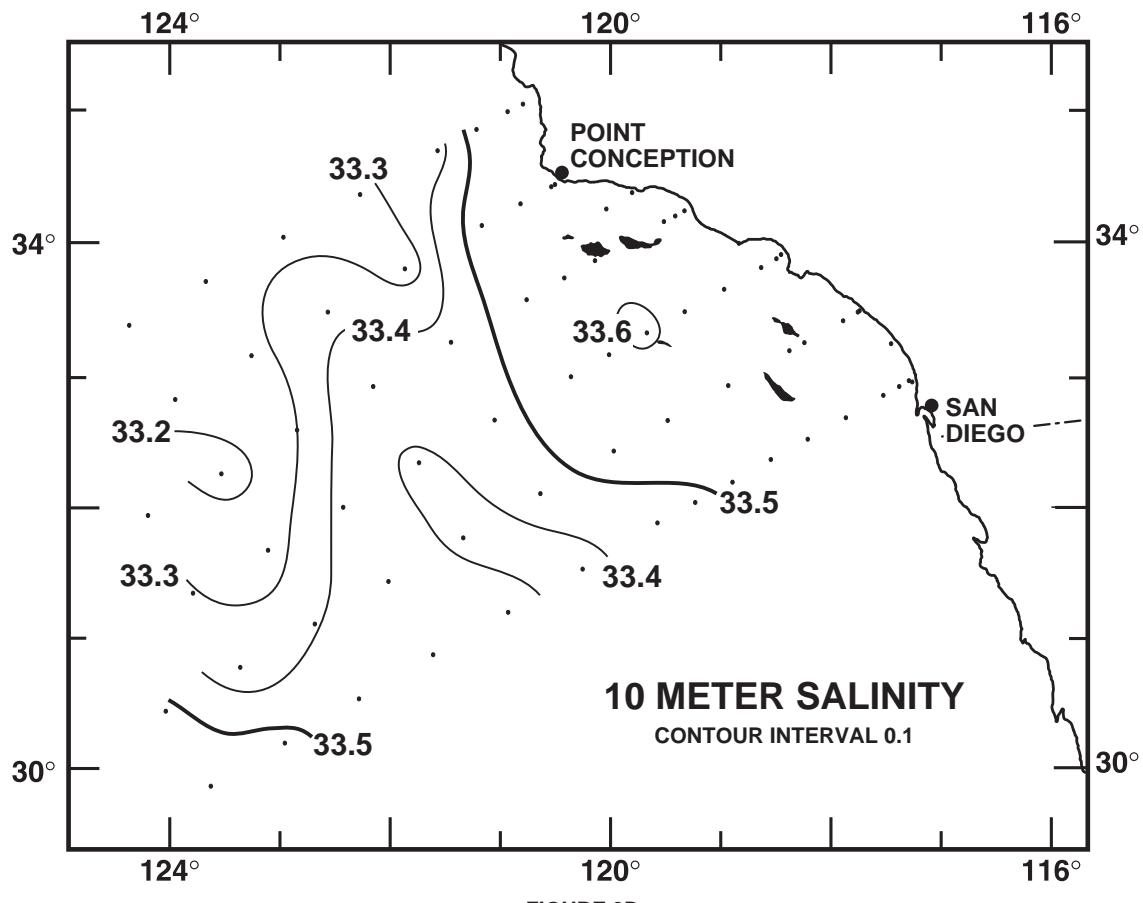


FIGURE 3D

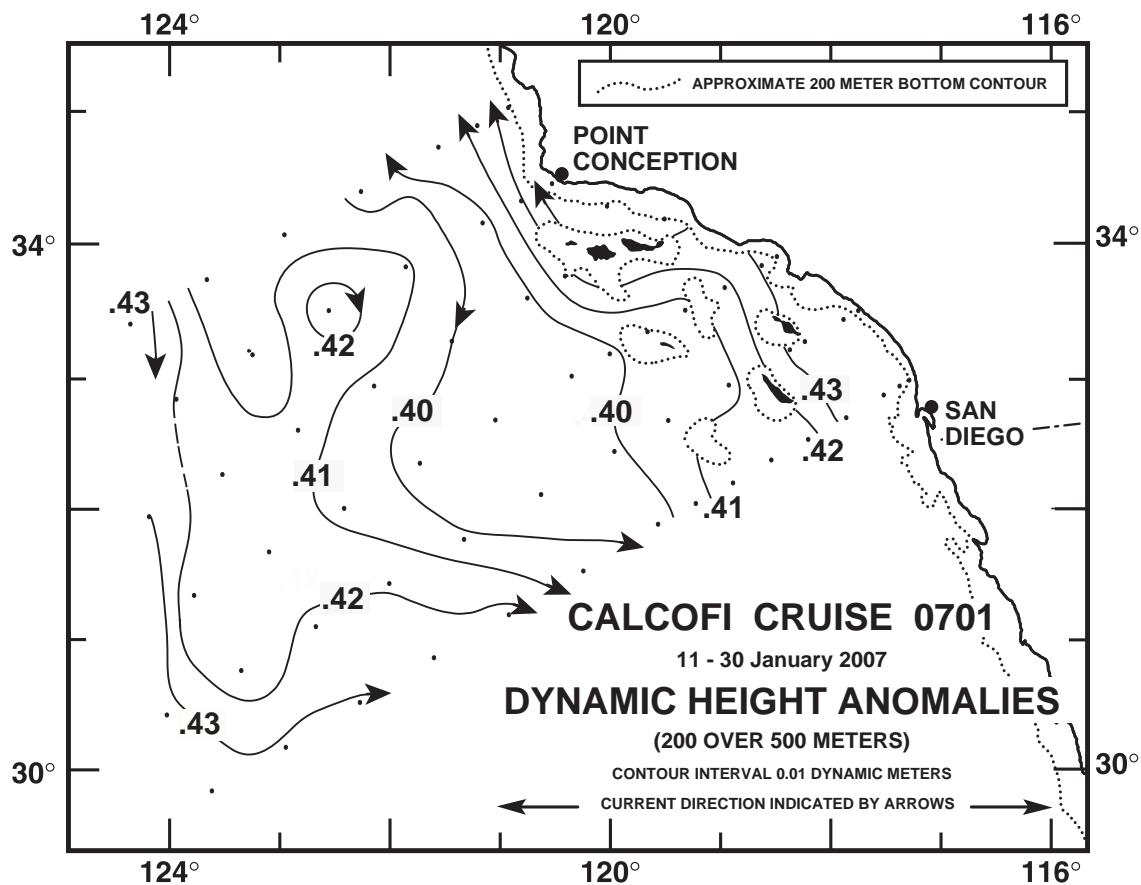


FIGURE 4A

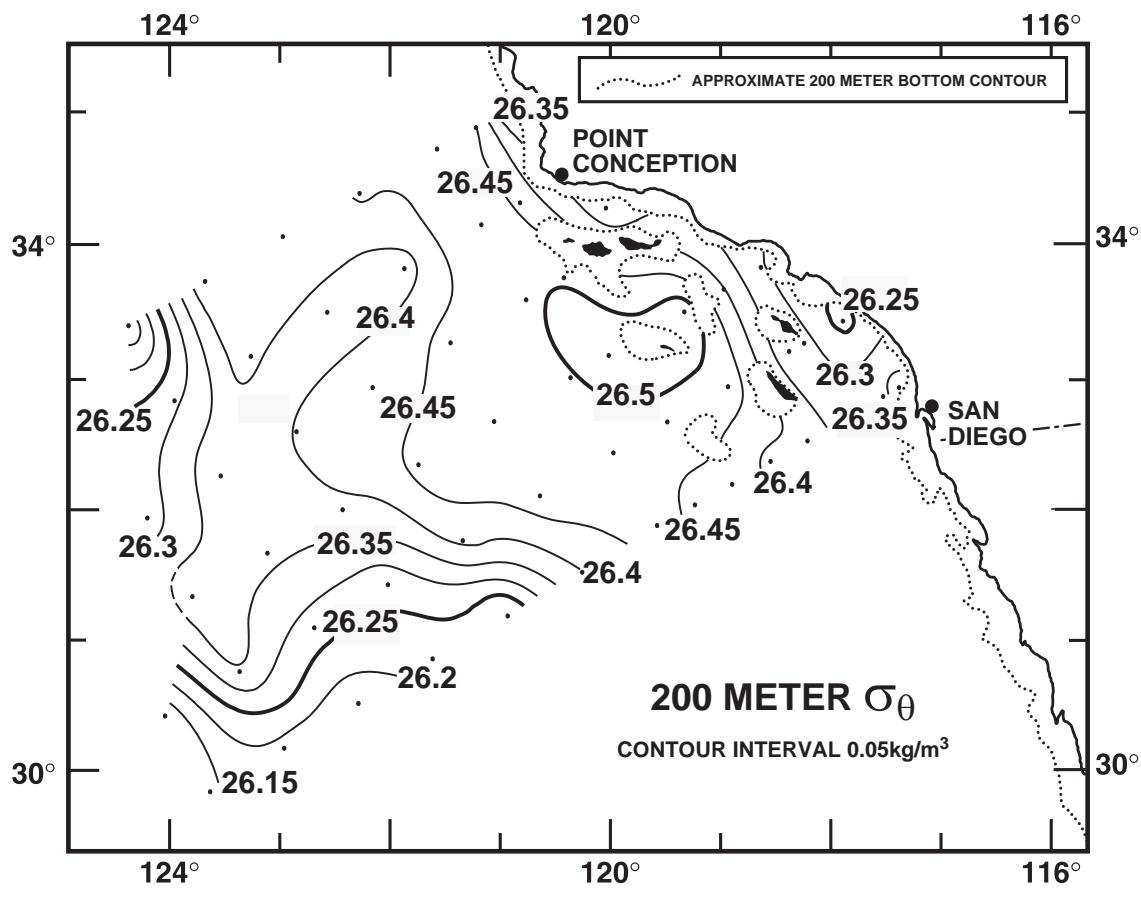


FIGURE 4B

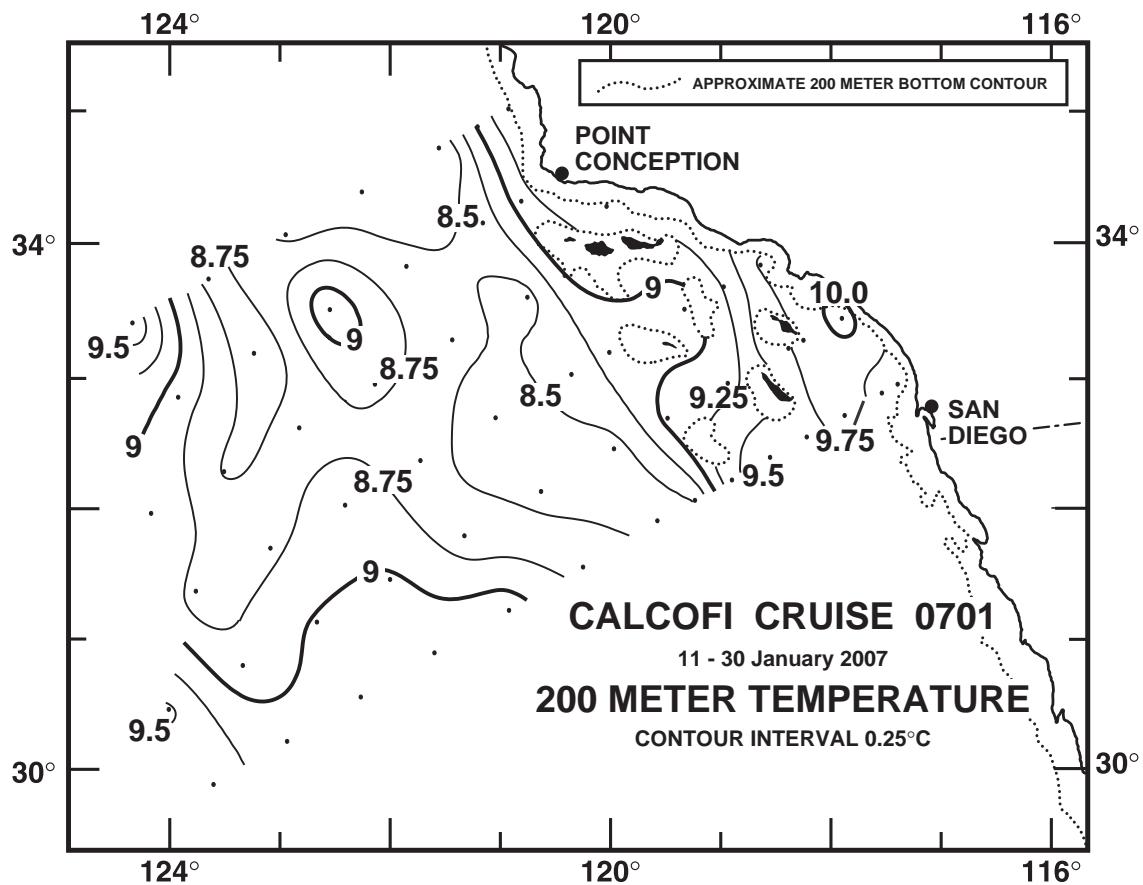


FIGURE 4C

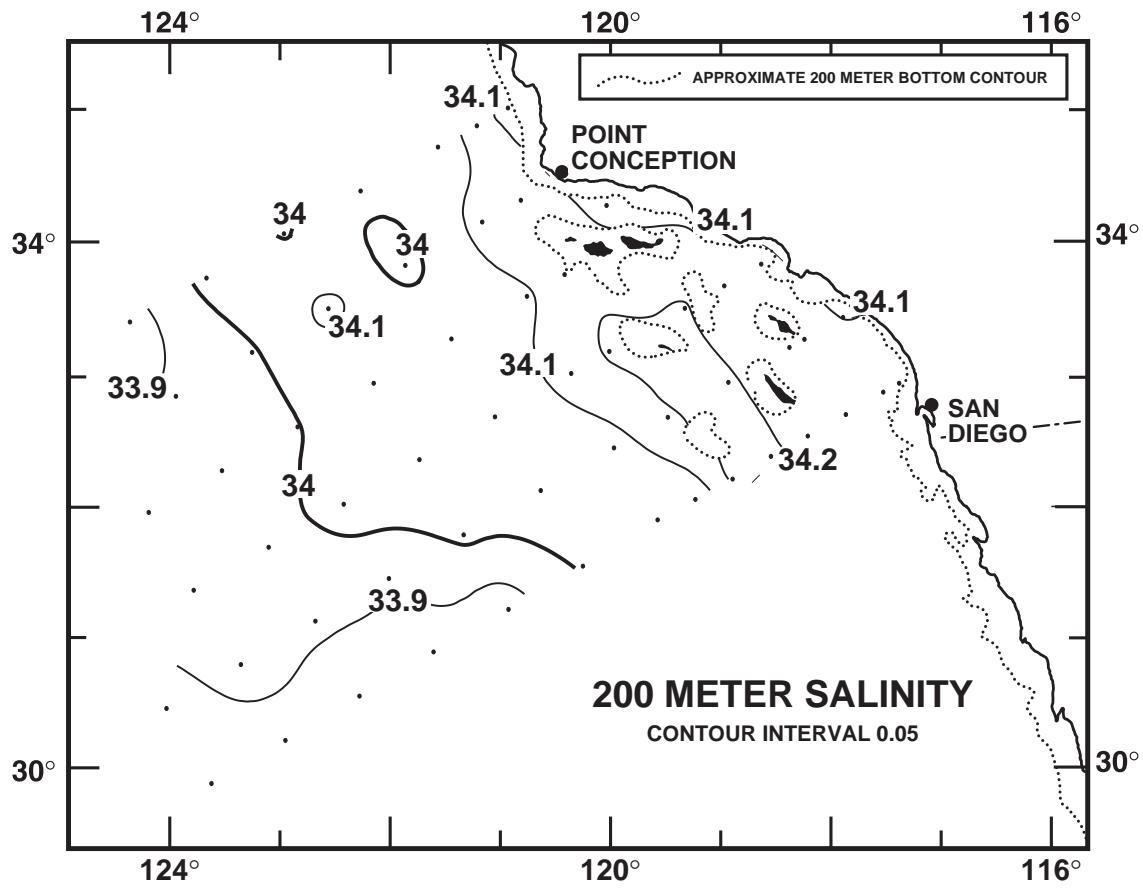


FIGURE 4D

CALCOFI CRUISE 0701

16 - 21 January 2007

POTENTIAL DENSITY (σ_0) ALONG CALCOFI LINE 90

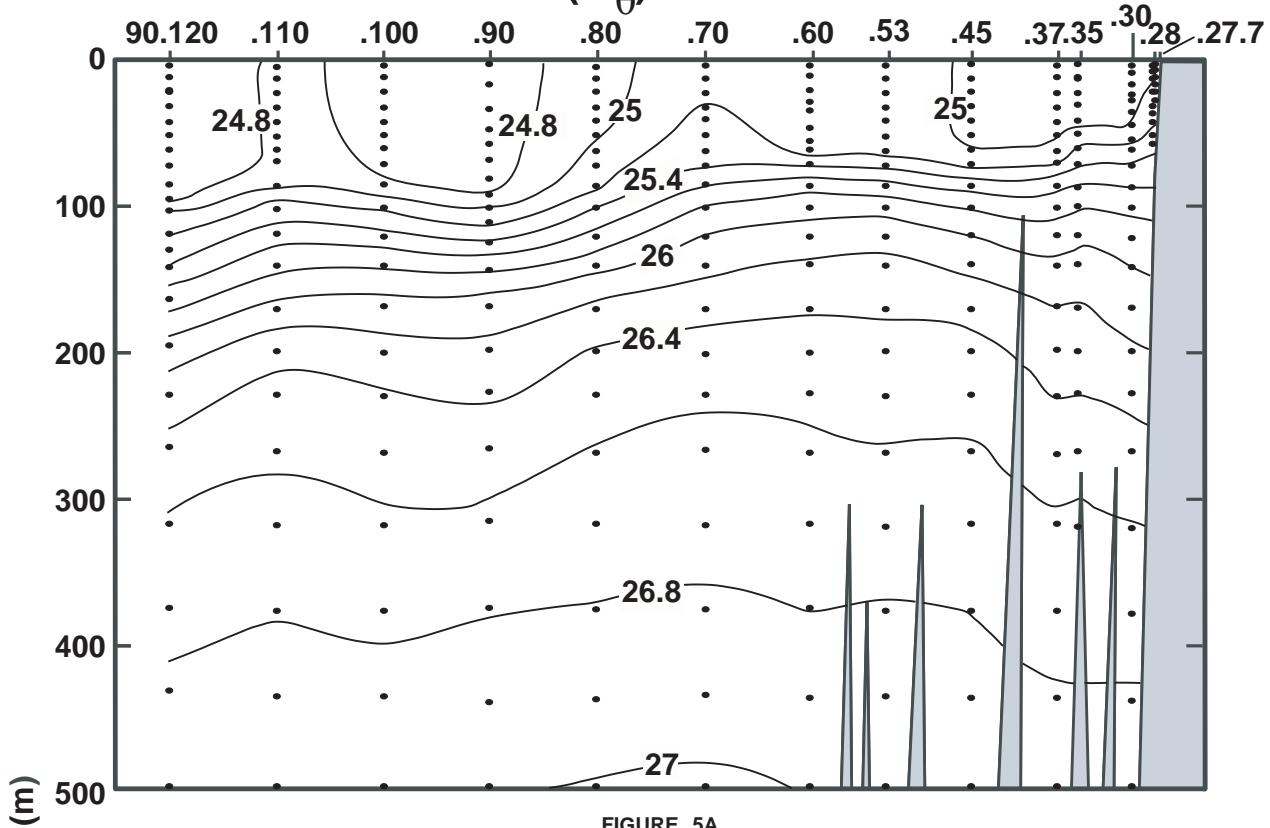


FIGURE 5A

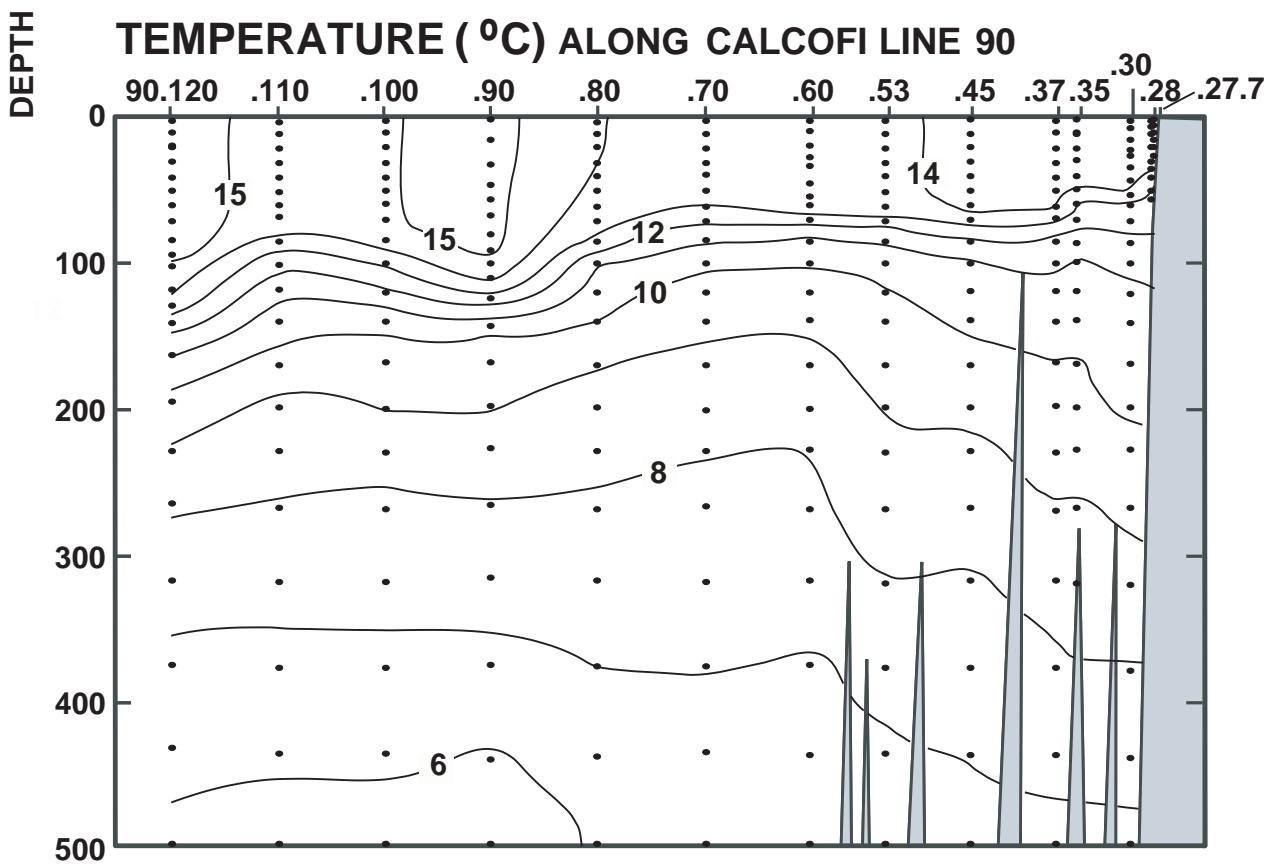
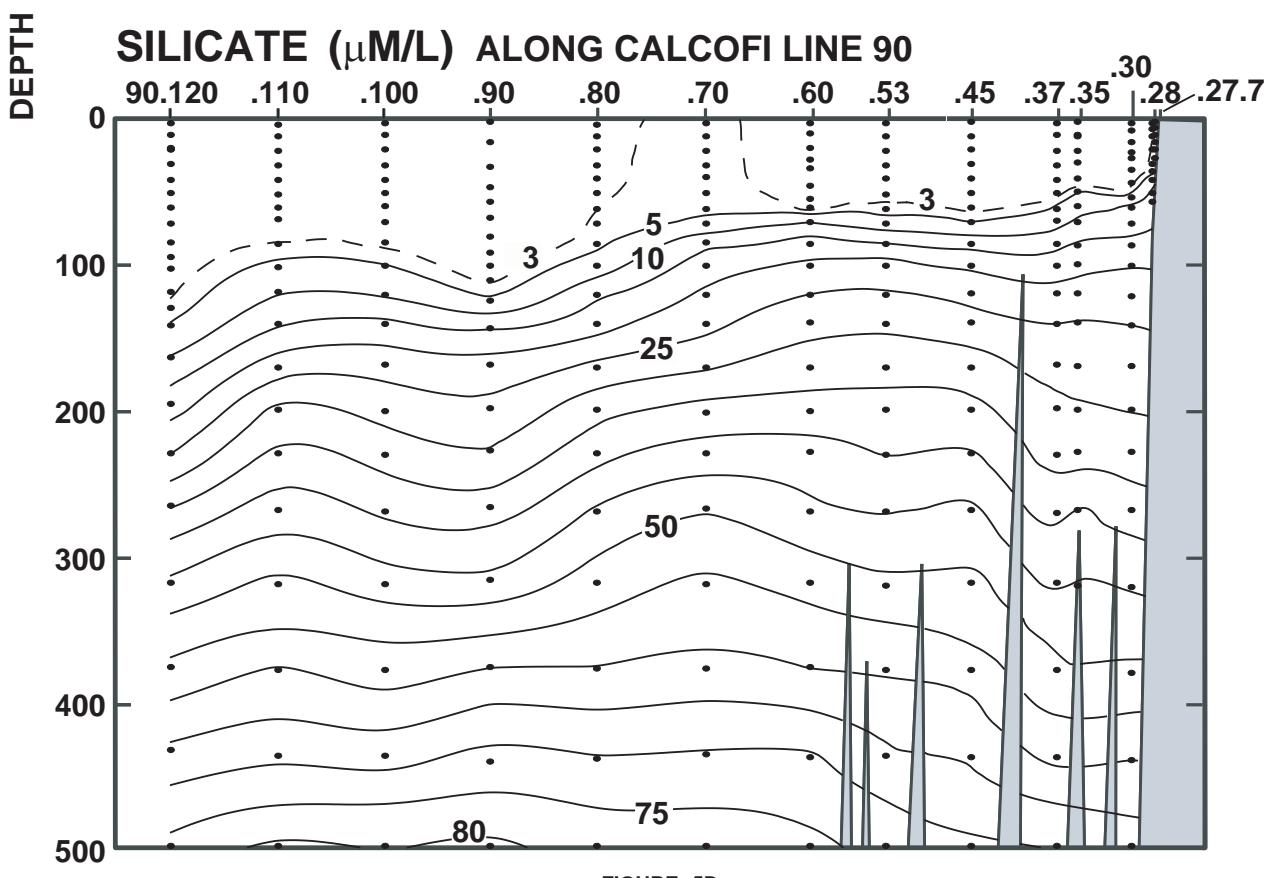
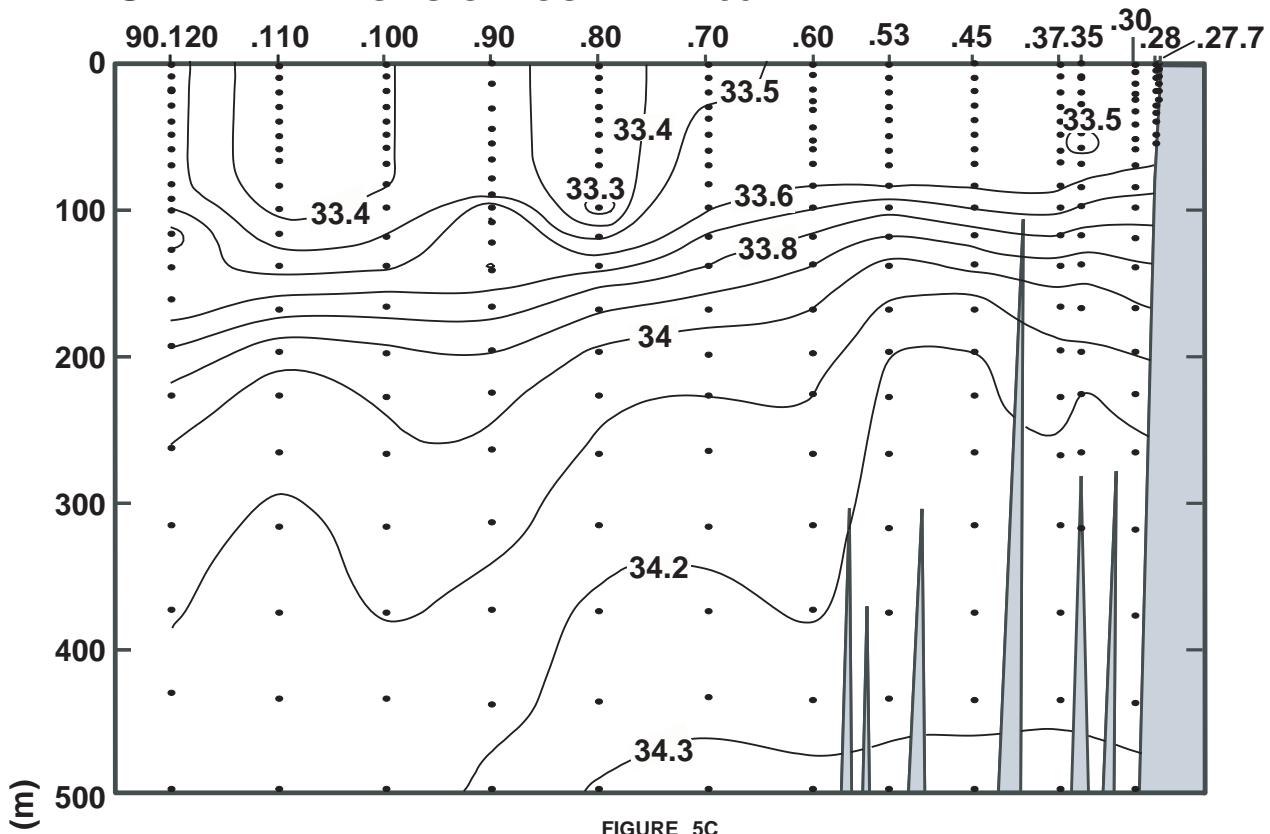


FIGURE 5B

CALCOFI CRUISE 0701

16 - 21 January 2007

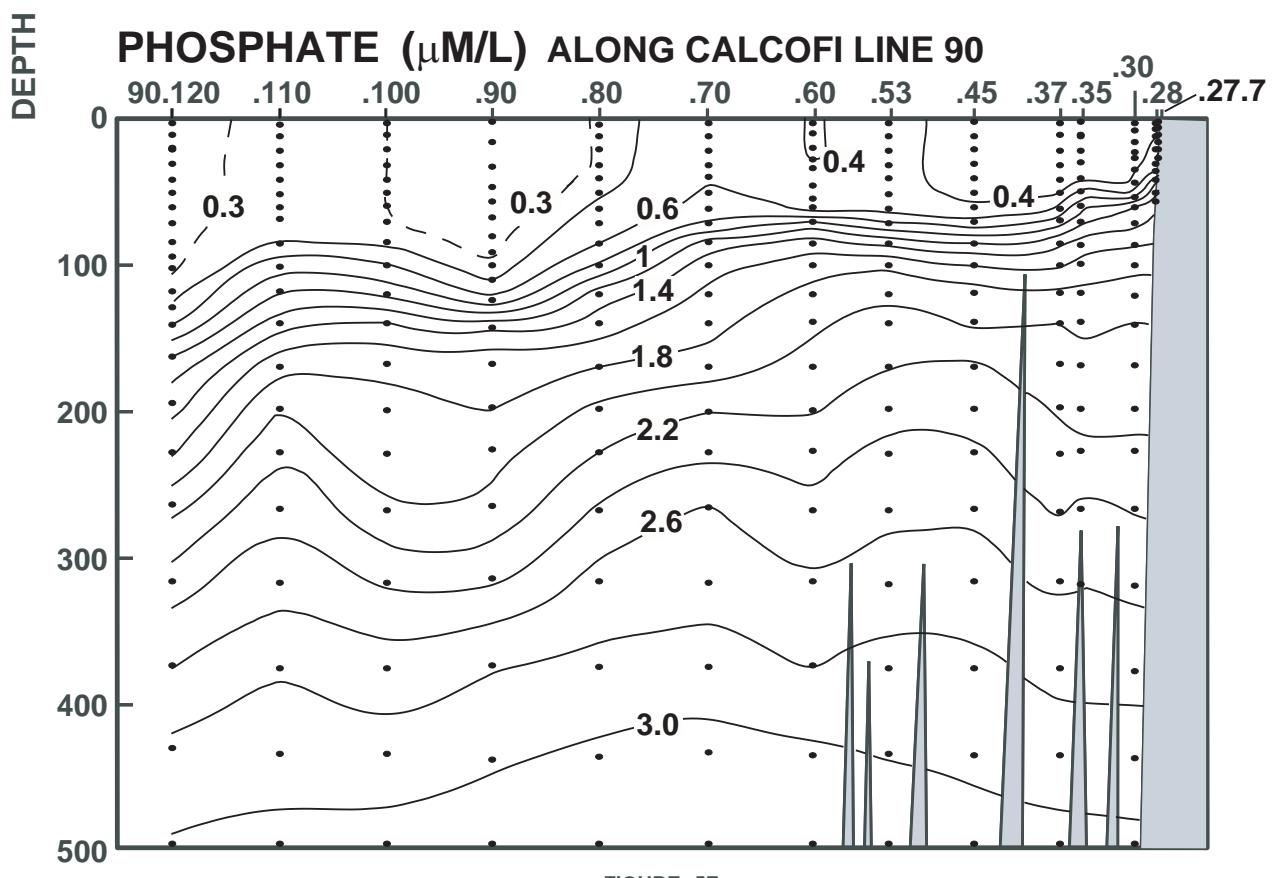
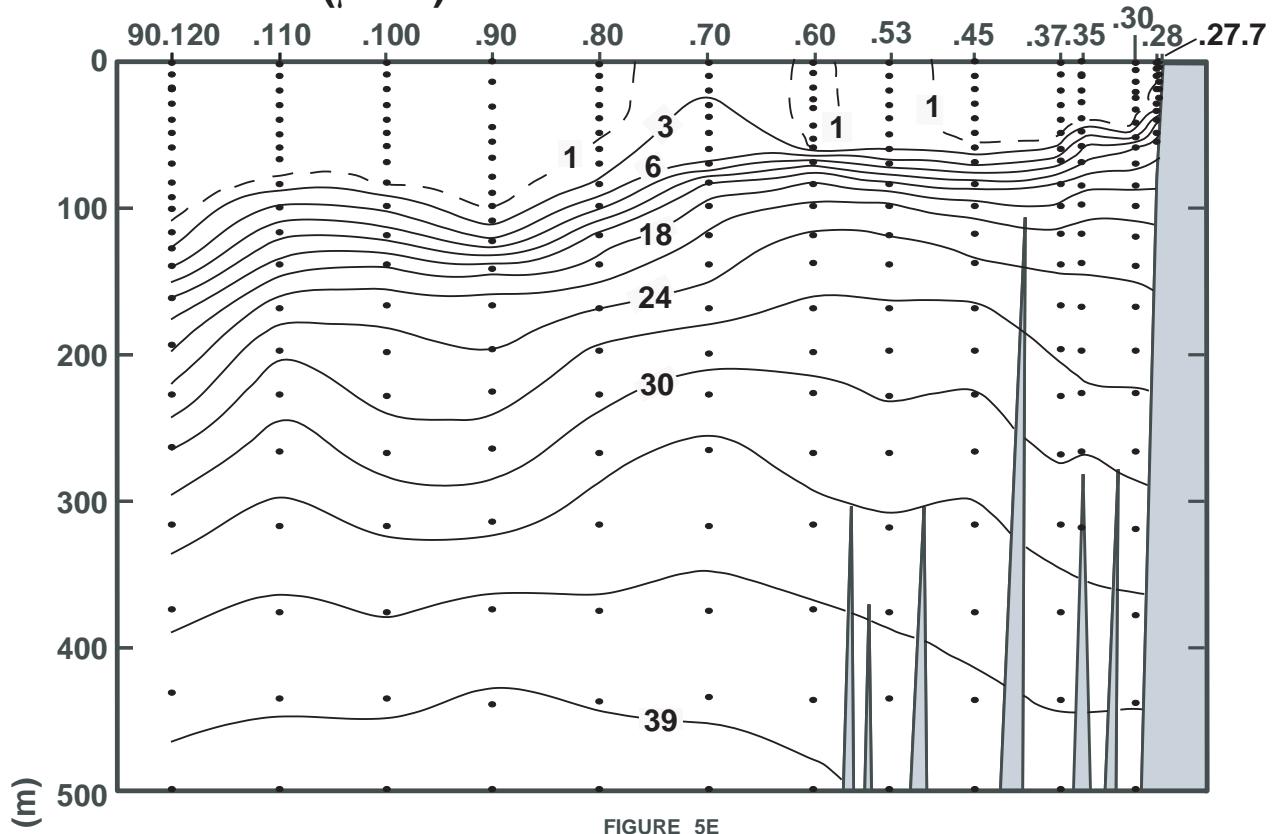
SALINITY ALONG CALCOFI LINE 90



CALCOFI CRUISE 0701

16 - 21 January 2007

NITRATE ($\mu\text{M/L}$) ALONG CALCOFI LINE 90



CALCOFI CRUISE 0701

16 - 21 January 2007

CHLOROPHYLL-a ($\mu\text{g/L}$) ALONG CALCOFI LINE 90

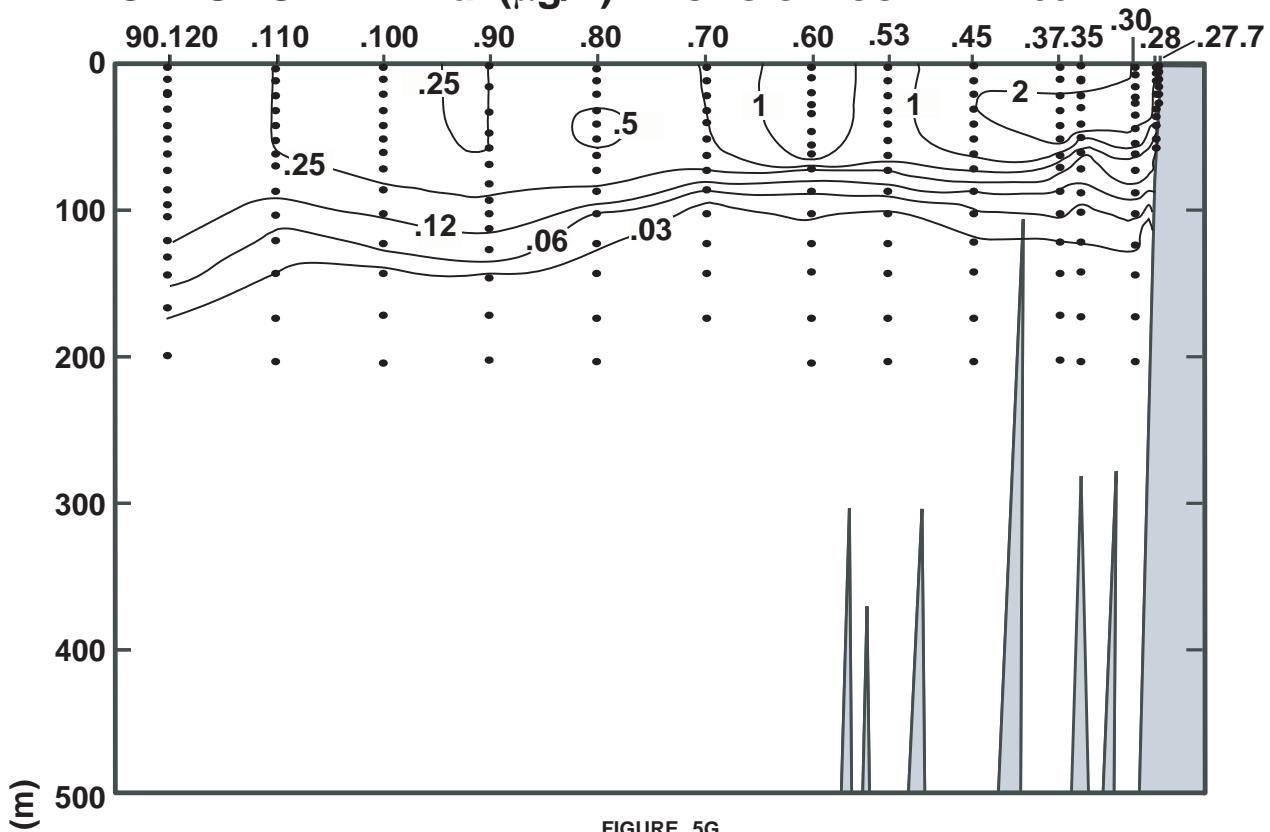


FIGURE 5G

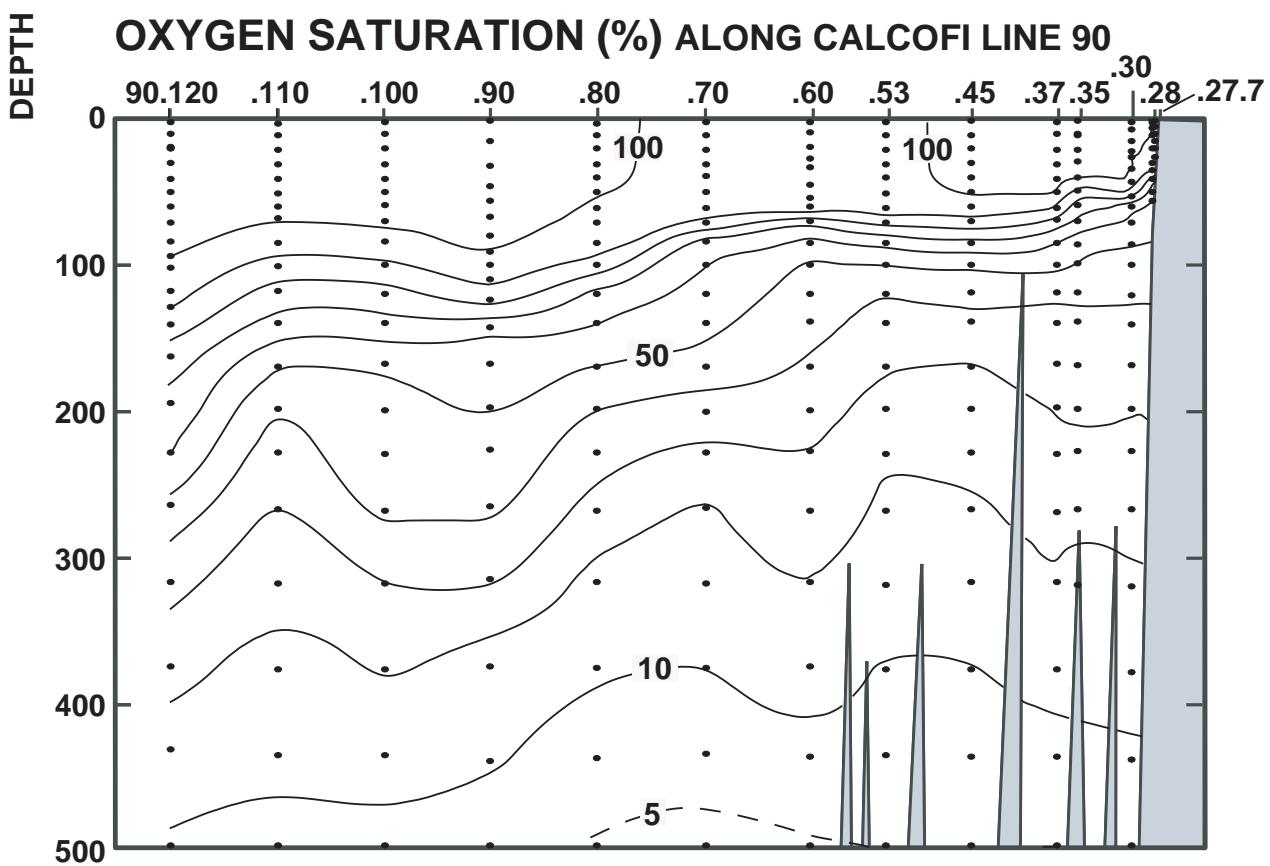


FIGURE 5H

CALCOFI CRUISE 0701

16 - 21 January 2007

OXYGEN (mL/L) ALONG CALCOFI LINE 90

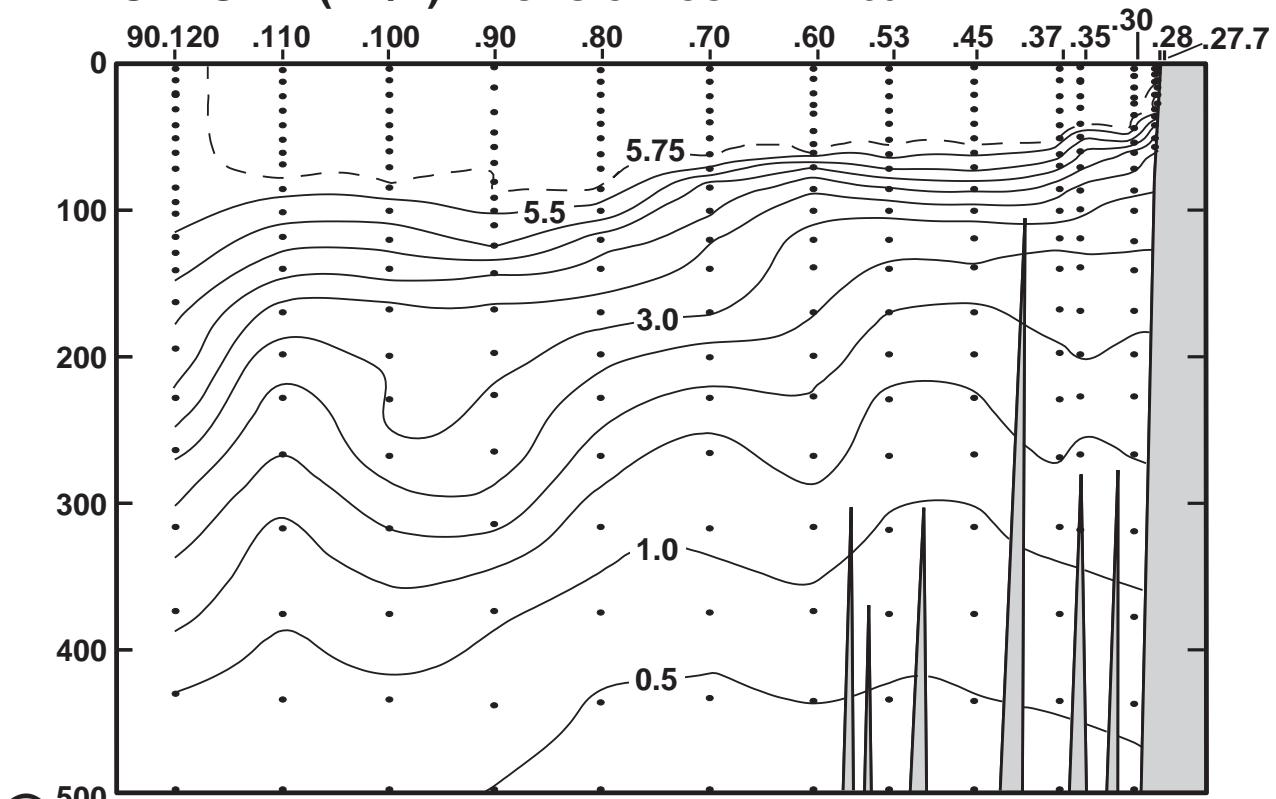


FIGURE 5I

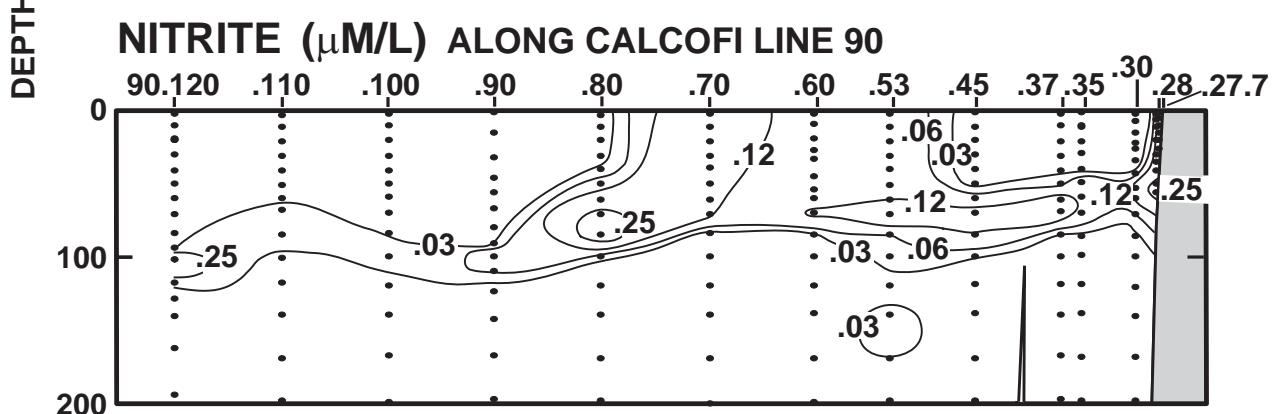


FIGURE 5J

PHAEOPIGMENTS (μg/L) ALONG CALCOFI LINE 90

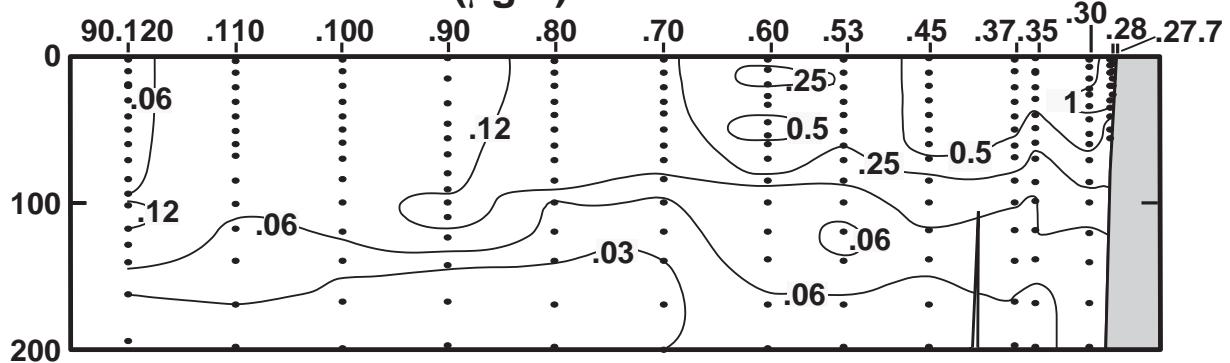


FIGURE 5K

PERSONNEL

CalCOFI Cruise 0701

SHIP'S CAPTAIN

Keith Roberts, RV *David Starr Jordan*

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

		Participating (Legs)
Griffith, David A. (Chief Scientist)	Fishery Biologist, NMFS	1-4
Becker, Susan	Staff Research Associate, SIO	1-3
Blum, Marguerite	Research Assistant, MBARI	4
Campbell, Gregory S.	Staff Research Associate, SIO	1-2
Dotson, Ronald C.	Fishery Biologist, NMFS	1-4
Douglas, Annie B.	Marine Mammal Observer, Cascadia Research	1-4
Dovel, Shonna L.	Staff Research Associate, SIO	1-3
Hays, Amy E.	Fishery Biologist, NMFS	1
Lewis, Jeffery T.	Volunteer	1-3
Manion, Susan M.	Fishery Biologist, NMFS	1-4
Overcash, Bryan J.	Scientific Aid, Cal. Department of Fish and Game	1-4
Roadman, Megan J.	Staff Research Associate, SIO	1-3
Rubio-Cisneros, Nadia	Scientific Technician, Aquatic Farms	3-4
Sheffield, Lisa M.	Seabird Biologist, Pt. Reyes Bird Observatory	1-4
Sheldon, Jennifer L.	Staff Research Associate, SIO	1-4
Stanaway, Kathryn E.	Staff Research Associate, SIO	1-3
Wilkinson, James R.	Programmer Analyst, SIO	1-3
Wolgast, David M.	Staff Research Associate, SIO	1-4

Leg 1: San Diego to Dana Point, California 12-18 January, 2007

Leg 2: Dana Point to Avila, California 18-28 January, 2007

Leg 3: Avila to Monterrey, California 28-31 January, 2007

Leg 4: Monterey to San Diego, California 31 January to 3 February, 2007

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 66.7 50.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SIO3	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C		THETA			ml/l	PCT	uM/l	uM/l	uM/l	uM/l	ug/l	ug/l	db	
0 ISL	12.04	12.04	33.566	25.468	250.2	0.000	6.08	99.7	7.7	0.52	6.8	0.27	0.78	0.27	0	
2	12.04	12.04	33.566	25.469	250.3	0.005	6.08	99.7	7.7	0.52	6.8	0.27	0.78	0.27	2	223
10	12.03	12.03	33.566	25.471	250.3	0.025	6.06 D	99.3	7.7	0.55	6.8	0.26	0.72	0.23	10	221
20	12.00	12.00	33.569	25.479	249.7	0.050	5.96 D	97.6	7.9	0.57	7.1	0.27	0.68	0.22	20	219
30	11.85	11.85	33.585	25.520	246.1	0.075	5.64 D	92.1	9.8	0.69	9.2	0.33	0.34	0.21	30	217
40	11.78	11.77	33.593	25.539	244.5	0.099	5.51 D	89.8	10.3	0.70	9.6	0.33	0.31	0.25	40	215
50 ISL	11.68 D	11.67	33.609 D	25.570	241.8	0.124	5.23 D	85.1	11.9	0.85	11.7	0.36	0.23	0.23	50	
60	11.39	11.38	33.633	25.642	235.1	0.148	4.47 D	72.3	13.7	1.03	14.1	0.38	0.16	0.21	60	213
75 ISL	11.25 D	11.24	33.666 D	25.694	230.6	0.182	4.28 D	69.0	15.6	1.12	15.8	0.30	0.14	0.17	75	
80	11.21	11.20	33.673	25.707	229.5	0.194	4.14 D	66.7	16.1	1.14	16.1	0.28	0.14	0.15	80	211
100	10.85	10.84	33.687	25.782	222.7	0.239	4.01 D	64.1	18.3	1.41	17.2	0.39	0.10	0.11	101	209
125 ISL	10.34 D	10.33	33.750 D	25.921	210.0	0.293	3.33 D	52.7	22.2	1.58	20.4	0.32	0.06	0.08	126	
149	9.90	9.88	33.844	26.069	196.3	0.342	2.66 D	41.7	26.2	1.68	23.7	0.18	0.03	0.06	150	207
150 ISL	9.86 D	9.84	33.854 D	26.084	195.0	0.344	2.66 D	41.6	26.4	1.69	23.8	0.18	0.03	0.06	151	
199	9.11	9.09	34.006	26.326	172.8	0.434	2.12 D	32.7	33.4	1.94	27.4	0.05	0.01	0.07	200	205
200 ISL	9.08 D	9.06	34.007 D	26.332	172.3	0.436	2.12 D	32.7	33.5	1.94	27.5	0.05	0.01	0.07	201	
250 CSL	8.66	8.63	34.056	26.437	163.1	0.520	1.98	30.2							252	200
300 CSL	8.09	8.06	34.107	26.564	151.7	0.598	1.61								302	200
400 CSL	7.27	7.23	34.172	26.735	136.7	0.743	1.04								403	200
500 CSL	6.59	6.54	34.205	26.854	126.3	0.874	0.71								504	200
516	6.47	6.42	34.218	26.880	123.9	0.894	0.65	9.4	69.3	2.78	37.6	0.04	0.00	0.02	520	203
600 CSL	5.71	5.66	34.290	27.034	109.6	0.992	0.42								604	200
700 CSL	5.17	5.11	34.344	27.142	99.9	1.097	0.27								705	200
800 CSL	4.66	4.60	34.384	27.233	91.7	1.193	0.29								806	200
900 CSL	4.30	4.23	34.415	27.297	85.9	1.281	0.35								908	200
1000 CSL	3.88	3.80	34.452	27.370	79.1	1.364	0.48								1009	200
1027	3.81	3.73	34.460	27.384	77.9	1.385	0.48	6.5	123.7	3.07	42.9	0.03	0.00	0.04	1036	201

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED O2;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 66.7 52.5

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SIO3	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C		THETA			ml/l	PCT	uM/l	uM/l	uM/l	uM/l	ug/l	ug/l	db	
0 ISL	11.90	11.90	33.590	25.513	245.9	0.000	5.98	97.7	9.6	0.48	8.3	0.26			0	
1	11.90	11.90	33.590	25.513	245.9	0.002	5.98	97.7	9.6	0.48	8.3	0.26		1	223	
10 ISL	11.78 D	11.78	33.593 D	25.538	243.8	0.024	5.81 D	94.7	10.0	0.53	8.9	0.30		10		
20 ISL	11.75 D	11.75	33.597 D	25.547	243.2	0.049	5.65 D	92.1	10.6	0.60	9.7	0.34		20		
30 ISL	11.72 D	11.72	33.609 D	25.562	242.0	0.073	5.35 D	87.1	11.4	0.69	10.7	0.38		30		
40 CSL	11.52	11.51	33.632	25.617	237.0	0.097	4.97								40	200
50 ISL	11.43 D	11.42	33.645 D	25.644	234.7	0.121	4.75 D	76.9	13.8	0.92	13.5	0.44		50		
51	11.43	11.42	33.647	25.646	234.6	0.123	4.71 D	76.2	13.9	0.93	13.7	0.44		51	221	
75 ISL	11.17 D	11.16	33.686 D	25.724	227.7	0.178	4.06 D	65.4	17.0	1.15	16.7	0.29		75		
100	10.79	10.78	33.737	25.832	218.0	0.234	3.28 D	52.4	20.2	1.35	19.6	0.09		101	219	
125 ISL	10.53 D	10.52	33.775 D	25.908	211.3	0.288	2.86 D	45.4	22.0	1.47	21.4			126		
150 ISL	10.24 D	10.22	33.797 D	25.975	205.4	0.340	2.67 D	42.1	23.9	1.58	22.9			151		
199 A	9.80	9.78	33.922	26.148	190.0	0.437	2.19 D	34.3	27.8	1.72	25.1			200	217	
200 ISL	9.75 D	9.73	33.930 D	26.162	188.6	0.439	2.19 D	34.2	27.9	1.72	25.2			201		
250 ISL	8.77 D	8.74	34.072 D	26.432	163.6	0.527	1.77 D	27.1	35.8	1.92	28.4			252		
293	8.15	8.12	34.114	26.560	151.9	0.595	1.50 D	22.6	43.1	2.08	31.1			295	215	
300 ISL	8.11 D	8.08	34.116 D	26.568	151.3	0.605	1.46 D	22.0	44.1	2.10	31.4			302		
397	7.14	7.10	34.173	26.753	134.7	0.744									400	213
400 ISL	7.11 D	7.07	34.171 D	26.756	134.5	0.748	0.83 D	12.2	57.7	2.44	35.2			403		
497	6.37	6.32	34.229	26.902	121.5	0.872	0.35 D	5.1	70.6	2.76	37.5			501	211	
500 ISL	6.36 D	6.31	34.228 D	26.902	121.5	0.876	0.34 D	4.9	70.9	2.77	37.6			504		
596	5.82	5.77	34.274	27.008	112.2	0.988	0.14 D	2.0	81.6	2.90	39.6			600	209	
600 ISL	5.79 D	5.74	34.276 D	27.014	111.7	0.992	0.13 D	1.9	82.1	2.90	39.7			604		
695	5.18	5.12	34.345	27.142	99.9	1.093	0.03 D	0.4	93.9	2.97	40.9			700	207	
700 ISL	5.16 D	5.10	34.345 D	27.144	99.7	1.098	0.03 D	0.4	94.4	2.97	41.0			705		
798	4.75	4.69	34.388	27.226	92.5	1.192	0.03 D	0.4	103.1	3.06	42.2			804	205	
800 ISL	4.72 D	4.66	34.389 D	27.230	92.0	1.194	0.04 D	0.6	103.3	3.06	42.2			806		
898	4.34	4.27	34.422	27.298	85.9	1.281	0.10 D	1.4	111.6	3.11	42.8			906	203	
900 CSL	4.34	4.27	34.421	27.297	86.0	1.283	0.10							908	200	
1000 CSL	4.04	3.96	34.442	27.346	81.7	1.367	0.18							1009	200	
1017	4.04	3.96	34.444	27.348	81.7	1.381	0.38	5.2	117.5	3.06	42.0	0.00		1026	201	

A) NUTRIENTS WERE FROZEN AND RUN FOLLOWING THE CRUISE. VALUES THAT WERE SUSPECT WERE OMITTED.

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED O2;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 66.7 55.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C		THETA			ml/l	PCT	uM/L	uM/L	uM/L	uM/L	ug/l	ug/l	db	
0 ISL	12.46	12.46	33.520	25.353	261.2	0.000	6.23	103.0	5.3	0.24	4.1	0.21	0.91	0.20	0	
2	12.46	12.46	33.520	25.353	261.3	0.005	6.23	103.0	5.3	0.24	4.1	0.21	0.91	0.20	2	223
10	12.47	12.47	33.520	25.351	261.6	0.026	6.26 D	103.5	5.1	0.31	4.1	0.21	0.86	0.20	10	221
20	12.36	12.36	33.536	25.385	258.7	0.052	5.95 D	98.2	5.6	0.37	5.2	0.23	0.80	0.25	20	219
30	12.24	12.24	33.570	25.434	254.2	0.078	5.76 D	94.8	6.5	0.48	6.4	0.26	0.65	0.38	30	217
40	12.01	12.00	33.589	25.493	248.9	0.103	5.43 D	88.9	8.9	0.76	8.7	0.32	0.34	0.29	40	215
50 ISL	11.83 D	11.82	33.618 D	25.549	243.8	0.128	5.22 D	85.2	10.7	0.86	10.8	0.34	0.26	0.25	50	
60	11.56	11.55	33.641	25.618	237.5	0.152	4.08 D	66.2	12.7	0.93	13.1	0.36	0.19	0.23	60	213
75 ISL	10.89 D	10.88	33.737 D	25.814	219.2	0.186	3.37 D	53.9	17.9	1.26	18.0	0.17	0.10	0.15	75	
80	10.84	10.83	33.746	25.830	217.7	0.197	3.32	53.1	19.6	1.37	19.5	0.10	0.07	0.13	80	211
100	10.30	10.29	33.845	26.001	201.8	0.239	2.63 D	41.6	23.9	1.64	22.8	0.05	0.02	0.12	101	209
125 ISL	10.02 D	10.01	33.915 D	26.104	192.6	0.288	2.39 D	37.6	26.5	1.75	24.7	0.04	0.01	0.08	126	
149	9.60	9.58	33.967	26.215	182.4	0.333	2.38 D	37.1	28.1	1.79	25.5	0.03	0.00	0.05	150	207
150 ISL	9.59 D	9.57	33.971 D	26.220	182.0	0.335	2.37 D	36.9	28.2	1.80	25.5	0.03	0.00	0.05	151	
198	9.19	9.17	34.096	26.384	167.4	0.419	1.86 D	28.7	33.5	2.15	27.7	0.04	0.00	0.05	199	205
200 ISL	9.12 D	9.10	34.099 D	26.397	166.1	0.422	1.85 D	28.5	33.8	2.15	27.8	0.04	0.00	0.05	201	
250 CSL	8.84	8.81	34.154	26.485	158.6	0.503	1.65	25.3							252	200
300 CSL	8.06	8.03	34.139	26.594	148.9	0.580	1.52	22.9							302	200
400 CSL	6.70	6.66	34.123	26.774	132.4	0.721	1.14	16.6							403	200
500 CSL	6.20	6.16	34.218	26.915	120.1	0.847	0.60	8.7							504	200
515	6.05	6.00	34.227	26.941	117.6	0.865	0.54 D	7.8	74.1	2.85	38.8	0.01	0.00	0.01	519	203
600 CSL	5.66	5.61	34.292	27.042	108.8	0.961	0.34	4.8							605	200
700 CSL	5.13	5.07	34.350	27.152	98.9	1.065	0.29	4.1							705	200
800 CSL	4.66	4.60	34.387	27.235	91.4	1.160	0.32	4.5							807	200
900 CSL	4.33	4.26	34.414	27.293	86.4	1.249	0.35	4.8							908	200
1000 CSL	3.99	3.91	34.446	27.354	80.8	1.333	0.45	6.2							1009	200
1028	3.89	3.81	34.459	27.375	78.9	1.355	0.42	5.7	121.3	3.15	43.0	0.01	0.00	0.01	1037	201

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED O2;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 66.7 60.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C		THETA			ml/l	PCT	uM/L	uM/L	uM/L	uM/L	ug/l	ug/l	db	
0 ISL	11.97	11.97	33.565	25.481	249.0	0.000	6.01	98.4	9.4	0.52	8.1	0.32	0.48	0.14	0	
2	11.97	11.97	33.565	25.481	249.1	0.005	6.01	98.4	9.4	0.52	8.1	0.32	0.48	0.14	2	223
10	11.96	11.96	33.564	25.482	249.2	0.025	6.04 D	98.8	9.3	0.63	8.1	0.31	0.49	0.14	10	221
20 ISL	11.95 D	11.95	33.562 D	25.483	249.3	0.050	6.03 D	98.6	9.2	0.66	8.1	0.31	0.47	0.14	20	
21	11.96	11.96	33.563	25.482	249.5	0.052	6.02 D	98.5	9.2	0.66	8.1	0.31	0.47	0.14	21	219
30	11.91	11.91	33.563	25.491	248.8	0.075	5.98 D	97.7	9.3	0.63	8.2	0.30	0.50	0.17	30	217
40 CSL	11.91	11.90	33.570	25.497	248.5	0.100	5.87	95.9							40	200
41	11.91	11.90	33.572	25.499	248.4	0.102	5.83 D	95.3	9.5	0.68	8.7	0.32	0.30	0.13	41	215
50 ISL	11.86 D	11.85	33.588 D	25.521	246.5	0.124	5.67 D	92.6	9.9	0.73	9.3	0.35	0.21	0.11	50	
61	11.79	11.78	33.586	25.532	245.7	0.151	5.37 D	87.5	10.5	0.79	10.1	0.38	0.14	0.10	61	213
75 ISL	10.60 D	10.59	33.627 D	25.779	222.4	0.184	3.70 D	58.8	17.3	1.23	17.9	0.16	0.05	0.07	75	
82	10.14	10.13	33.700	25.915	209.6	0.199	3.18	50.1	20.9	1.45	21.7	0.04	0.02	0.06	82	211
99	9.66	9.65	33.782	26.060	196.1	0.234	2.98 D	46.4	23.5	1.55	23.2	0.02	0.01	0.05	100	209
100 ISL	9.67 D	9.66	33.777 D	26.054	196.6	0.236	2.98 D	46.4	23.7	1.56	23.3	0.02	0.01	0.05	101	
125 ISL	9.41 D	9.40	33.949 D	26.232	180.3	0.283	2.47 D	38.3	27.5	1.70	25.2	0.03	0.00	0.04	126	
148	9.29	9.27	34.032	26.317	172.7	0.323	2.16 D	33.4	30.9	1.82	26.8	0.03	0.00	0.04	149	207
150 ISL	9.26 D	9.24	34.044 D	26.331	171.4	0.327	2.13 D	32.9	31.2	1.83	26.9	0.03	0.00	0.04	151	
200 ISL	8.79 D	8.77	34.139 D	26.481	158.0	0.409	1.78 D	27.3	37.8	2.08	29.6	0.02	0.00	0.02	201	
205	8.74	8.72	34.161	26.506	155.7	0.417	1.63 D	24.9	38.4	2.10	29.8	0.02	0.00	0.02	206	205
250 CSL	8.37	8.34	34.184	26.582	149.3	0.486	1.41	21.4							252	200
300 CSL	7.74	7.71	34.162	26.658	142.5	0.559	1.37	20.5							302	200
400 CSL	6.64	6.60	34.169	26.818	128.2	0.694	0.89	13.0							403	200
500 CSL	5.92	5.88	34.225	26.956	115.9	0.816	0.48	6.9							504	200
517	5.82	5.78	34.236	26.977	114.0	0.836	0.43 D	6.1	77.0	2.88	39.8	0.01	0.00	0.01	521	203
600 CSL	5.12	5.07	34.226	27.054	106.9	0.927	0.38	5.3							605	200
700 CSL	4.98	4.92	34.335	27.157	98.2	1.030	0.23	3.2							706	200
800 CSL	4.55	4.49	34.383	27.244	90.4	1.124	0.25	3.5							807	200
900 CSL	4.19	4.12	34.417	27.310	84.5	1.212	0.31	4.3							908	200
1000 CSL	3.93	3.85	34.448	27.362	79.9	1.294	0.40	5.5							1009	200
1013	3.91	3.83	34.452	27.367	79.5	1.304	0.39	5.3	119.0	3.06	43.5	0.00	0.00	0.00	1022	201

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED O2;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 66.7 65.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SIO3	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C		THETA			ml/l	PCT	uM/l	uM/l	uM/l	uM/l	ug/l	ug/l	db	
0 ISL	11.90	11.90	33.209	25.218	274.1	0.000	6.32	103.1	5.9	0.32	3.5	0.16	0.52	0.18	0	
2	11.90	11.90	33.209	25.218	274.1	0.005	6.32	103.1	5.9	0.32	3.5	0.16	0.52	0.18	2	223
10	11.90	11.90	33.209	25.218	274.3	0.027	6.47 D	105.5	5.0	0.36	3.2	0.15	0.52	0.17	10	221
20	11.90	11.90	33.210	25.219	274.4	0.055	6.40 D	104.4							20	219
30	11.69	11.69	33.247	25.287	268.2	0.082	5.93 D	96.3	7.2	0.48	6.5	0.38	0.27	0.12	30	217
40	11.57	11.56	33.308	25.356	261.8	0.108	5.82 D	94.3	7.2	0.56	7.1	0.34	0.16	0.09	40	215
50 ISL	11.41 D	11.40	33.362 D	25.428	255.3	0.134	5.72 D	92.4	8.3	0.64	8.1	0.34	0.19	0.10	50	
61	11.74	11.73	33.547	25.511	247.7	0.162	5.88 D	95.7	9.9	0.71	9.4	0.35	0.25	0.12	61	213
75 ISL	11.63 D	11.62	33.598 D	25.572	242.3	0.196	5.63 D	91.5	11.1	0.76	10.7	0.35	0.19	0.13	75	
80	11.57	11.56	33.605	25.588	240.8	0.208	5.41	87.8	11.8	0.80	11.5	0.35	0.16	0.13	80	211
100	10.69	10.68	33.672	25.799	221.1	0.255	3.54 D	56.4	18.2	1.30	19.0	0.09	0.06	0.08	101	209
125 ISL	10.01 D	10.00	33.862 D	26.064	196.3	0.307	2.66 D	41.8	23.8	1.59	23.6	0.05	0.03	0.05	126	
149	9.58	9.56	33.940	26.198	184.1	0.352	2.52 D	39.2	27.4	1.70	25.2	0.02	0.00	0.04	150	207
150 ISL	9.49 D	9.47	33.959 D	26.227	181.3	0.354	2.52 D	39.2	27.5	1.70	25.2	0.02	0.00	0.04	151	
200	8.82	8.80	34.015	26.379	167.7	0.441	2.84 D	43.5	31.2	1.85	26.2	0.03	0.00	0.04	201	205
250 CSL	8.26	8.23	34.080	26.517	155.3	0.522	1.94								252	200
300 CSL	7.75	7.72	34.126	26.629	145.3	0.597	1.49								302	200
400 CSL	6.65	6.61	34.190	26.833	126.8	0.733	0.85								403	200
497	6.00	5.96	34.241	26.959	115.7	0.851	0.47 D	6.7	75.4	2.63	39.2	0.02	0.00	0.01	501	203
500 CSL	5.93	5.89	34.238	26.965	115.1	0.855	0.47								504	200
600 CSL	5.39	5.34	34.284	27.068	106.0	0.965	0.30								604	200
700 CSL	4.93	4.87	34.342	27.168	97.1	1.067	0.25								705	200
800 CSL	4.49	4.43	34.386	27.253	89.5	1.160	0.28								806	200
900 CSL	4.22	4.15	34.422	27.311	84.5	1.247	0.34								908	200
1000 CSL	3.94	3.86	34.452	27.364	79.8	1.329	0.45								1009	200
1022	3.85	3.77	34.464	27.383	78.0	1.346	0.44								1031	201

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED O2;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 66.7 70.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SIO3	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C		THETA			ml/l	PCT	uM/l	uM/l	uM/l	uM/l	ug/l	ug/l	db	
0 ISL	11.80	11.80	33.212	25.239	272.1	0.000	6.33	103.0	6.1	0.25	3.8	0.17	0.54	0.14	0	
2	11.80	11.80	33.212	25.239	272.1	0.005	6.33	103.0	6.1	0.25	3.8	0.17	0.54	0.14	2	223
10	11.81	11.81	33.212	25.237	272.5	0.027	6.45 D	105.0	6.1	0.43	3.8	0.17	0.50	0.16	10	221
20	11.81	11.81	33.231	25.252	271.3	0.054	6.42 D	104.5	6.3	0.37	4.1	0.18	0.53	0.15	20	219
30	11.77	11.77	33.276	25.295	267.5	0.081	6.30 D	102.5	7.1	0.47	5.0	0.21	0.56	0.18	30	217
40	11.73	11.72	33.461	25.446	253.4	0.107	5.93 D	96.5	9.2	0.53	8.2	0.28	0.42	0.18	40	215
50 ISL	11.72 D	11.71	33.563 D	25.527	245.9	0.132	5.83 D	94.9	10.2	0.62	9.4	0.31	0.31	0.21	50	
60	11.60	11.59	33.581	25.564	242.6	0.157	5.43 D	88.2	11.3	0.75	10.7	0.34	0.22	0.22	60	213
75 ISL	10.68 D	10.67	33.558 D	25.711	228.8	0.192	4.41 D	70.2	15.3	1.03	16.3	0.11	0.08	0.11	75	
79	10.51	10.50	33.552	25.736	226.5	0.201	4.21	66.7	16.5	1.11	17.9	0.05	0.05	0.08	79	211
99	9.86	9.85	33.712	25.972	204.5	0.244	3.32 D	51.9	21.9	1.45	22.3	0.02	0.01	0.05	100	209
100 ISL	9.75 D	9.74	33.705 D	25.985	203.3	0.246	3.31 D	51.7	22.1	1.46	22.4	0.02	0.01	0.05	101	
125 ISL	9.42 D	9.41	33.859 D	26.160	187.1	0.295	2.89 D	44.8	26.2	1.65	25.0	0.03	0.00	0.03	126	
149	9.41	9.39	33.968	26.247	179.3	0.339	2.50 D	38.8	29.1	1.72	26.2	0.03	0.00	0.03	150	207
150 ISL	9.41 D	9.39	33.974 D	26.252	178.9	0.341	2.47 D	38.3	29.2	1.72	26.3	0.03	0.00	0.03	151	
199	8.29	8.27	34.026	26.469	158.9	0.424	2.48 D	37.5	35.8	1.86	28.7	0.02	0.00	0.01	200	205
200 ISL	8.27 D	8.25	34.026 D	26.472	158.6	0.425	2.47 D	37.4	35.9	1.86	28.7	0.02	0.00	0.01	201	
250 CSL	7.86	7.84	34.087	26.581	149.0	0.502	1.83								252	200
300 CSL	7.40	7.37	34.131	26.683	140.0	0.574	1.39								302	200
400 CSL	6.46	6.42	34.151	26.828	127.1	0.708	0.99								403	200
498	5.75	5.71	34.199	26.956	115.6	0.827	0.62 D	8.8	77.1	2.79	39.6	0.01	0.00	0.00	502	203
500 CSL	5.74	5.70	34.205	26.962	115.1	0.829	0.62								504	200
600 CSL	5.13	5.08	34.258	27.078	104.7	0.939	0.38								605	200
700 CSL	4.71	4.65	34.339	27.190	94.6	1.039	0.30								705	200
800 CSL	4.34	4.28	34.392	27.273	87.2	1.130	0.34								807	200
900 CSL	4.07	4.00	34.432	27.334	81.9	1.214	0.43								908	200
1000 CSL	3.81	3.74	34.465	27.388	77.3	1.294	0.55								1009	200
1023	3.74	3.66	34.473	27.401	76.0	1.311	0.47								1032	201

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED O2;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 66.7 75.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE	
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SIO3	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP	
m	DEG C	DEG C		THETA			ml/l	PCT	uM/L	uM/L	uM/L	uM/L	ug/l	ug/l	db		
35 57.4 N	123 50.2 W	01/02/07	1629	UTC	3870 m	330	11 kn	340 02 05	1	1017.1 mb	11.7	9.0 C					
0 ISL	12.28	12.28	33.122	25.078	287.3	0.000	6.27	103.0	4.2	0.17	1.9	0.09	0.52	0.14	0		
2	12.28	12.28	33.122	25.078	287.4	0.006	6.27	103.0	4.2	0.17	1.9	0.09	0.52	0.14	2	223	
10 ISL	12.28 D	12.28	33.120 D	25.077	287.7	0.029	6.27 D	103.0	4.1	0.26	1.9	0.10	0.49	0.14	10		
11	12.28	12.28	33.122	25.079	287.6	0.032	6.27 D	103.0	4.1	0.27	1.9	0.10	0.48	0.14	11	221	
20 ISL	12.30 D	12.30	33.139 D	25.088	286.9	0.057	6.26 D	102.9	4.4	0.22	2.3	0.13	0.47	0.15	20		
21 A	12.30	12.30	33.143	25.091	286.6	0.060	6.25 D	102.7	4.4	0.22	2.4	0.13	0.47	0.15	21	219	
30	12.32	12.32	33.175	25.113	284.8	0.086	6.10 D	100.3	4.5		3.0	0.25	0.31	0.12	30	217	
40	12.23	12.22	33.181	25.135	283.0	0.114	6.08 D	99.8	4.8	0.38	3.5	0.30	0.21	0.09	40	215	
50 ISL	12.14 D	12.13	33.186 D	25.156	281.2	0.143	6.03 D	98.8	5.2	0.39	4.4	0.30	0.15	0.07	50		
61	11.78	11.77	33.170	25.211	276.2	0.173	5.93 D	96.4	6.2	0.40	5.8	0.29	0.11	0.06	61	213	
75 ISL	11.29 D	11.28	33.362 D	25.450	253.7	0.210	5.86 D	94.4	9.2	0.66	8.5	0.49	0.12	0.07	75		
80	11.20	11.19	33.366	25.470	252.0	0.223	5.84 D	93.9	10.5	0.77	9.8	0.53	0.12	0.07	80	211	
100	10.47	10.46	33.419	25.640	236.1	0.272	4.02 D	63.6	15.0	1.09	17.0	0.02	0.02	0.04	101	209	
125 ISL	9.34 D	9.33	33.675 D	26.029	199.5	0.326	3.58 D	55.4	20.0	1.31	21.5	0.01	0.01	0.03	126		
150	9.08	9.06	33.804	26.172	186.4	0.375	3.24 D	49.8	24.7	1.44	23.6	0.01	0.00	0.02	151	207	
199	8.58	8.56	34.020	26.420	163.7	0.460	2.32 D	35.3	33.9	1.78	27.9	0.02	0.00	0.01	200	205	
200 ISL	8.60 D	8.58	34.021 D	26.418	163.9	0.462	2.31 D	35.2	34.1	1.79	28.0	0.02	0.00	0.01	201		
250 CSL	7.83	7.81	34.062	26.566	150.4	0.541	2.02		30.3						252	200	
300 CSL	7.33	7.30	34.105	26.672	140.9	0.613	1.44		21.3						302	200	
400 CSL	6.19	6.15	34.111	26.831	126.6	0.747	0.97		14.0						403	200	
500 CSL	5.58	5.54	34.191	26.971	114.1	0.867	0.54		7.7						504	200	
511	5.46	5.42	34.191	26.985	112.7	0.880	0.54		7.7	81.1	2.74	40.2	0.01	0.00	0.00	515	203
600 CSL	5.13	5.08	34.258	27.078	104.7	0.977	0.31		4.4						604	200	
700 CSL	4.69	4.63	34.317	27.175	96.0	1.077	0.21		2.9						705	200	
800 CSL	4.48	4.42	34.379	27.248	89.8	1.170	0.23		3.2						806	200	
900 CSL	4.14	4.07	34.428	27.324	83.1	1.256	0.31		4.3						908	200	
1000 CSL	3.88	3.80	34.458	27.375	78.6	1.337	0.42		5.7						1009	200	
1017	3.83	3.75	34.464	27.385	77.7	1.350	0.43		5.9	116.0	2.96	42.0	0.02	0.00	0.00	1026	201

A) NUTRIENTS WERE FROZEN AND RUN FOLLOWING THE CRUISE. VALUES THAT WERE SUSPECT WERE OMITTED.

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 02;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 66.7 80.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE	
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SIO3	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP	
m	DEG C	DEG C		THETA			ml/l	PCT	uM/L	uM/L	uM/L	uM/L	ug/l	ug/l	db		
35 47.3 N	124 11.7 W	01/02/07	1946	UTC	3948 m	320	10 kn	340 02 05	2	1019.5 mb	12.5	C 10.1					
0 ISL	12.90	12.90	33.088	24.932	301.2	0.000	6.12	101.8	2.9	0.10	0.8	0.06	0.27	0.07	0		
2	12.90	12.90	33.088	24.932	301.3	0.006	6.12	101.8	2.9	0.10	0.8	0.06	0.27	0.07	2	223	
10	12.60	12.60	33.121	25.016	293.5	0.030	6.19 D	102.4	3.5	0.22	1.3	0.09	0.38	0.10	10	221	
20 ISL	12.41 D	12.41	33.155 D	25.080	287.7	0.059	6.23 D	102.6	4.1	0.26	1.8	0.10	0.46	0.13	20		
21	12.42	12.42	33.152	25.075	288.1	0.062	6.23 D	102.7	4.1	0.26	1.9	0.10	0.46	0.13	21	219	
30	12.26	12.26	33.191	25.136	282.5	0.087	6.15 D	101.0	4.6	0.33	3.0	0.19	0.46	0.21	30	217	
40	12.15	12.14	33.197	25.162	280.3	0.116	6.12 D	100.3	5.0	0.35	3.5	0.24	0.36	0.14	40	215	
50 ISL	12.02 D	12.01	33.203 D	25.192	277.8	0.143	6.02 D	98.4	5.3	0.39	4.0	0.37	0.26	0.11	50		
60	11.96	11.95	33.212	25.210	276.3	0.171	5.97 D	97.5	5.8	0.47	4.8	0.45	0.17	0.09	60	213	
75 ISL	11.19 D	11.18	33.145 D	25.299	268.0	0.212	5.48 D	88.0	7.2	0.68	7.3	0.18	0.06	0.04	75		
80	11.14	11.13	33.190	25.344	264.0	0.225	5.18 D	83.1	7.6	0.77	8.7	0.07	0.04	0.03	80	211	
99	10.47	10.46	33.520	25.719	228.6	0.272	3.79 D	60.0	15.9	1.17	18.2	0.03	0.01	0.03	100	209	
100 ISL	10.42 D	10.41	33.534 D	25.738	226.8	0.274	3.63 D	57.4	16.2	1.18	18.3	0.03	0.01	0.03	101		
125 ISL	9.70 D	9.69	33.769 D	26.044	198.2	0.328	3.04 D	47.4	22.6	1.47	21.7	0.02	0.00	0.03	126		
149	9.32	9.30	33.851	26.170	186.6	0.374	2.70 D	41.8	26.2	1.61	25.0	0.02	0.00	0.02	150	207	
150 ISL	9.29 D	9.27	33.858 D	26.181	185.6	0.376	2.67 D	41.3	26.3	1.62	25.1	0.02	0.00	0.02	151		
198	8.81	8.79	33.990	26.361	169.3	0.461	2.46 D	37.7	31.8	1.85	27.4	0.03	0.00	0.02	199	205	
200 ISL	8.72 D	8.70	33.994 D	26.378	167.7	0.464	2.46 D	37.6	32.1	1.86	27.5	0.03	0.00	0.02	201		
250 CSL	8.67	8.64	34.142	26.503	156.9	0.545	1.52		23.2						252	200	
300 CSL	8.28	8.25	34.196	26.605	147.9	0.621	1.18		17.9						302	200	
400 CSL	7.24	7.20	34.210	26.769	135.4	0.762	0.84		12.4						403	200	
500 CSL	6.07	6.03	34.183	26.904	121.0	0.889	0.67		9.6						504	200	
515	5.93	5.89	34.173	26.914	120.1	0.907	0.68		9.7	71.6	2.72	38.6	0.02	0.00	0.01	519	203
600 CSL	5.76	5.71	34.266	27.009	112.1	1.006	0.35		5.0						604	200	
700 CSL	5.11	5.05	34.342	27.148	99.3	1.112	0.23		3.2						705	200	
800 CSL	4.65	4.59	34.391	27.239	91.0	1.207	0.26		3.6						806	200	
900 CSL	4.29	4.22	34.425	27.306	85.1	1.295	0.33		4.6						907	200	
1000 CSL	3.99	3.91	34.459	27.365	79.9	1.377	0.45		6.2						1009	200	
1029	3.85	3.77	34.469	27.387	77.7	1.400	0.45		6.1	120.6	3.07	43.6	0.01	0.00	0.01	1038	201

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S; STATION CORRECTED 02;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 66.7 85.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
35 37.1 N	124 33.0 W	01/02/07	2345	UTC	4189 m	310	15 kn	340 02 05	2	1018.9 mb	12.4 C	10.1 C	8/8	8/8	ST	
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN	OXY	SIO3	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C			ml/l	PCT	uM/L	uM/L	uM/L	uM/L	ug/l	ug/l			db	
0 ISL	12.71	12.71	33.107	24.984	296.3	0.000	6.07	100.6	3.5	0.23	1.7	0.13	0.23	0.06	0	
2	12.71	12.71	33.107	24.984	296.3	0.006	6.07	100.6	3.5	0.23	1.7	0.13	0.23	0.06	2	223
10 ISL	12.71	12.71	33.105 D	24.983	296.7	0.030	6.05 D	100.3	3.4	0.34	1.8	0.15	0.24	0.07	10	
11	12.71	12.71	33.107	24.984	296.6	0.033	6.05 D	100.3	3.4	0.36	1.8	0.15	0.24	0.07	11	221
20 ISL	12.58	12.58	33.118 D	25.018	293.5	0.059	6.10 D	100.8	3.7	0.34	1.9	0.15	0.29	0.09	20	
21	12.58	12.58	33.119	25.019	293.5	0.062	6.11 D	101.0	3.7	0.33	1.9	0.15	0.30	0.09	21	219
30 ISL	12.44	12.44	33.136 D	25.059	289.9	0.088	6.15 D	101.4	3.9	0.37	1.9	0.14	0.48	0.15	30	
31	12.45	12.45	33.137	25.058	290.0	0.091	6.16 D	101.6	3.9	0.37	1.9	0.14	0.50	0.16	31	217
40	12.34	12.33	33.148	25.088	287.4	0.117	6.13 D	100.8	4.1	0.30	2.4	0.16	0.42	0.15	40	215
50 ISL	12.23	12.22	33.162 D	25.120	284.6	0.146	6.06 D	99.5	4.4	0.34	3.1	0.26	0.29	0.12	50	
60	12.16	12.15	33.179	25.147	282.3	0.174	5.95 D	97.5	4.9	0.42	3.9	0.37	0.17	0.09	60	213
75 ISL	11.88	11.87	33.200 D	25.216	276.1	0.216	5.78 D	94.2	5.9	0.49	5.3	0.44	0.11	0.07	75	
80	11.86	11.85	33.225	25.239	274.0	0.230	5.26 D	85.7	6.2	0.51	5.8	0.46	0.10	0.06	80	211
100	11.18	11.17	33.528	25.600	240.1	0.281	3.49 D	56.1	15.3	1.21	17.4	0.05	0.03	0.04	101	209
125 ISL	10.27	10.26	33.721 D	25.910	211.0	0.338	2.79 D	44.0	21.1	1.45	20.4		0.01	0.03	126	
148 A	9.93	9.91	33.818	26.044	198.7	0.385	2.49 D	39.0	23.8	1.68	23.1		0.00	0.03	149	207
150 ISL	9.88	9.86	33.837 D	26.067	196.6	0.389	2.46 D	38.5	24.1	1.69	23.3		0.00	0.03	151	
198 A	9.44	9.42	34.014	26.279	177.4	0.478	1.95 D	30.3	29.6	1.87	26.4		0.00	0.02	199	205
200 ISL	9.43	9.41	34.015 D	26.282	177.2	0.482	1.94 D	30.1	29.8	1.88	26.5		0.00	0.02	201	
250 CSL	9.10	9.07	34.127	26.423	164.6	0.567	1.57								251	200
300 CSL	8.79	8.76	34.196	26.527	155.7	0.647	1.26								302	200
400 CSL	7.63	7.59	34.216	26.718	138.6	0.795	0.94								403	200
500 CSL	6.75	6.70	34.237	26.858	126.1	0.927	0.60								503	200
516	6.61	6.56	34.243	26.882	123.9	0.947	0.56								520	203
600 CSL	5.83	5.78	34.256	26.993	113.7	1.047	0.39								604	200
700 CSL	5.31	5.25	34.321	27.108	103.4	1.155	0.24								705	200
800 CSL	4.82	4.76	34.370	27.204	94.7	1.254	0.24								806	200
900 CSL	4.37	4.30	34.413	27.288	86.9	1.345	0.30								907	200
1000 CSL	4.08	4.00	34.443	27.343	82.1	1.430	0.39								1009	200
1027	4.03	3.95	34.450	27.354	81.2	1.452	0.38								1036	201

A) NUTRIENTS WERE FROZEN AND RUN FOLLOWING THE CRUISE. VALUES THAT WERE SUSPECT WERE OMITTED.

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S; CRUISE CORRECTED 02;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 67.1 47.7

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
36 47.8 N	121 50.8 W	31/01/07	1716	UTC	248 m	110		270 01 04	2	1016.9 mb	12.0 C	9.3 C	16m	8/8	SC	
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN	OXY	SIO3	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C			ml/l	PCT	uM/L	uM/L	uM/L	uM/L	ug/l	ug/l			db	
0 ISL	11.86	11.86	33.607	25.534	244.0	0.000	5.65	92.3	10.2	0.61	8.9	0.29	0.73	0.17	0	
2	11.86	11.86	33.607	25.534	244.0	0.005	5.65	92.3	10.2	0.61	8.9	0.29	0.73	0.17	2	223
5	11.85	11.85	33.608	25.537	243.8	0.012	5.57 D	91.0	10.3	0.71	9.0	0.30	0.48	0.16	5	221
10	11.81	11.81	33.613	25.548	242.9	0.024	5.37 D	87.6	11.2	0.79	9.9	0.31	0.31	0.15	10	219
20	11.77	11.77	33.617	25.559	242.1	0.049	5.33 D	86.9	11.6	0.87	10.4	0.33	0.26	0.17	20	217
30	11.72	11.72	33.621	25.572	241.1	0.073	5.27 D	85.8	11.9	0.88	10.9	0.35	0.20	0.16	30	215
40	11.68	11.67	33.622	25.580	240.6	0.097	5.20 D	84.6	12.2	0.92	11.2	0.36	0.21	0.19	40	213
50	11.65	11.64	33.625	25.588	240.1	0.121	5.16 D	83.9	12.1	0.91	11.5	0.37	0.19	0.16	50	211
60	11.64	11.63	33.625	25.590	240.1	0.145	5.13 D	83.4	12.3	1.04	11.9	0.39	0.18	0.15	60	209
75 ISL	11.61	11.60	33.626 D	25.597	239.8	0.181	5.09 D	82.7	12.5	0.97	12.0	0.39	0.18	0.14	75	
80	11.60	11.59	33.628	25.601	239.6	0.193	5.05 D	82.0	12.6	0.93	12.0	0.39	0.18	0.14	80	207
100	11.55	11.54	33.629	25.611	239.1	0.241	5.03 D	81.6	13.3	0.99	12.3	0.41	0.18	0.14	101	205
125 ISL	10.85	10.83	33.702 D	25.795	222.1	0.298	4.47 D	71.5	23.3	1.34	17.6	0.33	0.13	0.12	126	
149	9.47	9.45	33.874	26.164	187.2	0.348	2.82 D	43.8	34.6	1.74	23.8	0.23	0.08	0.09	150	203
150 ISL	9.24	9.22	33.903 D	26.224	181.5	0.349	2.82 D	43.6	34.8	1.75	23.9	0.23	0.08	0.09	151	
200 ISL	8.62	8.60	33.992 D	26.392	166.4	0.436	2.22 D	33.8	42.3	2.10	28.4	0.18	0.03	0.05	201	
201	8.59	8.57	33.997	26.401	165.5	0.438	2.16	32.9	42.5	2.11	28.5	0.18	0.03	0.05	202	201

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S; CRUISE CORRECTED 02;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 76.7 49.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
35 5.0 N	120 46.8 W	28/01/07	1947	UTC	1134 m	130	01 kn	300 03 10	2	1017.9 mb	13.0 C	12.0 C	21m	8/8	SC	
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN	OXY	SIO3	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C			ml/l	PCT	uM/L	uM/L	uM/L	uM/L	ug/l	ug/l			db	
0 ISL	12.93	12.93	33.558	25.290	267.1	0.000	6.01	100.4	1.8	0.56	2.2	0.10	0.81	0.27	0	
2 A	12.93	12.93	33.558	25.290	267.2	0.005	6.01	100.4	1.8	0.56	2.2	0.10	0.81	0.27	2	209
9	12.92	12.92	33.563	25.296	266.8	0.024	5.99	100.0	1.8	0.55	2.2	0.11	0.70	0.22	9	207
9	12.91	12.91	33.559	25.295	266.9	0.024									9	208
10 ISL	12.91	12.91	33.557 D	25.294	267.1	0.027	6.00	100.2	1.8	0.55	2.2	0.11	0.70	0.22	10	
14 A</td																

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 76.7 51.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
35 1.5 N	120 55.1 W	28/01/07	2357	UTC	232 m	010	05 kn	080 01 08	1	1016.1 mb	13.9 C	12.5 C	23m	1/8	CU	
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SIO3	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C	THETA	ml/l	PCT	uM/l	uM/l	uM/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	db	
0 ISL	13.23	13.23	33.549	25.224	273.5	0.000	6.08	102.2	2.5	0.58	2.4	0.12	0.64	0.15	0	
2	13.23	13.23	33.549	25.224	273.5	0.005	6.08	102.2	2.5	0.58	2.4	0.12	0.64	0.15	2	216
10 ISL	13.01 D	13.01	33.556 D	25.273	269.0	0.027	6.06	101.4	2.4	0.58	2.4	0.13	0.72	0.22	10	
11	13.00	13.00	33.564	25.281	268.3	0.030	6.06	101.4	2.4	0.58	2.4	0.13	0.73	0.23	11	214
11	12.99	12.99	33.558	25.279	268.6	0.030										11 215
20	12.96	12.96	33.568	25.293	267.5	0.054	6.03	100.8	2.4	0.58	2.6	0.13	0.85	0.35	20	213
30	12.91	12.91	33.585	25.316	265.5	0.081	5.93	99.0	2.7	0.61	2.8	0.14	0.65	0.36	30	212
41	12.89	12.88	33.597	25.329	264.5	0.110	5.81	97.0	2.8	0.64	3.0	0.12	0.52	0.40	41	211
50 ISL	12.78 D	12.77	33.598 D	25.352	262.6	0.134	5.53	92.1	4.2	0.74	4.3	0.14	0.38	0.55	50	
51	12.78	12.77	33.597	25.351	262.7	0.136	5.48	91.2	4.5	0.76	4.6	0.14	0.37	0.56	51	210
60	12.39	12.38	33.611	25.438	254.6	0.159	4.70	77.6	8.5	1.03	8.8	0.19	0.30	0.39	60	209
70	12.14	12.13	33.625	25.497	249.3	0.185	4.24	69.7	11.1	1.19	11.5	0.21	0.33	0.42	70	208
75 ISL	11.72 D	11.71	33.654 D	25.599	239.7	0.197	3.90	63.5	13.6	1.33	14.1	0.19	0.29	0.39	75	
85	10.95	10.94	33.680	25.759	224.6	0.220	3.30	52.9	18.3	1.60	18.9	0.14	0.18	0.31	85	207
100	10.68	10.67	33.719	25.837	217.5	0.253	3.08	49.1	20.0	1.70	20.4	0.09	0.12	0.25	101	206
120	10.30	10.29	33.837	25.995	202.8	0.295	2.63	41.6	23.9	1.89	23.0	0.06	0.05	0.22	121	205
125 ISL	10.19 D	10.18	33.876 D	26.045	198.2	0.305	2.55	40.2	24.7	1.93	23.4	0.07	0.05	0.22	126	
141	10.03	10.01	33.926	26.111	192.2	0.336	2.33	36.6	27.2	2.03	24.5	0.10	0.04	0.23	142	204
150 ISL	9.98 D	9.96	33.945 D	26.135	190.2	0.354	2.23	35.0	28.6	2.08	25.2	0.10	0.04	0.22	151	
170	9.61	9.59	34.030	26.263	178.3	0.391	2.07	32.3	31.0	2.16	26.4	0.08	0.03	0.20	171	203
199	9.50	9.48	34.051	26.298	175.6	0.442	2.01	31.3	32.1	2.19	27.0	0.08	0.01	0.17	200	202
200 ISL	9.49 D	9.47	34.054 D	26.302	175.2	0.444	2.00	31.1	32.2	2.19	27.0	0.08			201	
224	9.24	9.22	34.092	26.373	168.9	0.485	1.87	28.9	35.1	2.28	28.0	0.06			225	201

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 76.7 55.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
34 53.3 N	121 11.9 W	29/01/07	0335	UTC	564 m	150	14 kn			1016.8 mb	13.0 C	12.5 C				
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SIO3	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C	THETA	ml/l	PCT	uM/l	uM/l	uM/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	db	
0 ISL	13.06	13.06	33.544	25.254	270.6	0.000	6.04	101.1	2.7	0.56	2.0	0.12	0.52	0.04	0	
2	13.06	13.06	33.544	25.254	270.7	0.005	6.04	101.1	2.7	0.56	2.0	0.12	0.52	0.04	2	221
10	13.06	13.06	33.548	25.257	270.6	0.027	6.04	101.1	2.6	0.55	2.0	0.11	0.44	0.17	10	219
10	13.06	13.06	33.550	25.259	270.4	0.027									10	220
20	13.04	13.04	33.564	25.274	269.3	0.054	6.01	100.6	2.7	0.56	2.2	0.11	0.50	0.16	20	218
30	12.66	12.66	33.600 D	25.377	259.7	0.080									30	217
40	12.44	12.43	33.602	25.421	255.8	0.106	5.32	88.0	8.4	0.90	7.5	0.23	0.72	0.25	40	216
50	11.57	11.56	33.636	25.612	237.8	0.131	3.80	61.7	14.7	1.36	15.2	0.22	0.30	0.32	50	215
60	10.97	10.96	33.744	25.805	219.7	0.154	2.89	46.3	20.2	1.72	20.4	0.10	0.31	0.36	60	214
71	10.66	10.65	33.830	25.927	208.3	0.177	2.57	41.0	22.9	1.87	22.2	0.03	0.13	0.19	71	213
75 ISL	10.61 D	10.60	33.846 D	25.948	206.4	0.186	2.52	40.1	23.3	1.89	22.5	0.03	0.12	0.19	75	
85	10.52	10.51	33.876	25.987	202.9	0.206	2.45	38.9	24.2	1.92	23.0	0.02	0.11	0.20	85	212
100	10.07	10.06	33.949	26.122	190.4	0.236	2.33	36.7	27.0	2.02	24.6	0.02	0.11	0.17	101	211
120	9.83	9.82	34.035	26.230	180.5	0.273	2.10	32.9	29.7	2.12	25.9	0.02	0.09	0.16	121	210
125 ISL	9.81 D	9.80	34.038 D	26.235	180.1	0.282	2.09	32.7	30.0	2.12	26.1	0.02	0.08	0.17	126	
139	9.73	9.71	34.055	26.262	177.8	0.307	2.07	32.4	30.5	2.13	26.4	0.02	0.07	0.18	140	209
150 ISL	9.68 D	9.66	34.080 D	26.290	175.4	0.326	2.03	31.7	31.0	2.14	26.6	0.02	0.06	0.17	151	
168	9.56	9.54	34.115	26.338	171.2	0.357	1.92	29.9	32.3	2.19	27.2	0.01	0.04	0.13	169	208
198	9.05	9.03	34.153	26.451	161.0	0.407	1.66	25.6	37.1	2.35	29.2	0.01	0.04	0.09	199	207
200 ISL	9.02 D	9.00	34.157 D	26.459	160.2	0.410	1.64	25.2	37.4	2.36	29.3	0.01			201	
229	8.76	8.74	34.191	26.527	154.3	0.456	1.42	21.7	40.9	2.45	30.5	0.01			230	206
250 ISL	8.60 D	8.57	34.207 D	26.564	151.0	0.488	1.32	20.1	42.7	2.51	31.1	0.01			252	
268	8.48	8.45	34.218	26.592	148.7	0.515	1.24	18.9	44.2	2.55	31.5	0.01			270	205
300 ISL	8.23 D	8.20	34.230 D	26.640	144.6	0.562	1.05	15.9	48.3	2.64	32.2	0.01			302	
318	8.08	8.05	34.235	26.666	142.4	0.588	0.95	14.3	50.8	2.69	32.7	0.01			320	204
377	7.40	7.36	34.254	26.781	132.1	0.669	0.76	11.3	57.3	2.83	35.3	0.01			380	203
400 ISL	7.13 D	7.09	34.247 D	26.813	129.1	0.699	0.71	10.5	60.1	2.88	36.1	0.01			403	
437	6.83	6.79	34.247	26.855	125.5	0.746	0.64	9.4	64.6	2.94	37.1	0.01			440	202
500 ISL	6.27 D	6.23	34.243 D	26.926	119.1	0.823	0.56	8.1	71.9	3.02	38.5	0.01			504	
513	6.21	6.16	34.240	26.931	118.8	0.838	0.54	7.8	73.4	3.04	38.8	0.01			517	201

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 76.7 60.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SIO3	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C		THETA			ml/l	PCT	uM/L	uM/L	uM/L	uM/L	ug/l	ug/l	db	
0 ISL	12.76	12.76	33.351	25.163	279.2	0.000	6.19	102.9	4.3	0.49	2.0	0.20	0.74	0.09	0	
1	12.76	12.76	33.351	25.163	279.2	0.003	6.19	102.9	4.3	0.49	2.0	0.20	0.74	0.09	1	220
10	12.73	12.73	33.351	25.170	278.9	0.028	6.21	103.1	4.3	0.49	2.0	0.20	0.66	0.20	10	219
20	12.60	12.60	33.355	25.198	276.4	0.056	6.18	102.4	4.4	0.49	2.0	0.20	1.05	0.04	20	218
30	12.59	12.59	33.372 D	25.214	275.2	0.083									30	217
40	12.52	12.51	33.384	25.237	273.3	0.111	5.89	97.4	5.0	0.61	3.6	0.51	0.45	0.22	40	216
50	12.33	12.32	33.396	25.283	269.2	0.138	5.64	92.9	6.2	0.73	5.5	0.43	0.29	0.17	50	215
60	11.79	11.78	33.426	25.408	257.5	0.164	5.00	81.4	9.4	0.99	10.1	0.14	0.12	0.18	60	214
70	10.83	10.82	33.429	25.584	240.8	0.189	4.36	69.6	13.0	1.27	15.0	0.03	0.06	0.11	70	213
75 ISL	10.35 D	10.34	33.508 D	25.729	227.1	0.201	4.05	64.0	15.3	1.41	17.3	0.02	0.05	0.09	75	
85	9.96	9.95	33.618	25.882	212.8	0.223	3.55	55.6	19.3	1.64	21.0	0.01	0.03	0.07	85	212
100	9.65	9.64	33.693	25.992	202.6	0.254	3.32	51.7	21.8	1.75	22.6	0.01	0.01	0.07	101	211
119	9.19	9.18	33.829	26.173	185.6	0.291	3.06	47.2	25.8	1.87	24.5	0.01	0.00	0.06	120	210
125 ISL	9.16 D	9.15	33.833 D	26.181	185.0	0.302	3.02	46.6	26.6	1.89	24.8	0.01	0.00	0.06	126	
139	8.93	8.92	33.893	26.265	177.3	0.327	2.98	45.7	28.0	1.92	25.4	0.01	0.00	0.05	140	209
150 ISL	8.82 D	8.80	33.925 D	26.307	173.4	0.347	2.95	45.2	29.1	1.94	25.8	0.01	0.00	0.05	151	
169	8.60	8.58	33.969	26.376	167.2	0.379	2.89	44.0	31.2	1.97	26.6	0.01	0.00	0.06	170	208
199	8.26	8.24	34.008	26.459	159.8	0.428	2.71	41.0	35.2	2.06	28.1	0.02	0.00	0.04	200	207
200 ISL	8.25 D	8.23	34.011 D	26.463	159.4	0.430	2.69	40.7	35.4	2.07	28.2	0.02			201	
229	8.09	8.07	34.072	26.535	153.1	0.475	2.14	32.2	40.4	2.27	30.3	0.01			230	206
250 ISL	7.91 D	7.88	34.096 D	26.581	149.0	0.507	1.86	27.9	43.6	2.38	31.5	0.01			252	
268	7.81	7.78	34.124	26.618	145.8	0.533	1.67	25.0	46.0	2.46	32.3	0.01			270	205
300 ISL	7.48 D	7.45	34.127 D	26.668	141.4	0.579	1.35	20.1	49.7	2.60	33.6	0.01			302	
317	7.46	7.43	34.164	26.700	138.7	0.603	1.21	18.0	51.7	2.66	34.2	0.01			319	204
378	6.62	6.59	34.144	26.801	129.5	0.685	1.04	15.1	61.7	2.81	36.9	0.01			381	203
400 ISL	6.31 D	6.27	34.149 D	26.845	125.3	0.713	0.96	13.9	65.7	2.87	37.8	0.01			403	
437	5.95	5.91	34.149	26.891	121.1	0.758	0.81	11.6	72.3	2.96	39.1	0.01			440	202
500 ISL	5.61 D	5.57	34.205 D	26.978	113.4	0.832	0.56	8.0	81.0	3.08	40.6	0.01			504	
515	5.49	5.45	34.204	26.992	112.2	0.849	0.50	7.1	83.1	3.11	40.9	0.01			519	201

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 76.7 70.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SIO3	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C		THETA			ml/l	PCT	uM/L	uM/L	uM/L	uM/L	ug/l	ug/l	db	
0 ISL	12.82	12.82	33.294	25.107	284.5	0.000	6.14	102.1	3.6	0.41	0.8	0.08	0.92	0.17	0	
2	12.82	12.82	33.294	25.108	284.6	0.006	6.14	102.1	3.6	0.41	0.8	0.08	0.92	0.17	2	221
10	12.81	12.81	33.296	25.111	284.5	0.028	6.16	102.4	3.6	0.41	0.8	0.08	0.89	0.17	10	220
20	12.78	12.78	33.311	25.129	283.0	0.057	6.13	101.9	3.8	0.44	1.3	0.11	0.82	0.19	20	219
30	12.64	12.64	33.353	25.189	277.6	0.085	6.07	100.6	4.3	0.51	2.2	0.24	0.99	0.37	30	218
40	12.47	12.46	33.367	25.233	273.6	0.112	5.92	97.8	5.1	0.60	3.4	0.41	0.65	0.29	40	216
50	12.28	12.27	33.378	25.278	269.6	0.140	6.02	99.0	5.8	0.66	4.1	0.39	0.46	0.21	50	215
60	12.13	12.12	33.387	25.314	266.4	0.166	5.80	95.1	6.7	0.75	5.7	0.51	0.22	0.17	60	214
70	12.01	12.00	33.433	25.373	261.1	0.193	5.70	93.3	7.6	0.81	6.9	0.51	0.16	0.14	70	213
75 ISL	11.96 D	11.95	33.462 D	25.405	258.2	0.206	5.46	89.3	8.6	0.89	8.4	0.41	0.14	0.14	75	
85	11.16	11.15	33.478	25.564	243.1	0.231	4.77	76.7	11.8	1.15	12.8	0.16	0.09	0.13	85	212
99	9.84	9.83	33.612	25.897	211.6	0.263	3.55	55.5	19.7	1.67	21.3	0.01	0.03	0.05	100	211
100 ISL	9.89 D	9.88	33.610 D	25.887	212.5	0.265	3.55	55.5	19.9	1.67	21.4	0.01	0.03	0.05	101	
120	9.27	9.26	33.762	26.108	191.9	0.305	3.50	54.1	22.8	1.72	22.5	0.01	0.01	0.03	121	210
125 ISL	9.17 D	9.16	33.803 D	26.156	187.4	0.315	3.35	51.6	24.1	1.78	23.3	0.01	0.01	0.03	126	
139	9.02	9.01	33.872	26.234	180.2	0.340	2.94	45.2	27.6	1.93	25.4	0.01	0.00	0.03	140	209
150 ISL	8.99 D	8.97	33.907 D	26.267	177.4	0.360	2.96	45.5	29.0	1.93	25.5	0.01	0.00	0.03	151	
170	8.72	8.70	33.962	26.352	169.6	0.395	2.99	45.7	30.3	1.93	25.7	0.01	0.00	0.02	171	208
199	8.35	8.33	33.986	26.428	162.8	0.443	3.39	51.4	31.6	1.84	25.0	0.01	0.00	0.02	200	207
200 ISL	8.29 D	8.27	34.013 D	26.459	159.9	0.445	3.37	51.0	31.8	1.85	25.1	0.01			201	
229	8.09	8.07	34.034	26.505	155.9	0.490	2.44	36.8	38.4	2.17	29.3	0.01			230	206
250 ISL	7.83 D	7.81	34.063 D	26.567	150.3	0.523	1.97	29.5	43.6	2.36	31.5	0.01			252	
269	7.54	7.51	34.095	26.634	144.1	0.550	1.67	24.8	48.1	2.50	33.1	0.01			271	205
300 ISL	7.01 D	6.98	34.081 D	26.698	138.3	0.594	1.48	21.7	54.0	2.62	34.8	0.01			302	
319	6.68	6.65	34.090	26.749	133.5	0.620	1.42	20.7	57.2	2.67	35.6	0.01			321	204
377	6.43	6.40	34.167	26.844	125.2	0.695	0.82	11.9	66.4	2.91	38.0	0.01			379	203
400 ISL	5.80 D	5.77	34.106 D	26.876	122.0	0.724	0.82	11.7	70.4	2.95	38.9	0.01			403	
437	5.63	5.59	34.138	26.922	117.9	0.768	0.81	11.5	76.3	2.99	40.0	0.01			440	202
500 ISL	5.58 D	5.54	34.229 D	27.001	111.3	0.840	0.47	6.7	82.4	3.12	40.8	0.01			504	
515	5.56	5.52	34.236	27.009	110.7	0.857	0.39	5.5	83.8	3.15	41.0	0.01			519	201

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 76.7 80.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
34 3.6 N	122 56.1 W	29/01/07	1932	UTC	4226 m	130	01 kn	320 02 06	2	1017.5 mb	13.7 C	12.0 C	16m	8/8	SC	
0 ISL	13.63	13.63	33.268	24.926	301.9	0.000	6.16	104.2	2.7	0.34	0.0	0.01	0.86	0.01	0	
2 A	13.63	13.63	33.268	24.926	301.9	0.006	6.16	104.2	2.7	0.34	0.0	0.01	0.86	0.01	2 220	
10 A	13.40	13.40	33.267	24.972	297.7	0.030	6.16	103.7	2.7	0.34	0.0	0.01	1.02	0.01	10 219	
20 ISL	13.38 D	13.38	33.265 D	24.974	297.7	0.060	6.16	103.6	2.7	0.34	0.0	0.01	0.96	0.06	20	
22 A	13.37	13.37	33.267	24.978	297.5	0.066	6.16	103.6	2.7	0.34	0.0	0.01	0.95	0.08	22 218	
30 ISL	13.34 D	13.34	33.263 D	24.981	297.4	0.090	6.14	103.2	2.6	0.34	0.1	0.02	0.87	0.25	30	
31 A	13.35	13.35	33.265	24.981	297.5	0.093	6.13	103.1	2.6	0.34	0.1	0.02	0.86	0.26	31 217	
38 A	13.27	13.26	33.263	24.995	296.2	0.113	6.06	101.7	2.8	0.38	0.4	0.07	0.85	0.11	38 216	
49	13.15	13.14	33.267	25.023	293.9	0.146	6.01	100.6	3.1	0.46	0.9	0.12	0.60	0.20	49 215	
50 ISL	13.12 D	13.11	33.257 D	25.021	294.1	0.149	6.02	100.7	3.1	0.45	0.9	0.12	0.62	0.19	50	
61 A	13.00	12.99	33.256	25.044	292.2	0.181	6.08	101.5	3.1	0.40	0.6	0.08	0.75	0.05	61 214	
74	12.29	12.28	33.263	25.188	278.8	0.218	5.45	89.6	5.6	0.67	5.3	0.11	0.11	0.08	74 213	
75 ISL	12.30 D	12.29	33.265 D	25.187	278.9	0.221	5.41	89.0	5.8	0.69	5.7	0.10	0.11	0.08	75	
84	11.16	11.15	33.292	25.419	256.8	0.245	5.02	80.6	8.1	0.90	9.3	0.04	0.09	0.05	84 212	
100	10.35	10.34	33.534	25.750	225.7	0.284	3.73	58.9	17.2	1.62	19.1	0.01	0.05	0.05	100 211	
119	9.68	9.67	33.674	25.973	204.8	0.324	3.28	51.1	21.9	1.76	22.9	0.01	0.01	0.04	120 210	
125 ISL	9.47 D	9.46	33.711 D	26.036	198.9	0.337	3.28	50.9	23.0	1.78	23.4	0.01	0.01	0.04	126	
139	9.07	9.06	33.798	26.169	186.5	0.364	3.28	50.4	25.1	1.80	24.2	0.01	0.00	0.03	140 209	
150 ISL	8.96 D	8.94	33.851 D	26.228	181.1	0.384	3.21	49.3	26.5	1.83	24.8	0.01	0.00	0.03	151	
168	8.81	8.79	33.906	26.295	175.0	0.416	3.05	46.7	28.6	1.90	25.7	0.01	0.00	0.03	169 208	
198	8.44	8.42	33.987	26.416	164.0	0.467	2.76	41.9	33.2	2.03	27.4	0.01	0.00	0.03	199 207	
200 ISL	8.43 D	8.41	33.993 D	26.422	163.4	0.470	2.73	41.4	33.6	2.04	27.6	0.01		201		
228	8.07	8.05	34.042	26.515	155.0	0.515	2.30	34.6	38.7	2.19	30.2	0.01		229	206	
250 ISL	7.85 D	7.83	34.064 D	26.565	150.5	0.548	2.08	31.2	42.2	2.30	31.6	0.01		251		
268	7.61	7.58	34.064	26.600	147.4	0.575	1.93	28.8	45.0	2.38	32.5	0.01		270	205	
300 ISL	7.43 D	7.40	34.117 D	26.667	141.4	0.621	1.68	24.9	50.9	2.51	34.0	0.01		302		
318	6.99	6.96	34.093	26.710	137.4	0.646	1.54	22.6	54.2	2.58	34.8	0.01		320	204	
377	6.62	6.59	34.149	26.805	129.1	0.725	1.01	14.7	62.7	2.82	37.1	0.01		379	203	
400 ISL	6.37 D	6.33	34.155 D	26.842	125.7	0.754	0.91	13.2	66.7	2.88	38.1	0.01		403		
437	5.86	5.82	34.146	26.900	120.2	0.800	0.80	11.4	73.2	2.96	39.7	0.01		440	202	
500 ISL	5.53 D	5.49	34.197 D	26.981	113.0	0.873	0.56	8.0	83.0	3.08	41.3	0.01		503		
514	5.31	5.27	34.189	27.001	111.0	0.889	0.51	7.2	85.2	3.11	41.7	0.01		518	201	

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 76.7 90.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
33 43.2 N	123 38.0 W	30/01/07	0120	UTC	4284 m	170	01 kn	170 01 07	1	1015.9 mb	13.1 C	11.1 C	6/8	CU		
0 ISL	13.07	13.07	33.278	25.046	290.4	0.000	6.16	103.0	3.6	0.41	0.9	0.06	0.79	0.20	0	
2	13.07	13.07	33.278	25.046	290.5	0.006	6.16	103.0	3.6	0.41	0.9	0.06	0.79	0.20	2 220	
10	12.97	12.97	33.282	25.069	288.5	0.029	6.17	102.9	3.6	0.41	0.9	0.07	1.00	0.27	10 219	
20	12.93	12.93	33.286	25.080	287.7	0.058	6.09	101.5	3.7	0.43	1.2	0.10	0.86	0.29	20 218	
30	12.87	12.87	33.290	25.095	286.5	0.086	6.01	100.1	3.7	0.45	1.4	0.14	0.67	0.25	30 217	
40	12.83	12.82	33.310	25.119	284.5	0.115	6.08	101.2	4.1	0.48	1.7	0.17	0.68	0.24	40 216	
50	12.76	12.75	33.331	25.149	281.9	0.143	6.04	100.4	4.2	0.49	1.8	0.27	0.56	0.24	50 215	
60	12.60	12.59	33.309	25.164	280.8	0.171	6.04	100.0	4.5	0.53	2.3	0.30	0.58	0.25	60 214	
70	12.67	12.66	33.343	25.177	279.8	0.200	5.92	98.2	4.6	0.55	2.6	0.45	0.28	0.17	70 213	
75 ISL	12.61 D	12.60	33.365 D	25.205	277.2	0.213	5.72	94.8	5.4	0.63	4.0	0.38	0.20	0.15	75	
85	11.88	11.87	33.397	25.369	261.8	0.240	5.07	82.7	8.7	0.91	8.9	0.17	0.11	0.12	85 212	
100	10.25	10.24	33.548	25.778	223.0	0.277	3.60	56.7	18.5	1.62	20.3	0.02	0.05	0.07	100 211	
120	9.65	9.64	33.685	25.986	203.5	0.319	3.61	56.2	20.6	1.63	21.0	0.02	0.02	0.04	121 210	
125 ISL	9.51 D	9.50	33.731 D	26.045	198.0	0.329	3.43	53.3	22.2	1.70	22.0	0.02	0.01	0.04	126	
140	9.24	9.22	33.859	26.189	184.6	0.358	2.87	44.3	27.1	1.92	25.1	0.02	0.00	0.04	141 209	
150 ISL	9.04 D	9.02	33.891 D	26.246	179.3	0.376	2.90	44.6	28.5	1.93	25.4	0.02	0.00	0.04	151	
169	8.76	8.74	33.953	26.339	170.8	0.410	2.95	45.1	30.3	1.94	25.9	0.02	0.00	0.03	170 208	
200	8.46	8.44	34.028	26.445	161.3	0.461	2.49	37.8	35.4	2.11	28.1	0.01	0.00	0.02	201 207	
229	7.84	7.82	34.052	26.557	151.0	0.506	2.16	32.4	42.1	2.26	30.8	0.01		230	206	
250 ISL	7.68 D	7.66	34.080 D	26.602	146.9	0.538	2.07	30.9	45.6	2.33	31.9	0.01		251		
269	7.30	7.27	34.054	26.636	143.8	0.565	2.00	29.6	48.2	2.38	32.6	0.01		271	205	
300 ISL	7.05 D	7.02	34.074 D	26.687	139.4	0.609	1.64	24.1	52.6	2.52	34.5	0.01		302		
318	6.91	6.88	34.089	26.718	136.6	0.634	1.42	20.8	55.2	2.61	35.5	0.01		320	204	
378	6.34	6.31	34.115	26.814	127.9	0.713	1.06	15.3	64.1	2.81	37.6	0.01		380	203	
400 ISL	6.13 D	6.09	34.118 D	26.844	125.3	0.741	0.97	14.0	66.5	2.86	38.1	0.01		403		
436	6.06	6.02	34.141	26.871	123.1	0.786	0.85	12.2	70.0	2.93	38.7	0.01		439	202	
500 ISL	5.68 D	5.64	34.179 D	26.949	116.3	0.863	0.57	8.1	76.6	3.03	39.9	0.01		503		
515	5.69	5.65	34.207	26.970	114.5	0.880	0.51	7.3	78.1	3.05	40.2	0.01		519	201	

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 76.7 100.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C		THETA			ml/l	PCT	uM/l	uM/l	uM/l	uM/l	ug/l	ug/l	db	
0 ISL	14.68	14.68	33.230	24.677	325.5	0.000	5.88	101.6	2.1	0.30	0.1	0.00	0.18	0.07	0	
1	14.68	14.68	33.230	24.677	325.5	0.003	5.88	101.6	2.1	0.30	0.1	0.00	0.18	0.07	1	220
10 ISL	14.65 D	14.65	33.232 D	24.685	325.0	0.033	5.89	101.7	2.0	0.30	0.0	0.00	0.19	0.07	10	
15	14.65	14.65	33.233	24.686	325.1	0.049	5.89	101.7	1.9	0.30	0.0	0.00	0.19	0.07	15	219
20 ISL	14.65 D	14.65	33.233 D	24.687	325.2	0.065	5.89	101.7	1.9	0.30	0.0	0.00	0.19	0.07	20	
30 ISL	14.65 D	14.65	33.235 D	24.688	325.3	0.098	5.88	101.5	2.0	0.30	0.0	0.00	0.20	0.08	30	
31	14.65	14.65	33.235	24.688	325.4	0.101	5.88	101.5	2.0	0.30	0.0	0.00	0.20	0.08	31	218
45	14.70	14.69	33.254	24.693	325.4	0.146	5.89	101.8	1.9	0.30	0.0	0.00	0.23	0.09	45	217
50 ISL	14.82 D	14.81	33.283 D	24.690	325.8	0.163	5.85	101.4	1.9	0.29	0.0	0.00	0.23	0.10	50	
55	14.93	14.92	33.328	24.701	324.9	0.179	5.81	100.9	1.8	0.28	0.0	0.00	0.22	0.10	55	216
65	15.01	15.00	33.348	24.699	325.4	0.211	5.81	101.1	1.7	0.28	0.0	0.01	0.21	0.09	65	215
75	15.12	15.11	33.387	24.706	325.1	0.244	5.74	100.1	1.7	0.28	0.0	0.01	0.15	0.08	75	214
85	15.10	15.09	33.394	24.716	324.4	0.276	5.75	100.3	1.7	0.28	0.1	0.02	0.14	0.08	85	213
95	13.89	13.88	33.293	24.894	307.5	0.308	5.74	97.6	2.1	0.37	0.8	0.07	0.09	0.07	95	212
100 ISL	13.83 D	13.82	33.471 D	25.044	293.4	0.323	5.69	96.7	2.2	0.36	0.9	0.07	0.09	0.09	100	
109	14.14	14.12	33.640	25.111	287.4	0.349	5.58	95.6	2.3	0.32	1.0	0.06	0.08	0.13	109	211
124	13.94	13.92	33.728	25.221	277.3	0.392	5.50	93.9	2.5	0.34	1.5	0.03	0.06	0.09	125	210
125 ISL	13.75 D	13.73	33.699 D	25.238	275.7	0.394	5.49	93.3	2.6	0.35	1.6	0.03	0.06	0.09	126	
144	12.23	12.21	33.544	25.419	258.6	0.445	5.21	85.7	5.4	0.64	5.9	0.02	0.03	0.04	145	209
150 ISL	11.23 D	11.21	33.421 D	25.509	250.0	0.460	5.06	81.4	6.9	0.76	7.9	0.02	0.02	0.03	151	
169	10.44	10.42	33.662	25.836	219.1	0.505	4.65	73.6	11.9	1.10	13.7	0.01	0.01	0.02	170	208
199	9.77	9.75	33.844	26.092	195.2	0.567	4.59	71.7	16.1	1.25	16.5	0.01	0.00	0.01	200	207
200 ISL	9.74 D	9.72	33.848 D	26.100	194.5	0.569	4.58	71.5	16.3	1.26	16.6	0.01			201	
229	9.10	9.08	33.943	26.279	177.9	0.623	4.24	65.3	22.1	1.46	19.9	0.01			230	206
250 ISL	8.75 D	8.72	33.976 D	26.360	170.4	0.660	4.19	64.0	24.6	1.52	20.9	0.01			251	
269	8.54	8.51	33.980	26.396	167.3	0.692	4.11	62.5	27.0	1.57	21.8	0.01			270	205
300 ISL	7.78 D	7.75	33.986 D	26.514	156.1	0.742	3.52	52.6	35.2	1.84	25.7	0.00			302	
319	7.43	7.40	33.991	26.569	151.1	0.771	3.05	45.2	40.8	2.04	28.5	0.00			321	204
378	6.84	6.80	34.053	26.700	139.2	0.857	1.65	24.1	53.7	2.56	35.1	0.00			380	203
400 ISL	6.59 D	6.55	34.075 D	26.750	134.5	0.887	1.59	23.1	57.8	2.64	36.2	0.00			402	
437	5.92	5.88	34.038	26.807	129.0	0.935	1.50	21.5	64.8	2.73	37.6	0.00			440	202
500 ISL	5.23 D	5.19	34.106 D	26.945	116.1	1.013	0.90	12.7	80.3	2.98	40.8	0.00			503	
511	5.14	5.10	34.112	26.960	114.7	1.025	0.80	11.2	83.0	3.02	41.3	0.00			514	201

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 80.0 50.5

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C		THETA			ml/l	PCT	uM/l	uM/l	uM/l	uM/l	ug/l	ug/l	db	
0 ISL	13.44	13.44	33.545	25.178	277.8	0.000	5.89	99.4	2.9	0.51	1.5	0.13	1.55	0.34	0	
2	13.44	13.44	33.545	25.178	277.9	0.006	5.89	99.4	2.9	0.51	1.5	0.13	1.55	0.34	2	205
5	13.44	13.44	33.548	25.181	277.7	0.014	5.89	99.4	2.9	0.51	1.5	0.13	1.43	0.37	5	204
10	13.44	13.44	33.553	25.185	277.5	0.028	5.89	99.4	2.8	0.53	1.5	0.14	1.37	0.56	10	203
15	13.44	13.44	33.553	25.185	277.6	0.042	5.89	99.4	2.7	0.52	1.5	0.14	1.40	0.46	15	202
20	13.44	13.44	33.553	25.185	277.7	0.056	5.90	99.6	2.7	0.53	1.4	0.14	1.74	0.49	20	201

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 80.0 55.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAEO	PRES	SAMP
m	DEG C	DEG C	THETA	ml/l	PCT	uM/l	uM/l	uM/l	um/l	um/l	um/l	um/l	ug/l	ug/l	db	
0 ISL	12.88	12.88	33.525	25.275	268.6	0.000	6.01	100.2	3.9	0.60	3.5	0.16	1.91	0.41	0	
2	12.88	12.88	33.525	25.275	268.7	0.005	6.01	100.2	3.9	0.60	3.5	0.16	1.91	0.41	2	221
10	12.97	12.97	33.598	25.314	265.2	0.027	6.08	101.6	3.7	0.58	3.2	0.15	2.42	0.63	10	219
10	12.97	12.97	33.603	25.318	264.8	0.027									10	220
20	12.93	12.93	33.602	25.325	264.4	0.053	6.00	100.2	3.7	0.60	3.3	0.15	2.45	0.61	20	218
30	12.90	12.90	33.603	25.332	264.0	0.080	5.98	99.8	3.8	0.60	3.4	0.15	2.44	0.80	30	217
40	12.49	12.48	33.611	25.418	256.0	0.106	5.47	90.5	7.3	0.87	6.7	0.19	1.45	0.72	40	216
50 ISL	11.22 D	11.21	33.708 D	25.731	226.4	0.130	3.76	60.6	15.3	1.42	15.4	0.20	0.63	0.53	50	
51	11.54	11.53	33.672	25.645	234.7	0.132	3.59	58.2	16.1	1.47	16.3	0.20	0.56	0.51	51	215
60	11.00	10.99	33.737	25.794	220.7	0.153	2.97	47.7	20.1	1.71	19.9	0.07	0.15	0.27	60	214
70	10.84	10.83	33.757	25.838	216.7	0.174	2.89	46.2	21.0	1.76	20.7	0.04	0.09	0.18	70	213
75 ISL	10.83 D	10.82	33.759 D	25.841	216.5	0.185	2.83	45.2	21.4	1.79	21.0	0.04	0.08	0.17	75	
85	10.66	10.65	33.794	25.899	211.3	0.207	2.71	43.2	22.3	1.84	21.7	0.04	0.06	0.16	85	212
100	10.44	10.43	33.854	25.984	203.5	0.238	2.52	40.0	24.0	1.92	23.0	0.02	0.04	0.14	101	211
119	9.97	9.96	33.946	26.137	189.3	0.275	2.24	35.2	27.8	2.05	25.0	0.02	0.02	0.10	120	210
125 ISL	9.90 D	9.89	33.965 D	26.163	186.9	0.286	2.17	34.0	28.7	2.08	25.5	0.02	0.02	0.10	126	
140	9.68	9.66	34.015	26.239	180.0	0.314	2.03	31.7	30.5	2.15	26.4	0.02	0.01	0.09	141	209
150 ISL	9.61 D	9.59	34.041 D	26.271	177.1	0.332	1.96	30.6	31.5	2.18	26.8	0.02	0.01	0.09	151	
170	9.43	9.41	34.097	26.345	170.5	0.366	1.85	28.7	33.2	2.23	27.6	0.01	0.01	0.08	171	208
199	9.15	9.13	34.145	26.428	163.1	0.415	1.73	26.7	35.9	2.31	28.8	0.01	0.01	0.07	200	207
200 ISL	9.13 D	9.11	34.147 D	26.433	162.7	0.416	1.72	26.5	36.0	2.31	28.9	0.01			201	
229	8.77	8.75	34.182	26.518	155.1	0.463	1.46	22.4	40.0	2.44	30.3	0.01			230	206
250 ISL	8.59 D	8.56	34.211 D	26.569	150.6	0.495	1.32	20.1	42.3	2.50	31.0	0.01			252	
269	8.51	8.48	34.220	26.589	149.0	0.523	1.22	18.6	44.1	2.55	31.5	0.01			271	205
300 ISL	8.32 D	8.29	34.230 D	26.626	146.0	0.569	1.09	16.5	46.6	2.62	32.3	0.01			302	
318	8.16	8.13	34.240	26.658	143.2	0.595	1.03	15.6	48.0	2.65	32.8	0.01			320	204
378	7.66	7.62	34.245	26.736	136.5	0.679	0.88	13.1	53.9	2.76	34.4	0.01			381	203
400 ISL	7.42 D	7.38	34.255 D	26.779	132.6	0.708	0.80	11.9	56.4	2.81	35.1	0.01			403	
437	7.13	7.09	34.261	26.825	128.7	0.757	0.65	9.6	61.2	2.90	36.3	0.01			440	202
500 ISL	6.64 D	6.41	34.276 D	26.927	119.2	0.835	0.45	6.5	71.8	3.04	38.4	0.01			504	
514	6.31	6.26	34.273	26.945	117.6	0.851	0.41	5.9	74.1	3.07	38.9	0.01			518	201

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 80.0 60.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE	
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAEO	PRES	SAMP	
m	DEG C	DEG C	THETA	ml/l	PCT	uM/l	uM/l	uM/l	um/l	um/l	um/l	um/l	ug/l	ug/l	db		
0 ISL	13.17	13.17	33.563	25.246	271.3	0.000	6.20	104.1	1.3	0.46	1.4	0.10	0.93	0.27	0		
2	13.17	13.17	33.563	25.247	271.4	0.005	6.20	104.1	1.3	0.46	1.4	0.10	0.93	0.27	2	220	
10	13.21	13.21	33.586	25.257	270.6	0.027	6.26	105.2	0.9	0.43	1.1	0.09	1.53	0.32	10	219	
20	13.14	13.14	33.589	25.273	269.3	0.054	6.22	104.3	0.6	0.41	0.7	0.07	1.89	0.52	20	218	
30	12.90	12.90	33.588	25.320	265.1	0.081	6.23	104.0	0.7	0.43	0.7	0.07	1.91	0.57	30	217	
40	12.88	12.87	33.578	25.317	265.7	0.107	5.80	96.8	5.1	0.64	4.1	0.27	0.45	0.29	40	216	
50	12.73	12.72	33.580	25.348	263.0	0.134	5.59	93.0	6.2	0.74	5.4	0.28	0.30	0.26	50	215	
60	11.28	11.27	33.615	25.648	234.5	0.159	4.03	65.0	14.9	1.31	15.5	0.09	0.15	0.25	60	214	
70	10.28	10.27	33.689	25.882	212.4	0.181	3.26	51.5	20.4	1.65	20.9	0.02	0.06	0.12	70	213	
75 ISL	10.09 D	10.08	33.681 D	25.909	210.0	0.192	3.23	50.8	20.9	1.67	21.3	0.02	0.05	0.12	75		
85	9.98	9.97	33.709	25.949	206.4	0.212	3.17	49.7	21.8	1.71	22.1	0.02	0.04	0.12	85	212	
100	9.61	9.60	33.808	26.088	193.4	0.242							0.02	0.03	0.09	101	211
119	9.34	9.33	33.908	26.211	182.1	0.278	2.69	41.7	27.8	1.96	25.4	0.01	0.02	0.09	120	210	
125 ISL	9.29 D	9.28	33.924 D	26.232	180.3	0.289	2.63	40.7	28.6	1.99	25.7	0.01	0.02	0.08	126		
139	9.15	9.13	33.978	26.297	174.4	0.314	2.51	38.7	30.3	2.04	26.3	0.01	0.01	0.07	140	209	
150 ISL	9.12 D	9.10	34.013 D	26.329	171.5	0.333	2.38	36.7	31.8	2.09	27.0	0.01	0.01	0.07	151		
169	8.85	8.83	34.075	26.421	163.1	0.365	2.14	32.8	34.6	2.19	28.2	0.01	0.01	0.07	170	208	
199	8.65	8.63	34.142	26.505	155.7	0.412	1.72	26.3	39.1	2.35	30.1	0.01	0.01	0.05	200	207	
200 ISL	8.63 D	8.61	34.147 D	26.512	155.0	0.414	1.72	26.2	39.2	2.35	30.1	0.01			201		
228	8.28	8.26	34.138	26.559	150.9	0.457	1.65	25.0	42.1	2.42	31.3	0.01			229	206	
250 ISL	7.98 D	7.95	34.151 D	26.614	146.0	0.489	1.49	22.4	46.0	2.51	32.5	0.01			252		
268	7.67	7.64	34.155	26.663	141.5	0.515	1.35	20.2	49.2	2.58	33.5	0.01			270	205	
300 ISL	7.41 D	7.38	34.168 D	26.710	137.4	0.560	1.21	18.0	52.6	2.65	34.4	0.01			302		
317	7.29	7.26	34.170	26.729	135.8	0.583	1.14	16.9	54.2	2.69	34.8	0.01			319	204	
377	6.79	6.75	34.211	26.831	126.8	0.662	0.78	11.4	62.9	2.89	37.0	0.00			380	203	
400 ISL	6.60 D	6.56	34.217 D	26.861	124.1	0.691	0.68	9.9	65.1	2.92	37.5	0.00			403		
437	6.55	6.51	34.257	26.900	121.0	0.736	0.54	7.9	68.4	2.96	38.1	0.00			440	202	
500 ISL	6.26 D	6.22	34.307 D	26.978	114.3	0.810	0.35	5.1	76.6	3.11	39.5	0.00			504		
513	6.09	6.04	34.310	27.002	112.0	0.825											

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 80.0 70.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C	THETA	ml/l	PCT	uM/l	uM/l	uM/l	um/l	um/l	um/l	um/l	ug/l	ug/l	db	
0 ISL	13.04	13.04	33.275	25.049	290.1	0.000	6.16	102.9	3.3	0.40	0.7	0.08	1.03	0.10	0	
1	13.04	13.04	33.275	25.049	290.1	0.003	6.16	102.9	3.3	0.40	0.7	0.08	1.03	0.10	1	220
10	13.02	13.02	33.276	25.054	289.9	0.029	6.17	103.1	3.3	0.40	0.8	0.08	0.98	0.17	10	219
20	12.76	12.76	33.370	25.179	278.3	0.057	6.06	100.7	4.0	0.48	2.0	0.23	1.08	0.32	20	218
30 ISL	12.74 D	12.74	33.369 D	25.182	278.2	0.085	6.00	99.7	4.0	0.50	2.1	0.27	0.86	0.32	30	
31	12.74	12.74	33.370	25.183	278.2	0.088	6.00	99.7	4.0	0.50	2.1	0.27	0.84	0.32	31	217
40	12.73	12.72	33.371	25.186	278.1	0.113	6.00	99.7	3.9	0.51	2.2	0.28	0.81	0.31	40	216
50	12.72	12.71	33.370	25.187	278.3	0.141	5.96	99.0	4.0	0.51	2.3	0.31	0.60	0.26	50	215
61	12.71	12.70	33.369	25.189	278.4	0.171	5.95	98.8	4.0	0.51	2.3	0.31	0.51	0.23	61	214
69	12.68	12.67	33.367	25.193	278.2	0.194	5.91	98.0	4.1	0.52	2.6	0.33	0.36	0.19	69	213
75 ISL	12.62 D	12.61	33.365 D	25.203	277.4	0.210	5.71	94.6	4.8	0.60	3.9	0.26	0.26	0.17	75	
85	11.76	11.75	33.325	25.336	264.9	0.238	5.17	84.1	7.4	0.83	7.9	0.12	0.14	0.13	85	212
99	10.44	10.43	33.498	25.707	229.8	0.272	4.14	65.5	14.8	1.36	16.7	0.02	0.04	0.07	99	211
100 ISL	10.33 D	10.32	33.492 D	25.721	228.4	0.274	4.12	65.0	15.1	1.38	17.0	0.02	0.04	0.07	100	
118	9.68	9.67	33.595	25.911	210.6	0.314	3.90	60.7	18.4	1.54	19.9	0.01	0.02	0.03	119	210
125 ISL	9.42 D	9.41	33.677 D	26.017	200.6	0.328	3.64	56.4	20.4	1.65	21.5	0.01	0.02	0.03	126	
139	9.32	9.30	33.764	26.102	192.9	0.356	3.14	48.6	24.3	1.84	24.2	0.01	0.01	0.04	140	209
150 ISL	9.06 D	9.04	33.846 D	26.208	183.0	0.377	3.19	49.1	25.7	1.83	24.3	0.01	0.01	0.03	151	
169	8.83	8.81	33.896	26.284	176.1	0.411	3.28	50.2	27.3	1.82	24.5	0.01	0.00	0.02	170	208
198	8.57	8.55	33.961	26.375	167.9	0.461	2.97	45.2	31.1	1.94	26.3	0.01	0.00	0.02	199	207
200 ISL	8.58 D	8.56	33.963 D	26.375	167.9	0.464	2.94	44.8	31.4	1.95	26.4	0.01	0.00	0.01	201	
229	8.36	8.34	34.019	26.453	161.0	0.512	2.52	38.2	35.4	2.10	28.4	0.01	0.00	0.01	230	206
250 ISL	8.09 D	8.06	34.051 D	26.519	155.0	0.545	2.55	38.4	38.5	2.13	29.3	0.01	0.00	0.01	251	
268	7.57	7.54	34.013	26.565	150.7	0.572	2.60	38.7	41.6	2.16	30.0	0.01	0.00	0.01	270	205
300 ISL	6.92 D	6.89	34.003 D	26.648	142.9	0.619	2.28	33.4	48.7	2.33	32.5	0.00	0.00	0.00	302	
318	6.76	6.73	34.023	26.686	139.5	0.645	2.03	29.6	52.7	2.44	34.0	0.00	0.00	0.00	320	204
377	6.26	6.23	34.067	26.787	130.5	0.724	1.37	19.8	62.4	2.71	37.2	0.00	0.00	0.00	379	203
400 ISL	6.19 D	6.15	34.099 D	26.821	127.5	0.754	1.23	17.7	65.6	2.78	37.9	0.00	0.00	0.00	403	
436	5.86	5.82	34.100	26.864	123.6	0.799	1.06	15.2	70.3	2.86	38.8	0.00	0.00	0.00	439	202
500 ISL	5.75 D	5.71	34.179 D	26.941	117.2	0.876	0.70	10.0	78.0	3.01	40.4	0.00	0.00	0.00	503	
515	5.54	5.50	34.167	26.957	115.6	0.894	0.61	8.7	79.8	3.04	40.8	0.00	0.00	0.00	519	201

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 80.0 80.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C	THETA	ml/l	PCT	uM/l	uM/l	uM/l	um/l	um/l	um/l	um/l	ug/l	ug/l	db	
0 ISL	12.76	12.76	33.393	25.196	276.1	0.000	6.12	101.7	4.3	0.49	2.1	0.22	0.94	0.30	0	
2 A	12.76	12.76	33.393	25.196	276.2	0.006	6.12	101.7	4.3	0.49	2.1	0.22	0.94	0.30	2	220
10 A	12.76	12.76	33.395	25.198	276.2	0.028	6.11	101.6	4.4	0.49	2.1	0.23	0.94	0.28	10	219
20 A	12.74	12.74	33.397	25.203	276.0	0.055	6.08	101.0	4.4	0.49	2.2	0.23	0.94	0.32	20	218
28 A	12.73	12.73	33.394	25.203	276.2	0.077	6.06	100.7	4.5	0.50	2.2	0.25	0.88	0.30	28	217
30 ISL	12.73 D	12.73	33.393 D	25.203	276.3	0.083	6.04	100.3	4.5	0.51	2.3	0.28	0.81	0.30	30	
36 A	12.70	12.70	33.398	25.212	275.5	0.099	5.96	98.9	4.7	0.54	2.6	0.37	0.60	0.28	36	216
47	12.65	12.64	33.403	25.226	274.5	0.130	5.93	98.3	5.0	0.55	2.9	0.45	0.44	0.21	47	215
50 ISL	12.62 D	12.61	33.406 D	25.234	273.8	0.138	5.93	98.3	4.9	0.56	3.0	0.47	0.43	0.22	50	
58 A	12.59	12.58	33.411	25.245	273.0	0.160	5.94	98.4	4.6	0.57	3.2	0.52	0.41	0.26	58	214
70	12.56	12.55	33.414	25.253	272.5	0.192	5.89	97.5	4.6	0.59	3.5	0.60	0.29	0.18	70	213
75 ISL	12.64 D	12.63	33.453 D	25.268	271.3	0.206	5.82	96.5	4.7	0.63	4.0	0.53	0.27	0.17	75	
84	12.64	12.63	33.508	25.311	267.4	0.230	5.69	94.4	5.0	0.70	5.0	0.33	0.22	0.16	84	212
99	10.44	10.43	33.624	25.802	220.8	0.267	3.69	58.5	17.0	1.50	18.9	0.02	0.02	0.08	99	211
100 ISL	10.44 D	10.45	33.627 D	25.804	220.6	0.269	3.61	57.2	17.6	1.53	19.4	0.02	0.02	0.08	100	
119	9.81	9.80	33.837	26.078	194.8	0.309	2.69	42.1	24.7	1.90	24.1	0.01	0.01	0.05	120	210
125 ISL	9.75 D	9.74	33.875 D	26.118	191.1	0.320	2.54	39.7	25.9	1.95	24.8	0.01	0.01	0.05	126	
139	9.64	9.62	33.941	26.188	184.8	0.346	2.34	36.5	27.8	2.03	25.7	0.01	0.00	0.04	140	209
150 ISL	9.53 D	9.51	33.994 D	26.248	179.3	0.367	2.21	34.4	29.3	2.09	26.5	0.01	0.00	0.04	151	
169	9.36	9.34	34.053	26.322	172.7	0.400	2.04	31.6	31.5	2.17	27.5	0.01	0.00	0.04	170	208
199	9.26	9.24	34.110	26.383	167.4	0.451	1.84	28.5	33.5	2.25	28.4	0.01	0.00	0.04	200	207
200 ISL	9.25 D	9.23	34.114 D	26.388	167.0	0.453	1.83	28.3	33.6	2.25	28.4	0.01	0.00	0.04	201	
228	9.07	9.05	34.156	26.450	161.6	0.499	1.64	25.3	36.2	2.34	29.4	0.01	0.00	0.01	229	206
250 ISL	8.93 D	8.90	34.185 D	26.496	157.7	0.534	1.49	22.9	38.0	2.39	30.1	0.01	0.00	0.01	251	
269	8.85	8.82	34.201	26.521	155.6	0.564	1.37	21.0	39.6	2.44	30.6	0.01	0.00	0.01	271	205
300 ISL	8.61 D	8.58	34.228 D	26.580	150.5	0.611	1.18	18.0	43.0	2.53	31.6	0.00	0.00	0.00	302	
320	8.42	8.39	34.240	26.619	147.1	0.641	1.06	16.1	45.4							

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 80.0 90.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SIO3	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C		THETA			ml/l	PCT	uM/l	uM/l	uM/l	uM/l	ug/l	ug/l	db	
33	9.0 N	123 13.3 W	27/01/07	0938	UTC	4230 m	220	12 kn								
0	ISL	13.18	13.18	33.254	25.005	294.3	0.000	6.13	102.7	3.2	0.38	0.5	0.05	0.67	0.16	0
2		13.18	13.18	33.254	25.005	294.3	0.006	6.13	102.7	3.2	0.38	0.5	0.05	0.67	0.16	2 220
10		13.17	13.17	33.259	25.011	293.9	0.029	6.14	102.9	3.2	0.37	0.5	0.05	0.71	0.17	10 219
20		13.05	13.05	33.263	25.039	291.6	0.059	6.11	102.1	3.2	0.40	0.8	0.08	0.78	0.25	20 218
30		13.03	13.03	33.265	25.044	291.3	0.088	6.08	101.6	3.2	0.41	0.9	0.09	0.74	0.24	30 217
40		13.02	13.01	33.277	25.056	290.5	0.117	6.08	101.5	3.3	0.41	1.0	0.09	0.84	0.27	40 216
50		12.97	12.96	33.289	25.075	288.9	0.146	5.99	99.9	3.5	0.46	1.5	0.15	0.47	0.19	50 215
60		12.93	12.92	33.318	25.106	286.3	0.175	5.93	98.9	3.8	0.50	2.0	0.22	0.33	0.17	60 214
70		12.93	12.92	33.325	25.112	286.0	0.203	5.94	99.0	3.8	0.50	2.0	0.19	0.41	0.20	70 213
75	ISL	12.92 D	12.91	33.328 D	25.116	285.7	0.218	5.94	99.0	3.8	0.50	2.0	0.19	0.38	0.19	75
86		12.91	12.90	33.332	25.122	285.5	0.249	5.94	99.0	3.9	0.51	2.1	0.18	0.33	0.17	86 212
100		10.66	10.65	33.384	25.580	241.9	0.286	4.65	73.9	11.3	1.12	12.8	0.01	0.05	0.05	100 211
119		9.77	9.76	33.655	25.943	207.7	0.329	3.43	53.5	20.7	1.71	21.8	0.01	0.01	0.04	120 210
125	ISL	9.50 D	9.49	33.696 D	26.019	200.5	0.341	3.43	53.2	22.0	1.73	22.3	0.01	0.01	0.04	126
139		9.10	9.08	33.769	26.141	189.1	0.368	3.42	52.6	24.0	1.76	23.4	0.01	0.00	0.03	140 209
150	ISL	8.91 D	8.89	33.856 D	26.239	179.9	0.388	3.32	50.9	26.2	1.81	24.3	0.01	0.00	0.02	151
169		8.61	8.59	33.927	26.342	170.5	0.422	3.11	47.4	29.8	1.90	25.7	0.00	0.00	0.02	170 208
199		8.37	8.35	33.986	26.425	163.0	0.472	2.98	45.2	32.9	1.96	26.7	0.00	0.00	0.03	200 207
200	ISL	8.28 D	8.26	33.992 D	26.444	161.3	0.473	2.95	44.6	33.1	1.97	26.8	0.00			201
229		8.06	8.04	34.071	26.539	152.7	0.519	2.02	30.4	40.9	2.31	30.9	0.00			230 206
250	ISL	7.75 D	7.73	34.089 D	26.599	147.3	0.550	1.71	25.6	44.9	2.44	32.4	0.00			251
268		7.62	7.59	34.112	26.636	144.0	0.577	1.57	23.4	47.7	2.51	33.2	0.00			270 205
300	ISL	7.38 D	7.35	34.130 D	26.685	139.8	0.622	1.36	20.2	51.9	2.61	34.5	0.00			302
317		7.14	7.11	34.125	26.715	137.1	0.646	1.27	18.7	54.0	2.66	35.1	0.00			319 204
377		6.52	6.49	34.150	26.818	127.7	0.725	0.94	13.7	63.0	2.84	37.3	0.00			379 203
400	ISL	6.34 D	6.30	34.155 D	26.846	125.3	0.754	0.84	12.2	66.5	2.90	38.1	0.00			403
437		6.00	5.96	34.171	26.903	120.2	0.799	0.72	10.3	72.6	2.98	39.4	0.00			440 202
500	ISL	5.03 D	4.99	34.146 D	27.000	110.7	0.872	0.59	8.3	84.9	3.08	41.5	0.00			503
516		5.06	5.02	34.168	27.014	109.6	0.890	0.56	7.9	88.0	3.10	42.0	0.00			520 201

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 80.0 100.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SIO3	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C		THETA			ml/l	PCT	uM/l	uM/l	uM/l	uM/l	ug/l	ug/l	db	
32	48.8 N	123 54.5 W	27/01/07	0319	UTC	4343 m	230	10 kn								
0	ISL	14.16	14.16	33.206	24.768	316.8	0.000	5.97	102.0	2.3	0.34	0.1	0.01	0.39	0.11	0
2		14.16	14.16	33.206	24.768	316.9	0.006	5.97	102.0	2.3	0.34	0.1	0.01	0.39	0.11	2 220
10	ISL	14.15 D	14.15	33.205 D	24.770	316.9	0.032	5.97	102.0	2.2	0.30	0.0	0.01	0.38	0.11	10 219
11		14.15	14.15	33.206	24.771	316.9	0.035	5.97	102.0	2.2	0.30	0.0	0.01	0.38	0.11	11 219
20	ISL	14.14 D	14.14	33.209 D	24.776	316.7	0.063	5.96	101.8	2.1	0.32	0.0	0.01	0.42	0.13	20
21		14.14	14.14	33.212	24.778	316.5	0.067	5.96	101.8	2.1	0.32	0.0	0.01	0.43	0.13	21 218
30		14.00	14.00	33.181	24.783	316.3	0.095	5.96	101.5	2.2	0.31	0.1	0.02	0.50	0.16	30 217
41		13.95	13.94	33.171	24.786	316.3	0.130	5.96	101.4	2.1	0.33	0.1	0.02	0.45	0.16	41 216
50		13.93	13.92	33.166	24.787	316.5	0.158	5.95	101.2	2.1	0.33	0.1	0.02	0.44	0.16	50 215
61		13.93	13.92	33.166	24.787	316.8	0.193	5.94	101.0	2.1	0.33	0.1	0.03	0.41	0.15	61 214
69		13.91	13.90	33.160	24.787	317.0	0.218	5.94	101.0	2.1	0.35	0.2	0.03	0.36	0.14	69 213
75	ISL	13.90 D	13.89	33.158 D	24.787	317.1	0.237	5.88	99.9	2.2	0.39	0.7	0.04	0.26	0.12	75
85		12.72	12.71	33.102	24.980	298.8	0.268	5.73	95.0	2.8	0.48	2.1	0.06	0.10	0.08	85 212
99		11.59	11.58	33.106	25.197	278.4	0.309	5.53	89.5	4.5	0.65	4.7	0.02	0.07	0.06	99 211
100	ISL	11.56 D	11.55	33.108 D	25.204	277.7	0.311	5.51	89.1	4.7	0.66	5.0	0.02	0.07	0.06	100
119		10.66	10.65	33.187	25.427	256.9	0.362	5.02	79.7	9.2	0.97	10.4	0.01	0.03	0.03	120 210
125	ISL	10.41 D	10.40	33.248 D	25.517	248.3	0.377	4.83	76.3	11.0	1.09	12.3	0.01	0.03	0.03	126
139		9.97	9.95	33.398	25.709	230.3	0.411	4.44	69.5	14.9	1.31	16.1	0.01	0.02	0.03	140 209
150	ISL	9.82 D	9.80	33.611 D	25.901	212.3	0.435	4.43	69.2	15.6	1.30	16.7	0.01	0.01	0.03	151
169		9.61	9.59	33.768	26.058	197.7	0.474	4.41	68.6	17.1	1.29	17.5	0.01	0.00	0.02	170 208
200		8.86	8.84	33.911	26.291	176.0	0.532	2.97	45.5	28.7	1.91	25.7	0.00	0.00	0.03	201 207
229		8.50	8.48	33.999	26.416	164.6	0.582	2.56	38.9	33.8	2.05	28.1	0.01			230 206
250	ISL	8.19 D	8.16	34.042 D	26.497	157.1	0.615	2.47	37.3	36.9	2.11	29.1	0.01			251
268		7.95	7.92	34.037	26.529	154.3	0.643	2.41	36.2	39.5	2.17	29.9	0.01			270 205
300	ISL	7.65 D	7.62	34.074 D	26.602	147.7	0.692	1.96	29.2	44.7	2.35	32.0	0.00			302
318		7.46	7.43	34.085	26.638	144.5	0.718	1.72	25.5	47.9	2.45	33.2	0.00			320 204
378		6.12	6.09	34.021	26.768	132.1	0.801	1.77	25.5	60.9	2.60	36.1	0.00			380 203
400	ISL	5.91 D	5.88	34.026 D	26.799	129.3	0.830	1.63	23.3	65.1	2.68	37.1	0.00			402
437		5.54	5.50	34.047	26.86											

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 81.7 43.5

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SIO3	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C	THETA	ml/l	PCT	uM/l	uM/l	uM/l	uM/l	uM/l	uM/l	uM/l	ug/l	ug/l	db	
0 ISL	13.63	13.63	33.588	25.173	278.3	0.000	5.76	97.6	5.2	0.63	2.6	0.19	2.14	0.10	0	
2	13.63	13.63	33.588	25.173	278.4	0.006	5.76	97.6	5.2	0.63	2.6	0.19	2.14	0.10	2	204
5A	13.42	13.42	33.585	25.213	274.6	0.014	5.81	98.0	5.2	0.62	2.6	0.20	2.97	0.14	5	203
10	13.21	13.21	33.583	25.254	270.8	0.027	5.67	95.3	5.6	0.65	3.1	0.23	2.23	0.11	10	202
16	13.21	13.21	33.585	25.256	270.8	0.044	5.66	95.1	5.3	0.65	2.8	0.21	1.95	0.18	16	201

CALCULATED WITH ASSUMED ACID RATIO INTERPOLATED FROM ADJACENT LEVELS.

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 81.8 46.9

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SIO3	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C	THETA	ml/l	PCT	uM/l	uM/l	uM/l	uM/l	uM/l	uM/l	uM/l	ug/l	ug/l	db	
0 ISL	13.97	13.97	33.582	25.098	285.4	0.000	6.36	108.5	0.7	0.32	0.1	0.02	1.96	0.32	0	
2 A	13.97	13.97	33.582	25.098	285.5	0.006	6.36	108.5	0.7	0.32	0.1	0.02	1.96	0.32	2	224
10	13.76	13.76	33.581	25.141	281.6	0.028	6.26	106.4	0.9	0.32	0.1	0.03	3.22	0.45	10	223
10	13.76	13.76	33.580	25.140	281.7	0.028	6.26	106.4	0.9	0.32	0.1	0.03	3.22	0.45	10	223
20	13.71	13.71	33.581	25.152	280.9	0.057	6.15	104.4	1.0	0.35	0.2	0.04	3.67	0.66	20	221
30	13.56	13.56	33.578	25.180	278.5	0.084	5.75	97.3	3.0	0.50	1.8	0.14	1.25	0.56	30	220
40	13.39	13.38	33.576	25.214	275.6	0.112	5.41	91.2	4.9	0.64	3.5	0.27	0.51	0.41	40	219
50	13.02	13.01	33.570	25.283	269.2	0.139	4.71	78.8	8.1	0.92	7.6	0.46	0.34	0.31	50	218
60	12.64	12.63	33.583	25.368	261.3	0.166	4.24	70.4	10.7	1.12	10.8	0.33	0.28	0.26	60	217
70	12.13	12.12	33.605	25.483	250.6	0.192	3.54	58.1	14.0	1.39	15.0	0.04	0.14	0.22	70	216
75 ISL	12.02 D	12.01	33.619 D	25.515	247.7	0.204	3.58	58.7	14.4	1.40	15.2	0.07	0.15	0.26	75	
85	11.78	11.77	33.639	25.576	242.1	0.228	3.67	59.8	15.0	1.42	15.5	0.13	0.20	0.32	85	215
100	10.95	10.94	33.730	25.798	221.2	0.263	2.97	47.6	20.1	1.71	20.1	0.03	0.10	0.18	101	214
120	10.54	10.53	33.791	25.918	210.2	0.306	2.74	43.5	22.4	1.82	21.9	0.02	0.04	0.10	121	213
125 ISL	10.42 D	10.41	33.821 D	25.963	206.1	0.317	2.66	42.2	23.1	1.85	22.4	0.02	0.03	0.09	126	
139	10.18	10.16	33.868	26.041	198.9	0.345	2.46	38.8	25.2	1.94	23.8	0.01	0.02	0.08	140	212
150 ISL	10.02 D	10.00	33.940 D	26.124	191.2	0.367	2.40	37.7	26.7	2.01	24.7	0.01	0.01	0.07	151	
169	9.90	9.88	34.006	26.196	184.8	0.402	2.31	36.2	29.2	2.11	25.9	0.01	0.01	0.06	170	211
199	9.51	9.49	34.063	26.306	174.9	0.456	1.85	28.8	32.4	2.21	27.4	0.01	0.01	0.08	200	210
200 ISL	9.50 D	9.48	34.062 D	26.307	174.8	0.458	1.84	28.6	32.5	2.21	27.4	0.01		201		
228	9.22	9.19	34.110	26.390	167.4	0.506	1.55	24.0	36.2	2.34	28.8	0.00		229	209	
250 ISL	9.08 D	9.05	34.137 D	26.434	163.6	0.542	1.29	19.9	39.9	2.45	29.9	0.00		251		
268	8.87	8.84	34.173	26.496	158.0	0.571	1.10	16.9	43.0	2.54	30.7	0.00		270	208	
300 ISL	8.60 D	8.57	34.200 D	26.560	152.4	0.621	0.87	13.3	47.8	2.66	31.8	0.00		302		
318	8.42	8.39	34.212	26.597	149.1	0.648	0.78	11.8	50.3	2.72	32.3	0.00		320	207	
396	7.65	7.61	34.232	26.728	137.6	0.760	0.55	8.2	61.3	2.92	33.5	0.00		399	206	
400 ISL	7.63 D	7.59	34.233 D	26.732	137.3	0.765	0.54	8.1	61.8	2.93	33.4	0.00		403		
476	6.91	6.86	34.242	26.840	127.6	0.866	0.31	4.5	79.9	3.21	31.3	0.00		479	205	
500 ISL	6.73 D	6.68	34.246 D	26.868	125.1	0.896	0.14	2.0	90.8	3.40	28.2	0.00		503		
512	6.64	6.59	34.244	26.879	124.2	0.911	0.07	1.0	97.0	3.54	25.9	0.00		516	204	
536	6.55	6.50	34.240	26.888	123.6	0.941	0.02	0.3	110.5	3.96	18.4	0.00		540	203	
565	6.51	6.46	34.238	26.892	123.6	0.977	0.01	0.1	117.4	4.18	13.3	0.00		569	202	
569	6.51	6.46	34.238	26.892	123.7	0.982	0.01	0.1	117.6	4.24	13.1	0.01		573	201	

A) SANTA BARBARA BASIN STATION.

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 83.3 39.4

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SIO3	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C	THETA	ml/l	PCT	uM/l	uM/l	uM/l	uM/l	uM/l	uM/l	uM/l	ug/l	ug/l	db	
0 ISL	13.10	13.10	33.599	25.288	267.3	0.000	6.04	101.3	3.7	0.46	0.8	0.09	2.78	0.45	0	
2	13.10	13.10	33.599	25.288	267.4	0.005	6.04	101.3	3.7	0.46	0.8	0.09	2.78	0.45	2	205
6	13.10	13.10	33.600	25.289	267.4	0.016	6.02	100.9	3.7	0.45	0.8	0.09	2.85	0.26	6	204
10 ISL	13.10 D	13.10	33.597 D	25.287	267.7	0.027	6.04	101.3	3.7	0.47	0.8	0.10	2.93	0.19	10	
11	13.10	13.10	33.599	25.289	267.6	0.029	6.04	101.3	3.7	0.47	0.8	0.10	2.95	0.17	11	202
11	13.10	13.10	33.599	25.289	267.6	0.029	6.04	100.9	3.6	0.46	0.8	0.09	3.01	0.40	15	201
15	13.10	13.10	33.600	25.290	267.6	0.040	6.02	100.9	3.6	0.46	0.8	0.09	3.01	0.40	15	201

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 83.3 40.6

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	sva	DYN HT	OXYGEN	OXY	SiO3	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C		THETA			ml/l	PCT	uM/L	uM/L	uM/L	uM/L	ug/l	ug/l	db	
0 ISL	13.93	13.93	33.583	25.107	284.5	0.000	5.80	98.9	2.1	0.43	0.7	0.06	2.31	0.34	0	
2	13.93	13.93	33.583	25.107	284.6	0.006	5.80	98.9	2.1	0.43	0.7	0.06	2.31	0.34	2	206
6	13.93	13.93	33.585	25.109	284.6	0.017	5.78	98.6	2.1	0.43	0.7	0.06	2.61	0.58	6	205
10 ISL	13.92 D	13.92	33.581 D	25.108	284.8	0.028	5.76	98.2	2.1	0.44	0.9	0.07	1.88	0.71	10	
11	13.92	13.92	33.583	25.110	284.6	0.031	5.76	98.2	2.1	0.44	0.9	0.07	1.66	0.73	11	203
11	13.91	13.91	33.583	25.112	284.5	0.031										11 204
20 ISL	13.82 D	13.82	33.583 D	25.131	282.9	0.057	5.80	98.7	2.4	0.45	1.0	0.08	1.67	0.56	20	
21 A	13.82	13.82	33.585	25.132	282.8	0.060	5.80	98.7	2.4	0.45	1.0	0.08	1.67	0.52	21	202
29	13.71	13.71	33.588	25.157	280.6	0.082	5.88	99.8	2.6	0.46	1.0	0.09	1.42	0.28	29	201

CALCULATED WITH ASSUMED ACID RATIO INTERPOLATED FROM ADJACENT LEVELS.

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 83.3 42.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	sva	DYN HT	OXYGEN	OXY	SiO3	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C		THETA			ml/l	PCT	uM/L	uM/L	uM/L	uM/L	ug/l	ug/l	db	
0 ISL	14.14	14.14	33.579	25.061	289.0	0.000	5.76	98.6	2.3	0.43	0.7	0.06	0.74	0.27	0	
1 A	14.14	14.14	33.579	25.061	289.0	0.003	5.76	98.6	2.3	0.43	0.7	0.06	0.74	0.27	1	215
8	14.13	14.13	33.580	25.064	288.9	0.023	5.74	98.3	2.4	0.43	0.7	0.06	0.78	0.28	8	214
10	14.13	14.13	33.579	25.063	289.1	0.029	5.75	98.5	2.3	0.42	0.7	0.06	0.76	0.27	10	213
16 A	14.12	14.12	33.579	25.065	289.0	0.046	5.76	98.6	2.4	0.42	0.7	0.06	0.77	0.23	16	211
20 ISL	14.12 D	14.12	33.577 D	25.064	289.3	0.058	5.78	98.9	2.3	0.43	0.7	0.06	0.81	0.29	20	
24	14.10	14.10	33.582	25.072	288.6	0.069							0.85	0.34	24	210
30 ISL	14.00 D	14.00	33.581 D	25.092	286.9	0.087	5.84	99.7	2.2	0.42	0.8	0.06	1.35	0.23	30	
33 A	13.97	13.97	33.584	25.101	286.1	0.095	5.86	100.0	2.2	0.42	0.8	0.07	1.53	0.19	33	209
41	13.76	13.75	33.584	25.144	282.2	0.118	5.68	96.5	2.9	0.50	1.6	0.10	0.83	0.41	41	208
46 A	13.70	13.69	33.585	25.158	281.1	0.132	5.70	96.7	3.0	0.50	1.6	0.10	0.80	0.35	46	207
50 ISL	13.51 D	13.50	33.585 D	25.197	277.5	0.143	5.60	94.7	3.5	0.54	2.1	0.11	0.68	0.32	50	
57 A	13.40	13.39	33.588	25.221	275.3	0.163	5.30	89.4	4.8	0.67	3.7	0.14	0.46	0.30	57	206
68	13.00	12.99	33.586	25.300	268.1	0.192	4.74	79.3	7.6	0.90	7.1	0.18	0.40	0.29	68	205
75 ISL	12.78 D	12.77	33.581 D	25.340	264.5	0.211	4.51	75.1	8.7	0.99	8.5	0.20	0.36	0.27	75	
80	12.66	12.65	33.591	25.371	261.6	0.224	4.30	71.4	9.9	1.08	9.8	0.21	0.32	0.26	80	204
94 A	11.50	11.49	33.711	25.684	232.1	0.259	3.05	49.5	18.1	1.65	17.8	0.12	0.13	0.27	94	203
100 ISL	11.12 D	11.11	33.752 D	25.785	222.5	0.272	2.81	45.2	20.0	1.76	19.7	0.09	0.08	0.23	101	
108	10.88	10.87	33.796	25.862	215.3	0.290	2.65	42.4	21.6	1.84	21.2	0.05	0.05	0.17	109	202
121	10.64	10.63	33.848	25.945	207.7	0.317	2.55	40.6	23.3	1.90	22.4	0.04	0.05	0.14	122	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 83.3 51.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	sva	DYN HT	OXYGEN	OXY	SiO3	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C		THETA			ml/l	PCT	uM/L	uM/L	uM/L	uM/L	ug/l	ug/l	db	
0 ISL	13.45	13.45	33.595	25.215	274.3	0.000	5.80	97.9	2.8	0.54	2.4	0.09	3.77	0.69	0	
2	13.45	13.45	33.595	25.215	274.4	0.005	5.80	97.9	2.8	0.54	2.4	0.09	3.77	0.69	2	211
10	13.44	13.44	33.593	25.216	274.5	0.027	5.79	97.7	2.8	0.55	2.4	0.09	3.99	0.78	10	209
10	13.44	13.44	33.594	25.216	274.4	0.027										10 210
20	13.39	13.39	33.596	25.228	273.6	0.055	5.76	97.1	2.9	0.55	2.5	0.10	3.69	0.71	20	208
30	12.87	12.87	33.623	25.353	262.0	0.082	5.10	85.1	6.7	0.83	6.2	0.13	2.35	0.80	30	207
40	12.18	12.17	33.674	25.527	245.7	0.107	4.18	68.8	12.2	1.22	11.6	0.14	1.10	0.72	40	206
50	11.14	11.13	33.791	25.811	218.9	0.130	2.93	47.2	20.5	1.70	19.4	0.10	0.26	0.36	50	205
60	10.98	10.97	33.814	25.857	214.7	0.152	2.74	44.0	21.6	1.78	20.6	0.07	0.15	0.26	60	204
70	10.84	10.83	33.841	25.903	210.5	0.173	2.65	42.4	22.7	1.84	21.3	0.07	0.15	0.27	70	203
75 ISL	10.84 D	10.83	33.841 D	25.904	210.6	0.184	2.62	41.9	23.4	1.86	21.6	0.08	0.17	0.31	75	
80	10.59	10.58	33.881	25.979	203.5	0.194	2.54	40.4	24.4	1.89	22.2	0.09	0.18	0.34	80	202
87	10.27	10.26	33.945	26.084	193.7	0.208	2.28	36.0	27.1	1.99	24.0	0.08	0.11	0.35	87	201

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 83.3 55.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C		THETA			ml/l	PCT	uM/l	uM/l	uM/l	uM/l	ug/l	ug/l	db	
0 ISL	13.90	13.90	33.588	25.117	283.6	0.000	6.27	106.9	0.0	0.29	0.0	0.01	3.27	0.70	0	
2	13.90	13.90	33.588	25.117	283.6	0.006	6.27	106.9	0.0	0.29	0.0	0.01	3.27	0.70	2	221
10 ISL	13.89 D	13.89	33.585 D	25.118	283.9	0.028	6.28	107.0	0.0	0.29	0.0	0.01	3.14	0.68	10	
10	13.90	13.90	33.588	25.118	283.9	0.028										10 220
11	13.90	13.90	33.588	25.118	283.9	0.031	6.28	107.0	0.0	0.29	0.0	0.01	3.12	0.68	11	219
20 ISL	13.78 D	13.78	33.584 D	25.140	282.0	0.057	6.23	105.9	0.2	0.31	0.0	0.01	4.49	1.15	20	
21	13.77	13.77	33.587	25.144	281.7	0.059	6.22	105.7	0.2	0.31	0.0	0.01	4.65	1.20	21	218
30	13.68	13.68	33.585	25.161	280.3	0.085	6.04	102.5	0.9	0.40	0.7	0.04	4.87	1.21	30	217
40	12.53	12.52	33.588	25.393	258.4	0.112	4.38	72.5	9.7	1.06	10.1	0.14	0.64	0.47	40	216
50	11.46	11.45	33.660	25.651	234.1	0.136	3.50	56.7	16.2	1.47	16.7	0.16	0.40	0.43	50	215
60	11.18	11.17	33.701	25.734	226.4	0.159	3.24	52.2	18.3	1.59	18.4	0.11	0.28	0.41	60	214
70	10.65	10.64	33.818	25.919	209.0	0.181	2.72	43.3	22.3	1.82	21.5	0.05	0.15	0.29	70	213
75 ISL	10.58 D	10.57	33.850 D	25.956	205.6	0.192	2.54	40.4	23.8	1.90	22.5	0.03	0.11	0.25	75	
85	10.35	10.34	33.927	26.057	196.3	0.212	2.31	36.6	25.8	2.00	23.7	0.02	0.07	0.19	85	212
100	10.18	10.17	33.944	26.099	192.5	0.241	2.28	36.0	26.5	2.01	24.2	0.01	0.04	0.16	101	211
120	9.90	9.89	34.015	26.202	183.1	0.278	2.12	33.3	28.8	2.09	25.5	0.01	0.03	0.12	121	210
125 ISL	9.83 D	9.82	34.031 D	26.227	180.9	0.287	2.06	32.3	29.7	2.12	25.9	0.01	0.03	0.11	126	
140	9.51	9.49	34.109	26.341	170.3	0.314	1.89	29.4	32.6	2.21	27.2	0.01	0.02	0.10	141	209
150 ISL	9.36 D	9.34	34.139 D	26.389	165.9	0.331	1.81	28.1	33.8	2.25	27.7	0.01	0.02	0.10	151	
169	9.22	9.20	34.166	26.433	162.1	0.362	1.69	26.1	35.6	2.30	28.5	0.01	0.02	0.09	170	208
200	8.98	8.96	34.198	26.497	156.6	0.411	1.53	23.5	38.0	2.38	29.5	0.00	0.01	0.07	201	207
228	8.85	8.83	34.211	26.528	154.1	0.455	1.41	21.6	39.8	2.43	29.9	0.00		229	206	
250 ISL	8.72 D	8.69	34.225 D	26.560	151.5	0.488	1.30	19.9	41.8	2.49	30.5	0.00		252		
269	8.54	8.51	34.234	26.595	148.5	0.517	1.20	18.3	43.7	2.54	31.1	0.00		271	205	
300 ISL	8.30 D	8.27	34.242 D	26.639	144.8	0.562	1.08	16.4	46.1	2.60	31.9	0.00		302		
318	8.22	8.19	34.251	26.658	143.3	0.588	1.02	15.4	47.5	2.63	32.3	0.00		320	204	
378	7.77	7.73	34.269	26.739	136.3	0.672	0.79	11.8	53.2	2.76	34.0	0.00		380	203	
400 ISL	7.54 D	7.50	34.268 D	26.772	133.4	0.702	0.72	10.7	56.4	2.81	34.9	0.00		403		
438	7.01	6.97	34.264	26.844	126.8	0.751	0.62	9.1	62.1	2.90	36.4	0.00		441	202	
500 ISL	6.56 D	6.51	34.280 D	26.917	120.3	0.828	0.48	7.0	68.6	3.00	37.8	0.00		503		
516	6.49	6.44	34.287	26.932	119.0	0.847	0.44	6.4	70.3	3.03	38.1	0.00		520	201	

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 83.3 60.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C		THETA			ml/l	PCT	uM/l	uM/l	uM/l	uM/l	ug/l	ug/l	db	
0 ISL	12.92	12.92	33.582	25.311	265.2	0.000	5.93	99.0	4.3	0.60	3.6	0.17	1.10	0.32	0	
2	12.92	12.92	33.582	25.311	265.2	0.005	5.93	99.0	4.3	0.60	3.6	0.17	1.10	0.32	2	221
10	12.93	12.93	33.582	25.309	265.6	0.027	5.93	99.0	4.2	0.59	3.6	0.18	1.09	0.32	10	220
15	12.92	12.92	33.582	25.311	265.6	0.040	5.93	99.0	4.2	0.59	3.6	0.17	1.07	0.35	15	219
20 ISL	12.93 D	12.93	33.581 D	25.309	265.9	0.053	5.93	99.0	4.2	0.59	3.6	0.17	1.05	0.35	20	
30	12.92	12.92	33.583	25.313	265.9	0.080	5.92	98.9	4.2	0.60	3.6	0.18	1.00	0.36	30	218
45	12.92	12.91	33.581	25.311	266.4	0.120	5.92	98.8	4.2	0.60	3.7	0.18	0.96	0.37	45	217
50 ISL	12.93 D	12.92	33.580 D	25.309	266.7	0.133	5.91	98.7	4.2	0.60	3.7	0.18	0.93	0.34	50	
55	12.92	12.91	33.581	25.312	266.6	0.146	5.90	98.5	4.2	0.61	3.7	0.18	0.90	0.32	55	216
64	12.85	12.84	33.580	25.325	265.6	0.170	5.83	97.2	4.5	0.63	4.0	0.19	0.81	0.35	64	215
75	11.61	11.60	33.547	25.536	245.7	0.198	4.41	71.6	11.7	1.15	12.8	0.14	0.16	0.22	75	214
85	11.15	11.14	33.555	25.626	237.3	0.222	3.98	64.0	14.2	1.32	15.7	0.04	0.08	0.15	85	213
95	10.31	10.30	33.675	25.867	214.4	0.245	3.27	51.7	19.3	1.61	20.2	0.02	0.04	0.12	95	212
100 ISL	10.05 D	10.04	33.704 D	25.934	208.2	0.256	3.13	49.2	20.7	1.68	21.3	0.01	0.03	0.11	101	
109	9.85	9.84	33.750	26.004	201.7	0.274	3.02	47.2	22.3	1.75	22.3	0.01	0.02	0.10	110	211
124	9.53	9.52	33.848	26.133	189.6	0.303	2.78	43.2	25.2	1.86	23.9	0.01	0.01	0.08	125	210
125 ISL	9.52 D	9.51	33.855 D	26.140	189.0	0.305	2.75	42.7	25.4	1.87	24.0	0.01	0.01	0.08	126	
144	9.53	9.51	34.015	26.264	177.7	0.340	2.29	35.6	29.0	2.03	25.4	0.01	0.01	0.10	145	209
150 ISL	9.52 D	9.50	34.021 D	26.271	177.2	0.351	2.31	35.9	29.9	2.03	25.9	0.01	0.01	0.09	151	
170	8.63	8.61	34.019	26.411	164.0	0.385	2.46	37.5	32.8	2.05	27.3	0.01	0.01	0.06	171	208
198	8.41	8.39	34.080	26.493	156.6	0.430	2.15	32.6	36.6	2.17	28.6	0.01	0.01	0.06	199	207
200 ISL	8.40 D	8.38	34.081 D	26.495	156.5	0.433	2.10	31.9	36.9	2.19	28.7	0.01		201		
228	8.39	8.37	34.195	26.587	148.4	0.476	1.43	21.7	41.7	2.41	30.3	0.01		229	206	
250 ISL	8.10 D	8.07	34.182 D	26.621	145.4	0.508	1.47	22.2	44.3	2.44	31.3	0.01		252		
269	7.66	7.63	34.138	26.651	142.7	0.535	1.51	22.5	46.3	2.46	32.0	0.01		271	205	
300 ISL	7.41 D	7.38	34.177 D	26.718	136.7	0.579	1.28	19.0	49.6	2.55	33.0	0.00		302		
319	7.42	7.39	34.191	26.727	136.1	0.605	1.08	16.0	51.7	2.62	33.6	0.00		321	204	
378	7.08	7.04	34.275	26.842	126.0	0.682	0.59	8.7	60.2	2.84	35.5	0.00		380	203	
400 ISL	6.86 D	6.82	34.274 D	26.871	123.4	0.709	0.52	7.								

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 83.3 70.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SIO3	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C		THETA			ml/l	PCT	uM/L	uM/L	uM/L	uM/L	ug/l	ug/l	db	
33 15.2 N	121 25.6 W	25/01/07	1945	UTC	3784 m	330	08 kn	330 01 07	0	1021.1 mb	14.0	C 12.9 C	17m	0/8		
0 ISL	12.76	12.76	33.433	25.227	273.2	0.000	6.08	101.1	5.1	0.55	2.9	0.28	0.84	0.09	0	
2 A	12.76	12.76	33.433	25.227	273.2	0.005	6.08	101.1	5.1	0.55	2.9	0.28	0.84	0.09	2	222
10 A	12.66	12.66	33.434	25.247	271.5	0.027	6.08	100.9	5.0	0.55	2.9	0.28	0.90	0.13	10	220
10	12.67	12.67	33.433	25.245	271.7	0.027										10 221
20 ISL	12.63 D	12.63	33.429 D	25.250	271.5	0.054	6.07	100.6	5.0	0.54	2.9	0.29	0.88	0.23	20	
23 A	12.63	12.63	33.430	25.250	271.5	0.063	6.07	100.6	5.0	0.54	2.9	0.29	0.88	0.26	23	219
30 ISL	12.63 D	12.63	33.429 D	25.250	271.8	0.082	6.06	100.5	4.9	0.55	2.9	0.30	0.84	0.31	30	
32 A	12.63	12.63	33.431	25.251	271.7	0.087	6.05	100.3	4.9	0.55	2.9	0.30	0.83	0.32	32	218
40 A	12.65	12.64	33.450	25.263	270.8	0.109	5.98	99.2	4.9	0.58	3.2	0.33	0.81	0.37	40	217
48	12.66	12.65	33.466	25.273	270.0	0.130	5.98	99.2	4.8	0.58	3.2	0.30	0.96	0.28	48	216
50 ISL	12.67 D	12.66	33.469 D	25.274	270.1	0.136	5.96	98.9	4.9	0.59	3.3	0.30	0.89	0.25	50	
57	12.68	12.67	33.511	25.304	267.3	0.155	5.86	97.3	5.2	0.63	4.0	0.29	0.56	0.18	57	215
66 A	12.58	12.57	33.503	25.318	266.3	0.179	5.71	94.6	5.4	0.67	4.6	0.28	0.37	0.21	66	214
75	12.05	12.04	33.481	25.402	258.4	0.202	5.41	88.6	6.8	0.79	6.7	0.23	0.25	0.18	75	213
85	10.45	10.44	33.663	25.833	217.4	0.226	3.38	53.6	19.3	1.58	19.8	0.02	0.05	0.13	85	212
100	9.83	9.82	33.791	26.039	198.2	0.257	3.28	51.3	24.0	1.80	23.1	0.02	0.03	0.08	101	211
120	9.61	9.60	33.853	26.124	190.5	0.296	2.81	43.8	25.6	1.86	24.1	0.01	0.02	0.08	121	210
125 ISL	9.47 D	9.46	33.892 D	26.177	185.4	0.305	2.74	42.5	26.3	1.89	24.5	0.01	0.02	0.08	126	
139	9.35	9.33	33.941	26.236	180.2	0.331	2.62	40.6	28.4	1.96	25.5	0.01	0.01	0.08	140	209
150 ISL	9.17 D	9.15	33.957 D	26.277	176.4	0.351	2.56	39.5	29.6	2.00	26.1	0.01	0.01	0.08	151	
169	8.95	8.93	34.014	26.357	169.2	0.383	2.45	37.6	31.8	2.06	27.1	0.01	0.01	0.07	170	208
199	8.63	8.61	34.087	26.465	159.4	0.433	2.07	31.6	36.7	2.21	29.1	0.01	0.01	0.06	200	207
200 ISL	8.59 D	8.57	34.095 D	26.477	158.3	0.434	2.06	31.4	36.9	2.22	29.2	0.01			201	
229	8.41	8.39	34.147	26.546	152.2	0.479	1.70	25.8	41.0	2.36	30.6	0.01			230	206
250 ISL	8.15 D	8.12	34.155 D	26.592	148.2	0.511	1.52	22.9	43.8	2.45	31.5	0.01			251	
268	8.01	7.98	34.177	26.630	144.8	0.537	1.39	20.9	46.1	2.52	32.3	0.01			270	205
300 ISL	7.76 D	7.73	34.208 D	26.692	139.4	0.583	1.12	16.8	50.7	2.64	33.7	0.01			302	
318	7.55	7.52	34.220	26.732	135.8	0.607	0.98	14.6	53.3	2.70	34.4	0.01			320	204
379	7.08	7.04	34.253	26.824	127.7	0.688	0.67	9.9	60.7	2.87	36.2	0.01			381	203
400 ISL	6.87 D	6.83	34.250 D	26.851	125.3	0.714	0.60	8.8	63.7	2.92	36.9	0.01			403	
440	6.47	6.43	34.250	26.905	120.5	0.764	0.51	7.4	69.6	2.99	38.3	0.01			443	202
500 ISL	5.86 D	5.82	34.255 D	26.987	112.9	0.834	0.39	5.6	77.2	3.09	39.7	0.00			503	
515	5.91	5.87	34.279	27.000	111.9	0.850	0.36	5.2	79.1	3.11	40.1	0.00			519	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 83.3 80.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SIO3	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C		THETA			ml/l	PCT	uM/L	uM/L	uM/L	uM/L	ug/l	ug/l	db	
32 54.8 N	122 7.6 W	26/01/07	0151	UTC	4178 m	330	08 kn	330 01 07	1	1019.0 mb	11.9	C 10.0 C	1/8	ST		
0 ISL	12.90	12.90	33.475	25.232	272.7	0.000	6.02	100.4	4.6	0.56	3.1	0.27	0.55	0.05	0	
2	12.90	12.90	33.475	25.232	272.8	0.005	6.02	100.4	4.6	0.56	3.1	0.27	0.55	0.05	2	221
10	12.85	12.85	33.476	25.243	271.9	0.027	6.03	100.5	4.5	0.56	3.1	0.27	0.61	0.06	10	219
10	12.88	12.88	33.479	25.239	272.3	0.027										10 220
20	12.73	12.73	33.468	25.260	270.5	0.054	6.03	100.2	4.5	0.56	3.0	0.27	1.06	0.23	20	218
30	12.89	12.89	33.526	25.274	269.5	0.081	5.91	98.6	4.6	0.59	3.7	0.28	0.87	0.19	30	217
40	12.89	12.88	33.531	25.278	269.4	0.108	5.91	98.6	4.7	0.60	3.8	0.28	0.63	0.17	40	216
50	12.90	12.89	33.536	25.281	269.4	0.135	5.89	98.3	4.7	0.61	3.9	0.29	0.53	0.12	50	215
60	12.89	12.88	33.541	25.287	269.1	0.162	5.83	97.3	4.7	0.62	4.0	0.32	0.48	0.13	60	214
70	12.86	12.85	33.560	25.307	267.4	0.189	5.77	96.2	4.9	0.65	4.5	0.33	0.32	0.02	70	213
75 ISL	12.80 D	12.79	33.558 D	25.318	266.5	0.202	5.42	90.3	6.5	0.77	6.6	0.26	0.24	0.05	75	
85	11.56	11.55	33.463	25.480	251.2	0.228	4.62	74.9	10.7	1.07	11.9	0.10	0.11	0.13	85	212
99	10.40	10.39	33.544	25.749	225.7	0.262	4.14	65.5	16.0	1.41	17.8	0.02	0.04	0.09	99	211
100 ISL	10.40 D	10.39	33.595 D	25.789	222.0	0.264	4.09	64.7	16.3	1.43	18.1	0.02	0.04	0.09	100	
119	9.88	9.87	33.729	25.982	203.9	0.304	3.19	49.9	21.8	1.71	22.2	0.02	0.03	0.09	120	210
125 ISL	9.60 D	9.59	33.776 D	26.066	196.1	0.316	3.14	48.9	23.0	1.75	22.9	0.02	0.02	0.09	126	
139	9.35	9.33	33.848	26.163	187.1	0.343	3.03	46.9	25.3	1.82	24.0	0.01	0.01	0.09	140	209
150 ISL	9.27 D	9.25	33.931 D	26.241	179.9	0.363	2.87	44.4	27.2	1.89	24.9	0.01	0.00	0.08	151	
169	9.07	9.05	33.989	26.319	172.9	0.397	2.60	40.0	30.2	2.00	26.3	0.01	0.00	0.06	170	208
200	8.80	8.78	34.048	26.408	164.9	0.449	2.39	36.6	33.6	2.09	27.5	0.01			201	207
228	8.41	8.39	34.090	26.501	156.4	0.494	2.15	32.6	38.1	2.21	29.1	0.01			229	206
250 ISL	7.92 D	7.89	34.062 D	26.553	151.7	0.528	2.01	30.2	41.1	2.28	30.0	0.01			251	
268	7.91	7.88	34.108	26.591	148.4	0.555	1.91	28.7	43.6	2.34	30.8	0.01			270	205
300 ISL	7.53 D	7.50	34.113 D	26.650	143.2	0.602	1.67	24.8	49.4	2.48	33.1	0.00			302	
319	7.															

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 83.3 90.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C		THETA			ml/l	PCT	uM/l	uM/l	uM/l	uM/l	ug/l	ug/l	db	
0 ISL	13.77	13.77	33.251	24.884	305.8	0.000	6.04	102.5	2.3	0.32	0.0	0.01	0.56	0.11	0	
2	13.77	13.77	33.251	24.884	305.9	0.006	6.04	102.4	2.3	0.32	0.0	0.01	0.56	0.11	2	221
10 CSL	13.72	13.72	33.240	24.886	305.9	0.031										10 200
10	13.76	13.76	33.247	24.883	306.2	0.031										10 220
11	13.74	13.74	33.244	24.885	306.0	0.034	6.04	102.4	2.3	0.32	0.0	0.01	0.59	0.09	11	219
20	13.64	13.64	33.233	24.897	305.1	0.061	6.06	102.5	2.3	0.32	0.0	0.01	0.78	0.16	20	218
30	13.73	13.73	33.282	24.917	303.5	0.092	6.08	103.1	2.4	0.32	0.1	0.02	0.92	0.09	30	217
41	13.36	13.35	33.265	24.979	297.9	0.125	6.10	102.6	2.8	0.36	0.5	0.04	1.02	0.16	41	216
50	13.14	13.13	33.263	25.022	294.1	0.151	6.11	102.3	3.0	0.40	0.8	0.06	1.11	0.19	50	215
60	13.05	13.04	33.269	25.044	292.2	0.181	6.03	100.8	3.3	0.43	1.3	0.11	0.96	0.14	60	214
70	13.03	13.02	33.292	25.066	290.3	0.210	6.00	100.2	3.4	0.45	1.4	0.14	0.74	0.22	70	213
75 ISL	13.01 D	13.00	33.309 D	25.084	288.8	0.224	5.97	99.7	3.4	0.45	1.5	0.14	0.63	0.20		75
85	12.99	12.98	33.319	25.096	287.9	0.253	5.92	98.8	3.5	0.45	1.6	0.14	0.40	0.16	85	212
100	12.57	12.56	33.475 D	25.299	269.0	0.295	5.41	89.6	4.1	0.51	3.7	0.04	0.08	0.06	100	211
120	10.41	10.40	33.416	25.648	235.8	0.345	4.51	71.3	12.9	1.21	14.4	0.01	0.03	0.03	121	210
125 ISL	10.28 D	10.27	33.474 D	25.716	229.4	0.357	4.23	66.7	15.3	1.36	16.7	0.01	0.02	0.03	126	
139	9.56	9.54	33.672	25.991	203.4	0.387	3.59	55.8	21.0	1.66	21.6	0.01	0.01	0.02	140	209
150 ISL	9.43 D	9.41	33.767 D	26.087	194.6	0.409	3.69	57.2	21.8	1.63	21.5	0.01	0.00	0.02	151	
169	9.09	9.07	33.868	26.221	182.1	0.445	3.85	59.3	23.1	1.59	21.4	0.00	0.00	0.01	170	208
199	8.66	8.64	33.972	26.370	168.4	0.497	3.21	49.0	29.7	1.85	25.0	0.00	0.00	0.01	200	207
200 ISL	8.57 D	8.55	33.996 D	26.403	165.3	0.499	3.19	48.6	29.9	1.86	25.1	0.00			201	
229	8.25	8.23	34.010	26.463	160.0	0.546	2.75	41.6	35.3	2.04	27.8	0.00			230	206
250 ISL	7.96 D	7.93	34.013 D	26.509	155.9	0.580	2.65	39.8	38.6	2.11	28.9	0.00			251	
268	7.71	7.68	34.024	26.554	151.8	0.607	2.57	38.4	41.3	2.16	29.7	0.00			270	205
300 ISL	7.26 D	7.23	34.045 D	26.635	144.4	0.655	2.03	30.0	47.2	2.38	32.2	0.00			302	
318	7.22	7.19	34.084	26.671	141.2	0.680	1.70	25.1	50.6	2.51	33.7	0.00			320	204
378	6.54	6.51	34.103	26.779	131.5	0.762	1.26	18.3	60.8	2.73	36.5	0.00			380	203
400 ISL	6.15 D	6.11	34.092 D	26.821	127.5	0.791	1.17	16.8	64.5	2.79	37.3	0.00			403	
438	5.91	5.87	34.114	26.869	123.2	0.838	1.02	14.6	70.7	2.88	38.6	0.00			441	202
500 ISL	5.62 D	5.58	34.191 D	26.966	114.6	0.912	0.61	8.7	79.3	3.04	40.3	0.00			503	
514	5.56	5.52	34.201	26.981	113.3	0.928	0.52	7.4	81.3	3.08	40.7	0.00			517	201

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 83.3 100.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C		THETA			ml/l	PCT	uM/l	uM/l	uM/l	uM/l	ug/l	ug/l	db	
0 ISL	14.11	14.11	33.211	24.783	315.5	0.000	5.93	101.3	2.0	0.31	0.0	0.01	0.43	0.08	0	
2	14.11	14.11	33.211	24.783	315.5	0.006	5.93	101.3	2.0	0.31	0.0	0.01	0.43	0.08	2	221
10	13.98	13.98	33.194	24.797	314.4	0.032	5.96	101.5	2.1	0.32	0.2	0.02	0.49	0.09	10	219
10	14.00	14.00	33.197	24.795	314.6	0.032										10 220
20	13.74	13.74	33.222	24.868	307.9	0.063	6.03	102.2	2.2	0.32	0.0	0.01	0.61	0.08	20	218
30	13.70	13.70	33.223	24.877	307.3	0.093	6.02	101.9	2.3	0.33	0.1	0.02	0.59	0.16	30	217
41	13.55	13.54	33.214	24.901	305.3	0.127	6.02	101.6	2.4	0.34	0.2	0.03	0.69	0.14	41	216
50	13.40	13.39	33.232	24.946	301.3	0.154	5.98	100.6	2.7	0.38	0.6	0.09	0.56	0.16	50	215
60	13.09	13.08	33.230	25.006	295.8	0.184	5.89	98.5	3.2	0.45	1.5	0.22	0.35	0.11	60	214
70	12.97	12.96	33.288	25.075	289.5	0.213	5.90	98.4	3.6	0.48	1.8	0.24	0.27	0.11	70	213
75 ISL	12.96 D	12.95	33.292 D	25.080	289.1	0.228	5.88	98.1	3.6	0.49	1.9	0.25	0.23	0.10	75	
84	12.89	12.88	33.297	25.098	287.7	0.254	5.83	97.1	3.7	0.51	2.2	0.27	0.16	0.09	84	212
100	12.44	12.43	33.364	25.238	274.7	0.299	5.48	90.4	4.3	0.58	4.1	0.07	0.08	0.07	100	211
119	11.37	11.36	33.524	25.563	244.1	0.348	4.95	79.9	8.1	0.84	9.2	0.02	0.03	0.04	120	210
125 ISL	10.43 D	10.42	33.572 D	25.767	224.7	0.362	4.73	74.9	10.5	1.01	11.8	0.02	0.02	0.03	126	
140	9.73	9.71	33.590	25.899	212.2	0.395	4.17	65.0	17.1	1.43	18.2	0.01	0.01	0.02	141	209
150 ISL	9.17 D	9.15	33.661 D	26.046	198.4	0.416	3.86	59.4	20.5	1.60	20.8	0.01	0.00	0.02	151	
170	8.88	8.86	33.830	26.224	181.8	0.454	3.42	52.4	25.7	1.79	23.7	0.01	0.00	0.02	171	208
200 ISL	8.47 D	8.45	33.963 D	26.392	166.2	0.506	3.40	51.6	29.4	1.81	24.8	0.01	0.00	0.02	201	
203	8.47	8.45	33.967	26.395	166.0	0.511	3.40	51.6	29.7	1.81	24.8	0.01			204	207
227	8.13	8.11	33.998	26.471	159.1	0.550	3.02	45.5	34.8	1.98	27.0	0.00			228	206
250 ISL	7.92 D	7.89	34.034 D	26.531	153.8	0.586	2.51	37.7	39.0	2.17	29.2	0.00			251	
269	7.82	7.79	34.059	26.566	150.8	0.615	2.14	32.0	42.3	2.30	30.8	0.00			271	205
300 ISL	7.52 D	7.49	34.084 D	26.629	145.2	0.661	2.14	31.8	47.7	2.38	32.5	0.00			302	
319	6.86	6.83	34.019	26.669	141.2	0.688	2.14	31.3	51.0	2.41	33.3	0.00			321	204
380	6.22	6.19	34.040	26.771	132.0	0.771	1.61	23.2	61.3	2.66	36.5	0.00			382	203
400 ISL	6.33 D	6.29	34.108 D	26.810	128.6	0.797	1.34	19.4	63.6	2.75	37.1	0.00			403	
438	6.18	6.14	34.150	26.863	124.1	0.845	0.89	12.8	68.5	2.91	38.2	0.00			441	202
500 ISL	5.25 D	5.21	34.132 D	26.963	114.4	0.919	0.74	10.4	82.0	3.03	40.8	0				

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 83.3 110.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE	
31 55.3 N	124 9.2 W	26/01/07	1926	UTC	220	02 kn	290	04	07	2	1017.1 mb	15.9 C	14.9 C	29m	8/8	ST	
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SIO3	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP	
m	DEG C	DEG C	THETA				ml/l	PCT	uM/l	uM/l	uM/l	uM/l	ug/l	ug/l	db		
0 ISL	14.80	14.80	33.282	24.692	324.1	0.000	5.87	101.7	1.6	0.29	0.1	0.00	0.25	0.13	0		
1 A	14.80	14.80	33.282	24.692	324.2	0.003	5.87	101.7	1.6	0.29	0.1	0.00	0.25	0.13	1	223	
10	14.70	14.70	33.290	24.719	321.8	0.032	5.85	101.2	1.6	0.29	0.1	0.00	0.29	0.04	10	222	
19 A	14.69	14.69	33.288	24.720	322.0	0.061	5.86	101.3	1.6	0.28	0.1	0.00	0.35	0.01	19	220	
19	14.69	14.69	33.289	24.721	321.9	0.061										19	221
20 ISL	14.68 D	14.68	33.287 D	24.722	321.9	0.064	5.86	101.3	1.6	0.28	0.1	0.00	0.35	0.01	20		
29	14.67	14.67	33.288	24.725	321.8	0.093	5.86	101.3	1.5	0.28	0.1	0.00	0.34	0.06	29	219	
30 ISL	14.68 D	14.68	33.287 D	24.722	322.1	0.097	5.86	101.3	1.5	0.28	0.1	0.00	0.35	0.07	30		
39 A	14.67	14.66	33.289	24.726	322.0	0.126	5.85	101.1	1.5	0.28	0.1	0.00	0.47	0.09	39	218	
48	14.65	14.64	33.286	24.728	322.1	0.155	5.85	101.0	1.5	0.28	0.1	0.00	0.50	0.04	48	217	
50 ISL	14.65 D	14.64	33.286 D	24.728	322.1	0.161	5.85	101.0	1.5	0.28	0.1	0.00	0.48	0.05	50		
56 A	14.65	14.64	33.289	24.731	322.0	0.180	5.85	101.0	1.5	0.28	0.1	0.00	0.39	0.07	56	216	
63	14.65	14.64	33.285	24.728	322.5	0.203	5.85	101.0	1.6	0.29	0.1	0.00	0.35	0.08	63	215	
68 A	14.64	14.63	33.276	24.723	323.1	0.219	5.83	100.7	1.6	0.30	0.1	0.02	0.37	0.04	68	214	
75 ISL	14.63 D	14.62	33.282 D	24.730	322.7	0.242	5.83	100.6	1.6	0.30	0.1	0.01	0.44	0.03	75		
84	14.44	14.43	33.283	24.772	319.0	0.271	5.84	100.4	1.5	0.29	0.1	0.00	0.48	0.01	84	213	
99	13.22	13.21	33.147 D	24.917	305.3	0.317	5.81	97.3	2.3	0.39	1.0	0.11	0.17	0.08	99	212	
100 ISL	13.17 D	13.16	33.182 D	24.954	301.8	0.320	5.80	97.1	2.4	0.41	1.2	0.10	0.17	0.08	100		
112 A	11.60	11.59	33.011	25.122	285.9	0.356	5.68	91.9	3.6	0.61	3.8	0.02	0.15	0.02	112	211	
125 ISL	11.38 D	11.36	33.065 D	25.204	278.3	0.392	5.54	89.2	4.5	0.69	5.2	0.01	0.09	0.04	126		
128	11.38	11.36	33.112	25.241	274.9	0.401	5.49	88.4	4.8	0.70	5.5	0.01	0.08	0.04	129	210	
144	11.34	11.32	33.490	25.542	246.6	0.442	4.87	78.6	8.5	0.90	9.9	0.01	0.05	0.04	145	209	
150 ISL	10.71 D	10.69	33.488 D	25.653	236.1	0.457	4.74	75.4	9.8	0.98	11.4	0.01	0.04	0.04	151		
169	10.13	10.11	33.662	25.889	214.0	0.500	4.49	70.6	14.0	1.22	15.6	0.01	0.01	0.02	170	208	
199	9.07	9.05	33.875	26.230	181.9	0.559	4.14	63.7	22.0	1.49	20.4	0.00	0.00	0.02	200	207	
200 ISL	8.98 D	8.96	33.909 D	26.271	178.0	0.561	4.13	63.4	22.2	1.50	20.5	0.00			201		
229	8.65	8.63	33.949	26.354	170.5	0.611	3.83	58.4	26.9	1.64	22.6	0.01			230	206	
250 ISL	8.38 D	8.35	33.986 D	26.425	164.1	0.646	3.34	50.6	31.4	1.83	25.1	0.01			251		
268	8.20	8.17	34.017	26.476	159.4	0.676	2.92	44.1	35.4	2.00	27.2	0.00			269	205	
300 ISL	7.37 D	7.34	33.993 D	26.578	149.8	0.725	2.68	39.7	41.4	2.13	29.5	0.00			302		
319	7.36	7.33	34.014	26.597	148.4	0.753	2.57	38.1	44.9	2.19	30.6	0.00			321	204	
378	6.82	6.78	34.090	26.731	136.2	0.837	1.47	21.5	56.6	2.61	35.4	0.00			380	203	
400 ISL	6.78 D	6.74	34.146 D	26.781	131.8	0.867	1.16	17.0	59.8	2.73	36.3	0.00			402		
438	6.61	6.57	34.188	26.837	126.9	0.916	0.77	11.2	64.8	2.90	37.4	0.00			441	202	
500 ISL	6.11 D	6.07	34.219 D	26.927	118.8	0.992	0.59	8.5	73.9	3.02	39.1	0.00			503		
515	5.94	5.90	34.211	26.943	117.4	1.010	0.55	7.9	76.1	3.05	39.5	0.00			518	201	

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

B) SECOND FLUOROMETER READING MIS-RECORDED. CHLOROPHYLL AND PHAEOPIGMENT

CALCULATED WITH ASSUMED ACID RATIO INTERPOLATED FROM ADJACENT LEVELS.

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 85.4 35.8

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
34 0.8 N	118 50.2 W	24/01/07	1041	UTC	23 m	080	05 kn			1020.0 mb	12.8 C	9.3 C				
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SIO3	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C	THETA				ml/l	PCT	uM/l	uM/l	uM/l	uM/l	ug/l	ug/l	db	
0 ISL	13.90	13.90	33.581	25.112	284.1	0.000	5.74	97.8	3.0	0.49	1.3	0.09	2.37	0.49	0	
2	13.90	13.90	33.581	25.112	284.2	0.006	5.74	97.8	3.0	0.49	1.3	0.09	2.37	0.49	2	206
6	13.90	13.90	33.581	25.112	284.3	0.017	5.75	98.0	2.9	0.49	1.3	0.10	2.22	0.52	6	205
10 ISL	13.90 D	13.90	33.579 D	25.111	284.5	0.028	5.76	98.2	3.0	0.49	1.2	0.10	2.33	0.45	10	
11	13.91	13.91	33.584	25.113	284.4	0.031	5.76	98.2	3.0	0.49	1.2	0.10	2.37	0.43	11	203
11	13.91	13.91	33.579	25.103	285.5	0.046	5.79	98.7	2.9	0.49	1.2	0.10	2.35	0.47	16	202
20	13.92	13.92	33.581	25.109	285.0	0.057	5.78	98.5	3.0	0.47	1.2	0.09	2.41	0.47	20	201

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 86.7 35.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C	THETA	ml/l	PCT	uM/l	uM/l	uM/l	um/l	um/l	um/l	um/l	ug/l	ug/l	db	
0 ISL	14.44	14.44	33.565	24.987	296.1	0.000	5.95	102.5	0.6	0.34	0.0	0.00	0.35	0.17	0	
2	14.44	14.44	33.565	24.987	296.1	0.006	5.95	102.5	0.6	0.34	0.0	0.00	0.35	0.17	2	221
10	14.17	14.17	33.571	25.048	290.5	0.029	6.00	102.8	0.6	0.37	0.0	0.01	0.42	0.25	10	219
10	14.17	14.17	33.575	25.052	290.2	0.029									10	220
20	13.97	13.97	33.575	25.094	286.4	0.058	5.99	102.2	0.7	0.40	0.1	0.01	0.49	0.38	20	218
30	13.94	13.94	33.574	25.099	286.2	0.087	5.96	101.6	0.9	0.41	0.1	0.02	0.44	0.36	30	217
40	13.74	13.73	33.573	25.140	282.6	0.115	5.78	98.2	1.9	0.50	0.9	0.04	0.31	0.48	40	216
50	13.46	13.45	33.575	25.199	277.2	0.143	5.48	92.5	3.9	0.62	2.7	0.10	0.30	0.67	50	215
60	12.74	12.73	33.572	25.340	264.0	0.170	4.85	80.7	9.0	0.94	8.1	0.28	0.26	0.62	60	214
70	12.13	12.12	33.544	25.436	255.1	0.196	3.88	63.7	12.2	1.26	13.3	0.12	0.28	0.44	70	213
75 ISL	11.85 D	11.84	33.606 D	25.537	245.6	0.209	3.63	59.3	13.9	1.37	15.1	0.08	0.26	0.44	75	
85	11.21	11.20	33.649	25.688	231.4	0.233	3.32	53.5	16.9	1.55	17.8	0.05	0.18	0.45	85	212
99	10.92	10.91	33.747	25.817	219.4	0.264	2.89	46.3	20.0	1.74	20.3	0.03	0.08	0.21	99	211
100 ISL	10.71 D	10.70	33.794 D	25.891	212.4	0.266	2.87	45.8	20.2	1.75	20.4	0.03	0.08	0.21	101	
120	10.53	10.52	33.842	25.960	206.3	0.308	2.62	41.6	23.0	1.86	22.2	0.02	0.06	0.19	121	210
125 ISL	10.46 D	10.45	33.886 D	26.006	202.0	0.318	2.61	41.4	23.4	1.88	22.5	0.02	0.05	0.18	126	
140	10.22	10.20	33.890	26.051	198.0	0.348	2.58	40.7	24.5	1.92	23.3	0.02	0.04	0.15	141	209
150 ISL	10.25 D	10.23	33.960 D	26.101	193.5	0.368	2.43	38.4	25.7	1.98	23.9	0.02	0.04	0.18	151	
170	10.16	10.14	34.034	26.174	187.0	0.406	2.10	33.1	28.2	2.10	25.0	0.02	0.05	0.23	171	208
199	9.78	9.76	34.116	26.303	175.3	0.459	1.92	30.1	31.1	2.19	26.5	0.01	0.02	0.14	200	207
200 ISL	9.79 D	9.77	34.118 D	26.303	175.3	0.460	1.91	29.9	31.3	2.19	26.6	0.01			201	
229	9.28	9.25	34.194	26.446	162.1	0.509	1.66	25.7	35.8	2.33	28.5	0.01			230	206
250 ISL	9.07 D	9.04	34.207 D	26.491	158.2	0.543	1.55	23.9	37.6	2.38	29.2	0.01			251	
269	8.97	8.94	34.215	26.513	156.5	0.573	1.48	22.8	38.9	2.42	29.6	0.01			271	205
300 ISL	8.65 D	8.62	34.234 D	26.579	150.7	0.620	1.35	20.6	41.6	2.50	30.6	0.01			302	
318	8.54	8.51	34.239	26.600	149.0	0.647	1.26	19.2	43.5	2.55	31.3	0.01			320	204
377	7.88	7.84	34.268	26.723	138.0	0.732	0.84	12.6	52.0	2.75	33.8	0.00			379	203
400 ISL	7.65 D	7.61	34.275 D	26.762	134.5	0.763	0.71	10.6	54.8	2.81	34.5	0.00			403	
437	7.40	7.36	34.296	26.815	129.9	0.812	0.54	8.0	59.5	2.91	35.4	0.01			440	202
500 ISL	6.66 D	6.61	34.316 D	26.933	119.0	0.891	0.37	5.4	69.7	3.06	37.4	0.01			503	
514	6.58	6.53	34.318	26.945	118.0	0.907	0.33	4.8	72.0	3.09	37.8	0.01			518	201

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 86.7 40.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C	THETA	ml/l	PCT	uM/l	uM/l	uM/l	um/l	um/l	um/l	um/l	ug/l	ug/l	db	
0 ISL	14.24	14.24	33.571	25.033	291.6	0.000	6.02	103.3	1.3	0.39	0.4	0.02	0.81	0.05	0	
2	14.24	14.24	33.571	25.033	291.6	0.006	6.02	103.3	1.3	0.39	0.4	0.02	0.81	0.05	2	224
10	13.92	13.92	33.569	25.099	285.6	0.029	5.92	100.9	1.4	0.39	0.4	0.02	0.99	0.16	10	222
10	13.92	13.92	33.569	25.099	285.6	0.029	5.92	100.9							10	223
20	13.87	13.87	33.571	25.111	284.8	0.057	5.87	100.0	1.3	0.41	0.6	0.03	1.03	0.39	20	221
30	13.84	13.84	33.568	25.115	284.7	0.086	5.80	98.7	1.5	0.43	0.9	0.03	0.82	0.34	30	220
40	13.71	13.70	33.564	25.139	282.7	0.114	5.66	96.1	2.3	0.49	1.7	0.05	0.67	0.33	40	219
50	12.86	12.85	33.550	25.299	267.6	0.142	4.84	80.7	7.2	0.85	7.3	0.13	0.46	0.50	50	218
59	11.74	11.73	33.573	25.531	245.7	0.165	3.85	62.7	13.2	1.31	14.5	0.11	0.22	0.30	59	217
70	11.47	11.46	33.581	25.588	240.6	0.192	3.70	59.9	14.3	1.38	15.7	0.10	0.15	0.26	70	216
75 ISL	11.16 D	11.15	33.618 D	25.673	232.6	0.203	3.60	57.9	15.2	1.44	16.5	0.09	0.13	0.22	75	
85	10.98	10.97	33.656	25.735	226.9	0.226	3.37	54.0	17.4	1.57	18.4	0.06	0.09	0.14	85	215
100	10.61	10.60	33.763	25.884	213.0	0.259	2.92	46.5	21.0	1.77	20.9	0.04	0.05	0.14	101	214
119	10.22	10.21	33.889	26.050	197.6	0.298	2.48	39.2	25.4	1.96	23.5	0.02	0.05	0.20	120	213
125 ISL	10.15 D	10.14	33.904 D	26.073	195.5	0.310	2.42	38.1	26.0	1.98	23.9	0.02	0.04	0.18	126	
139	10.06	10.04	33.934	26.113	192.1	0.337	2.34	36.8	26.9	2.02	24.4	0.03	0.03	0.12	140	212
150 ISL	9.98 D	9.96	33.960 D	26.146	189.1	0.358	2.26	35.5	27.8	2.06	24.9	0.04	0.03	0.12	151	
169	9.80	9.78	34.010	26.216	182.8	0.394	2.10	32.9	29.7	2.13	25.8	0.04	0.03	0.11	170	211
199	9.31	9.29	34.122	26.385	167.3	0.446	1.78	27.6	34.3	2.28	28.0	0.03	0.02	0.13	200	210
200 ISL	9.26 D	9.24	34.135 D	26.403	165.6	0.448	1.77	27.4	34.5	2.29	28.1	0.03			201	
229	8.87	8.85	34.200	26.516	155.3	0.494	1.41	21.6	40.0	2.46	30.1	0.02			230	209
250 ISL	8.71 D	8.68	34.210 D	26.550	152.5	0.527	1.30	19.9	42.0	2.52	30.8	0.01			251	
268	8.59	8.56	34.221	26.577	150.2	0.554	1.24	18.9	43.3	2.55	31.2	0.01			270	208
300 ISL	8.28 D	8.25	34.251 D	26.649	143.8	0.601	1.06	16.1	46.8	2.65	32.2	0.01			302	
318	8.12	8.09	34.261	26.681	141.0	0.627	0.95	14.3	48.9	2.70	32.7	0.01			320	207
378	7.66	7.62	34.282	26.766	133.7	0.709	0.66	9.9	55.3	2.85	34.5	0.00			380	206
400 ISL	7.50 D	7.46	34.282 D	26.789	131.8	0.738	0.61	9.1	57.1	2.89	34.9	0.00			403	
437	7.35	7.31	34.296	26.822	129.2	0.787	0.54	8.0	60.4	2.94	35.6	0.01			440	205
500 ISL	6.64 D	6.59	34.316 D	26.9												

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 86.7 45.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE	
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN	OXY PCT	SIO3	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP	
m	DEG C	DEG C			m	040	05 kn	320 02	0	1023.9 mb	15.9	C 13.9	16m	ug/l	ug/l	db	
33 29.3 N	119 19.5 W	23/01/07	1754	UTC	1628 m	040	05 kn	320 02	07	1023.9 mb	15.9	C 13.9	16m	0.33	0.33	0	
0 ISL	14.34	14.34	33.575	25.016	293.3	0.000	5.96	102.5	0.6	0.33	0.1	0.01	1.65	0.33	0		
1 A	14.34	14.34	33.575	25.016	293.3	0.003	5.96	102.5	0.6	0.33	0.1	0.01	1.65	0.33	1	221	
10 A	14.23	14.23	33.575	25.039	291.3	0.029	5.95	102.1	0.6	0.33	0.1	0.01	1.93	0.26	10	219	
10	14.23	14.23	33.575	25.039	291.3	0.029										10	220
20 ISL	14.22 D	14.22	33.573 D	25.040	291.6	0.058	5.88	100.9	0.7	0.36	0.3	0.02	1.72	0.50	20		
22 A	14.18	14.18	33.575	25.050	290.7	0.064	5.87	100.6	0.7	0.36	0.3	0.02	1.68	0.56	22	218	
30 ISL	12.95 D	12.95	33.600 D	25.320	265.2	0.086	5.47	91.4	4.0	0.70	4.5	0.11	1.22	0.72	30		
31 A	12.86	12.86	33.604	25.341	263.2	0.089	5.42	90.4	4.4	0.74	5.0	0.12	1.17	0.74	31	217	
38 A	12.63	12.62	33.610	25.390	258.6	0.107	5.34	88.6	5.1	0.80	6.0	0.14	1.28	0.83	38	216	
50	11.79	11.78	33.644	25.577	241.1	0.137	4.32	70.5	12.4	1.21	12.4	0.18	0.51	0.51	50	215	
62 A	10.61	10.60	33.775	25.892	211.3	0.164	3.03	48.2	21.0	1.72	20.4	0.11	0.25	0.42	62	214	
74	10.44	10.43	33.826	25.962	205.0	0.189	2.76	43.8	23.0	1.83	21.8	0.06	0.15	0.36	74	213	
75 ISL	10.45 D	10.44	33.824 D	25.959	205.3	0.192	2.74	43.5	23.1	1.84	21.9	0.06	0.16	0.36	75		
85	10.30	10.29	33.868	26.019	199.8	0.212	2.59	41.0	24.4	1.90	22.8	0.04	0.22	0.32	85	212	
100	10.13	10.12	33.932	26.098	192.6	0.241	2.38	37.5	26.4	2.00	24.2	0.03	0.09	0.20	101	211	
119	9.60	9.59	34.000	26.240	179.4	0.277	2.30	35.8	29.0	2.07	25.8	0.01	0.03	0.09	120	210	
125 ISL	9.46 D	9.45	34.033 D	26.289	174.9	0.287	2.20	34.2	29.9	2.11	26.3	0.01	0.03	0.09	126		
139	9.44	9.42	34.097	26.343	170.1	0.311	1.95	30.3	32.1	2.21	27.3	0.01	0.02	0.10	140	209	
150 ISL	9.18 D	9.16	34.150 D	26.427	162.3	0.330	1.81	28.0	33.7	2.26	28.0	0.01	0.02	0.12	151		
169	9.07	9.05	34.168	26.459	159.6	0.360	1.64	25.3	36.3	2.34	29.1	0.01	0.03	0.15	170	208	
198	8.84	8.82	34.212	26.530	153.4	0.406	1.45	22.2	39.4	2.44	30.0	0.01	0.02	0.12	199	207	
200 ISL	8.81 D	8.79	34.211 D	26.534	153.0	0.409	1.44	22.1	39.6	2.45	30.1	0.01			201		
229	8.66	8.64	34.233	26.575	149.6	0.453	1.27	19.4	41.9	2.52	30.8	0.01			230	206	
250 ISL	8.38 D	8.35	34.246 D	26.629	144.8	0.483	1.16	17.6	44.0	2.57	31.5	0.01			252		
269	8.35	8.32	34.247	26.634	144.6	0.511	1.06	16.1	46.1	2.61	32.1	0.01			271	205	
300 ISL	8.24 D	8.21	34.253 D	26.656	143.1	0.556	0.90	13.6	49.4	2.70	32.9	0.00			302		
318	7.99	7.96	34.272	26.709	138.3	0.581	0.82	12.3	51.3	2.75	33.4	0.00			320	204	
378	7.54	7.50	34.292	26.791	131.3	0.662	0.58	8.6	57.4	2.87	35.0	0.00			380	203	
400 ISL	7.50 D	7.46	34.294 D	26.798	130.9	0.691	0.52	7.7	59.2	2.91	35.5	0.00			403		
437	7.19	7.15	34.305	26.851	126.2	0.738	0.44	6.5	62.6	2.98	36.3	0.01			440	202	
500 ISL	6.62 D	6.57	34.322 D	26.943	118.0	0.815	0.32	4.7	71.0	3.07	37.8	0.01			503		
514	6.52	6.47	34.324	26.958	116.7	0.831	0.29	4.2	72.9	3.09	38.1	0.01			518	201	

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 86.7 50.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE	
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN	OXY PCT	SIO3	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP	
m	DEG C	DEG C			m	320	11 kn		0	1023.3 mb	13.2	C 11.9	16m	ug/l	ug/l	db	
33 19.5 N	119 39.9 W	23/01/07	1401	UTC	76 m	320	11 kn										
0 ISL	12.96	12.96	33.604	25.320	264.3	0.000	5.77	96.4	3.6	0.61	3.4	0.10	1.45	0.56	0		
2	12.96	12.96	33.604	25.320	264.4	0.005	5.77	96.4	3.6	0.61	3.4	0.10	1.45	0.56	2	210	
6	12.95	12.95	33.613	25.329	263.6	0.016	5.77	96.4	3.6	0.61	3.4	0.10	1.53	0.68	6	209	
10 ISL	12.86 D	12.86	33.605 D	25.341	262.6	0.026	5.68	94.7	4.1	0.65	4.1	0.12	1.80	0.86	10		
11	12.86	12.86	33.607	25.342	262.5	0.029	5.65	94.2	4.3	0.67	4.3	0.12	1.86	0.90	11	207	
11	12.88	12.88	33.605	25.337	263.0	0.029										11	208
20 ISL	12.43 D	12.43	33.632 D	25.446	252.9	0.052	5.14	85.0	7.2	0.87	7.0	0.13	1.06	0.89	20		
21	12.46	12.46	33.629	25.438	253.7	0.055	5.08	84.0	7.5	0.89	7.3	0.13	0.94	0.89	21	206	
30	12.34	12.34	33.637	25.467	251.1	0.077	4.93	81.4	8.0	0.96	8.2	0.14	0.83	0.79	30	205	
40	12.06	12.05	33.659	25.538	244.6	0.102	4.58	75.1	10.3	1.09	10.3	0.15	0.73	0.74	40	204	
50 ISL	11.79 D	11.78	33.679 D	25.604	238.6	0.126	4.33	70.6	12.2	1.20	12.0	0.14	0.69	0.78	50		
51	11.81	11.80	33.680	25.601	238.9	0.129	4.30	70.2	12.4	1.21	12.2	0.14	0.69	0.78	51	203	
60	11.43	11.42	33.726	25.708	228.9	0.150	3.83	62.0	15.7	1.42	15.1	0.13	0.57	0.90	60	202	
70	10.80	10.79	33.782	25.865	214.2	0.172	3.23	51.6	20.1	1.64	19.0	0.11	0.32	0.61	70	201	

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS;PRIMARY T; PRIMARY CORRECTED S;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 86.7 55.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN	OXY PCT	SIO3	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C			m	320	14 kn		0	1023.2 mb	12.8	C 11.9	16m	ug/l	ug/l	db
33 9.4 N	120 0.3 W	23/01/07	0939	UTC	1201 m	320	14 kn									
0 ISL	13.02	13.02	33.592	25.299	266.3	0.000	5.99	100.2	2.2	0.52	2.2	0.09	1.07	0.37	0	
2	13.02	13.02	33.592	25.299	266.4	0.005	5.99	100.2	2.2	0.52	2.2	0.09	1.07	0.37	2	221
10 ISL	13.02 D	13.02	33.590 D	25.298	266.7	0.027	5.99	100.2</								

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 86.7 60.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C		THETA			ml/l	PCT	uM/l	uM/l	uM/l	uM/l	ug/l	ug/l	db	
0 ISL	12.97	12.97	33.592	25.309	265.4	0.000	6.13	102.5	3.0	0.54	2.7	0.15	2.37	0.58	0	
1	12.97	12.97	33.592	25.309	265.4	0.003	6.13	102.5	3.0	0.54	2.7	0.15	2.37	0.58	1	221
10 ISL	12.98 D	12.98	33.592 D	25.307	265.8	0.027	6.14	102.7	2.8	0.53	2.6	0.15	2.64	0.82	10	
11	12.97	12.97	33.592	25.309	265.7	0.029	6.14	102.6	2.8	0.53	2.6	0.15	2.66	0.85	11	219
11	12.97	12.97	33.592	25.309	265.7	0.029										11 220
20	12.86	12.86	33.591	25.330	263.9	0.053	6.03	100.6	3.3	0.59	3.2	0.17	2.18	0.69	20	218
30	12.82	12.82	33.593	25.340	263.2	0.079	5.93	98.8	4.4	0.60	3.8	0.20	1.77	0.63	30	217
40	12.81	12.80	33.590	25.340	263.5	0.106	5.88	98.0	4.9	0.63	4.1	0.21	1.42	0.51	40	216
50	12.78	12.77	33.590	25.346	263.2	0.132	5.81	96.7	5.2	0.65	4.4	0.22	1.01	0.51	50	215
60	12.40	12.39	33.592	25.422	256.3	0.158	5.25	86.7	8.0	0.85	7.5	0.22	0.85	0.58	60	214
70	11.20	11.19	33.625	25.671	232.6	0.182	4.00	64.4	15.0	1.32	15.5	0.11	0.48	0.55	70	213
75 ISL	11.00 D	10.99	33.631 D	25.712	228.9	0.194	3.87	62.0	16.3	1.41	17.1	0.08	0.35	0.49	75	
85	10.64	10.63	33.642	25.784	222.2	0.217	3.60	57.3	17.7	1.49	18.5	0.05	0.17	0.35	85	212
100	10.01	10.00	33.732	25.963	205.4	0.249	3.14	49.3	21.9	1.71	22.0	0.02	0.05	0.19	101	211
119	9.81	9.80	33.793	26.044	198.1	0.287	2.93	45.8	24.0	1.82	23.2	0.01	0.04	0.12	120	210
125 ISL	9.59 D	9.58	33.871 D	26.141	188.9	0.299	2.86	44.5	24.8	1.85	23.7	0.01	0.03	0.12	126	
139	9.51	9.49	33.886	26.167	186.8	0.325	2.68	41.6	27.0	1.92	25.0	0.01	0.02	0.12	140	209
150 ISL	9.21 D	9.19	33.962 D	26.275	176.7	0.345	2.50	38.6	29.3	2.00	26.1	0.01	0.02	0.23	151	
169	9.02	9.00	34.066	26.387	166.4	0.377	2.19	33.7	33.3	2.14	27.9	0.01	0.03	0.37	170	208
198	8.70	8.68	34.131	26.488	157.2	0.424	1.85	28.3	38.1	2.29	29.7	0.01	0.01	0.06	199	207
200 ISL	8.70 D	8.68	34.133 D	26.490	157.1	0.428	1.83	28.0	38.3	2.30	29.8	0.01			201	
229	8.66	8.64	34.183	26.536	153.3	0.473	1.55	23.7	40.7	2.40	30.3	0.01			230	206
250 ISL	8.47 D	8.44	34.189 D	26.570	150.4	0.504	1.46	22.2	42.4	2.44	30.9	0.00			251	
269	8.31	8.28	34.190	26.596	148.3	0.533	1.41	21.4	44.1	2.48	31.5	0.00			271	205
300 ISL	7.86 D	7.83	34.188 D	26.661	142.3	0.578	1.27	19.0	47.5	2.56	32.7	0.00			302	
319	7.78	7.75	34.200	26.683	140.6	0.605	1.17	17.5	49.8	2.62	33.4	0.00			321	204
377	7.21	7.17	34.229	26.788	131.2	0.684	0.83	12.3	58.2	2.80	35.6	0.00			379	203
400 ISL	7.12 D	7.08	34.261 D	26.826	128.0	0.713	0.72	10.6	60.5	2.85	36.2	0.00			403	
437	6.90	6.86	34.278	26.870	124.2	0.760	0.56	8.2	64.2	2.93	37.0	0.00			440	202
500 ISL	6.41 D	6.36	34.300 D	26.953	116.8	0.836	0.39	5.7	72.8	3.05	38.8	0.00			503	
514	6.29	6.24	34.306	26.973	114.9	0.852	0.35	5.1	74.7	3.08	39.2	0.00			518	201

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 86.7 70.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C		THETA			ml/l	PCT	uM/l	uM/l	uM/l	uM/l	ug/l	ug/l	db	
0 ISL	13.18	13.18	33.464	25.168	278.8	0.000	5.94	99.7	4.2	0.55	2.3	0.15	0.38	0.10	0	
2	13.18	13.18	33.464	25.168	278.9	0.006	5.94	99.7	4.2	0.55	2.3	0.15	0.38	0.10	2	221
10 A	13.06	13.06	33.479	25.204	275.7	0.028	5.90	98.7	4.3	0.56	2.5	0.14	0.32	0.10	10	219
11	13.00	13.00	33.478	25.215	274.6	0.031										11 220
20	12.92	12.92	33.487	25.238	272.7	0.055	5.88	98.1	4.5	0.58	2.8	0.14	0.52	0.20	20	218
30 ISL	12.90 D	12.90	33.490 D	25.244	272.3	0.082	5.82	97.1	4.6	0.61	3.1	0.15	0.57	0.25	30	
31	12.89	12.89	33.492	25.248	272.0	0.085	5.81	96.9	4.6	0.61	3.1	0.15	0.58	0.25	31	217
41	12.70	12.69	33.504	25.295	267.8	0.112	5.50	91.4	5.9	0.72	4.9	0.17	0.48	0.30	41	216
49	11.97	11.96	33.472	25.410	257.0	0.133	4.78	78.2	9.4	0.99	9.8	0.19	0.17	0.17	49	215
50 ISL	11.76 D	11.75	33.477 D	25.453	252.9	0.136	4.72	76.9	9.7	1.01	10.3	0.18	0.16	0.17	50	
60	11.21	11.20	33.503	25.574	241.6	0.160	4.31	69.4	12.6	1.21	13.8	0.07	0.09	0.14	60	214
70	10.74	10.73	33.526	25.676	232.1	0.184	4.01	63.9	14.9	1.36	16.4	0.02	0.06	0.12	70	213
75 ISL	10.50 D	10.49	33.568 D	25.750	225.1	0.195	3.92	62.1	15.7	1.40	17.1	0.02	0.05	0.12	75	
85	10.35	10.34	33.607	25.807	219.9	0.218	3.79	59.9	17.1	1.47	18.2	0.02	0.04	0.11	85	212
100	9.93	9.92	33.686	25.940	207.5	0.250	3.56	55.8	19.8	1.59	20.3	0.01	0.02	0.08	101	211
120	9.40	9.39	33.836	26.145	188.4	0.289	3.00	46.5	25.7	1.85	24.3	0.01	0.01	0.12	121	210
125 ISL	9.27 D	9.26	33.889 D	26.208	182.6	0.299	2.84	43.9	27.2	1.91	25.2	0.01	0.01	0.11	126	
139	9.01	9.00	33.982	26.322	171.9	0.323	2.45	37.7	31.1	2.06	27.2	0.01	0.01	0.09	140	209
150 ISL	8.87 D	8.85	34.010 D	26.366	167.9	0.342	2.38	36.5	32.9	2.11	28.0	0.01	0.01	0.08	151	
169	8.64	8.62	34.042	26.427	162.4	0.374	2.27	34.6	35.0	2.15	28.8	0.01	0.01	0.07	170	208
198	8.31	8.29	34.075	26.504	155.6	0.420	2.08	31.5	38.8	2.25	30.2	0.01	0.00	0.06	199	207
200 ISL	8.29 D	8.27	34.076 D	26.508	155.2	0.423	2.07	31.3	39.1	2.26	30.3	0.01			201	
228	8.01	7.99	34.101	26.570	149.7	0.465	1.85	27.8	42.9	2.37	31.8	0.01			229	206
250 ISL	7.92 D	7.89	34.129 D	26.606	146.7	0.498	1.62	24.3	45.8	2.47	32.7	0.00			251	
268	7.74	7.71	34.146	26.646	143.2	0.524	1.44	21.5	48.1	2.54	33.4	0.00			270	205
300 ISL	7.42 D	7.39	34.160 D	26.703	138.1	0.569	1.21	18.0	52.1	2.65	34.7	0.00			302	
318	7.29	7.26	34.173	26.732	135.6	0.594	1.11	16.4	54.3	2.70	35.3	0.00			320	204
378	6.94	6.90	34.219	26.817	128.3	0.673	0.81	11.9	61.0	2.85	36.9	0.00			380	203
400 ISL	6.62 D	6.58	34.235 D	26.873	123.0	0.701										

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 86.7 80.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C		THETA			ml/l	PCT	uM/L	uM/L	uM/L	uM/L	ug/l	ug/l	db	
32 19.6 N	121 42.9 W	22/01/07	1721	UTC	4001 m	360	07 kn	350 03 06	0	1028.5 mb	15.0	C 14.0 C	15m	0/8		
0 ISL	12.88	12.88	33.378	25.161	279.5	0.000	6.07	101.2	3.9	0.47	0.9	0.15	1.46	0.07	0	
1 A	12.88	12.88	33.378	25.161	279.5	0.003	6.07	101.2	3.9	0.47	0.9	0.15	1.46	0.07	1	221
10 ISL	12.87 D	12.87	33.376 D	25.161	279.7	0.028	6.09	101.5	3.7	0.46	0.9	0.15	1.27	0.11	10	
11 A	12.87	12.87	33.379	25.164	279.5	0.031	6.09	101.5	3.7	0.46	0.9	0.15	1.25	0.12	11	219
11	12.87	12.87	33.378	25.163	279.5	0.031										11 220
20 A	12.86	12.86	33.382	25.168	279.3	0.056	6.05	100.8	3.7	0.47	0.9	0.15	1.35	0.30	20	218
29 A	12.88	12.88	33.394	25.174	279.0	0.081	6.02	100.3	3.7	0.48	1.1	0.18	1.25	0.14	29	217
30 ISL	12.87 D	12.87	33.392 D	25.174	279.0	0.084	6.02	100.3	3.7	0.48	1.1	0.18	1.24	0.15	30	
36 A	12.86	12.86	33.394	25.178	278.8	0.101	6.01	100.1	3.8	0.48	1.1	0.18	1.19	0.22	36	216
48	12.84	12.83	33.395	25.183	278.6	0.134	6.01	100.1	3.7	0.49	1.2	0.19	1.13	0.28	48	215
50 ISL	12.84 D	12.83	33.395 D	25.183	278.7	0.140	6.00	99.9	3.7	0.49	1.3	0.19	1.12	0.27	50	
60 A	12.83	12.82	33.403	25.192	278.2	0.167	5.95	99.0	3.9	0.51	1.5	0.21	1.08	0.24	60	214
70	11.11	11.10	33.564	25.640	235.6	0.193	3.82	61.4	15.7	1.41	16.4	0.03	0.10	0.15	70	213
75 ISL	10.60 D	10.59	33.611 D	25.767	223.6	0.205	3.68	58.5	16.9	1.48	17.6	0.03	0.08	0.12	75	
85	10.33	10.32	33.640	25.836	217.2	0.227	3.39	53.6	19.4	1.61	20.0	0.02	0.04	0.09	85	212
100	9.83	9.82	33.742	26.000	201.8	0.258	3.06	47.9	22.9	1.77	22.6	0.01	0.02	0.07	101	211
120	9.45	9.44	33.879	26.171	186.0	0.297	2.74	42.5	27.1	1.93	25.0	0.01	0.01	0.04	121	210
125 ISL	9.40 D	9.39	33.895 D	26.191	184.1	0.306	2.68	41.5	27.7	1.96	25.4	0.01	0.01	0.04	126	
140	9.20	9.18	33.938	26.257	178.1	0.333	2.55	39.4	29.4	2.02	26.4	0.01	0.01	0.03	141	209
150 ISL	9.05 D	9.03	33.969 D	26.306	173.7	0.351	2.48	38.2	30.8	2.06	27.1	0.01	0.01	0.03	151	
169	8.79	8.77	34.024	26.390	166.0	0.383	2.36	36.1	33.5	2.12	28.3	0.01	0.00	0.04	170	208
199	8.57	8.55	34.072	26.462	159.7	0.432	2.11	32.1	36.8	2.22	29.6	0.01	0.00	0.04	200	207
200 ISL	8.54 D	8.52	34.073 D	26.468	159.2	0.434	2.10	32.0	36.9	2.23	29.7	0.01			201	
230	8.38	8.36	34.140	26.545	152.3	0.480	1.67	25.3	41.1	2.40	31.4	0.01			231	206
250 ISL	8.16 D	8.13	34.165 D	26.598	147.6	0.510	1.51	22.8	43.9	2.48	32.3	0.01			251	
269	7.95	7.92	34.169	26.633	144.5	0.538	1.38	20.7	46.6	2.54	33.1	0.01			271	205
300 ISL	7.65 D	7.62	34.194 D	26.697	138.8	0.582	1.09	16.3	51.1	2.67	34.5	0.01			302	
318	7.53	7.50	34.219	26.734	135.6	0.607	0.93	13.8	53.9	2.75	35.3	0.01			320	204
377	6.81	6.77	34.253	26.861	124.0	0.683	0.58	8.5	64.8	2.97	37.8	0.00			379	203
400 ISL	6.58 D	6.54	34.255 D	26.894	121.0	0.711	0.52	7.6	68.0	3.03	38.6	0.00			403	
438	6.28	6.24	34.267	26.943	116.7	0.757	0.47	6.8	72.8	3.10	39.8	0.00			441	202
500 ISL	5.81 D	5.77	34.292 D	27.023	109.5	0.827	0.34	4.9	80.8	3.15	41.3	0.00			503	
512	5.73	5.69	34.290	27.031	108.8	0.840	0.31	4.4	82.4	3.16	41.6	0.00			516	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

D) CTD DATA USED ON STANDARD LEVELS AND MISSING FIELDS; PRIMARY T; PRIMARY CORRECTED S;

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 86.7 90.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD	AMT	TYPE
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAEAO	PRES	SAMP
m	DEG C	DEG C		THETA			ml/l	PCT	uM/L	uM/L	uM/L	uM/L	ug/l	ug/l	db	
31 59.1 N	122 23.8 W	22/01/07	0856	UTC	4136 m	360	15 kn									
0 ISL	13.00	13.00	33.492	25.225	273.3	0.000	5.97	99.8	4.1	0.50	1.2	0.19	0.98	0.35	0	
2	13.00	13.00	33.492	25.225	273.4	0.005	5.97	99.8	4.1	0.50	1.2	0.19	0.98	0.35	2	220
10 ISL	13.00 D	13.00	33.490 D	25.224	273.7	0.027	5.98	100.0	4.1	0.50	1.1	0.19	0.98	0.33	10	
15	13.00	13.00	33.492	25.226	273.7	0.041	5.98	100.0	4.1	0.50	1.1	0.19	0.97	0.31	15	219
20 ISL	13.00 D	13.00	33.490 D	25.224	274.0	0.055	5.98	100.0	4.1	0.50	1.1	0.19	0.96	0.30	20	
29	13.01	13.01	33.491	25.223	274.3	0.079	5.98	100.0	4.0	0.50	1.1	0.19	0.94	0.29	29	218
30 ISL	13.01 D	13.01	33.490 D	25.223	274.4	0.082	5.98	100.0	4.0	0.50	1.1	0.19	0.94	0.29	30	
45	13.01	13.00	33.495	25.227	274.4	0.123	5.98	100.0	4.0	0.50	1.1	0.19	0.97	0.31	45	217
50 ISL	13.01 D	13.00	33.490 D	25.223	274.9	0.137	5.98	100.0	4.0	0.50	1.0	0.19	0.98	0.30	50	
55	13.01	13.00	33.491	25.224	274.9	0.151	5.98	100.0	4.0	0.50	1.0	0.19	0.99	0.30	55	216
65	13.01	13.00	33.492	25.225	275.1	0.178	5.98	100.0	4.0	0.50	1.1	0.20	0.92	0.33	65	215
75	12.99	12.98	33.506	25.240	274.0	0.206	5.87	98.1	4.5	0.56	1.8	0.29	0.50	0.27	75	214
84	12.96	12.95	33.511	25.250	273.2	0.230	5.77	96.4	4.7	0.59	2.3	0.31	0.38	0.21	84	213
94	12.18	12.17	33.531	25.417	257.5	0.257	4.74	77.9	10.1	0.99	9.4	0.18	0.16	0.16	94	212
100 ISL	10.87 D	10.86	33.577 D	25.693	231.2	0.272	4.46	71.3	13.5	1.22	13.7	0.11	0.09	0.14	100	
110	10.21	10.20	33.594	25.821	219.1	0.294	4.14	65.2	18.5	1.53	19.4	0.02	0.04	0.11	111	211
125 ISL	9.66	9.65	33.710	26.004	201.9	0.326	3.31	51.6	22.1	1.68	22.2	0.01	0.01	0.07	126	210
144	9.51	9.49	33.859	26.146	188.9	0.363	3.17	49.3	25.0	1.77	23.4	0.01	0.01	0.06	145	209
150 ISL	9.38 D	9.36	33.905 D	26.203	183.6	0.374	3.03	47.0	26.2	1.81	24.0	0.01	0.01	0.06	151	
169	9.20	9.18	33.987	26.296	175.0	0.408	2.57	39.7	29.9	1.95	26.1	0.01	0.00	0.05	170	208
199	8.96	8.94	34.043	26.379	167.7	0.459	2.32	35.6	32.9	2.06	27.8	0.01	0.00	0.04	200	207
200 ISL	8.94 D	8.92	34.063 D	26.398	166.0	0.461	2.31	35.5	33.0	2.06	27.8	0.01			201	
229	8.64	8.62	34.097	26.472	159.4	0.508	2.13	32.5	36.6	2.15	29.1	0.01			230	206
250 ISL	8.33 D	8.30	34.102 D	26.523	154.7	0.541	2.07	31.4	39.6	2.19	30.2	0.01				

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 76.7 49.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
35 5.0 N	120 46.8 W	28/01/07	1947 UTC	21 m	1223 - 1756 PST	1216 PST	1756 PST	241.8 mg C/m ²

DEPTH	TEMP	SALINITY	SIGMA	OXYGEN	OXY	SIO3	P04	N03	N02	CHL-A	PHAEAO	LIGHT	UPTAKE	(mg C/m ³)		
m	DEG C	THETA	ml/l	pct	um/l	um/l	um/l	um/l	um/l	ug/l	ug/l	pct	1	2	MEAN	DARK
2	12.93	33.558	25.290	6.01	100.4	1.8	0.56	2.2	0.10	0.81	0.27	86. A	10.5	8.5	9.5	0.16
9	12.92	33.563	25.296	5.99	100.0	1.8	0.55	2.2	0.11	0.70	0.22					
14	12.90	33.559	25.297	6.02	100.5	1.8	0.55	2.2	0.10			36.	7.3	8.0	7.7	0.14
22	12.89	33.563	25.303	5.97	99.6	2.0	0.56	2.4	0.11	0.83	0.23					
29	12.83	33.581	25.329	5.74	95.7	3.8	0.68	3.9	0.14	0.86	0.32	12.	4.1	4.0	4.1	0.10
41	12.30	33.622	25.464	4.93	81.3	9.4	1.02	8.7	0.22	0.52	0.38	5.0	1.1	1.1	1.1	0.06
51	12.22	33.626	25.482	4.92	81.0	10.1	1.06	9.0	0.22	0.55	0.46	2.4	0.52	0.49	0.50	0.06

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 76.7 80.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
34 3.6 N	122 56.1 W	29/01/07	1932 UTC	16 m	1226 - 1810 PST	1225 PST	1809 PST	176.5 mg C/m ²

DEPTH	TEMP	SALINITY	SIGMA	OXYGEN	OXY	SIO3	P04	N03	N02	CHL-A	PHAEAO	LIGHT	UPTAKE	(mg C/m ³)		
m	DEG C	THETA	ml/l	pct	um/l	um/l	um/l	um/l	um/l	ug/l	ug/l	pct	1	2	MEAN	DARK
2	13.63	33.268	24.926	6.16	104.2	2.7	0.34	0.0	0.01	0.86	0.01	83. A	3.2	3.7	3.5	0.06
10	13.40	33.267	24.972	6.16	103.7	2.7	0.34	0.0	0.01	1.02	0.01	38.	6.0	6.0	6.0	0.09
22	13.37	33.267	24.978	6.16	103.6	2.7	0.34	0.0	0.01	0.95	0.08	12.	5.6	4.8	5.2	0.12
31	13.35	33.265	24.981	6.13	103.1	2.6	0.34	0.1	0.02	0.86	0.26	5.1	2.6	2.8	2.7	0.07
38	13.27	33.263	24.995	6.06	101.7	2.8	0.38	0.4	0.07	0.85	0.11	2.6	1.2	1.3	1.2	0.06
49	13.15	33.267	25.023	6.01	100.6	3.1	0.46	0.9	0.12	0.60	0.20					
61	13.00	33.256	25.044	6.08	101.5	3.1	0.40	0.6	0.08	0.75	0.05	0.29	0.10	0.12	0.11	0.02

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 80.0 80.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33 29.1 N	122 32.1 W	27/01/07	1743 UTC	15 m	1224 - 1756 PST	1223 PST	1755 PST	252.9 mg C/m ²

DEPTH	TEMP	SALINITY	SIGMA	OXYGEN	OXY	SIO3	P04	N03	N02	CHL-A	PHAEAO	LIGHT	UPTAKE	(mg C/m ³)		
m	DEG C	THETA	ml/l	pct	um/l	um/l	um/l	um/l	um/l	ug/l	ug/l	pct	1	2	MEAN	DARK
2	12.76	33.393	25.196	6.12	101.7	4.3	0.49	2.1	0.22	0.94	0.30	81. A	11.2	10.7	10.9	0.12
10	12.76	33.395	25.198	6.11	101.6	4.4	0.49	2.1	0.23	0.94	0.28	36.	11.3	11.5	11.4	0.11
20	12.74	33.397	25.203	6.08	101.0	4.4	0.49	2.2	0.23	0.94	0.32	13.	6.1	5.9	6.0	0.09
28	12.73	33.394	25.203	6.06	100.7	4.5	0.50	2.2	0.25	0.88	0.30	5.7	2.3	2.2	2.3	0.07
36	12.70	33.398	25.212	5.96	98.9	4.7	0.54	2.6	0.37	0.60	0.28	2.5	0.80	0.77	0.79	0.05
47	12.65	33.403	25.226	5.93	98.3	5.0	0.55	2.9	0.45	0.44	0.21					
58	12.59	33.411	25.245	5.94	98.4	4.6	0.57	3.2	0.52	0.41	0.26	0.26	0.06	0.06	0.06	0.03

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 83.3 42.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
34 10.8 N	119 30.7 W	24/01/07	1750 UTC	24 m	1207 - 1750 PST	1210 PST	1749 PST	350.3 mg C/m ²

DEPTH	TEMP	SALINITY	SIGMA	OXYGEN	OXY	SIO3	P04	N03	N02	CHL-A	PHAEAO	LIGHT	UPTAKE	(mg C/m ³)		
m	DEG C	THETA	ml/l	pct	um/l	um/l	um/l	um/l	um/l	ug/l	ug/l	pct	1	2	MEAN	DARK
1	14.14	33.579	25.061	5.76	98.6	2.3	0.43	0.7	0.06	0.74	0.27	94. A	6.0	5.3	5.7	0.07
8	14.13	33.580	25.064	5.74	98.3	2.4	0.43	0.7	0.06	0.78	0.28					
10	14.13	33.579	25.063	5.75	98.5	2.3	0.42	0.7	0.06	0.76	0.27					
16	14.12	33.579	25.065	5.76	98.6	2.4	0.42	0.7	0.06	0.77	0.23	36.	9.0	9.6	9.3	0.10
24	14.10	33.582	25.072			2.2	0.43	0.7	0.06	0.85	0.34					
33	13.97	33.584	25.101	5.86	100.0	2.2	0.42	0.8	0.07	1.53	0.19	12.	7.5	7.6	7.5	0.17
41	13.76	33.584	25.144	5.68	96.5	2.9	0.50	1.6	0.10	0.83	0.41					
46	13.70	33.585	25.158	5.70	96.7	3.0	0.50	1.6	0.10	0.80	0.35	5.3	2.4	2.1	2.2	0.07
57	13.40	33.588	25.221	5.30	89.4	4.8	0.67	3.7	0.14	0.46	0.30	2.6	0.63	0.55	0.59	0.05
68	13.00	33.586	25.300	4.74	79.3	7.6	0.90	7.1	0.18	0.40	0.29					
80	12.66	33.591	25.371	4.30	71.4	9.9	1.08	9.8	0.21	0.32	0.26					
94	11.50	33.711	25.684	3.05	49.5	18.1	1.65	17.8	0.12	0.13	0.27	0.24	0.00	0.00	0.00	0.06

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 83.3 70.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33 15.2 N	121 25.6 W	25/01/07	1945 UTC	17 m	1244 - 1800 PST	1218 PST	1800 PST	222.5 mg C/m ²

DEPTH	TEMP	SALINITY	SIGMA	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	LIGHT	UPTAKE	(mg C/m ³)		
m	DEG C	THETA	ml/l	PCT	uM/l	uM/l	uM/l	uM/l	uM/l	ug/l	ug/l	PCT	1	2	MEAN	DARK
2	12.76	33.433	25.227	6.08	101.1	5.1	0.55	2.9	0.28	0.84	0.09	83. A	6.6	6.7	6.6	0.07
10	12.66	33.434	25.247	6.08	100.9	5.0	0.55	2.9	0.28	0.90	0.13	41.	8.2	8.4	8.3	0.13
23	12.63	33.430	25.250	6.07	100.6	5.0	0.54	2.9	0.29	0.88	0.26	13.	5.3	5.1	5.2	0.08
32	12.63	33.431	25.251	6.05	100.3	4.9	0.55	2.9	0.30	0.83	0.32	5.6	2.1	2.4	2.3	0.07
40	12.65	33.450	25.263	5.98	99.2	4.9	0.58	3.2	0.33	0.81	0.37	2.7	1.1	1.1	1.1	0.06
48	12.66	33.466	25.273	5.98	99.2	4.8	0.58	3.2	0.30	0.96	0.28					
57	12.68	33.511	25.304	5.86	97.3	5.2	0.63	4.0	0.29	0.56	0.18					
66	12.58	33.503	25.318	5.71	94.6	5.4	0.67	4.6	0.28	0.37	0.21	0.26	0.04	0.00	0.02	0.06

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 83.3 110.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
31 55.3 N	124 9.2 W	26/01/07	1926 UTC	29 m	1238 - 1812 PST	1229 PST	1809 PST	108.4 mg C/m ²

DEPTH	TEMP	SALINITY	SIGMA	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	LIGHT	UPTAKE	(mg C/m ³)		
m	DEG C	THETA	ml/l	PCT	uM/l	uM/l	uM/l	uM/l	uM/l	ug/l	ug/l	PCT	1	2	MEAN	DARK
1	14.80	33.282	24.692	5.87	101.7	1.6	0.29	0.1	0.00	0.25	0.13	95. A	1.9	1.7	1.8	0.04
10	14.70	33.290	24.719	5.85	101.2	1.6	0.29	0.1	0.00	0.29	0.04					
19	14.69	33.288	24.720	5.86	101.3	1.6	0.28	0.1	0.00	0.35	0.01	37.	2.1	2.1	2.1	0.05
29	14.67	33.288	24.725	5.86	101.3	1.5	0.28	0.1	0.00	0.34	0.06					
39	14.67	33.289	24.726	5.85	101.1	1.5	0.28	0.1	0.00	0.47	0.09	13.	1.5	1.6	1.6	0.05
48	14.65	33.286	24.728	5.85	101.0	1.5	0.28	0.1	0.00	0.50	0.04					
56A	14.65	33.289	24.731	5.85	101.0	1.5	0.28	0.1	0.00	0.39	0.07	5.2	0.80	0.85	0.83	0.02
63	14.65	33.285	24.728	5.85	101.0	1.6	0.29	0.1	0.00	0.35	0.08					
68	14.64	33.276	24.723	5.83	100.7	1.6	0.30	0.1	0.02	0.37	0.04	2.7	0.31	0.31	0.31	0.02
84	14.44	33.283	24.772	5.84	100.4	1.5	0.29	0.1	0.00	0.48	0.01					
99	13.22	33.147	24.917	5.81	97.3	2.3	0.39	1.0	0.11	0.17	0.08					
112	11.60	33.011	25.122	5.68	91.9	3.6	0.61	3.8	0.02	0.15	0.02	0.27	0.01	0.01	0.01	0.02

A) SECOND FLUOROMETER READING MIS-RECORDED, CHLOROPHYLL AND PHAEOPIGMENT CALCULATED WITH ASSUMED ACID RATIO INTERPOLATED FROM ADJACENT LEVELS.

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 86.7 45.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33 29.3 N	119 19.5 W	23/01/07	1754 UTC	16 m	1201 - 1746 PST	1209 PST	1744 PST	329.6 mg C/m ²

DEPTH	TEMP	SALINITY	SIGMA	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	LIGHT	UPTAKE	(mg C/m ³)		
m	DEG C	THETA	ml/l	PCT	uM/l	uM/l	uM/l	uM/l	uM/l	ug/l	ug/l	PCT	1	2	MEAN	DARK
1	14.34	33.575	25.016	5.96	102.5	0.6	0.33	0.1	0.01	1.65	0.33	91. A	11.5	12.5	12.0	0.11
10	14.23	33.575	25.039	5.95	102.1	0.6	0.33	0.1	0.01	1.93	0.26	38.	13.3	13.8	13.5	0.13
22	14.18	33.575	25.050	5.87	100.6	0.7	0.36	0.3	0.02	1.68	0.56	12.	8.3	8.1	8.2	0.09
31	12.86	33.604	25.341	5.42	90.4	4.4	0.74	5.0	0.12	1.17	0.74	5.1	2.7	2.6	2.6	0.06
38	12.63	33.610	25.390	5.34	88.6	5.1	0.80	6.0	0.14	1.28	0.83	2.6	0.97	0.93	0.95	0.07
50	11.79	33.644	25.577	4.32	70.5	12.4	1.21	12.4	0.18	0.51	0.51					
62	10.61	33.775	25.892	3.03	48.2	21.0	1.72	20.4	0.11	0.25	0.42	0.26	0.02	0.01	0.02	0.02

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 86.7 80.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32 19.6 N	121 42.9 W	22/01/07	1721 UTC	15 m	1217 - 1754 PST	1218 PST	1754 PST	250.3 mg C/m ²

DEPTH	TEMP	SALINITY	SIGMA	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	LIGHT	UPTAKE	(mg C/m ³)		
m	DEG C	THETA	ml/l	PCT	uM/l	uM/l	uM/l	uM/l	uM/l	ug/l	ug/l	PCT	1	2	MEAN	DARK
1	12.88	33.378	25.161	6.07	101.2	3.9	0.47	0.9	0.15	1.46	0.07	90. A	3.5	4.0	3.8	0.07
11	12.87	33.379	25.164	6.09	101.5	3.7	0.46	0.9	0.15	1.25	0.12	32.	11.3	11.4	11.3	0.09
20	12.86	33.382	25.168	6.05	100.8	3.7	0.47	0.9	0.15	1.35	0.30	13.	7.9	7.6	7.8	0.08
29	12.88	33.394	25.174	6.02	100.3	3.7	0.48	1.1	0.18	1.25	0.14	5.1	3.7	3.2	3.4	0.06
36	12.86	33.394	25.178	6.01	100.1	3.8	0.48	1.1	0.18	1.19	0.22	2.5	1.4	1.4	1.4	0.05
48	12.84	33.395	25.183	6.01	100.1	3.7	0.49	1.2	0.19	1.13	0.28					
60	12.83	33.403	25.192	5.95	99.0	3.9	0.51	1.5	0.21	1.08	0.24	0.22	0.10	0.08	0.09	0.03

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 86.7 110.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
31 19.5 N	123 44.9 W	21/01/07	1731 UTC	15 m	1220 - 1804 PST	1226 PST	1803 PST	74.2 mg C/m ²

DEPTH	TEMP	SALINITY	SIGMA	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAE0	LIGHT	UPTAKE	(mg C/m ³)		
m	DEG C	THETA	ml/l	PCT	uM/l	uM/l	uM/l	uM/l	uM/l	ug/l	ug/l	PCT	1	2	MEAN	DARK
2	14.17	33.300	24.839	5.89	100.8	2.3	0.34	0.0	0.02	0.37	0.16	81. A	0.54	0.45	0.49	0.04
10	14.16	33.300	24.841	5.89	100.7	2.3	0.33	0.1	0.02	0.41	0.11	36.	3.9	4.0	3.9	0.04
20	14.16	33.306	24.846	5.89	100.7	2.2	0.34	0.1	0.02	0.38	0.15	13.	2.1	2.5	2.3	0.03
29	14.16	33.299	24.841	5.89	100.7	2.2	0.33	0.1	0.02	0.38	0.14	5.1	1.1	1.3	1.2	0.03
36	14.17	33.300	24.840	5.89	100.8	2.1	0.33	0.1	0.02	0.40	0.14	2.5	0.29	0.31	0.30	0.03
48	14.17	33.300	24.840	5.90	100.9	2.1	0.34	0.0	0.02	0.36	0.14					
58	14.18	33.301	24.839	5.89	100.8	2.2	0.34	0.1	0.02	0.38	0.14	0.26	0.03	0.04	0.03	0.02

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 90.0 30.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33 25.1 N	117 54.0 W	18/01/07	1751 UTC	11 m	1202 - 1740 PST	1202 PST	1740 PST	309.0 mg C/m ²

DEPTH	TEMP	SALINITY	SIGMA	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAE0	LIGHT	UPTAKE	(mg C/m ³)		
m	DEG C	THETA	ml/l	PCT	uM/l	uM/l	uM/l	uM/l	uM/l	ug/l	ug/l	PCT	1	2	MEAN	DARK
2	14.60	33.572	24.958	5.88	101.6	1.2	0.33	0.0	0.01	2.00	0.58	76. A	11.7	11.0	11.3	0.12
7	14.59	33.569	24.958	5.88	101.6	1.2	0.34	0.0	0.01	2.02	0.76	38.	17.5	16.7	17.1	0.14
15	14.56	33.566	24.962	5.87	101.4	1.0	0.34	0.0	0.01	2.26	0.57	12.	12.6	11.8	12.2	0.12
22	14.42	33.564	24.991	5.83	100.4	1.0	0.36	0.1	0.01	2.33	1.04	4.6	5.8	5.7	5.7	0.10
26	14.41	33.565	24.994	5.80	99.9	1.1	0.36	0.1	0.01	2.22	1.13	2.7	2.4	2.1	2.2	0.09
34	14.40	33.566	24.997	5.79	99.7	1.1	0.38	0.2	0.01	2.19	1.32					
43	14.38	33.565	25.001	5.77	99.3	1.2	0.39	0.3	0.02	2.16	0.72	0.25	0.14	0.09	0.12	0.05

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 90.0 60.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32 25.0 N	119 57.8 W	19/01/07	1805 UTC	14 m	1210 - 1752 PST	1211 PST	1751 PST	202.8 mg C/m ²

DEPTH	TEMP	SALINITY	SIGMA	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAE0	LIGHT	UPTAKE	(mg C/m ³)		
m	DEG C	THETA	ml/l	PCT	uM/l	uM/l	uM/l	uM/l	uM/l	ug/l	ug/l	PCT	1	2	MEAN	DARK
2	13.90	33.537	25.078	5.87	100.0	1.3	0.39	0.7	0.06	1.31	0.58	80. A	3.1	4.3	3.7	0.07
9	13.90	33.537	25.078	5.87	100.0	1.3	0.40	0.7	0.06	1.38	0.06	37.	9.0	9.4	9.2	0.06
19	13.89	33.537	25.081	5.87	100.0	1.2	0.39	0.6	0.06	1.46	0.13	12.	7.0	7.8	7.4	0.06
27	13.89	33.537	25.081	5.87	100.0	1.3	0.40	0.6	0.06	1.16	0.87	5.2	3.1	3.1	3.1	0.07
33	13.89	33.537	25.081	5.87	100.0	1.3	0.40	0.6	0.06	1.37	0.14	2.7	0.86	0.84	0.85	0.04
45	13.88	33.536	25.083	5.85	99.6	1.3	0.40	0.7	0.06	1.33	0.75					
54	13.88	33.536	25.083	5.85	99.6	1.3	0.40	0.7	0.06	1.04	0.98	0.27	0.04	0.06	0.05	0.03

RV DAVID STARR JORDAN

CALCOFI CRUISE 0701

STATION 90.0 90.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
31 24.9 N	121 59.4 W	20/01/07	1804 UTC	23 m	1208 - 1759 PST	1219 PST	1801 PST	83.9 mg C/m ²

DEPTH	TEMP	SALINITY	SIGMA	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAE0	LIGHT	UPTAKE	(mg C/m ³)		
m	DEG C	THETA	ml/l	PCT	uM/l	uM/l	uM/l	uM/l	uM/l	ug/l	ug/l	PCT	1	2	MEAN	DARK
1	15.21	33.460	24.740	5.75	100.6	0.7	0.27	0.1	0.00	0.25	0.09	94. A	2.0	2.0	2.0	0.04
15	15.20	33.459	24.742	5.75	100.5	0.7	0.27	0.1	0.00	0.25	0.09	37.	2.4	2.4	2.4	0.03
32	15.21	33.458	24.739	5.76	100.7	0.7	0.28	0.1	0.00	0.25	0.09	12.	1.4	1.4	1.4	0.03
46	15.21	33.461	24.742	5.75	100.5	0.9	0.28	0.1	0.00	0.25	0.09	4.6	0.51	0.54	0.53	0.03
56	15.21	33.457	24.739	5.75	100.5	0.8	0.28	0.1	0.00	0.25	0.09	2.4	0.12	0.10	0.11	0.02
67	15.21	33.457	24.740	5.75	100.5	0.9	0.28	0.0	0.01	0.26	0.09					
80	15.21	33.457	24.740	5.75	100.5	1.0	0.28	0.1	0.00	0.26	0.10					
91	15.21	33.461	24.744	5.74	100.4	1.0	0.28	0.0	0.00	0.25	0.09	0.23	0.01	0.01	0.01	0.02

