UNIVERSITY OF CALIFORNIA, SAN DIEGO SCRIPPS INSTITUTION OF OCEANOGRAPHY

# data report

**CalCOFI Cruise 0704**
**28 March – 29 April 2007**

**CC Reference 08-06**
**25 June 2008**

**UNIVERSITY OF CALIFORNIA, SAN DIEGO**

**SCRIPPS INSTITUTION OF OCEANOGRAPHY**

**LA JOLLA, CALIFORNIA 92093-0227**

# PHYSICAL, CHEMICAL AND BIOLOGICAL DATA

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## INTRODUCTION

The data in this report were collected during cruises 0704 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 reugular sampling during cruises. They were made by filtering sufficient 10m water samples to anlalyze 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 53.14 µCi of $^{14}C$ as $NaHCO_3$ (200 µl of 271.32 µCi/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.

*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) *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)

4) *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. (R. Goericke, SIO)

5) *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. (G. Friederich, MBARI)

6) *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. (J. Hildebrand, SIO)

## 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 ($cm^3/1000m^3$ 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 0704

1. CalCOFI Cruise 0704 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.

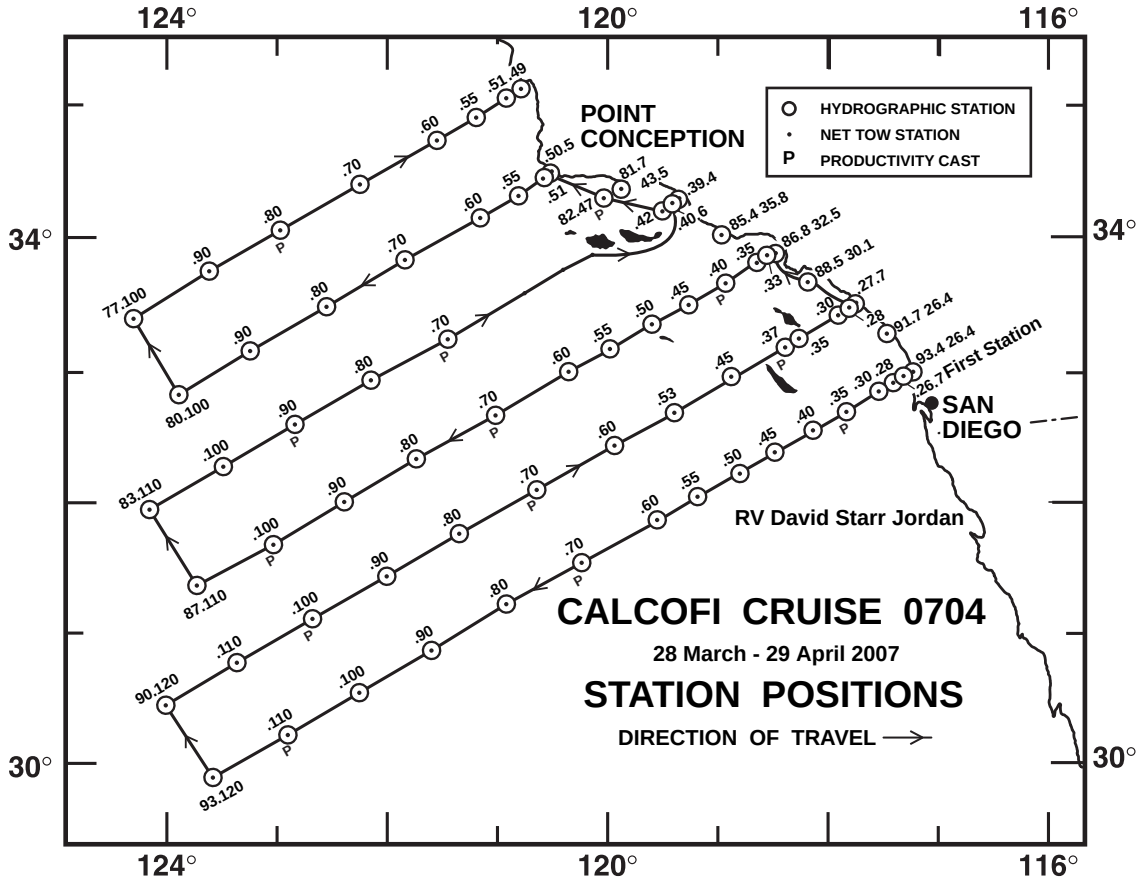


FIGURE 1

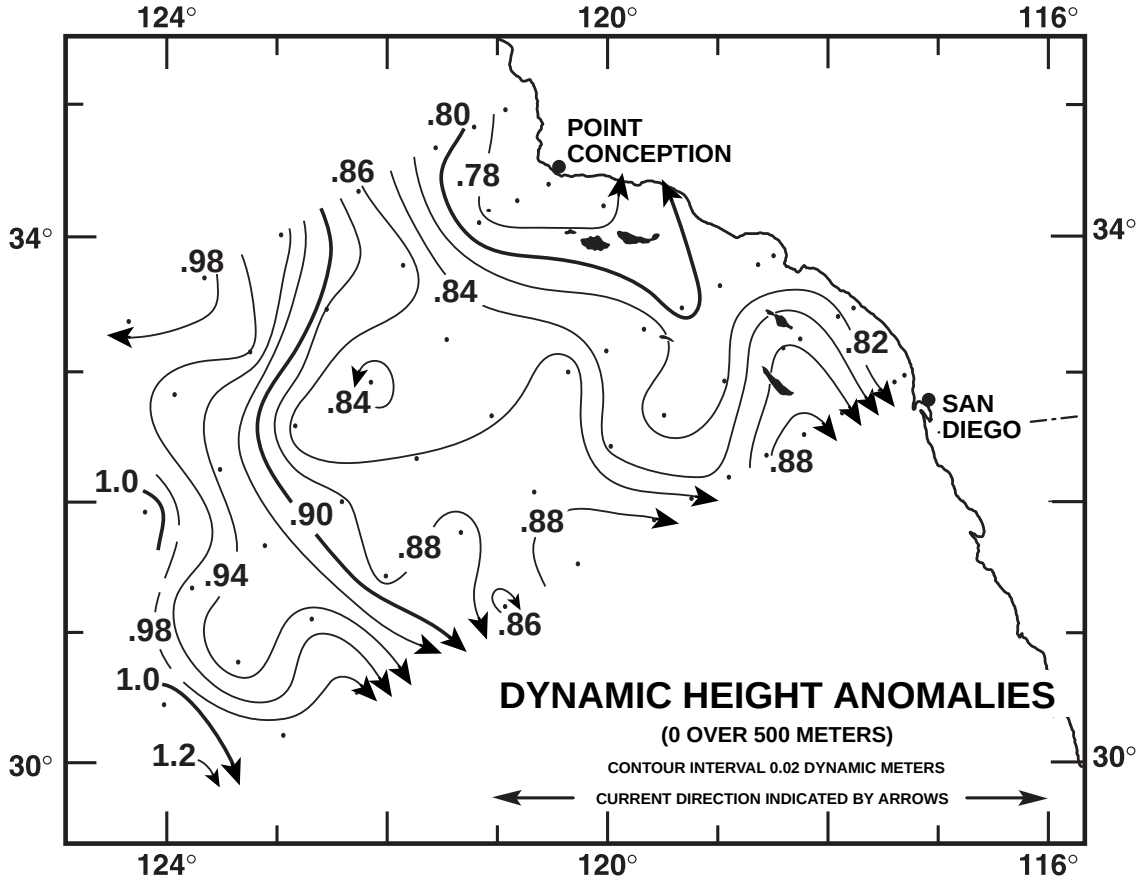


FIGURE 2

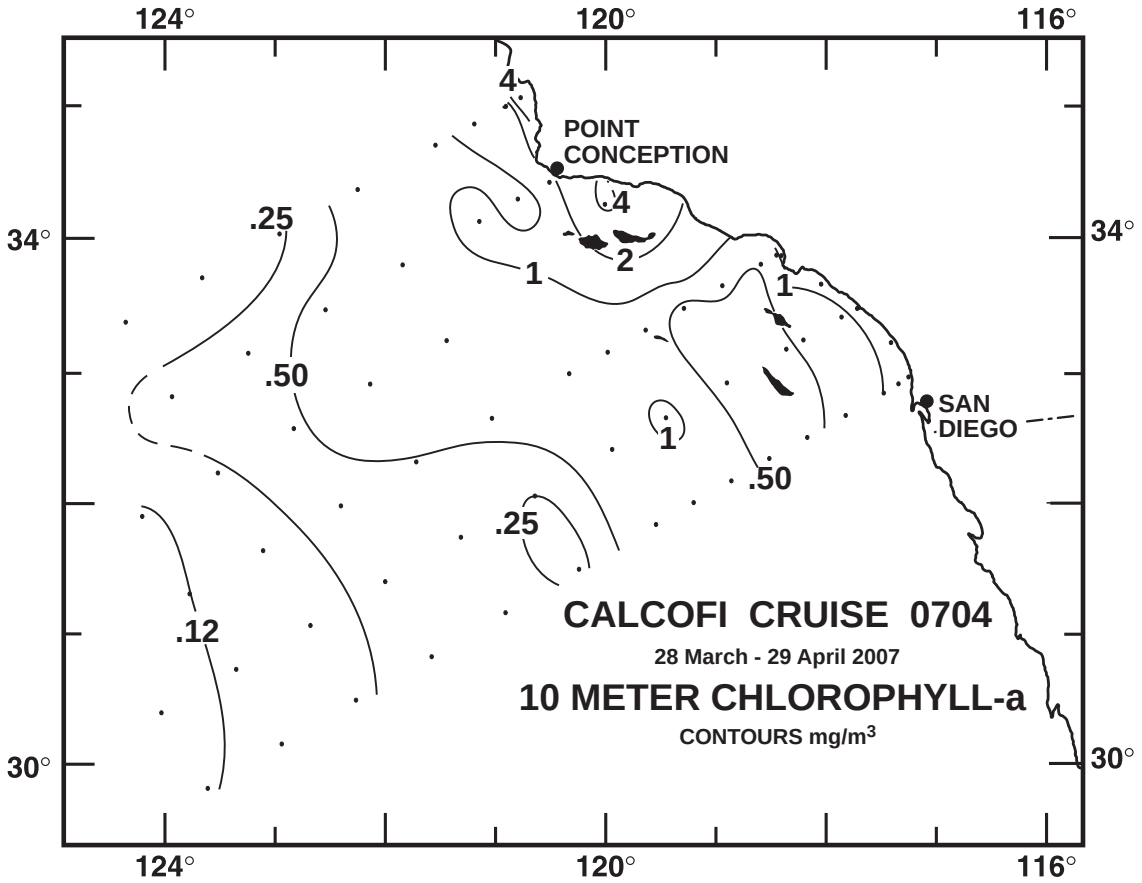


FIGURE 3A

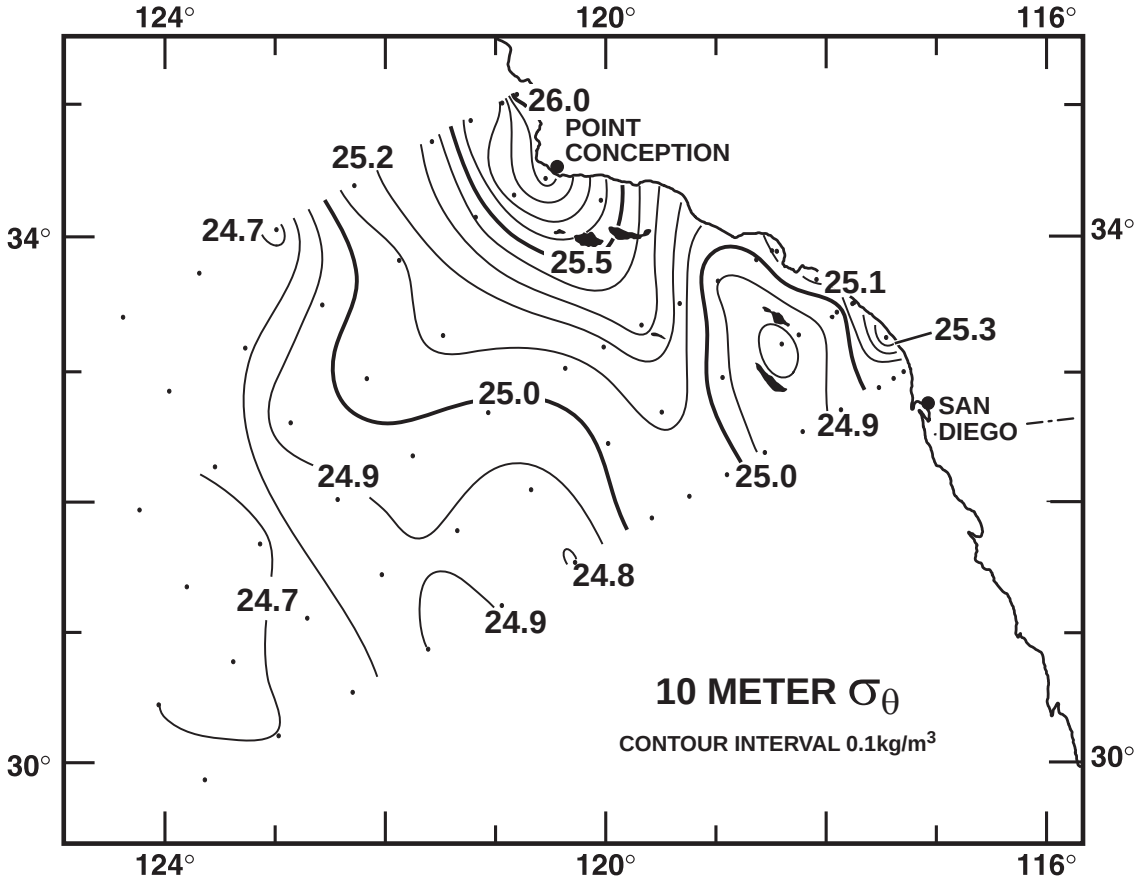


FIGURE 3B

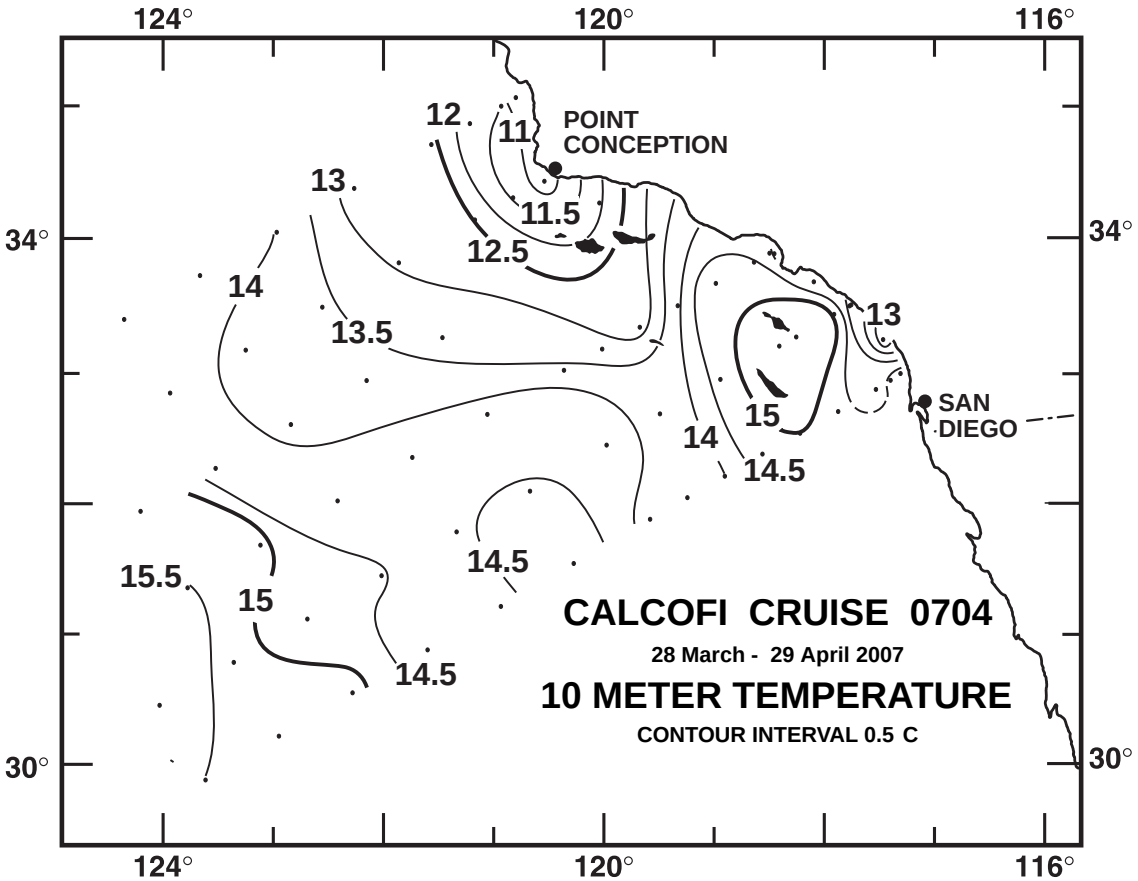


FIGURE 3C

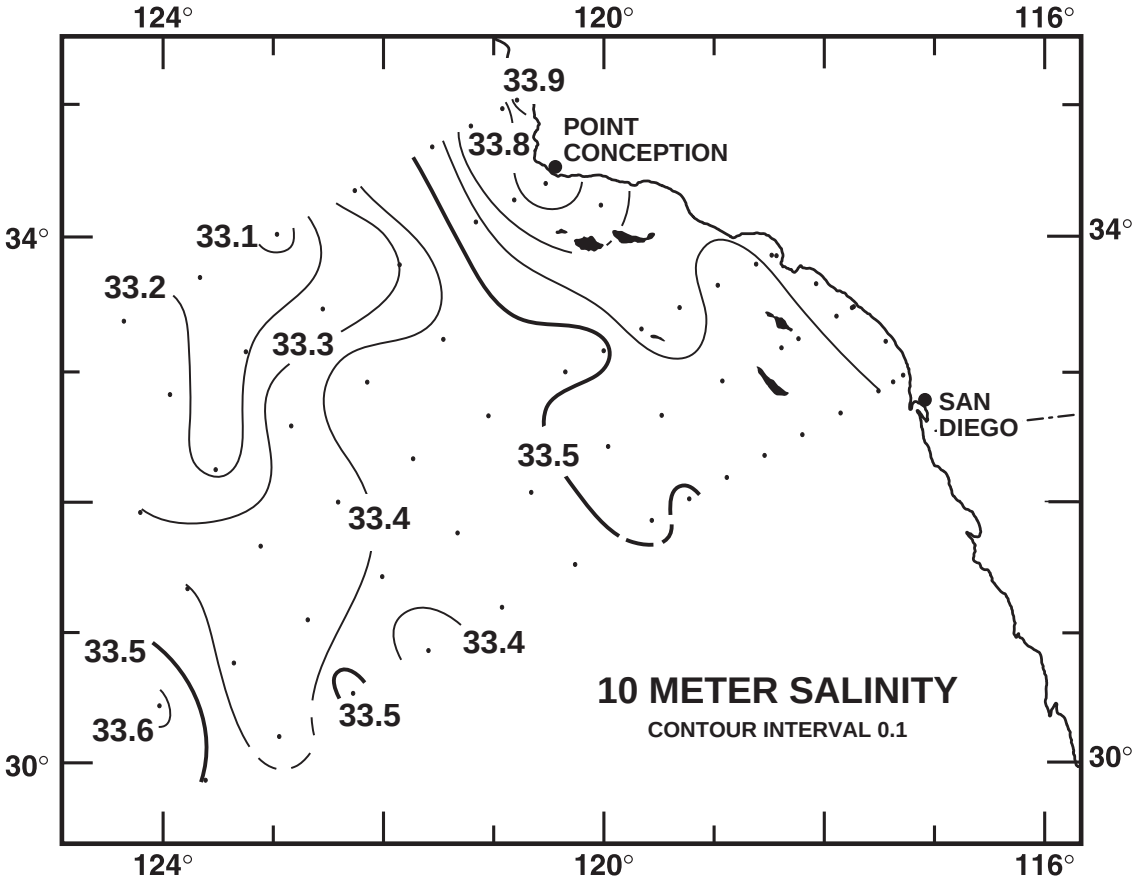


FIGURE 3D

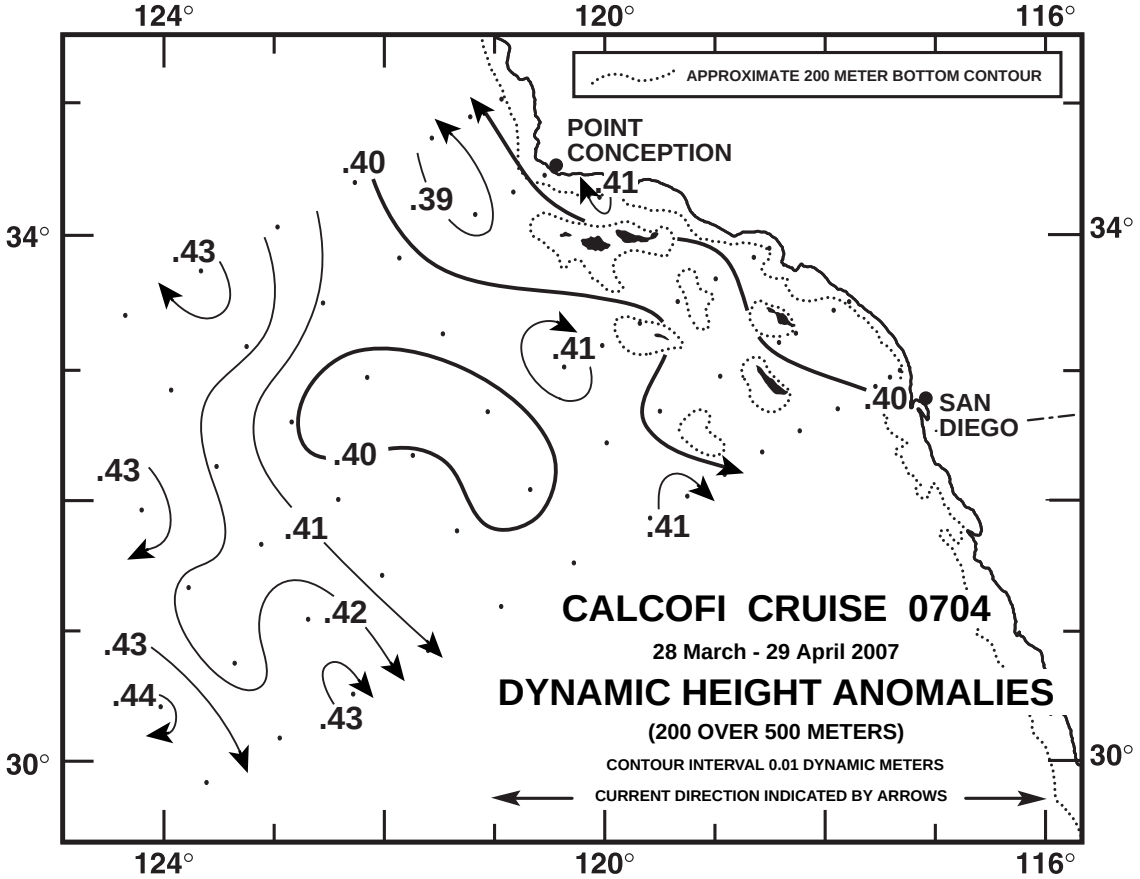


FIGURE 4A

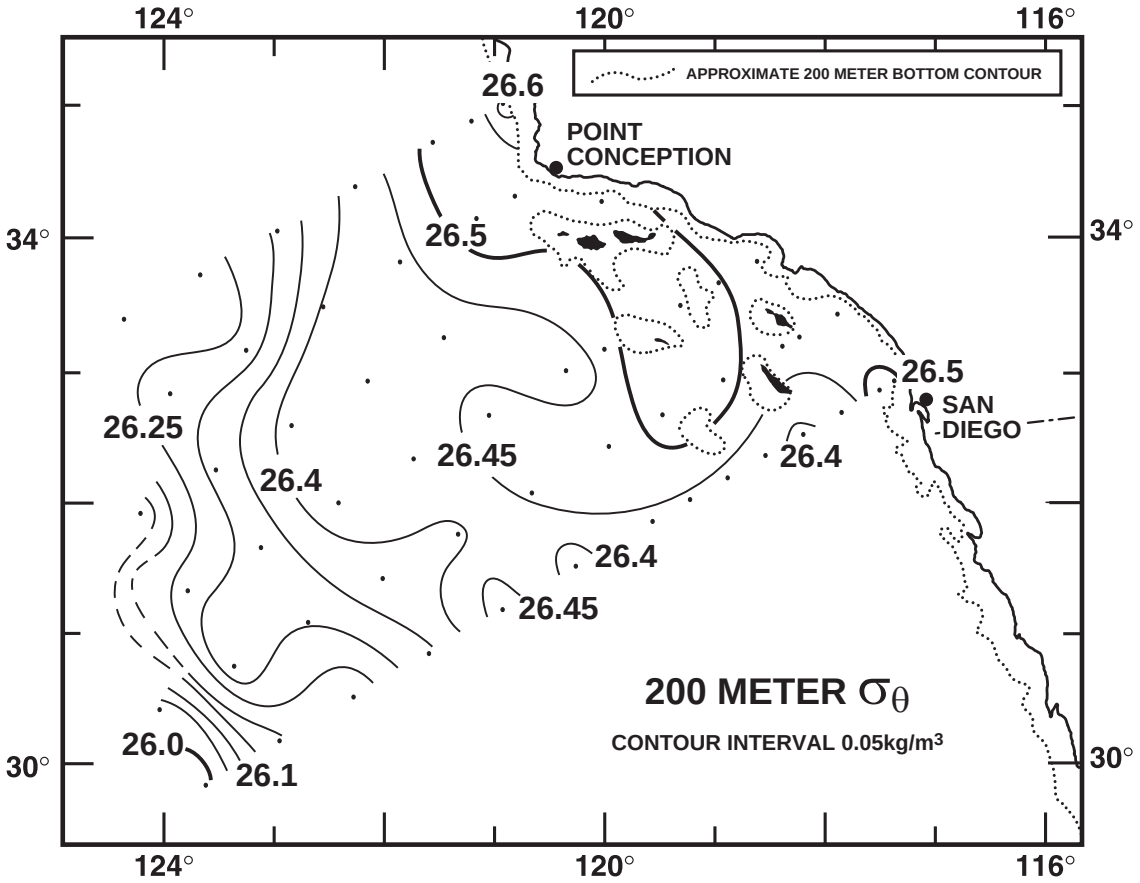


FIGURE 4B

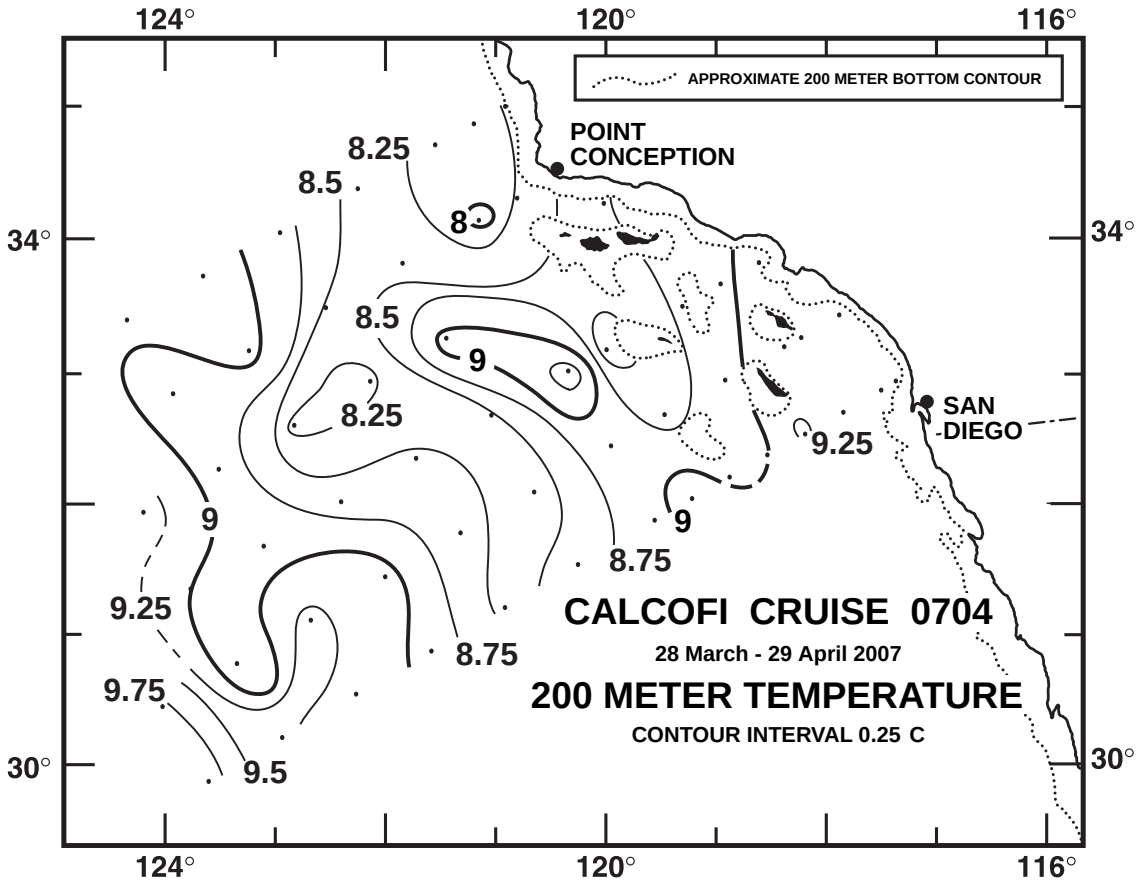


FIGURE 4C

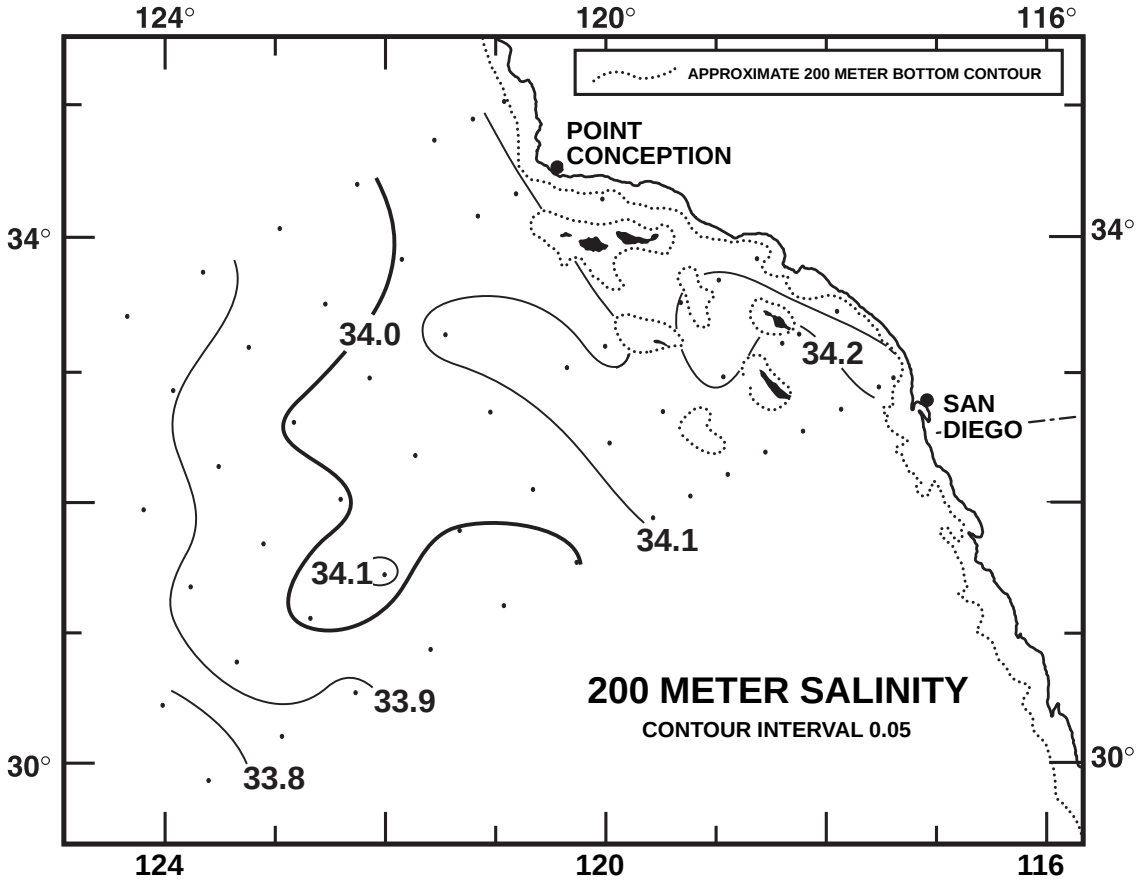


FIGURE 4D

# CALCOFI CRUISE 0704

**4 - 7 April 2007**

## POTENTIAL DENSITY ( ) ALONG CALCOFI LINE 90

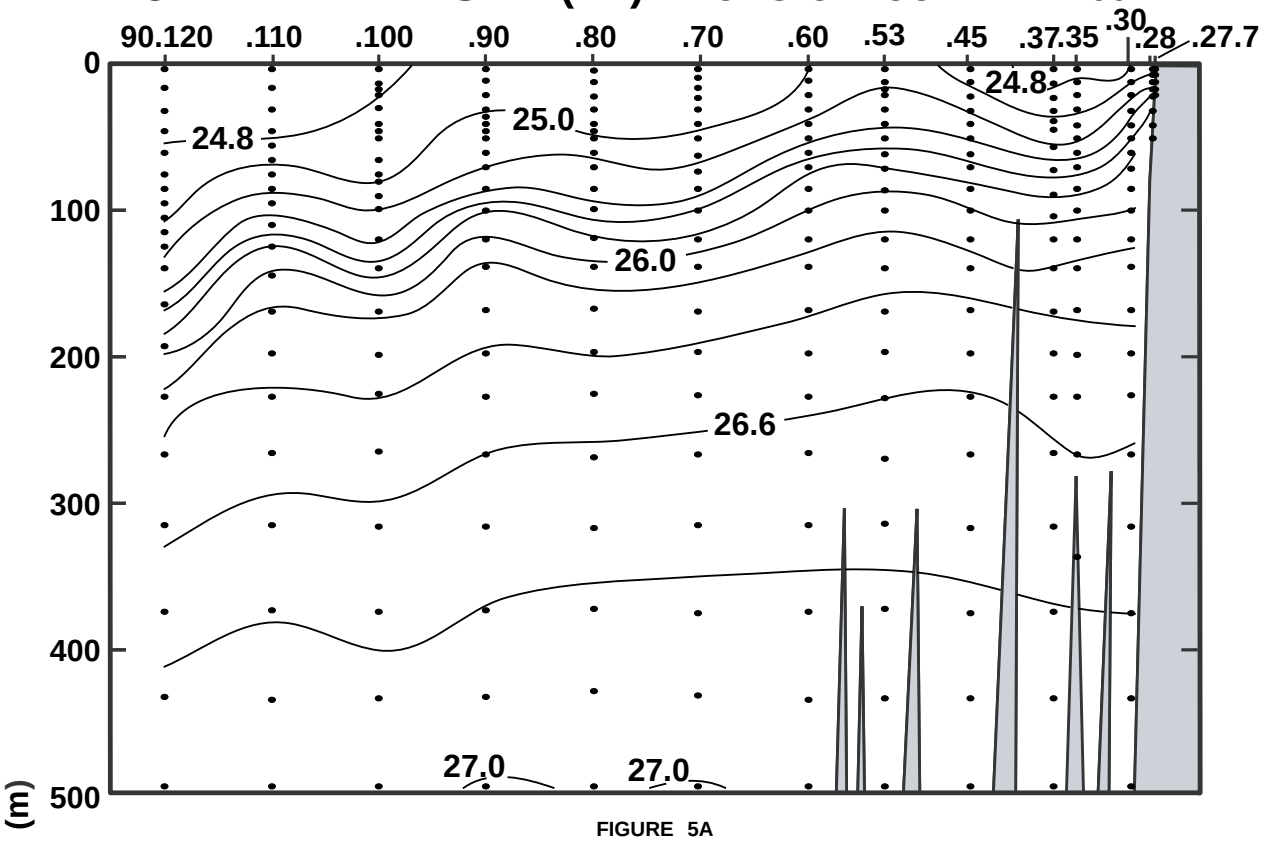


FIGURE 5A

## TEMPERATURE ( °C) ALONG CALCOFI LINE 90

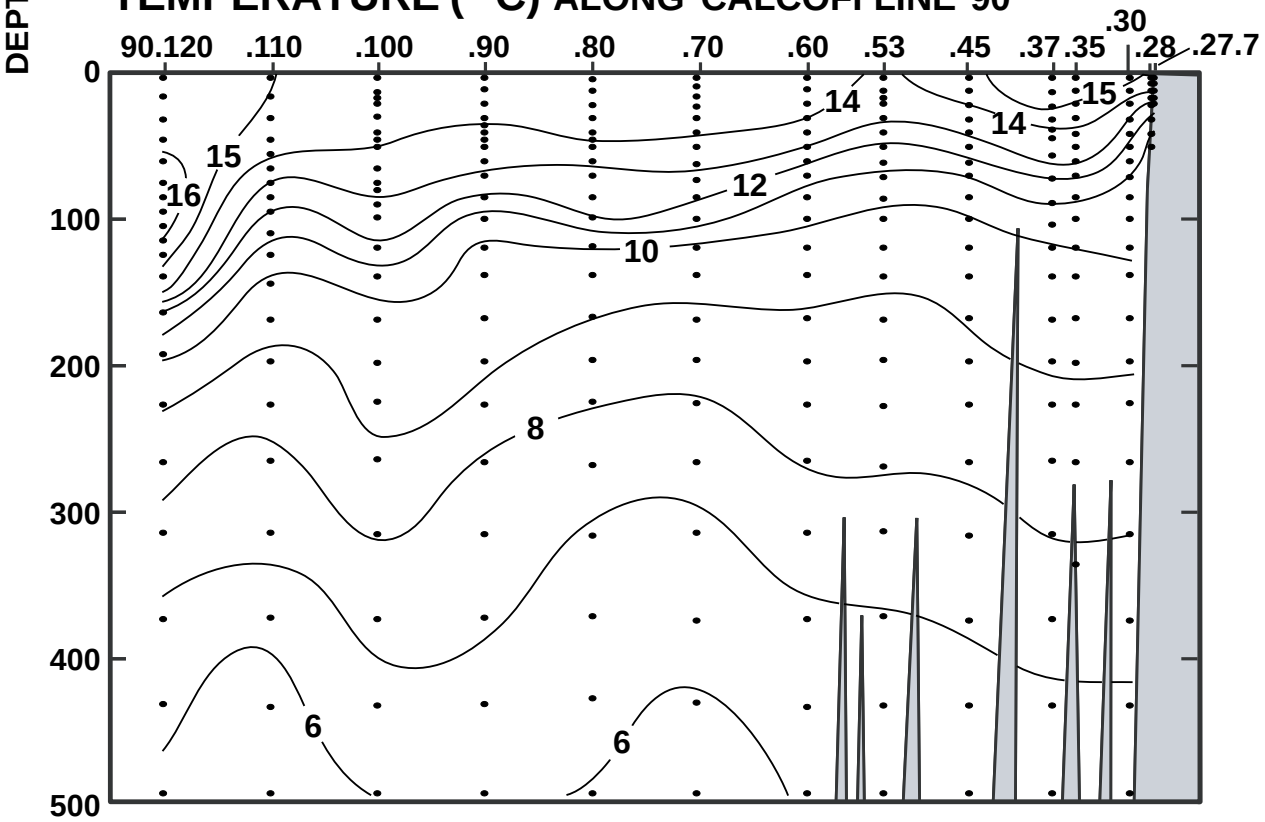


FIGURE 5B

# CALCOFI CRUISE 0704

**4 - 7 April 2007**

## SALINITY ALONG CALCOFI LINE 90

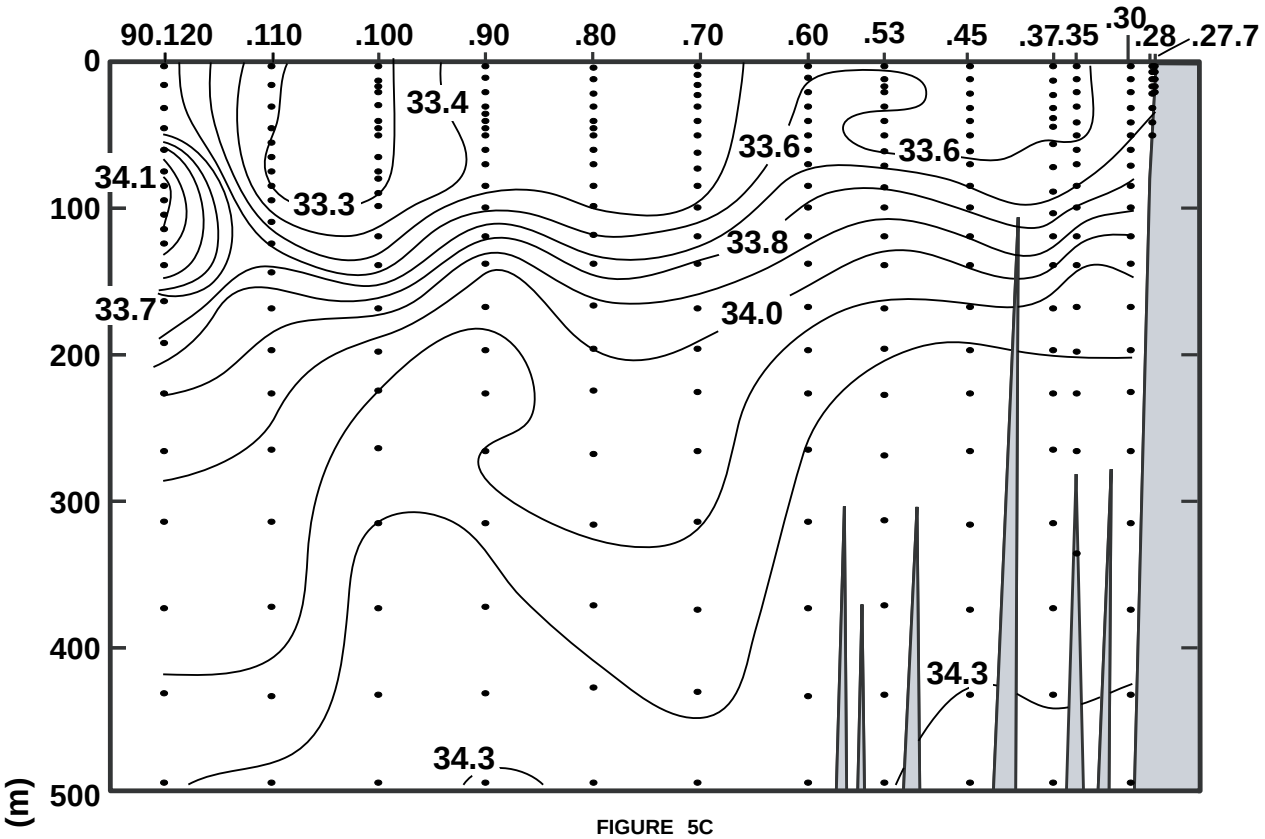


FIGURE 5C

## SILICATE ( M/L) ALONG CALCOFI LINE 90

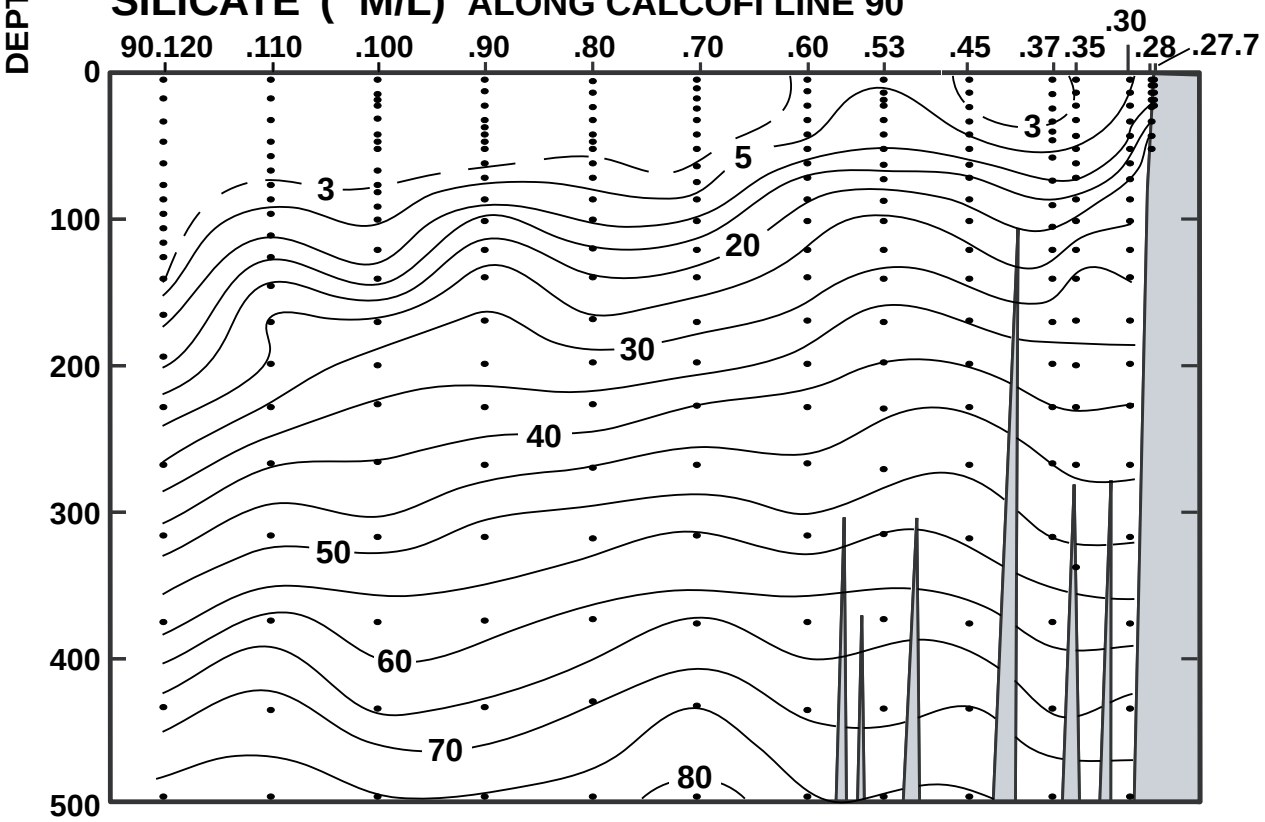


FIGURE 5D

# CALCOFI CRUISE 0704

**4 - 7 April 2007**

## NITRATE ( M/L) ALONG CALCOFI LINE 90

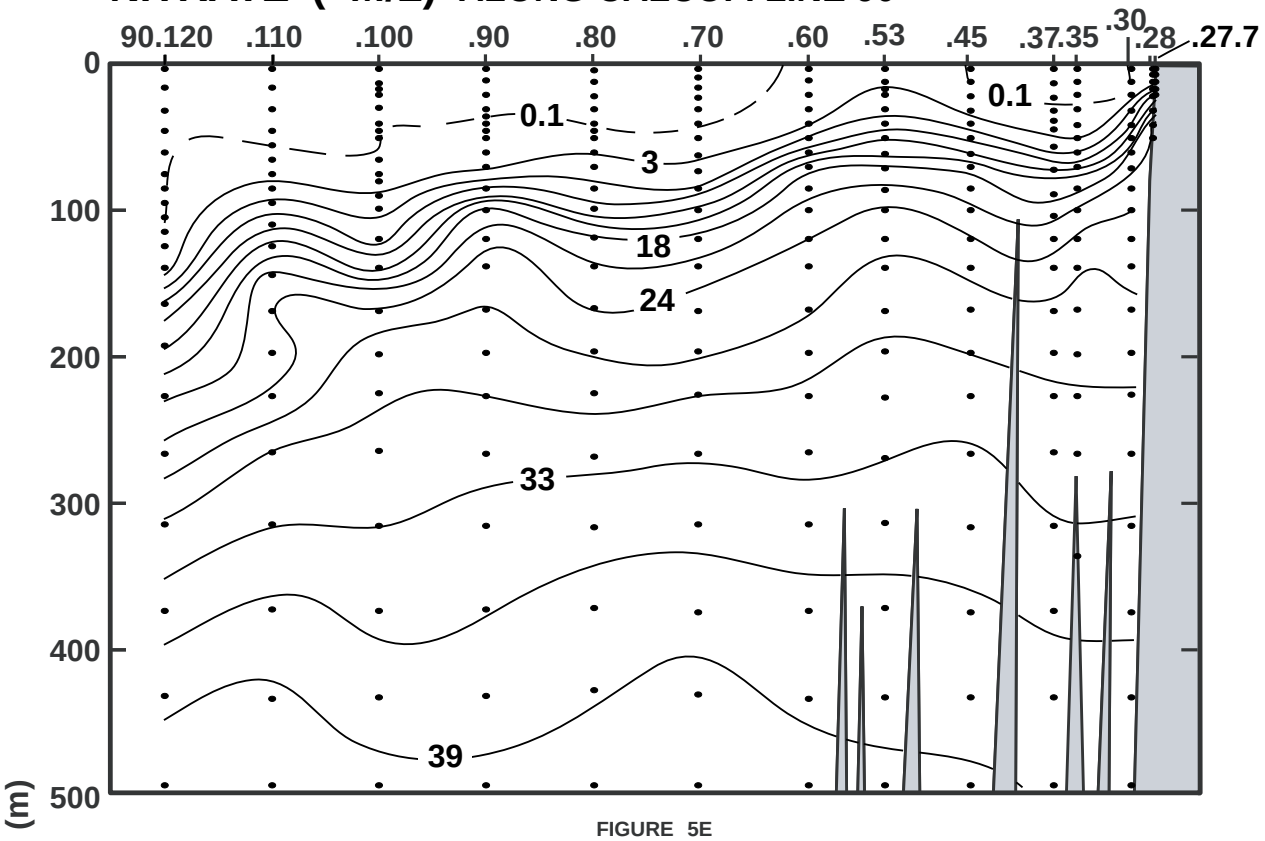


FIGURE 5E

## PHOSPHATE ( M/L) ALONG CALCOFI LINE 90

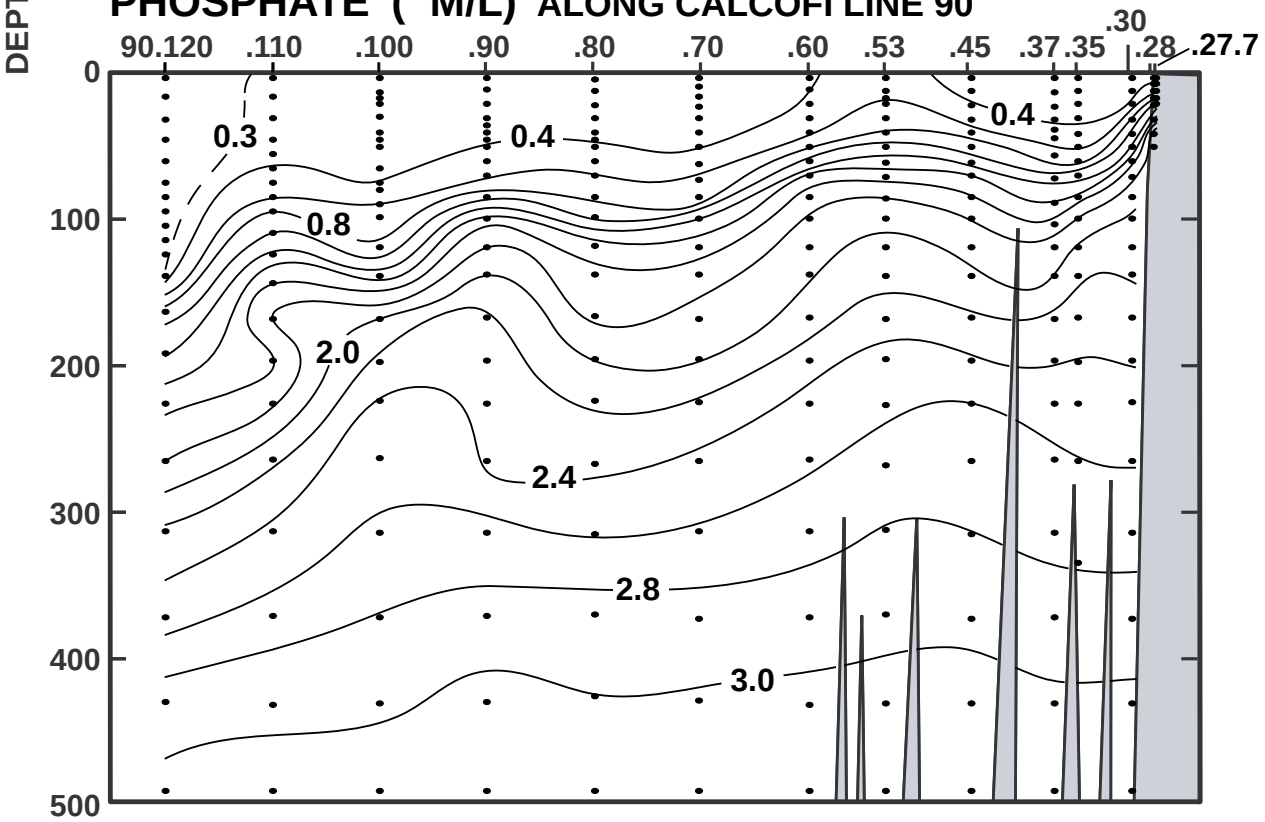


FIGURE 5F

# CALCOFI CRUISE 0704

04 - 07 April 2007

## CHLOROPHYLL-a ( g/L) ALONG CALCOFI LINE 90

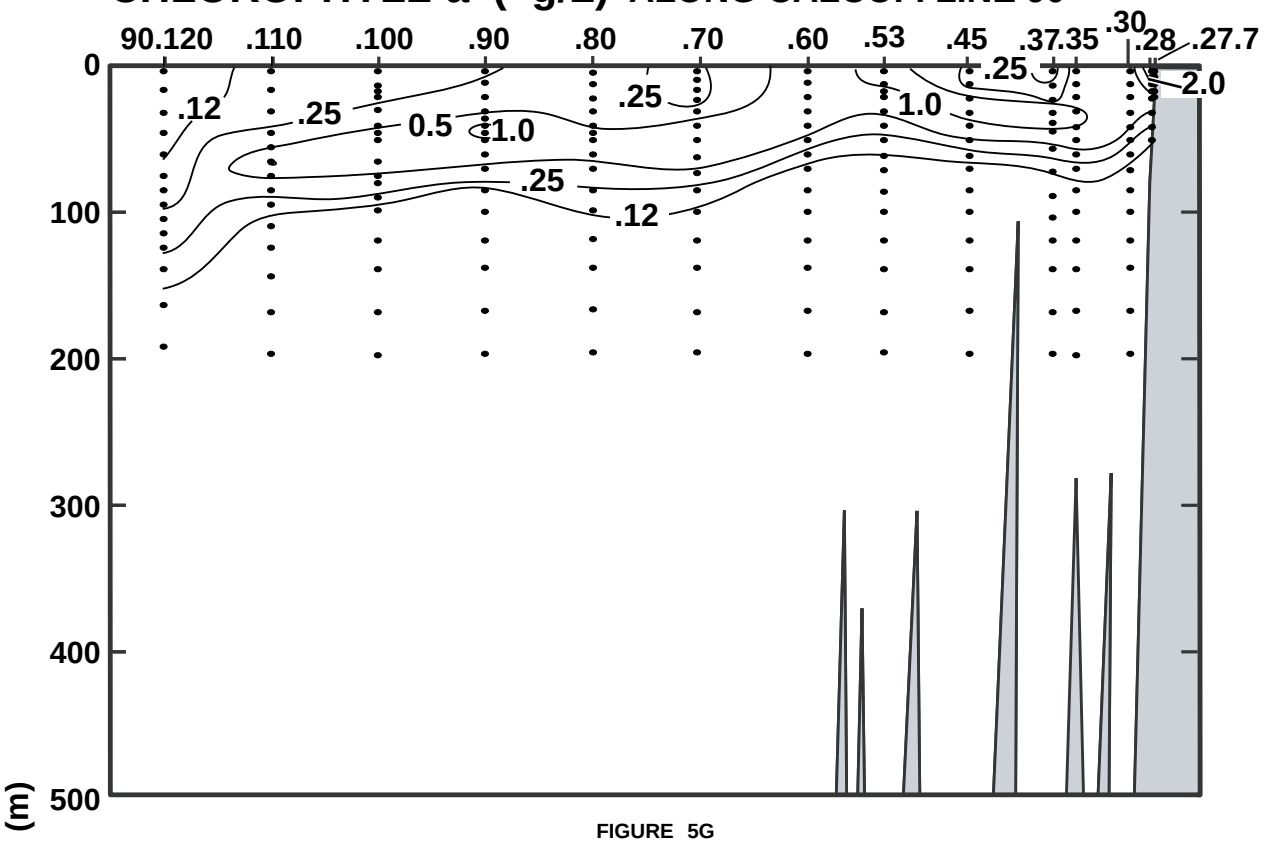


FIGURE 5G

## OXYGEN SATURATION (%) ALONG CALCOFI LINE 90

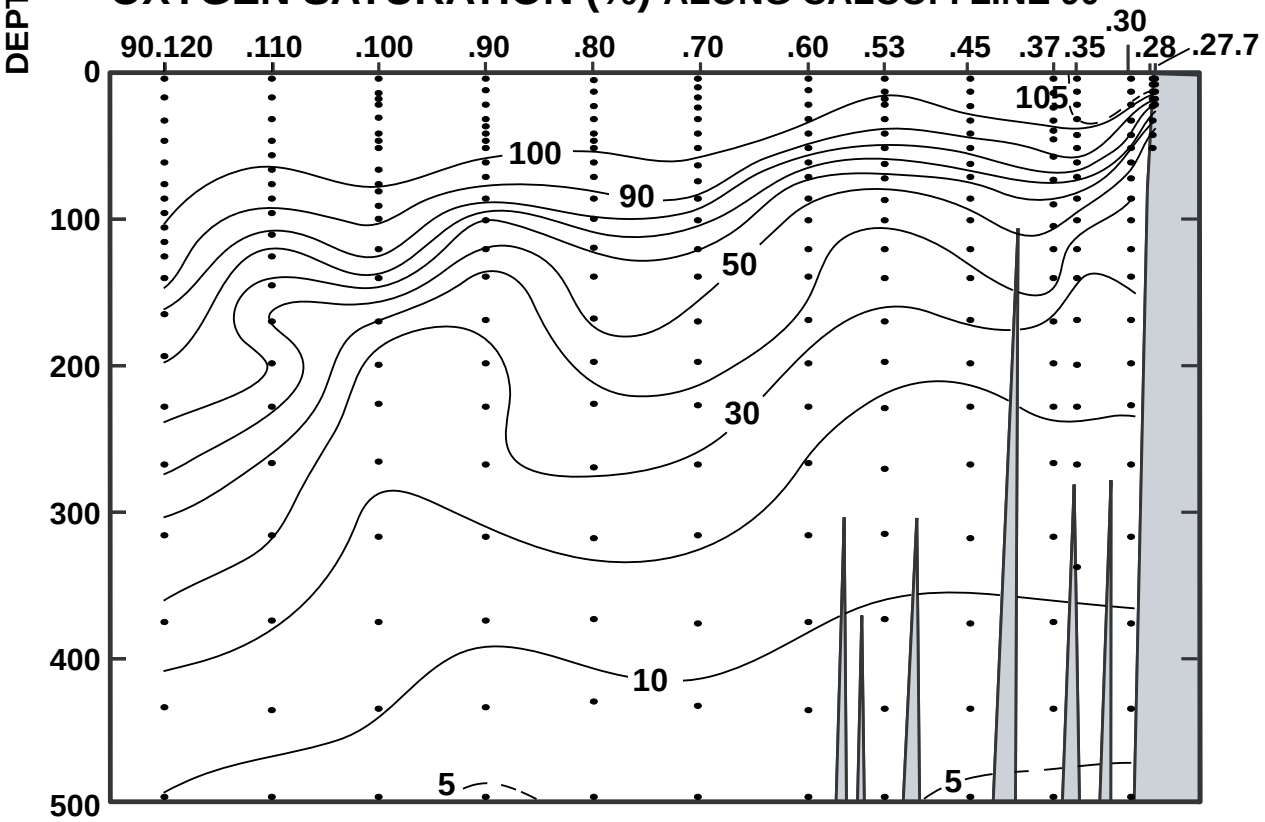


FIGURE 5H

# CALCOFI CRUISE 0704

**4 - 7 April 2007**

## OXYGEN (mL/L) ALONG CALCOFI LINE 90

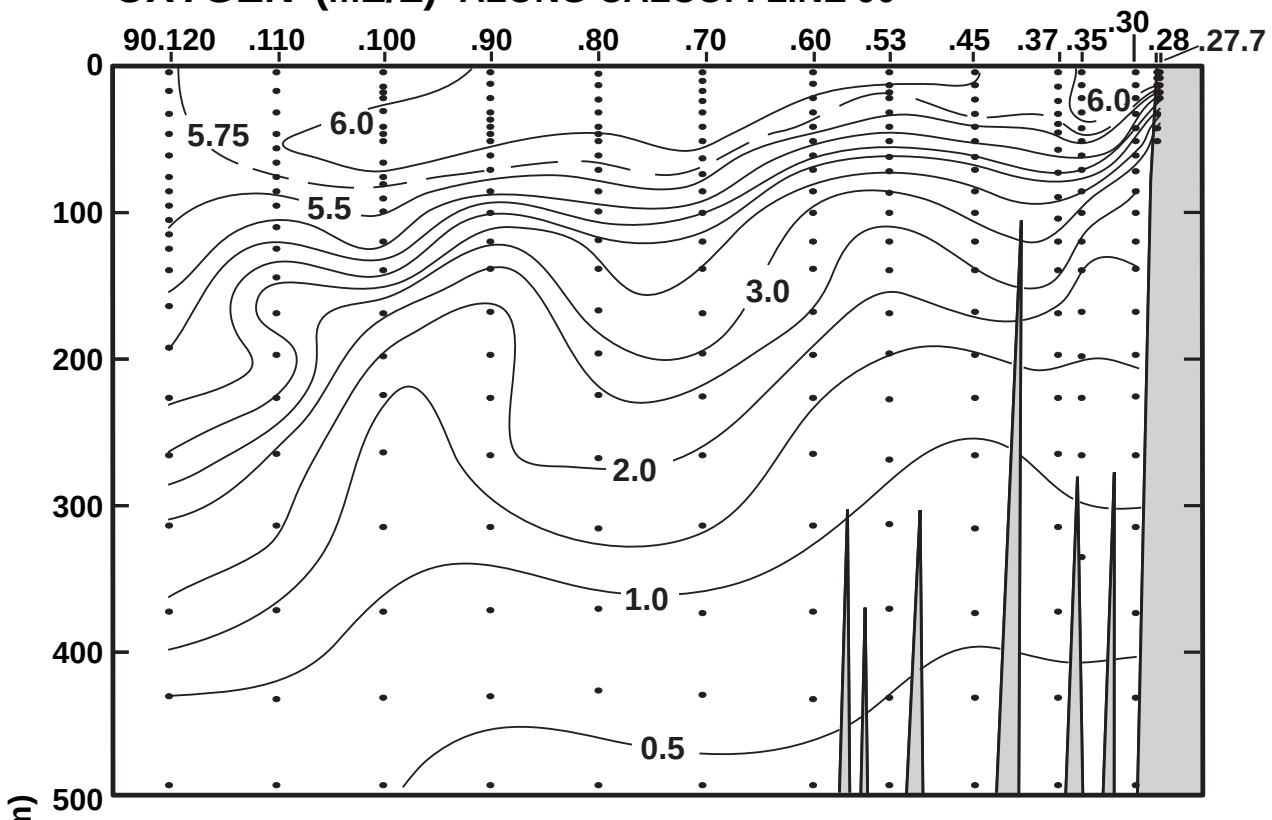


FIGURE 5I

## NITRITE ( M/L) ALONG CALCOFI LINE 90

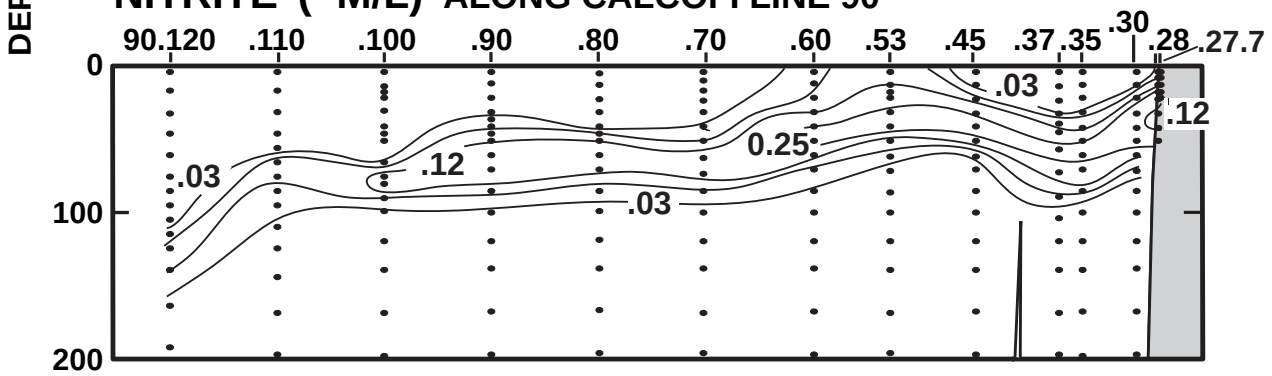


FIGURE 5J

## PHAEOPIGMENTS ( g/L) ALONG CALCOFI LINE 90

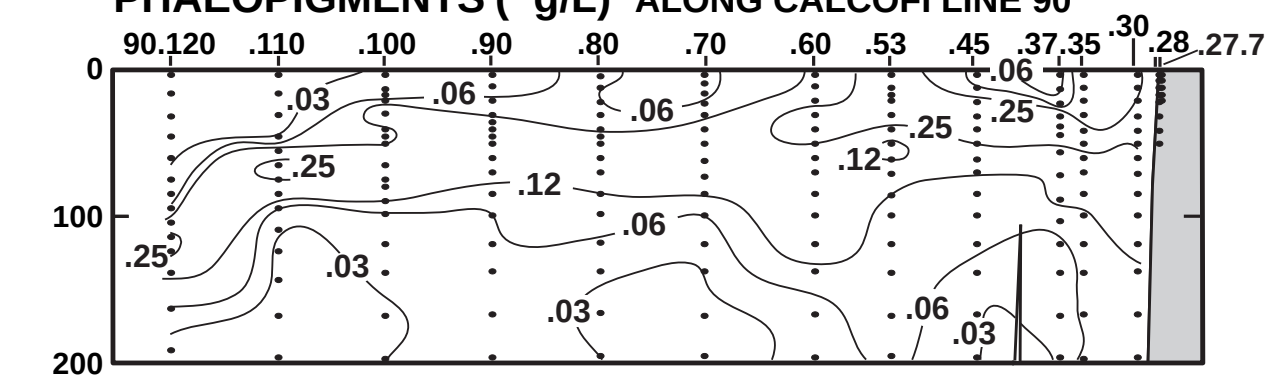


FIGURE 5K

PERSONNEL

CalCOFI Cruise 0704

SHIP'S CAPTAIN

Keith Roberts, RV *David Starr Jordan*

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

| | | Participating (Legs) |
|---|---|---|
| Hays, Amy E. (Chief Scientist) | Fishery Biologist, NMFS | 1-3 |
| Abramenkoff, Dimitry N. | Fishery Biologist, NMFS | 1, 3 |
| Becker, Susan M. | Staff Research Associate, SIO | 1 |
| Bowlin, Noelle M. | Fishery Biologist, NMFS | 2-3 |
| Cambell, Gregory | Staff Research Associate, SIO | 1 |
| Claussen, Stephen M. | Marine Mammal Observer, Cascadia Research | 1 |
| Davis, Edward P. | Volunteer | 1 |
| Dotson, Ronald C. | Fishery Biologist, NMFS | 1-3 |
| Dovel, Shonna L. | Staff Research Associate, SIO | 1 |
| Griffith, David A. | Fishery Biologist, NMFS | 2-3 |
| Macewicz, Beverly | Fishery Biologist, NMFS | 2-3 |
| Overcash, Bryan J. | Scientific Aid, Cal. Department of Fish and Game | 1-2 |
| Sheldon, Jennifer L. | Staff Research Associate, SIO | 1 |
| Stanaway, Kathryn E. | Staff Research Associate, SIO | 1 |
| Thombley, Robert L. | Staff Research Associate, SIO | 1 |
| Wilkinson, James R. | Programmer Analyst, SIO | 1 |
| Wolgast, David M. | Staff Research Associate, SIO | 1 |

Leg 1: San Diego to Monterey, California 27 March-15 April, 2007
Leg 2: Monterey to Santa Cruz, California 24-25 April 2007
Leg 3: Santa Cruz to San Diego, California 27-29 April, 2007

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 STATION 66.7 50.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 36 47.0 N | 122 3.4 W | 27/04/07 | 2204 | UTC | 264 m | 300 20 kn | 290 02 07 | 1 | 1014.8 mb | 14.1 C | 12.2 C | 7m | 3/8 | CS |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 10.07 | 10.07 | 33.861 | 26.051 | 194.8 | 0.000 | 4.60 | 72.4 | 29.0 | | 21.3 | | 1.92 | 0.49 | 0 | |
| 2 A | 10.07 | 10.07 | 33.861 | 26.051 | 194.9 | 0.004 | 4.60 | 72.4 | 29.0 | | 21.3 | | 1.92 | 0.49 | 2 | 212 |
| 5 | 10.18 | 10.18 | 33.818 D | 25.999 | 199.9 | 0.010 | 4.63 D | 73.0 | 27.2 | | 21.1 | | 1.21 | 0.32 | 5 | 211 |
| 10 | 10.07 | 10.07 | 33.926 D | 26.102 | 190.2 | 0.020 | 3.94 D | 62.0 | 30.3 | | 21.6 | | 2.31 | 0.60 | 10 | 210 |
| 20 | 9.33 | 9.33 | 33.920 D | 26.220 | 179.2 | 0.038 | 3.34 D | 51.7 | 34.5 | | 25.0 | | 0.96 | 0.64 | 20 | 209 |
| 30 | 9.27 | 9.27 | 33.916 D | 26.227 | 178.8 | 0.056 | 3.29 D | 50.9 | 34.5 | | 25.6 | | 0.48 | 0.56 | 30 | 208 |
| 40 | 9.21 | 9.21 | 33.932 D | 26.249 | 176.8 | 0.074 | 3.02 D | 46.6 | 35.3 | | 26.0 | | 0.35 | 0.55 | 40 | 207 |
| 50 ISL | 9.18 D | 9.17 | 33.953 D | 26.271 | 175.0 | 0.091 | 2.80 D | 43.2 | 36.1 | | 26.5 | | 0.33 | 0.55 | 50 | |
| 60 | 9.09 | 9.08 | 34.000 D | 26.322 | 170.3 | 0.109 | 2.25 D | 34.7 | 36.8 | | 27.1 | | 0.31 | 0.55 | 60 | 206 |
| 75 ISL | 8.79 D | 8.78 | 34.027 D | 26.391 | 164.1 | 0.134 | 1.92 D | 29.4 | 37.0 | | 28.6 | | 0.11 | 0.32 | 75 | |
| 80 | 8.75 | 8.74 | 34.043 D | 26.410 | 162.4 | 0.142 | 1.90 D | 29.1 | 37.0 | | 29.1 | | 0.05 | 0.24 | 80 | 205 |
| 99 | 8.55 | 8.54 | 34.085 | 26.474 | 156.6 | 0.172 | 1.68 | 25.6 | 40.6 | | 30.3 | | 0.04 | 0.21 | 100 | 204 |
| 100 ISL | 8.52 D | 8.51 | 34.091 D | 26.483 | 155.7 | 0.174 | 1.63 D | 24.8 | 40.7 | | 30.3 | | 0.04 | 0.21 | 101 | |
| 125 ISL | 8.28 D | 8.27 | 34.120 D | 26.543 | 150.5 | 0.212 | 1.58 D | 23.9 | 43.4 | | 31.2 | | 0.02 | 0.15 | 126 | |
| 149 | 8.11 | 8.09 | 34.140 D | 26.585 | 146.9 | 0.248 | 1.44 D | 21.7 | 45.3 | | 31.8 | | 0.01 | 0.11 | 150 | 203 |
| 150 ISL | 8.12 D | 8.10 | 34.140 D | 26.583 | 147.1 | 0.249 | 1.43 D | 21.6 | 45.4 | | 31.8 | | 0.01 | 0.11 | 151 | |
| 199 | 7.84 | 7.82 | 34.167 D | 26.646 | 141.9 | 0.320 | 1.17 D | 17.5 | 51.0 | | 33.1 | | 0.01 | 0.10 | 200 | 202 |
| 200 ISL | 7.80 D | 7.78 | 34.174 D | 26.658 | 140.8 | 0.321 | 1.15 D | 17.2 | 51.0 | | 33.1 | | 0.01 | 0.10 | 201 | |
| 250 ISL | 7.63 D | 7.61 | 34.185 D | 26.692 | 138.4 | 0.391 | 1.08 D | 16.1 | 53.5 | | 33.6 | | 0.01 | 0.09 | 252 | |
| 260 | 7.58 | 7.55 | 34.189 | 26.702 | 137.6 | 0.405 | 1.05 | 15.6 | 54.0 | | 33.7 | | 0.01 | 0.09 | 262 | 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 O2;

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 STATION 66.7 52.5

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 36 42.0 N | 122 13.9 W | 28/04/07 | 0112 | UTC | 1136 m | 310 22 kn | 280 03 07 | 1 | 1013.5 mb | 12.8 C | 11.5 C | 9m | 2/8 | CS |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 11.10 | 11.10 | 33.490 | 25.582 | 239.4 | 0.000 | 6.13 | 98.4 | 15.8 | | 14.1 | 0.24 | | | 0 | |
| 2 A | 11.10 | 11.10 | 33.490 | 25.582 | 239.4 | 0.005 | 6.13 | 98.4 | 15.8 | | 14.1 | 0.24 | | | 2 | 212 |
| 10 ISL | 11.09 D | 11.09 | 33.487 D | 25.582 | 239.6 | 0.024 | 6.02 D | 96.6 | 17.2 | | 15.7 | 0.26 | | | 10 | |
| 20 ISL | 10.88 D | 10.88 | 33.494 D | 25.625 | 235.8 | 0.048 | 5.71 D | 91.2 | 19.3 | | 17.9 | 0.28 | | | 20 | |
| 30 ISL | 10.04 D | 10.04 | 33.704 D | 25.934 | 206.6 | 0.070 | 3.82 D | 60.0 | 21.8 | | 20.5 | 0.31 | | | 30 | |
| 50 | 9.54 | 9.53 | 33.886 D | 26.160 | 185.6 | 0.109 | 2.44 D | 38.0 | 28.2 | | 26.5 | 0.34 | | | 50 | 211 |
| 75 ISL | 9.00 D | 8.99 | 33.958 D | 26.304 | 172.4 | 0.154 | 2.40 D | 36.9 | 32.9 | | 27.8 | 0.24 | | | 75 | |
| 99 | 8.78 | 8.77 | 34.055 | 26.415 | 162.3 | 0.194 | 1.93 | 29.5 | 36.6 | | 29.0 | 0.12 | | | 100 | 210 |
| 100 ISL | 8.75 D | 8.74 | 34.062 D | 26.425 | 161.3 | 0.196 | 1.87 D | 28.6 | 36.7 | | 29.0 | 0.12 | | | 101 | |
| 125 ISL | 8.51 D | 8.50 | 34.107 D | 26.498 | 154.9 | 0.235 | 1.63 D | 24.8 | 39.9 | | 29.6 | 0.11 | | | 126 | |
| 150 ISL | 8.32 D | 8.30 | 34.128 D | 26.544 | 150.9 | 0.273 | 1.51 D | 22.9 | 42.5 | | 30.0 | 0.11 | | | 151 | |
| 199 | 7.89 | 7.87 | 34.170 D | 26.641 | 142.4 | 0.345 | 1.21 D | 18.2 | 46.1 | | 30.4 | 0.10 | | | 200 | 209 |
| 200 ISL | 7.86 D | 7.84 | 34.170 D | 26.646 | 142.0 | 0.347 | 1.20 D | 18.0 | 46.1 | | 30.4 | 0.10 | | | 201 | |
| 250 ISL | 7.51 D | 7.49 | 34.181 D | 26.706 | 137.0 | 0.416 | 1.09 D | 16.2 | 47.1 | | 30.7 | 0.11 | | | 252 | |
| 298 | 7.33 | 7.30 | 34.192 D | 26.741 | 134.4 | 0.482 | 0.98 D | 14.5 | 49.0 | | 31.5 | 0.11 | | | 300 | 208 |
| 300 ISL | 7.32 D | 7.29 | 34.192 D | 26.742 | 134.3 | 0.484 | 0.98 D | 14.5 | 49.3 | | 31.6 | 0.11 | | | 302 | |
| 397 | 6.61 | 6.57 | 34.202 D | 26.848 | 125.3 | 0.610 | 0.75 D | 10.9 | 66.2 | | 36.7 | 0.09 | | | 400 | 207 |
| 400 ISL | 6.43 D | 6.39 | 34.187 D | 26.860 | 124.1 | 0.614 | 0.77 D | 11.2 | 66.6 | | 36.8 | 0.09 | | | 403 | |
| 497 | 5.72 | 5.68 | 34.238 | 26.991 | 112.4 | 0.729 | 0.42 | 6.0 | 79.7 | | 39.8 | 0.07 | | | 501 | 206 |
| 500 ISL | 5.67 D | 5.63 | 34.242 D | 27.000 | 111.4 | 0.732 | 0.40 D | 5.7 | 80.1 | | 39.9 | 0.07 | | | 504 | |
| 595 | 5.14 | 5.09 | 34.312 D | 27.119 | 100.7 | 0.833 | 0.26 D | 3.7 | 91.6 | | 41.1 | 0.06 | | | 600 | 205 |
| 600 ISL | 5.11 D | 5.06 | 34.316 D | 27.126 | 100.1 | 0.838 | 0.26 D | 3.7 | 92.1 | | 41.1 | | | | 605 | |
| 693 | 4.76 | 4.70 | 34.361 D | 27.202 | 93.5 | 0.928 | 0.25 D | 3.5 | 100.2 | | 42.0 | | | | 699 | 204 |
| 700 ISL | 4.74 D | 4.68 | 34.363 D | 27.206 | 93.2 | 0.934 | 0.26 D | 3.6 | 100.7 | | 42.1 | | | | 706 | |
| 792 | 4.43 | 4.37 | 34.407 D | 27.276 | 87.1 | 1.017 | 0.31 D | 4.3 | 107.1 | | 43.2 | | | | 799 | 203 |
| 800 ISL | 4.40 D | 4.34 | 34.409 D | 27.281 | 86.7 | 1.024 | 0.31 D | 4.3 | 107.7 | | 43.2 | | | | 807 | |
| 892 | 4.06 | 3.99 | 34.444 D | 27.345 | 80.9 | 1.101 | 0.40 D | 5.5 | 115.2 | | 42.5 | | | | 900 | 202 |
| 900 CSL | 4.01 | 3.94 | 34.448 | 27.353 | 80.0 | 1.108 | 0.41 | 5.6 | | | | | | | 908 | 200 |
| 1000 CSL | 3.69 | 3.62 | 34.474 | 27.407 | 75.2 | 1.185 | 0.53 | 7.2 | | | | | | | 1009 | 200 |
| 1026 | 3.64 | 3.56 | 34.478 D | 27.415 | 74.5 | 1.205 | 0.55 D | 7.5 | 125.9 | | 42.8 | | | | 1035 | 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 O2;

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 STATION 66.7 55.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 36 37.2 N | 122 25.0 W | 28/04/07 | 0343 | UTC | 2600 m | 300 18 kn | | | 1014.2 mb | 12.5 C | 11.2 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 11.03 | 11.03 | 33.515 | 25.614 | 236.3 | 0.000 | 6.12 | 98.1 | 16.3 | | 14.5 | 0.24 | 1.07 | 0.30 | 0 | |
| 1 A | 11.03 | 11.03 | 33.515 | 25.614 | 236.4 | 0.002 | 6.12 | 98.1 | 16.3 | | 14.5 | 0.24 | 1.07 | 0.30 | 1 | 212 |
| 6 | 11.04 | 11.04 | 33.514 D | 25.612 | 236.7 | 0.014 | 6.17 D | 99.0 | 16.2 | | 14.9 | 0.26 | 1.11 | 0.28 | 6 | 211 |
| 10 ISL | 11.02 D | 11.02 | 33.514 D | 25.616 | 236.4 | 0.024 | 6.15 D | 98.6 | 16.2 | | 14.7 | 0.26 | 1.10 | 0.29 | 10 | |
| 11 | 11.04 | 11.04 | 33.515 D | 25.613 | 236.7 | 0.026 | 6.14 D | 98.5 | 16.2 | | 14.6 | 0.26 | 1.10 | 0.29 | 11 | 210 |
| 20 ISL | 10.66 D | 10.66 | 33.530 D | 25.692 | 229.4 | 0.047 | 5.97 D | 95.0 | 16.4 | | 15.1 | 0.27 | 1.37 | 0.38 | 20 | |
| 21 | 10.66 | 10.66 | 33.531 D | 25.693 | 229.4 | 0.049 | 5.94 D | 94.5 | 16.5 | | 15.2 | 0.27 | 1.40 | 0.39 | 21 | 209 |
| 30 ISL | 10.49 D | 10.49 | 33.596 D | 25.773 | 221.9 | 0.070 | 5.43 D | 86.1 | 17.2 | | 15.9 | 0.30 | 1.15 | 0.39 | 30 | |
| 31 | 10.49 | 10.49 | 33.605 D | 25.780 | 221.3 | 0.072 | 5.31 D | 84.2 | 17.3 | | 16.1 | 0.30 | 1.10 | 0.39 | 31 | 208 |
| 40 | 10.15 | 10.15 | 33.677 D | 25.895 | 210.6 | 0.091 | 4.66 D | 73.4 | 20.1 | | 19.1 | 0.37 | 0.71 | 0.35 | 40 | 207 |
| 50 ISL | 9.90 D | 9.89 | 33.743 D | 25.989 | 201.9 | 0.112 | 4.01 D | 62.8 | 22.4 | | 21.3 | 0.38 | 0.38 | 0.26 | 50 | |
| 60 | 9.80 | 9.79 | 33.778 D | 26.033 | 197.9 | 0.132 | 3.68 D | 57.5 | 24.4 | | 22.7 | 0.38 | 0.18 | 0.19 | 60 | 206 |
| 75 ISL | 9.64 D | 9.63 | 33.834 D | 26.103 | 191.5 | 0.161 | 3.36 D | 52.4 | 27.7 | | 24.2 | 0.38 | 0.19 | 0.20 | 75 | |
| 80 | 9.64 | 9.63 | 33.850 D | 26.116 | 190.4 | 0.171 | 3.37 D | 52.5 | 28.5 | | 24.6 | 0.38 | 0.19 | 0.21 | 80 | 205 |
| 100 | 9.19 | 9.18 | 33.890 | 26.221 | 180.8 | 0.208 | 2.66 | 41.0 | 28.4 | | 26.1 | | 0.03 | 0.15 | 101 | 204 |
| 125 ISL | 9.12 D | 9.11 | 33.986 D | 26.307 | 173.1 | 0.252 | 2.32 D | 35.8 | 31.8 | | 27.9 | | 0.04 | 0.14 | 126 | |
| 149 | 8.79 | 8.77 | 34.052 D | 26.412 | 163.5 | 0.292 | 2.02 D | 30.9 | 36.0 | | 29.2 | | 0.05 | 0.14 | 150 | 203 |
| 150 ISL | 8.77 D | 8.75 | 34.053 D | 26.416 | 163.2 | 0.294 | 2.01 D | 30.8 | 36.1 | | 29.2 | | 0.05 | 0.14 | 151 | |
| 199 | 8.20 | 8.18 | 34.079 | 26.524 | 153.6 | 0.372 | 1.94 | 29.3 | 40.3 | | 30.2 | | 0.01 | 0.09 | 200 | 202 |
| 200 ISL | 8.20 D | 8.18 | 34.081 D | 26.526 | 153.5 | 0.373 | 1.91 D | 28.9 | 40.4 | | 30.2 | | 0.01 | 0.09 | 201 | |
| 250 CSL | 7.80 | 7.78 | 34.123 | 26.618 | 145.5 | 0.448 | 1.51 | 22.6 | | | | | | | 252 | 200 |
| 300 CSL | 7.26 | 7.23 | 34.136 | 26.706 | 137.7 | 0.519 | 1.25 | 18.5 | | | | | | | 302 | 200 |
| 400 CSL | 6.63 | 6.59 | 34.186 | 26.833 | 126.8 | 0.651 | 0.79 | 11.5 | | | | | | | 403 | 200 |
| 500 CSL | 5.82 | 5.78 | 34.239 | 26.979 | 113.6 | 0.771 | 0.44 | 6.3 | | | | | | | 504 | 200 |
| 600 CSL | 5.26 | 5.21 | 34.298 | 27.094 | 103.3 | 0.880 | 0.27 | 3.8 | | | | | | | 605 | 200 |
| 700 CSL | 4.82 | 4.76 | 34.355 | 27.191 | 94.8 | 0.979 | 0.24 | 3.4 | | | | | | | 706 | 200 |
| 800 CSL | 4.42 | 4.36 | 34.404 | 27.274 | 87.3 | 1.070 | 0.30 | 4.1 | | | | | | | 807 | 200 |
| 900 CSL | 4.01 | 3.94 | 34.441 | 27.348 | 80.5 | 1.153 | | | | | | | | | 908 | 200 |
| 1000 CSL | 3.81 | 3.74 | 34.462 | 27.385 | 77.5 | 1.233 | 0.46 | 6.3 | | | | | | | 1009 | 200 |
| 1029 | 3.74 | 3.66 | 34.470 D | 27.399 | 76.3 | 1.255 | 0.50 D | 6.8 | 118.6 | | 43.3 | | 0.00 | 0.02 | 1038 | 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 O2;

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 STATION 66.7 60.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 36 26.9 N | 122 46.2 W | 28/04/07 | 0804 | UTC | 2921 m | 320 14 kn | | | 1016.0 mb | 13.6 C | 11.3 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.05 | 12.05 | 33.357 | 25.304 | 265.8 | 0.000 | 6.16 | 100.9 | 5.7 | | 7.8 | 0.17 | 0.43 | 0.19 | 0 | |
| 3 A | 12.05 | 12.05 | 33.357 | 25.304 | 265.9 | 0.008 | 6.16 | 100.9 | 5.7 | | 7.8 | 0.17 | 0.43 | 0.19 | 3 | 212 |
| 6 | 12.05 | 12.05 | 33.357 D | 25.304 | 265.9 | 0.016 | 6.16 D | 100.9 | 6.1 | 0.68 | 8.4 | 0.21 | 0.42 | 0.17 | 6 | 211 |
| 10 ISL | 12.03 D | 12.03 | 33.358 D | 25.309 | 265.6 | 0.027 | 6.14 D | 100.5 | 5.3 | 0.67 | 7.3 | 0.18 | 0.41 | 0.18 | 10 | |
| 11 | 12.05 | 12.05 | 33.358 D | 25.305 | 266.0 | 0.029 | 6.14 D | 100.5 | 5.0 | 0.67 | 6.9 | 0.17 | 0.41 | 0.19 | 11 | 210 |
| 20 | 12.01 | 12.01 | 33.370 D | 25.322 | 264.6 | 0.053 | 6.10 D | 99.8 | 6.3 | 0.68 | 8.5 | 0.20 | 0.42 | 0.21 | 20 | 209 |
| 30 | 11.54 | 11.54 | 33.412 D | 25.443 | 253.4 | 0.079 | 6.07 D | 98.3 | 8.8 | 0.71 | 10.8 | 0.21 | 0.43 | 0.27 | 30 | 208 |
| 40 | 11.39 | 11.39 | 33.444 D | 25.495 | 248.6 | 0.104 | 5.94 D | 95.9 | 9.6 | 1.02 | 11.8 | 0.22 | 0.64 | 0.33 | 40 | 207 |
| 50 ISL | 11.05 D | 11.04 | 33.576 D | 25.659 | 233.3 | 0.128 | 5.43 D | 87.1 | 10.2 | 1.07 | 13.3 | 0.24 | 0.54 | 0.25 | 50 | |
| 59 | 10.96 | 10.95 | 33.601 D | 25.695 | 230.1 | 0.149 | 5.35 D | 85.7 | 11.5 | 1.12 | 15.0 | 0.25 | 0.34 | 0.15 | 59 | 206 |
| 75 ISL | 10.61 D | 10.60 | 33.678 D | 25.817 | 218.8 | 0.185 | 4.28 D | 68.1 | 17.4 | 1.35 | 19.4 | 0.27 | 0.11 | 0.09 | 75 | |
| 79 | 10.35 | 10.34 | 33.737 D | 25.908 | 210.2 | 0.194 | 3.82 D | 60.4 | 19.1 | 1.41 | 20.5 | 0.27 | 0.07 | 0.09 | 79 | 205 |
| 99 | 9.74 | 9.73 | 33.817 | 26.074 | 194.8 | 0.234 | 2.95 | 46.1 | 25.0 | 1.68 | 25.0 | 0.21 | 0.03 | 0.10 | 100 | 204 |
| 100 ISL | 9.74 D | 9.73 | 33.816 D | 26.073 | 194.9 | 0.236 | 2.88 D | 45.0 | 25.2 | 1.69 | 25.1 | | 0.03 | 0.10 | 101 | |
| 125 ISL | 9.09 D | 9.08 | 33.889 D | 26.236 | 179.8 | 0.283 | 2.60 D | 40.0 | 29.0 | 1.81 | 26.4 | | 0.02 | 0.11 | 126 | |
| 149 | 8.78 | 8.76 | 33.983 D | 26.359 | 168.5 | 0.325 | 2.36 D | 36.1 | 31.5 | 1.86 | 27.7 | | 0.02 | 0.12 | 150 | 203 |
| 150 ISL | 8.78 D | 8.76 | 33.986 D | 26.362 | 168.3 | 0.326 | 2.35 D | 36.0 | 31.7 | 1.86 | 27.8 | | 0.02 | 0.12 | 151 | |
| 199 | 8.26 | 8.24 | 34.097 | 26.529 | 153.2 | 0.405 | 1.80 | 27.2 | 40.3 | 2.11 | 31.1 | | 0.01 | 0.10 | 200 | 202 |
| 200 ISL | 8.27 D | 8.25 | 34.098 D | 26.528 | 153.3 | 0.407 | 1.77 D | 26.8 | 40.4 | 2.11 | 31.1 | | 0.01 | 0.10 | 201 | |
| 250 CSL | 7.61 | 7.59 | 34.100 | 26.628 | 144.4 | 0.481 | 1.51 | 22.5 | | | | | | | 252 | 200 |
| 300 CSL | 7.10 | 7.07 | 34.115 | 26.712 | 137.0 | 0.551 | 1.28 | 18.9 | | | | | | | 302 | 200 |
| 400 CSL | 6.24 | 6.20 | 34.155 | 26.859 | 124.0 | 0.682 | 0.80 | 11.5 | | | | | | | 403 | 200 |
| 500 CSL | 5.57 | 5.53 | 34.220 | 26.995 | 111.8 | 0.800 | 0.42 | 6.0 | | | | | | | 504 | 200 |
| 600 CSL | 5.12 | 5.07 | 34.297 | 27.110 | 101.7 | 0.907 | 0.25 | 3.5 | | | | | | | 605 | 200 |
| 700 CSL | 4.79 | 4.73 | 34.358 | 27.197 | 94.2 | 1.004 | 0.23 | 3.2 | | | | | | | 706 | 200 |
| 800 CSL | 4.43 | 4.37 | 34.401 | 27.271 | 87.6 | 1.095 | 0.27 | 3.7 | | | | | | | 807 | 200 |
| 900 CSL | 4.11 | 4.04 | 34.432 | 27.330 | 82.4 | 1.180 | 0.35 | 4.8 | | | | | | | 908 | 200 |
| 1000 CSL | 3.80 | 3.73 | 34.460 | 27.385 | 77.5 | 1.260 | 0.45 | 6.1 | | | | | | | 1009 | 200 |
| 1021 | 3.72 | 3.64 | 34.467 D | 27.398 | 76.2 | 1.276 | 0.47 D | 6.4 | 119.6 | 2.91 | 43.8 | | 0.00 | 0.03 | 1030 | 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 O2;

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 STATION 66.7 65.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 36 17.5 N | 123 7.6 W | 28/04/07 | 1423 | UTC | 3259 m | 340 22 kn | 320 09 07 | 2 | 1015.6 mb | 12.5 C | 11.4 C | | 8/8 | ST |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.37 | 12.37 | 33.208 | 25.128 | 282.6 | 0.000 | 6.22 | 102.4 | 3.4 | | 4.6 | 0.14 | 0.35 | 0.16 | 0 | |
| 2 A | 12.37 | 12.37 | 33.208 | 25.128 | 282.7 | 0.006 | 6.22 | 102.4 | 3.4 | | 4.6 | 0.14 | 0.35 | 0.16 | 2 | 212 |
| 6 | 12.37 | 12.37 | 33.207 D | 25.127 | 282.8 | 0.017 | 6.24 D | 102.8 | 3.6 | 0.46 | 4.8 | 0.17 | 0.38 | 0.17 | 6 | 211 |
| 10 | 12.37 | 12.37 | 33.207 D | 25.127 | 282.9 | 0.028 | 6.24 D | 102.8 | 3.4 | | 4.7 | 0.15 | 0.33 | 0.17 | 10 | 210 |
| 20 | 12.38 | 12.38 | 33.209 D | 25.127 | 283.2 | 0.057 | 6.23 D | 102.6 | 3.3 | 0.43 | 4.7 | 0.18 | 0.35 | 0.15 | 20 | 209 |
| 30 | 12.30 | 12.30 | 33.281 D | 25.199 | 276.6 | 0.085 | 6.19 D | 101.8 | 3.4 | | 4.9 | 0.15 | 0.35 | 0.16 | 30 | 208 |
| 40 | 12.17 | 12.16 | 33.310 D | 25.246 | 272.4 | 0.112 | 6.04 D | 99.1 | 4.5 | 0.42 | 6.5 | 0.17 | 0.44 | 0.21 | 40 | 207 |
| 50 ISL | 10.88 D | 10.87 | 33.375 D | 25.533 | 245.2 | 0.138 | 5.14 D | 82.1 | 10.9 | 0.84 | 12.7 | 0.19 | 0.28 | 0.17 | 50 | |
| 60 | 10.09 | 10.08 | 33.586 D | 25.834 | 216.7 | 0.161 | 3.88 D | 61.0 | 18.0 | 1.29 | 19.2 | 0.21 | 0.07 | 0.11 | 60 | 206 |
| 75 ISL | 9.76 D | 9.75 | 33.691 D | 25.972 | 204.0 | 0.193 | 3.13 D | 48.9 | 21.1 | 1.41 | 21.5 | 0.11 | 0.05 | 0.12 | 75 | |
| 80 | 9.60 | 9.59 | 33.744 D | 26.040 | 197.6 | 0.203 | 2.93 D | 45.6 | 21.6 | 1.45 | 21.7 | 0.07 | 0.05 | 0.12 | 80 | 205 |
| 100 | 9.32 | 9.31 | 33.829 | 26.152 | 187.3 | 0.241 | 2.82 | 43.6 | 27.2 | 1.45 | 25.4 | 0.06 | 0.03 | 0.16 | 101 | 204 |
| 125 ISL | 8.95 D | 8.94 | 33.936 D | 26.295 | 174.2 | 0.286 | 2.42 D | 37.2 | 32.1 | 1.66 | 28.3 | | 0.03 | 0.16 | 126 | |
| 149 | 8.51 | 8.49 | 34.029 D | 26.437 | 161.1 | 0.326 | 2.07 D | 31.5 | 35.7 | 1.90 | 30.0 | | 0.03 | 0.16 | 150 | 203 |
| 150 ISL | 8.49 D | 8.47 | 34.032 D | 26.442 | 160.6 | 0.328 | 2.07 D | 31.5 | 35.8 | 1.90 | 30.0 | | 0.03 | 0.16 | 151 | |
| 198 | 7.90 | 7.88 | 34.073 | 26.564 | 149.7 | 0.403 | 1.81 | 27.2 | 42.3 | 2.05 | 31.6 | | 0.01 | 0.09 | 199 | 202 |
| 200 ISL | 7.86 D | 7.84 | 34.074 D | 26.570 | 149.1 | 0.406 | 1.76 D | 26.4 | 42.5 | 2.05 | 31.6 | | 0.01 | 0.09 | 201 | |
| 250 CSL | 7.25 | 7.23 | 34.105 | 26.683 | 139.0 | 0.478 | 1.44 | 21.3 | | | | | | | 252 | 200 |
| 300 CSL | 6.42 | 6.39 | 34.065 | 26.764 | 131.6 | 0.545 | 1.33 | 19.3 | | | | | | | 302 | 200 |
| 400 CSL | 6.02 | 5.99 | 34.194 | 26.918 | 118.2 | 0.670 | 0.60 | 8.6 | | | | | | | 403 | 200 |
| 500 CSL | 5.37 | 5.33 | 34.249 | 27.042 | 107.2 | 0.783 | 0.34 | 4.8 | | | | | | | 504 | 200 |
| 600 CSL | 4.98 | 4.93 | 34.319 | 27.143 | 98.3 | 0.886 | 0.23 | 3.2 | | | | | | | 605 | 200 |
| 700 CSL | 4.71 | 4.65 | 34.366 | 27.212 | 92.6 | 0.981 | 0.23 | 3.2 | | | | | | | 706 | 200 |
| 800 CSL | 4.36 | 4.30 | 34.404 | 27.281 | 86.5 | 1.071 | 0.28 | 3.9 | | | | | | | 807 | 200 |
| 900 CSL | 4.07 | 4.00 | 34.435 | 27.337 | 81.7 | 1.155 | 0.36 | 4.9 | | | | | | | 908 | 200 |
| 1000 CSL | 3.78 | 3.71 | 34.463 | 27.389 | 77.1 | 1.234 | 0.47 | 6.4 | | | | | | | 1009 | 200 |
| 1021 | 3.74 | 3.66 | 34.470 D | 27.399 | 76.2 | 1.250 | 0.49 D | 6.7 | 118.9 | 3.21 | 44.2 | | 0.00 | 0.02 | 1030 | 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 O2;

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 STATION 66.7 70.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 36 6.8 N | 123 28.6 W | 28/04/07 | 1807 | UTC | 3565 m | 330 20 kn | 320 06 06 | 2 | 1017.8 mb | 12.8 C | 11.7 C | 12m | 8/8 | ST |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.00 | 12.00 | 33.183 | 25.179 | 277.8 | 0.000 | 6.31 | 103.1 | 4.7 | | 6.6 | 0.19 | 0.86 | 0.28 | 0 | |
| 3 A | 12.00 | 12.00 | 33.183 | 25.179 | 277.8 | 0.008 | 6.31 | 103.1 | 4.7 | | 6.6 | 0.19 | 0.86 | 0.28 | 3 | 212 |
| 5 | 12.00 | 12.00 | 33.183 D | 25.179 | 277.9 | 0.014 | 6.35 D | 103.7 | 4.6 | | 6.5 | 0.20 | 0.85 | 0.28 | 5 | 211 |
| 10 | 12.00 | 12.00 | 33.183 D | 25.179 | 278.0 | 0.028 | 6.34 D | 103.6 | 4.4 | 0.53 | 6.5 | 0.21 | 0.81 | 0.26 | 10 | 210 |
| 20 | 11.99 | 11.99 | 33.182 D | 25.180 | 278.1 | 0.056 | 6.33 D | 103.4 | 4.5 | 0.43 | 6.5 | 0.21 | 0.82 | 0.25 | 20 | 209 |
| 30 | 11.98 | 11.98 | 33.181 D | 25.182 | 278.2 | 0.083 | 6.31 D | 103.0 | 4.6 | 0.47 | 6.6 | 0.21 | 0.80 | 0.25 | 30 | 208 |
| 40 | 11.93 | 11.92 | 33.182 D | 25.192 | 277.5 | 0.111 | 6.21 D | 101.3 | 4.7 | | 6.7 | 0.21 | 0.85 | 0.27 | 40 | 207 |
| 50 ISL | 10.59 D | 10.58 | 33.112 D | 25.379 | 259.8 | 0.138 | 5.64 D | 89.3 | 8.0 | 0.72 | 9.8 | 0.20 | 0.49 | 0.19 | 50 | |
| 60 | 10.07 | 10.06 | 33.194 D | 25.532 | 245.5 | 0.163 | 4.91 D | 76.9 | 12.5 | 0.89 | 14.0 | 0.18 | 0.08 | 0.10 | 60 | 206 |
| 75 ISL | 9.71 D | 9.70 | 33.453 D | 25.794 | 220.8 | 0.198 | 4.15 D | 64.6 | 17.6 | 1.11 | 19.1 | 0.10 | 0.04 | 0.08 | 75 | |
| 79 | 9.82 | 9.81 | 33.581 D | 25.876 | 213.2 | 0.207 | 3.75 D | 58.6 | 18.8 | 1.16 | 20.3 | 0.09 | 0.03 | 0.08 | 79 | 205 |
| 100 | 9.50 | 9.49 | 33.812 | 26.110 | 191.4 | 0.249 | 2.98 | 46.3 | 24.2 | 1.32 | 24.2 | 0.27 | 0.05 | 0.12 | 101 | 204 |
| 125 ISL | 8.94 D | 8.93 | 33.940 D | 26.300 | 173.7 | 0.295 | 2.63 D | 40.4 | 30.0 | 1.64 | 27.3 | | 0.04 | 0.12 | 126 | |
| 149 | 8.64 | 8.62 | 34.016 D | 26.407 | 164.0 | 0.336 | 2.13 D | 32.5 | 34.6 | 1.91 | 29.0 | | 0.03 | 0.12 | 150 | 203 |
| 150 ISL | 8.63 D | 8.61 | 34.018 D | 26.410 | 163.7 | 0.337 | 2.13 D | 32.5 | 34.7 | 1.91 | 29.0 | | 0.03 | 0.12 | 151 | |
| 199 | 7.92 | 7.90 | 34.047 | 26.540 | 152.0 | 0.415 | 2.04 | 30.6 | 39.5 | 1.96 | 30.0 | | 0.01 | 0.07 | 200 | 202 |
| 200 ISL | 7.90 D | 7.88 | 34.046 D | 26.543 | 151.8 | 0.416 | 2.03 D | 30.4 | 39.6 | 1.96 | 30.0 | | 0.01 | 0.07 | 201 | |
| 250 CSL | 7.36 | 7.34 | 34.079 | 26.647 | 142.5 | 0.490 | 1.61 | 23.9 | | | | | | | 252 | 200 |
| 300 CSL | 6.84 | 6.81 | 34.109 | 26.743 | 133.9 | 0.559 | 1.20 | 17.6 | | | | | | | 302 | 200 |
| 400 CSL | 6.01 | 5.98 | 34.154 | 26.887 | 121.1 | 0.686 | 0.75 | 10.8 | | | | | | | 403 | 200 |
| 500 CSL | 5.40 | 5.36 | 34.212 | 27.009 | 110.3 | 0.802 | 0.44 | 6.2 | | | | | | | 504 | 200 |
| 600 CSL | 5.01 | 4.96 | 34.284 | 27.112 | 101.3 | 0.908 | 0.25 | 3.5 | | | | | | | 605 | 200 |
| 700 CSL | 4.58 | 4.53 | 34.344 | 27.209 | 92.7 | 1.005 | 0.22 | 3.1 | | | | | | | 706 | 200 |
| 800 CSL | 4.32 | 4.26 | 34.406 | 27.287 | 85.9 | 1.094 | 0.29 | 4.0 | | | | | | | 807 | 200 |
| 900 CSL | 4.02 | 3.95 | 34.444 | 27.349 | 80.5 | 1.177 | 0.39 | 5.3 | | | | | | | 908 | 200 |
| 1000 CSL | 3.73 | 3.66 | 34.470 | 27.400 | 76.0 | 1.255 | 0.49 | 6.7 | | | | | | | 1009 | 200 |
| 1018 | 3.67 | 3.59 | 34.476 D | 27.410 | 74.9 | 1.269 | 0.51 D | 6.9 | 122.6 | 3.12 | 43.8 | | 0.00 | 0.02 | 1027 | 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 O2;

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 STATION 66.7 75.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 35 56.9 N | 123 50.0 W | 28/04/07 | 2239 | UTC | 3869 m | 350 20 kn | 320 06 08 | 2 | 1017.7 mb | 13.3 C | 12.1 C | 12m | 8/8 | ST |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.31 | 12.31 | 32.905 | 24.904 | 303.9 | 0.000 | 6.51 | 106.9 | 3.7 | | 2.5 | | 1.00 | 0.25 | 0 | |
| 2 A | 12.31 | 12.31 | 32.905 | 24.904 | 303.9 | 0.006 | 6.51 | 106.9 | 3.7 | | 2.5 | | 1.00 | 0.25 | 2 | 212 |
| 6 | 12.30 | 12.30 | 32.905 D | 24.906 | 303.8 | 0.018 | 6.49 D | 106.5 | 3.5 | 0.34 | 2.5 | 0.12 | 1.06 | 0.25 | 6 | 211 |
| 10 | 12.30 | 12.30 | 32.905 D | 24.906 | 303.9 | 0.030 | 6.49 D | 106.5 | 3.2 | | 2.4 | | 1.00 | 0.29 | 10 | 210 |
| 20 | 12.29 | 12.29 | 32.905 D | 24.909 | 304.0 | 0.061 | 6.49 D | 106.5 | 2.7 | 0.41 | 2.0 | 0.13 | 0.98 | 0.26 | 20 | 209 |
| 30 | 12.20 | 12.20 | 32.901 D | 24.923 | 302.9 | 0.091 | 6.44 D | 105.5 | 3.2 | 0.42 | 2.7 | 0.16 | 0.98 | 0.27 | 30 | 208 |
| 40 | 11.82 | 11.81 | 32.904 D | 24.997 | 296.1 | 0.121 | 6.33 D | 102.8 | 4.5 | 0.58 | 3.7 | 0.21 | 0.88 | 0.28 | 40 | 207 |
| 50 ISL | 11.19 D | 11.18 | 32.955 D | 25.151 | 281.5 | 0.150 | 6.09 D | 97.6 | 8.2 | 0.71 | 7.1 | 0.30 | 0.50 | 0.23 | 50 | |
| 60 | 10.69 | 10.68 | 33.066 D | 25.326 | 265.1 | 0.177 | 5.74 D | 91.1 | 12.0 | 0.80 | 11.0 | 0.34 | 0.12 | 0.16 | 60 | 206 |
| 75 ISL | 10.70 D | 10.69 | 33.346 D | 25.543 | 244.9 | 0.216 | 4.88 D | 77.6 | 12.8 | 0.81 | 14.0 | 0.15 | 0.07 | 0.13 | 75 | |
| 80 | 10.63 | 10.62 | 33.379 D | 25.581 | 241.3 | 0.228 | 4.60 D | 73.0 | 13.0 | 0.81 | 14.8 | 0.08 | 0.05 | 0.12 | 80 | 205 |
| 100 | 9.58 | 9.57 | 33.484 | 25.840 | 216.9 | 0.274 | 4.13 | 64.1 | 19.4 | 1.12 | 18.1 | 0.10 | 0.04 | 0.08 | 101 | 204 |
| 125 ISL | 9.06 D | 9.05 | 33.728 D | 26.115 | 191.3 | 0.325 | 3.44 D | 52.9 | 25.6 | 1.42 | 22.4 | | 0.03 | 0.09 | 126 | |
| 150 | 8.86 | 8.84 | 33.915 D | 26.293 | 174.8 | 0.370 | 2.67 D | 40.9 | 30.4 | 1.65 | 26.1 | | 0.03 | 0.11 | 151 | 203 |
| 199 | 8.31 | 8.29 | 34.059 | 26.492 | 156.7 | 0.452 | 1.94 | 29.4 | 37.9 | 1.95 | 30.4 | | 0.01 | 0.05 | 200 | 202 |
| 200 ISL | 8.29 D | 8.27 | 34.069 D | 26.503 | 155.7 | 0.453 | 1.89 D | 28.6 | 38.0 | 1.95 | 30.4 | | 0.01 | 0.05 | 201 | |
| 250 CSL | 7.73 | 7.71 | 34.086 | 26.599 | 147.2 | 0.529 | 1.68 | 25.1 | | | | | | | 252 | 200 |
| 300 CSL | 7.03 | 7.00 | 34.068 | 26.685 | 139.5 | 0.600 | 1.63 | 24.0 | | | | | | | 302 | 200 |
| 400 CSL | 6.18 | 6.14 | 34.107 | 26.829 | 126.7 | 0.734 | 1.02 | 14.7 | | | | | | | 403 | 200 |
| 500 CSL | 5.61 | 5.57 | 34.201 | 26.975 | 113.7 | 0.854 | 0.50 | 7.1 | | | | | | | 504 | 200 |
| 600 CSL | 5.28 | 5.23 | 34.292 | 27.087 | 104.0 | 0.963 | 0.27 | 3.8 | | | | | | | 604 | 200 |
| 700 CSL | 4.81 | 4.75 | 34.343 | 27.182 | 95.5 | 1.063 | 0.22 | 3.1 | | | | | | | 705 | 200 |
| 800 CSL | 4.38 | 4.32 | 34.378 | 27.258 | 88.7 | 1.155 | 0.24 | 3.3 | | | | | | | 806 | 200 |
| 900 CSL | 4.12 | 4.05 | 34.435 | 27.332 | 82.3 | 1.240 | 0.36 | 4.9 | | | | | | | 908 | 200 |
| 996 | 3.85 | 3.78 | 34.457 D | 27.377 | 78.3 | 1.317 | 0.44 D | 6.0 | 118.4 | 2.97 | 43.6 | | 0.00 | 0.02 | 1005 | 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 O2;

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 STATION 66.7 80.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 35 47.3 N | 124 11.4 W | 29/04/07 | 0230 | UTC | 3946 m | 350 16 kn | 330 06 09 | 2 | 1017.0 mb | 13.5 C | 11.8 C | | 8/8 | ST |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.32 | 12.32 | 32.874 | 24.878 | 306.3 | 0.000 | 6.54 | 107.4 | 3.1 | | 2.2 | 0.17 | 0.90 | 0.27 | 0 | |
| 2 A | 12.32 | 12.32 | 32.874 | 24.878 | 306.4 | 0.006 | 6.54 | 107.4 | 3.1 | | 2.2 | 0.17 | 0.90 | 0.27 | 2 | 212 |
| 6 | 12.33 | 12.33 | 32.879 D | 24.881 | 306.3 | 0.018 | 6.53 D | 107.2 | 3.1 | 0.45 | 2.3 | 0.17 | 0.97 | 0.27 | 6 | 211 |
| 10 ISL | 12.35 D | 12.35 | 32.894 D | 24.888 | 305.6 | 0.031 | 6.54 D | 107.4 | 3.1 | 0.53 | 2.4 | 0.16 | 0.88 | 0.28 | 10 | |
| 11 | 12.37 | 12.37 | 32.995 D | 24.963 | 298.6 | 0.034 | 6.51 D | 107.1 | 3.1 | | 2.5 | 0.16 | 0.85 | 0.28 | 11 | 210 |
| 20 ISL | 12.32 D | 12.32 | 33.044 D | 25.011 | 294.3 | 0.060 | 6.46 D | 106.2 | 4.3 | 0.72 | 4.0 | 0.15 | 0.71 | 0.25 | 20 | |
| 21 | 12.28 | 12.28 | 33.050 D | 25.023 | 293.1 | 0.063 | 6.41 D | 105.3 | 4.5 | | 4.2 | 0.15 | 0.70 | 0.25 | 21 | 209 |
| 30 | 11.86 | 11.86 | 33.070 D | 25.118 | 284.3 | 0.089 | 6.32 D | 102.9 | 7.0 | 0.92 | 5.9 | 0.21 | 0.49 | 0.24 | 30 | 208 |
| 40 | 11.39 | 11.39 | 33.147 D | 25.264 | 270.6 | 0.117 | 6.08 D | 98.0 | 9.2 | 1.00 | 7.8 | 0.21 | 0.40 | 0.25 | 40 | 207 |
| 50 ISL | 11.00 D | 10.99 | 33.195 D | 25.372 | 260.6 | 0.144 | 5.89 D | 94.2 | 9.3 | 1.08 | 8.4 | 0.23 | 0.25 | 0.20 | 50 | |
| 60 | 10.73 | 10.72 | 33.239 D | 25.454 | 253.0 | 0.169 | 5.61 D | 89.2 | 9.7 | 1.14 | 9.3 | 0.25 | 0.12 | 0.14 | 60 | 206 |
| 75 ISL | 10.30 D | 10.29 | 33.331 D | 25.600 | 239.3 | 0.206 | 5.11 D | 80.5 | 15.2 | 1.15 | 14.7 | 0.25 | 0.07 | 0.11 | 75 | |
| 80 | 10.11 | 10.10 | 33.381 D | 25.671 | 232.6 | 0.218 | 4.78 D | 75.0 | 17.3 | 1.15 | 16.7 | 0.25 | 0.06 | 0.11 | 80 | 205 |
| 100 | 9.55 | 9.54 | 33.542 | 25.890 | 212.2 | 0.262 | 4.30 | 66.7 | 21.2 | 1.33 | 20.4 | 0.17 | 0.05 | 0.11 | 101 | 204 |
| 125 ISL | 8.85 D | 8.84 | 33.746 D | 26.162 | 186.7 | 0.312 | 3.38 D | 51.7 | 24.7 | 1.36 | 22.6 | | 0.03 | 0.09 | 126 | |
| 150 | 8.54 | 8.52 | 33.913 D | 26.341 | 170.1 | 0.357 | 3.07 D | 46.7 | 28.4 | 1.38 | 24.1 | | 0.01 | 0.07 | 151 | 203 |
| 200 | 8.39 | 8.37 | 34.083 | 26.499 | 156.2 | 0.438 | 1.75 | 26.6 | 40.8 | 1.87 | 30.7 | | 0.02 | 0.09 | 201 | 202 |
| 250 CSL | 7.66 | 7.64 | 34.063 | 26.591 | 147.9 | 0.514 | 1.82 | 27.1 | | | | | | | 252 | 200 |
| 300 CSL | 6.93 | 6.90 | 34.097 | 26.721 | 136.0 | 0.585 | 1.33 | 19.5 | | | | | | | 302 | 200 |
| 400 CSL | 6.19 | 6.15 | 34.169 | 26.876 | 122.3 | 0.715 | 0.73 | 10.5 | | | | | | | 403 | 200 |
| 500 CSL | 5.55 | 5.51 | 34.207 | 26.987 | 112.5 | 0.832 | 0.49 | 7.0 | | | | | | | 504 | 200 |
| 600 CSL | 5.13 | 5.08 | 34.289 | 27.102 | 102.4 | 0.939 | 0.27 | 3.8 | | | | | | | 604 | 200 |
| 700 CSL | 4.55 | 4.50 | 34.319 | 27.192 | 94.2 | 1.038 | | | | | | | | | 705 | 200 |
| 800 CSL | 4.36 | 4.30 | 34.400 | 27.278 | 86.8 | 1.128 | 0.28 | 3.9 | | | | | | | 806 | 200 |
| 900 CSL | 4.06 | 3.99 | 34.437 | 27.339 | 81.4 | 1.212 | 0.37 | 5.1 | | | | | | | 908 | 200 |
| 1000 CSL | 3.75 | 3.68 | 34.468 | 27.396 | 76.3 | 1.291 | 0.48 | 6.5 | | | | | | | 1009 | 200 |
| 1010 | 3.73 | 3.65 | 34.472 D | 27.401 | 75.9 | 1.299 | 0.50 D | 6.8 | 124.3 | 3.02 | 43.7 | | 0.00 | 0.01 | 1019 | 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 O2;

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 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 37.0 N | 124 32.4 W | 29/04/07 | 0910 | UTC | 4196 m | 350 12 kn | | | 1018.2 mb | 12.9 C | 11.2 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.27 | 12.27 | 32.953 | 24.949 | 299.6 | 0.000 | 6.49 | 106.5 | 4.4 | | 3.1 | 0.14 | 0.76 | 0.24 | 0 | |
| 2 A | 12.27 | 12.27 | 32.953 | 24.949 | 299.7 | 0.006 | 6.49 | 106.5 | 4.4 | | 3.1 | 0.14 | 0.76 | 0.24 | 2 | 212 |
| 5 | 12.27 | 12.27 | 32.954 D | 24.950 | 299.6 | 0.015 | 6.48 D | 106.3 | 4.4 | 0.24 | 3.1 | 0.16 | 0.76 | 0.26 | 5 | 211 |
| 10 | 12.27 | 12.27 | 32.954 D | 24.950 | 299.8 | 0.030 | 6.47 D | 106.2 | 4.1 | 0.33 | 3.0 | 0.15 | 0.84 | 0.24 | 10 | 210 |
| 20 | 12.27 | 12.27 | 32.954 D | 24.951 | 300.0 | 0.060 | 6.46 D | 106.0 | 3.6 | 0.28 | 3.0 | 0.15 | 0.71 | 0.22 | 20 | 209 |
| 30 | 12.27 | 12.27 | 32.953 D | 24.950 | 300.3 | 0.090 | 6.45 D | 105.8 | 4.0 | 0.25 | 3.0 | 0.14 | 0.69 | 0.25 | 30 | 208 |
| 40 | 12.19 | 12.18 | 32.966 D | 24.975 | 298.1 | 0.120 | 6.38 D | 104.5 | 3.5 | 0.42 | 3.0 | 0.15 | 0.63 | 0.23 | 40 | 207 |
| 50 ISL | 11.82 D | 11.81 | 33.005 D | 25.075 | 288.8 | 0.149 | 6.25 D | 101.6 | 5.6 | 0.60 | 4.7 | 0.19 | 0.44 | 0.18 | 50 | |
| 60 | 11.26 | 11.25 | 33.008 D | 25.180 | 279.0 | 0.178 | 6.05 D | 97.2 | 8.1 | 0.75 | 6.8 | 0.24 | 0.25 | 0.14 | 60 | 206 |
| 75 ISL | 10.91 D | 10.90 | 33.216 D | 25.404 | 258.0 | 0.218 | 5.88 D | 93.8 | 8.9 | 0.83 | 8.3 | 0.25 | 0.18 | 0.14 | 75 | |
| 80 | 10.86 | 10.85 | 33.234 D | 25.427 | 255.9 | 0.231 | 5.77 D | 92.0 | 9.1 | 0.84 | 8.8 | 0.25 | 0.18 | 0.14 | 80 | 205 |
| 99 | 10.70 | 10.69 | 33.418 | 25.599 | 240.0 | 0.278 | 5.71 | 90.8 | 11.8 | 0.92 | 12.4 | 0.26 | 0.08 | 0.09 | 100 | 204 |
| 100 ISL | 10.68 D | 10.67 | 33.421 D | 25.605 | 239.5 | 0.280 | 5.59 D | 88.9 | 12.1 | 0.93 | 12.7 | | 0.08 | 0.09 | 101 | |
| 125 ISL | 9.52 D | 9.51 | 33.520 D | 25.879 | 213.8 | 0.337 | 4.19 D | 65.0 | 19.1 | 1.22 | 18.9 | | 0.05 | 0.11 | 126 | |
| 149 | 9.14 | 9.12 | 33.748 D | 26.118 | 191.5 | 0.386 | 3.31 D | 51.0 | 26.3 | 1.52 | 24.4 | | 0.03 | 0.14 | 150 | 203 |
| 150 ISL | 8.95 D | 8.93 | 33.762 D | 26.159 | 187.5 | 0.387 | 3.31 D | 50.8 | 26.5 | 1.53 | 24.5 | | 0.03 | 0.14 | 151 | |
| 199 | 8.22 | 8.20 | 33.949 | 26.419 | 163.6 | 0.473 | 2.81 | 42.4 | 34.4 | 1.79 | 27.8 | | 0.01 | 0.07 | 200 | 202 |
| 200 ISL | 8.21 D | 8.19 | 33.950 D | 26.421 | 163.4 | 0.475 | 2.73 D | 41.2 | 34.5 | 1.79 | 27.8 | | 0.01 | 0.07 | 201 | |
| 250 CSL | 7.68 | 7.66 | 34.015 | 26.551 | 151.8 | 0.554 | 2.18 | 32.5 | | | | | | | 252 | 200 |
| 300 CSL | 7.36 | 7.33 | 34.086 | 26.653 | 142.8 | 0.628 | 1.56 | 23.1 | | | | | | | 302 | 200 |
| 400 CSL | 6.47 | 6.43 | 34.139 | 26.817 | 128.2 | 0.763 | 0.95 | 13.8 | | | | | | | 403 | 200 |
| 500 CSL | 5.81 | 5.77 | 34.202 | 26.951 | 116.2 | 0.885 | 0.52 | 7.4 | | | | | | | 504 | 200 |
| 600 CSL | 5.13 | 5.08 | 34.256 | 27.076 | 104.8 | 0.996 | 0.32 | 4.5 | | | | | | | 604 | 200 |
| 700 CSL | 4.74 | 4.68 | 34.326 | 27.177 | 95.9 | 1.096 | 0.22 | 3.1 | | | | | | | 705 | 200 |
| 800 CSL | 4.45 | 4.39 | 34.378 | 27.250 | 89.6 | 1.189 | 0.24 | 3.3 | | | | | | | 806 | 200 |
| 900 CSL | 4.09 | 4.02 | 34.421 | 27.323 | 83.0 | 1.275 | 0.32 | 4.4 | | | | | | | 907 | 200 |
| 1000 CSL | 3.79 | 3.72 | 34.461 | 27.386 | 77.3 | 1.355 | 0.45 | 6.1 | | | | | | | 1009 | 200 |
| 1022 | 3.72 | 3.64 | 34.468 D | 27.399 | 76.2 | 1.372 | 0.48 D | 6.5 | 122.7 | 3.06 | 43.2 | | 0.00 | 0.01 | 1031 | 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 O2;

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 STATION 66.7 90.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 35 27.1 N | 124 53.4 W | 29/04/07 | 1453 | UTC | 4390 m | 350 14 kn | 320 05 04 | 2 | 1019.0 mb | 14.0 C | 11.9 C | 14m | 8/8 | SC |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.69 | 12.69 | 32.790 | 24.742 | 319.3 | 0.000 | 6.38 | 105.5 | 2.1 | | 0.2 | 0.06 | 0.54 | 0.17 | 0 | |
| 2 A | 12.69 | 12.69 | 32.790 | 24.742 | 319.4 | 0.006 | 6.38 | 105.5 | 2.1 | | 0.2 | 0.06 | 0.54 | 0.17 | 2 | 212 |
| 5 | 12.69 | 12.69 | 32.791 D | 24.743 | 319.4 | 0.016 | 6.41 D | 106.0 | 2.0 | 0.26 | 0.3 | 0.07 | 0.55 | 0.17 | 5 | 211 |
| 10 | 12.69 | 12.69 | 32.791 D | 24.743 | 319.5 | 0.032 | 6.41 D | 106.0 | 1.8 | | 0.2 | 0.06 | 0.54 | 0.18 | 10 | 210 |
| 20 | 12.69 | 12.69 | 32.789 D | 24.742 | 319.8 | 0.064 | 6.41 D | 106.0 | 2.2 | | 0.2 | 0.05 | 0.53 | 0.18 | 20 | 209 |
| 30 | 12.65 | 12.65 | 32.783 D | 24.745 | 319.8 | 0.096 | 6.41 D | 105.9 | 1.9 | 0.23 | 0.1 | 0.09 | | | 30 | 208 |
| 40 | 12.14 | 12.13 | 32.821 D | 24.872 | 307.9 | 0.127 | 6.35 D | 103.8 | 2.7 | 0.27 | 1.1 | 0.14 | 0.45 | 0.23 | 40 | 207 |
| 50 ISL | 11.23 D | 11.22 | 32.676 D | 24.927 | 302.9 | 0.158 | 6.37 D | 102.0 | 4.3 | 0.31 | 2.5 | 0.22 | 0.33 | 0.21 | 50 | |
| 61 | 11.11 | 11.10 | 32.790 D | 25.037 | 292.6 | 0.191 | 6.11 D | 97.7 | 6.4 | 0.39 | 4.5 | 0.27 | 0.20 | 0.18 | 61 | 206 |
| 75 ISL | 10.84 D | 10.83 | 32.900 D | 25.171 | 280.2 | 0.231 | 5.84 D | 92.9 | 9.2 | 0.59 | 8.2 | 0.19 | 0.10 | 0.13 | 75 | |
| 80 | 10.67 | 10.66 | 32.968 D | 25.253 | 272.4 | 0.244 | 5.60 D | 88.8 | 10.1 | 0.67 | 9.6 | 0.15 | 0.08 | 0.11 | 80 | 205 |
| 99 | 10.55 | 10.54 | 33.328 | 25.555 | 244.2 | 0.294 | 4.69 | 74.3 | 12.2 | 0.89 | 13.6 | 0.05 | 0.03 | 0.06 | 99 | 204 |
| 100 ISL | 10.49 D | 10.48 | 33.340 D | 25.575 | 242.3 | 0.296 | 4.58 D | 72.5 | 12.4 | 0.91 | 13.8 | | 0.03 | 0.06 | 100 | |
| 125 ISL | 9.75 D | 9.74 | 33.629 D | 25.926 | 209.4 | 0.352 | 3.56 D | 55.5 | 18.3 | 1.34 | 19.2 | | 0.02 | 0.06 | 126 | |
| 149 | 9.34 | 9.32 | 33.782 D | 26.113 | 192.0 | 0.401 | 3.01 D | 46.6 | 24.6 | 1.72 | 23.6 | | 0.02 | 0.06 | 150 | 203 |
| 150 ISL | 9.29 D | 9.27 | 33.783 D | 26.122 | 191.2 | 0.403 | 2.99 D | 46.2 | 24.8 | 1.72 | 23.7 | | 0.02 | 0.06 | 151 | |
| 200 | 8.68 | 8.66 | 33.986 | 26.378 | 167.7 | 0.492 | 2.45 | 37.4 | 33.3 | 1.83 | 27.8 | | 0.01 | 0.04 | 201 | 202 |
| 250 CSL | 8.05 | 8.02 | 34.043 | 26.519 | 155.0 | 0.573 | 2.08 | 31.3 | | | | | | | 251 | 200 |
| 300 CSL | 7.48 | 7.45 | 34.098 | 26.646 | 143.6 | 0.648 | 1.49 | 22.1 | | | | | | | 302 | 200 |
| 400 CSL | 6.62 | 6.58 | 34.138 | 26.796 | 130.2 | 0.784 | 0.95 | 13.8 | | | | | | | 403 | 200 |
| 500 CSL | 5.82 | 5.78 | 34.193 | 26.943 | 117.0 | 0.908 | 0.56 | 8.0 | | | | | | | 503 | 200 |
| 600 CSL | 5.21 | 5.16 | 34.254 | 27.065 | 106.0 | 1.020 | 0.32 | 4.5 | | | | | | | 604 | 200 |
| 700 CSL | 4.76 | 4.70 | 34.310 | 27.162 | 97.4 | 1.121 | 0.23 | 3.2 | | | | | | | 705 | 200 |
| 800 CSL | 4.42 | 4.36 | 34.375 | 27.251 | 89.4 | 1.215 | 0.24 | 3.3 | | | | | | | 806 | 200 |
| 900 CSL | 4.09 | 4.02 | 34.419 | 27.322 | 83.1 | 1.301 | 0.31 | 4.3 | | | | | | | 907 | 200 |
| 1000 CSL | 3.82 | 3.74 | 34.447 | 27.372 | 78.7 | 1.382 | 0.39 | 5.3 | | | | | | | 1009 | 200 |
| 1018 | 3.76 | 3.68 | 34.452 D | 27.382 | 77.8 | 1.396 | 0.41 D | 5.6 | 124.0 | 3.12 | 43.5 | | 0.00 | 0.01 | 1027 | 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 O2;

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 STATION 66.7 95.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND | SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 35 16.9 N | 125 15.4 W | 29/04/07 | 1931 | UTC | 4494 m | 340 | 14 kn | 340 03 06 | 0 | 1020.4 mb | 15.1 C | 13.3 C | 15m | 0/8 | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.00 | 13.00 | 32.799 | 24.689 | 324.4 | 0.000 | 6.44 | 107.2 | 2.2 | | 0.3 | 0.05 | 0.51 | 0.13 | 0 | |
| 1 A | 13.00 | 13.00 | 32.799 | 24.689 | 324.4 | 0.003 | 6.44 | 107.2 | 2.2 | | 0.3 | 0.05 | 0.51 | 0.13 | 1 | 212 |
| 6 | 12.95 | 12.95 | 32.798 D | 24.698 | 323.7 | 0.019 | 6.45 D | 107.3 | 1.8 | 0.23 | 0.2 | 0.05 | 0.53 | 0.13 | 6 | 211 |
| 10 | 12.80 | 12.80 | 32.792 D | 24.723 | 321.4 | 0.032 | 6.46 D | 107.1 | 1.8 | 0.29 | 0.1 | 0.06 | 0.56 | 0.15 | 10 | 210 |
| 20 | 12.68 | 12.68 | 32.784 D | 24.740 | 320.0 | 0.064 | 6.47 D | 107.0 | 1.7 | 0.15 | 0.1 | 0.05 | 0.64 | 0.18 | 20 | 209 |
| 30 | 12.63 | 12.63 | 32.779 D | 24.746 | 319.7 | 0.096 | 6.47 D | 106.8 | 1.8 | 0.17 | 0.0 | 0.05 | 0.69 | 0.19 | 30 | 208 |
| 40 | 12.66 | 12.65 | 32.792 D | 24.751 | 319.5 | 0.128 | 6.40 D | 105.8 | 2.2 | 0.15 | 0.2 | 0.06 | 0.65 | 0.12 | 40 | 207 |
| 50 ISL | 12.57 D | 12.56 | 32.906 D | 24.857 | 309.7 | 0.160 | 6.26 D | 103.3 | 2.5 | 0.23 | 0.8 | 0.16 | 0.47 | 0.15 | 50 | |
| 60 | 12.36 | 12.35 | 32.954 D | 24.934 | 302.5 | 0.190 | 6.05 D | 99.4 | 3.1 | 0.35 | 1.9 | 0.25 | 0.27 | 0.19 | 60 | 206 |
| 75 ISL | 11.90 D | 11.89 | 33.082 D | 25.121 | 285.1 | 0.235 | 5.74 D | 93.5 | 5.5 | 0.54 | 5.2 | 0.15 | 0.14 | 0.14 | 75 | |
| 80 | 11.45 | 11.44 | 33.030 D | 25.163 | 281.1 | 0.249 | 5.83 D | 94.0 | 6.4 | | 6.4 | 0.10 | 0.12 | 0.12 | 80 | 205 |
| 100 | 11.07 | 11.06 | 33.254 | 25.406 | 258.5 | 0.303 | 5.47 | 87.6 | 9.4 | 0.90 | 10.3 | 0.05 | 0.04 | 0.07 | 100 | 204 |
| 125 ISL | 10.25 D | 10.24 | 33.489 D | 25.733 | 227.8 | 0.363 | 4.20 D | 66.2 | 16.3 | 1.27 | 16.9 | | 0.02 | 0.06 | 126 | |
| 149 | 9.63 | 9.61 | 33.737 D | 26.031 | 199.9 | 0.415 | 3.07 D | 47.8 | 23.3 | 1.57 | 22.7 | | 0.01 | 0.06 | 150 | 203 |
| 150 ISL | 9.59 D | 9.57 | 33.751 D | 26.048 | 198.3 | 0.417 | 3.04 D | 47.3 | 23.5 | 1.58 | 22.8 | | 0.01 | 0.06 | 151 | |
| 199 | 8.88 | 8.86 | 33.948 | 26.317 | 173.6 | 0.508 | 2.57 | 39.4 | 30.9 | 1.85 | 26.9 | | 0.01 | 0.04 | 200 | 202 |
| 200 ISL | 8.82 D | 8.80 | 33.948 D | 26.326 | 172.6 | 0.510 | 2.61 D | 39.9 | 31.0 | 1.85 | 26.9 | | 0.01 | 0.04 | 201 | |
| 250 CSL | 8.29 | 8.26 | 34.053 | 26.491 | 157.8 | 0.592 | 2.00 | 30.3 | | | | | | | 251 | 200 |
| 300 CSL | 7.82 | 7.79 | 34.086 | 26.587 | 149.3 | 0.669 | 1.68 | 25.2 | | | | | | | 302 | 200 |
| 400 CSL | 6.78 | 6.74 | 34.115 | 26.757 | 134.1 | 0.811 | 1.11 | 16.2 | | | | | | | 403 | 200 |
| 500 CSL | 5.93 | 5.89 | 34.174 | 26.914 | 119.8 | 0.938 | 0.68 | 9.7 | | | | | | | 503 | 200 |
| 600 CSL | 5.29 | 5.24 | 34.227 | 27.035 | 109.0 | 1.052 | 0.38 | 5.4 | | | | | | | 604 | 200 |
| 700 CSL | 4.84 | 4.78 | 34.303 | 27.147 | 98.9 | 1.156 | 0.24 | 3.4 | | | | | | | 705 | 200 |
| 800 CSL | 4.52 | 4.46 | 34.368 | 27.235 | 91.1 | 1.251 | 0.23 | 3.2 | | | | | | | 806 | 200 |
| 900 CSL | 4.18 | 4.11 | 34.415 | 27.309 | 84.5 | 1.339 | 0.30 | 4.1 | | | | | | | 907 | 200 |
| 1000 CSL | 3.84 | 3.76 | 34.443 | 27.367 | 79.3 | 1.421 | 0.39 | 5.3 | | | | | | | 1009 | 200 |
| 1100 CSL | 3.53 | 3.45 | 34.473 | 27.422 | 74.2 | 1.497 | 0.50 | 6.8 | | | | | | | 1110 | 200 |
| 1122 | 3.48 | 3.40 | 34.480 D | 27.433 | 73.2 | 1.514 | | | 129.7 | 3.02 | 42.5 | | 0.00 | 0.01 | 1132 | 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 O2;

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 STATION 66.7 100.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND | SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 35 7.3 N | 125 35.9 W | 29/04/07 | 2307 | UTC | 4608 m | 350 | 18 kn | 360 04 07 | 0 | 1019.9 mb | 15.3 C | 13.7 C | 16m | 0/8 | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.90 | 13.90 | 32.978 | 24.646 | 328.5 | 0.000 | 6.09 | 103.4 | 1.9 | | 0.0 | 0.04 | 0.17 | 0.04 | 0 | |
| 3 A | 13.90 | 13.90 | 32.978 | 24.646 | 328.5 | 0.010 | 6.09 | 103.4 | 1.9 | | 0.0 | 0.04 | 0.17 | 0.04 | 3 | 212 |
| 6 | 13.88 | 13.88 | 32.977 D | 24.650 | 328.3 | 0.020 | 6.16 D | 104.5 | 1.7 | 0.17 | 0.0 | 0.05 | 0.18 | 0.05 | 6 | 211 |
| 10 ISL | 13.86 D | 13.86 | 32.977 D | 24.654 | 328.0 | 0.033 | 6.16 D | 104.5 | 1.6 | 0.19 | 0.1 | 0.06 | 0.17 | 0.05 | 10 | |
| 11 | 13.87 | 13.87 | 32.977 D | 24.652 | 328.2 | 0.036 | 6.16 D | 104.5 | 1.6 | 0.19 | 0.1 | 0.06 | 0.17 | 0.05 | 11 | 210 |
| 20 | 13.65 | 13.65 | 32.977 D | 24.697 | 324.2 | 0.065 | 6.17 D | 104.2 | 1.9 | | 0.3 | 0.08 | 0.17 | 0.05 | 20 | 209 |
| 30 | 13.63 | 13.63 | 32.976 D | 24.701 | 324.1 | 0.098 | 6.17 D | 104.2 | 1.7 | 0.24 | 0.0 | 0.04 | 0.17 | 0.05 | 30 | 208 |
| 40 | 13.63 | 13.62 | 32.977 D | 24.702 | 324.3 | 0.130 | 6.16 D | 104.0 | 1.9 | | 0.0 | 0.04 | 0.19 | 0.06 | 40 | 207 |
| 50 ISL | 13.63 D | 13.62 | 32.981 D | 24.705 | 324.2 | 0.163 | 6.16 D | 104.0 | 2.1 | 0.23 | 0.1 | 0.05 | 0.26 | 0.09 | 50 | |
| 60 | 12.96 | 12.95 | 32.899 D | 24.776 | 317.7 | 0.195 | 6.24 D | 103.8 | 2.3 | 0.22 | 0.2 | 0.07 | 0.32 | 0.13 | 60 | 206 |
| 75 ISL | 12.17 D | 12.16 | 33.002 D | 25.008 | 295.9 | 0.241 | 6.11 D | 100.1 | 3.8 | 0.44 | 2.4 | 0.47 | 0.25 | 0.15 | 75 | |
| 80 | 12.23 | 12.22 | 33.057 D | 25.039 | 293.0 | 0.256 | 6.01 D | 98.6 | 4.3 | 0.53 | 3.2 | 0.58 | 0.21 | 0.15 | 80 | 205 |
| 100 | 11.89 | 11.88 | 33.076 | 25.119 | 286.0 | 0.313 | 5.84 | 95.1 | 5.6 | | 5.4 | 0.18 | 0.11 | 0.09 | 100 | 204 |
| 125 ISL | 10.98 D | 10.96 | 33.248 D | 25.418 | 257.9 | 0.381 | 5.30 D | 84.7 | 10.2 | 1.04 | 11.2 | | 0.04 | 0.07 | 126 | |
| 150 | 10.58 | 10.56 | 33.496 D | 25.682 | 233.3 | 0.443 | 3.97 D | 63.0 | 16.2 | 1.27 | 17.6 | | 0.01 | 0.05 | 151 | 203 |
| 199 | 9.43 | 9.41 | 33.874 | 26.171 | 187.6 | 0.546 | 2.61 | 40.5 | 27.5 | 1.78 | 25.3 | | 0.00 | 0.04 | 200 | 202 |
| 200 ISL | 9.43 D | 9.41 | 33.878 D | 26.174 | 187.3 | 0.548 | 2.58 D | 40.0 | 27.5 | 1.78 | 25.3 | | 0.00 | 0.04 | 201 | |
| 250 CSL | 8.59 | 8.56 | 34.019 | 26.419 | 164.8 | 0.636 | 2.34 | 35.6 | | | | | | | 251 | 200 |
| 300 CSL | 8.03 | 8.00 | 34.088 | 26.558 | 152.2 | 0.715 | 1.77 | 26.6 | | | | | | | 302 | 200 |
| 400 CSL | 7.45 | 7.41 | 34.211 | 26.740 | 136.3 | 0.859 | 0.87 | 12.9 | | | | | | | 403 | 200 |
| 500 CSL | 6.39 | 6.34 | 34.212 | 26.886 | 123.0 | 0.989 | 0.61 | 8.8 | | | | | | | 503 | 200 |
| 600 CSL | 5.23 | 5.18 | 34.191 | 27.013 | 110.9 | 1.106 | 0.48 | 6.8 | | | | | | | 604 | 200 |
| 700 CSL | 4.80 | 4.74 | 34.272 | 27.127 | 100.7 | 1.212 | 0.27 | 3.8 | | | | | | | 705 | 200 |
| 800 CSL | 4.41 | 4.35 | 34.329 | 27.216 | 92.7 | 1.308 | 0.22 | 3.0 | | | | | | | 806 | 200 |
| 900 CSL | 4.05 | 3.98 | 34.386 | 27.300 | 85.1 | 1.397 | 0.26 | 3.6 | | | | | | | 907 | 200 |
| 1000 CSL | 3.88 | 3.80 | 34.452 | 27.370 | 79.1 | 1.479 | 0.44 | 6.0 | | | | | | | 1008 | 200 |
| 1025 | 3.80 | 3.72 | 34.456 D | 27.382 | 78.0 | 1.499 | 0.45 D | 6.1 | 27.9 | 2.20 | 25.7 | | 0.00 | 0.01 | 1034 | 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 O2;

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 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 50.6 W | 27/04/07 | 1950 | UTC | 202 m | 280 | 17 kn | 270 02 08 | 1 | 1014.8 mb | 14.0 C | 13.1 C | 4m | 3/8 | CS |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 11.94 | 11.94 | 33.916 | 25.759 | 222.6 | 0.000 | 7.29 | 119.5 | 16.4 | | 7.1 | | 5.76 | 1.02 | 0 | |
| 2 A | 11.94 | 11.94 | 33.916 | 25.759 | 222.6 | 0.004 | 7.29 | 119.5 | 16.4 | | 7.1 | | 5.76 | 1.02 | 2 | 212 |
| 5 | 11.85 | 11.85 | 33.915 D | 25.775 | 221.2 | 0.011 | 6.89 D | 112.7 | 16.8 | | 8.0 | | 5.84 | 1.08 | 5 | 211 |
| 10 | 11.19 | 11.19 | 33.915 D | 25.897 | 209.7 | 0.022 | 4.67 D | 75.3 | 20.9 | | 13.3 | | 8.65 | 1.58 | 10 | 210 |
| 20 | 9.82 | 9.82 | 33.968 D | 26.177 | 183.3 | 0.042 | 2.95 D | 46.2 | 32.2 | | 23.6 | | 1.02 | 0.75 | 20 | 209 |
| 30 | 9.21 | 9.21 | 34.017 D | 26.316 | 170.3 | 0.059 | 2.03 D | 31.4 | 35.0 | | 26.3 | | 0.88 | 0.53 | 30 | 208 |
| 41 | 8.86 | 8.86 | 34.050 D | 26.397 | 162.8 | 0.078 | 1.73 D | 26.5 | 38.3 | | 29.0 | | 0.11 | 0.41 | 41 | 207 |
| 50 ISL | 8.76 D | 8.75 | 34.062 D | 26.423 | 160.6 | 0.092 | 1.67 D | 25.6 | 39.4 | | 29.3 | | 0.08 | 0.37 | 50 | |
| 51 | 8.76 | 8.75 | 34.062 D | 26.423 | 160.6 | 0.094 | 1.67 D | 25.6 | 39.5 | | 29.3 | | 0.08 | 0.37 | 51 | 206 |
| 60 | 8.60 | 8.59 | 34.085 D | 26.466 | 156.7 | 0.108 | 1.57 D | 23.9 | 40.8 | | 30.2 | | 0.06 | 0.25 | 60 | 205 |
| 75 ISL | 8.47 D | 8.46 | 34.102 D | 26.499 | 153.7 | 0.131 | 1.47 D | 22.4 | 42.4 | | 30.7 | | 0.04 | 0.20 | 75 | |
| 80 | 8.45 | 8.44 | 34.103 D | 26.503 | 153.5 | 0.139 | 1.47 D | 22.3 | 42.8 | | 30.8 | | 0.03 | 0.18 | 80 | 204 |
| 100 | 8.35 | 8.34 | 34.112 | 26.526 | 151.7 | 0.169 | 1.42 | 21.5 | 43.9 | | 31.3 | | 0.03 | 0.16 | 101 | 203 |
| 125 ISL | 8.27 D | 8.26 | 34.113 D | 26.539 | 150.9 | 0.207 | 1.37 D | 20.7 | 46.2 | | 31.8 | | 0.03 | 0.17 | 126 | |
| 150 ISL | 8.09 D | 8.07 | 34.129 D | 26.579 | 147.5 | 0.245 | 1.30 D | 19.6 | 49.1 | | 32.2 | | 0.04 | 0.18 | 151 | |
| 151 | 8.09 | 8.07 | 34.129 D | 26.579 | 147.5 | 0.246 | 1.30 D | 19.6 | 49.2 | | 32.2 | | 0.04 | 0.18 | 152 | 202 |
| 190 | 7.76 | 7.74 | 34.151 | 26.645 | 141.8 | 0.302 | 1.20 | 18.0 | 53.9 | | 32.9 | | 0.04 | 0.27 | 191 | 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 O2;

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 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 5.3 N | 120 46.8 W | 24/04/07 | 0102 | UTC | 67 m | 310 | 27 kn | 320 05 04 | 1 | 1020.1 mb | 12.0 C | 10.6 C | | 1/8 | CI |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 10.32 | 10.32 | 33.967 | 26.091 | 191.0 | 0.000 | 4.53 | 71.7 | 27.6 | | 20.9 | | 6.03 | 0.18 | 0 | |
| 3 A | 10.32 | 10.32 | 33.967 | 26.091 | 191.1 | 0.006 | 4.53 | 71.7 | 27.6 | | 20.9 | | 6.03 | 0.18 | 3 | 208 |
| 6 | 10.33 | 10.33 | 33.966 D | 26.089 | 191.4 | 0.011 | 4.59 D | 72.7 | 28.4 | | 21.4 | | 6.36 | 0.51 | 6 | 207 |
| 10 | 10.30 | 10.30 | 33.965 D | 26.093 | 191.1 | 0.019 | 4.49 D | 71.1 | 28.8 | | 21.8 | | 6.71 | 0.17 | 10 | 206 |
| 20 | 10.26 | 10.26 | 33.963 | 26.099 | 190.8 | 0.038 | 4.23 | 66.9 | 28.9 | | 22.2 | | 5.40 | 0.19 | 20 | 205 |
| 30 ISL | 9.74 D | 9.74 | 33.944 D | 26.172 | 184.0 | 0.057 | 2.98 D | 46.6 | 29.1 | | 24.5 | | 1.39 | 0.28 | 30 | |
| 31 | 9.74 | 9.74 | 33.941 D | 26.170 | 184.2 | 0.059 | 3.00 D | 46.9 | 29.1 | | 24.7 | | 1.03 | 0.29 | 31 | 204 |
| 39 | 9.74 | 9.74 | 33.962 D | 26.186 | 182.9 | 0.073 | 2.93 D | 45.8 | 29.8 | | 25.2 | | 0.77 | 0.35 | 39 | 203 |
| 50 | 9.57 | 9.56 | 34.013 D | 26.254 | 176.6 | 0.093 | 2.35 D | 36.6 | 32.3 | | 26.3 | | 0.51 | 0.23 | 50 | 202 |
| 62 | 9.54 | 9.53 | 34.032 | 26.274 | 175.0 | 0.114 | 2.16 | 33.6 | 34.9 | | 27.1 | | 0.65 | 0.38 | 62 | 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 O2;

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 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 1.3 N | 120 54.7 W | 24/04/07 | 0311 | UTC | 222 m | 320 | 22 kn | | | 1020.8 mb | 12.0 C | 10.5 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 11.47 | 11.47 | 33.707 | 25.684 | 229.7 | 0.000 | 5.58 | 90.4 | 16.4 | | 15.9 | | 1.05 | 0.28 | 0 | |
| 2 A | 11.47 | 11.47 | 33.707 | 25.684 | 229.8 | 0.005 | 5.58 | 90.4 | 16.4 | | 15.9 | | 1.05 | 0.28 | 2 | 212 |
| 10 ISL | 11.49 D | 11.49 | 33.703 D | 25.677 | 230.6 | 0.023 | 5.60 D | 90.8 | 16.1 | | 15.7 | | 0.97 | 0.27 | 10 | |
| 11 | 11.49 | 11.49 | 33.703 D | 25.677 | 230.6 | 0.025 | 5.59 D | 90.6 | 16.1 | | 15.7 | | 0.96 | 0.27 | 11 | 211 |
| 20 ISL | 11.32 D | 11.32 | 33.713 D | 25.717 | 227.1 | 0.046 | 5.44 D | 87.9 | 16.9 | | 16.4 | | 1.01 | 0.27 | 20 | |
| 21 | 11.33 | 11.33 | 33.716 | 25.717 | 227.1 | 0.048 | 5.46 | 88.2 | 17.0 | | 16.5 | | 1.01 | 0.27 | 21 | 210 |
| 30 | 10.68 | 10.68 | 33.765 D | 25.872 | 212.6 | 0.068 | 4.88 D | 77.8 | 20.8 | | 19.3 | | 0.85 | 0.42 | 30 | 209 |
| 40 | 10.55 | 10.55 | 33.767 D | 25.896 | 210.5 | 0.089 | 4.59 D | 72.9 | 21.3 | | 19.9 | | 0.62 | 0.28 | 40 | 208 |
| 50 ISL | 10.17 D | 10.16 | 33.790 D | 25.980 | 202.7 | 0.110 | 4.00 D | 63.0 | 23.3 | | 21.8 | | 0.58 | 0.33 | 50 | |
| 51 | 10.16 | 10.15 | 33.801 D | 25.990 | 201.8 | 0.112 | 3.99 D | 62.9 | 23.5 | | 22.0 | | 0.58 | 0.34 | 51 | 207 |
| 75 ISL | 9.85 D | 9.84 | 33.840 D | 26.073 | 194.4 | 0.159 | 3.41 D | 53.4 | 25.6 | | 23.8 | | 0.42 | 0.28 | 75 | |
| 77 | 9.79 | 9.78 | 33.842 D | 26.085 | 193.3 | 0.163 | 3.26 D | 51.0 | 25.8 | | 23.9 | | 0.40 | 0.28 | 77 | 206 |
| 100 ISL | 9.35 D | 9.34 | 34.039 D | 26.312 | 172.2 | 0.205 | 1.94 D | 30.1 | 33.1 | | 27.5 | | 0.05 | 0.19 | 101 | |
| 101 | 9.35 | 9.34 | 34.048 | 26.319 | 171.5 | 0.207 | 1.90 | 29.5 | 33.4 | | 27.7 | | 0.04 | 0.19 | 102 | 205 |
| 125 ISL | 9.20 D | 9.19 | 34.104 D | 26.387 | 165.5 | 0.247 | 1.60 D | 24.7 | 35.7 | | 28.8 | | 0.04 | 0.19 | 126 | |
| 128 | 9.24 | 9.23 | 34.108 D | 26.384 | 165.9 | 0.252 | 1.58 D | 24.4 | 35.9 | | 28.8 | | 0.04 | 0.19 | 129 | 204 |
| 147 | 8.87 | 8.85 | 34.138 D | 26.466 | 158.4 | 0.283 | 1.50 D | 23.0 | 39.4 | | 29.8 | | 0.03 | 0.17 | 148 | 203 |
| 150 ISL | 8.72 D | 8.70 | 34.154 D | 26.503 | 154.9 | 0.288 | 1.46 D | 22.3 | 40.1 | | 29.9 | | 0.03 | 0.17 | 151 | |
| 198 | 8.25 | 8.23 | 34.201 | 26.612 | 145.3 | 0.360 | 1.12 | 17.0 | 48.1 | | 31.7 | | 0.03 | 0.19 | 199 | 202 |
| 200 ISL | 8.25 D | 8.23 | 34.201 D | 26.612 | 145.4 | 0.363 | 1.15 D | 17.4 | 48.1 | | 31.8 | | | | 201 | |
| 206 | 8.23 | 8.21 | 34.203 | 26.617 | 145.0 | 0.372 | 1.09 | 16.5 | 48.3 | | 32.1 | | | | 207 | 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 O2;

RV DAVID STARR JORDAN — CALCOFI CRUISE 0704 — 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 11.7 W | 24/04/07 | 0654 UTC | 462 m | 330 26 kn | | | 1022.2 mb | 12.2 C | 11.3 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 11.71 | 11.71 | 33.738 | 25.664 | 231.6 | 0.000 | 5.82 | 94.8 | 15.6 | | 15.0 | | 1.31 | 0.41 | 0 | |
| 3 A | 11.71 | 11.71 | 33.738 | 25.664 | 231.7 | 0.007 | 5.82 | 94.8 | 15.6 | | 15.0 | | 1.31 | 0.41 | 3 | 212 |
| 10 | 11.71 | 11.71 | 33.735 D | 25.662 | 232.1 | 0.023 | 5.83 D | 95.0 | 15.6 | | 15.1 | | 1.40 | 0.59 | 10 | 211 |
| 20 | 11.64 | 11.64 | 33.741 | 25.680 | 230.6 | 0.046 | 5.72 | 93.1 | 15.6 | | 15.2 | | 1.25 | 0.44 | 20 | 210 |
| 30 | 11.53 | 11.53 | 33.741 D | 25.700 | 228.9 | 0.069 | 5.63 D | 91.4 | 15.3 | | 14.9 | | 1.12 | 0.43 | 30 | 209 |
| 40 | 11.43 | 11.43 | 33.747 D | 25.723 | 226.9 | 0.092 | 5.45 D | 88.3 | 15.8 | | 15.4 | | 0.95 | 0.58 | 40 | 208 |
| 50 | 11.21 | 11.20 | 33.753 D | 25.768 | 222.9 | 0.115 | 5.23 D | 84.3 | 16.6 | | 16.5 | | 0.84 | 0.37 | 50 | 207 |
| 75 | 10.78 | 10.77 | 33.769 D | 25.858 | 214.9 | 0.169 | 4.49 D | 71.7 | 19.1 | 1.16 | 18.7 | | 0.45 | 0.38 | 75 | 206 |
| 100 | 10.66 | 10.65 | 33.802 | 25.905 | 211.0 | 0.223 | 4.28 | 68.2 | 20.5 | 1.38 | 19.3 | | 0.33 | 0.32 | 101 | 205 |
| 124 | 9.89 | 9.88 | 33.975 D | 26.173 | 186.0 | 0.270 | 2.25 D | 35.3 | 29.4 | 1.88 | 25.6 | | 0.18 | 0.36 | 125 | 204 |
| 125 ISL | 9.86 D | 9.85 | 33.977 D | 26.179 | 185.4 | 0.272 | 2.23 D | 34.9 | 29.6 | 1.88 | 25.7 | | 0.18 | 0.36 | 126 | |
| 150 | 9.40 | 9.38 | 34.023 D | 26.292 | 175.1 | 0.317 | 2.16 D | 33.5 | 32.7 | 1.99 | 27.0 | | 0.09 | 0.34 | 151 | 203 |
| 199 | 8.22 | 8.20 | 34.048 | 26.497 | 156.3 | 0.398 | 2.11 | 31.9 | 38.7 | 1.99 | 29.8 | | 0.02 | 0.15 | 200 | 202 |
| 200 ISL | 8.15 D | 8.13 | 34.055 D | 26.513 | 154.7 | 0.400 | 2.04 D | 30.8 | 38.8 | 1.99 | 29.8 | | | | 201 | |
| 250 CSL | 7.62 | 7.60 | 34.069 | 26.602 | 146.9 | 0.475 | 1.86 | 27.7 | | | | | | | 252 | 200 |
| 300 CSL | 7.02 | 6.99 | 34.081 | 26.696 | 138.4 | 0.547 | 1.53 | 22.5 | | | | | | | 302 | 200 |
| 400 CSL | 6.39 | 6.35 | 34.155 | 26.840 | 125.9 | 0.679 | 0.92 | 13.3 | | | | | | | 403 | 200 |
| 500 CSL | 5.68 | 5.64 | 34.259 | 27.012 | 110.3 | 0.797 | 0.42 | 6.0 | | | | | | | 504 | 200 |
| 512 | 5.55 | 5.51 | 34.265 | 27.033 | 108.4 | 0.810 | 0.39 | 5.5 | 83.7 | 3.00 | 39.8 | | | | 516 | 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 O2;

RV DAVID STARR JORDAN — CALCOFI CRUISE 0704 — STATION 76.7 60.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 43.6 N | 121 32.6 W | 24/04/07 | 1104 UTC | 913 m | 330 27 kn | | | 1022.1 mb | 12.5 C | 11.2 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.65 | 12.65 | 33.544 | 25.334 | 263.0 | 0.000 | 6.03 | 100.1 | 6.7 | | 6.8 | | 0.86 | 0.34 | 0 | |
| 3 A | 12.65 | 12.65 | 33.544 | 25.334 | 263.0 | 0.008 | 6.03 | 100.1 | 6.7 | | 6.8 | | 0.86 | 0.34 | 3 | 212 |
| 10 | 12.65 | 12.65 | 33.544 D | 25.335 | 263.2 | 0.026 | 6.05 D | 100.4 | 6.7 | 0.43 | 6.8 | | 0.79 | 0.31 | 10 | 211 |
| 20 | 12.65 | 12.65 | 33.547 | 25.337 | 263.2 | 0.053 | 6.03 | 100.1 | 6.7 | 0.49 | 7.0 | | 0.77 | 0.31 | 20 | 210 |
| 30 | 12.65 | 12.65 | 33.545 D | 25.336 | 263.6 | 0.079 | 6.05 D | 100.4 | 6.6 | 0.51 | 6.8 | | 0.82 | 0.35 | 30 | 209 |
| 40 | 12.66 | 12.65 | 33.544 D | 25.333 | 264.1 | 0.105 | 6.04 D | 100.3 | 6.8 | 0.53 | 6.8 | | 0.77 | 0.31 | 40 | 208 |
| 49 | 12.64 | 12.63 | 33.547 D | 25.340 | 263.7 | 0.129 | 5.96 D | 98.9 | 6.8 | 0.58 | 6.9 | | 0.74 | 0.31 | 49 | 207 |
| 50 ISL | 12.62 D | 12.61 | 33.549 D | 25.345 | 263.2 | 0.132 | 5.86 D | 97.2 | 7.1 | 0.60 | 7.3 | | 0.72 | 0.30 | 50 | |
| 74 | 10.77 | 10.76 | 33.617 D | 25.741 | 226.0 | 0.190 | 3.87 D | 61.7 | 17.1 | 1.21 | 18.0 | | 0.14 | 0.15 | 74 | 206 |
| 75 ISL | 10.64 D | 10.63 | 33.622 D | 25.768 | 223.4 | 0.193 | 3.82 D | 60.8 | 17.4 | 1.23 | 18.3 | | 0.14 | 0.15 | 75 | |
| 99 | 9.60 | 9.59 | 33.728 | 26.027 | 199.2 | 0.243 | 3.15 | 49.0 | 23.3 | 1.50 | 22.8 | | 0.03 | 0.10 | 100 | 205 |
| 100 ISL | 9.55 D | 9.54 | 33.769 D | 26.068 | 195.4 | 0.245 | 2.94 D | 45.7 | 23.5 | 1.51 | 22.9 | | 0.03 | 0.10 | 101 | |
| 124 | 9.02 | 9.01 | 33.898 D | 26.255 | 178.0 | 0.290 | 2.80 D | 43.0 | 28.7 | 1.71 | 25.5 | | 0.01 | 0.12 | 125 | 204 |
| 125 ISL | 8.97 D | 8.96 | 33.902 D | 26.266 | 177.0 | 0.292 | 2.79 D | 42.8 | 28.9 | 1.71 | 25.6 | | 0.01 | 0.12 | 126 | |
| 150 | 8.66 | 8.64 | 33.973 D | 26.370 | 167.5 | 0.335 | 2.64 D | 40.3 | 32.4 | 1.76 | 27.3 | | 0.01 | 0.11 | 151 | 203 |
| 198 | 8.15 | 8.13 | 34.046 | 26.506 | 155.4 | 0.412 | 2.17 | 32.7 | 39.1 | 2.07 | 29.7 | | 0.01 | 0.07 | 199 | 202 |
| 200 ISL | 8.13 D | 8.11 | 34.051 D | 26.512 | 154.7 | 0.416 | 2.13 D | 32.1 | 39.4 | 2.08 | 29.8 | | | | 201 | |
| 250 CSL | 7.39 | 7.37 | 34.064 | 26.631 | 144.0 | 0.490 | 1.82 | 27.0 | | | | | | | 252 | 200 |
| 300 CSL | 6.76 | 6.73 | 34.084 | 26.734 | 134.7 | 0.560 | 1.42 | 20.7 | | | | | | | 302 | 200 |
| 400 CSL | 6.01 | 5.98 | 34.158 | 26.891 | 120.8 | 0.688 | 0.77 | 11.1 | | | | | | | 403 | 200 |
| 500 CSL | 5.43 | 5.39 | 34.238 | 27.026 | 108.7 | 0.802 | 0.41 | 5.8 | | | | | | | 504 | 200 |
| 510 | 5.38 | 5.34 | 34.245 | 27.037 | 107.7 | 0.813 | 0.37 | 5.2 | 86.1 | 3.05 | 40.7 | | | | 514 | 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 O2;

RV DAVID STARR JORDAN — CALCOFI CRUISE 0704 — STATION 76.7 70.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 23.4 N | 122 14.4 W | 24/04/07 | 1740 UTC | 4015 m | 330 28 kn | 310 09 05 | 1 | 1025.1 mb | 13.2 C | 12.0 C | 13m | 4/8 SC |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.80 | 12.80 | 33.389 | 25.185 | 277.2 | 0.000 | 6.19 | 103.0 | 4.1 | | 4.4 | 0.19 | 0.56 | 0.22 | 0 | |
| 2 A | 12.80 | 12.80 | 33.389 | 25.185 | 277.2 | 0.006 | 6.19 | 103.0 | 4.1 | | 4.4 | 0.19 | 0.56 | 0.22 | 2 | 212 |
| 10 | 12.79 | 12.79 | 33.390 D | 25.188 | 277.1 | 0.028 | 6.17 D | 102.6 | 3.9 | 0.37 | 4.4 | 0.19 | 0.58 | 0.22 | 10 | 211 |
| 20 | 12.77 | 12.77 | 33.391 | 25.193 | 276.9 | 0.055 | 6.16 | 102.4 | 4.0 | 0.42 | 4.4 | 0.18 | 0.61 | 0.22 | 20 | 210 |
| 30 | 12.78 | 12.78 | 33.399 D | 25.198 | 276.8 | 0.083 | 6.16 D | 102.4 | 3.9 | 0.39 | 4.4 | 0.19 | 0.62 | 0.23 | 30 | 209 |
| 40 | 12.64 | 12.63 | 33.518 D | 25.317 | 265.6 | 0.110 | 5.99 D | 99.4 | 5.5 | 0.52 | 6.2 | 0.19 | 0.75 | 0.34 | 40 | 208 |
| 50 | 12.36 | 12.35 | 33.557 D | 25.402 | 257.8 | 0.136 | 5.86 D | 96.7 | 7.0 | 0.64 | 7.9 | 0.23 | 0.49 | 0.24 | 50 | 207 |
| 75 | 12.10 | 12.09 | 33.585 D | 25.474 | 251.6 | 0.200 | 5.66 D | 92.9 | 9.0 | 0.79 | 10.0 | 0.25 | 0.34 | 0.15 | 75 | 206 |
| 100 | 11.54 | 11.53 | 33.649 | 25.628 | 237.5 | 0.261 | 5.52 | 89.5 | 13.4 | 1.18 | 14.6 | 0.29 | 0.41 | 0.23 | 101 | 205 |
| 125 | 10.33 | 10.32 | 33.684 D | 25.871 | 214.7 | 0.318 | 3.31 D | 52.3 | 20.7 | 1.39 | 21.6 | | 0.04 | 0.11 | 126 | 204 |
| 149 | 9.66 | 9.64 | 33.832 D | 26.100 | 193.4 | 0.367 | 2.70 D | 42.1 | 26.2 | 1.74 | 25.1 | | 0.01 | 0.11 | 150 | 203 |
| 150 ISL | 9.64 D | 9.62 | 33.834 D | 26.105 | 192.9 | 0.369 | 2.70 D | 42.1 | 26.4 | 1.74 | 25.2 | | 0.01 | 0.11 | 151 | |
| 199 | 8.43 | 8.41 | 33.988 | 26.418 | 163.8 | 0.456 | 2.56 | 38.9 | 34.2 | 1.85 | 28.4 | | 0.00 | 0.07 | 200 | 202 |
| 200 ISL | 8.42 D | 8.40 | 33.986 D | 26.418 | 163.8 | 0.458 | 2.48 D | 37.6 | 34.4 | 1.85 | 28.4 | | | | 201 | |
| 250 CSL | 8.01 | 7.98 | 34.062 | 26.540 | 153.0 | 0.537 | 1.87 | 28.1 | | | | | | | 251 | 200 |
| 300 CSL | 7.36 | 7.33 | 34.109 | 26.671 | 141.0 | 0.610 | 1.38 | 20.4 | | | | | | | 302 | 200 |
| 400 CSL | 6.40 | 6.36 | 34.183 | 26.861 | 124.0 | 0.743 | 0.77 | 11.2 | | | | | | | 403 | 200 |
| 500 CSL | 5.69 | 5.65 | 34.245 | 27.000 | 111.5 | 0.861 | 0.44 | 6.3 | | | | | | | 503 | 200 |
| 513 | 5.62 | 5.58 | 34.242 | 27.006 | 111.0 | 0.875 | 0.41 | 5.8 | 81.7 | 3.05 | 40.3 | | | | 517 | 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 O2;

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 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 3.2 N | 122 56.4 W | 25/04/07 | 0139 | UTC | 4227 m | 330 | 26 kn | 340 06 04 | 1 | 1022.9 mb | 14.0 C | 12.0 C | | 2/8 | ST |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.08 | 14.08 | 33.034 | 24.652 | 327.9 | 0.000 | 6.06 | 103.3 | 2.1 | | 0.2 | 0.04 | 0.16 | 0.05 | 0 | |
| 2 A | 14.08 | 14.08 | 33.034 | 24.652 | 327.9 | 0.007 | 6.06 | 103.3 | 2.1 | | 0.2 | 0.04 | 0.16 | 0.05 | 2 | 212 |
| 10 | 14.04 | 14.04 | 33.023 D | 24.652 | 328.1 | 0.033 | 6.10 D | 103.9 | 2.1 | 0.25 | 0.3 | 0.03 | 0.18 | 0.04 | 10 | 211 |
| 20 | 14.01 | 14.01 | 33.026 | 24.661 | 327.6 | 0.066 | 6.08 | 103.5 | 2.0 | 0.23 | 0.3 | 0.04 | 0.18 | 0.04 | 20 | 210 |
| 30 | 14.00 | 14.00 | 33.024 D | 24.662 | 327.8 | 0.098 | 6.10 D | 103.8 | 1.9 | 0.20 | 0.4 | 0.04 | 0.18 | 0.05 | 30 | 209 |
| 40 | 13.95 | 13.94 | 33.031 D | 24.678 | 326.6 | 0.131 | 6.10 D | 103.7 | 1.9 | 0.15 | 0.2 | 0.04 | 0.23 | 0.05 | 40 | 208 |
| 49 | 14.11 | 14.10 | 33.084 D | 24.686 | 326.0 | 0.160 | 6.06 D | 103.4 | 1.7 | 0.16 | 0.3 | 0.05 | 0.20 | 0.09 | 49 | 207 |
| 50 ISL | 13.63 D | 13.62 | 33.065 D | 24.770 | 318.0 | 0.164 | 6.13 D | 103.5 | 1.7 | 0.16 | 0.3 | 0.05 | 0.21 | 0.10 | 50 | |
| 75 ISL | 12.42 D | 12.41 | 32.896 D | 24.878 | 308.2 | 0.242 | 6.19 D | 101.8 | 2.8 | 0.26 | 1.0 | 0.11 | 0.43 | 0.19 | 75 | |
| 76 | 12.42 | 12.41 | 32.898 D | 24.880 | 308.1 | 0.245 | 6.18 D | 101.7 | 2.9 | 0.27 | 1.0 | 0.11 | 0.44 | 0.19 | 76 | 206 |
| 100 | 12.18 | 12.17 | 33.172 | 25.139 | 284.1 | 0.316 | 5.67 | 93.0 | 4.0 | 0.40 | 4.0 | 0.13 | 0.20 | 0.18 | 100 | 205 |
| 125 ISL | 11.02 D | 11.00 | 33.301 D | 25.452 | 254.6 | 0.383 | 5.29 D | 84.7 | 6.7 | 0.63 | 8.0 | | 0.04 | 0.06 | 126 | |
| 126 | 10.98 | 10.96 | 33.297 D | 25.456 | 254.3 | 0.386 | 5.23 D | 83.6 | 6.9 | 0.64 | 8.2 | | 0.04 | 0.05 | 127 | 204 |
| 144 | 10.04 | 10.02 | 33.501 D | 25.778 | 223.9 | 0.429 | 4.40 D | 69.0 | 13.9 | 1.02 | 15.2 | | 0.01 | 0.03 | 145 | 203 |
| 150 ISL | 9.65 D | 9.63 | 33.572 D | 25.898 | 212.5 | 0.442 | 3.96 D | 61.6 | 15.8 | 1.12 | 16.8 | | 0.01 | 0.03 | 151 | |
| 200 | 8.85 | 8.83 | 33.925 | 26.304 | 174.8 | 0.539 | 2.98 | 45.6 | 28.7 | 1.74 | 25.2 | | 0.01 | 0.04 | 201 | 202 |
| 250 CSL | 7.94 | 7.91 | 34.011 | 26.510 | 155.8 | 0.622 | 2.63 | 39.5 | | | | | | | 251 | 200 |
| 300 CSL | 7.23 | 7.20 | 34.000 | 26.604 | 147.3 | 0.697 | 2.55 | 37.6 | | | | | | | 302 | 200 |
| 400 CSL | 6.04 | 6.01 | 34.060 | 26.809 | 128.4 | 0.835 | 1.40 | 20.1 | | | | | | | 403 | 200 |
| 500 CSL | 5.62 | 5.58 | 34.195 | 26.969 | 114.3 | 0.957 | 0.60 | 8.5 | | | | | | | 503 | 200 |
| 516 | 5.57 | 5.53 | 34.199 | 26.978 | 113.6 | 0.975 | 0.50 | 7.1 | 79.5 | 3.05 | 39.6 | | | | 520 | 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 O2;

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 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 | 25/04/07 | 1008 | UTC | 4134 m | 350 | 30 kn | | | 1022.7 mb | 14.0 C | 12.3 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.13 | 14.13 | 33.209 | 24.777 | 316.0 | 0.000 | 6.08 | 103.9 | 2.5 | 0.16 | 0.3 | 0.05 | 0.19 | 0.07 | 0 | |
| 2 A | 14.13 | 14.13 | 33.209 | 24.777 | 316.1 | 0.006 | 6.08 | 103.9 | 2.5 | 0.16 | 0.3 | 0.05 | 0.19 | 0.07 | 2 | 212 |
| 10 | 14.13 | 14.13 | 33.206 D | 24.775 | 316.5 | 0.032 | 6.04 D | 103.2 | 2.3 | 0.16 | 0.1 | 0.05 | 0.19 | 0.06 | 10 | 211 |
| 20 | 14.14 | 14.14 | 33.206 | 24.773 | 316.9 | 0.063 | 6.02 | 102.9 | 2.3 | 0.17 | 0.2 | 0.04 | 0.20 | 0.07 | 20 | 210 |
| 29 | 14.14 | 14.14 | 33.205 D | 24.773 | 317.2 | 0.092 | 6.03 D | 103.0 | 2.3 | 0.21 | 0.4 | 0.07 | 0.19 | 0.07 | 29 | 209 |
| 30 ISL | 14.13 D | 14.13 | 33.205 D | 24.775 | 317.1 | 0.095 | 6.03 D | 103.0 | 2.3 | 0.21 | 0.4 | 0.07 | 0.19 | 0.07 | 30 | |
| 39 | 14.11 | 14.10 | 33.205 D | 24.779 | 316.9 | 0.124 | 6.03 D | 103.0 | 2.3 | 0.23 | 0.2 | 0.06 | 0.21 | 0.08 | 39 | 208 |
| 49 | 14.10 | 14.09 | 33.202 D | 24.779 | 317.2 | 0.155 | 6.02 D | 102.8 | 2.2 | 0.24 | 0.1 | 0.06 | 0.22 | 0.08 | 49 | 207 |
| 50 ISL | 14.08 D | 14.07 | 33.202 D | 24.783 | 316.8 | 0.158 | 6.01 D | 102.5 | 2.2 | 0.24 | 0.1 | 0.06 | 0.22 | 0.08 | 50 | |
| 74 | 13.89 | 13.88 | 33.199 D | 24.821 | 313.9 | 0.234 | 5.96 D | 101.3 | 2.3 | 0.27 | 0.4 | 0.08 | 0.31 | 0.15 | 74 | 206 |
| 75 ISL | 13.88 D | 13.87 | 33.202 D | 24.826 | 313.5 | 0.237 | 5.95 D | 101.1 | 2.4 | 0.27 | 0.5 | | 0.31 | 0.15 | 75 | |
| 99 | 12.69 | 12.68 | 33.258 | 25.108 | 287.1 | 0.309 | 5.82 | 96.5 | 3.9 | | 3.6 | | 0.18 | 0.13 | 99 | 205 |
| 100 ISL | 12.68 D | 12.67 | 33.263 D | 25.113 | 286.6 | 0.312 | 5.81 D | 96.3 | 3.9 | 0.38 | 3.6 | | 0.18 | 0.13 | 100 | |
| 124 | 12.48 | 12.46 | 33.317 D | 25.194 | 279.5 | 0.380 | 5.63 D | 93.0 | 4.7 | 0.49 | 4.9 | | 0.11 | 0.09 | 125 | 204 |
| 125 ISL | 12.42 D | 12.40 | 33.325 D | 25.212 | 277.8 | 0.383 | 5.58 D | 92.0 | 4.9 | 0.50 | 5.1 | | 0.11 | 0.09 | 126 | |
| 149 | 11.17 | 11.15 | 33.453 D | 25.544 | 246.5 | 0.446 | 4.55 D | 73.1 | 10.3 | 0.86 | 12.1 | | 0.03 | 0.05 | 150 | 203 |
| 150 ISL | 10.87 D | 10.85 | 33.465 D | 25.607 | 240.5 | 0.448 | 4.42 D | 70.6 | 10.6 | 0.88 | 12.4 | | 0.03 | 0.05 | 151 | |
| 198 | 9.37 | 9.35 | 33.829 | 26.146 | 190.0 | 0.552 | 3.10 | 48.0 | 25.0 | 1.60 | 23.7 | | 0.00 | 0.04 | 199 | 202 |
| 200 ISL | 9.19 D | 9.17 | 33.855 D | 26.195 | 185.2 | 0.555 | 3.09 D | 47.7 | 25.3 | 1.61 | 23.8 | | | | 201 | |
| 250 CSL | 8.76 | 8.73 | 34.064 | 26.427 | 164.0 | 0.643 | 2.26 | 34.6 | | | | | | | 251 | 200 |
| 300 CSL | 8.17 | 8.14 | 34.108 | 26.553 | 152.8 | 0.722 | 1.80 | 27.2 | | | | | | | 302 | 200 |
| 400 CSL | 6.69 | 6.65 | 34.116 | 26.770 | 132.8 | 0.865 | 1.19 | 17.4 | | | | | | | 402 | 200 |
| 500 CSL | 6.31 | 6.26 | 34.241 | 26.919 | 119.8 | 0.991 | 0.53 | 7.7 | | | | | | | 503 | 200 |
| 512 | 6.24 | 6.19 | 34.252 | 26.937 | 118.2 | 1.005 | 0.47 | 6.8 | 71.6 | 2.95 | 38.4 | | | | 515 | 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 O2;

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 STATION 76.7 100.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND | SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 23.0 N | 124 19.1 W | 25/04/07 | 1631 | UTC | 4584 m | 340 | 23 kn | 320 08 06 | 1 | 1024.9 mb | 14.7 C | 12.4 C | | 7/8 | SC |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.23 | 14.23 | 33.127 | 24.693 | 324.0 | 0.000 | 5.93 | 101.5 | 1.8 | | 0.2 | 0.03 | 0.14 | 0.05 | 0 | |
| 2 A | 14.23 | 14.23 | 33.127 | 24.693 | 324.1 | 0.006 | 5.93 | 101.5 | 1.8 | | 0.2 | 0.03 | 0.14 | 0.05 | 2 | 212 |
| 10 | 14.23 | 14.23 | 33.127 D | 24.693 | 324.3 | 0.032 | 5.99 D | 102.5 | 1.8 | 0.23 | 0.1 | 0.03 | 0.15 | 0.06 | 10 | 211 |
| 20 ISL | 14.23 D | 14.23 | 33.126 D | 24.693 | 324.6 | 0.065 | 5.99 D | 102.5 | 1.9 | 0.28 | 0.2 | 0.06 | 0.15 | 0.05 | 20 | |
| 21 | 14.22 | 14.22 | 33.127 | 24.696 | 324.4 | 0.068 | 5.98 | 102.3 | 1.9 | 0.29 | 0.2 | 0.06 | 0.15 | 0.05 | 21 | 210 |
| 29 | 14.22 | 14.22 | 33.125 D | 24.694 | 324.7 | 0.094 | 5.98 D | 102.3 | 1.7 | 0.22 | 0.1 | 0.03 | 0.17 | 0.05 | 29 | 209 |
| 30 ISL | 14.22 D | 14.22 | 33.126 D | 24.695 | 324.7 | 0.097 | 5.98 D | 102.3 | 1.7 | 0.22 | 0.1 | 0.03 | 0.17 | 0.05 | 30 | |
| 39 | 14.22 | 14.21 | 33.125 D | 24.695 | 325.0 | 0.127 | 5.99 D | 102.5 | 1.6 | 0.21 | 0.1 | 0.03 | 0.15 | 0.06 | 39 | 208 |
| 50 | 14.22 | 14.21 | 33.124 D | 24.694 | 325.3 | 0.162 | 5.97 D | 102.1 | 1.6 | 0.16 | 0.2 | 0.03 | 0.20 | 0.01 | 50 | 207 |
| 75 | 13.47 | 13.46 | 33.072 D | 24.809 | 315.1 | 0.242 | 6.03 D | 101.5 | 1.8 | 0.21 | 0.1 | 0.03 | 0.40 | 0.43 | 75 | 206 |
| 100 | 12.99 | 12.98 | 33.062 | 24.897 | 307.2 | 0.320 | 5.96 | 99.3 | 2.2 | 0.29 | 1.0 | | 0.30 | 0.29 | 100 | 205 |
| 125 | 11.93 | 11.91 | 33.318 D | 25.300 | 269.4 | 0.392 | 5.43 D | 88.6 | 4.2 | 0.41 | 4.4 | | 0.08 | 0.10 | 126 | 204 |
| 150 | 10.37 | 10.35 | 33.399 D | 25.643 | 237.0 | 0.456 | 4.65 D | 73.4 | 11.8 | 0.92 | 13.8 | | 0.01 | 0.03 | 151 | 203 |
| 199 | 9.09 | 9.07 | 33.827 | 26.189 | 185.7 | 0.559 | 3.86 | 59.4 | 22.8 | 1.45 | 21.1 | | 0.00 | 0.02 | 200 | 202 |
| 200 ISL | 9.05 D | 9.03 | 33.841 D | 26.206 | 184.1 | 0.561 | 3.90 D | 60.0 | 23.0 | 1.46 | 21.2 | | | | 201 | |
| 250 CSL | 8.39 | 8.36 | 33.989 | 26.426 | 164.0 | 0.648 | 2.75 | 41.7 | | | | | | | 251 | 200 |
| 300 CSL | 7.38 | 7.35 | 34.008 | 26.589 | 148.8 | 0.726 | 2.39 | 35.4 | | | | | | | 302 | 200 |
| 400 CSL | 6.43 | 6.39 | 34.094 | 26.786 | 131.0 | 0.866 | 1.15 | 16.7 | | | | | | | 402 | 200 |
| 500 CSL | 5.63 | 5.59 | 34.153 | 26.935 | 117.5 | 0.990 | 0.68 | 9.7 | | | | | | | 503 | 200 |
| 512 | 5.55 | 5.51 | 34.163 | 26.952 | 115.9 | 1.004 | 0.63 | 8.9 | 78.2 | 3.04 | 39.7 | | | | 515 | 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 O2;

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 STATION 80.0 51.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 26.7 N | 120 31.3 W | 13/04/07 | 2355 UTC | 76 m | 300 28 kn | 280 03 04 | 1 | 1019.1 mb | 13.5 C | 12.0 C | 8m | 2/8 | CI |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 10.79 | 10.79 | 33.888 | 25.947 | 204.7 | 0.000 | 4.09 | 65.4 | 24.5 | 1.97 | 21.7 | 0.31 | 1.40 | 0.51 | 0 | |
| 2 | 10.79 | 10.79 | 33.888 | 25.948 | 204.7 | 0.004 | 4.09 | 65.4 | 24.5 | 1.97 | 21.7 | 0.31 | 1.40 | 0.51 | 2 | 209 |
| 6 | 10.76 | 10.76 | 33.889 | 25.954 | 204.2 | 0.012 | 4.05 | 64.7 | 24.6 | 1.97 | 21.8 | 0.30 | 1.47 | 0.52 | 6 | 208 |
| 10 ISL | 10.71 D | 10.71 | 33.888 D | 25.962 | 203.5 | 0.020 | 3.92 | 62.6 | 24.7 | 1.97 | 21.9 | 0.28 | 1.48 | 0.60 | 10 | |
| 11 | 10.67 | 10.67 | 33.907 | 25.984 | 201.5 | 0.022 | 3.88 | 61.9 | 24.7 | 1.97 | 22.0 | 0.28 | 1.48 | 0.62 | 11 | 207 |
| 20 ISL | 10.33 D | 10.33 | 33.898 D | 26.036 | 196.7 | 0.040 | 3.24 | 51.3 | 25.5 | 1.99 | 22.9 | 0.21 | 0.76 | 0.47 | 20 | |
| 21 | 10.55 | 10.55 | 33.894 | 25.995 | 200.7 | 0.042 | 3.16 | 50.3 | 25.6 | 1.99 | 23.0 | 0.20 | 0.66 | 0.44 | 21 | 206 |
| 30 ISL | 10.15 D | 10.15 | 33.932 D | 26.094 | 191.5 | 0.060 | 2.64 | 41.6 | 27.6 | 2.07 | 24.5 | 0.14 | 0.25 | 0.43 | 30 | |
| 31 | 10.15 | 10.15 | 33.932 | 26.094 | 191.5 | 0.062 | 2.60 | 41.0 | 27.8 | 2.08 | 24.6 | 0.14 | 0.23 | 0.43 | 31 | 205 |
| 40 | 10.13 | 10.13 | 33.937 | 26.101 | 191.0 | 0.079 | 2.65 | 41.8 | 28.0 | 2.08 | 24.7 | 0.14 | 0.21 | 0.44 | 40 | 204 |
| 50 | 10.05 | 10.04 | 33.952 | 26.127 | 188.8 | 0.098 | 2.57 | 40.4 | 28.6 | 2.11 | 25.1 | 0.13 | 0.20 | 0.37 | 50 | 203 |
| 60 | 9.76 | 9.75 | 34.001 | 26.214 | 180.7 | 0.117 | 2.02 | 31.6 | 31.3 | 2.22 | 26.6 | 0.11 | 0.11 | 0.34 | 60 | 202 |
| 66 | 9.73 | 9.72 | 34.006 | 26.223 | 180.0 | 0.127 | 1.97 | 30.8 | 31.5 | 2.23 | 26.8 | 0.11 | 0.10 | 0.36 | 66 | 201 |

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

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 STATION 80.0 55.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 19.1 N | 120 48.3 W | 14/04/07 | 0349 UTC | 772 m | 330 21 kn | | | 1020.8 mb | 12.2 C | 10.9 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 11.38 | 11.38 | 33.778 | 25.756 | 222.9 | 0.000 | 4.62 | 74.8 | 18.6 | 1.55 | 17.6 | 0.29 | 0.82 | 0.22 | 0 | |
| 3 | 11.38 | 11.38 | 33.778 | 25.756 | 223.0 | 0.007 | 4.62 | 74.8 | 18.6 | 1.55 | 17.6 | 0.29 | 0.82 | 0.22 | 3 | 221 |
| 10 ISL | 11.38 D | 11.38 | 33.778 D | 25.756 | 223.1 | 0.022 | 4.61 | 74.6 | 18.6 | 1.55 | 17.7 | 0.29 | 0.79 | 0.22 | 10 | |
| 11 | 11.38 | 11.38 | 33.778 | 25.756 | 223.1 | 0.025 | 4.61 | 74.6 | 18.6 | 1.55 | 17.7 | 0.29 | 0.79 | 0.22 | 11 | 219 |
| 11 | 11.39 | 11.39 | 33.776 | 25.753 | 223.5 | 0.025 | | | | | | | | | 11 | 220 |
| 20 ISL | 11.38 D | 11.38 | 33.781 D | 25.759 | 223.1 | 0.045 | 4.61 | 74.6 | 18.6 | 1.55 | 17.7 | 0.29 | 0.76 | 0.19 | 20 | |
| 21 | 11.39 | 11.39 | 33.779 | 25.755 | 223.5 | 0.047 | 4.61 | 74.6 | 18.6 | 1.55 | 17.7 | 0.29 | 0.76 | 0.19 | 21 | 218 |
| 30 ISL | 11.36 D | 11.36 | 33.792 D | 25.771 | 222.2 | 0.067 | 4.55 | 73.6 | 19.0 | 1.56 | 17.8 | 0.34 | 0.99 | 0.22 | 30 | |
| 31 | 11.37 | 11.37 | 33.790 | 25.768 | 222.5 | 0.069 | 4.54 | 73.5 | 19.0 | 1.56 | 17.8 | 0.35 | 1.02 | 0.22 | 31 | 217 |
| 40 | 11.34 | 11.34 | 33.791 | 25.774 | 222.1 | 0.089 | 4.50 D | 72.8 | 18.3 | 1.55 | 17.3 | 0.45 | 1.32 | 0.23 | 40 | 216 |
| 50 | 11.34 | 11.33 | 33.794 | 25.777 | 222.1 | 0.111 | 4.48 | 72.4 | 18.2 | 1.54 | 17.2 | 0.48 | 1.73 | 0.28 | 50 | 215 |
| 61 | 11.05 | 11.04 | 33.769 | 25.810 | 219.2 | 0.136 | 4.08 | 65.5 | 18.3 | 1.56 | 18.0 | 0.36 | 1.02 | 0.26 | 61 | 214 |
| 71 | 10.12 | 10.11 | 33.788 | 25.987 | 202.5 | 0.157 | 3.01 | 47.4 | 23.1 | 1.83 | 22.7 | 0.06 | 0.09 | 0.33 | 71 | 213 |
| 75 ISL | 9.91 D | 9.90 | 33.781 D | 26.017 | 199.7 | 0.165 | 2.86 | 44.8 | 23.9 | 1.87 | 23.0 | 0.05 | 0.08 | 0.31 | 75 | |
| 85 | 9.99 | 9.98 | 33.864 | 26.069 | 195.0 | 0.185 | 2.70 | 42.4 | 25.4 | 1.93 | 23.9 | 0.03 | 0.06 | 0.24 | 85 | 212 |
| 99 | 9.75 | 9.74 | 33.982 | 26.201 | 182.7 | 0.211 | 2.22 | 34.7 | 29.4 | 2.10 | 26.0 | 0.02 | 0.04 | 0.19 | 100 | 211 |
| 100 ISL | 9.70 D | 9.69 | 33.993 D | 26.218 | 181.1 | 0.213 | 2.22 | 34.7 | 29.4 | 2.10 | 26.0 | 0.02 | 0.04 | 0.19 | 101 | |
| 120 | 9.20 | 9.19 | 33.964 | 26.277 | 175.8 | 0.248 | 2.57 | 39.7 | 29.6 | 2.04 | 26.2 | 0.02 | 0.02 | 0.14 | 121 | 210 |
| 125 ISL | 9.02 D | 9.01 | 33.949 D | 26.294 | 174.3 | 0.257 | 2.65 | 40.8 | 29.7 | 2.02 | 26.2 | 0.02 | 0.02 | 0.13 | 126 | |
| 140 | 8.81 | 8.80 | 33.955 | 26.332 | 170.9 | 0.283 | 2.80 | 42.9 | 30.1 | 1.99 | 26.5 | 0.02 | 0.01 | 0.11 | 141 | 209 |
| 150 ISL | 8.64 D | 8.62 | 33.975 D | 26.375 | 167.0 | 0.300 | 2.75 | 41.9 | 31.4 | 2.02 | 27.0 | 0.02 | 0.01 | 0.10 | 151 | |
| 170 | 8.46 | 8.44 | 34.030 | 26.446 | 160.6 | 0.333 | 2.50 | 38.0 | 34.8 | 2.12 | 28.3 | 0.02 | 0.01 | 0.09 | 171 | 208 |
| 199 | 8.39 | 8.37 | 34.096 | 26.509 | 155.2 | 0.379 | 2.06 | 31.3 | 39.1 | 2.29 | 29.8 | 0.02 | 0.01 | 0.08 | 200 | 207 |
| 200 ISL | 8.35 D | 8.33 | 34.094 D | 26.513 | 154.8 | 0.380 | 2.06 | 31.2 | 39.2 | 2.29 | 29.8 | 0.02 | | | 201 | |
| 229 | 7.94 | 7.92 | 34.079 | 26.563 | 150.4 | 0.424 | 2.07 | 31.1 | 42.1 | 2.32 | 30.9 | 0.03 | | | 230 | 206 |
| 250 ISL | 7.72 D | 7.70 | 34.087 D | 26.602 | 147.0 | 0.456 | 1.89 | 28.2 | 44.8 | 2.41 | 31.9 | 0.02 | | | 252 | |
| 269 | 7.60 | 7.57 | 34.117 | 26.643 | 143.4 | 0.483 | 1.66 | 24.7 | 47.5 | 2.51 | 32.9 | 0.01 | | | 271 | 205 |
| 300 ISL | 7.29 D | 7.26 | 34.121 D | 26.690 | 139.2 | 0.527 | 1.29 | 19.1 | 52.5 | 2.66 | 34.5 | 0.01 | | | 302 | |
| 318 | 7.23 | 7.20 | 34.173 | 26.740 | 134.8 | 0.552 | 1.09 | 16.1 | 55.3 | 2.74 | 35.3 | 0.01 | | | 320 | 204 |
| 378 | 6.96 | 6.92 | 34.236 | 26.828 | 127.3 | 0.630 | 0.70 | 10.3 | 62.2 | 2.92 | 36.8 | 0.01 | | | 381 | 203 |
| 400 ISL | 6.68 D | 6.64 | 34.250 D | 26.877 | 122.7 | 0.658 | 0.62 | 9.0 | 65.2 | 2.97 | 37.4 | 0.01 | | | 403 | |
| 438 | 6.44 | 6.40 | 34.257 | 26.914 | 119.5 | 0.704 | 0.51 | 7.4 | 70.2 | 3.05 | 38.5 | 0.00 | | | 441 | 202 |
| 500 ISL | 6.11 D | 6.07 | 34.279 D | 26.975 | 114.4 | 0.776 | 0.39 | 5.6 | 76.5 | 3.14 | 39.8 | 0.00 | | | 504 | |
| 514 | 6.00 | 5.95 | 34.285 | 26.994 | 112.7 | 0.792 | 0.36 | 5.2 | 77.9 | 3.16 | 40.1 | 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 0704 STATION 80.0 60.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 8.9 N | 121 9.0 W | 14/04/07 | 0803 UTC | 2175 m | 320 15 kn | | | 1020.2 mb | 12.7 C | 11.0 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.43 | 12.43 | 33.579 | 25.404 | 256.3 | 0.000 | 6.01 | 99.3 | 6.4 | 0.83 | 7.8 | 0.25 | 1.20 | 0.22 | 0 | |
| 3 | 12.43 | 12.43 | 33.579 | 25.404 | 256.4 | 0.008 | 6.01 | 99.3 | 6.4 | 0.83 | 7.8 | 0.25 | 1.20 | 0.22 | 3 | 220 |
| 10 ISL | 12.42 D | 12.42 | 33.578 D | 25.406 | 256.4 | 0.026 | 6.01 | 99.3 | 6.4 | 0.83 | 7.8 | 0.25 | 1.25 | 0.20 | 10 | |
| 11 | 12.43 | 12.43 | 33.579 | 25.404 | 256.6 | 0.028 | 6.01 | 99.3 | 6.4 | 0.83 | 7.8 | 0.25 | 1.26 | 0.20 | 11 | 219 |
| 20 | 12.43 | 12.43 | 33.580 | 25.405 | 256.7 | 0.051 | 6.01 | 99.3 | 6.4 | 0.83 | 7.8 | 0.25 | 1.30 | 0.17 | 20 | 218 |
| 30 | 12.25 | 12.25 | 33.602 | 25.457 | 252.0 | 0.077 | 5.93 | 97.6 | 6.4 | 0.87 | 8.2 | 0.33 | 1.60 | 0.23 | 30 | 217 |
| 40 | 12.15 | 12.14 | 33.610 | 25.483 | 249.9 | 0.102 | 5.83 | 95.8 | 6.9 | 0.91 | 8.9 | 0.32 | 1.46 | 0.23 | 40 | 216 |
| 50 | 11.43 | 11.42 | 33.647 | 25.646 | 234.6 | 0.126 | 5.13 | 83.0 | 10.9 | 1.20 | 12.6 | 0.32 | 0.90 | 0.26 | 50 | 215 |
| 60 | 10.15 | 10.14 | 33.706 | 25.918 | 208.8 | 0.148 | 3.25 | 51.2 | 21.1 | 1.77 | 22.0 | 0.07 | 0.25 | 0.38 | 60 | 214 |
| 70 | 9.94 | 9.93 | 33.720 | 25.964 | 204.6 | 0.169 | 3.12 | 48.9 | 22.4 | 1.82 | 22.9 | 0.04 | 0.17 | 0.37 | 70 | 213 |
| 75 ISL | 9.72 D | 9.71 | 33.748 D | 26.023 | 199.1 | 0.179 | 3.05 | 47.6 | 23.3 | 1.85 | 23.5 | 0.04 | 0.14 | 0.33 | 75 | |
| 85 | 9.46 | 9.45 | 33.793 | 26.101 | 191.9 | 0.199 | 2.94 | 45.6 | 24.9 | 1.91 | 24.5 | 0.03 | 0.09 | 0.26 | 85 | 212 |
| 100 | 9.32 | 9.31 | 33.836 | 26.158 | 186.8 | 0.227 | 2.85 | 44.1 | 26.2 | 1.94 | 25.3 | 0.03 | 0.05 | 0.24 | 101 | 211 |
| 120 | 9.01 | 9.00 | 33.926 | 26.278 | 175.7 | 0.263 | 2.69 | 41.4 | 28.9 | 2.02 | 26.5 | 0.05 | 0.05 | 0.24 | 121 | 210 |
| 125 ISL | 8.95 D | 8.94 | 33.947 D | 26.304 | 173.3 | 0.272 | 2.69 | 41.3 | 29.4 | 2.03 | 26.7 | 0.05 | 0.05 | 0.24 | 126 | |
| 140 | 8.70 | 8.69 | 33.972 | 26.363 | 168.0 | 0.298 | 2.68 | 40.9 | 31.1 | 2.05 | 27.2 | 0.06 | 0.05 | 0.23 | 141 | 209 |
| 150 ISL | 8.56 D | 8.54 | 33.989 D | 26.398 | 164.8 | 0.314 | 2.62 | 39.9 | 32.5 | 2.07 | 27.7 | 0.06 | 0.04 | 0.20 | 151 | |
| 169 | 8.36 | 8.34 | 34.016 | 26.450 | 160.2 | 0.345 | 2.46 | 37.3 | 35.4 | 2.14 | 28.9 | 0.05 | 0.01 | 0.15 | 170 | 208 |
| 199 | 8.03 | 8.01 | 34.052 | 26.528 | 153.2 | 0.392 | 2.15 | 32.3 | 39.8 | 2.29 | 30.7 | 0.03 | 0.01 | 0.12 | 200 | 207 |
| 200 ISL | 7.96 D | 7.94 | 34.068 D | 26.551 | 151.0 | 0.394 | 2.14 | 32.1 | 40.0 | 2.30 | 30.8 | 0.03 | | | 201 | |
| 228 | 7.66 | 7.64 | 34.073 | 26.599 | 146.8 | 0.435 | 1.86 | 27.7 | 45.1 | 2.43 | 32.6 | 0.02 | | | 229 | 206 |
| 250 ISL | 7.40 D | 7.38 | 34.077 D | 26.640 | 143.2 | 0.467 | 1.74 | 25.8 | 48.8 | 2.51 | 33.7 | 0.01 | | | 252 | |
| 269 | 7.11 | 7.08 | 34.071 | 26.676 | 140.0 | 0.494 | 1.65 | 24.3 | 51.8 | 2.57 | 34.5 | 0.01 | | | 271 | 205 |
| 300 ISL | 6.78 D | 6.75 | 34.090 D | 26.736 | 134.5 | 0.537 | 1.39 | 20.3 | 56.4 | 2.69 | 36.0 | 0.01 | | | 302 | |
| 320 | 6.60 | 6.57 | 34.101 | 26.769 | 131.6 | 0.563 | 1.23 | 17.9 | 59.4 | 2.77 | 36.9 | 0.01 | | | 322 | 204 |
| 378 | 6.01 | 5.98 | 34.113 | 26.855 | 123.8 | 0.637 | 0.99 | 14.2 | 68.9 | 2.92 | 39.0 | 0.01 | | | 381 | 203 |
| 400 ISL | 5.82 D | 5.79 | 34.127 D | 26.890 | 120.7 | 0.664 | 0.83 | 11.9 | 72.7 | 2.99 | 39.7 | 0.01 | | | 403 | |
| 438 | 5.63 | 5.59 | 34.182 | 26.957 | 114.6 | 0.709 | 0.57 | 8.1 | 79.1 | 3.10 | 40.8 | 0.00 | | | 441 | 202 |
| 500 ISL | 5.38 D | 5.34 | 34.246 D | 27.038 | 107.5 | 0.778 | 0.37 | 5.2 | 87.3 | 3.21 | 42.0 | 0.00 | | | 504 | |
| 517 | 5.27 | 5.23 | 34.266 | 27.067 | 104.9 | 0.796 | 0.31 | 4.4 | 89.5 | 3.24 | 42.3 | 0.00 | | | 521 | 201 |

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

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 STATION 80.0 70.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 49.1 N | 121 50.2 W | 14/04/07 | 1410 UTC | 3623 m | 310 11 kn | 330 05 05 | 1 | 1020.6 mb | 13.7 C | 12.1 C | 14m | 6/8 | SC |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.96 | 12.96 | 33.296 | 25.082 | 287.0 | 0.000 | 6.08 | 101.4 | 3.2 | 0.49 | 2.1 | 0.17 | 0.63 | 0.20 | 0 | |
| 2 | 12.96 | 12.96 | 33.296 | 25.082 | 287.1 | 0.006 | 6.08 | 101.4 | 3.2 | 0.49 | 2.1 | 0.17 | 0.63 | 0.20 | 2 | 220 |
| 10 | 12.95 | 12.95 | 33.296 | 25.084 | 287.1 | 0.029 | 6.08 | 101.4 | 3.2 | 0.49 | 2.1 | 0.17 | 0.63 | 0.19 | 10 | 219 |
| 20 | 12.95 | 12.95 | 33.297 | 25.085 | 287.2 | 0.057 | 6.08 | 101.4 | 3.2 | 0.49 | 2.1 | 0.17 | 0.60 | 0.19 | 20 | 218 |
| 30 | 12.94 | 12.94 | 33.308 | 25.095 | 286.5 | 0.086 | 6.06 | 101.1 | 3.1 | 0.50 | 2.3 | 0.17 | 0.60 | 0.20 | 30 | 217 |
| 39 | 12.94 | 12.93 | 33.314 | 25.100 | 286.3 | 0.112 | 6.08 | 101.4 | 3.1 | 0.50 | 2.3 | 0.17 | 0.65 | 0.20 | 39 | 216 |
| 50 | 12.88 | 12.87 | 33.331 | 25.126 | 284.1 | 0.143 | 6.05 | 100.8 | 3.2 | 0.53 | 2.6 | 0.18 | 0.54 | 0.20 | 50 | 215 |
| 60 | 12.74 | 12.73 | 33.405 | 25.211 | 276.3 | 0.171 | 6.00 | 99.7 | 3.5 | 0.61 | 3.4 | 0.23 | 0.44 | 0.21 | 60 | 214 |
| 70 | 12.70 | 12.69 | 33.497 | 25.290 | 269.0 | 0.199 | 5.97 | 99.2 | 3.5 | 0.67 | 4.1 | 0.26 | 0.27 | 0.18 | 70 | 213 |
| 75 ISL | 12.60 D | 12.59 | 33.505 D | 25.316 | 266.7 | 0.212 | 5.84 | 96.8 | 4.4 | 0.73 | 5.3 | 0.31 | 0.20 | 0.17 | 75 | |
| 84 | 12.05 | 12.04 | 33.487 | 25.407 | 258.2 | 0.236 | 5.55 | 90.9 | 6.5 | 0.87 | 7.9 | 0.36 | 0.11 | 0.16 | 84 | 212 |
| 99 | 11.38 | 11.37 | 33.439 | 25.494 | 250.1 | 0.274 | 5.13 | 82.8 | 9.8 | 1.07 | 11.5 | 0.07 | 0.07 | 0.09 | 99 | 211 |
| 100 ISL | 11.10 D | 11.09 | 33.434 D | 25.541 | 245.7 | 0.276 | 5.06 | 81.2 | 10.2 | 1.10 | 12.0 | 0.07 | 0.07 | 0.09 | 100 | |
| 119 | 9.91 | 9.90 | 33.602 | 25.878 | 213.8 | 0.320 | 3.71 | 58.1 | 18.6 | 1.60 | 20.3 | 0.02 | 0.01 | 0.06 | 120 | 210 |
| 125 ISL | 9.60 D | 9.59 | 33.676 D | 25.987 | 203.5 | 0.332 | 3.63 | 56.4 | 20.0 | 1.67 | 21.4 | 0.02 | 0.01 | 0.06 | 126 | |
| 140 | 9.40 | 9.38 | 33.766 | 26.091 | 194.0 | 0.362 | 3.44 | 53.3 | 22.5 | 1.74 | 22.7 | 0.02 | 0.01 | 0.06 | 141 | 209 |
| 150 ISL | 9.12 D | 9.10 | 33.873 D | 26.219 | 181.9 | 0.381 | 3.40 | 52.4 | 24.4 | 1.77 | 23.4 | 0.02 | 0.01 | 0.06 | 151 | |
| 169 | 8.72 | 8.70 | 33.944 | 26.338 | 170.9 | 0.414 | 3.34 | 51.0 | 28.0 | 1.82 | 24.6 | 0.02 | 0.00 | 0.05 | 170 | 208 |
| 199 | 8.31 | 8.29 | 33.995 | 26.442 | 161.5 | 0.464 | 2.92 | 44.2 | 33.5 | 2.00 | 27.2 | 0.01 | 0.00 | 0.04 | 200 | 207 |
| 200 ISL | 8.29 D | 8.27 | 33.996 D | 26.445 | 161.1 | 0.466 | 2.91 | 44.0 | 33.7 | 2.01 | 27.3 | 0.01 | | | 201 | |
| 229 | 7.96 | 7.94 | 34.035 | 26.526 | 153.9 | 0.512 | 2.49 | 37.4 | 39.0 | 2.18 | 29.6 | 0.01 | | | 230 | 206 |
| 250 ISL | 7.66 D | 7.64 | 34.046 D | 26.578 | 149.2 | 0.543 | 2.13 | 31.8 | 42.8 | 2.32 | 31.3 | 0.01 | | | 251 | |
| 269 | 7.57 | 7.54 | 34.085 | 26.622 | 145.3 | 0.571 | 1.82 | 27.1 | 46.3 | 2.44 | 32.7 | 0.01 | | | 271 | 205 |
| 300 ISL | 7.14 D | 7.11 | 34.101 D | 26.695 | 138.6 | 0.615 | 1.45 | 21.4 | 52.0 | 2.61 | 34.6 | 0.01 | | | 302 | |
| 318 | 7.03 | 7.00 | 34.124 | 26.729 | 135.7 | 0.640 | 1.29 | 19.0 | 55.1 | 2.69 | 35.5 | 0.01 | | | 320 | 204 |
| 378 | 6.38 | 6.35 | 34.114 | 26.808 | 128.5 | 0.719 | 1.12 | 16.2 | 63.9 | 2.82 | 37.7 | 0.01 | | | 380 | 203 |
| 400 ISL | 6.39 D | 6.35 | 34.161 D | 26.844 | 125.5 | 0.747 | 0.97 | 14.1 | 66.3 | 2.88 | 38.3 | 0.01 | | | 403 | |
| 437 | 6.15 | 6.11 | 34.180 | 26.891 | 121.4 | 0.793 | 0.71 | 10.2 | 70.3 | 2.98 | 39.1 | 0.01 | | | 440 | 202 |
| 500 ISL | 5.56 D | 5.52 | 34.195 D | 26.976 | 113.6 | 0.867 | 0.56 | 8.0 | 80.1 | 3.09 | 40.9 | 0.01 | | | 503 | |
| 508 | 5.50 | 5.46 | 34.194 | 26.983 | 113.0 | 0.876 | 0.54 | 7.7 | 81.4 | 3.10 | 41.1 | 0.01 | | | 512 | 201 |

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

RV DAVID STARR JORDAN — CALCOFI CRUISE 0704 — STATION 80.0 80.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 28.6 N | 122 31.7 W | 14/04/07 | 2145 UTC | 3976 m | 320 15 kn | 320 04 04 | 1 | 1022.5 mb | 16.1 C | 13.2 C | 14m | 4/8 | AC |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.53 | 13.53 | 33.257 | 24.937 | 300.7 | 0.000 | 6.11 | 103.1 | 2.8 | 0.42 | 1.1 | 0.09 | 0.54 | 0.07 | 0 | |
| 2 | 13.53 | 13.53 | 33.257 | 24.937 | 300.8 | 0.006 | 6.11 | 103.1 | 2.8 | 0.42 | 1.1 | 0.09 | 0.54 | 0.07 | 2 | 220 |
| 10 ISL | 13.51 D | 13.51 | 33.257 D | 24.942 | 300.6 | 0.030 | 6.13 | 103.4 | 2.7 | 0.42 | 1.1 | 0.09 | 0.61 | 0.04 | 10 | |
| 11 | 13.49 | 13.49 | 33.257 | 24.946 | 300.2 | 0.033 | 6.13 | 103.4 | 2.7 | 0.42 | 1.1 | 0.09 | 0.63 | 0.04 | 11 | 219 |
| 20 | 13.22 | 13.22 | 33.311 | 25.042 | 291.3 | 0.060 | 6.19 | 103.8 | 2.7 | 0.46 | 1.7 | 0.11 | 0.92 | 0.05 | 20 | 218 |
| 30 | 13.10 | 13.10 | 33.342 | 25.090 | 287.0 | 0.089 | 6.19 | 103.6 | 2.8 | 0.48 | 2.1 | 0.12 | 0.95 | 0.16 | 30 | 217 |
| 40 | 13.07 | 13.06 | 33.404 | 25.144 | 282.1 | 0.117 | 6.17 | 103.2 | 2.9 | 0.52 | 2.7 | 0.15 | 0.85 | 0.24 | 40 | 216 |
| 50 | 12.68 | 12.67 | 33.424 | 25.237 | 273.5 | 0.145 | 6.10 | 101.2 | 2.4 | 0.61 | 3.4 | 0.22 | 0.50 | 0.22 | 50 | 215 |
| 60 | 12.52 | 12.51 | 33.440 | 25.281 | 269.6 | 0.172 | 5.98 | 98.9 | 3.0 | 0.69 | 4.0 | 0.33 | 0.26 | 0.22 | 60 | 214 |
| 70 | 12.58 | 12.57 | 33.493 | 25.310 | 267.1 | 0.199 | 5.92 | 98.1 | 4.0 | 0.70 | 4.1 | 0.40 | 0.26 | 0.17 | 70 | 213 |
| 75 ISL | 12.49 D | 12.48 | 33.490 D | 25.325 | 265.8 | 0.212 | 5.85 | 96.7 | 4.7 | 0.75 | 5.2 | 0.36 | 0.21 | 0.16 | 75 | |
| 85 | 11.85 | 11.84 | 33.439 | 25.407 | 258.1 | 0.238 | 5.53 | 90.2 | 6.9 | 0.90 | 8.5 | 0.22 | 0.10 | 0.13 | 85 | 212 |
| 100 | 10.78 | 10.77 | 33.465 | 25.622 | 237.9 | 0.276 | 4.50 | 71.7 | 12.3 | 1.23 | 14.2 | 0.02 | 0.04 | 0.07 | 100 | 211 |
| 120 | 10.18 | 10.17 | 33.606 | 25.836 | 217.9 | 0.321 | 3.67 | 57.8 | 17.8 | 1.57 | 19.7 | 0.02 | 0.02 | 0.05 | 121 | 210 |
| 125 ISL | 10.08 D | 10.07 | 33.637 D | 25.877 | 214.1 | 0.332 | 3.65 | 57.4 | 18.7 | 1.61 | 20.4 | 0.02 | 0.02 | 0.05 | 126 | |
| 139 | 9.47 | 9.45 | 33.713 | 26.038 | 199.0 | 0.361 | 3.60 | 55.8 | 20.9 | 1.68 | 21.7 | 0.01 | 0.01 | 0.05 | 140 | 209 |
| 150 ISL | 9.23 D | 9.21 | 33.826 D | 26.165 | 187.1 | 0.382 | 3.65 | 56.3 | 22.3 | 1.68 | 22.1 | 0.01 | 0.01 | 0.05 | 151 | |
| 169 | 8.95 | 8.93 | 33.904 | 26.271 | 177.3 | 0.417 | 3.68 | 56.5 | 24.7 | 1.69 | 22.7 | 0.01 | 0.00 | 0.04 | 170 | 208 |
| 199 | 8.51 | 8.49 | 33.979 | 26.399 | 165.7 | 0.468 | 3.21 | 48.8 | 30.2 | 1.89 | 25.6 | 0.01 | 0.00 | 0.04 | 200 | 207 |
| 200 ISL | 8.49 D | 8.47 | 33.987 D | 26.408 | 164.8 | 0.470 | 3.18 | 48.3 | 30.5 | 1.90 | 25.7 | 0.01 | | | 201 | |
| 228 | 8.10 | 8.08 | 34.038 | 26.507 | 155.7 | 0.515 | 2.41 | 36.3 | 37.7 | 2.19 | 29.6 | 0.01 | | | 229 | 206 |
| 250 ISL | 7.90 D | 7.87 | 34.029 D | 26.530 | 153.9 | 0.549 | 2.39 | 35.8 | 40.9 | 2.23 | 30.6 | 0.01 | | | 251 | |
| 270 | 7.53 | 7.50 | 34.025 | 26.581 | 149.2 | 0.579 | 2.37 | 35.2 | 43.3 | 2.27 | 31.1 | 0.01 | | | 272 | 205 |
| 300 ISL | 7.05 D | 7.02 | 34.034 D | 26.655 | 142.3 | 0.623 | 2.13 | 31.3 | 48.3 | 2.39 | 32.8 | 0.01 | | | 302 | |
| 319 | 6.88 | 6.85 | 34.034 | 26.678 | 140.3 | 0.650 | 1.94 | 28.4 | 51.7 | 2.48 | 34.0 | 0.01 | | | 321 | 204 |
| 377 | 6.16 | 6.13 | 34.044 | 26.781 | 130.9 | 0.728 | 1.52 | 21.9 | 62.2 | 2.71 | 37.0 | 0.01 | | | 379 | 203 |
| 400 ISL | 5.86 D | 5.83 | 34.053 D | 26.826 | 126.7 | 0.758 | 1.36 | 19.4 | 66.5 | 2.79 | 38.0 | 0.01 | | | 403 | |
| 437 | 5.62 | 5.58 | 34.082 | 26.879 | 122.0 | 0.804 | 1.10 | 15.6 | 72.9 | 2.91 | 39.4 | 0.01 | | | 440 | 202 |
| 500 ISL | 5.54 D | 5.50 | 34.167 D | 26.956 | 115.4 | 0.879 | 0.70 | 9.9 | 79.3 | 3.06 | 40.8 | 0.01 | | | 503 | |
| 515 | 5.47 | 5.43 | 34.177 | 26.973 | 113.9 | 0.896 | 0.60 | 8.5 | 80.8 | 3.09 | 41.1 | 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 0704 — STATION 80.0 80.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 29.3 N | 122 30.8 W | 14/04/07 | 2017 UTC | 3953 m | 320 15 kn | 320 04 04 | 1 | 1022.5 mb | 16.1 C | 13.2 C | 14m | 4/8 | AC |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.49 | 13.49 | 33.259 | 24.947 | 299.8 | 0.000 | 6.12 | 103.2 | 2.8 | 0.42 | 1.0 | 0.09 | 0.52 | 0.11 | 0 | |
| 2 A | 13.49 | 13.49 | 33.259 | 24.947 | 299.9 | 0.006 | 6.12 | 103.2 | 2.8 | 0.42 | 1.0 | 0.09 | 0.52 | 0.11 | 2 | 207 |
| 8 A | 13.48 | 13.48 | 33.259 | 24.949 | 299.8 | 0.024 | 6.11 | 103.0 | 2.8 | 0.47 | 1.1 | 0.09 | 0.55 | 0.08 | 8 | 206 |
| 10 ISL | 13.45 D | 13.45 | 33.260 D | 24.956 | 299.2 | 0.030 | 6.11 D | 103.0 | 2.8 | 0.46 | 1.1 | 0.09 | 0.58 | 0.08 | 10 | |
| 19 A | 13.40 | 13.40 | 33.263 | 24.969 | 298.3 | 0.057 | 6.13 | 103.2 | 2.6 | 0.43 | 1.0 | 0.09 | 0.70 | 0.06 | 19 | 205 |
| 20 ISL | 13.40 D | 13.40 | 33.260 D | 24.967 | 298.5 | 0.060 | 6.10 D | 102.7 | 2.6 | 0.44 | 1.1 | 0.09 | 0.70 | 0.08 | 20 | |
| 27 A | 13.10 | 13.10 | 33.335 | 25.085 | 287.4 | 0.080 | 6.18 | 103.4 | 2.8 | 0.49 | 2.1 | 0.12 | 0.67 | 0.20 | 27 | 204 |
| 30 ISL | 13.07 D | 13.07 | 33.338 D | 25.093 | 286.7 | 0.089 | 6.19 D | 103.5 | 2.9 | 0.49 | 2.2 | 0.12 | 0.69 | 0.21 | 30 | |
| 34 A | 13.05 | 13.05 | 33.342 | 25.100 | 286.1 | 0.100 | 6.19 | 103.5 | 2.9 | 0.49 | 2.3 | 0.13 | 0.71 | 0.22 | 34 | 203 |
| 50 ISL | 12.77 D | 12.76 | 33.426 D | 25.221 | 275.1 | 0.145 | 6.12 D | 101.8 | 2.7 | 0.57 | 3.1 | 0.19 | 0.48 | 0.20 | 50 | |
| 54 A | 12.71 | 12.70 | 33.425 | 25.232 | 274.1 | 0.156 | 6.09 | 101.1 | 2.7 | 0.60 | 3.3 | 0.21 | 0.39 | 0.19 | 54 | 202 |
| 75 ISL | 12.47 D | 12.46 | 33.435 D | 25.287 | 269.4 | 0.213 | 5.90 D | 97.5 | 6.6 | 0.78 | 6.5 | 0.18 | 0.34 | 0.17 | 75 | |
| 100 ISL | 11.11 D | 11.10 | 33.436 D | 25.541 | 245.7 | 0.278 | 4.80 D | 77.0 | 11.3 | 1.00 | 10.2 | 0.15 | 0.27 | 0.14 | 100 | |
| 125 ISL | 9.80 D | 9.79 | 33.644 D | 25.929 | 209.1 | 0.335 | 3.68 D | 57.5 | 16.0 | 1.22 | 14.0 | 0.12 | 0.21 | 0.12 | 126 | |
| 150 ISL | 9.22 D | 9.20 | 33.832 D | 26.171 | 186.5 | 0.384 | 3.45 D | 53.2 | 20.6 | 1.44 | 17.7 | 0.08 | 0.15 | 0.09 | 151 | |
| 200 ISL | 8.59 D | 8.57 | 33.974 D | 26.382 | 167.2 | 0.472 | 3.27 D | 49.8 | 30.0 | 1.88 | 25.2 | 0.02 | 0.02 | 0.04 | 201 | |
| 205 | 8.54 | 8.52 | 33.984 | 26.398 | 165.8 | 0.481 | 3.08 | 46.9 | 30.9 | 1.92 | 26.0 | 0.01 | 0.01 | 0.04 | 206 | 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; STATION CORRECTED 02;

RV DAVID STARR JORDAN — CALCOFI CRUISE 0704 — STATION 80.0 90.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 8.8 N | 123 13.2 W | 15/04/07 | 0250 UTC | 4232 m | 330 27 kn | 320 06 06 | 1 | 1022.4 mb | 13.5 C | 10.4 C | | 4/8 | SC |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.94 | 13.94 | 33.181 | 24.795 | 314.3 | 0.000 | 6.04 | 102.8 | 2.6 | 0.34 | 0.1 | 0.02 | 0.26 | 0.07 | 0 | |
| 2 | 13.94 | 13.94 | 33.181 | 24.795 | 314.4 | 0.006 | 6.04 | 102.8 | 2.6 | 0.34 | 0.1 | 0.02 | 0.26 | 0.07 | 2 | 222 |
| 10 | 13.95 | 13.95 | 33.180 | 24.792 | 314.8 | 0.031 | 6.04 | 102.8 | 2.5 | 0.33 | 0.1 | 0.02 | 0.28 | 0.06 | 10 | 221 |
| 20 | 13.94 | 13.94 | 33.181 | 24.795 | 314.8 | 0.063 | 6.04 | 102.8 | 2.5 | 0.34 | 0.1 | 0.02 | 0.28 | 0.06 | 20 | 220 |
| 30 | 13.94 | 13.94 | 33.182 | 24.796 | 315.0 | 0.094 | 6.04 | 102.8 | 2.5 | 0.34 | 0.1 | 0.02 | 0.29 | 0.06 | 30 | 219 |
| 40 | 13.63 | 13.62 | 33.180 | 24.859 | 309.3 | 0.126 | 6.07 | 102.6 | 2.6 | 0.36 | 0.3 | 0.05 | 0.39 | 0.12 | 40 | 218 |
| 50 | 13.55 | 13.54 | 33.193 | 24.885 | 307.1 | 0.156 | 6.05 | 102.1 | 2.7 | 0.39 | 0.5 | 0.07 | 0.43 | 0.14 | 50 | 217 |
| 60 | 13.48 | 13.47 | 33.198 | 24.904 | 305.6 | 0.187 | 6.04 | 101.8 | 2.8 | 0.40 | 0.6 | 0.08 | 0.40 | 0.14 | 60 | 216 |
| 71 | 13.46 | 13.45 | 33.200 | 24.909 | 305.4 | 0.221 | 6.03 | 101.6 | 2.7 | 0.41 | 0.6 | 0.08 | 0.40 | 0.16 | 71 | 215 |
| 75 ISL | 13.41 D | 13.40 | 33.202 D | 24.921 | 304.3 | 0.233 | 6.05 | 101.8 | 2.8 | 0.41 | 0.6 | 0.09 | 0.40 | 0.16 | 75 | |
| 85 | 13.31 | 13.30 | 33.208 | 24.946 | 302.2 | 0.263 | 6.08 | 102.1 | 3.0 | 0.43 | 0.9 | 0.10 | 0.41 | 0.14 | 85 | 213 |
| 100 | 12.98 | 12.97 | 33.226 | 25.026 | 295.0 | 0.308 | 5.94 | 99.1 | 3.5 | 0.50 | 1.9 | 0.22 | 0.30 | 0.13 | 100 | 212 |
| 110 | 12.69 | 12.68 | 33.345 | 25.175 | 281.0 | 0.337 | 5.87 | 97.4 | 4.2 | 0.62 | 3.8 | 0.12 | 0.21 | 0.12 | 111 | 211 |
| 119 | 11.86 | 11.84 | 33.303 | 25.301 | 269.1 | 0.362 | 5.33 | 86.9 | | | | | 0.08 | 0.07 | 120 | 210 |
| 125 ISL | 11.22 D | 11.20 | 33.328 D | 25.438 | 256.1 | 0.377 | 5.02 | 80.7 | 8.0 | 0.93 | 9.1 | 0.04 | 0.06 | 0.06 | 126 | |
| 139 | 10.82 | 10.80 | 33.463 | 25.614 | 239.6 | 0.412 | 4.40 | 70.2 | 12.7 | 1.26 | 14.6 | 0.01 | 0.03 | 0.05 | 140 | 209 |
| 150 ISL | 9.85 D | 9.83 | 33.565 D | 25.860 | 216.2 | 0.437 | 3.95 | 61.7 | 16.2 | 1.47 | 17.9 | 0.01 | 0.02 | 0.04 | 151 | |
| 170 | 9.63 | 9.61 | 33.738 | 26.032 | 200.3 | 0.479 | 3.32 | 51.7 | 21.9 | 1.76 | 22.4 | 0.01 | 0.01 | 0.04 | 171 | 208 |
| 200 | 9.14 | 9.12 | 33.924 | 26.257 | 179.3 | 0.536 | 2.96 | 45.6 | 27.2 | 1.92 | 25.0 | 0.00 | 0.00 | 0.04 | 201 | 207 |
| 227 | 8.94 | 8.92 | 34.008 | 26.355 | 170.5 | 0.583 | 2.61 | 40.1 | 30.8 | 2.06 | 26.7 | 0.00 | | | 228 | 206 |
| 250 ISL | 8.43 D | 8.40 | 34.032 D | 26.453 | 161.4 | 0.621 | 2.49 | 37.8 | 34.7 | 2.14 | 28.2 | 0.00 | | | 251 | |
| 268 | 8.14 | 8.11 | 34.045 | 26.507 | 156.5 | 0.650 | 2.40 | 36.2 | 38.0 | 2.21 | 29.4 | 0.00 | | | 270 | 205 |
| 300 ISL | 7.94 D | 7.91 | 34.110 D | 26.589 | 149.3 | 0.699 | 2.01 | 30.2 | 43.4 | 2.38 | 31.5 | 0.00 | | | 302 | |
| 319 | 7.61 | 7.58 | 34.098 | 26.627 | 145.7 | 0.727 | 1.74 | 25.9 | 46.5 | 2.49 | 32.7 | 0.00 | | | 321 | 204 |
| 377 | 7.14 | 7.10 | 34.165 | 26.747 | 135.0 | 0.808 | 1.10 | 16.2 | 55.4 | 2.76 | 35.4 | 0.00 | | | 379 | 203 |
| 400 ISL | 6.93 D | 6.89 | 34.196 D | 26.800 | 130.1 | 0.839 | 0.93 | 13.6 | 58.5 | 2.84 | 36.2 | 0.00 | | | 403 | |
| 438 | 6.68 | 6.64 | 34.213 | 26.848 | 126.0 | 0.887 | 0.72 | 10.5 | 63.9 | 2.96 | 37.5 | 0.00 | | | 441 | 202 |
| 500 ISL | 6.02 D | 5.98 | 34.234 D | 26.951 | 116.5 | 0.962 | 0.53 | 7.6 | 75.3 | 3.08 | 39.9 | 0.00 | | | 503 | |
| 513 | 5.81 | 5.77 | 34.220 | 26.966 | 115.0 | 0.977 | 0.49 | 7.0 | 77.7 | 3.11 | 40.4 | 0.00 | | | 516 | 201 |

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

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 STATION 80.0 100.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 49.0 N | 123 54.2 W | 15/04/07 | 0853 | UTC | 4393 m | 340 36 kn | | | 1023.8 mb | 13.1 C | 9.9 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.07 | 14.07 | 33.204 | 24.786 | 315.2 | 0.000 | 6.01 | 102.5 | 2.3 | 0.33 | 0.0 | 0.00 | 0.28 | 0.05 | 0 | |
| 2 | 14.07 | 14.07 | 33.204 | 24.786 | 315.2 | 0.006 | 6.01 | 102.5 | 2.3 | 0.33 | 0.0 | 0.00 | 0.28 | 0.05 | 2 | 220 |
| 10 ISL | 14.07 D | 14.07 | 33.204 D | 24.786 | 315.4 | 0.032 | 6.01 | 102.5 | 2.2 | 0.33 | 0.0 | 0.00 | 0.27 | 0.06 | 10 | |
| 15 | 14.08 | 14.08 | 33.208 | 24.787 | 315.5 | 0.047 | 6.01 | 102.6 | 2.2 | 0.33 | 0.0 | 0.00 | 0.26 | 0.06 | 15 | 219 |
| 20 ISL | 14.08 D | 14.08 | 33.204 D | 24.784 | 315.9 | 0.063 | 6.01 | 102.6 | 2.2 | 0.33 | 0.0 | 0.00 | 0.26 | 0.06 | 20 | |
| 30 | 14.08 | 14.08 | 33.207 | 24.787 | 315.9 | 0.095 | 6.01 | 102.6 | 2.2 | 0.33 | 0.0 | 0.00 | 0.25 | 0.07 | 30 | 218 |
| 46 | 14.06 | 14.05 | 33.203 | 24.788 | 316.3 | 0.145 | 6.02 | 102.7 | 2.1 | 0.33 | 0.1 | 0.00 | 0.27 | 0.08 | 46 | 217 |
| 50 ISL | 14.02 D | 14.01 | 33.205 D | 24.798 | 315.4 | 0.158 | 6.04 | 102.9 | 2.5 | 0.34 | 0.3 | 0.02 | 0.36 | 0.11 | 50 | |
| 54 | 13.60 | 13.59 | 33.216 | 24.893 | 306.5 | 0.170 | 6.05 | 102.2 | 2.8 | 0.35 | 0.5 | 0.05 | 0.45 | 0.14 | 54 | 216 |
| 65 | 13.30 | 13.29 | 33.310 | 25.026 | 294.0 | 0.203 | 6.06 | 101.8 | 2.9 | 0.41 | 0.9 | 0.09 | 0.46 | 0.18 | 65 | 215 |
| 75 | 13.06 | 13.05 | 33.309 | 25.074 | 289.8 | 0.233 | 5.98 | 100.0 | 3.2 | 0.45 | 1.4 | 0.15 | 0.40 | 0.21 | 75 | 214 |
| 85 | 12.88 | 12.87 | 33.334 | 25.129 | 284.8 | 0.261 | 5.92 | 98.6 | 3.5 | 0.51 | 2.3 | 0.24 | 0.25 | 0.20 | 85 | 213 |
| 93 | 12.89 | 12.88 | 33.375 | 25.159 | 282.1 | 0.284 | 5.92 | 98.6 | 3.4 | 0.52 | 2.5 | 0.25 | 0.23 | 0.13 | 93 | 212 |
| 100 ISL | 12.77 D | 12.76 | 33.389 D | 25.193 | 279.0 | 0.304 | 5.87 | 97.6 | 3.8 | 0.56 | 2.9 | 0.35 | 0.19 | 0.13 | 100 | |
| 110 | 12.62 | 12.61 | 33.435 | 25.259 | 273.1 | 0.331 | 5.74 | 95.1 | 4.3 | 0.65 | 4.3 | 0.42 | 0.12 | 0.12 | 111 | 211 |
| 125 | 11.73 | 11.71 | 33.400 | 25.400 | 259.8 | 0.371 | 5.45 | 88.6 | 7.4 | 0.85 | 8.6 | 0.02 | 0.08 | 0.07 | 126 | 210 |
| 145 | 10.33 | 10.31 | 33.494 | 25.723 | 229.2 | 0.420 | 4.26 | 67.2 | 14.7 | 1.33 | 16.6 | 0.02 | 0.02 | 0.05 | 146 | 209 |
| 150 ISL | 9.95 D | 9.93 | 33.569 D | 25.846 | 217.5 | 0.431 | 4.10 | 64.2 | 16.3 | 1.41 | 18.0 | 0.02 | 0.02 | 0.04 | 151 | |
| 169 | 9.32 | 9.30 | 33.679 | 26.036 | 199.7 | 0.471 | 3.71 | 57.3 | 21.4 | 1.63 | 21.8 | 0.01 | 0.01 | 0.03 | 170 | 208 |
| 199 | 8.78 | 8.76 | 33.856 | 26.260 | 178.8 | 0.528 | 3.24 | 49.5 | 27.4 | 1.86 | 25.2 | 0.01 | 0.00 | 0.03 | 200 | 207 |
| 200 ISL | 8.85 D | 8.83 | 33.895 D | 26.280 | 177.0 | 0.529 | 3.24 | 49.6 | 27.5 | 1.86 | 25.2 | 0.01 | | | 201 | |
| 228 | 8.63 | 8.61 | 33.982 | 26.383 | 167.8 | 0.578 | 3.24 | 49.4 | 30.0 | 1.84 | 25.3 | 0.01 | | | 229 | 206 |
| 250 ISL | 8.42 D | 8.39 | 34.036 D | 26.458 | 161.0 | 0.614 | 2.78 | 42.2 | 34.5 | 2.01 | 27.6 | 0.01 | | | 251 | |
| 269 | 8.11 | 8.08 | 34.048 | 26.514 | 155.8 | 0.644 | 2.31 | 34.8 | 38.9 | 2.20 | 29.9 | 0.01 | | | 271 | 205 |
| 300 ISL | 7.54 D | 7.51 | 34.038 D | 26.590 | 148.9 | 0.691 | 1.99 | 29.6 | 44.2 | 2.36 | 32.1 | 0.01 | | | 302 | |
| 317 | 7.45 | 7.42 | 34.064 | 26.623 | 145.9 | 0.716 | 1.90 | 28.2 | 47.1 | 2.43 | 33.0 | 0.01 | | | 319 | 204 |
| 378 | 6.36 | 6.33 | 34.054 | 26.764 | 132.7 | 0.801 | 1.60 | 23.2 | 59.8 | 2.65 | 36.3 | 0.00 | | | 380 | 203 |
| 400 ISL | 5.93 D | 5.90 | 34.049 D | 26.814 | 127.9 | 0.830 | 1.34 | 19.2 | 63.7 | 2.75 | 37.4 | 0.00 | | | 402 | |
| 439 | 6.01 | 5.97 | 34.139 | 26.876 | 122.7 | 0.879 | 0.87 | 12.5 | 69.9 | 2.92 | 39.2 | 0.00 | | | 442 | 202 |
| 500 ISL | 5.65 D | 5.61 | 34.193 D | 26.964 | 114.8 | 0.951 | 0.57 | 8.1 | 78.7 | 3.07 | 40.8 | 0.00 | | | 503 | |
| 514 | 5.60 | 5.56 | 34.201 | 26.976 | 113.8 | 0.967 | 0.50 | 7.1 | 80.7 | 3.10 | 41.2 | 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 0704 STATION 81.8 46.9

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 16.7 N | 120 1.5 W | 13/04/07 | 1848 | UTC | 574 m | 270 | 260 04 08 | 1 | 1020.1 mb | 16.0 C | 13.3 C | 11m | 2/8 | CC |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.03 | 13.03 | 33.746 | 25.416 | 255.2 | 0.000 | 5.23 | 87.6 | 10.9 | 0.95 | 10.6 | 0.56 | 4.32 | 0.27 | 0 | |
| 2 A,B | 13.03 | 13.03 | 33.746 | 25.416 | 255.2 | 0.005 | 5.23 | 87.6 | 10.9 | 0.95 | 10.6 | 0.56 | 4.32 | 0.27 | 2 | 224 |
| 7 B | 12.09 | 12.09 | 33.748 | 25.600 | 237.8 | 0.017 | 4.77 | 78.4 | 12.7 | 1.13 | 12.1 | 0.56 | 4.82 | 0.46 | 7 | 223 |
| 10 ISL | 11.89 D | 11.89 | 33.749 D | 25.639 | 234.3 | 0.025 | 4.62 | 75.6 | 13.3 | 1.18 | 12.7 | 0.53 | 4.43 | 0.44 | 10 | |
| 15 B | 11.76 | 11.76 | 33.749 D | 25.663 | 232.0 | 0.036 | 4.45 D | 72.6 | | | | | | | 15 | 222 |
| 20 ISL | 11.60 D | 11.60 | 33.751 D | 25.695 | 229.2 | 0.048 | 4.26 | 69.2 | 15.4 | 1.33 | 15.0 | 0.39 | 3.14 | 0.36 | 20 | |
| 22 B | 11.59 | 11.59 | 33.753 | 25.698 | 228.9 | 0.052 | 4.18 | 67.9 | 15.9 | 1.36 | 15.5 | 0.35 | 2.88 | 0.34 | 22 | 221 |
| 28 B | 11.23 | 11.23 | 33.771 | 25.778 | 221.4 | 0.066 | 3.82 | 61.6 | 18.5 | 1.54 | 17.8 | 0.27 | 1.09 | 0.23 | 28 | 220 |
| 30 ISL | 10.60 D | 10.60 | 33.814 D | 25.924 | 207.6 | 0.070 | 3.59 | 57.1 | 19.9 | 1.62 | 19.0 | 0.23 | 0.94 | 0.22 | 30 | |
| 42 B | 9.96 | 9.96 | 33.930 | 26.124 | 188.8 | 0.094 | 2.38 | 37.4 | 27.2 | 2.02 | 24.9 | 0.03 | 0.04 | 0.18 | 42 | 219 |
| 50 ISL | 9.94 D | 9.93 | 33.936 D | 26.133 | 188.2 | 0.109 | 2.37 | 37.2 | 27.4 | 2.04 | 25.0 | 0.03 | 0.03 | 0.17 | 50 | |
| 52 | 9.93 | 9.92 | 33.937 | 26.135 | 188.0 | 0.113 | 2.37 | 37.2 | 27.5 | 2.04 | 25.0 | 0.03 | 0.03 | 0.17 | 52 | 218 |
| 60 | 9.88 | 9.87 | 33.957 | 26.159 | 185.9 | 0.128 | 2.30 | 36.1 | 28.1 | 2.07 | 25.4 | 0.03 | 0.03 | 0.24 | 60 | 217 |
| 70 | 9.80 | 9.79 | 33.987 | 26.196 | 182.6 | 0.146 | 2.24 | 35.1 | 28.8 | 2.10 | 25.7 | 0.03 | 0.06 | 0.14 | 70 | 216 |
| 75 ISL | 9.76 D | 9.75 | 34.010 D | 26.221 | 180.3 | 0.155 | 2.17 | 33.9 | 29.4 | 2.12 | 26.0 | 0.03 | 0.05 | 0.14 | 75 | |
| 85 | 9.71 | 9.70 | 34.029 | 26.244 | 178.3 | 0.173 | 2.04 | 31.9 | 30.5 | 2.17 | 26.6 | 0.02 | 0.02 | 0.13 | 85 | 215 |
| 100 | 9.67 | 9.66 | 34.039 | 26.259 | 177.2 | 0.200 | 2.00 | 31.2 | 31.0 | 2.19 | 26.9 | 0.02 | 0.02 | 0.11 | 101 | 214 |
| 120 | 9.54 | 9.53 | 34.078 | 26.311 | 172.7 | 0.235 | 1.86 | 29.0 | 32.5 | 2.26 | 27.7 | 0.02 | 0.02 | 0.13 | 121 | 213 |
| 125 ISL | 9.50 D | 9.49 | 34.114 D | 26.346 | 169.5 | 0.243 | 1.78 | 27.7 | 33.3 | 2.30 | 28.1 | 0.02 | 0.02 | 0.14 | 126 | |
| 140 | 9.32 | 9.30 | 34.149 | 26.403 | 164.4 | 0.268 | 1.53 | 23.7 | 35.9 | 2.41 | 29.1 | 0.02 | 0.02 | 0.16 | 141 | 212 |
| 150 ISL | 9.26 D | 9.24 | 34.164 D | 26.425 | 162.5 | 0.285 | 1.46 | 22.6 | 36.8 | 2.44 | 29.4 | 0.02 | 0.02 | 0.17 | 151 | |
| 169 | 9.11 | 9.09 | 34.177 | 26.459 | 159.6 | 0.315 | 1.39 | 21.4 | 38.3 | 2.47 | 29.8 | 0.02 | 0.02 | 0.18 | 170 | 211 |
| 200 | 8.74 | 8.72 | 34.196 | 26.533 | 153.0 | 0.364 | 1.14 | 17.4 | 43.2 | 2.61 | 31.2 | 0.01 | 0.01 | 0.13 | 201 | 210 |
| 229 | 8.45 | 8.43 | 34.209 | 26.589 | 148.2 | 0.407 | 1.01 | 15.4 | 46.5 | 2.68 | 32.2 | 0.01 | | | 230 | 209 |
| 250 ISL | 8.37 D | 8.34 | 34.217 D | 26.607 | 146.8 | 0.438 | 0.94 | 14.3 | 48.8 | 2.72 | 32.6 | 0.01 | | | 252 | |
| 268 | 8.19 | 8.16 | 34.221 | 26.638 | 144.2 | 0.465 | 0.88 | 13.3 | 50.7 | 2.75 | 32.9 | 0.01 | | | 270 | 208 |
| 300 ISL | 7.95 D | 7.92 | 34.228 D | 26.680 | 140.7 | 0.510 | 0.78 | 11.7 | 54.3 | 2.82 | 33.5 | 0.01 | | | 302 | |
| 318 | 7.80 | 7.77 | 34.231 | 26.704 | 138.6 | 0.535 | 0.73 D | 10.9 | 56.3 | 2.86 | 33.7 | 0.01 | | | 320 | 207 |
| 377 | 7.49 | 7.45 | 34.240 | 26.757 | 134.4 | 0.616 | 0.56 | 8.3 | 63.0 | 2.97 | 33.9 | 0.01 | | | 380 | 206 |
| 400 ISL | 7.34 D | 7.30 | 34.244 D | 26.781 | 132.3 | 0.646 | 0.48 | 7.1 | 66.7 | 3.02 | 33.7 | 0.01 | | | 403 | |
| 437 | 7.07 | 7.03 | 34.245 | 26.820 | 129.0 | 0.695 | 0.36 | 5.3 | 73.4 | 3.13 | 33.3 | 0.01 | | | 440 | 205 |
| 467 | 6.88 | 6.84 | 34.248 | 26.849 | 126.6 | 0.733 | 0.28 | 4.1 | 79.3 | 3.24 | 32.4 | 0.01 | | | 470 | 204 |
| 500 ISL | 6.74 D | 6.69 | 34.257 D | 26.875 | 124.5 | 0.775 | 0.34 | 5.0 | 79.8 | 3.26 | 33.4 | 0.01 | | | 504 | |
| 512 | 6.58 | 6.53 | 34.261 | 26.900 | 122.1 | 0.789 | 0.36 | 5.2 | 79.9 | 3.27 | 33.8 | 0.01 | | | 516 | 203 |
| 532 | 6.49 | 6.44 | 34.266 | 26.916 | 120.8 | 0.814 | 0.31 | 4.5 | 82.9 | 3.34 | 33.8 | 0.20 | | | 536 | 202 |
| 569 | 6.44 | 6.39 | 34.271 | 26.927 | 120.3 | 0.858 | 0.33 | 4.8 | 81.1 | 3.29 | 35.1 | 0.25 | | | 573 | 201 |

A) SANTA BARBARA BASIN STATION.
B) 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 0704 STATION 83.3 70.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 14.6 N | 121 26.6 W | 11/04/07 | 1825 UTC | 3796 m | 310 23 kn | 330 08 06 | 1 | 1020.2 mb | 14.7 C | 12.9 C | 14m | 4/8 | AC |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.14 | 13.14 | 33.423 D | 25.144 | 281.1 | 0.000 | 6.15 D | 103.1 | | | | | | | 0 | |
| 1 A | 13.14 | 13.14 | 33.423 D | 25.144 | 281.1 | 0.003 | 6.15 D | 103.1 | | | | | | | 1 | 222 |
| 8 A | 13.14 | 13.14 | 33.423 | 25.144 | 281.3 | 0.022 | 6.05 | 101.4 | 3.7 | 0.53 | 2.8 | 0.15 | 0.73 | 0.21 | 8 | 221 |
| 10 ISL | 13.12 D | 13.12 | 33.423 D | 25.148 | 280.9 | 0.028 | 6.06 | 101.5 | 3.6 | 0.53 | 2.8 | 0.15 | 0.74 | 0.22 | 10 | |
| 11 | 13.12 | 13.12 | 33.424 | 25.149 | 280.9 | 0.031 | 6.07 | 101.7 | 3.6 | 0.53 | 2.8 | 0.15 | 0.75 | 0.22 | 11 | 220 |
| 19 A | 13.13 | 13.13 | 33.424 | 25.147 | 281.3 | 0.053 | 6.06 | 101.5 | 3.8 | 0.53 | 2.8 | 0.15 | 0.74 | 0.22 | 19 | 219 |
| 20 ISL | 13.11 D | 13.11 | 33.423 D | 25.151 | 281.0 | 0.056 | 6.06 | 101.5 | 3.8 | 0.53 | 2.8 | 0.15 | 0.75 | 0.22 | 20 | |
| 28 A | 13.09 | 13.09 | 33.424 | 25.156 | 280.7 | 0.079 | 6.06 | 101.5 | 3.7 | 0.53 | 2.8 | 0.15 | 0.80 | 0.24 | 28 | 218 |
| 30 ISL | 13.09 D | 13.09 | 33.422 D | 25.154 | 280.9 | 0.084 | 6.06 | 101.4 | 3.6 | 0.53 | 2.8 | 0.15 | 0.80 | 0.24 | 30 | |
| 34 A | 13.08 | 13.08 | 33.424 | 25.158 | 280.7 | 0.096 | 6.05 | 101.3 | 3.6 | 0.53 | 2.8 | 0.15 | 0.80 | 0.24 | 34 | 217 |
| 45 | 12.68 | 12.67 | 33.443 | 25.251 | 272.0 | 0.126 | 5.81 | 96.4 | 4.5 | 0.67 | 4.5 | 0.27 | 0.50 | 0.22 | 45 | 216 |
| 50 ISL | 12.38 D | 12.37 | 33.528 D | 25.375 | 260.3 | 0.139 | 5.32 | 87.8 | 7.0 | 0.88 | 8.0 | 0.26 | 0.27 | 0.16 | 50 | |
| 54 A | 12.07 | 12.06 | 33.557 | 25.457 | 252.7 | 0.150 | 4.96 | 81.3 | 8.9 | 1.03 | 10.6 | 0.25 | 0.11 | 0.12 | 54 | 215 |
| 63 | 12.06 | 12.05 | 33.615 | 25.504 | 248.4 | 0.172 | 5.06 | 83.0 | 9.9 | 1.08 | 10.6 | 0.47 | 0.12 | 0.12 | 63 | 214 |
| 71 | 11.94 | 11.93 | 33.620 | 25.531 | 246.1 | 0.192 | 4.92 | 80.5 | 10.7 | 1.13 | 11.5 | 0.46 | 0.10 | 0.14 | 71 | 213 |
| 75 ISL | 11.91 D | 11.90 | 33.616 D | 25.533 | 245.9 | 0.202 | 4.78 | 78.1 | 11.4 | 1.18 | 12.4 | 0.39 | 0.09 | 0.14 | 75 | |
| 86 | 11.37 | 11.36 | 33.667 | 25.673 | 232.8 | 0.228 | 4.15 | 67.1 | 14.6 | 1.40 | 16.0 | 0.17 | 0.06 | 0.15 | 86 | 212 |
| 100 | 10.72 | 10.71 | 33.793 | 25.888 | 212.7 | 0.259 | 2.75 | 43.9 | 22.0 | 1.85 | 22.0 | 0.02 | 0.02 | 0.11 | 101 | 211 |
| 119 | 10.30 | 10.29 | 33.897 | 26.042 | 198.4 | 0.298 | 2.33 | 36.8 | 25.7 | 2.02 | 24.4 | 0.02 | 0.02 | 0.14 | 120 | 210 |
| 125 ISL | 10.18 D | 10.17 | 33.907 D | 26.071 | 195.8 | 0.310 | 2.26 | 35.6 | 26.6 | 2.05 | 25.0 | 0.02 | 0.02 | 0.14 | 126 | |
| 140 | 9.82 | 9.80 | 33.968 | 26.179 | 185.7 | 0.339 | 2.14 | 33.5 | 28.6 | 2.12 | 26.1 | 0.01 | 0.02 | 0.12 | 141 | 209 |
| 150 ISL | 9.60 D | 9.58 | 33.995 D | 26.237 | 180.4 | 0.357 | 2.09 | 32.6 | 30.0 | 2.16 | 26.8 | 0.01 | 0.02 | 0.12 | 151 | |
| 170 | 9.31 | 9.29 | 34.061 | 26.336 | 171.3 | 0.392 | 1.98 | 30.7 | 32.6 | 2.23 | 27.9 | 0.01 | 0.01 | 0.11 | 171 | 208 |
| 200 | 9.18 | 9.16 | 34.147 | 26.425 | 163.5 | 0.442 | 1.64 | 25.3 | 36.2 | 2.37 | 29.2 | 0.01 | 0.01 | 0.09 | 201 | 207 |
| 229 | 8.76 | 8.74 | 34.167 | 26.508 | 156.0 | 0.489 | 1.57 | 24.0 | 39.1 | 2.43 | 30.4 | 0.01 | | | 230 | 206 |
| 250 ISL | 8.31 D | 8.28 | 34.129 D | 26.547 | 152.5 | 0.521 | 1.71 | 25.9 | 41.2 | 2.42 | 31.3 | 0.01 | | | 251 | |
| 269 | 7.86 | 7.83 | 34.093 | 26.586 | 148.8 | 0.550 | 1.81 | 27.1 | 43.4 | 2.42 | 32.1 | 0.01 | | | 271 | 205 |
| 300 ISL | 7.50 D | 7.47 | 34.135 D | 26.672 | 141.1 | 0.595 | 1.54 | 22.9 | 48.4 | 2.55 | 33.7 | 0.01 | | | 302 | |
| 319 | 7.36 | 7.33 | 34.137 | 26.693 | 139.3 | 0.621 | 1.31 | 19.4 | 51.5 | 2.65 | 34.7 | 0.01 | | | 321 | 204 |
| 378 | 6.94 | 6.90 | 34.178 | 26.785 | 131.3 | 0.701 | 0.97 | 14.2 | 58.7 | 2.84 | 36.4 | 0.01 | | | 380 | 203 |
| 400 ISL | 6.85 D | 6.81 | 34.206 D | 26.819 | 128.3 | 0.730 | 0.82 | 12.0 | 61.4 | 2.90 | 36.9 | 0.01 | | | 403 | |
| 437 | 6.66 | 6.62 | 34.247 | 26.877 | 123.2 | 0.776 | 0.59 | 8.6 | 66.3 | 3.00 | 37.8 | 0.01 | | | 440 | 202 |
| 500 ISL | 6.08 D | 6.04 | 34.278 D | 26.978 | 114.1 | 0.851 | 0.38 | 5.5 | 75.9 | 3.14 | 39.7 | 0.01 | | | 503 | |
| 516 | 5.98 | 5.93 | 34.295 | 27.004 | 111.7 | 0.869 | 0.33 | 4.7 | 78.4 | 3.17 | 40.2 | 0.01 | | | 520 | 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 0704 STATION 83.3 80.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 54.8 N | 122 7.7 W | 11/04/07 | 0204 UTC | 4177 m | 350 32 kn | 340 12 09 | 0 | 1019.6 mb | 14.8 C | 12.5 C | | 0/8 | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.74 | 13.74 | 33.506 | 25.087 | 286.5 | 0.000 | 6.14 | 104.2 | 3.6 | 0.43 | 1.3 | 0.07 | 0.99 | 0.21 | 0 | |
| 3 | 13.74 | 13.74 | 33.506 | 25.087 | 286.6 | 0.009 | 6.14 | 104.2 | 3.6 | 0.43 | 1.3 | 0.07 | 0.99 | 0.21 | 3 | 221 |
| 10 ISL | 13.74 D | 13.74 | 33.504 D | 25.086 | 286.9 | 0.029 | 6.16 | 104.6 | 3.6 | 0.43 | 1.3 | 0.07 | 0.97 | 0.20 | 10 | |
| 11 | 13.74 | 13.74 | 33.506 | 25.087 | 286.8 | 0.032 | 6.16 | 104.6 | 3.6 | 0.43 | 1.3 | 0.07 | 0.97 | 0.20 | 11 | 219 |
| 11 | 13.73 | 13.73 | 33.504 | 25.088 | 286.7 | 0.032 | | | | | | | | | 11 | 220 |
| 20 ISL | 13.74 D | 13.74 | 33.504 D | 25.086 | 287.2 | 0.057 | 6.14 | 104.2 | 3.4 | 0.43 | 1.3 | 0.07 | 1.14 | 0.24 | 20 | |
| 21 | 13.74 | 13.74 | 33.505 | 25.087 | 287.1 | 0.060 | 6.14 | 104.2 | 3.4 | 0.43 | 1.3 | 0.07 | 1.15 A | 0.24 A | 21 | 218 |
| 30 ISL | 13.75 D | 13.75 | 33.504 D | 25.084 | 287.6 | 0.086 | 6.14 | 104.3 | 3.3 | 0.44 | 1.3 | 0.07 | 0.99 | 0.22 | 30 | |
| 31 | 13.74 | 13.74 | 33.505 | 25.087 | 287.3 | 0.089 | 6.14 | 104.2 | 3.3 | 0.44 | 1.3 | 0.07 | 0.96 | 0.22 | 31 | 217 |
| 40 | 13.09 | 13.08 | 33.491 | 25.208 | 276.1 | 0.114 | 5.84 | 97.8 | 4.0 | 0.59 | 3.2 | 0.22 | 0.73 | 0.23 | 40 | 216 |
| 50 ISL | 12.61 D | 12.60 | 33.526 D | 25.329 | 264.7 | 0.141 | 5.66 | 93.9 | 5.8 | 0.76 | 5.6 | 0.29 | 0.59 | 0.30 | 50 | |
| 51 | 12.58 | 12.57 | 33.534 | 25.342 | 263.6 | 0.144 | 5.64 | 93.5 | 6.0 | 0.78 | 5.9 | 0.30 | 0.58 | 0.30 | 51 | 215 |
| 61 | 12.06 | 12.05 | 33.589 | 25.484 | 250.3 | 0.170 | 5.05 | 82.8 | 9.0 | 1.04 | 10.0 | 0.47 | 0.28 | 0.19 | 61 | 214 |
| 70 | 11.76 | 11.75 | 33.597 | 25.547 | 244.5 | 0.192 | 4.59 | 74.8 | 10.9 | 1.20 | 12.8 | 0.49 | 0.17 | 0.14 | 70 | 213 |
| 75 ISL | 11.30 D | 11.29 | 33.632 D | 25.658 | 234.0 | 0.204 | 4.14 | 66.8 | 13.5 | 1.36 | 15.4 | 0.35 | 0.12 | 0.14 | 75 | |
| 85 | 10.66 | 10.65 | 33.708 | 25.832 | 217.6 | 0.227 | 3.25 | 51.7 | 19.1 | 1.68 | 20.3 | 0.04 | 0.05 | 0.13 | 85 | 212 |
| 100 ISL | 10.24 D | 10.23 | 33.811 D | 25.985 | 203.3 | 0.258 | 2.72 | 42.9 | 22.9 | 1.86 | 23.0 | 0.03 | 0.04 | 0.15 | 101 | |
| 101 | 10.27 | 10.26 | 33.802 | 25.973 | 204.5 | 0.260 | 2.70 | 42.6 | 23.0 | 1.87 | 23.1 | 0.03 | 0.04 | 0.15 | 102 | 211 |
| 120 | 9.85 | 9.84 | 33.872 | 26.099 | 192.9 | 0.298 | 2.52 | 39.5 | 25.8 | 1.98 | 24.8 | 0.02 | 0.02 | 0.15 | 121 | 210 |
| 125 ISL | 9.88 D | 9.87 | 33.926 D | 26.136 | 189.5 | 0.307 | 2.43 | 38.1 | 26.6 | 2.02 | 25.2 | 0.02 | 0.02 | 0.16 | 126 | |
| 140 | 9.61 | 9.59 | 33.958 | 26.206 | 183.1 | 0.335 | 2.29 | 35.7 | 28.5 | 2.10 | 26.2 | 0.02 | 0.03 | 0.18 | 141 | 209 |
| 150 ISL | 8.95 D | 8.93 | 33.909 D | 26.275 | 176.6 | 0.353 | 2.57 | 39.4 | 28.7 | 2.04 | 26.0 | 0.02 | 0.02 | 0.15 | 151 | |
| 169 | 8.62 | 8.60 | 33.954 | 26.362 | 168.6 | 0.386 | 3.15 | 48.0 | 29.3 | 1.91 | 25.7 | 0.02 | 0.01 | 0.08 | 170 | 208 |
| 200 | 8.16 | 8.14 | 34.005 | 26.472 | 158.6 | 0.437 | 2.79 | 42.1 | 34.9 | 2.07 | 28.1 | 0.02 | 0.00 | 0.06 | 201 | 207 |
| 230 | 7.82 | 7.80 | 34.045 | 26.554 | 151.2 | 0.483 | 2.31 | 34.6 | 40.8 | 2.27 | 30.5 | 0.02 | | | 231 | 206 |
| 250 ISL | 7.74 D | 7.72 | 34.106 D | 26.614 | 145.9 | 0.513 | 1.85 | 27.7 | 44.8 | 2.43 | 32.1 | 0.02 | | | 251 | |
| 269 | 7.64 | 7.61 | 34.147 | 26.661 | 141.7 | 0.540 | 1.43 | 21.3 | 48.3 | 2.58 | 33.4 | 0.02 | | | 271 | 205 |
| 300 ISL | 7.46 D | 7.43 | 34.191 D | 26.721 | 136.4 | 0.583 | 1.07 | 15.9 | 52.3 | 2.73 | 34.5 | 0.01 | | | 302 | |
| 318 | 7.35 | 7.32 | 34.211 | 26.753 | 133.6 | 0.608 | 0.95 | 14.1 | 54.5 | 2.79 | 35.0 | 0.01 | | | 320 | 204 |
| 379 | 6.66 | 6.63 | 34.213 | 26.850 | 124.9 | 0.687 | 0.71 | 10.4 | 64.3 | 2.94 | 37.6 | 0.01 | | | 381 | 203 |
| 400 ISL | 6.61 D | 6.57 | 34.259 D | 26.893 | 121.1 | 0.712 | 0.62 | 9.0 | 67.2 | 2.99 | 38.2 | 0.01 | | | 403 | |
| 439 | 6.26 | 6.22 | 34.264 | 26.943 | 116.6 | 0.759 | 0.46 | 6.6 | 72.1 | 3.07 | 39.1 | 0.01 | | | 442 | 202 |
| 500 ISL | 5.90 D | 5.86 | 34.311 D | 27.026 | 109.2 | 0.828 | 0.32 | 4.6 | 78.7 | 3.16 | 40.2 | 0.00 | | | 503 | |
| 515 | 5.88 | 5.84 | 34.315 | 27.032 | 108.9 | 0.844 | 0.28 | 4.0 | 80.3 | 3.18 | 40.5 | 0.00 | | | 519 | 201 |

A) SECOND FLUOROMETER READING NOT 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 0704 STATION 83.3 90.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 34.5 N | 122 48.7 W | 10/04/07 | 1848 UTC | 4273 m | 340 24 kn | 340 09 08 | 1 | 1021.9 mb | 15.1 C | 13.8 C | 15m | 1/8 | ST |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.92 | 13.92 | 33.403 | 24.970 | 297.6 | 0.000 | 6.17 | 105.1 | 3.4 | 0.39 | 0.8 | 0.05 | 0.44 | 0.09 | 0 | |
| 2 A | 13.92 | 13.92 | 33.403 | 24.970 | 297.6 | 0.006 | 6.17 | 105.1 | 3.4 | 0.39 | 0.8 | 0.05 | 0.44 | 0.09 | 2 | 222 |
| 8 A | 13.91 | 13.91 | 33.401 | 24.971 | 297.7 | 0.024 | 6.16 | 104.9 | 3.3 | 0.39 | 0.7 | 0.05 | 0.46 | 0.10 | 8 | 221 |
| 10 | 13.90 | 13.90 | 33.401 | 24.973 | 297.6 | 0.030 | 6.17 | 105.0 | 3.1 | 0.39 | 0.7 | 0.05 | 0.46 | 0.11 | 10 | 220 |
| 20 ISL | 13.89 D | 13.89 | 33.399 D | 24.974 | 297.8 | 0.060 | 6.16 | 104.8 | 3.2 | 0.39 | 0.8 | 0.06 | 0.47 | 0.12 | 20 | |
| 21 A | 13.82 | 13.82 | 33.404 | 24.992 | 296.1 | 0.063 | 6.16 | 104.7 | 3.2 | 0.39 | 0.8 | 0.06 | 0.47 | 0.12 | 21 | 219 |
| 28 A | 13.46 | 13.46 | 33.431 | 25.087 | 287.3 | 0.083 | 6.21 | 104.8 | 3.2 | 0.44 | 1.4 | 0.08 | 0.61 | 0.16 | 28 | 218 |
| 30 ISL | 13.43 D | 13.43 | 33.434 D | 25.095 | 286.5 | 0.089 | 6.19 | 104.4 | 3.2 | 0.46 | 1.5 | 0.09 | 0.59 | 0.18 | 30 | |
| 38 A | 13.14 | 13.13 | 33.438 | 25.157 | 280.9 | 0.111 | 6.08 | 101.9 | 3.4 | 0.51 | 2.1 | 0.13 | 0.52 | 0.22 | 38 | 217 |
| 49 | 12.73 | 12.72 | 33.398 | 25.207 | 276.4 | 0.142 | 5.95 | 98.8 | 3.9 | 0.55 | 2.8 | 0.19 | 0.33 | 0.17 | 49 | 216 |
| 50 ISL | 12.56 D | 12.55 | 33.409 D | 25.248 | 272.4 | 0.145 | 5.90 | 97.7 | 4.2 | 0.58 | 3.3 | 0.17 | 0.31 | 0.16 | 50 | |
| 58 A | 11.80 | 11.79 | 33.341 | 25.340 | 263.8 | 0.166 | 5.49 | 89.4 | 7.0 | 0.83 | 7.8 | 0.04 | 0.15 | 0.12 | 58 | 215 |
| 64 | 11.56 | 11.55 | 33.344 | 25.387 | 259.5 | 0.182 | 5.38 | 87.1 | 8.0 | 0.92 | 9.2 | 0.04 | 0.12 | 0.14 | 64 | 214 |
| 70 | 11.48 | 11.47 | 33.397 | 25.443 | 254.3 | 0.197 | 5.13 | 83.0 | 9.3 | 1.02 | 10.8 | 0.03 | 0.08 | 0.09 | 70 | 213 |
| 75 ISL | 11.08 D | 11.07 | 33.446 D | 25.553 | 243.9 | 0.210 | 4.74 | 76.0 | 11.4 | 1.16 | 13.1 | 0.02 | 0.06 | 0.10 | 75 | |
| 85 | 10.65 | 10.64 | 33.543 | 25.705 | 229.7 | 0.233 | 3.93 | 62.5 | 15.9 | 1.46 | 18.0 | 0.02 | 0.03 | 0.11 | 85 | 212 |
| 100 | 9.87 | 9.86 | 33.647 | 25.920 | 209.5 | 0.266 | 3.40 | 53.2 | 20.3 | 1.72 | 22.0 | 0.02 | 0.01 | 0.08 | 100 | 211 |
| 120 | 9.34 | 9.33 | 33.793 | 26.121 | 190.7 | 0.306 | 3.01 | 46.6 | 24.7 | 1.89 | 24.7 | 0.01 | 0.01 | 0.08 | 121 | 210 |
| 125 ISL | 9.28 D | 9.27 | 33.809 D | 26.143 | 188.6 | 0.316 | 3.00 | 46.4 | 25.2 | 1.91 | 25.0 | 0.01 | 0.01 | 0.08 | 126 | |
| 140 | 9.10 | 9.08 | 33.861 | 26.213 | 182.3 | 0.344 | 2.96 | 45.6 | 26.5 | 1.93 | 25.4 | 0.01 | 0.01 | 0.07 | 141 | 209 |
| 150 ISL | 8.97 D | 8.95 | 33.899 D | 26.264 | 177.7 | 0.362 | 2.95 | 45.3 | 27.7 | 1.94 | 25.8 | 0.01 | 0.01 | 0.07 | 151 | |
| 170 | 8.60 | 8.58 | 33.964 | 26.373 | 167.6 | 0.396 | 2.92 | 44.5 | 30.5 | 1.97 | 26.8 | 0.01 | 0.00 | 0.06 | 171 | 208 |
| 199 | 8.27 | 8.25 | 34.004 | 26.455 | 160.2 | 0.444 | 2.62 | 39.6 | 34.7 | 2.10 | 28.7 | 0.01 | 0.00 | 0.05 | 200 | 207 |
| 200 ISL | 8.21 D | 8.19 | 34.008 D | 26.467 | 159.1 | 0.445 | 2.61 | 39.4 | 34.9 | 2.11 | 28.8 | 0.01 | | | 201 | |
| 228 | 7.88 | 7.86 | 34.043 | 26.544 | 152.2 | 0.489 | 2.25 | 33.7 | 40.3 | 2.26 | 30.8 | 0.01 | | | 229 | 206 |
| 250 ISL | 7.55 D | 7.53 | 34.056 D | 26.602 | 146.9 | 0.522 | 2.06 | 30.7 | 44.9 | 2.37 | 32.2 | 0.01 | | | 251 | |
| 268 | 7.26 | 7.23 | 34.059 | 26.645 | 142.9 | 0.548 | 1.91 | 28.2 | 48.4 | 2.45 | 33.3 | 0.01 | | | 270 | 205 |
| 300 ISL | 7.11 D | 7.08 | 34.106 D | 26.703 | 137.8 | 0.593 | 1.50 | 22.1 | 52.8 | 2.61 | 34.9 | 0.01 | | | 302 | |
| 318 | 7.05 | 7.02 | 34.128 | 26.729 | 135.6 | 0.617 | 1.28 | 18.8 | 54.9 | 2.69 | 35.6 | 0.01 | | | 320 | 204 |
| 379 | 6.59 | 6.56 | 34.170 | 26.825 | 127.2 | 0.698 | 0.89 | 13.0 | 63.1 | 2.86 | 37.5 | 0.01 | | | 381 | 203 |
| 400 ISL | 6.16 D | 6.12 | 34.152 D | 26.867 | 123.1 | 0.724 | 0.81 | 11.7 | 66.9 | 2.93 | 38.4 | 0.01 | | | 403 | |
| 437 | 5.94 | 5.90 | 34.178 | 26.916 | 118.9 | 0.769 | 0.68 | 9.7 | 73.3 | 3.03 | 39.8 | 0.01 | | | 440 | 202 |
| 500 ISL | 5.57 D | 5.53 | 34.221 D | 26.996 | 111.7 | 0.841 | 0.43 | 6.1 | 80.1 | 3.13 | 40.8 | 0.00 | | | 503 | |
| 513 | 5.68 | 5.64 | 34.258 | 27.012 | 110.5 | 0.856 | 0.38 | 5.4 | 81.5 | 3.15 | 41.0 | 0.00 | | | 517 | 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 0704 STATION 83.3 100.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 14.3 N | 123 29.5 W | 10/04/07 | 1137 UTC | 4163 m | 340 23 kn | | | 1022.6 mb | 14.7 C | 11.8 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.14 | 14.14 | 33.179 | 24.752 | 318.4 | 0.000 | 6.04 | 103.2 | 2.8 | 0.33 | 0.0 | 0.00 | 0.22 | 0.07 | 0 | |
| 2 | 14.14 | 14.14 | 33.179 | 24.752 | 318.5 | 0.006 | 6.04 | 103.2 | 2.8 | 0.33 | 0.0 | 0.00 | 0.22 | 0.07 | 2 | 221 |
| 10 | 14.15 | 14.15 | 33.179 | 24.750 | 318.9 | 0.032 | 6.05 | 103.4 | 2.7 | 0.32 | 0.0 | 0.00 | 0.22 | 0.06 | 10 | 220 |
| 15 | 14.15 | 14.15 | 33.183 | 24.753 | 318.7 | 0.048 | 6.05 | 103.4 | 2.6 | 0.33 | 0.0 | 0.00 | 0.22 | 0.07 | 15 | 219 |
| 20 ISL | 14.15 D | 14.15 | 33.177 D | 24.749 | 319.3 | 0.064 | 6.04 | 103.2 | 2.5 | 0.33 | 0.0 | 0.00 | 0.22 | 0.07 | 20 | |
| 30 | 14.13 | 14.13 | 33.175 | 24.752 | 319.3 | 0.096 | 6.04 | 103.2 | 2.4 | 0.33 | 0.0 | 0.00 | 0.22 | 0.07 | 30 | 218 |
| 45 | 13.77 | 13.76 | 33.157 | 24.812 | 313.9 | 0.143 | 6.08 | 103.1 | 2.3 | 0.33 | 0.0 | 0.00 | 0.32 | 0.15 | 45 | 217 |
| 50 ISL | 13.57 D | 13.56 | 33.150 D | 24.848 | 310.6 | 0.159 | 6.06 | 102.3 | 2.4 | 0.35 | 0.1 | 0.04 | 0.37 | 0.19 | 50 | |
| 55 | 13.40 | 13.39 | 33.144 | 24.878 | 307.9 | 0.174 | 6.04 | 101.6 | 2.6 | 0.38 | 0.3 | 0.08 | 0.41 | 0.22 | 55 | 216 |
| 65 | 13.00 | 12.99 | 33.132 | 24.948 | 301.4 | 0.205 | 6.05 | 100.9 | 3.2 | 0.43 | 0.9 | 0.11 | 0.36 | 0.19 | 65 | 215 |
| 75 | 12.70 | 12.69 | 33.145 | 25.017 | 295.1 | 0.235 | 5.95 | 98.6 | 3.7 | 0.51 | 1.7 | 0.22 | 0.24 | 0.14 | 75 | 214 |
| 84 | 12.38 | 12.37 | 33.173 | 25.101 | 287.3 | 0.261 | 5.84 | 96.2 | 4.2 | 0.58 | 3.4 | 0.37 | 0.13 | 0.09 | 84 | 213 |
| 94 | 12.21 | 12.20 | 33.245 | 25.189 | 279.1 | 0.289 | 5.60 | 91.9 | 4.3 | 0.62 | 4.6 | 0.07 | 0.09 | 0.07 | 94 | 212 |
| 100 ISL | 11.88 D | 11.87 | 33.212 D | 25.226 | 275.7 | 0.306 | 5.50 | 89.6 | 4.5 | 0.64 | 5.0 | 0.05 | 0.08 | 0.06 | 100 | |
| 109 | 11.98 | 11.97 | 33.368 | 25.329 | 266.2 | 0.330 | 5.33 | 87.1 | 4.9 | 0.68 | 6.0 | 0.03 | 0.06 | 0.06 | 109 | 211 |
| 125 | 11.12 | 11.10 | 33.438 | 25.541 | 246.3 | 0.371 | 4.71 | 75.6 | 9.7 | 1.05 | 11.8 | 0.02 | 0.03 | 0.05 | 126 | 210 |
| 145 | 10.13 | 10.11 | 33.635 | 25.867 | 215.5 | 0.417 | 3.55 | 55.8 | 18.1 | 1.59 | 20.2 | 0.01 | 0.01 | 0.05 | 146 | 209 |
| 150 ISL | 9.82 D | 9.80 | 33.713 D | 25.980 | 204.8 | 0.428 | 3.39 | 53.0 | 19.8 | 1.67 | 21.5 | 0.01 | 0.01 | 0.05 | 151 | |
| 170 | 9.24 | 9.22 | 33.830 | 26.167 | 187.3 | 0.467 | 3.05 | 47.1 | 24.8 | 1.87 | 24.7 | 0.01 | 0.00 | 0.06 | 171 | 208 |
| 199 | 8.95 | 8.93 | 33.943 | 26.302 | 175.0 | 0.520 | 3.09 | 47.4 | 27.4 | 1.87 | 25.0 | 0.01 | 0.01 | 0.04 | 200 | 207 |
| 200 ISL | 8.91 D | 8.89 | 33.954 D | 26.317 | 173.6 | 0.521 | 3.08 | 47.2 | 27.5 | 1.87 | 25.1 | 0.01 | | | 201 | |
| 228 | 8.57 | 8.55 | 34.004 | 26.410 | 165.2 | 0.569 | 2.78 | 42.3 | 31.9 | 2.01 | 27.2 | 0.01 | | | 229 | 206 |
| 250 ISL | 8.37 D | 8.34 | 34.044 D | 26.472 | 159.6 | 0.604 | 2.74 | 41.5 | 35.7 | 2.07 | 28.3 | 0.01 | | | 251 | |
| 271 | 7.72 | 7.69 | 34.013 | 26.544 | 152.8 | 0.637 | 2.72 | 40.6 | 39.4 | 2.13 | 29.3 | 0.01 | | | 273 | 205 |
| 300 ISL | 7.59 D | 7.56 | 34.058 D | 26.598 | 148.1 | 0.681 | 2.48 | 36.9 | 43.8 | 2.25 | 31.0 | 0.01 | | | 302 | |
| 317 | 7.20 | 7.17 | 34.024 | 26.627 | 145.4 | 0.706 | 2.29 | 33.8 | 46.5 | 2.33 | 32.1 | 0.01 | | | 319 | 204 |
| 377 | 6.41 | 6.38 | 34.056 | 26.759 | 133.2 | 0.789 | 1.57 | 22.7 | 59.2 | 2.66 | 36.3 | 0.01 | | | 379 | 203 |
| 400 ISL | 5.93 D | 5.90 | 34.040 D | 26.807 | 128.5 | 0.819 | 1.41 | 20.2 | 64.8 | 2.75 | 37.7 | 0.01 | | | 402 | |
| 437 | 5.48 | 5.44 | 34.062 | 26.880 | 121.7 | 0.866 | 1.19 | 16.9 | 73.4 | 2.88 | 39.6 | 0.01 | | | 440 | 202 |
| 500 ISL | 5.22 D | 5.18 | 34.138 D | 26.971 | 113.6 | 0.940 | 0.74 | 10.4 | 82.4 | 3.05 | 41.3 | 0.00 | | | 503 | |
| 516 | 5.18 | 5.14 | 34.154 | 26.989 | 112.1 | 0.958 | 0.63 | 8.9 | 84.7 | 3.09 | 41.7 | 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 0704 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 54.5 N | 124 10.2 W | 10/04/07 | 0443 UTC | 4200 m | 350 21 kn | | | 1023.2 mb | 15.0 C | 13.0 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 15.31 | 15.31 | 33.291 | 24.588 | 334.0 | 0.000 | 5.85 | 102.4 | 2.5 | 0.31 | 0.0 | 0.00 | 0.09 | 0.01 | 0 | |
| 2 | 15.31 | 15.31 | 33.291 | 24.588 | 334.1 | 0.007 | 5.85 | 102.4 | 2.5 | 0.31 | 0.0 | 0.00 | 0.09 | 0.01 | 2 | 221 |
| 10 | 15.31 | 15.31 | 33.292 | 24.589 | 334.2 | 0.033 | 5.86 | 102.6 | 2.3 | 0.31 | 0.0 | 0.00 | 0.09 | 0.01 | 10 | 220 |
| 15 | 15.29 | 15.29 | 33.287 | 24.590 | 334.3 | 0.050 | 5.86 | 102.5 | 2.1 | 0.31 | 0.0 | 0.00 | 0.09 | 0.01 | 15 | 219 |
| 20 ISL | 14.98 D | 14.98 | 33.252 D | 24.630 | 330.6 | 0.067 | 5.89 | 102.4 | 2.1 | 0.31 | 0.0 | 0.00 | 0.10 | 0.01 | 20 | |
| 30 | 14.56 | 14.56 | 33.201 | 24.681 | 326.0 | 0.100 | 5.95 | 102.5 | 2.2 | 0.32 | 0.0 | 0.00 | 0.12 | 0.02 | 30 | 218 |
| 45 | 14.76 | 14.75 | 33.307 | 24.721 | 322.7 | 0.148 | 5.90 | 102.1 | 2.0 | 0.30 | 0.0 | 0.00 | 0.13 | 0.02 | 45 | 217 |
| 50 ISL | 14.76 D | 14.75 | 33.315 D | 24.727 | 322.2 | 0.164 | 5.89 | 102.0 | 2.0 | 0.30 | 0.0 | 0.00 | 0.15 | 0.03 | 50 | |
| 60 | 14.73 | 14.72 | 33.320 | 24.738 | 321.5 | 0.197 | 5.89 | 101.9 | 2.0 | 0.30 | 0.0 | 0.00 | 0.24 | 0.06 | 60 | 216 |
| 75 | 14.32 | 14.31 | 33.283 | 24.797 | 316.3 | 0.244 | 5.88 | 100.9 | 1.9 | 0.33 | 0.0 | 0.01 | 0.50 | 0.15 | 75 | 215 |
| 83 | 14.23 | 14.22 | 33.281 | 24.814 | 314.9 | 0.270 | 5.81 | 99.5 | 1.9 | 0.34 | 0.1 | 0.09 | 0.42 | 0.21 | 83 | 214 |
| 94 | 13.48 | 13.47 | 33.172 | 24.884 | 308.4 | 0.304 | 5.86 | 98.7 | 2.2 | 0.42 | 0.7 | 0.24 | 0.31 | 0.14 | 94 | 213 |
| 100 ISL | 13.23 D | 13.22 | 33.180 D | 24.941 | 303.1 | 0.322 | 5.86 | 98.2 | 2.4 | 0.49 | 1.0 | 0.30 | 0.30 | 0.14 | 100 | |
| 104 | 13.14 | 13.13 | 33.172 | 24.953 | 302.1 | 0.334 | 5.86 | 98.0 | 2.5 | 0.52 | 1.3 | 0.31 | 0.30 | 0.14 | 104 | 212 |
| 114 | 12.83 | 12.81 | 33.191 | 25.029 | 295.0 | 0.364 | 5.80 | 96.4 | 3.0 | 0.51 | 2.2 | 0.21 | 0.20 | 0.09 | 114 | 211 |
| 125 | 12.74 | 12.72 | 33.286 | 25.120 | 286.6 | 0.396 | 5.59 | 92.8 | 3.3 | 0.56 | 3.4 | 0.03 | 0.11 | 0.06 | 126 | 210 |
| 142 | 12.19 | 12.17 | 33.439 | 25.345 | 265.6 | 0.443 | 5.20 | 85.4 | 4.9 | 0.68 | 6.1 | 0.01 | 0.05 | 0.04 | 143 | 209 |
| 150 ISL | 11.88 D | 11.86 | 33.457 D | 25.417 | 258.8 | 0.464 | 4.98 | 81.3 | 6.8 | 0.83 | 8.5 | 0.01 | 0.03 | 0.03 | 151 | |
| 165 | 10.72 | 10.70 | 33.511 | 25.670 | 234.9 | 0.501 | 4.59 | 73.1 | 11.0 | 1.12 | 13.3 | 0.01 | 0.01 | 0.02 | 166 | 208 |
| 196 | 9.60 | 9.58 | 33.774 | 26.065 | 197.6 | 0.568 | 4.26 | 66.3 | 17.2 | 1.39 | 18.4 | 0.01 | 0.00 | 0.02 | 197 | 207 |
| 200 ISL | 9.42 D | 9.40 | 33.788 D | 26.106 | 193.8 | 0.576 | 4.22 | 65.4 | 18.1 | 1.42 | 18.9 | 0.01 | | | 201 | |
| 228 | 8.93 | 8.91 | 33.948 | 26.310 | 174.8 | 0.628 | 3.84 | 58.9 | 24.3 | 1.62 | 22.0 | 0.01 | | | 229 | 206 |
| 250 ISL | 8.61 D | 8.58 | 33.985 D | 26.389 | 167.6 | 0.665 | 3.21 | 48.9 | 29.6 | 1.86 | 25.2 | 0.01 | | | 251 | |
| 268 | 8.41 | 8.38 | 34.021 | 26.448 | 162.2 | 0.695 | 2.68 | 40.7 | 33.8 | 2.06 | 27.7 | 0.01 | | | 269 | 205 |
| 300 ISL | 7.89 D | 7.86 | 34.033 D | 26.535 | 154.2 | 0.746 | 2.27 | 34.0 | 39.7 | 2.24 | 30.3 | 0.00 | | | 302 | |
| 317 | 7.71 | 7.68 | 34.053 | 26.577 | 150.4 | 0.772 | 2.14 | 32.0 | 42.6 | 2.31 | 31.4 | 0.00 | | | 319 | 204 |
| 377 | 6.95 | 6.91 | 34.094 | 26.717 | 137.7 | 0.858 | 1.44 | 21.1 | 54.0 | 2.63 | 35.3 | 0.00 | | | 379 | 203 |
| 400 ISL | 6.69 D | 6.65 | 34.096 D | 26.754 | 134.3 | 0.889 | 1.30 | 19.0 | 57.7 | 2.72 | 36.3 | 0.00 | | | 402 | |
| 435 | 6.38 | 6.34 | 34.118 | 26.812 | 129.0 | 0.935 | 1.14 D | 16.5 | 63.1 | 2.82 | 37.6 | 0.00 | | | 438 | 202 |
| 500 ISL | 5.60 D | 5.56 | 34.113 D | 26.906 | 120.2 | 1.016 | 0.87 | 12.4 | 74.3 | 2.97 | 40.0 | 0.00 | | | 503 | |
| 511 | 5.56 | 5.52 | 34.124 | 26.920 | 119.0 | 1.029 | 0.83 | 11.8 | 76.2 | 2.99 | 40.4 | 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 0704 STATION 86.7 33.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 53.5 N | 118 29.3 W | 07/04/07 | 1204 UTC | 53 m | 320 01 kn | | | 1012.3 mb | 15.3 C | 14.0 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.57 | 14.57 | 33.678 | 25.046 | 290.4 | 0.000 | 6.27 | 108.4 | 8.7 | 0.44 | 1.5 | 0.10 | 0.86 | 0.35 | 0 | |
| 1 | 14.57 | 14.57 | 33.678 | 25.046 | 290.4 | 0.003 | 6.27 | 108.4 | 8.7 | 0.44 | 1.5 | 0.10 | 0.86 | 0.35 | 1 | 208 |
| 6 | 14.57 | 14.57 | 33.680 | 25.048 | 290.4 | 0.017 | 6.29 | 108.7 | 8.7 | 0.42 | 1.5 | 0.10 | 0.88 | 0.33 | 6 | 207 |
| 10 | 14.53 | 14.53 | 33.679 | 25.056 | 289.7 | 0.029 | 6.31 | 109.0 | 8.7 | 0.42 | 1.5 | 0.10 | 0.86 | 0.28 | 10 | 205 |
| 10 | 14.54 | 14.54 | 33.681 | 25.055 | 289.8 | 0.029 | | | | | | | | | 10 | 206 |
| 19 | 13.71 | 13.71 | 33.677 | 25.226 | 273.8 | 0.054 | 5.97 | 101.4 | 9.2 | 0.56 | 3.3 | 0.14 | 0.77 | 0.35 | 19 | 204 |
| 20 ISL | 13.65 D | 13.65 | 33.682 D | 25.242 | 272.3 | 0.057 | 5.95 | 100.9 | 9.3 | 0.57 | 3.4 | 0.15 | 0.77 | 0.36 | 20 | |
| 30 | 13.17 | 13.17 | 33.681 | 25.339 | 263.4 | 0.084 | 5.46 | 91.7 | 10.0 | 0.78 | 6.1 | 0.25 | 0.70 | 0.44 | 30 | 203 |
| 40 | 11.86 | 11.85 | 33.694 | 25.603 | 238.5 | 0.109 | 4.12 | 67.3 | 14.6 | 1.33 | 13.9 | 0.42 | 0.46 | 0.44 | 40 | 202 |
| 49 | 11.12 | 11.11 | 33.743 | 25.777 | 222.1 | 0.130 | 3.20 | 51.5 | 19.5 | 1.70 | 18.9 | 0.41 | 0.33 | 0.34 | 49 | 201 |
| 50 CSL | 11.12 | 11.11 | 33.746 | 25.779 | 221.9 | 0.132 | | | | | | | | | 50 | 200 |

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

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 STATION 86.7 35.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 49.4 N | 118 37.7 W | 07/04/07 | 1423 UTC | | 00 kn | 300 02 07 | 2 | 1012.6 mb | 15.8 C | 14.2 C | | 8/8 CI |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.90 | 14.90 | 33.579 | 24.899 | 304.4 | 0.000 | 6.01 | 104.5 | 3.0 | 0.33 | 0.1 | 0.01 | 0.39 | 0.10 | 0 | |
| 1 | 14.90 | 14.90 | 33.579 | 24.899 | 304.4 | 0.003 | 6.01 | 104.5 | 3.0 | 0.33 | 0.1 | 0.01 | 0.39 | 0.10 | 1 | 221 |
| 10 | 14.50 | 14.50 | 33.572 | 24.980 | 297.0 | 0.030 | 6.03 | 104.0 | 3.2 | 0.36 | 0.3 | 0.03 | 0.46 A | 0.13 A | 10 | 219 |
| 10 | 14.49 | 14.49 | 33.572 | 24.982 | 296.8 | 0.030 | | | | | | | | | 10 | 220 |
| 20 | 14.01 | 14.01 | 33.556 | 25.071 | 288.6 | 0.059 | 5.79 | 98.9 | 3.7 | 0.45 | 1.5 | 0.11 | 0.79 | 0.27 | 20 | 218 |
| 30 | 12.83 | 12.83 | 33.562 | 25.314 | 265.7 | 0.087 | 5.09 | 84.8 | 6.6 | 0.79 | 6.5 | 0.25 | 0.78 | 0.28 | 30 | 217 |
| 40 | 11.61 | 11.60 | 33.600 | 25.576 | 241.0 | 0.112 | 4.10 | 66.6 | 12.7 | 1.23 | 13.9 | 0.13 | 0.32 | 0.20 | 40 | 216 |
| 50 | 11.23 | 11.22 | 33.638 | 25.675 | 231.7 | 0.136 | 3.82 | 61.6 | 14.8 | 1.37 | 15.9 | 0.08 | 0.30 | 0.13 | 50 | 215 |
| 60 | 11.05 | 11.04 | 33.672 | 25.734 | 226.4 | 0.159 | 3.57 | 57.3 | 16.5 | 1.48 | 17.3 | 0.09 | 0.24 | 0.16 | 60 | 214 |
| 70 | 10.71 | 10.70 | 33.730 | 25.840 | 216.5 | 0.181 | 3.21 | 51.2 | 19.2 | 1.64 | 19.7 | 0.04 | 0.13 | 0.12 | 70 | 213 |
| 75 ISL | 10.53 D | 10.52 | 33.792 D | 25.920 | 209.0 | 0.192 | 3.12 | 49.6 | 20.1 | 1.68 | 20.4 | 0.04 | 0.09 | 0.12 | 75 | |
| 85 | 10.41 | 10.40 | 33.807 | 25.953 | 206.1 | 0.213 | 2.94 | 46.6 | 22.0 | 1.77 | 21.7 | 0.03 | 0.05 | 0.14 | 85 | 212 |
| 100 | 10.08 | 10.07 | 33.932 | 26.107 | 191.8 | 0.242 | 2.31 | 36.4 | 26.4 | 2.02 | 24.7 | 0.02 | 0.02 | 0.13 | 101 | 211 |
| 120 | 9.91 | 9.90 | 34.037 | 26.218 | 181.6 | 0.280 | 2.01 | 31.5 | 29.1 | 2.15 | 26.0 | 0.03 | 0.02 | 0.15 | 121 | 210 |
| 125 ISL | 9.86 D | 9.85 | 34.046 D | 26.233 | 180.3 | 0.289 | 1.95 | 30.6 | 29.8 | 2.18 | 26.3 | 0.03 | 0.02 | 0.14 | 126 | |
| 139 | 9.70 | 9.68 | 34.097 | 26.300 | 174.2 | 0.314 | 1.81 | 28.3 | 31.7 | 2.24 | 27.1 | 0.03 | 0.02 | 0.11 | 140 | 209 |
| 150 ISL | 9.64 D | 9.62 | 34.115 D | 26.324 | 172.1 | 0.333 | 1.72 | 26.8 | 33.0 | 2.28 | 27.7 | 0.03 | 0.02 | 0.10 | 151 | |
| 168 | 9.39 | 9.37 | 34.172 | 26.410 | 164.3 | 0.363 | 1.61 | 25.0 | 35.0 | 2.34 | 28.4 | 0.04 | 0.01 | 0.09 | 169 | 208 |
| 199 | 9.18 | 9.16 | 34.182 | 26.453 | 160.9 | 0.413 | 1.52 | 23.5 | 37.7 | 2.40 | 29.1 | 0.03 | 0.02 | 0.10 | 200 | 207 |
| 200 ISL | 9.08 D | 9.06 | 34.194 D | 26.478 | 158.4 | 0.415 | 1.51 | 23.3 | 37.8 | 2.40 | 29.1 | 0.03 | | | 201 | |
| 228 | 8.85 | 8.83 | 34.220 | 26.535 | 153.5 | 0.459 | 1.33 | 20.4 | 40.9 | 2.49 | 30.4 | 0.01 | | | 229 | 206 |
| 250 ISL | 8.55 D | 8.52 | 34.234 D | 26.593 | 148.3 | 0.492 | 1.20 | 18.3 | 43.4 | 2.56 | 31.3 | 0.01 | | | 252 | |
| 267 | 8.41 | 8.38 | 34.238 | 26.618 | 146.2 | 0.517 | 1.11 | 16.9 | 45.4 | 2.61 | 31.9 | 0.01 | | | 269 | 205 |
| 300 ISL | 8.11 D | 8.08 | 34.254 D | 26.676 | 141.1 | 0.564 | 0.93 | 14.0 | 49.4 | 2.71 | 33.2 | 0.01 | | | 302 | |
| 318 | 7.91 | 7.88 | 34.269 | 26.718 | 137.3 | 0.589 | 0.84 | 12.6 | 51.6 | 2.76 | 33.8 | 0.01 | | | 320 | 204 |
| 377 | 7.53 | 7.49 | 34.284 | 26.786 | 131.7 | 0.669 | 0.61 | 9.1 | 57.6 | 2.88 | 35.2 | 0.00 | | | 379 | 203 |
| 400 ISL | 7.24 D | 7.20 | 34.295 D | 26.836 | 127.1 | 0.698 | 0.52 | 7.7 | 61.7 | 2.95 | 36.0 | 0.00 | | | 403 | |
| 438 | 6.85 | 6.81 | 34.310 | 26.902 | 121.2 | 0.746 | 0.39 | 5.7 | 68.9 | 3.06 | 37.2 | 0.00 | | | 441 | 202 |
| 500 ISL | 6.39 D | 6.34 | 34.329 D | 26.978 | 114.4 | 0.819 | 0.27 | 3.9 | 78.4 | 3.16 | 38.0 | 0.01 | | | 504 | |
| 515 | 6.20 | 6.15 | 34.339 | 27.011 | 111.3 | 0.835 | 0.24 | 3.5 | 80.7 | 3.18 | 38.2 | 0.01 | | | 519 | 201 |

A) SECOND FLUOROMETER READING NOT 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 0704 STATION 86.7 40.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND | SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 39.6 N | 118 58.4 W | 07/04/07 | 1929 | UTC | 799 m | 320 | 04 kn | 300 03 06 | 2 | 1014.0 mb | 17.1 C | 15.1 C | 21m | 8/8 | CI |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.96 | 14.96 | 33.559 D | 24.871 | 307.1 | 0.000 | 6.09 D | 106.0 | | | | | | | 0 | |
| 2 A | 14.96 | 14.96 | 33.559 D | 24.871 | 307.2 | 0.006 | 6.09 D | 106.0 | | | | | | | 2 | 224 |
| 10 ISL | 14.87 D | 14.87 | 33.557 D | 24.889 | 305.7 | 0.031 | 6.05 | 105.1 | | | | | | | 10 | |
| 11 A | 14.86 | 14.86 | 33.559 | 24.893 | 305.3 | 0.034 | 6.04 | 105.0 | 2.6 | 0.33 | 0.0 | 0.01 | 0.35 | 0.11 | 11 | 222 |
| 11 | 14.87 | 14.87 | 33.559 | 24.890 | 305.5 | 0.034 | | | | | | | | | 11 | 223 |
| 20 | 14.65 | 14.65 | 33.555 | 24.935 | 301.6 | 0.061 | 6.03 | 104.3 | 2.6 | 0.34 | 0.0 | 0.01 | 0.38 | 0.14 | 20 | 221 |
| 28 A | 14.24 | 14.24 | 33.556 | 25.023 | 293.4 | 0.085 | 5.96 | 102.3 | 2.9 | 0.38 | 0.4 | 0.06 | 0.58 | 0.25 | 28 | 220 |
| 30 ISL | 13.73 D | 13.73 | 33.559 D | 25.131 | 283.2 | 0.091 | 5.81 | 98.6 | 3.5 | 0.44 | 1.3 | 0.09 | 0.58 | 0.29 | 30 | |
| 40 A | 12.75 | 12.74 | 33.540 | 25.313 | 266.1 | 0.118 | 4.94 | 82.2 | 7.1 | 0.83 | 7.1 | 0.19 | 0.61 | 0.42 | 40 | 219 |
| 50 ISL | 12.00 D | 11.99 | 33.545 D | 25.461 | 252.2 | 0.144 | 4.39 | 71.9 | 10.3 | 1.08 | 11.3 | 0.09 | 0.39 | 0.28 | 50 | |
| 51 A | 12.00 | 11.99 | 33.552 | 25.466 | 251.7 | 0.146 | 4.34 | 71.1 | 10.6 | 1.10 | 11.7 | 0.08 | 0.36 | 0.26 | 51 | 218 |
| 66 | 10.87 | 10.86 | 33.626 | 25.731 | 226.8 | 0.182 | 3.71 | 59.3 | 16.0 | 1.45 | 17.2 | 0.04 | 0.08 | 0.09 | 66 | 217 |
| 75 ISL | 10.27 D | 10.26 | 33.704 D | 25.896 | 211.2 | 0.202 | 3.38 | 53.4 | 19.2 | 1.62 | 19.8 | 0.02 | 0.04 | 0.10 | 75 | |
| 81 A | 10.13 | 10.12 | 33.751 | 25.957 | 205.6 | 0.215 | 3.17 | 49.9 | 21.3 | 1.72 | 21.3 | 0.01 | 0.01 | 0.10 | 81 | 216 |
| 89 | 9.77 | 9.76 | 33.842 | 26.088 | 193.2 | 0.231 | 2.91 | 45.5 | 24.2 | 1.85 | 23.3 | 0.01 | 0.01 | 0.06 | 89 | 215 |
| 100 | 9.64 | 9.63 | 33.891 | 26.148 | 187.7 | 0.252 | 2.80 | 43.6 | 25.5 | 1.90 | 24.0 | 0.01 | 0.01 | 0.05 | 101 | 214 |
| 119 | 9.73 | 9.72 | 34.001 | 26.220 | 181.4 | 0.287 | 2.29 | 35.8 | 28.7 | 2.09 | 25.5 | 0.01 | 0.01 | 0.06 | 120 | 213 |
| 125 ISL | 9.69 D | 9.68 | 34.021 D | 26.242 | 179.4 | 0.297 | 2.16 | 33.7 | 29.8 | 2.14 | 26.1 | 0.01 | 0.01 | 0.07 | 126 | |
| 139 | 9.50 | 9.48 | 34.075 | 26.316 | 172.7 | 0.322 | 1.90 | 29.6 | 32.3 | 2.23 | 27.4 | 0.01 | 0.01 | 0.09 | 140 | 212 |
| 150 ISL | 9.44 D | 9.42 | 34.085 D | 26.334 | 171.2 | 0.341 | 1.78 | 27.7 | 33.7 | 2.28 | 28.0 | 0.01 | 0.01 | 0.09 | 151 | |
| 169 | 9.24 | 9.22 | 34.144 | 26.413 | 164.0 | 0.373 | 1.63 | 25.2 | 35.7 | 2.36 | 28.8 | 0.02 | 0.01 | 0.08 | 170 | 211 |
| 199 | 8.94 | 8.92 | 34.198 | 26.503 | 155.9 | 0.421 | 1.39 | 21.4 | 39.4 | 2.47 | 30.1 | 0.02 | 0.01 | 0.08 | 200 | 210 |
| 200 ISL | 8.93 D | 8.91 | 34.203 D | 26.509 | 155.4 | 0.422 | 1.38 | 21.2 | 39.6 | 2.47 | 30.2 | 0.02 | | | 201 | |
| 229 | 8.50 | 8.48 | 34.234 | 26.601 | 147.1 | 0.466 | 1.12 | 17.0 | 44.8 | 2.61 | 31.7 | 0.04 | | | 230 | 209 |
| 250 ISL | 8.41 D | 8.38 | 34.247 D | 26.625 | 145.2 | 0.497 | 1.03 | 15.6 | 46.6 | 2.66 | 32.4 | 0.03 | | | 252 | |
| 269 | 8.23 | 8.20 | 34.255 | 26.659 | 142.3 | 0.524 | 0.97 | 14.7 | 47.8 | 2.70 | 32.8 | 0.01 | | | 271 | 208 |
| 300 ISL | 7.94 D | 7.91 | 34.268 D | 26.713 | 137.5 | 0.568 | 0.83 | 12.5 | 51.1 | 2.77 | 33.7 | 0.01 | | | 302 | |
| 319 | 7.80 | 7.77 | 34.273 | 26.737 | 135.5 | 0.594 | 0.75 | 11.2 | 53.3 | 2.81 | 34.2 | 0.01 | | | 321 | 207 |
| 378 | 7.34 | 7.30 | 34.288 | 26.816 | 128.7 | 0.671 | 0.57 | 8.5 | 59.8 | 2.92 | 35.8 | 0.01 | | | 380 | 206 |
| 400 ISL | 7.13 D | 7.09 | 34.295 D | 26.851 | 125.6 | 0.699 | 0.52 | 7.7 | 61.5 | 2.96 | 36.3 | 0.01 | | | 403 | |
| 437 | 6.93 | 6.89 | 34.303 | 26.885 | 122.8 | 0.745 | 0.43 | 6.3 | 65.5 | 3.02 | 37.1 | 0.01 | | | 440 | 205 |
| 500 ISL | 6.07 D | 6.03 | 34.342 D | 27.030 | 109.2 | 0.818 | 0.24 | 3.5 | 80.4 | 3.18 | 39.0 | 0.01 | | | 504 | |
| 513 | 6.01 | 5.96 | 34.347 | 27.041 | 108.2 | 0.833 | 0.21 | 3.0 | 83.6 | 3.21 | 39.3 | 0.01 | | | 517 | 204 |
| 592 | 5.62 | 5.57 | 34.369 | 27.108 | 102.5 | 0.916 | 0.19 | 2.7 | 91.4 | 3.28 | 39.6 | 0.01 | | | 596 | 203 |
| 600 ISL | 5.56 D | 5.51 | 34.371 D | 27.117 | 101.7 | 0.924 | 0.19 | 2.7 | 92.4 | 3.29 | 39.5 | 0.01 | | | 604 | |
| 676 | 5.32 | 5.26 | 34.388 | 27.159 | 98.3 | 1.000 | 0.14 | 2.0 | 101.5 | 3.36 | 37.8 | 0.00 | | | 681 | 202 |
| 700 ISL | 5.24 D | 5.18 | 34.393 D | 27.173 | 97.2 | 1.023 | 0.13 | 1.8 | 103.9 | 3.38 | 36.7 | 0.00 | | | 705 | |
| 753 | 5.18 | 5.12 | 34.399 | 27.185 | 96.5 | 1.075 | 0.11 | 1.5 | 109.2 | 3.44 | 34.3 | 0.00 | | | 759 | 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 0704 STATION 86.7 45.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND | SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 29.3 N | 119 19.0 W | 08/04/07 | 0004 | UTC | 1639 m | 310 | 06 kn | 300 03 06 | 1 | 1012.7 mb | 15.0 C | 14.1 C | 18m | 6/8 | SC |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.91 | 13.91 | 33.660 | 25.171 | 278.5 | 0.000 | 5.75 | 98.1 | 6.9 | 0.61 | 3.6 | 0.13 | 0.31 | 0.08 | 0 | |
| 2 | 13.91 | 13.91 | 33.660 | 25.171 | 278.6 | 0.006 | 5.75 | 98.1 | 6.9 | 0.61 | 3.6 | 0.13 | 0.31 | 0.08 | 2 | 221 |
| 10 | 13.92 | 13.92 | 33.660 | 25.169 | 279.0 | 0.028 | 5.73 | 97.7 | 6.8 | 0.61 | 3.6 | 0.13 | 0.29 | 0.07 | 10 | 219 |
| 10 | 13.91 | 13.91 | 33.660 | 25.171 | 278.8 | 0.028 | | | | | | | | | 10 | 220 |
| 20 | 13.75 | 13.75 | 33.660 | 25.205 | 275.9 | 0.056 | 5.72 | 97.2 | 6.8 | 0.60 | 3.5 | 0.13 | 0.39 | 0.11 | 20 | 218 |
| 30 | 13.23 | 13.23 | 33.648 | 25.301 | 266.9 | 0.083 | 5.47 | 92.0 | 8.0 | 0.73 | 5.5 | 0.15 | 0.56 | 0.15 | 30 | 217 |
| 40 | 11.82 | 11.81 | 33.679 | 25.599 | 238.8 | 0.108 | 4.25 | 69.4 | 13.6 | 1.25 | 13.3 | 0.23 | 0.42 | 0.18 | 40 | 216 |
| 50 | 11.06 | 11.05 | 33.707 | 25.760 | 223.7 | 0.131 | 3.51 | 56.4 | 17.5 | 1.53 | 17.9 | 0.17 | 0.20 | 0.21 | 50 | 215 |
| 60 | 10.64 | 10.63 | 33.768 | 25.882 | 212.3 | 0.153 | 3.03 | 48.2 | 20.7 | 1.72 | 20.8 | 0.07 | 0.11 | 0.17 | 60 | 214 |
| 70 | 10.36 | 10.35 | 33.852 | 25.996 | 201.7 | 0.174 | 2.59 | 41.0 | 23.9 | 1.90 | 23.0 | 0.04 | 0.06 | 0.16 | 70 | 213 |
| 75 ISL | 10.23 D | 10.22 | 33.871 D | 26.033 | 198.2 | 0.184 | 2.49 | 39.3 | 25.1 | 1.95 | 23.8 | 0.03 | 0.04 | 0.15 | 75 | |
| 86 | 9.94 | 9.93 | 33.929 | 26.128 | 189.4 | 0.205 | 2.36 | 37.0 | 27.2 | 2.02 | 25.0 | 0.02 | 0.02 | 0.12 | 86 | 212 |
| 100 | 9.81 | 9.80 | 34.000 | 26.205 | 182.4 | 0.231 | 2.13 | 33.3 | 29.3 | 2.12 | 26.1 | 0.02 | 0.02 | 0.13 | 101 | 211 |
| 120 | 9.49 | 9.48 | 34.029 | 26.281 | 175.5 | 0.267 | 2.08 | 32.3 | 31.6 | 2.17 | 26.9 | 0.03 | 0.02 | 0.11 | 121 | 210 |
| 125 ISL | 9.12 D | 9.11 | 33.988 D | 26.309 | 172.9 | 0.276 | 2.08 | 32.1 | 31.9 | 2.17 | 27.0 | 0.03 | 0.02 | 0.10 | 126 | |
| 140 | 9.27 | 9.25 | 34.075 | 26.353 | 169.1 | 0.301 | 2.09 | 32.3 | 32.9 | 2.19 | 27.5 | 0.04 | 0.01 | 0.08 | 141 | 209 |
| 150 ISL | 9.25 D | 9.23 | 34.155 D | 26.419 | 163.0 | 0.318 | 1.91 | 29.6 | 34.4 | 2.25 | 28.1 | 0.04 | 0.01 | 0.07 | 151 | |
| 170 | 9.10 | 9.08 | 34.200 | 26.479 | 157.7 | 0.350 | 1.51 | 23.3 | 37.6 | 2.40 | 29.3 | 0.04 | 0.01 | 0.05 | 171 | 208 |
| 200 | 8.82 | 8.80 | 34.204 | 26.527 | 153.7 | 0.397 | 1.37 | 21.0 | 40.7 | 2.49 | 30.6 | 0.03 | 0.00 | 0.06 | 201 | 207 |
| 230 | 8.61 | 8.59 | 34.239 | 26.588 | 148.4 | 0.442 | 1.21 | 18.5 | 43.1 | 2.55 | 31.3 | 0.03 | | | 231 | 206 |
| 250 ISL | 8.37 D | 8.34 | 34.251 D | 26.634 | 144.3 | 0.471 | 1.08 | 16.4 | 46.0 | 2.62 | 32.2 | 0.02 | | | 252 | |
| 268 | 8.13 | 8.10 | 34.259 | 26.677 | 140.5 | 0.497 | 0.97 | 14.6 | 48.7 | 2.69 | 33.0 | 0.02 | | | 270 | 205 |
| 300 ISL | 7.81 D | 7.78 | 34.272 D | 26.735 | 135.4 | 0.541 | 0.83 | 12.4 | 51.8 | 2.76 | 33.9 | 0.02 | | | 302 | |
| 318 | 7.77 | 7.74 | 34.274 | 26.742 | 134.9 | 0.565 | 0.77 | 11.5 | 53.4 | 2.80 | 34.3 | 0.02 | | | 320 | 204 |
| 377 | 7.14 | 7.10 | 34.292 | 26.847 | 125.6 | 0.642 | 0.54 | 8.0 | 61.9 | 2.96 | 36.5 | 0.01 | | | 380 | 203 |
| 400 ISL | 7.03 D | 6.99 | 34.297 D | 26.866 | 124.0 | 0.671 | 0.51 | 7.5 | 63.9 | 2.99 | 37.0 | 0.01 | | | 403 | |
| 437 | 6.85 | 6.81 | 34.305 | 26.898 | 121.5 | 0.716 | 0.47 | 6.9 | 66.8 | 3.02 | 37.5 | 0.02 | | | 440 | 202 |
| 500 ISL | 6.47 D | 6.42 | 34.320 D | 26.961 | 116.1 | 0.791 | 0.35 | 5.1 | 73.0 | 3.11 | 38.6 | 0.02 | | | 504 | |
| 514 | 6.42 | 6.37 | 34.326 | 26.972 | 115.2 | 0.807 | 0.32 | 4.6 | 74.4 | 3.13 | 38.8 | 0.02 | | | 518 | 201 |

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

RV DAVID STARR JORDAN — CALCOFI CRUISE 0704 — STATION 86.7 50.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 19.4 N | 119 39.6 W | 08/04/07 | 0436 UTC | 78 m | 310 21 kn | | | 1013.5 mb | 14.1 C | 13.5 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.86 | 12.86 | 33.613 | 25.347 | 261.8 | 0.000 | 5.80 | 96.8 | 8.4 | 0.78 | 6.4 | 0.18 | 0.66 | 0.22 | 0 | |
| 2 | 12.86 | 12.86 | 33.613 | 25.347 | 261.8 | 0.005 | 5.80 | 96.8 | 8.4 | 0.78 | 6.4 | 0.18 | 0.66 | 0.22 | 2 | 210 |
| 6 | 12.85 | 12.85 | 33.614 | 25.350 | 261.7 | 0.016 | 5.78 | 96.4 | 8.3 | 0.80 | 6.4 | 0.18 | 0.67 | 0.24 | 6 | 209 |
| 10 ISL | 12.85 D | 12.85 | 33.613 D | 25.349 | 261.8 | 0.026 | 5.76 | 96.1 | 8.3 | 0.79 | 6.4 | 0.18 | 0.64 | 0.23 | 10 | |
| 10 | 12.84 | 12.84 | 33.614 | 25.352 | 261.6 | 0.026 | | | | | | | | | 10 | 208 |
| 11 | 12.85 | 12.85 | 33.613 | 25.349 | 261.8 | 0.029 | 5.76 | 96.1 | 8.3 | 0.78 | 6.4 | 0.18 | 0.63 | 0.23 | 11 | 207 |
| 20 ISL | 12.83 D | 12.83 | 33.613 D | 25.353 | 261.7 | 0.052 | 5.76 | 96.0 | 8.3 | 0.78 | 6.4 | 0.18 | 0.62 | 0.26 | 20 | |
| 21 | 12.84 | 12.84 | 33.617 | 25.354 | 261.6 | 0.055 | 5.76 | 96.0 | 8.3 | 0.78 | 6.4 | 0.18 | 0.62 | 0.26 | 21 | 206 |
| 30 | 12.81 | 12.81 | 33.614 | 25.358 | 261.5 | 0.079 | 5.75 | 95.8 | 8.3 | 0.79 | 6.5 | 0.18 | 0.60 | 0.22 | 30 | 205 |
| 41 | 12.74 | 12.73 | 33.622 | 25.378 | 259.9 | 0.107 | 5.63 | 93.7 | 8.5 | 0.82 | 7.0 | 0.17 | 0.56 | 0.25 | 41 | 204 |
| 50 | 12.60 | 12.59 | 33.618 | 25.403 | 257.8 | 0.130 | 5.47 | 90.7 | 9.0 | 0.86 | 7.8 | 0.16 | 0.50 | 0.24 | 50 | 203 |
| 61 | 11.44 | 11.43 | 33.628 | 25.630 | 236.4 | 0.158 | 4.24 | 68.6 | 13.8 | 1.28 | 14.5 | 0.17 | 0.18 | 0.15 | 61 | 202 |
| 70 | 10.64 | 10.63 | 33.734 | 25.855 | 215.0 | 0.178 | 3.45 | 54.9 | 19.6 | 1.66 | 19.7 | 0.16 | 0.06 | 0.14 | 70 | 201 |

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

RV DAVID STARR JORDAN — CALCOFI CRUISE 0704 — STATION 86.7 55.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 9.3 N | 120 0.0 W | 08/04/07 | 0837 UTC | 1201 m | 300 20 kn | | | 1013.7 mb | 13.9 C | 13.0 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.24 | 13.24 | 33.475 | 25.164 | 279.1 | 0.000 | 5.95 | 100.0 | 4.2 | 0.55 | 2.9 | 0.15 | 0.49 | 0.14 | 0 | |
| 2 | 13.24 | 13.24 | 33.475 | 25.165 | 279.2 | 0.006 | 5.95 | 100.0 | 4.2 | 0.55 | 2.9 | 0.15 | 0.49 | 0.14 | 2 | 221 |
| 10 | 13.24 | 13.24 | 33.473 | 25.163 | 279.5 | 0.028 | 5.94 | 99.8 | 4.2 | 0.54 | 2.9 | 0.15 | 0.46 | 0.10 | 10 | 219 |
| 10 | 13.24 | 13.24 | 33.470 | 25.161 | 279.7 | 0.028 | | | | | | | | | 10 | 220 |
| 20 | 13.25 | 13.25 | 33.473 | 25.161 | 280.0 | 0.056 | 5.94 | 99.8 | 4.1 | 0.55 | 2.9 | 0.15 | 0.45 | 0.17 | 20 | 218 |
| 30 | 13.26 | 13.26 | 33.493 | 25.175 | 278.9 | 0.084 | 5.82 | 97.8 | 4.1 | 0.56 | 3.1 | 0.18 | 0.43 | 0.15 | 30 | 217 |
| 40 | 12.91 | 12.90 | 33.513 | 25.260 | 271.1 | 0.111 | 5.50 | 91.8 | 4.8 | 0.67 | 4.9 | 0.18 | 0.29 | 0.13 | 40 | 216 |
| 50 | 12.41 | 12.40 | 33.506 | 25.353 | 262.5 | 0.138 | 5.20 | 85.9 | 6.7 | 0.84 | 7.8 | 0.12 | 0.26 | 0.11 | 50 | 215 |
| 60 | 12.08 | 12.07 | 33.525 | 25.431 | 255.3 | 0.164 | 4.99 | 81.8 | 8.3 | 0.96 | 9.7 | 0.10 | 0.22 | 0.11 | 60 | 214 |
| 69 | 11.74 | 11.73 | 33.613 | 25.563 | 243.0 | 0.186 | 4.73 | 77.0 | 11.9 | 1.16 | 12.5 | 0.24 | 0.25 | 0.15 | 69 | 213 |
| 75 ISL | 11.24 D | 11.23 | 33.608 D | 25.651 | 234.7 | 0.201 | 4.36 | 70.3 | 13.9 | 1.30 | 15.0 | 0.18 | 0.18 | 0.12 | 75 | |
| 85 | 10.30 | 10.29 | 33.623 | 25.828 | 217.9 | 0.223 | 3.71 | 58.6 | 17.2 | 1.52 | 19.2 | 0.03 | 0.05 | 0.06 | 85 | 212 |
| 99 | 9.60 | 9.59 | 33.763 | 26.055 | 196.6 | 0.252 | 3.23 | 50.3 | 22.5 | 1.76 | 23.0 | 0.01 | 0.01 | 0.05 | 100 | 211 |
| 100 ISL | 9.62 D | 9.61 | 33.761 D | 26.050 | 197.0 | 0.254 | 3.23 | 50.3 | 22.6 | 1.76 | 23.0 | 0.01 | 0.01 | 0.05 | 101 | |
| 120 | 9.35 | 9.34 | 33.827 | 26.146 | 188.3 | 0.293 | 3.21 | 49.7 | 24.1 | 1.81 | 23.9 | 0.01 | 0.01 | 0.06 | 121 | 210 |
| 125 ISL | 9.25 D | 9.24 | 33.851 D | 26.181 | 185.1 | 0.302 | 3.20 | 49.4 | 24.8 | 1.82 | 24.2 | 0.01 | 0.01 | 0.05 | 126 | |
| 139 | 8.98 | 8.97 | 33.915 | 26.274 | 176.4 | 0.327 | 3.14 | 48.2 | 27.0 | 1.86 | 24.9 | 0.01 | 0.01 | 0.03 | 140 | 209 |
| 150 ISL | 8.93 D | 8.91 | 33.926 D | 26.291 | 175.0 | 0.347 | 3.08 | 47.3 | 28.2 | 1.88 | 25.4 | 0.01 | 0.01 | 0.03 | 151 | |
| 169 | 8.63 | 8.61 | 33.977 | 26.378 | 167.1 | 0.379 | 2.98 | 45.4 | 30.7 | 1.95 | 26.5 | 0.01 | 0.00 | 0.03 | 170 | 208 |
| 198 | 8.33 | 8.31 | 34.055 | 26.486 | 157.3 | 0.426 | 2.26 | 34.2 | 37.1 | 2.22 | 29.8 | 0.01 | 0.00 | 0.04 | 199 | 207 |
| 200 ISL | 8.33 D | 8.31 | 34.053 D | 26.484 | 157.5 | 0.429 | 2.24 | 33.9 | 37.3 | 2.23 | 29.9 | 0.01 | | | 201 | |
| 230 | 8.09 | 8.07 | 34.073 | 26.536 | 153.0 | 0.476 | 2.07 | 31.2 | 40.2 | 2.31 | 31.0 | 0.01 | | | 231 | 206 |
| 250 ISL | 7.99 D | 7.96 | 34.084 D | 26.560 | 151.1 | 0.506 | 1.84 | 27.7 | 43.3 | 2.41 | 32.1 | 0.01 | | | 251 | |
| 270 | 7.72 | 7.69 | 34.123 | 26.630 | 144.6 | 0.536 | 1.60 | 23.9 | 46.6 | 2.51 | 33.2 | 0.01 | | | 272 | 205 |
| 300 ISL | 7.52 D | 7.49 | 34.137 D | 26.670 | 141.2 | 0.579 | 1.36 | 20.2 | 50.7 | 2.62 | 34.5 | 0.00 | | | 302 | |
| 320 | 7.27 | 7.24 | 34.150 | 26.716 | 137.1 | 0.607 | 1.23 | 18.2 | 53.2 | 2.68 | 35.2 | 0.00 | | | 322 | 204 |
| 378 | 7.01 | 6.97 | 34.227 | 26.814 | 128.6 | 0.684 | 0.77 | 11.3 | 60.6 | 2.89 | 36.8 | 0.00 | | | 380 | 203 |
| 400 ISL | 6.95 D | 6.91 | 34.234 D | 26.828 | 127.6 | 0.712 | 0.66 | 9.7 | 63.4 | 2.95 | 37.4 | 0.00 | | | 403 | |
| 440 | 6.60 | 6.56 | 34.269 | 26.903 | 120.8 | 0.762 | 0.52 | 7.6 | 68.5 | 3.03 | 38.4 | 0.00 | | | 443 | 202 |
| 500 ISL | 6.12 D | 6.08 | 34.300 D | 26.990 | 113.0 | 0.832 | 0.39 | 5.6 | 76.8 | 3.12 | 39.8 | 0.00 | | | 503 | |
| 509 | 6.09 | 6.04 | 34.299 | 26.993 | 112.7 | 0.842 | 0.37 | 5.3 | 78.0 | 3.13 | 40.0 | 0.00 | | | 513 | 201 |

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

RV DAVID STARR JORDAN — CALCOFI CRUISE 0704 — STATION 86.7 60.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 59.5 N | 120 20.7 W | 08/04/07 | 1303 UTC | 721 m | 320 21 kn | | | 1013.9 mb | 13.9 C | 11.2 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.90 | 13.90 | 33.491 | 25.042 | 290.7 | 0.000 | 5.99 | 102.0 | 2.6 | 0.35 | 0.3 | 0.04 | 0.73 | 0.18 | 0 | |
| 2 | 13.90 | 13.90 | 33.491 | 25.042 | 290.8 | 0.006 | 5.99 | 102.0 | 2.6 | 0.35 | 0.3 | 0.04 | 0.73 | 0.18 | 2 | 221 |
| 10 | 13.90 | 13.90 | 33.491 | 25.043 | 291.0 | 0.029 | 6.02 | 102.5 | 2.4 | 0.35 | 0.3 | 0.04 | 0.76 | 0.17 | 10 | 219 |
| 10 | 13.89 | 13.89 | 33.493 | 25.046 | 290.6 | 0.029 | | | | | | | | | 10 | 220 |
| 20 | 13.90 | 13.90 | 33.490 | 25.042 | 291.3 | 0.058 | 6.01 | 102.4 | 2.5 | 0.35 | 0.2 | 0.04 | 0.77 | 0.17 | 20 | 218 |
| 30 | 13.90 | 13.90 | 33.490 | 25.043 | 291.6 | 0.087 | 6.01 | 102.4 | 2.5 | 0.35 | 0.2 | 0.04 | 0.77 | 0.17 | 30 | 217 |
| 41 | 13.55 | 13.54 | 33.495 | 25.119 | 284.6 | 0.119 | 5.87 | 99.3 | 2.9 | 0.44 | 1.4 | 0.16 | 0.64 | 0.09 | 41 | 216 |
| 50 | 13.14 | 13.13 | 33.515 | 25.217 | 275.5 | 0.144 | 5.64 | 94.6 | 3.5 | 0.58 | 3.3 | 0.41 | 0.42 | 0.21 | 50 | 215 |
| 59 | 12.51 | 12.50 | 33.549 | 25.367 | 261.4 | 0.168 | 5.17 | 85.6 | 5.9 | 0.82 | 7.4 | 0.14 | 0.13 | 0.10 | 59 | 214 |
| 70 | 12.24 | 12.23 | 33.574 | 25.438 | 254.9 | 0.197 | 4.90 | 80.6 | 7.9 | 0.94 | 9.4 | 0.09 | 0.10 | 0.09 | 70 | 213 |
| 75 ISL | 11.80 D | 11.79 | 33.637 D | 25.570 | 242.4 | 0.209 | 4.55 | 74.2 | 10.3 | 1.09 | 11.5 | 0.06 | 0.08 | 0.09 | 75 | |
| 84 | 11.42 | 11.41 | 33.676 | 25.671 | 233.0 | 0.231 | 3.88 | 62.8 | 14.9 | 1.36 | 15.5 | 0.02 | 0.05 | 0.09 | 84 | 212 |
| 99 | 11.07 | 11.06 | 33.736 | 25.781 | 222.8 | 0.265 | 3.39 | 54.5 | 18.2 | 1.56 | 18.3 | 0.02 | 0.05 | 0.07 | 99 | 211 |
| 100 ISL | 10.92 D | 10.91 | 33.763 D | 25.829 | 218.3 | 0.267 | 3.32 | 53.2 | 18.7 | 1.59 | 18.7 | 0.02 | 0.05 | 0.07 | 100 | |
| 119 | 10.15 | 10.14 | 33.937 | 26.099 | 192.9 | 0.306 | 2.11 | 33.3 | 27.8 | 2.07 | 25.1 | 0.02 | 0.02 | 0.07 | 120 | 210 |
| 125 ISL | 10.06 D | 10.05 | 33.922 D | 26.103 | 192.7 | 0.318 | 2.07 | 32.6 | 28.3 | 2.09 | 25.4 | 0.02 | 0.02 | 0.07 | 126 | |
| 138 | 9.99 | 9.97 | 33.984 | 26.163 | 187.2 | 0.342 | 1.98 | 31.1 | 29.3 | 2.14 | 25.9 | 0.02 | 0.02 | 0.07 | 139 | 209 |
| 150 ISL | 9.86 D | 9.84 | 34.052 D | 26.239 | 180.3 | 0.364 | 1.89 | 29.6 | 30.4 | 2.19 | 26.6 | 0.02 | 0.02 | 0.07 | 151 | |
| 168 | 9.70 | 9.68 | 34.100 | 26.303 | 174.6 | 0.396 | 1.76 | 27.5 | 32.1 | 2.25 | 27.6 | 0.01 | 0.01 | 0.06 | 169 | 208 |
| 199 | 9.49 | 9.47 | 34.170 | 26.393 | 166.6 | 0.449 | 1.56 | 24.3 | 34.7 | 2.34 | 28.6 | 0.01 | 0.01 | 0.05 | 200 | 207 |
| 200 ISL | 9.47 D | 9.45 | 34.175 D | 26.400 | 166.0 | 0.451 | 1.55 | 24.1 | 34.8 | 2.34 | 28.6 | 0.01 | | | 201 | |
| 228 | 9.21 | 9.18 | 34.214 | 26.473 | 159.5 | 0.496 | 1.39 | 21.5 | 37.7 | 2.43 | 29.7 | 0.01 | | | 229 | 206 |
| 250 ISL | 8.91 D | 8.88 | 34.215 D | 26.522 | 155.2 | 0.531 | 1.37 | 21.0 | 39.5 | 2.46 | 30.4 | 0.01 | | | 251 | |
| 268 | 8.73 | 8.70 | 34.212 | 26.548 | 153.0 | 0.559 | 1.37 | 21.0 | 41.1 | 2.49 | 31.0 | 0.01 | | | 270 | 205 |
| 300 ISL | 8.21 D | 8.18 | 34.228 D | 26.641 | 144.5 | 0.606 | 1.20 | 18.1 | 45.3 | 2.58 | 32.3 | 0.01 | | | 302 | |
| 319 | 8.10 | 8.07 | 34.231 | 26.660 | 143.0 | 0.634 | 1.08 | 16.3 | 47.9 | 2.64 | 33.1 | 0.01 | | | 321 | 204 |
| 377 | 7.61 | 7.57 | 34.234 | 26.735 | 136.6 | 0.715 | 0.90 | 13.4 | 53.7 | 2.75 | 34.8 | 0.01 | | | 379 | 203 |
| 400 ISL | 7.42 D | 7.38 | 34.240 D | 26.767 | 133.8 | 0.746 | 0.80 | 11.9 | 56.7 | 2.83 | 35.6 | 0.01 | | | 403 | |
| 438 | 7.02 | 6.98 | 34.257 | 26.837 | 127.4 | 0.795 | 0.64 | 9.4 | 62.0 | 2.95 | 36.9 | 0.01 | | | 441 | 202 |
| 500 ISL | 6.45 D | 6.40 | 34.274 D | 26.927 | 119.3 | 0.872 | 0.48 | 7.0 | 69.6 | 3.02 | 38.7 | 0.01 | | | 503 | |
| 514 | 6.41 | 6.36 | 34.276 | 26.934 | 118.8 | 0.889 | 0.45 | 6.5 | 71.3 | 3.04 | 39.1 | 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 0704 STATION 86.7 70.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 39.2 N | 121 2.2 W | 08/04/07 | 1953 UTC | 3763 m | 300 27 kn | 320 04 09 | 1 | 1017.7 mb | 15.2 C | 14.0 C | 10m | 1/8 | AS |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.22 | 14.22 | 33.471 | 24.960 | 298.5 | 0.000 | 6.05 | 103.7 | 2.8 | 0.35 | 0.1 | 0.02 | 0.60 | 0.15 | 0 | |
| 2 A | 14.22 | 14.22 | 33.471 | 24.961 | 298.6 | 0.006 | 6.05 | 103.7 | 2.8 | 0.35 | 0.1 | 0.02 | 0.60 | 0.15 | 2 | 223 |
| 5 A | 14.21 | 14.21 | 33.471 | 24.963 | 298.5 | 0.015 | 6.08 | 104.2 | 2.8 | 0.35 | 0.1 | 0.02 | 0.58 | 0.13 | 5 | 222 |
| 10 ISL | 14.21 D | 14.21 | 33.469 D | 24.961 | 298.8 | 0.030 | 6.08 | 104.2 | 2.8 | 0.34 | 0.1 | 0.02 | 0.57 | 0.13 | 10 | |
| 10 | 14.20 | 14.20 | 33.471 | 24.965 | 298.4 | 0.030 | 6.06 | 103.8 | 2.7 | 0.34 | 0.1 | 0.02 | 0.60 | 0.14 | 10 | 221 |
| 14 A | 14.20 | 14.20 | 33.471 | 24.965 | 298.5 | 0.042 | 6.08 | 104.2 | 2.7 | 0.34 | 0.1 | 0.02 | 0.57 | 0.13 | 14 | 220 |
| 19 A | 14.18 | 14.18 | 33.471 | 24.969 | 298.2 | 0.057 | 6.06 | 103.8 | 2.6 | 0.36 | 0.1 | 0.02 | 0.58 | 0.15 | 19 | 219 |
| 20 ISL | 14.17 D | 14.17 | 33.469 D | 24.970 | 298.2 | 0.060 | 6.06 | 103.8 | 2.6 | 0.36 | 0.1 | 0.02 | 0.59 | 0.15 | 20 | |
| 24 A | 14.15 | 14.15 | 33.471 | 24.976 | 297.8 | 0.072 | 6.07 | 103.9 | 2.5 | 0.34 | 0.2 | 0.02 | 0.61 | 0.14 | 24 | 218 |
| 30 ISL | 14.07 D | 14.07 | 33.468 D | 24.990 | 296.5 | 0.089 | 6.04 | 103.2 | 2.6 | 0.36 | 0.3 | 0.03 | 0.62 | 0.15 | 30 | |
| 32 | 14.03 | 14.03 | 33.469 | 25.000 | 295.8 | 0.095 | 6.03 | 103.0 | 2.6 | 0.37 | 0.3 | 0.04 | 0.62 | 0.15 | 32 | 217 |
| 40 A | 13.59 | 13.58 | 33.466 | 25.088 | 287.5 | 0.119 | 6.08 | 102.9 | 2.7 | 0.41 | 0.9 | 0.08 | 0.64 | 0.21 | 40 | 216 |
| 50 | 13.30 | 13.29 | 33.484 | 25.161 | 280.9 | 0.147 | 6.06 | 101.9 | 3.0 | 0.49 | 1.9 | 0.12 | 0.80 | 0.40 | 50 | 215 |
| 60 | 12.96 | 12.95 | 33.480 | 25.226 | 274.9 | 0.175 | 5.85 | 97.7 | 3.3 | 0.59 | 3.2 | 0.22 | 0.26 | 0.23 | 60 | 214 |
| 70 | 12.50 | 12.49 | 33.491 | 25.324 | 265.8 | 0.202 | 5.36 | 88.7 | 5.6 | 0.77 | 6.4 | 0.24 | 0.14 | 0.14 | 70 | 213 |
| 75 ISL | 12.11 D | 12.10 | 33.509 D | 25.413 | 257.4 | 0.215 | 4.98 | 81.7 | 7.9 | 0.93 | 9.2 | 0.17 | 0.11 | 0.12 | 75 | |
| 85 | 11.04 | 11.03 | 33.544 | 25.637 | 236.2 | 0.240 | 4.22 | 67.7 | 13.0 | 1.28 | 15.1 | 0.03 | 0.07 | 0.10 | 85 | 212 |
| 100 | 9.94 | 9.93 | 33.664 | 25.921 | 209.3 | 0.273 | 3.50 D | 54.8 | 18.8 | 1.60 | 20.4 | 0.02 | 0.03 | 0.06 | 100 | 211 |
| 119 | 9.56 | 9.55 | 33.767 | 26.065 | 196.0 | 0.312 | 3.36 | 52.2 | 22.0 | 1.71 | 22.4 | 0.02 | 0.01 | 0.05 | 120 | 210 |
| 125 ISL | 9.55 D | 9.54 | 33.773 D | 26.071 | 195.5 | 0.323 | 3.30 | 51.3 | 22.8 | 1.74 | 22.9 | 0.02 | 0.01 | 0.05 | 126 | |
| 140 | 9.31 | 9.29 | 33.841 | 26.164 | 187.0 | 0.352 | 3.15 | 48.7 | 24.6 | 1.81 | 23.9 | 0.02 | 0.01 | 0.04 | 141 | 209 |
| 150 ISL | 9.11 D | 9.09 | 33.900 D | 26.242 | 179.7 | 0.370 | 3.10 | 47.7 | 25.8 | 1.84 | 24.5 | 0.02 | 0.01 | 0.04 | 151 | |
| 170 | 8.83 | 8.81 | 33.954 | 26.329 | 171.8 | 0.406 | 2.96 | 45.3 | 28.8 | 1.91 | 25.7 | 0.01 | 0.00 | 0.04 | 171 | 208 |
| 200 | 8.44 | 8.42 | 34.044 | 26.460 | 159.8 | 0.455 | 2.43 | 36.9 | 35.3 | 2.14 | 28.7 | 0.01 | 0.00 | 0.03 | 201 | 207 |
| 227 | 8.23 | 8.21 | 34.099 | 26.536 | 153.1 | 0.498 | 1.91 | 28.9 | 40.5 | 2.33 | 31.0 | 0.01 | | | 228 | 206 |
| 250 ISL | 7.72 D | 7.70 | 34.108 D | 26.618 | 145.4 | 0.532 | 1.72 | 25.7 | 45.8 | 2.45 | 32.8 | 0.01 | | | 251 | |
| 268 | 7.30 | 7.27 | 34.092 | 26.666 | 141.0 | 0.558 | 1.62 | 24.0 | 49.8 | 2.52 | 34.0 | 0.01 | | | 270 | 205 |
| 300 ISL | 7.17 D | 7.14 | 34.123 D | 26.709 | 137.4 | 0.602 | 1.30 | 19.2 | 54.2 | 2.65 | 35.4 | 0.01 | | | 302 | |
| 318 | 7.01 | 6.98 | 34.150 | 26.752 | 133.4 | 0.627 | 1.12 | 16.5 | 56.3 | 2.72 | 36.0 | 0.01 | | | 320 | 204 |
| 378 | 6.57 | 6.54 | 34.196 | 26.848 | 125.0 | 0.704 | 0.79 | 11.5 | 64.8 | 2.89 | 37.8 | 0.01 | | | 380 | 203 |
| 400 ISL | 6.57 D | 6.53 | 34.233 D | 26.878 | 122.5 | 0.731 | 0.65 | 9.5 | 66.8 | 2.95 | 38.1 | 0.01 | | | 403 | |
| 438 | 6.47 | 6.43 | 34.282 | 26.930 | 118.1 | 0.777 | 0.44 | 6.4 | 70.1 | 3.04 | 38.6 | 0.01 | | | 441 | 202 |
| 500 ISL | 5.99 D | 5.95 | 34.314 D | 27.018 | 110.2 | 0.848 | 0.32 | 4.6 | 78.1 | 3.13 | 40.1 | 0.00 | | | 503 | |
| 515 | 5.93 | 5.88 | 34.318 | 27.028 | 109.3 | 0.864 | 0.29 | 4.2 | 80.0 | 3.15 | 40.5 | 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 0704 STATION 86.7 80.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 19.3 N | 121 42.9 W | 09/04/07 | 0229 UTC | 4050 m | 330 20 kn | 330 07 06 | 0 | 1017.5 mb | 15.0 C | 13.0 C | | 0/8 | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.32 | 14.32 | 33.473 | 24.941 | 300.4 | 0.000 | 6.06 | 104.1 | 2.8 | 0.35 | 0.3 | 0.03 | 0.52 | 0.00 | 0 | |
| 2 | 14.32 | 14.32 | 33.473 | 24.941 | 300.4 | 0.006 | 6.06 | 104.1 | 2.8 | 0.35 | 0.3 | 0.03 | 0.52 | 0.00 | 2 | 221 |
| 10 | 14.33 | 14.33 | 33.474 | 24.940 | 300.8 | 0.030 | 6.10 | 104.8 | 2.7 | 0.35 | 0.3 | 0.03 | 0.42 | 0.11 | 10 | 219 |
| 10 | 14.33 | 14.33 | 33.474 | 24.940 | 300.8 | 0.030 | | | | | | | | | 10 | 220 |
| 20 ISL | 14.33 D | 14.33 | 33.472 D | 24.939 | 301.2 | 0.060 | 6.08 | 104.5 | 2.7 | 0.35 | 0.3 | 0.03 | 0.44 | 0.15 | 20 | |
| 21 | 14.33 | 14.33 | 33.473 | 24.940 | 301.1 | 0.063 | 6.08 | 104.5 | 2.7 | 0.35 | 0.3 | 0.03 | 0.44 | 0.15 | 21 | 218 |
| 30 | 13.99 | 13.99 | 33.469 | 25.008 | 294.9 | 0.090 | 6.11 | 104.2 | 2.8 | 0.34 | 0.1 | 0.02 | 0.57 | 0.14 | 30 | 217 |
| 40 | 13.69 | 13.68 | 33.474 | 25.074 | 288.9 | 0.119 | 6.01 | 101.9 | 2.9 | 0.39 | 0.6 | 0.12 | 0.93 | 0.18 | 40 | 216 |
| 50 | 12.83 | 12.82 | 33.415 | 25.201 | 277.0 | 0.147 | 5.72 | 95.2 | 4.8 | 0.63 | 4.1 | 0.21 | 0.55 | 0.17 | 50 | 215 |
| 60 | 12.22 | 12.21 | 33.392 | 25.301 | 267.7 | 0.175 | 5.47 | 89.9 | 6.5 | 0.78 | 6.8 | 0.05 | 0.31 | 0.11 | 60 | 214 |
| 69 | 11.86 | 11.85 | 33.415 | 25.387 | 259.7 | 0.198 | 5.17 | 84.3 | 8.4 | 0.95 | 9.3 | 0.03 | 0.15 | 0.09 | 69 | 213 |
| 75 ISL | 11.74 D | 11.73 | 33.449 D | 25.435 | 255.2 | 0.214 | 4.93 | 80.2 | 10.0 | 1.06 | 11.2 | 0.02 | 0.10 | 0.08 | 75 | |
| 85 | 10.95 | 10.94 | 33.453 | 25.582 | 241.4 | 0.239 | 4.53 | 72.5 | 12.7 | 1.24 | 14.3 | 0.02 | 0.06 | 0.07 | 85 | 212 |
| 100 ISL | 10.21 D | 10.20 | 33.563 D | 25.797 | 221.2 | 0.273 | 3.99 | 62.8 | 16.3 | 1.49 | 18.0 | 0.01 | 0.04 | 0.07 | 100 | |
| 101 | 10.43 | 10.42 | 33.530 | 25.733 | 227.3 | 0.276 | 3.96 | 62.7 | 16.5 | 1.51 | 18.2 | 0.01 | 0.04 | 0.07 | 101 | 211 |
| 119 | 9.72 | 9.71 | 33.686 | 25.975 | 204.5 | 0.315 | 3.40 | 53.0 | 21.4 | 1.72 | 22.1 | 0.01 | 0.01 | 0.06 | 120 | 210 |
| 125 ISL | 9.53 D | 9.52 | 33.757 D | 26.062 | 196.4 | 0.327 | 3.32 | 51.6 | 22.6 | 1.76 | 22.8 | 0.01 | 0.01 | 0.06 | 126 | |
| 139 | 9.28 | 9.26 | 33.843 | 26.170 | 186.4 | 0.353 | 3.17 | 49.0 | 25.1 | 1.83 | 24.0 | 0.01 | 0.00 | 0.05 | 140 | 209 |
| 150 ISL | 9.30 D | 9.28 | 33.904 D | 26.215 | 182.4 | 0.374 | 2.95 | 45.6 | 26.9 | 1.90 | 25.0 | 0.01 | 0.00 | 0.05 | 151 | |
| 169 | 9.15 | 9.13 | 33.975 | 26.295 | 175.1 | 0.408 | 2.56 | 39.5 | 29.8 | 2.03 | 26.5 | 0.01 | 0.00 | 0.04 | 170 | 208 |
| 199 | 8.78 | 8.76 | 34.045 | 26.409 | 164.8 | 0.459 | 2.27 | 34.7 | 34.0 | 2.16 | 28.4 | 0.01 | 0.01 | 0.03 | 200 | 207 |
| 200 ISL | 8.74 D | 8.72 | 34.053 D | 26.421 | 163.7 | 0.460 | 2.27 | 34.7 | 34.1 | 2.16 | 28.4 | 0.01 | | | 201 | |
| 228 | 8.48 | 8.46 | 34.066 | 26.472 | 159.3 | 0.505 | 2.16 | 32.8 | 36.8 | 2.23 | 29.5 | 0.01 | | | 229 | 206 |
| 250 ISL | 8.18 D | 8.15 | 34.104 D | 26.547 | 152.4 | 0.540 | 1.96 | 29.6 | 40.6 | 2.33 | 30.9 | 0.01 | | | 251 | |
| 268 | 7.93 | 7.90 | 34.109 | 26.589 | 148.6 | 0.567 | 1.76 | 26.4 | 44.1 | 2.43 | 32.1 | 0.01 | | | 270 | 205 |
| 300 ISL | 7.54 D | 7.51 | 34.162 D | 26.687 | 139.7 | 0.613 | 1.40 | 20.8 | 49.7 | 2.59 | 33.7 | 0.01 | | | 302 | |
| 319 | 7.38 | 7.35 | 34.168 | 26.715 | 137.3 | 0.639 | 1.20 | 17.8 | 52.9 | 2.68 | 34.6 | 0.01 | | | 321 | 204 |
| 377 | 6.89 | 6.85 | 34.226 | 26.829 | 127.0 | 0.716 | 0.75 | 11.0 | 62.0 | 2.91 | 36.9 | 0.00 | | | 379 | 203 |
| 400 ISL | 6.63 D | 6.59 | 34.231 D | 26.868 | 123.5 | 0.745 | 0.63 | 9.2 | 65.7 | 2.98 | 37.6 | 0.00 | | | 403 | |
| 438 | 6.36 | 6.32 | 34.262 | 26.929 | 118.1 | 0.791 | 0.48 | 7.0 | 71.3 | 3.07 | 38.7 | 0.00 | | | 441 | 202 |
| 500 ISL | 6.03 D | 5.99 | 34.299 D | 27.001 | 111.8 | 0.862 | 0.34 | 4.9 | 77.9 | 3.13 | 40.1 | 0.00 | | | 503 | |
| 515 | 5.94 | 5.89 | 34.300 | 27.013 | 110.8 | 0.879 | 0.31 | 4.4 | 79.5 | 3.15 | 40.4 | 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 0704 STATION 86.7 90.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 59.3 N | 122 23.4 W | 09/04/07 | 0838 UTC | 4069 m | 300 18 kn | | | 1019.5 mb | 14.7 C | 13.1 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.11 | 14.11 | 33.296 | 24.848 | 309.2 | 0.000 | 6.13 | 104.7 | 2.6 | 0.35 | 0.1 | 0.03 | 0.39 | 0.07 | 0 | |
| 2 | 14.11 | 14.11 | 33.296 | 24.848 | 309.3 | 0.006 | 6.13 | 104.7 | 2.6 | 0.35 | 0.1 | 0.03 | 0.39 | 0.07 | 2 | 221 |
| 10 | 14.11 | 14.11 | 33.297 | 24.849 | 309.4 | 0.031 | 6.15 | 105.1 | 2.6 | 0.35 | 0.1 | 0.03 | 0.37 | 0.08 | 10 | 219 |
| 10 | 14.11 | 14.11 | 33.296 | 24.849 | 309.5 | 0.031 | | | | | | | | | 10 | 220 |
| 20 ISL | 13.87 D | 13.87 | 33.303 D | 24.904 | 304.5 | 0.062 | 6.19 | 105.2 | 2.5 | 0.36 | 0.2 | 0.04 | 0.42 | 0.11 | 20 | |
| 21 | 13.82 | 13.82 | 33.305 | 24.916 | 303.4 | 0.065 | 6.19 | 105.1 | 2.5 | 0.36 | 0.2 | 0.04 | 0.43 | 0.12 | 21 | 218 |
| 30 | 13.32 | 13.32 | 33.284 | 25.001 | 295.5 | 0.092 | 6.11 | 102.7 | 2.9 | 0.40 | 0.6 | 0.08 | 0.55 | 0.18 | 30 | 217 |
| 40 | 13.27 | 13.26 | 33.308 | 25.030 | 293.0 | 0.121 | 6.14 | 103.1 | 2.9 | 0.41 | 0.7 | 0.08 | 0.45 | 0.16 | 40 | 216 |
| 50 | 13.24 | 13.23 | 33.313 | 25.040 | 292.3 | 0.150 | 6.11 | 102.5 | 2.9 | 0.42 | 0.8 | 0.09 | 0.47 | 0.24 | 50 | 215 |
| 60 | 13.07 | 13.06 | 33.331 | 25.089 | 288.0 | 0.179 | 5.95 | 99.5 | 3.2 | 0.49 | 1.4 | 0.23 | 0.35 | 0.18 | 60 | 214 |
| 70 | 12.68 | 12.67 | 33.359 | 25.187 | 278.8 | 0.208 | 5.76 | 95.6 | 3.9 | 0.59 | 3.4 | 0.29 | 0.19 | 0.11 | 70 | 213 |
| 75 ISL | 12.62 D | 12.61 | 33.505 D | 25.312 | 267.1 | 0.221 | 5.69 | 94.4 | 4.3 | 0.64 | 4.3 | 0.28 | 0.13 | 0.09 | 75 | |
| 85 | 12.36 | 12.35 | 33.487 | 25.348 | 263.8 | 0.248 | 5.41 | 89.2 | 5.1 | 0.78 | 6.7 | 0.26 | 0.05 | 0.07 | 85 | 212 |
| 99 | 11.26 | 11.25 | 33.475 | 25.544 | 245.4 | 0.283 | 4.46 | 71.8 | 11.2 | 1.18 | 13.5 | 0.02 | 0.03 | 0.07 | 99 | 211 |
| 100 ISL | 11.14 D | 11.13 | 33.483 D | 25.572 | 242.7 | 0.286 | 4.40 | 70.7 | 11.6 | 1.20 | 13.9 | 0.02 | 0.03 | 0.07 | 100 | |
| 120 | 10.30 | 10.29 | 33.623 | 25.829 | 218.7 | 0.332 | 3.54 | 55.9 | 18.5 | 1.60 | 19.9 | 0.02 | 0.02 | 0.09 | 121 | 210 |
| 125 ISL | 9.95 D | 9.94 | 33.681 D | 25.933 | 208.7 | 0.343 | 3.38 | 53.0 | 20.0 | 1.68 | 21.1 | 0.02 | 0.02 | 0.08 | 126 | |
| 140 | 9.52 | 9.50 | 33.757 | 26.064 | 196.5 | 0.373 | 3.16 | 49.1 | 23.3 | 1.81 | 23.4 | 0.01 | 0.01 | 0.05 | 141 | 209 |
| 150 ISL | 9.20 D | 9.18 | 33.829 D | 26.172 | 186.4 | 0.392 | 3.50 | 54.0 | 23.1 | 1.71 | 22.5 | 0.01 | 0.01 | 0.04 | 151 | |
| 170 | 9.05 | 9.03 | 33.931 | 26.276 | 176.9 | 0.429 | 4.19 | 64.5 | 22.5 | 1.49 | 20.4 | 0.01 | 0.01 | 0.03 | 171 | 208 |
| 199 | 8.55 | 8.53 | 33.991 | 26.402 | 165.4 | 0.478 | 3.38 | 51.4 | 29.9 | 1.82 | 24.8 | 0.01 | 0.01 | 0.03 | 200 | 207 |
| 200 ISL | 8.54 D | 8.52 | 33.996 D | 26.407 | 164.9 | 0.480 | 3.35 | 51.0 | 30.2 | 1.83 | 25.0 | 0.01 | | | 201 | |
| 229 | 8.17 | 8.15 | 34.044 | 26.501 | 156.3 | 0.526 | 2.42 | 36.5 | 37.6 | 2.18 | 29.3 | 0.01 | | | 230 | 206 |
| 250 ISL | 7.93 D | 7.90 | 34.067 D | 26.555 | 151.5 | 0.559 | 2.08 | 31.2 | 41.8 | 2.32 | 31.1 | 0.01 | | | 251 | |
| 269 | 7.70 | 7.67 | 34.086 | 26.604 | 147.1 | 0.587 | 1.89 | 28.2 | 45.1 | 2.41 | 32.2 | 0.01 | | | 271 | 205 |
| 300 ISL | 7.26 D | 7.23 | 34.103 D | 26.680 | 140.1 | 0.632 | 1.57 | 23.2 | 50.5 | 2.56 | 34.2 | 0.01 | | | 302 | |
| 317 | 7.07 | 7.04 | 34.108 | 26.711 | 137.4 | 0.655 | 1.42 | 20.9 | 53.4 | 2.64 | 35.1 | 0.01 | | | 319 | 204 |
| 377 | 6.49 | 6.46 | 34.151 | 26.823 | 127.2 | 0.735 | 0.95 | 13.8 | 63.6 | 2.87 | 37.7 | 0.00 | | | 379 | 203 |
| 400 ISL | 6.47 D | 6.43 | 34.173 D | 26.844 | 125.6 | 0.764 | 0.82 | 11.9 | 65.8 | 2.92 | 38.1 | 0.00 | | | 403 | |
| 440 | 6.35 | 6.31 | 34.221 | 26.898 | 121.0 | 0.813 | 0.62 | 9.0 | 69.0 | 3.00 | 38.6 | 0.00 | | | 443 | 202 |
| 500 ISL | 6.22 D | 6.18 | 34.300 D | 26.977 | 114.3 | 0.884 | 0.37 | 5.3 | 75.0 | 3.12 | 39.6 | 0.00 | | | 503 | |
| 511 | 6.16 | 6.11 | 34.307 | 26.991 | 113.1 | 0.896 | 0.32 | 4.6 | 76.1 | 3.14 | 39.8 | 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 0704 STATION 86.7 100.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 38.9 N | 123 5.2 W | 09/04/07 | 1652 UTC | 4145 m | 330 24 kn | 320 05 06 | 2 | 1021.3 mb | 15.9 C | 14.2 C | 25m | 8/8 | SC |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 15.25 | 15.25 | 33.368 | 24.660 | 327.1 | 0.000 | 5.85 | 102.3 | 1.8 | 0.31 | 0.0 | 0.00 | 0.11 | 0.02 | 0 | |
| 2 A | 15.25 | 15.25 | 33.368 | 24.660 | 327.2 | 0.007 | 5.85 | 102.3 | 1.8 | 0.31 | 0.0 | 0.00 | 0.11 | 0.02 | 2 | 223 |
| 10 ISL | 15.24 D | 15.24 | 33.368 D | 24.663 | 327.2 | 0.033 | 5.86 | 102.5 | 1.8 | 0.30 | 0.0 | 0.00 | 0.12 | 0.03 | 10 | |
| 11 | 15.24 | 15.24 | 33.370 | 24.664 | 327.1 | 0.036 | 5.86 | 102.5 | 1.8 | 0.30 | 0.0 | 0.00 | 0.12 | 0.03 | 11 | 222 |
| 13 A | 15.24 | 15.24 | 33.369 | 24.664 | 327.2 | 0.043 | 5.85 | 102.3 | 1.7 | 0.30 | 0.0 | 0.00 | 0.12 | 0.03 | 13 | 221 |
| 20 ISL | 15.24 D | 15.24 | 33.372 D | 24.666 | 327.2 | 0.065 | 5.85 | 102.3 | 1.7 | 0.30 | 0.0 | 0.00 | 0.12 | 0.03 | 20 | |
| 23 | 15.24 | 15.24 | 33.377 | 24.670 | 326.9 | 0.075 | 5.85 | 102.3 | 1.7 | 0.30 | 0.0 | 0.00 | 0.12 | 0.03 | 23 | 220 |
| 30 ISL | 15.21 D | 15.21 | 33.388 D | 24.685 | 325.6 | 0.098 | 5.87 | 102.6 | 1.7 | 0.30 | 0.0 | 0.00 | 0.13 | 0.03 | 30 | |
| 34 A | 15.14 | 15.13 | 33.380 | 24.695 | 324.9 | 0.111 | 5.88 | 102.6 | 1.7 | 0.30 | 0.0 | 0.00 | 0.13 | 0.03 | 34 | 219 |
| 40 | 14.70 | 14.69 | 33.323 | 24.746 | 320.1 | 0.130 | 5.96 | 103.1 | 1.7 | 0.31 | 0.0 | 0.00 | 0.17 | 0.05 | 40 | 218 |
| 47 A | 14.40 | 14.39 | 33.287 | 24.782 | 316.9 | 0.153 | 6.00 | 103.1 | 1.8 | 0.32 | 0.0 | 0.00 | 0.27 | 0.11 | 47 | 217 |
| 50 ISL | 14.32 D | 14.31 | 33.282 D | 24.795 | 315.7 | 0.162 | 6.00 | 102.9 | 1.8 | 0.32 | 0.0 | 0.00 | 0.28 | 0.11 | 50 | |
| 54 | 14.20 | 14.19 | 33.287 | 24.824 | 313.1 | 0.175 | 6.00 | 102.7 | 1.8 | 0.33 | 0.0 | 0.00 | 0.30 | 0.11 | 54 | 216 |
| 61 A | 13.77 | 13.76 | 33.245 | 24.881 | 307.8 | 0.197 | 6.05 | 102.6 | 1.8 | 0.34 | 0.1 | 0.01 | 0.44 | 0.25 | 61 | 215 |
| 72 | 13.31 | 13.30 | 33.254 | 24.981 | 298.5 | 0.230 | 5.84 | 98.1 | 2.4 | 0.44 | 1.0 | 0.31 | 0.54 | 0.31 | 72 | 214 |
| 75 ISL | 13.22 D | 13.21 | 33.249 D | 24.996 | 297.2 | 0.239 | 5.81 | 97.4 | 2.5 | 0.45 | 1.3 | 0.30 | 0.51 | 0.30 | 75 | |
| 85 | 13.15 | 13.14 | 33.334 | 25.076 | 289.9 | 0.268 | 5.70 | 95.5 | 3.1 | 0.50 | 2.5 | 0.15 | 0.31 | 0.20 | 85 | 213 |
| 96 A | 12.63 | 12.62 | 33.388 | 25.220 | 276.4 | 0.299 | 5.53 | 91.7 | 4.2 | 0.64 | 4.9 | 0.03 | 0.07 | 0.06 | 96 | 212 |
| 100 ISL | 12.56 D | 12.55 | 33.394 D | 25.238 | 274.7 | 0.310 | 5.49 | 90.9 | 4.4 | 0.66 | 5.3 | 0.03 | 0.06 | 0.06 | 100 | |
| 111 | 12.27 | 12.26 | 33.413 | 25.309 | 268.2 | 0.340 | 5.31 | 87.4 | 5.5 | 0.74 | 6.6 | 0.02 | 0.05 | 0.05 | 111 | 211 |
| 124 | 11.48 | 11.46 | 33.489 | 25.516 | 248.7 | 0.374 | 4.80 | 77.7 | 8.6 | 0.96 | 10.7 | 0.02 | 0.04 | 0.04 | 125 | 210 |
| 125 ISL | 11.41 D | 11.39 | 33.500 D | 25.537 | 246.7 | 0.376 | 4.77 | 77.1 | 8.8 | 0.97 | 11.0 | 0.02 | 0.04 | 0.04 | 126 | |
| 145 | 10.38 | 10.36 | 33.671 | 25.853 | 216.9 | 0.423 | 4.40 | 69.6 | 13.6 | 1.23 | 15.6 | 0.01 | 0.02 | 0.03 | 146 | 209 |
| 150 ISL | 9.93 D | 9.91 | 33.701 D | 25.953 | 207.4 | 0.433 | 4.33 | 67.8 | 14.9 | 1.29 | 16.6 | 0.01 | 0.01 | 0.03 | 151 | |
| 169 | 9.45 | 9.43 | 33.824 | 26.128 | 191.0 | 0.471 | 4.07 | 63.1 | 19.6 | 1.48 | 19.8 | 0.01 | 0.00 | 0.02 | 170 | 208 |
| 198 | 8.91 | 8.89 | 33.937 | 26.304 | 174.8 | 0.524 | 3.68 | 56.4 | 25.2 | 1.68 | 22.9 | 0.01 | 0.00 | 0.02 | 199 | 207 |
| 200 ISL | 8.85 D | 8.83 | 33.943 D | 26.318 | 173.5 | 0.528 | 3.66 | 56.1 | 25.6 | 1.69 | 23.1 | 0.01 | | | 201 | |
| 228 | 8.38 | 8.36 | 33.985 | 26.424 | 163.8 | 0.575 | 3.31 | 50.2 | 31.0 | 1.85 | 25.5 | 0.01 | | | 229 | 206 |
| 250 ISL | 8.03 D | 8.00 | 34.015 D | 26.500 | 156.8 | 0.610 | 2.80 | 42.1 | 36.6 | 2.06 | 28.3 | 0.01 | | | 251 | |
| 268 | 7.81 | 7.78 | 34.043 | 26.554 | 151.8 | 0.638 | 2.37 | 35.5 | 41.1 | 2.24 | 30.5 | 0.01 | | | 269 | 205 |
| 300 ISL | 7.37 D | 7.34 | 34.049 D | 26.622 | 145.6 | 0.685 | 1.87 | 27.7 | 46.7 | 2.44 | 32.9 | 0.01 | | | 302 | |
| 318 | 7.35 | 7.32 | 34.093 | 26.660 | 142.4 | 0.711 | 1.66 | 24.6 | 49.4 | 2.53 | 33.9 | 0.01 | | | 320 | 204 |
| 378 | 6.63 | 6.60 | 34.106 | 26.769 | 132.4 | 0.794 | 1.26 | 18.4 | 59.5 | 2.75 | 36.8 | 0.01 | | | 380 | 203 |
| 400 ISL | 6.42 D | 6.38 | 34.129 D | 26.815 | 128.3 | 0.823 | 1.08 | 15.7 | 63.2 | 2.83 | 37.6 | 0.01 | | | 402 | |
| 438 | 6.20 | 6.16 | 34.165 | 26.873 | 123.2 | 0.870 | 0.79 | 11.4 | 69.2 | 2.96 | 38.9 | 0.00 | | | 441 | 202 |
| 500 ISL | 5.73 D | 5.69 | 34.191 D | 26.953 | 116.0 | 0.944 | 0.59 | 8.4 | 77.1 | 3.06 | 40.5 | 0.00 | | | 503 | |
| 517 | 5.67 | 5.63 | 34.201 | 26.968 | 114.7 | 0.964 | 0.53 | 7.5 | 79.3 | 3.09 | 41.0 | 0.00 | | | 520 | 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 0704 STATION 86.7 110.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 19.2 N | 123 44.7 W | 09/04/07 | 2203 UTC | 3844 m | 320 16 kn | 320 14 06 | 1 | 1022.1 mb | 18.0 C | 16.7 C | 26m | 6/8 | SC |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 15.72 | 15.72 | 33.413 | 24.591 | 333.7 | 0.000 | 5.86 | 103.5 | 1.9 | 0.30 | 0.0 | 0.00 | 0.11 | 0.01 | 0 | |
| 2 | 15.72 | 15.72 | 33.413 | 24.591 | 333.8 | 0.007 | 5.86 | 103.5 | 1.9 | 0.30 | 0.0 | 0.00 | 0.11 | 0.01 | 2 | 222 |
| 10 | 15.54 | 15.54 | 33.412 | 24.630 | 330.3 | 0.033 | 5.87 D | 103.3 | 1.9 | 0.30 | 0.0 | 0.00 | 0.12 | 0.01 | 10 | 221 |
| 15 | 15.53 | 15.53 | 33.426 | 24.644 | 329.2 | 0.050 | 5.83 | 102.6 | 1.8 | 0.29 | 0.0 | 0.00 | 0.11 | 0.01 | 15 | 220 |
| 20 ISL | 15.49 D | 15.49 | 33.420 D | 24.648 | 328.9 | 0.066 | 5.84 | 102.7 | 1.8 | 0.29 | 0.0 | 0.00 | 0.11 | 0.01 | 20 | |
| 30 | 15.41 | 15.41 | 33.408 | 24.657 | 328.4 | 0.099 | 5.85 | 102.7 | 1.8 | 0.30 | 0.0 | 0.00 | 0.12 | 0.00 | 30 | 219 |
| 45 | 14.81 | 14.80 | 33.361 | 24.752 | 319.8 | 0.148 | 5.98 | 103.7 | 1.7 | 0.31 | 0.0 | 0.00 | 0.14 | 0.03 | 45 | 218 |
| 50 ISL | 14.52 D | 14.51 | 33.296 D | 24.764 | 318.7 | 0.164 | 6.02 | 103.7 | 1.8 | 0.32 | 0.0 | 0.00 | 0.18 | 0.02 | 50 | |
| 55 | 14.44 | 14.43 | 33.298 | 24.782 | 317.1 | 0.180 | 6.05 | 104.1 | 1.9 | 0.32 | 0.0 | 0.00 | 0.22 | 0.02 | 55 | 217 |
| 65 | 14.22 | 14.21 | 33.313 | 24.840 | 311.8 | 0.211 | 6.01 | 102.9 | 1.8 | 0.32 | 0.0 | 0.00 | 0.30 | 0.09 | 65 | 216 |
| 70 | 13.80 | 13.79 | 33.273 | 24.897 | 306.6 | 0.226 | 6.08 | 103.2 | 1.9 | 0.34 | 0.0 | 0.00 | 0.43 | 0.11 | 70 | 215 |
| 75 | 13.49 | 13.48 | 33.254 | 24.945 | 302.1 | 0.242 | 6.08 | 102.5 | 2.0 | 0.36 | 0.0 | 0.01 | 0.81 | 0.43 | 75 | 214 |
| 84 | 13.27 | 13.26 | 33.257 | 24.992 | 297.8 | 0.269 | 5.91 | 99.2 | 2.4 | 0.42 | 0.7 | 0.21 | 0.76 | 0.36 | 84 | 213 |
| 95 | 12.85 | 12.84 | 33.270 | 25.085 | 289.1 | 0.301 | 5.80 | 96.5 | 3.0 | 0.52 | 2.3 | 0.18 | 0.35 | 0.20 | 95 | 212 |
| 100 ISL | 12.82 D | 12.81 | 33.350 D | 25.154 | 282.8 | 0.315 | 5.73 | 95.3 | 3.5 | 0.58 | 3.4 | 0.12 | 0.23 | 0.14 | 100 | |
| 109 | 12.29 | 12.28 | 33.333 | 25.243 | 274.4 | 0.340 | 5.55 | 91.3 | 4.8 | 0.69 | 5.5 | 0.02 | 0.09 | 0.06 | 109 | 211 |
| 124 | 11.64 | 11.62 | 33.440 | 25.448 | 255.2 | 0.380 | 4.98 | 80.8 | 7.4 | 0.88 | 9.2 | 0.02 | 0.04 | 0.04 | 125 | 210 |
| 125 ISL | 11.43 D | 11.41 | 33.456 D | 25.499 | 250.3 | 0.383 | 4.94 | 79.8 | 7.7 | 0.90 | 9.5 | 0.02 | 0.04 | 0.04 | 126 | |
| 144 | 10.44 | 10.42 | 33.606 | 25.792 | 222.7 | 0.427 | 4.34 | 68.7 | 13.0 | 1.24 | 15.5 | 0.01 | 0.02 | 0.03 | 145 | 209 |
| 150 ISL | 10.10 D | 10.08 | 33.641 D | 25.877 | 214.6 | 0.441 | 4.19 | 65.9 | 14.8 | 1.33 | 17.0 | 0.01 | 0.01 | 0.03 | 151 | |
| 169 | 9.49 | 9.47 | 33.764 | 26.075 | 196.1 | 0.480 | 3.88 | 60.2 | 19.5 | 1.55 | 20.5 | 0.01 | 0.00 | 0.02 | 170 | 208 |
| 199 | 9.04 | 9.02 | 33.923 | 26.272 | 177.8 | 0.536 | 4.04 | 62.1 | 22.5 | 1.55 | 21.2 | 0.01 | 0.00 | 0.02 | 200 | 207 |
| 200 ISL | 8.99 D | 8.97 | 33.932 D | 26.287 | 176.4 | 0.537 | 4.04 | 62.1 | 22.6 | 1.55 | 21.3 | 0.01 | | | 201 | |
| 229 | 8.54 | 8.52 | 33.984 | 26.398 | 166.3 | 0.587 | 3.67 | 55.8 | 28.0 | 1.73 | 23.8 | 0.01 | | | 230 | 206 |
| 250 ISL | 8.21 D | 8.18 | 34.019 D | 26.476 | 159.1 | 0.621 | 2.98 | 45.0 | 33.6 | 1.98 | 27.1 | 0.00 | | | 251 | |
| 267 | 8.01 | 7.98 | 34.038 | 26.521 | 155.1 | 0.648 | 2.43 | 36.5 | 38.3 | 2.19 | 29.8 | 0.00 | | | 268 | 205 |
| 300 ISL | 7.18 D | 7.15 | 34.016 D | 26.623 | 145.5 | 0.698 | 2.25 | 33.2 | 45.7 | 2.35 | 32.3 | 0.00 | | | 302 | |
| 318 | 6.98 | 6.95 | 34.023 | 26.656 | 142.5 | 0.724 | 2.15 | 31.6 | 49.4 | 2.40 | 33.2 | 0.00 | | | 320 | 204 |
| 377 | 6.17 | 6.14 | 34.036 | 26.774 | 131.6 | 0.804 | 1.67 | 24.1 | 61.1 | 2.67 | 36.8 | 0.00 | | | 379 | 203 |
| 400 ISL | 5.95 D | 5.92 | 34.067 D | 26.826 | 126.8 | 0.834 | 1.33 | 19.1 | 64.6 | 2.79 | 37.8 | 0.00 | | | 402 | |
| 438 | 6.10 | 6.06 | 34.172 | 26.891 | 121.4 | 0.881 | 0.78 | 11.2 | 69.8 | 2.98 | 39.2 | 0.01 | | | 441 | 202 |
| 500 ISL | 5.78 D | 5.74 | 34.246 D | 26.990 | 112.6 | 0.954 | 0.47 | 6.7 | 77.9 | 3.11 | 40.6 | 0.00 | | | 503 | |
| 515 | 5.75 | 5.71 | 34.253 | 26.999 | 111.8 | 0.971 | 0.39 | 5.6 | 79.8 | 3.14 | 40.9 | 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 0704 STATION 86.8 32.5

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 53.3 N | 118 26.7 W | 07/04/07 | 1113 UTC | | 250 04 kn | | | 1012.2 mb | 15.2 C | 13.9 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.47 | 14.47 | 33.671 | 25.062 | 288.9 | 0.000 | 6.05 | 104.4 | 8.8 | 0.53 | 2.4 | 0.13 | 1.82 | 0.43 | 0 | |
| 1 | 14.47 | 14.47 | 33.671 | 25.062 | 288.9 | 0.003 | 6.05 | 104.4 | 8.8 | 0.53 | 2.4 | 0.13 | 1.82 | 0.43 | 1 | 205 |
| 6 | 13.75 | 13.75 | 33.670 | 25.212 | 274.8 | 0.017 | 5.70 | 96.9 | 9.6 | 0.67 | 4.2 | 0.18 | 1.03 | 0.38 | 6 | 204 |
| 10 | 13.77 | 13.77 | 33.671 | 25.209 | 275.2 | 0.028 | 5.61 | 95.4 | 10.0 | 0.71 | 4.7 | 0.20 | 1.09 | 0.42 | 10 | 203 |
| 16 | 13.07 | 13.07 | 33.680 | 25.358 | 261.2 | 0.044 | 4.94 | 82.8 | 12.4 | 1.01 | 8.2 | 0.29 | 0.81 | 0.58 | 16 | 202 |
| 20 | 12.75 | 12.75 | 33.684 | 25.424 | 255.0 | 0.054 | 4.72 | 78.6 | 13.2 | 1.10 | 9.4 | 0.32 | 0.88 | 0.66 | 20 | 201 |

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

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 STATION 88.5 30.1

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 40.3 N | 118 5.3 W | 07/04/07 | 0732 UTC | 19 m | 110 04 kn | | | 1013.1 mb | 15.5 C | 14.4 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 15.14 | 15.14 | 33.661 | 24.910 | 303.3 | 0.000 | 6.63 | 115.9 | 8.0 | 0.34 | 0.2 | 0.03 | 1.74 | 0.93 | 0 | |
| 2 | 15.14 | 15.14 | 33.661 | 24.910 | 303.4 | 0.006 | 6.63 | 115.9 | 8.0 | 0.34 | 0.2 | 0.03 | 1.74 | 0.93 | 2 | 204 |
| 6 | 14.94 | 14.94 | 33.660 | 24.953 | 299.4 | 0.018 | 6.65 | 115.8 | 8.2 | 0.36 | 0.4 | 0.04 | 2.98 | 1.14 | 6 | 203 |
| 10 ISL | 14.11 D | 14.11 | 33.660 D | 25.130 | 282.7 | 0.030 | 6.23 | 106.7 | 9.0 | 0.51 | 2.4 | 0.12 | 2.03 | 0.79 | 10 | |
| 11 | 14.10 | 14.10 | 33.659 | 25.131 | 282.6 | 0.033 | 6.11 | 104.6 | 9.2 | 0.55 | 2.9 | 0.14 | 1.68 | 0.68 | 11 | 202 |
| 15 | 13.77 | 13.77 | 33.661 | 25.201 | 276.1 | 0.044 | 5.88 | 100.0 | 9.5 | 0.61 | 3.5 | 0.17 | 1.28 | 0.48 | 15 | 201 |

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

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 STATION 90.0 27.7

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 29.7 N | 117 45.0 W | 07/04/07 | 0451 UTC | 26 m | 320 01 kn | | | 1013.7 mb | 16.0 C | 14.5 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 15.09 | 15.09 | 33.636 | 24.902 | 304.1 | 0.000 | 6.66 | 116.3 | 7.5 | 0.36 | 0.4 | 0.05 | 3.63 | 1.05 | 0 | |
| 2 | 15.09 | 15.09 | 33.636 | 24.902 | 304.2 | 0.006 | 6.66 | 116.3 | 7.5 | 0.36 | 0.4 | 0.05 | 3.63 | 1.05 | 2 | 205 |
| 6 | 14.73 | 14.73 | 33.651 | 24.991 | 295.8 | 0.018 | 6.56 | 113.8 | 7.4 | 0.37 | 0.5 | 0.05 | 3.37 | 1.11 | 6 | 204 |
| 10 ISL | 14.25 D | 14.25 | 33.644 D | 25.088 | 286.7 | 0.030 | 6.18 | 106.1 | 7.7 | 0.50 | 1.4 | 0.09 | 2.52 | 0.90 | 10 | |
| 11 | 14.17 | 14.17 | 33.645 | 25.106 | 285.0 | 0.033 | 6.05 | 103.7 | 7.8 | 0.55 | 1.8 | 0.11 | 2.26 | 0.83 | 11 | 203 |
| 16 | 13.55 | 13.55 | 33.649 | 25.237 | 272.7 | 0.047 | 5.39 | 91.2 | 9.5 | 0.83 | 5.3 | 0.27 | 1.17 | 0.66 | 16 | 202 |
| 20 | 12.67 | 12.67 | 33.658 | 25.419 | 255.4 | 0.057 | 4.76 | 79.1 | 11.4 | 1.05 | 9.2 | 0.45 | 0.81 | 0.52 | 20 | 201 |

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

RV DAVID STARR JORDAN — CALCOFI CRUISE 0704 — STATION 90.0 28.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 29.2 N | 117 45.9 W | 07/04/07 | 0302 | UTC | 55 m | 200 04 kn | | | 1012.8 mb | 15.5 C | 14.0 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.60 | 14.60 | 33.650 | 25.018 | 293.0 | 0.000 | 6.74 | 116.6 | 6.2 | 0.32 | 0.1 | 0.01 | 3.11 | 0.98 | 0 | |
| 2 | 14.60 | 14.60 | 33.650 | 25.018 | 293.1 | 0.006 | 6.74 | 116.6 | 6.2 | 0.32 | 0.1 | 0.01 | 3.11 | 0.98 | 2 | 208 |
| 6 | 13.99 | 13.99 | 33.650 | 25.147 | 281.0 | 0.017 | 6.23 | 106.4 | 7.0 | 0.48 | 2.1 | 0.07 | 2.07 | 0.74 | 6 | 207 |
| 10 ISL | 13.64 D | 13.64 | 33.651 D | 25.220 | 274.1 | 0.028 | 5.97 | 101.2 | 7.6 | 0.57 | 3.4 | 0.12 | 1.59 | 0.57 | 10 | |
| 11 | 13.63 | 13.63 | 33.652 | 25.223 | 273.9 | 0.031 | 5.92 | 100.4 | 7.7 | 0.59 | 3.7 | 0.13 | 1.52 | 0.55 | 11 | 206 |
| 16 | 13.30 | 13.30 | 33.654 | 25.291 | 267.5 | 0.045 | 5.62 | 94.6 | 8.3 | 0.70 | 5.1 | 0.20 | 1.21 | 0.59 | 16 | 205 |
| 20 ISL | 12.48 D | 12.48 | 33.663 D | 25.460 | 251.5 | 0.055 | 4.84 | 80.1 | 10.7 | 1.01 | 9.4 | 0.41 | 0.83 | 0.42 | 20 | |
| 21 | 12.45 | 12.45 | 33.663 | 25.466 | 251.0 | 0.058 | 4.63 | 76.6 | 11.4 | 1.09 | 10.6 | 0.46 | 0.74 | 0.37 | 21 | 204 |
| 30 ISL | 11.73 D | 11.73 | 33.688 D | 25.622 | 236.4 | 0.080 | 3.79 | 61.8 | 14.9 | 1.40 | 15.0 | 0.55 | 0.46 | 0.38 | 30 | |
| 31 | 11.70 | 11.70 | 33.682 | 25.623 | 236.3 | 0.082 | 3.73 | 60.7 | 15.3 | 1.43 | 15.3 | 0.56 | 0.45 | 0.38 | 31 | 203 |
| 41 | 10.84 | 10.84 | 33.726 | 25.813 | 218.4 | 0.105 | 2.63 | 42.0 | 22.5 | 2.03 | 22.8 | 0.54 | 0.19 | 0.28 | 41 | 202 |
| 50 | 10.62 | 10.61 | 33.833 | 25.936 | 207.0 | 0.124 | 2.41 | 38.4 | 23.2 | 1.97 | 22.7 | 0.25 | 0.12 | 0.41 | 50 | 201 |

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

RV DAVID STARR JORDAN — CALCOFI CRUISE 0704 — STATION 90.0 30.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 25.3 N | 117 54.3 W | 06/04/07 | 2346 | UTC | 616 m | 240 09 kn | 250 01 05 | 4 | 1012.3 mb | 17.0 C | 15.1 C | 12m | 4/8 | ST |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 15.55 | 15.55 | 33.640 | 24.803 | 313.5 | 0.000 | 6.33 | 111.6 | 4.8 | 0.33 | 0.0 | 0.01 | 0.59 | 0.12 | 0 | |
| 2 | 15.55 | 15.55 | 33.640 | 24.803 | 313.5 | 0.006 | 6.33 | 111.6 | 4.8 | 0.33 | 0.0 | 0.01 | 0.59 | 0.12 | 2 | 220 |
| 10 ISL | 15.17 D | 15.17 | 33.631 D | 24.881 | 306.4 | 0.031 | 6.36 | 111.3 | 4.8 | 0.33 | 0.0 | 0.01 | 0.58 | 0.14 | 10 | |
| 11 | 15.16 | 15.16 | 33.636 | 24.887 | 305.9 | 0.034 | 6.36 | 111.2 | 4.8 | 0.33 | 0.0 | 0.01 | 0.58 | 0.14 | 11 | 219 |
| 20 | 14.06 | 14.06 | 33.624 | 25.113 | 284.6 | 0.061 | 6.26 | 107.1 | 4.5 | 0.41 | 0.6 | 0.05 | 0.92 | 0.27 | 20 | 218 |
| 30 ISL | 13.05 D | 13.05 | 33.636 D | 25.328 | 264.4 | 0.088 | 5.40 | 90.4 | 7.8 | 0.75 | 5.6 | 0.35 | 0.77 | 0.35 | 30 | |
| 31 | 12.97 | 12.97 | 33.638 | 25.345 | 262.8 | 0.091 | 5.31 | 88.8 | 8.2 | 0.79 | 6.2 | 0.38 | 0.76 | 0.35 | 31 | 217 |
| 41 | 12.66 | 12.65 | 33.641 | 25.409 | 257.0 | 0.117 | 4.96 | 82.4 | 9.6 | 0.93 | 8.5 | 0.47 | 0.56 | 0.31 | 41 | 216 |
| 50 | 12.05 | 12.04 | 33.624 | 25.513 | 247.3 | 0.139 | 4.30 | 70.5 | 11.6 | 1.16 | 12.2 | 0.42 | 0.34 | 0.25 | 50 | 215 |
| 60 | 11.33 | 11.32 | 33.697 | 25.703 | 229.3 | 0.163 | 3.25 | 52.5 | 16.8 | 1.58 | 18.4 | 0.10 | 0.13 | 0.22 | 60 | 214 |
| 71 | 10.93 | 10.92 | 33.764 | 25.828 | 217.7 | 0.188 | 2.77 | 44.4 | 20.1 | 1.79 | 21.3 | 0.03 | 0.07 | 0.25 | 71 | 213 |
| 75 ISL | 10.86 D | 10.85 | 33.780 D | 25.853 | 215.5 | 0.197 | 2.68 | 42.9 | 20.9 | 1.83 | 21.8 | 0.03 | 0.06 | 0.25 | 75 | |
| 85 | 10.69 | 10.68 | 33.816 | 25.911 | 210.2 | 0.218 | 2.52 | 40.2 | 22.3 | 1.90 | 22.7 | 0.02 | 0.05 | 0.23 | 85 | 212 |
| 100 | 10.44 | 10.43 | 33.879 | 26.004 | 201.6 | 0.249 | 2.30 | 36.5 | 24.5 | 2.01 | 23.9 | 0.02 | 0.04 | 0.23 | 101 | 211 |
| 120 | 10.03 | 10.02 | 34.002 | 26.170 | 186.2 | 0.288 | 2.22 | 34.9 | 27.3 | 2.08 | 25.1 | 0.02 | 0.02 | 0.15 | 121 | 210 |
| 125 ISL | 10.01 D | 10.00 | 34.018 D | 26.186 | 184.8 | 0.297 | 2.17 | 34.1 | 27.9 | 2.10 | 25.4 | 0.02 | 0.02 | 0.13 | 126 | |
| 139 | 9.92 | 9.90 | 34.069 | 26.242 | 179.8 | 0.322 | 2.01 | 31.6 | 29.3 | 2.17 | 26.1 | 0.02 | 0.01 | 0.09 | 140 | 209 |
| 150 ISL | 9.78 D | 9.76 | 34.097 D | 26.287 | 175.7 | 0.342 | 1.94 | 30.4 | 30.4 | 2.21 | 26.6 | 0.02 | 0.01 | 0.09 | 151 | |
| 169 | 9.56 | 9.54 | 34.146 | 26.362 | 168.9 | 0.375 | 1.84 | 28.7 | 32.6 | 2.26 | 27.5 | 0.02 | 0.01 | 0.08 | 170 | 208 |
| 199 | 9.06 | 9.04 | 34.193 | 26.480 | 158.2 | 0.424 | 1.61 | 24.8 | 37.0 | 2.37 | 29.1 | 0.02 | 0.00 | 0.06 | 200 | 207 |
| 200 ISL | 9.01 D | 8.99 | 34.196 D | 26.491 | 157.2 | 0.425 | 1.60 | 24.6 | 37.1 | 2.38 | 29.1 | 0.02 | | | 201 | |
| 228 | 8.86 | 8.84 | 34.238 | 26.548 | 152.3 | 0.469 | 1.33 | 20.4 | 40.3 | 2.51 | 30.3 | 0.01 | | | 229 | 206 |
| 250 ISL | 8.62 D | 8.59 | 34.248 D | 26.593 | 148.3 | 0.502 | 1.24 | 18.9 | 42.4 | 2.56 | 31.0 | 0.01 | | | 252 | |
| 269 | 8.46 | 8.43 | 34.244 | 26.615 | 146.5 | 0.530 | 1.18 | 17.9 | 44.1 | 2.59 | 31.6 | 0.01 | | | 271 | 205 |
| 300 ISL | 8.15 D | 8.12 | 34.247 D | 26.665 | 142.2 | 0.574 | 1.02 | 15.4 | 47.5 | 2.67 | 32.6 | 0.00 | | | 302 | |
| 319 | 7.98 | 7.95 | 34.262 | 26.702 | 138.9 | 0.601 | 0.92 | 13.8 | 49.7 | 2.73 | 33.3 | 0.00 | | | 321 | 204 |
| 379 | 7.44 | 7.40 | 34.285 | 26.799 | 130.4 | 0.682 | 0.62 | 9.2 | 57.6 | 2.91 | 35.4 | 0.00 | | | 381 | 203 |
| 400 ISL | 7.19 D | 7.15 | 34.292 D | 26.840 | 126.6 | 0.709 | 0.53 | 7.8 | 61.0 | 2.96 | 36.1 | 0.00 | | | 403 | |
| 438 | 6.83 | 6.79 | 34.303 | 26.899 | 121.4 | 0.756 | 0.39 | 5.7 | 67.0 | 3.04 | 37.3 | 0.00 | | | 441 | 202 |
| 500 ISL | 6.43 D | 6.38 | 34.321 D | 26.967 | 115.5 | 0.829 | 0.30 | 4.4 | 72.9 | 3.12 | 38.4 | 0.00 | | | 503 | |
| 511 | 6.41 | 6.36 | 34.322 | 26.970 | 115.3 | 0.842 | 0.28 | 4.1 | 73.9 | 3.13 | 38.6 | 0.00 | | | 515 | 201 |

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

RV DAVID STARR JORDAN — CALCOFI CRUISE 0704 — STATION 90.0 35.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 14.9 N | 118 14.8 W | 06/04/07 | 1925 | UTC | 347 m | 220 02 kn | 300 01 05 | 2 | 1013.8 mb | 16.8 C | 15.0 C | 15m | 8/8 | CS |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 15.34 | 15.34 | 33.584 | 24.807 | 313.2 | 0.000 | 6.05 | 106.2 | 3.5 | 0.32 | 0.1 | 0.01 | 0.60 | 0.19 | 0 | |
| 2 | 15.34 | 15.34 | 33.584 | 24.807 | 313.2 | 0.006 | 6.05 | 106.2 | 3.5 | 0.32 | 0.1 | 0.01 | 0.60 | 0.19 | 2 | 218 |
| 10 ISL | 15.17 D | 15.17 | 33.576 D | 24.838 | 310.5 | 0.031 | 6.08 | 106.3 | 3.1 | 0.33 | 0.0 | 0.01 | 0.73 | 0.20 | 10 | |
| 11 | 15.18 | 15.18 | 33.578 | 24.838 | 310.6 | 0.034 | 6.08 | 106.3 | 3.1 | 0.33 | 0.0 | 0.01 | 0.75 | 0.20 | 11 | 216 |
| 11 | 15.18 | 15.18 | 33.577 | 24.837 | 310.6 | 0.034 | 6.07 | 106.2 | 3.2 | 0.33 | 0.0 | 0.01 | 0.90 | 0.14 | 11 | 217 |
| 20 | 14.81 | 14.81 | 33.572 | 24.914 | 303.6 | 0.062 | 6.10 | 105.9 | 3.2 | 0.33 | 0.1 | 0.01 | 0.85 | 0.18 | 20 | 215 |
| 30 | 14.58 | 14.58 | 33.574 | 24.965 | 299.0 | 0.092 | 6.12 | 105.7 | 3.3 | 0.34 | 0.1 | 0.01 | 1.03 | 0.11 | 30 | 214 |
| 41 | 13.96 | 13.95 | 33.590 | 25.108 | 285.7 | 0.124 | 5.90 | 100.7 | 4.5 | 0.46 | 1.5 | 0.08 | 1.03 | 0.28 | 41 | 213 |
| 50 | 13.76 | 13.75 | 33.600 | 25.157 | 281.2 | 0.150 | 5.70 | 96.9 | 5.0 | 0.54 | 2.6 | 0.13 | 0.92 | 0.31 | 50 | 212 |
| 60 | 13.16 | 13.15 | 33.589 | 25.270 | 270.7 | 0.177 | 5.24 | 87.9 | 6.3 | 0.73 | 5.4 | 0.28 | 0.46 | 0.24 | 60 | 211 |
| 70 | 12.38 | 12.37 | 33.599 | 25.431 | 255.6 | 0.204 | 4.68 | 77.3 | 9.0 | 0.96 | 9.4 | 0.27 | 0.26 | 0.23 | 70 | 210 |
| 75 ISL | 11.60 D | 11.59 | 33.615 D | 25.590 | 240.5 | 0.216 | 4.23 | 68.7 | 11.8 | 1.16 | 12.5 | 0.20 | 0.18 | 0.19 | 75 | |
| 85 | 10.98 | 10.97 | 33.705 | 25.773 | 223.3 | 0.239 | 3.34 | 53.5 | 17.7 | 1.56 | 18.6 | 0.04 | 0.07 | 0.12 | 85 | 209 |
| 100 | 10.38 | 10.37 | 33.840 | 25.984 | 203.5 | 0.271 | 2.72 | 43.1 | 23.3 | 1.86 | 22.6 | 0.02 | 0.03 | 0.10 | 100 | 208 |
| 120 | 9.97 | 9.96 | 33.989 | 26.170 | 186.2 | 0.310 | 2.19 | 34.4 | 27.9 | 2.09 | 25.3 | 0.02 | 0.02 | 0.09 | 121 | 207 |
| 125 ISL | 9.92 D | 9.91 | 34.008 D | 26.194 | 184.0 | 0.319 | 2.10 | 33.0 | 28.9 | 2.13 | 25.8 | 0.02 | 0.02 | 0.08 | 126 | |
| 140 | 9.70 | 9.68 | 34.117 | 26.316 | 172.8 | 0.346 | 1.89 | 29.5 | 31.4 | 2.22 | 27.1 | 0.02 | 0.01 | 0.06 | 141 | 206 |
| 150 ISL | 9.60 D | 9.58 | 34.129 D | 26.342 | 170.5 | 0.363 | 1.79 | 27.9 | 32.4 | 2.26 | 27.5 | 0.02 | 0.01 | 0.06 | 151 | |
| 169 | 9.51 | 9.49 | 34.153 | 26.376 | 167.6 | 0.396 | 1.65 | 25.7 | 34.0 | 2.33 | 28.1 | 0.04 | 0.02 | 0.08 | 170 | 205 |
| 200 | 9.13 | 9.11 | 34.201 | 26.476 | 158.7 | 0.446 | 1.44 | 22.2 | 37.7 | 2.43 | 29.5 | 0.09 | 0.01 | 0.07 | 201 | 204 |
| 229 | 8.97 | 8.95 | 34.211 | 26.509 | 156.0 | 0.492 | 1.35 | 20.8 | 39.5 | 2.49 | 30.1 | 0.08 | | | 230 | 203 |
| 250 ISL | 8.85 D | 8.82 | 34.221 D | 26.536 | 153.8 | 0.524 | 1.26 | 19.3 | 41.4 | 2.54 | 30.7 | 0.05 | | | 251 | |
| 269 | 8.59 | 8.56 | 34.239 | 26.591 | 148.8 | 0.553 | 1.17 | 17.8 | 43.4 | 2.59 | 31.4 | 0.03 | | | 271 | 202 |
| 300 ISL | 8.22 D | 8.19 | 34.256 D | 26.661 | 142.6 | 0.598 | 1.02 | 15.4 | 47.1 | 2.67 | 32.4 | 0.03 | | | 302 | |
| 340 | 7.93 | 7.90 | 34.270 | 26.716 | 137.9 | 0.654 | 0.82 | 12.3 | 51.9 | 2.78 | 33.7 | 0.02 | | | 342 | 201 |

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

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 STATION 90.0 37.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 10.7 N | 118 24.0 W | 06/04/07 | 1732 | UTC | 1180 m | 260 02 kn | 300 01 05 | 2 | 1013.7 mb | 10.2 C | 8.9 C | 23m | 8/8 | CS |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 15.53 | 15.53 | 33.548 | 24.737 | 319.8 | 0.000 | 5.84 | 102.8 | 1.7 | 0.32 | 0.0 | 0.00 | 0.24 | 0.04 | 0 | |
| 2 A | 15.53 | 15.53 | 33.548 | 24.737 | 319.9 | 0.006 | 5.84 | 102.8 | 1.7 | 0.32 | 0.0 | 0.00 | 0.24 | 0.04 | 2 | 220 |
| 10 ISL | 15.51 D | 15.51 | 33.543 D | 24.738 | 320.0 | 0.032 | 5.85 | 103.0 | 1.7 | 0.32 | 0.0 | 0.00 | 0.26 | 0.04 | 10 | |
| 12 A | 15.50 | 15.50 | 33.549 | 24.745 | 319.4 | 0.038 | 5.85 | 103.0 | 1.7 | 0.32 | 0.0 | 0.00 | 0.27 | 0.04 | 12 | 219 |
| 20 ISL | 15.32 D | 15.32 | 33.541 D | 24.779 | 316.5 | 0.064 | 5.90 | 103.5 | 1.8 | 0.32 | 0.0 | 0.00 | 0.31 | 0.06 | 20 | |
| 22 | 15.26 | 15.26 | 33.542 | 24.793 | 315.2 | 0.070 | 5.91 | 103.5 | 1.9 | 0.32 | 0.0 | 0.00 | 0.32 | 0.07 | 22 | 218 |
| 30 ISL | 14.46 D | 14.46 | 33.521 D | 24.949 | 300.5 | 0.095 | 5.86 | 101.0 | 2.4 | 0.38 | 0.4 | 0.02 | 1.52 | 0.37 | 30 | |
| 31 A | 14.43 | 14.43 | 33.525 | 24.959 | 299.6 | 0.098 | 5.85 | 100.7 | 2.5 | 0.39 | 0.4 | 0.03 | 1.63 | 0.41 | 31 | 217 |
| 38 | 14.09 | 14.08 | 33.524 | 25.030 | 293.1 | 0.119 | 5.64 | 96.4 | 3.4 | 0.48 | 1.8 | 0.11 | 0.95 | 0.43 | 38 | 216 |
| 44 A | 13.87 | 13.86 | 33.521 | 25.073 | 289.1 | 0.136 | 5.51 | 93.8 | 3.9 | 0.54 | 2.6 | 0.15 | 0.74 | 0.43 | 44 | 215 |
| 50 ISL | 13.72 D | 13.71 | 33.598 D | 25.164 | 280.6 | 0.153 | 5.42 | 92.0 | 4.8 | 0.62 | 3.5 | 0.26 | 0.53 | 0.30 | 50 | |
| 56 A | 13.34 | 13.33 | 33.608 | 25.249 | 272.6 | 0.170 | 5.28 | 88.9 | 6.1 | 0.72 | 4.9 | 0.35 | 0.34 | 0.15 | 56 | 214 |
| 72 | 12.03 | 12.02 | 33.597 | 25.496 | 249.4 | 0.211 | 4.32 | 70.8 | 10.8 | 1.13 | 12.2 | 0.14 | 0.10 | 0.13 | 72 | 213 |
| 75 ISL | 11.68 D | 11.67 | 33.594 D | 25.559 | 243.4 | 0.219 | 4.19 | 68.2 | 11.6 | 1.19 | 13.1 | 0.11 | 0.09 | 0.13 | 75 | |
| 89 A | 11.25 | 11.24 | 33.649 | 25.681 | 232.1 | 0.252 | 3.73 | 60.1 | 15.1 | 1.41 | 16.4 | 0.03 | 0.06 | 0.14 | 89 | 212 |
| 100 ISL | 10.50 D | 10.49 | 33.718 D | 25.868 | 214.5 | 0.277 | 3.45 | 54.7 | 18.2 | 1.57 | 18.9 | 0.02 | 0.03 | 0.09 | 100 | |
| 104 | 10.40 | 10.39 | 33.727 | 25.892 | 212.3 | 0.285 | 3.35 | 53.0 | 19.3 | 1.63 | 19.8 | 0.02 | 0.02 | 0.07 | 105 | 211 |
| 120 | 9.94 | 9.93 | 33.872 | 26.084 | 194.3 | 0.318 | 2.85 | 44.7 | 23.8 | 1.87 | 23.1 | 0.02 | 0.01 | 0.05 | 121 | 210 |
| 125 ISL | 9.88 D | 9.87 | 33.879 D | 26.100 | 193.0 | 0.327 | 2.83 | 44.3 | 24.4 | 1.89 | 23.5 | 0.02 | 0.01 | 0.05 | 126 | |
| 140 | 9.59 | 9.57 | 33.939 | 26.195 | 184.2 | 0.356 | 2.79 | 43.4 | 25.9 | 1.92 | 24.2 | 0.01 | 0.01 | 0.05 | 141 | 209 |
| 150 ISL | 9.57 D | 9.55 | 34.028 D | 26.268 | 177.5 | 0.374 | 2.52 | 39.2 | 28.2 | 2.03 | 25.4 | 0.01 | 0.01 | 0.05 | 151 | |
| 170 | 9.35 | 9.33 | 34.121 | 26.377 | 167.5 | 0.408 | 1.92 | 29.8 | 32.9 | 2.25 | 27.7 | 0.01 | 0.00 | 0.04 | 171 | 208 |
| 199 | 9.08 | 9.06 | 34.177 | 26.465 | 159.7 | 0.456 | 1.68 | 25.9 | 36.1 | 2.35 | 29.0 | 0.01 | 0.00 | 0.03 | 200 | 207 |
| 200 ISL | 9.07 D | 9.05 | 34.175 D | 26.465 | 159.7 | 0.457 | 1.67 | 25.7 | 36.2 | 2.35 | 29.0 | 0.01 | | | 201 | |
| 229 | 8.79 | 8.77 | 34.218 | 26.543 | 152.7 | 0.503 | 1.43 | 21.9 | 39.8 | 2.48 | 30.3 | 0.02 | | | 230 | 206 |
| 250 ISL | 8.56 D | 8.53 | 34.232 D | 26.590 | 148.6 | 0.534 | 1.24 | 18.9 | 42.8 | 2.57 | 31.2 | 0.02 | | | 251 | |
| 268 | 8.40 | 8.37 | 34.258 | 26.635 | 144.5 | 0.561 | 1.09 | 16.6 | 45.3 | 2.63 | 31.9 | 0.01 | | | 270 | 205 |
| 300 ISL | 8.16 D | 8.13 | 34.271 D | 26.682 | 140.6 | 0.606 | 0.96 | 14.5 | 48.1 | 2.70 | 32.7 | 0.01 | | | 302 | |
| 319 | 8.04 | 8.01 | 34.274 | 26.703 | 138.9 | 0.633 | 0.90 | 13.6 | 49.7 | 2.74 | 33.1 | 0.01 | | | 321 | 204 |
| 378 | 7.42 | 7.38 | 34.288 | 26.805 | 129.8 | 0.712 | 0.61 | 9.1 | 57.8 | 2.91 | 35.4 | 0.01 | | | 380 | 203 |
| 400 ISL | 7.23 D | 7.19 | 34.291 D | 26.834 | 127.3 | 0.740 | 0.55 | 8.1 | 60.3 | 2.95 | 36.1 | 0.01 | | | 403 | |
| 438 | 6.93 | 6.89 | 34.293 | 26.877 | 123.5 | 0.788 | 0.48 | 7.0 | 64.4 | 3.01 | 37.1 | 0.01 | | | 441 | 202 |
| 500 ISL | 6.49 D | 6.44 | 34.321 D | 26.959 | 116.3 | 0.862 | 0.32 | 4.7 | 72.3 | 3.12 | 38.6 | 0.00 | | | 503 | |
| 513 | 6.38 | 6.33 | 34.325 | 26.977 | 114.7 | 0.877 | 0.29 | 4.2 | 74.0 | 3.14 | 38.9 | 0.00 | | | 517 | 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 0704 STATION 90.0 45.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 55.3 N | 118 55.9 W | 06/04/07 | 1005 | UTC | 1702 m | 300 18 kn | | | 1013.3 mb | 13.8 C | 12.3 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.78 | 14.78 | 33.568 | 24.916 | 302.7 | 0.000 | 6.00 | 104.1 | 2.5 | 0.33 | 0.0 | 0.00 | 0.42 | 0.09 | 0 | |
| 2 | 14.78 | 14.78 | 33.568 | 24.917 | 302.8 | 0.006 | 6.00 | 104.1 | 2.5 | 0.33 | 0.0 | 0.00 | 0.42 | 0.09 | 2 | 221 |
| 10 ISL | 14.77 D | 14.77 | 33.567 D | 24.918 | 302.9 | 0.030 | 6.00 | 104.1 | 2.5 | 0.33 | 0.0 | 0.00 | 0.38 | 0.09 | 10 | |
| 11 | 14.77 | 14.77 | 33.569 | 24.920 | 302.7 | 0.033 | 6.00 | 104.1 | 2.5 | 0.33 | 0.0 | 0.00 | 0.38 | 0.09 | 11 | 219 |
| 11 | 14.77 | 14.77 | 33.568 | 24.919 | 302.8 | 0.033 | | | | | | | | | 11 | 220 |
| 20 ISL | 13.98 D | 13.98 | 33.584 D | 25.098 | 286.0 | 0.060 | 6.01 | 102.6 | 3.3 | 0.40 | 0.6 | 0.06 | 1.22 | 0.39 | 20 | |
| 21 | 13.98 | 13.98 | 33.585 | 25.099 | 285.9 | 0.063 | 6.01 | 102.6 | 3.4 | 0.41 | 0.7 | 0.07 | 1.31 | 0.42 | 21 | 218 |
| 30 ISL | 13.72 D | 13.72 | 33.592 D | 25.158 | 280.5 | 0.088 | 5.87 | 99.7 | 3.5 | 0.47 | 1.6 | 0.17 | 1.23 | 0.46 | 30 | |
| 31 | 13.75 | 13.75 | 33.594 | 25.154 | 281.0 | 0.091 | 5.84 | 99.2 | 3.5 | 0.48 | 1.7 | 0.19 | 1.22 | 0.46 | 31 | 217 |
| 40 | 13.28 | 13.27 | 33.601 | 25.255 | 271.6 | 0.116 | 5.49 | 92.4 | 4.9 | 0.66 | 4.0 | 0.44 | 0.82 | 0.33 | 40 | 216 |
| 50 | 12.44 | 12.43 | 33.590 | 25.412 | 256.9 | 0.142 | 5.09 | 84.1 | 7.0 | 0.88 | 8.0 | 0.10 | 0.41 | 0.26 | 50 | 215 |
| 61 | 11.82 | 11.81 | 33.590 | 25.530 | 245.9 | 0.170 | 4.44 | 72.4 | 11.0 | 1.13 | 12.3 | 0.02 | 0.16 | 0.16 | 61 | 214 |
| 70 | 11.00 | 10.99 | 33.631 | 25.711 | 228.8 | 0.191 | 3.76 | 60.3 | 15.6 | 1.42 | 16.8 | 0.02 | 0.09 | 0.13 | 70 | 213 |
| 75 ISL | 10.74 D | 10.73 | 33.653 D | 25.775 | 222.8 | 0.203 | 3.58 | 57.1 | 17.0 | 1.50 | 18.2 | 0.02 | 0.07 | 0.11 | 75 | |
| 85 | 10.37 | 10.36 | 33.699 | 25.875 | 213.5 | 0.224 | 3.38 | 53.5 | 18.9 | 1.61 | 19.9 | 0.02 | 0.04 | 0.08 | 85 | 212 |
| 100 | 9.91 | 9.90 | 33.804 | 26.036 | 198.5 | 0.255 | 3.00 | 47.0 | 23.0 | 1.80 | 22.7 | 0.01 | 0.01 | 0.07 | 101 | 211 |
| 120 | 9.70 | 9.69 | 33.886 | 26.135 | 189.4 | 0.294 | 2.70 | 42.1 | 25.8 | 1.93 | 24.3 | 0.01 | 0.01 | 0.07 | 121 | 210 |
| 125 ISL | 9.65 D | 9.64 | 33.930 D | 26.178 | 185.5 | 0.303 | 2.64 | 41.2 | 26.5 | 1.96 | 24.7 | 0.01 | 0.01 | 0.07 | 126 | |
| 140 | 9.42 | 9.40 | 33.983 | 26.257 | 178.2 | 0.331 | 2.45 | 38.0 | 28.9 | 2.05 | 25.9 | 0.02 | 0.01 | 0.05 | 141 | 209 |
| 150 ISL | 9.16 D | 9.14 | 34.049 D | 26.351 | 169.5 | 0.348 | 2.33 | 36.0 | 30.8 | 2.11 | 26.8 | 0.02 | 0.01 | 0.04 | 151 | |
| 169 | 9.01 | 8.99 | 34.109 | 26.422 | 163.1 | 0.380 | 2.06 | 31.7 | 34.4 | 2.23 | 28.3 | 0.01 | 0.00 | 0.03 | 170 | 208 |
| 199 | 8.95 | 8.93 | 34.222 | 26.521 | 154.3 | 0.427 | 1.42 | 21.8 | 39.1 | 2.45 | 29.9 | 0.01 | 0.00 | 0.03 | 200 | 207 |
| 200 ISL | 8.91 D | 8.89 | 34.224 D | 26.528 | 153.6 | 0.429 | 1.41 | 21.7 | 39.3 | 2.46 | 30.0 | 0.01 | | | 201 | |
| 229 | 8.46 | 8.44 | 34.253 | 26.622 | 145.1 | 0.472 | 1.14 | 17.3 | 44.9 | 2.61 | 31.7 | 0.01 | | | 230 | 206 |
| 250 ISL | 8.25 D | 8.22 | 34.264 D | 26.662 | 141.6 | 0.502 | 1.00 | 15.1 | 47.6 | 2.68 | 32.6 | 0.00 | | | 251 | |
| 269 | 8.07 | 8.04 | 34.264 | 26.690 | 139.2 | 0.529 | 0.90 | 13.6 | 49.5 | 2.73 | 33.3 | 0.00 | | | 271 | 205 |
| 300 ISL | 7.78 D | 7.75 | 34.255 D | 26.726 | 136.2 | 0.572 | 0.84 | 12.6 | 52.5 | 2.77 | 34.2 | 0.00 | | | 302 | |
| 320 | 7.60 | 7.57 | 34.256 | 26.753 | 133.9 | 0.599 | 0.81 | 12.1 | 54.5 | 2.80 | 34.7 | 0.00 | | | 322 | 204 |
| 379 | 7.01 | 6.97 | 34.274 | 26.851 | 125.2 | 0.675 | 0.58 | 8.5 | 62.8 | 2.95 | 36.7 | 0.00 | | | 381 | 203 |
| 400 ISL | 6.92 D | 6.88 | 34.291 D | 26.877 | 123.0 | 0.701 | 0.50 | 7.3 | 65.7 | 3.00 | 37.4 | 0.00 | | | 403 | |
| 438 | 6.53 | 6.49 | 34.303 | 26.939 | 117.3 | 0.747 | 0.38 | 5.5 | 70.6 | 3.07 | 38.4 | 0.00 | | | 441 | 202 |
| 500 ISL | 6.23 D | 6.19 | 34.325 D | 26.996 | 112.5 | 0.818 | 0.31 | 4.5 | 75.9 | 3.14 | 39.6 | 0.00 | | | 503 | |
| 512 | 6.14 | 6.09 | 34.320 | 27.004 | 111.9 | 0.831 | 0.30 | 4.3 | 76.9 | 3.15 | 39.8 | 0.00 | | | 516 | 201 |

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

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 STATION 90.0 53.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 39.4 N | 119 28.7 W | 06/04/07 | 0423 | UTC | 1313 m | 310 15 kn | | | 1014.5 mb | 14.4 C | 13.0 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.81 | 13.81 | 33.572 | 25.124 | 283.0 | 0.000 | 6.05 | 102.9 | 5.0 | 0.48 | 2.0 | 0.10 | 1.22 | 0.32 | 0 | |
| 2 | 13.81 | 13.81 | 33.572 | 25.124 | 283.1 | 0.006 | 6.05 | 102.9 | 5.0 | 0.48 | 2.0 | 0.10 | 1.22 | 0.32 | 2 | 221 |
| 10 ISL | 13.81 D | 13.81 | 33.574 D | 25.125 | 283.1 | 0.028 | 6.05 | 102.9 | 5.0 | 0.49 | 2.0 | 0.10 | 1.22 | 0.33 | 10 | |
| 11 | 13.81 | 13.81 | 33.572 | 25.124 | 283.3 | 0.031 | 6.05 | 102.9 | 5.0 | 0.49 | 2.0 | 0.10 | 1.22 | 0.33 | 11 | 220 |
| 16 | 13.57 | 13.57 | 33.642 | 25.227 | 273.6 | 0.045 | 5.77 | 97.7 | 6.6 | 0.61 | 3.5 | 0.17 | 0.74 | 0.27 | 16 | 219 |
| 20 | 13.38 | 13.38 | 33.636 | 25.261 | 270.5 | 0.056 | 5.64 | 95.1 | 6.7 | 0.66 | 4.2 | 0.19 | 0.60 | 0.21 | 20 | 218 |
| 30 | 13.19 | 13.19 | 33.627 | 25.293 | 267.7 | 0.083 | 5.55 | 93.2 | 6.8 | 0.70 | 4.8 | 0.23 | 0.52 | 0.22 | 30 | 217 |
| 40 | 12.48 | 12.47 | 33.544 | 25.368 | 260.8 | 0.109 | 5.20 | 86.0 | 7.6 | 0.84 | 7.5 | 0.16 | 0.32 | 0.27 | 40 | 216 |
| 50 | 11.63 | 11.62 | 33.529 | 25.517 | 246.8 | 0.135 | 4.57 | 74.2 | 10.4 | 1.12 | 12.0 | 0.05 | 0.15 | 0.07 | 50 | 215 |
| 61 | 11.29 | 11.28 | 33.574 | 25.615 | 237.8 | 0.161 | 4.24 | 68.4 | 12.7 | 1.26 | 14.3 | 0.04 | 0.11 | 0.12 | 61 | 214 |
| 71 | 10.99 | 10.98 | 33.699 | 25.766 | 223.6 | 0.184 | 3.55 | 56.9 | 17.3 | 1.53 | 18.2 | 0.02 | 0.06 | 0.15 | 71 | 213 |
| 75 ISL | 10.67 D | 10.66 | 33.728 D | 25.845 | 216.1 | 0.193 | 3.36 | 53.5 | 18.7 | 1.61 | 19.4 | 0.02 | 0.05 | 0.15 | 75 | |
| 86 | 10.24 | 10.23 | 33.778 | 25.959 | 205.5 | 0.216 | 2.97 | 46.9 | 22.0 | 1.78 | 22.2 | 0.02 | 0.03 | 0.12 | 86 | 212 |
| 100 | 9.64 | 9.63 | 33.869 | 26.131 | 189.4 | 0.244 | 2.65 | 41.3 | 26.1 | 1.96 | 24.8 | 0.01 | 0.02 | 0.10 | 101 | 211 |
| 120 | 9.43 | 9.42 | 33.951 | 26.230 | 180.4 | 0.281 | 2.38 | 36.9 | 28.8 | 2.08 | 26.2 | 0.01 | 0.01 | 0.09 | 121 | 210 |
| 125 ISL | 9.42 D | 9.41 | 34.011 D | 26.279 | 175.9 | 0.290 | 2.35 | 36.5 | 29.5 | 2.11 | 26.6 | 0.01 | 0.01 | 0.09 | 126 | |
| 140 | 9.07 | 9.05 | 34.020 | 26.342 | 170.0 | 0.316 | 2.26 | 34.8 | 31.9 | 2.18 | 27.6 | 0.02 | 0.01 | 0.08 | 141 | 209 |
| 150 ISL | 9.02 D | 9.00 | 34.065 D | 26.386 | 166.1 | 0.333 | 2.09 | 32.2 | 33.8 | 2.23 | 28.3 | 0.02 | 0.01 | 0.08 | 151 | |
| 170 | 8.83 | 8.81 | 34.137 | 26.472 | 158.3 | 0.365 | 1.74 | 26.7 | 37.4 | 2.34 | 29.6 | 0.02 | 0.00 | 0.08 | 171 | 208 |
| 198 | 8.68 | 8.66 | 34.179 | 26.529 | 153.4 | 0.409 | 1.49 | 22.8 | 40.3 | 2.47 | 30.5 | 0.01 | 0.00 | 0.07 | 199 | 207 |
| 200 ISL | 8.65 D | 8.63 | 34.184 D | 26.538 | 152.6 | 0.412 | 1.47 | 22.4 | 40.6 | 2.48 | 30.6 | 0.01 | | | 201 | |
| 230 | 8.39 | 8.37 | 34.211 | 26.599 | 147.2 | 0.457 | 1.25 | 19.0 | 44.3 | 2.56 | 31.8 | 0.01 | | | 231 | 206 |
| 250 ISL | 8.13 D | 8.10 | 34.210 D | 26.638 | 143.8 | 0.486 | 1.16 | 17.5 | 46.2 | 2.61 | 32.3 | 0.01 | | | 252 | |
| 272 | 8.07 | 8.04 | 34.227 | 26.661 | 142.0 | 0.517 | 1.07 | 16.1 | 48.4 | 2.66 | 32.9 | 0.01 | | | 274 | 205 |
| 300 ISL | 7.65 D | 7.62 | 34.243 D | 26.735 | 135.2 | 0.556 | 0.92 | 13.7 | 52.8 | 2.76 | 34.2 | 0.01 | | | 302 | |
| 317 | 7.47 | 7.44 | 34.242 | 26.760 | 133.0 | 0.579 | 0.83 | 12.3 | 55.6 | 2.82 | 35.0 | 0.01 | | | 319 | 204 |
| 376 | 6.91 | 6.87 | 34.264 | 26.856 | 124.5 | 0.655 | 0.61 | 9.0 | 63.7 | 2.96 | 36.9 | 0.01 | | | 378 | 203 |
| 400 ISL | 6.68 D | 6.64 | 34.270 D | 26.892 | 121.3 | 0.684 | 0.56 | 8.2 | 65.5 | 3.00 | 37.4 | 0.01 | | | 403 | |
| 438 | 6.63 | 6.59 | 34.273 | 26.902 | 120.9 | 0.730 | 0.50 | 7.3 | 68.1 | 3.05 | 38.0 | 0.01 | | | 441 | 202 |
| 500 ISL | 6.16 D | 6.12 | 34.296 D | 26.982 | 113.8 | 0.803 | 0.38 | 5.5 | 75.3 | 3.11 | 39.4 | 0.01 | | | 503 | |
| 516 | 6.08 | 6.03 | 34.300 | 26.995 | 112.6 | 0.821 | 0.35 | 5.0 | 77.2 | 3.13 | 39.7 | 0.01 | | | 520 | 201 |

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

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 STATION 90.0 60.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 25.0 N | 119 57.6 W | 05/04/07 | 2232 | UTC | 863 m | 300 22 kn | 310 03 05 | 1 | 1014.9 mb | 14.9 C | 13.7 C | 13m | 6/8 | SC |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.51 | 14.51 | 33.601 | 25.000 | 294.8 | 0.000 | 6.00 | 103.5 | 3.4 | 0.39 | 0.5 | 0.05 | 0.63 | 0.13 | 0 | |
| 2 | 14.51 | 14.51 | 33.601 | 25.000 | 294.9 | 0.006 | 6.00 | 103.5 | 3.4 | 0.39 | 0.5 | 0.05 | 0.63 | 0.13 | 2 | 220 |
| 10 | 14.49 | 14.49 | 33.601 | 25.004 | 294.7 | 0.029 | 6.01 | 103.7 | 3.3 | 0.39 | 0.5 | 0.05 | 0.61 | 0.14 | 10 | 219 |
| 20 | 14.37 | 14.37 | 33.606 | 25.034 | 292.2 | 0.059 | 6.00 | 103.3 | 3.4 | 0.41 | 0.7 | 0.06 | 0.70 | 0.20 | 20 | 218 |
| 30 | 14.03 | 14.03 | 33.615 | 25.112 | 285.0 | 0.088 | 5.95 | 101.7 | 3.7 | 0.46 | 1.4 | 0.11 | 0.66 | 0.31 | 30 | 217 |
| 40 | 13.60 | 13.59 | 33.619 | 25.204 | 276.5 | 0.116 | 5.82 | 98.6 | 4.5 | 0.55 | 2.5 | 0.23 | 0.64 | 0.37 | 40 | 216 |
| 50 | 13.04 | 13.03 | 33.627 | 25.323 | 265.4 | 0.143 | 5.40 | 90.4 | 6.2 | 0.74 | 5.3 | 0.44 | 0.37 | 0.24 | 50 | 215 |
| 60 | 12.12 | 12.11 | 33.645 | 25.516 | 247.2 | 0.168 | 4.61 | 75.7 | 10.2 | 1.08 | 11.0 | 0.17 | 0.18 | 0.16 | 60 | 214 |
| 70 | 11.12 | 11.11 | 33.691 | 25.737 | 226.4 | 0.192 | 3.65 | 58.7 | 16.2 | 1.48 | 17.4 | 0.03 | 0.07 | 0.12 | 70 | 213 |
| 75 ISL | 10.85 D | 10.84 | 33.732 D | 25.817 | 218.9 | 0.203 | 3.41 | 54.5 | 18.1 | 1.59 | 19.0 | 0.03 | 0.06 | 0.13 | 75 | |
| 85 | 10.55 | 10.54 | 33.765 | 25.896 | 211.6 | 0.225 | 3.15 | 50.1 | 20.7 | 1.71 | 20.6 | 0.03 | 0.05 | 0.17 | 85 | 212 |
| 100 | 10.22 | 10.21 | 33.817 | 25.993 | 202.6 | 0.256 | 2.83 | 44.7 | 23.4 | 1.84 | 22.6 | 0.02 | 0.04 | 0.17 | 101 | 211 |
| 120 | 9.72 | 9.71 | 33.856 | 26.108 | 192.0 | 0.295 | 2.71 | 42.3 | 25.2 | 1.91 | 23.9 | 0.02 | 0.00 | 0.18 | 121 | 210 |
| 125 ISL | 9.49 D | 9.48 | 33.902 D | 26.182 | 185.0 | 0.305 | 2.70 | 41.9 | 25.9 | 1.93 | 24.3 | 0.02 | 0.00 | 0.16 | 126 | |
| 139 | 9.29 | 9.27 | 33.938 | 26.243 | 179.5 | 0.330 | 2.68 | 41.5 | 27.9 | 1.99 | 25.3 | 0.02 | 0.01 | 0.10 | 140 | 209 |
| 150 ISL | 9.14 D | 9.12 | 33.982 D | 26.302 | 174.1 | 0.350 | 2.64 | 40.7 | 29.1 | 2.01 | 25.8 | 0.02 | 0.01 | 0.07 | 151 | |
| 169 | 8.95 | 8.93 | 34.036 | 26.374 | 167.5 | 0.382 | 2.56 | 39.3 | 31.4 | 2.06 | 26.6 | 0.02 | 0.00 | 0.04 | 170 | 208 |
| 199 | 8.84 | 8.82 | 34.147 | 26.479 | 158.2 | 0.431 | 1.86 | 28.5 | 36.5 | 2.31 | 29.0 | 0.02 | 0.00 | 0.04 | 200 | 207 |
| 200 ISL | 8.84 D | 8.82 | 34.144 D | 26.477 | 158.4 | 0.433 | 1.85 | 28.4 | 36.7 | 2.32 | 29.1 | 0.02 | | | 201 | |
| 229 | 8.58 | 8.56 | 34.189 | 26.553 | 151.7 | 0.478 | 1.54 | 23.5 | 40.9 | 2.46 | 30.4 | 0.01 | | | 230 | 206 |
| 250 ISL | 8.27 D | 8.24 | 34.194 D | 26.604 | 147.0 | 0.509 | 1.39 | 21.0 | 43.4 | 2.53 | 31.3 | 0.01 | | | 251 | |
| 268 | 8.18 | 8.15 | 34.207 | 26.629 | 145.1 | 0.535 | 1.29 | 19.5 | 45.5 | 2.57 | 32.1 | 0.01 | | | 270 | 205 |
| 300 ISL | 7.84 D | 7.81 | 34.208 D | 26.680 | 140.5 | 0.581 | 1.15 | 17.2 | 49.4 | 2.66 | 33.3 | 0.01 | | | 302 | |
| 318 | 7.64 | 7.61 | 34.209 | 26.710 | 137.9 | 0.606 | 1.07 | 16.0 | 51.7 | 2.71 | 34.0 | 0.01 | | | 320 | 204 |
| 378 | 6.96 | 6.92 | 34.244 | 26.834 | 126.7 | 0.685 | 0.69 | 10.1 | 61.3 | 2.91 | 36.5 | 0.01 | | | 380 | 203 |
| 400 ISL | 6.83 D | 6.79 | 34.262 D | 26.866 | 123.9 | 0.713 | 0.62 | 9.1 | 64.2 | 2.96 | 37.2 | 0.01 | | | 403 | |
| 439 | 6.51 | 6.47 | 34.254 | 26.903 | 120.7 | 0.761 | 0.54 | 7.8 | 68.7 | 3.02 | 38.3 | 0.01 | | | 442 | 202 |
| 500 ISL | 6.12 D | 6.08 | 34.275 D | 26.970 | 114.8 | 0.832 | 0.40 | 5.8 | 74.9 | 3.11 | 39.7 | 0.00 | | | 503 | |
| 511 | 6.04 | 5.99 | 34.278 | 26.983 | 113.7 | 0.845 | 0.38 | 5.5 | 76.0 | 3.13 | 39.9 | 0.00 | | | 515 | 201 |

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

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 STATION 90.0 70.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 3.8 N | 120 39.1 W | 05/04/07 | 1705 UTC | 3806 m | 320 27 kn | 300 03 05 | 2 | 1017.0 mb | 15.7 C | 14.8 C | 16m | 8/8 | CS |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.56 | 14.56 | 33.432 | 24.859 | 308.2 | 0.000 | 5.94 | 102.5 | 1.9 | 0.31 | 0.0 | 0.00 | 0.22 | 0.05 | 0 | |
| 2 B | 14.56 | 14.56 | 33.432 | 24.859 | 308.3 | 0.006 | 5.94 | 102.5 | 1.9 | 0.31 | 0.0 | 0.00 | 0.22 | 0.05 | 2 | 221 |
| 8 B | 14.56 | 14.56 | 33.433 | 24.860 | 308.4 | 0.025 | 5.96 | 102.9 | 1.9 | 0.31 | 0.0 | 0.00 | 0.23 | 0.05 | 8 | 220 |
| 10 ISL | 14.55 D | 14.55 | 33.430 D | 24.859 | 308.4 | 0.031 | 5.96 | 102.8 | 1.9 | 0.31 | 0.0 | 0.00 | 0.23 | 0.05 | 10 | |
| 15 | 14.54 | 14.54 | 33.433 | 24.864 | 308.2 | 0.046 | 5.95 | 102.6 | 1.8 | 0.32 | 0.0 | 0.00 | 0.22 | 0.06 | 15 | 219 |
| 20 ISL | 14.54 D | 14.54 | 33.430 D | 24.862 | 308.5 | 0.062 | 5.94 | 102.5 | 1.8 | 0.32 | 0.0 | 0.00 | 0.23 | 0.06 | 20 | |
| 22 B | 14.55 | 14.55 | 33.433 | 24.862 | 308.5 | 0.068 | 5.94 | 102.5 | 1.8 | 0.32 | 0.0 | 0.00 | 0.24 | 0.06 | 22 | 218 |
| 30 B | 14.54 | 14.54 | 33.433 | 24.865 | 308.6 | 0.093 | 5.94 | 102.5 | 1.8 | 0.32 | 0.0 | 0.00 | 0.24 | 0.06 | 30 | 217 |
| 40 B | 14.00 | 13.99 | 33.421 | 24.969 | 298.9 | 0.123 | 6.07 | 103.5 | 2.3 | 0.35 | 0.1 | 0.03 | 0.64 | 0.19 | 40 | 216 |
| 50 | 13.90 | 13.89 | 33.482 | 25.037 | 292.7 | 0.152 | 6.11 | 104.0 | 2.6 | 0.37 | 0.3 | 0.04 | 0.63 | 0.23 | 50 | 215 |
| 62 B | 13.01 | 13.00 | 33.404 | 25.157 | 281.5 | 0.187 | 5.83 | 97.4 | 3.2 | 0.52 | 2.4 | 0.22 | 0.72 A | 0.29 A | 62 | 214 |
| 73 | 12.66 | 12.65 | 33.413 | 25.233 | 274.5 | 0.218 | 5.65 | 93.7 | 4.0 | 0.63 | 4.0 | 0.14 | 0.46 | 0.20 | 73 | 213 |
| 75 ISL | 12.72 D | 12.71 | 33.443 D | 25.244 | 273.5 | 0.223 | 5.63 | 93.5 | 4.1 | 0.64 | 4.2 | 0.12 | 0.40 | 0.19 | 75 | |
| 85 | 12.42 | 12.41 | 33.465 | 25.320 | 266.6 | 0.250 | 5.41 | 89.3 | 5.1 | 0.75 | 6.0 | 0.04 | 0.16 | 0.13 | 85 | 212 |
| 100 | 11.14 | 11.13 | 33.501 | 25.586 | 241.4 | 0.288 | 4.42 | 71.0 | 11.2 | 1.19 | 13.4 | 0.02 | 0.05 | 0.06 | 100 | 211 |
| 120 | 9.90 | 9.89 | 33.669 | 25.932 | 208.7 | 0.333 | 3.84 | 60.1 | 17.7 | 1.53 | 19.3 | 0.01 | 0.01 | 0.04 | 121 | 210 |
| 125 ISL | 9.65 D | 9.64 | 33.728 D | 26.020 | 200.5 | 0.343 | 3.72 | 57.9 | 19.1 | 1.59 | 20.3 | 0.01 | 0.01 | 0.04 | 126 | |
| 139 | 9.35 | 9.33 | 33.814 | 26.136 | 189.6 | 0.371 | 3.43 | 53.1 | 22.7 | 1.74 | 22.6 | 0.01 | 0.01 | 0.03 | 140 | 209 |
| 150 ISL | 9.06 D | 9.04 | 33.901 D | 26.251 | 178.9 | 0.391 | 3.30 | 50.8 | 25.1 | 1.81 | 23.8 | 0.01 | 0.01 | 0.03 | 151 | |
| 170 | 8.74 | 8.72 | 33.969 | 26.355 | 169.3 | 0.426 | 3.15 | 48.1 | 28.9 | 1.90 | 25.2 | 0.01 | 0.00 | 0.02 | 171 | 208 |
| 198 | 8.28 | 8.26 | 34.009 | 26.457 | 160.0 | 0.472 | 2.98 | 45.1 | 33.6 | 2.00 | 26.9 | 0.01 | 0.00 | 0.02 | 199 | 207 |
| 200 ISL | 8.23 D | 8.21 | 34.008 D | 26.464 | 159.4 | 0.475 | 2.95 | 44.6 | 34.0 | 2.01 | 27.1 | 0.01 | | | 201 | |
| 228 | 7.82 | 7.80 | 34.042 | 26.552 | 151.4 | 0.519 | 2.43 | 36.4 | 40.2 | 2.20 | 30.1 | 0.01 | | | 229 | 206 |
| 250 ISL | 7.60 D | 7.58 | 34.064 D | 26.601 | 147.0 | 0.551 | 2.15 | 32.0 | 44.2 | 2.32 | 31.7 | 0.00 | | | 251 | |
| 269 | 7.30 | 7.27 | 34.064 | 26.644 | 143.1 | 0.579 | 1.95 | 28.8 | 47.4 | 2.42 | 32.8 | 0.00 | | | 271 | 205 |
| 300 ISL | 6.96 D | 6.93 | 34.073 D | 26.698 | 138.2 | 0.623 | 1.68 | 24.7 | 52.6 | 2.56 | 34.6 | 0.00 | | | 302 | |
| 318 | 6.75 | 6.72 | 34.080 | 26.732 | 135.1 | 0.647 | 1.53 | 22.3 | 55.6 | 2.64 | 35.5 | 0.00 | | | 320 | 204 |
| 379 | 6.36 | 6.33 | 34.157 | 26.845 | 125.1 | 0.726 | 0.90 | 13.0 | 65.3 | 2.89 | 38.1 | 0.00 | | | 381 | 203 |
| 400 ISL | 6.20 D | 6.16 | 34.168 D | 26.875 | 122.5 | 0.752 | 0.78 | 11.3 | 69.0 | 2.95 | 38.9 | 0.00 | | | 403 | |
| 436 | 5.82 | 5.78 | 34.175 | 26.928 | 117.5 | 0.796 | 0.64 | 9.1 | 75.2 | 3.04 | 40.1 | 0.00 | | | 439 | 202 |
| 500 ISL | 5.46 D | 5.42 | 34.221 D | 27.009 | 110.4 | 0.869 | 0.45 | 6.4 | 83.2 | 3.14 | 41.4 | 0.00 | | | 503 | |
| 512 | 5.41 | 5.37 | 34.225 | 27.018 | 109.6 | 0.882 | 0.41 | 5.8 | 84.7 | 3.16 | 41.6 | 0.00 | | | 515 | 201 |

A) SECOND FLUOROMETER READING NOT RECORDED, CHLOROPHYLL AND PHAEOPIGMENT
CALCULATED WITH ASSUMED ACID RATIO INTERPOLATED FROM ADJACENT LEVELS.
B) 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 0704 STATION 90.0 80.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 45.0 N | 121 18.9 W | 05/04/07 | 0908 UTC | 3659 m | 320 14 kn | | | 1016.8 mb | 15.0 C | 13.2 C | | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.46 | 14.46 | 33.451 | 24.894 | 304.8 | 0.000 | 6.00 | 103.3 | 2.5 | 0.34 | 0.0 | 0.00 | 0.32 | 0.07 | 0 | |
| 3 | 14.46 | 14.46 | 33.451 | 24.895 | 304.9 | 0.009 | 6.00 | 103.3 | 2.5 | 0.34 | 0.0 | 0.00 | 0.32 | 0.07 | 3 | 221 |
| 10 ISL | 14.47 D | 14.47 | 33.448 D | 24.890 | 305.5 | 0.031 | 6.01 | 103.5 | 2.5 | 0.36 | 0.0 | 0.00 | 0.32 | 0.06 | 10 | |
| 11 | 14.46 | 14.46 | 33.453 | 24.896 | 305.0 | 0.034 | 6.01 | 103.5 | 2.5 | 0.36 | 0.0 | 0.00 | 0.32 | 0.06 | 11 | 220 |
| 20 ISL | 14.34 D | 14.34 | 33.449 D | 24.919 | 303.1 | 0.061 | 6.03 | 103.6 | 2.4 | 0.35 | 0.0 | 0.00 | 0.33 | 0.06 | 20 | |
| 21 | 14.35 | 14.35 | 33.452 | 24.919 | 303.1 | 0.064 | 6.03 | 103.6 | 2.4 | 0.35 | 0.0 | 0.00 | 0.33 | 0.06 | 21 | 219 |
| 30 | 14.31 | 14.31 | 33.449 | 24.926 | 302.7 | 0.091 | 6.04 | 103.7 | 2.3 | 0.34 | 0.0 | 0.00 | 0.32 | 0.07 | 30 | 218 |
| 40 | 14.25 | 14.24 | 33.449 | 24.938 | 301.8 | 0.121 | 6.04 | 103.6 | 2.4 | 0.33 | 0.0 | 0.00 | 0.40 | 0.10 | 40 | 217 |
| 45 | 14.09 | 14.08 | 33.447 | 24.970 | 298.9 | 0.136 | | | | | | | | | 45 | 216 |
| 50 | 13.79 | 13.78 | 33.428 | 25.018 | 294.5 | 0.151 | 5.94 | 100.9 | 2.6 | 0.40 | 0.6 | 0.09 | 0.64 | 0.17 | 50 | 215 |
| 60 | 12.94 | 12.93 | 33.409 | 25.175 | 279.8 | 0.180 | 5.78 | 96.4 | 3.6 | 0.56 | 2.9 | 0.27 | 0.60 | 0.22 | 60 | 214 |
| 70 | 12.68 | 12.67 | 33.449 | 25.257 | 272.2 | 0.208 | 5.61 | 93.1 | 4.4 | 0.65 | 4.6 | 0.13 | 0.38 | 0.14 | 70 | 213 |
| 75 ISL | 12.65 D | 12.64 | 33.461 D | 25.272 | 270.9 | 0.221 | 5.53 | 91.7 | 4.7 | 0.69 | 5.2 | 0.08 | 0.31 | 0.13 | 75 | |
| 85 | 12.43 | 12.42 | 33.474 | 25.325 | 266.1 | 0.248 | 5.33 | 88.0 | 5.6 | 0.77 | 6.5 | 0.03 | 0.22 | 0.12 | 85 | 212 |
| 99 | 11.88 | 11.87 | 33.494 | 25.445 | 254.9 | 0.284 | 4.88 | 79.7 | 8.0 | 0.93 | 9.5 | 0.02 | 0.13 | 0.10 | 99 | 211 |
| 100 ISL | 11.92 D | 11.91 | 33.494 D | 25.438 | 255.7 | 0.287 | 4.83 | 78.9 | 8.4 | 0.95 | 9.9 | 0.02 | 0.12 | 0.10 | 100 | |
| 119 | 10.32 | 10.31 | 33.588 | 25.798 | 221.5 | 0.332 | 3.97 | 62.7 | 15.5 | 1.43 | 17.7 | 0.01 | 0.03 | 0.05 | 120 | 210 |
| 125 ISL | 10.04 D | 10.03 | 33.644 D | 25.889 | 212.9 | 0.345 | 3.80 | 59.7 | 17.1 | 1.52 | 19.1 | 0.01 | 0.02 | 0.05 | 126 | |
| 139 | 9.72 | 9.70 | 33.717 | 26.000 | 202.7 | 0.375 | 3.53 | 55.1 | 20.1 | 1.66 | 21.2 | 0.01 | 0.01 | 0.04 | 140 | 209 |
| 150 ISL | 9.34 D | 9.32 | 33.804 D | 26.130 | 190.4 | 0.396 | 3.51 | 54.3 | 22.1 | 1.70 | 22.1 | 0.01 | 0.00 | 0.03 | 151 | |
| 168 | 8.99 | 8.97 | 33.908 | 26.268 | 177.6 | 0.429 | 3.49 | 53.6 | 25.2 | 1.74 | 23.2 | 0.01 | 0.00 | 0.02 | 169 | 208 |
| 198 | 8.61 | 8.59 | 33.996 | 26.396 | 165.9 | 0.481 | 2.80 | 42.7 | 31.5 | 2.00 | 26.8 | 0.01 | 0.00 | 0.03 | 199 | 207 |
| 200 ISL | 8.61 D | 8.59 | 33.995 D | 26.396 | 166.0 | 0.484 | 2.78 | 42.4 | 31.8 | 2.01 | 26.9 | 0.01 | | | 201 | |
| 227 | 8.26 | 8.24 | 34.035 | 26.481 | 158.3 | 0.528 | 2.53 | 38.3 | 35.9 | 2.14 | 28.6 | 0.01 | | | 228 | 206 |
| 250 ISL | 7.76 D | 7.74 | 34.046 D | 26.564 | 150.6 | 0.563 | 2.29 | 34.2 | 40.6 | 2.27 | 30.4 | 0.01 | | | 251 | |
| 271 | 7.47 | 7.44 | 34.052 | 26.610 | 146.4 | 0.595 | 2.07 | 30.7 | 45.0 | 2.38 | 32.1 | 0.01 | | | 273 | 205 |
| 300 ISL | 7.15 D | 7.12 | 34.073 D | 26.672 | 140.8 | 0.636 | 1.80 | 26.5 | 49.9 | 2.51 | 33.7 | 0.01 | | | 302 | |
| 320 | 6.94 | 6.91 | 34.070 | 26.699 | 138.5 | 0.664 | 1.61 | 23.6 | 53.0 | 2.59 | 34.7 | 0.01 | | | 322 | 204 |
| 376 | 6.72 | 6.69 | 34.181 D | 26.817 | 128.1 | 0.739 | 0.87 | 12.7 | 61.3 | 2.86 | 37.1 | 0.00 | | | 378 | 203 |
| 400 ISL | 6.51 D | 6.47 | 34.172 D | 26.838 | 126.2 | 0.769 | 0.73 | 10.6 | 64.4 | 2.93 | 37.8 | 0.00 | | | 403 | |
| 433 | 6.36 | 6.32 | 34.221 | 26.896 | 121.1 | 0.810 | 0.62 | 9.0 | 68.5 | 3.00 | 38.5 | 0.00 | | | 436 | 202 |
| 500 ISL | 5.97 D | 5.93 | 34.276 D | 26.990 | 112.8 | 0.888 | 0.41 | 5.9 | 76.4 | 3.12 | 40.1 | 0.00 | | | 503 | |
| 515 | 5.89 | 5.85 | 34.279 | 27.003 | 111.7 | 0.905 | 0.36 | 5.2 | 78.2 | 3.15 | 40.4 | 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 0704 STATION 90.0 90.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND | SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 24.8 N | 121 59.6 W | 05/04/07 | 0226 | UTC | 3867 m | 340 | 13 kn | 350 02 05 | 2 | 1017.2 mb | 15.2 C | 13.5 C | | 8/8 | SC |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.59 | 14.59 | 33.471 | 24.882 | 306.0 | 0.000 | 6.01 | 103.8 | 2.5 | 0.33 | 0.0 | 0.01 | 0.24 | 0.05 | 0 | |
| 2 | 14.59 | 14.59 | 33.471 | 24.882 | 306.0 | 0.006 | 6.01 | 103.8 | 2.5 | 0.33 | 0.0 | 0.01 | 0.24 | 0.05 | 2 | 222 |
| 10 | 14.58 | 14.58 | 33.470 | 24.884 | 306.1 | 0.031 | 6.00 | 103.6 | 2.3 | 0.33 | 0.0 | 0.00 | 0.25 | 0.05 | 10 | 221 |
| 20 | 14.55 | 14.55 | 33.472 | 24.892 | 305.6 | 0.061 | 6.02 | 103.9 | 2.2 | 0.32 | 0.0 | 0.00 | 0.28 | 0.06 | 20 | 220 |
| 30 | 14.07 | 14.07 | 33.476 | 24.997 | 296.0 | 0.091 | 6.11 | 104.4 | 2.4 | 0.33 | 0.0 | 0.01 | 0.48 | 0.11 | 30 | 219 |
| 35 | 13.67 | 13.67 | 33.465 | 25.071 | 289.0 | 0.106 | 6.16 | 104.4 | 2.5 | 0.36 | 0.1 | 0.03 | 0.86 | 0.20 | 35 | 218 |
| 40 | 13.60 | 13.59 | 33.460 | 25.081 | 288.2 | 0.120 | 6.15 | 104.1 | 2.4 | 0.37 | 0.2 | 0.05 | 1.03 | 0.22 | 40 | 217 |
| 45 | 13.52 | 13.51 | 33.448 | 25.088 | 287.6 | 0.135 | 6.10 | 103.0 | 2.4 | 0.39 | 0.4 | 0.08 | 1.29 | 0.11 | 45 | 216 |
| 50 | 13.46 | 13.45 | 33.438 | 25.093 | 287.3 | 0.149 | 6.08 | 102.6 | 2.3 | 0.41 | 0.6 | 0.10 | 0.87 | 0.25 | 50 | 215 |
| 60 | 13.19 | 13.18 | 33.426 | 25.138 | 283.3 | 0.178 | 5.89 | 98.8 | 2.9 | 0.49 | 1.6 | 0.22 | 0.62 | 0.16 | 60 | 214 |
| 70 | 13.00 | 12.99 | 33.419 | 25.171 | 280.4 | 0.206 | 5.82 | 97.2 | 3.2 | 0.57 | 2.6 | 0.26 | 0.44 | 0.13 | 70 | 213 |
| 75 ISL | 12.59 D | 12.58 | 33.420 D | 25.252 | 272.8 | 0.220 | 5.73 | 94.9 | 3.8 | 0.64 | 3.9 | 0.19 | 0.31 | 0.12 | 75 | |
| 85 | 12.03 | 12.02 | 33.425 | 25.363 | 262.4 | 0.246 | 5.27 | 86.3 | 6.8 | 0.88 | 8.2 | 0.04 | 0.09 | 0.09 | 85 | 212 |
| 100 | 10.33 | 10.32 | 33.593 | 25.800 | 220.9 | 0.283 | 3.65 | 57.7 | 17.0 | 1.60 | 19.4 | 0.02 | 0.04 | 0.06 | 100 | 211 |
| 120 | 9.64 | 9.63 | 33.799 | 26.077 | 194.9 | 0.324 | 3.03 | 47.2 | 22.7 | 1.83 | 23.3 | 0.01 | 0.01 | 0.06 | 121 | 210 |
| 125 ISL | 9.62 D | 9.61 | 33.892 D | 26.153 | 187.8 | 0.334 | 2.85 | 44.4 | 24.0 | 1.89 | 24.0 | 0.01 | 0.01 | 0.06 | 126 | |
| 139 | 9.59 | 9.57 | 33.973 | 26.221 | 181.6 | 0.360 | 2.37 | 36.9 | 27.3 | 2.06 | 25.6 | 0.01 | 0.01 | 0.06 | 140 | 209 |
| 150 ISL | 9.52 D | 9.50 | 34.022 D | 26.271 | 177.1 | 0.379 | 2.14 | 33.3 | 29.0 | 2.14 | 26.4 | 0.01 | 0.01 | 0.06 | 151 | |
| 169 | 9.54 | 9.52 | 34.096 | 26.326 | 172.3 | 0.413 | 1.91 | 29.7 | 31.0 | 2.22 | 27.2 | 0.01 | 0.01 | 0.05 | 170 | 208 |
| 199 | 9.18 | 9.16 | 34.125 | 26.408 | 165.1 | 0.463 | 1.84 | 28.4 | 33.3 | 2.28 | 28.3 | 0.01 | 0.01 | 0.05 | 200 | 207 |
| 200 ISL | 9.19 D | 9.17 | 34.129 D | 26.410 | 164.9 | 0.465 | 1.84 | 28.4 | 33.4 | 2.28 | 28.4 | 0.01 | | | 201 | |
| 229 | 8.63 | 8.61 | 34.134 | 26.502 | 156.5 | 0.511 | 1.75 | 26.7 | 37.3 | 2.37 | 29.9 | 0.01 | | | 230 | 206 |
| 250 ISL | 8.51 D | 8.48 | 34.183 D | 26.559 | 151.4 | 0.544 | 1.89 | 28.8 | 40.5 | 2.38 | 30.8 | 0.01 | | | 251 | |
| 269 | 7.60 | 7.57 | 34.075 | 26.610 | 146.5 | 0.572 | 1.98 | 29.5 | 43.5 | 2.38 | 31.7 | 0.01 | | | 271 | 205 |
| 300 ISL | 7.33 D | 7.30 | 34.108 D | 26.674 | 140.7 | 0.617 | 1.56 | 23.1 | 48.9 | 2.55 | 33.6 | 0.00 | | | 302 | |
| 319 | 7.27 | 7.24 | 34.154 | 26.719 | 136.8 | 0.643 | 1.23 | 18.2 | 52.0 | 2.67 | 34.6 | 0.00 | | | 321 | 204 |
| 377 | 7.11 | 7.07 | 34.231 | 26.803 | 129.7 | 0.720 | 0.76 | 11.2 | 58.7 | 2.88 | 35.9 | 0.00 | | | 379 | 203 |
| 400 ISL | 6.90 D | 6.86 | 34.232 D | 26.833 | 127.1 | 0.750 | 0.66 | 9.7 | 61.6 | 2.96 | 36.6 | 0.00 | | | 403 | |
| 437 | 6.59 | 6.55 | 34.255 | 26.893 | 121.7 | 0.796 | 0.54 | 7.9 | 66.6 | 3.08 | 37.8 | 0.01 | | | 440 | 202 |
| 500 ISL | 6.02 D | 5.98 | 34.319 D | 27.018 | 110.2 | 0.869 | 0.32 | 4.6 | 76.6 | 3.14 | 39.7 | 0.00 | | | 503 | |
| 515 | 5.95 | 5.90 | 34.321 | 27.028 | 109.3 | 0.885 | 0.27 | 3.9 | 79.0 | 3.16 | 40.1 | 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 0704 STATION 90.0 100.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND | SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 4.8 N | 122 39.8 W | 04/04/07 | 1954 | UTC | 4012 m | 350 | 10 kn | 360 01 06 | 3 | 1019.9 mb | 16.8 C | 15.0 C | 21m | 6/8 | AS |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.51 | 14.51 | 33.297 | 24.765 | 317.1 | 0.000 | 5.96 | 102.7 | 2.1 | 0.33 | 0.1 | 0.00 | 0.15 | 0.04 | 0 | |
| 2 A | 14.51 | 14.51 | 33.297 | 24.765 | 317.2 | 0.006 | 5.96 | 102.7 | 2.1 | 0.33 | 0.1 | 0.00 | 0.15 | 0.04 | 2 | 223 |
| 10 ISL | 14.50 D | 14.50 | 33.300 D | 24.770 | 317.0 | 0.032 | 5.94 | 102.3 | 2.1 | 0.32 | 0.0 | 0.00 | 0.15 | 0.04 | 10 | |
| 12 A | 14.48 | 14.48 | 33.301 | 24.775 | 316.6 | 0.038 | 5.94 | 102.3 | 2.1 | 0.32 | 0.0 | 0.00 | 0.15 | 0.04 | 12 | 222 |
| 16 | 14.38 | 14.38 | 33.289 | 24.787 | 315.5 | 0.051 | 5.96 | 102.4 | 2.1 | 0.32 | 0.0 | 0.00 | 0.19 | 0.05 | 16 | 221 |
| 20 | 14.31 | 14.31 | 33.281 | 24.796 | 314.8 | 0.063 | 5.98 | 102.6 | 2.1 | 0.33 | 0.0 | 0.00 | 0.22 | 0.06 | 20 | 220 |
| 29 A | 14.12 | 14.12 | 33.274 | 24.830 | 311.8 | 0.091 | 6.03 | 103.0 | 2.3 | 0.35 | 0.1 | 0.01 | 0.33 | 0.17 | 29 | 219 |
| 30 ISL | 14.10 D | 14.10 | 33.275 D | 24.835 | 311.3 | 0.095 | 6.03 | 103.0 | 2.3 | 0.35 | 0.1 | 0.01 | 0.33 | 0.17 | 30 | |
| 40 A | 14.05 | 14.04 | 33.275 | 24.846 | 310.6 | 0.126 | 6.04 | 103.0 | 2.3 | 0.35 | 0.1 | 0.01 | 0.34 | 0.11 | 40 | 218 |
| 45 | 14.01 | 14.00 | 33.278 | 24.857 | 309.7 | 0.141 | 6.05 | 103.1 | 2.4 | 0.35 | 0.1 | 0.02 | 0.34 | 0.11 | 45 | 217 |
| 50 A | 14.01 | 14.00 | 33.279 | 24.857 | 309.8 | 0.157 | 6.05 | 103.1 | 2.4 | 0.35 | 0.1 | 0.02 | 0.34 | 0.12 | 50 | 216 |
| 65 | 13.95 | 13.94 | 33.286 | 24.876 | 308.5 | 0.203 | 6.05 | 103.0 | 2.5 | 0.36 | 0.2 | 0.03 | 0.38 | 0.12 | 65 | 215 |
| 75 | 13.66 | 13.65 | 33.288 | 24.937 | 302.9 | 0.234 | 6.00 | 101.5 | 2.6 | 0.39 | 0.3 | 0.11 | 0.41 | 0.16 | 75 | 214 |
| 80 A | 13.31 | 13.30 | 33.262 | 24.988 | 298.1 | 0.249 | 5.84 | 98.1 | 2.8 | 0.44 | 1.0 | 0.27 | 0.37 | 0.19 | 80 | 213 |
| 90 | 12.79 | 12.78 | 33.310 | 25.128 | 285.0 | 0.278 | 5.64 | 93.7 | 3.9 | 0.58 | 3.6 | 0.04 | 0.17 | 0.10 | 90 | 212 |
| 99 | 12.60 | 12.59 | 33.362 | 25.206 | 277.8 | 0.303 | 5.57 | 92.2 | 4.5 | 0.64 | 4.6 | 0.03 | 0.09 | 0.06 | 99 | 211 |
| 100 ISL | 12.60 D | 12.59 | 33.364 D | 25.207 | 277.7 | 0.306 | 5.56 | 92.1 | 4.5 | 0.64 | 4.7 | 0.03 | 0.09 | 0.06 | 100 | |
| 120 | 12.03 | 12.01 | 33.414 | 25.355 | 264.0 | 0.360 | 5.17 | 84.6 | 6.6 | 0.81 | 7.6 | 0.02 | 0.05 | 0.05 | 121 | 210 |
| 125 ISL | 11.62 D | 11.60 | 33.438 D | 25.450 | 255.0 | 0.373 | 4.97 | 80.6 | 7.9 | 0.91 | 9.1 | 0.02 | 0.04 | 0.05 | 126 | |
| 140 | 10.91 | 10.89 | 33.514 | 25.638 | 237.4 | 0.410 | 4.23 | 67.6 | 12.9 | 1.25 | 14.5 | 0.01 | 0.02 | 0.05 | 141 | 209 |
| 150 ISL | 10.31 D | 10.29 | 33.655 D | 25.852 | 217.1 | 0.433 | 3.64 | 57.5 | 17.4 | 1.52 | 18.3 | 0.01 | 0.01 | 0.04 | 151 | |
| 170 | 9.68 | 9.66 | 33.842 | 26.105 | 193.4 | 0.474 | 2.56 | 39.9 | 25.9 | 1.99 | 24.9 | 0.01 | 0.00 | 0.02 | 171 | 208 |
| 200 | 9.34 | 9.32 | 34.030 | 26.308 | 174.6 | 0.529 | 1.82 | 28.2 | 32.4 | 2.26 | 28.5 | 0.00 | 0.00 | 0.03 | 201 | 207 |
| 227 | 9.21 | 9.19 | 34.101 | 26.385 | 167.9 | 0.575 | 1.51 | 23.3 | 35.1 | 2.44 | 29.8 | 0.00 | | | 228 | 206 |
| 250 ISL | 9.03 D | 9.00 | 34.135 D | 26.441 | 163.0 | 0.613 | 1.37 | 21.1 | 37.3 | 2.46 | 30.5 | 0.00 | | | 251 | |
| 267 | 8.90 | 8.87 | 34.161 | 26.482 | 159.3 | 0.641 | 1.30 | 20.0 | 39.1 | 2.48 | 31.0 | 0.00 | | | 268 | 205 |
| 300 ISL | 8.49 D | 8.46 | 34.222 D | 26.594 | 149.1 | 0.692 | 1.19 | 18.1 | 44.0 | 2.59 | 32.2 | 0.00 | | | 302 | |
| 319 | 8.13 | 8.10 | 34.197 | 26.629 | 145.9 | 0.720 | 1.13 | 17.1 | 47.2 | 2.66 | 32.9 | 0.00 | | | 321 | 204 |
| 378 | 7.36 | 7.32 | 34.207 | 26.749 | 135.0 | 0.802 | 0.88 | 13.0 | 56.5 | 2.81 | 35.4 | 0.00 | | | 380 | 203 |
| 400 ISL | 7.12 D | 7.08 | 34.207 D | 26.783 | 132.0 | 0.832 | 0.82 | 12.1 | 59.0 | 2.86 | 36.0 | 0.00 | | | 402 | |
| 438 | 6.82 | 6.78 | 34.209 | 26.826 | 128.2 | 0.881 | 0.73 | 10.7 | 63.6 | 2.94 | 37.1 | 0.00 | | | 441 | 202 |
| 500 ISL | 6.02 D | 5.98 | 34.211 D | 26.932 | 118.2 | 0.958 | 0.54 | 7.8 | 74.8 | 3.07 | 39.6 | 0.00 | | | 503 | |
| 511 | 5.93 | 5.89 | 34.219 | 26.950 | 116.6 | 0.971 | 0.51 | 7.3 | 76.8 | 3.09 | 40.0 | 0.00 | | | 514 | 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 0704 STATION 90.0 110.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30 44.8 N | 123 19.7 W | 04/04/07 | 1319 UTC | 4008 m | 310 06 kn | | | 1018.8 mb | 15.9 C | 14.0 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 15.03 | 15.03 | 33.327 | 24.677 | 325.6 | 0.000 | 5.88 | 102.4 | 1.8 | 0.31 | 0.0 | 0.00 | 0.16 | 0.01 | 0 | |
| 2 | 15.03 | 15.03 | 33.327 | 24.677 | 325.6 | 0.007 | 5.88 | 102.4 | 1.8 | 0.31 | 0.0 | 0.00 | 0.16 | 0.01 | 2 | 221 |
| 10 ISL | 15.02 D | 15.02 | 33.320 D | 24.674 | 326.1 | 0.033 | 5.89 | 102.5 | 1.8 | 0.32 | 0.0 | 0.00 | 0.15 | 0.02 | 10 | |
| 15 | 14.99 | 14.99 | 33.329 | 24.687 | 325.0 | 0.049 | 5.89 | 102.5 | 1.8 | 0.32 | 0.0 | 0.00 | 0.14 | 0.02 | 15 | 220 |
| 20 ISL | 14.89 D | 14.89 | 33.319 D | 24.701 | 323.8 | 0.065 | 5.89 | 102.3 | 1.8 | 0.32 | 0.0 | 0.00 | 0.15 | 0.02 | 20 | |
| 30 | 14.85 | 14.85 | 33.326 | 24.716 | 322.7 | 0.097 | 5.90 | 102.3 | 1.8 | 0.31 | 0.0 | 0.00 | 0.16 | 0.02 | 30 | 219 |
| 45 | 14.52 | 14.51 | 33.314 | 24.777 | 317.3 | 0.145 | 5.97 | 102.9 | 2.0 | 0.32 | 0.0 | 0.00 | 0.26 | 0.03 | 45 | 218 |
| 50 ISL | 14.49 D | 14.48 | 33.309 D | 24.780 | 317.2 | 0.161 | 6.00 | 103.3 | 2.0 | 0.33 | 0.0 | 0.00 | 0.34 | 0.06 | 50 | |
| 55 | 14.16 | 14.15 | 33.295 | 24.839 | 311.7 | 0.177 | 6.01 | 102.8 | 2.1 | 0.34 | 0.0 | 0.00 | 0.48 | 0.12 | 55 | 217 |
| 65 | 13.26 | 13.25 | 33.258 | 24.994 | 297.1 | 0.207 | 5.96 | 100.0 | 2.6 | 0.41 | 0.5 | 0.08 | 1.11 | 0.42 | 65 | 216 |
| 75 | 12.85 | 12.84 | 33.268 | 25.083 | 288.8 | 0.237 | 5.71 | 95.0 | 3.4 | 0.53 | 2.6 | 0.09 | 0.68 | 0.24 | 75 | 215 |
| 85 | 12.52 | 12.51 | 33.301 | 25.173 | 280.5 | 0.265 | 5.57 | 92.1 | 4.2 | 0.59 | 4.2 | 0.05 | 0.37 | 0.17 | 85 | 214 |
| 95 | 11.97 | 11.96 | 33.345 | 25.312 | 267.4 | 0.293 | 5.30 | 86.6 | 5.9 | 0.74 | 6.7 | 0.02 | 0.16 | 0.06 | 95 | 213 |
| 100 ISL | 11.61 D | 11.60 | 33.374 D | 25.402 | 259.0 | 0.306 | 5.13 | 83.2 | 7.0 | 0.82 | 8.2 | 0.02 | 0.11 | 0.05 | 100 | |
| 110 | 11.14 | 11.13 | 33.432 | 25.532 | 246.7 | 0.331 | 4.75 | 76.3 | 9.7 | 1.01 | 11.5 | 0.02 | 0.05 | 0.03 | 110 | 212 |
| 125 | 10.14 | 10.13 | 33.573 | 25.817 | 219.8 | 0.366 | 4.21 | 66.2 | 15.0 | 1.33 | 16.9 | 0.01 | 0.01 | 0.02 | 126 | 211 |
| 145 | 9.46 | 9.44 | 33.736 | 26.057 | 197.2 | 0.408 | 3.56 | 55.2 | 21.1 | 1.65 | 21.7 | 0.01 | 0.00 | 0.02 | 146 | 210 |
| 150 ISL | 9.29 D | 9.27 | 33.798 D | 26.134 | 190.1 | 0.417 | 3.41 | 52.7 | 22.4 | 1.71 | 22.6 | 0.01 | 0.00 | 0.02 | 151 | |
| 170 | 9.10 | 9.08 | 33.874 | 26.224 | 181.9 | 0.455 | 3.13 | 48.2 | 25.9 | 1.84 | 24.4 | 0.01 | 0.00 | 0.02 | 171 | 209 |
| 199 | 8.77 | 8.75 | 33.962 | 26.345 | 170.8 | 0.506 | 3.96 | 60.6 | 25.3 | 1.58 | 21.9 | 0.01 | 0.00 | 0.01 | 200 | 208 |
| 200 ISL | 8.74 D | 8.72 | 33.960 D | 26.348 | 170.5 | 0.507 | 3.95 | 60.4 | 25.4 | 1.58 | 21.9 | 0.01 | | | 201 | |
| 229 | 8.34 | 8.32 | 33.979 | 26.425 | 163.7 | 0.556 | 3.56 | 53.9 | 30.3 | 1.76 | 24.5 | 0.01 | | | 230 | 207 |
| 250 ISL | 7.97 D | 7.94 | 34.011 D | 26.505 | 156.2 | 0.590 | 2.93 | 44.0 | 35.5 | 2.00 | 27.5 | 0.01 | | | 251 | |
| 268 | 7.84 | 7.81 | 34.038 | 26.546 | 152.6 | 0.617 | 2.40 | 35.9 | 40.1 | 2.20 | 30.1 | 0.01 | | | 269 | 206 |
| 300 ISL | 7.21 D | 7.18 | 34.010 D | 26.614 | 146.3 | 0.665 | 2.25 | 33.2 | 46.1 | 2.33 | 32.1 | 0.00 | | | 302 | |
| 318 | 6.99 | 6.96 | 34.027 | 26.658 | 142.3 | 0.691 | 2.17 | 31.9 | 49.2 | 2.38 | 32.9 | 0.00 | | | 320 | 205 |
| 377 | 6.17 | 6.14 | 34.057 | 26.790 | 130.0 | 0.771 | 1.47 | 21.2 | 62.1 | 2.71 | 37.0 | 0.00 | | | 379 | 204 |
| 400 ISL | 5.92 D | 5.89 | 34.071 D | 26.833 | 126.1 | 0.801 | 1.25 | 17.9 | 66.8 | 2.81 | 38.2 | 0.00 | | | 402 | |
| 439 | 5.65 | 5.61 | 34.114 | 26.901 | 120.0 | 0.849 | 0.93 | 13.2 | 73.5 | 2.96 | 39.7 | 0.00 | | | 442 | 203 |
| 500 ISL | 5.72 D | 5.68 | 34.220 D | 26.977 | 113.7 | 0.920 | 0.55 | 7.8 | 78.9 | 3.10 | 40.6 | 0.00 | | | 503 | |
| 522 | 5.64 | 5.60 | 34.246 | 27.007 | 111.0 | 0.945 | 0.41 | 5.8 | 80.9 | 3.15 | 40.9 | 0.00 | | | 525 | 202 |

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

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 STATION 90.0 120.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30 25.0 N | 123 59.9 W | 04/04/07 | 0656 UTC | 4239 m | 320 08 kn | | | 1021.4 mb | 16.0 C | 14.5 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 16.04 | 16.04 | 33.648 | 24.700 | 323.4 | 0.000 | 5.74 | 102.2 | 1.5 | 0.25 | 0.0 | 0.00 | 0.07 | 0.01 | 0 | |
| 2 | 16.04 | 16.04 | 33.648 | 24.700 | 323.4 | 0.006 | 5.74 | 102.2 | 1.5 | 0.25 | 0.0 | 0.00 | 0.07 | 0.01 | 2 | 220 |
| 10 ISL | 16.03 D | 16.03 | 33.644 D | 24.699 | 323.7 | 0.032 | 5.73 | 102.0 | 1.6 | 0.25 | 0.0 | 0.00 | 0.07 | 0.01 | 10 | |
| 15 | 15.98 | 15.98 | 33.648 | 24.714 | 322.5 | 0.049 | 5.73 | 101.9 | 1.6 | 0.25 | 0.0 | 0.00 | 0.07 | 0.01 | 15 | 219 |
| 20 ISL | 15.89 D | 15.89 | 33.646 D | 24.733 | 320.9 | 0.065 | 5.74 | 101.9 | 1.6 | 0.25 | 0.0 | 0.00 | 0.07 | 0.01 | 20 | |
| 30 ISL | 15.79 D | 15.79 | 33.646 D | 24.755 | 319.0 | 0.097 | 5.76 | 102.0 | 1.6 | 0.25 | 0.0 | 0.00 | 0.07 | 0.01 | 30 | |
| 31 | 15.78 | 15.78 | 33.645 | 24.757 | 318.9 | 0.100 | 5.76 | 102.0 | 1.6 | 0.25 | 0.0 | 0.00 | 0.07 | 0.01 | 31 | 218 |
| 45 | 15.77 | 15.76 | 33.678 | 24.785 | 316.7 | 0.144 | 5.77 | 102.2 | 1.6 | 0.25 | 0.0 | 0.00 | 0.09 | 0.02 | 45 | 217 |
| 50 ISL | 15.77 D | 15.76 | 33.671 D | 24.780 | 317.3 | 0.160 | 5.74 | 101.6 | 1.6 | 0.23 | 0.0 | 0.00 | 0.09 | 0.02 | 50 | |
| 60 | 16.45 | 16.44 | 33.949 | 24.839 | 312.1 | 0.192 | 5.66 | 101.7 | 1.5 | 0.20 | 0.0 | 0.00 | 0.10 | 0.02 | 60 | 216 |
| 75 | 16.61 | 16.60 | 34.073 | 24.898 | 307.0 | 0.238 | 5.64 | 101.8 | 1.4 | 0.18 | 0.0 | 0.00 | 0.16 | 0.05 | 75 | 215 |
| 85 | 16.75 | 16.74 | 34.145 | 24.921 | 305.2 | 0.269 | 5.59 | 101.2 | 1.4 | 0.18 | 0.0 | 0.00 | 0.18 | 0.05 | 85 | 214 |
| 95 | 16.67 | 16.65 | 34.151 | 24.945 | 303.2 | 0.299 | 5.60 | 101.2 | 1.4 | 0.17 | 0.0 | 0.00 | 0.21 | 0.06 | 95 | 213 |
| 100 ISL | 16.52 D | 16.50 | 34.117 D | 24.954 | 302.5 | 0.314 | 5.57 | 100.4 | 1.5 | 0.18 | 0.0 | 0.00 | 0.28 | 0.13 | 100 | |
| 105 | 16.41 | 16.39 | 34.112 | 24.975 | 300.6 | 0.329 | 5.54 | 99.6 | 1.6 | 0.19 | 0.0 | 0.01 | 0.34 | 0.20 | 105 | 212 |
| 115 | 15.95 | 15.93 | 34.101 | 25.072 | 291.6 | 0.359 | 5.47 | 97.4 | 1.9 | 0.22 | 0.2 | 0.05 | 0.35 | 0.27 | 115 | 211 |
| 125 | 15.41 | 15.39 | 34.045 | 25.151 | 284.4 | 0.388 | 5.42 | 95.5 | 2.1 | 0.25 | 0.6 | 0.10 | 0.27 | 0.26 | 126 | 210 |
| 140 | 14.72 | 14.70 | 33.960 | 25.236 | 276.6 | 0.430 | 5.38 | 93.4 | 2.5 | 0.31 | 1.5 | 0.06 | 0.20 | 0.22 | 141 | 209 |
| 150 ISL | 14.24 D | 14.22 | 33.904 D | 25.295 | 271.1 | 0.457 | 5.15 | 88.5 | 4.5 | 0.52 | 4.5 | 0.04 | 0.14 | 0.15 | 151 | |
| 165 | 11.84 | 11.82 | 33.604 | 25.539 | 247.6 | 0.496 | 4.76 | 77.7 | 8.2 | 0.89 | 9.6 | 0.01 | 0.06 | 0.05 | 166 | 208 |
| 194 | 10.42 | 10.40 | 33.718 | 25.884 | 215.1 | 0.563 | 4.51 | 71.4 | 13.1 | 1.18 | 14.6 | 0.01 | 0.01 | 0.02 | 195 | 207 |
| 200 ISL | 9.80 D | 9.78 | 33.756 D | 26.018 | 202.2 | 0.576 | 4.44 | 69.4 | 14.6 | 1.25 | 15.7 | 0.01 | | | 201 | |
| 229 | 9.14 | 9.12 | 33.895 | 26.235 | 182.0 | 0.631 | 4.06 | 62.6 | 22.3 | 1.55 | 20.6 | 0.01 | | | 230 | 206 |
| 250 ISL | 8.50 D | 8.47 | 33.969 D | 26.393 | 167.1 | 0.668 | 3.77 | 57.3 | 26.6 | 1.69 | 23.0 | 0.01 | | | 251 | |
| 269 | 8.42 | 8.39 | 33.975 | 26.410 | 165.8 | 0.700 | 3.46 | 52.5 | 30.4 | 1.80 | 24.9 | 0.01 | | | 270 | 205 |
| 300 ISL | 7.94 D | 7.91 | 34.015 D | 26.514 | 156.3 | 0.750 | 2.78 | 41.7 | 37.7 | 2.08 | 28.5 | 0.00 | | | 302 | |
| 318 | 7.71 | 7.68 | 34.036 | 26.564 | 151.7 | 0.777 | 2.41 | 36.0 | 41.9 | 2.24 | 30.4 | 0.00 | | | 320 | 204 |
| 378 | 6.84 | 6.80 | 34.040 | 26.689 | 140.2 | 0.865 | 1.92 | 28.1 | 52.7 | 2.51 | 34.2 | 0.00 | | | 380 | 203 |
| 400 ISL | 6.41 D | 6.37 | 34.053 D | 26.757 | 133.8 | 0.895 | 1.57 | 22.7 | 58.1 | 2.67 | 35.9 | 0.00 | | | 402 | |
| 437 | 6.18 | 6.14 | 34.131 | 26.848 | 125.4 | 0.943 | 0.99 | 14.3 | 66.9 | 2.91 | 38.4 | 0.00 | | | 440 | 202 |
| 500 ISL | 5.94 D | 5.90 | 34.200 D | 26.934 | 118.0 | 1.020 | 0.68 | 9.7 | 76.1 | 3.05 | 40.3 | 0.00 | | | 503 | |
| 515 | 5.65 | 5.61 | 34.176 | 26.950 | 116.3 | 1.037 | 0.61 | 8.7 | 78.3 | 3.08 | 40.7 | 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 0704 STATION 91.7 26.4

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 13.7 N | 117 27.7 W | 28/03/07 | 0847 UTC | 28 m | 050 07 kn | | | 1018.1 mb | 12.4 C | 10.0 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 12.93 | 12.93 | 33.621 | 25.339 | 262.5 | 0.000 | 4.67 | 78.0 | 9.2 | 0.99 | 8.0 | 0.40 | 0.68 | 0.51 | 0 | |
| 2 | 12.93 | 12.93 | 33.621 | 25.339 | 262.6 | 0.005 | 4.67 | 78.0 | 9.2 | 0.99 | 8.0 | 0.40 | 0.68 | 0.51 | 2 | 209 |
| 6 | 12.89 | 12.89 | 33.620 | 25.346 | 262.0 | 0.016 | 4.58 | 76.5 | 9.5 | 1.02 | 8.5 | 0.41 | 0.64 | 0.45 | 6 | 207 |
| 10 | 12.50 | 12.50 | 33.627 | 25.428 | 254.3 | 0.026 | 4.20 | 69.5 | 11.4 | 1.16 | 10.9 | 0.45 | 0.55 | 0.42 | 10 | 205 |
| 15 | 12.21 | 12.21 | 33.632 | 25.488 | 248.8 | 0.039 | 3.94 | 64.8 | 12.6 | 1.27 | 12.6 | 0.47 | 0.48 | 0.35 | 15 | 203 |
| 20 ISL | 11.38 D | 11.38 | 33.672 D | 25.674 | 231.2 | 0.051 | 3.34 | 54.0 | 16.0 | 1.51 | 16.5 | 0.48 | 0.32 | 0.27 | 20 | |
| 22 | 11.36 | 11.36 | 33.668 | 25.674 | 231.2 | 0.055 | 3.10 | 50.1 | 17.3 | 1.61 | 18.1 | 0.48 | 0.25 | 0.24 | 22 | 201 |

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

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 STATION 93.3 26.7

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 58.0 N | 117 18.3 W | 28/03/07 | 0537 UTC | 2016 m | 330 30 kn | | | 1016.9 mb | 13.5 C | 11.7 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.90 | 14.90 | 33.609 D | 24.922 | 302.2 | 0.000 | 6.12 | 106.5 | 2.5 | 0.29 | 0.2 | 0.02 | | | 0 | |
| 1 | 14.90 | 14.90 | 33.609 D | 24.922 | 302.2 | 0.003 | 6.12 | 106.5 | 2.5 | 0.29 | 0.2 | 0.02 | | | 1 | 210 |
| 5 | 14.90 | 14.90 | 33.618 | 24.929 | 301.7 | 0.015 | 6.14 | 106.8 | 2.4 | 0.29 | 0.2 | 0.02 | 1.33 | 0.44 | 5 | 209 |
| 10 ISL | 14.88 D | 14.88 | 33.618 D | 24.934 | 301.4 | 0.030 | 6.14 | 106.8 | 2.4 | 0.29 | 0.2 | 0.03 | 1.34 | 0.46 | 10 | |
| 11 | 14.89 | 14.89 | 33.620 | 24.933 | 301.5 | 0.033 | 6.14 | 106.8 | 2.4 | 0.29 | 0.2 | 0.03 | 1.34 | 0.46 | 11 | 208 |
| 19 | 14.66 | 14.66 | 33.616 | 24.980 | 297.3 | 0.057 | 6.06 | 104.9 | 2.9 | 0.33 | 0.4 | 0.06 | 1.37 | 0.42 | 19 | 207 |
| 20 ISL | 14.05 D | 14.05 | 33.618 D | 25.110 | 284.9 | 0.060 | 5.86 | 100.2 | 3.7 | 0.42 | 1.5 | 0.13 | 1.41 | 0.45 | 20 | |
| 25 | 12.78 | 12.78 | 33.616 | 25.365 | 260.7 | 0.074 | 4.74 | 78.9 | 8.1 | 0.91 | 7.5 | 0.46 | 1.52 | 0.51 | 25 | 206 |
| 30 | 12.23 | 12.23 | 33.588 | 25.450 | 252.7 | 0.087 | 4.06 | 66.8 | 11.2 | 1.21 | 11.6 | 0.52 | 1.27 | 0.28 | 30 | 205 |
| 41 | 11.89 | 11.88 | 33.641 | 25.556 | 242.9 | 0.114 | 3.66 | 59.8 | 13.4 | 1.39 | 14.6 | 0.41 | 0.35 | 0.28 | 41 | 203 |
| 48 | 11.44 | 11.43 | 33.684 | 25.673 | 232.0 | 0.130 | 3.09 | 50.0 | 17.5 | 1.65 | 17.8 | 0.39 | 0.28 | 0.36 | 48 | 202 |
| 50 ISL | 11.29 D | 11.28 | 33.702 D | 25.714 | 228.1 | 0.135 | 3.04 | 49.1 | 17.9 | 1.67 | 18.1 | 0.39 | 0.26 | 0.35 | 50 | |
| 56 | 11.24 | 11.23 | 33.708 | 25.728 | 226.9 | 0.149 | 2.88 | 46.4 | 19.2 | 1.72 | 19.0 | 0.39 | 0.20 | 0.33 | 56 | 201 |

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

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 STATION 93.3 28.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 54.9 N | 117 23.7 W | 28/03/07 | 1201 UTC | 639 m | 360 09 kn | | | 1018.0 mb | 16.8 C | 12.9 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.60 | 14.60 | 33.632 | 25.004 | 294.4 | 0.000 | 6.04 | 104.5 | 2.5 | 0.30 | 0.4 | 0.06 | 1.25 | 0.45 | 0 | |
| 3 | 14.60 | 14.60 | 33.632 | 25.004 | 294.4 | 0.009 | 6.04 | 104.4 | 2.5 | 0.30 | 0.4 | 0.06 | 1.25 | 0.45 | 3 | 220 |
| 10 ISL | 14.61 D | 14.61 | 33.629 D | 25.000 | 295.1 | 0.029 | 6.04 | 104.5 | 2.5 | 0.30 | 0.4 | 0.06 | 1.21 | 0.45 | 10 | |
| 11 | 14.61 | 14.61 | 33.632 | 25.003 | 294.9 | 0.032 | 6.04 | 104.5 | 2.5 | 0.30 | 0.4 | 0.06 | 1.20 | 0.45 | 11 | 219 |
| 20 ISL | 14.43 D | 14.43 | 33.614 D | 25.027 | 292.8 | 0.059 | 5.83 | 100.5 | 3.5 | 0.42 | 1.6 | 0.13 | 1.12 | 0.44 | 20 | |
| 21 | 14.31 | 14.31 | 33.606 | 25.046 | 291.0 | 0.062 | 5.81 | 99.9 | 3.7 | 0.44 | 1.7 | 0.14 | 1.11 | 0.44 | 21 | 218 |
| 30 ISL | 12.71 D | 12.71 | 33.568 D | 25.342 | 263.0 | 0.087 | 4.98 | 82.8 | 7.5 | 0.84 | 6.9 | 0.29 | 0.60 | 0.29 | 30 | |
| 31 | 12.66 | 12.66 | 33.569 | 25.353 | 262.0 | 0.089 | 4.87 | 80.9 | 8.0 | 0.89 | 7.6 | 0.30 | 0.54 | 0.27 | 31 | 217 |
| 40 | 11.91 | 11.90 | 33.610 | 25.528 | 245.6 | 0.112 | 3.84 | 62.8 | 13.5 | 1.33 | 14.2 | 0.16 | 0.30 | 0.22 | 40 | 216 |
| 50 | 11.21 | 11.20 | 33.700 D | 25.727 | 226.8 | 0.136 | 3.04 D | 49.0 | | | | | | | 50 | 215 |
| 60 | 10.92 | 10.91 | 33.756 | 25.823 | 217.9 | 0.158 | 2.76 | 44.2 | 20.9 | 1.81 | 21.0 | 0.03 | 0.07 | 0.23 | 60 | 214 |
| 71 | 10.64 | 10.63 | 33.835 | 25.934 | 207.6 | 0.181 | 2.49 | 39.7 | 23.6 | 1.95 | 22.7 | 0.03 | 0.04 | 0.17 | 71 | 213 |
| 75 ISL | 10.50 D | 10.49 | 33.878 D | 25.992 | 202.2 | 0.190 | 2.44 | 38.8 | 24.4 | 1.99 | 23.2 | 0.03 | 0.04 | 0.16 | 75 | |
| 85 | 10.31 | 10.30 | 33.923 D | 26.060 | 195.9 | 0.210 | 2.34 D | 37.0 | | | | | | | 85 | 212 |
| 100 | 10.08 | 10.07 | 33.997 | 26.158 | 186.9 | 0.238 | 2.13 | 33.5 | 28.3 | 2.13 | 25.4 | 0.03 | 0.02 | 0.10 | 101 | 211 |
| 120 | 9.59 | 9.58 | 34.057 | 26.287 | 175.0 | 0.274 | 2.28 | 35.5 | 30.2 | 2.12 | 26.1 | 0.02 | 0.01 | 0.04 | 121 | 210 |
| 125 ISL | 9.71 D | 9.70 | 34.120 D | 26.316 | 172.4 | 0.283 | 2.18 | 34.1 | 31.1 | 2.16 | 26.5 | 0.02 | 0.01 | 0.04 | 126 | |
| 141 | 9.59 | 9.57 | 34.165 | 26.372 | 167.5 | 0.310 | 1.79 | 27.9 | 33.8 | 2.29 | 27.7 | 0.01 | 0.01 | 0.04 | 142 | 209 |
| 150 ISL | 9.49 D | 9.47 | 34.191 D | 26.408 | 164.1 | 0.325 | 1.71 | 26.6 | 34.6 | 2.32 | 28.1 | 0.01 | 0.01 | 0.04 | 151 | |
| 170 | 9.39 | 9.37 | 34.205 | 26.436 | 161.9 | 0.358 | 1.62 | 25.2 | 36.1 | 2.37 | 28.6 | 0.01 | 0.01 | 0.03 | 171 | 208 |
| 200 | 9.11 | 9.09 | 34.233 | 26.504 | 156.0 | 0.406 | 1.43 | 22.1 | 39.2 | 2.46 | 29.7 | 0.01 | 0.00 | 0.04 | 201 | 207 |
| 217 | 8.85 | 8.83 | 34.220 | 26.535 | 153.2 | 0.432 | 1.36 | 20.9 | 41.1 | 2.50 | 30.6 | 0.01 | | | 218 | 206 |
| 250 ISL | 8.57 D | 8.54 | 34.254 D | 26.606 | 147.1 | 0.481 | 1.16 | 17.7 | 45.0 | 2.61 | 31.8 | 0.01 | | | 252 | |
| 269 | 8.40 | 8.37 | 34.258 | 26.635 | 144.6 | 0.509 | 1.04 | 15.8 | 47.3 | 2.67 | 32.3 | 0.01 | | | 271 | 205 |
| 300 ISL | 8.12 D | 8.09 | 34.261 D | 26.680 | 140.7 | 0.553 | 0.90 | 13.6 | 50.6 | 2.74 | 33.4 | 0.01 | | | 302 | |
| 319 | 7.91 | 7.88 | 34.269 | 26.718 | 137.4 | 0.580 | 0.83 | 12.5 | 52.6 | 2.78 | 34.0 | 0.01 | | | 321 | 204 |
| 379 | 7.37 | 7.33 | 34.289 | 26.813 | 129.1 | 0.660 | 0.58 | 8.6 | 60.3 | 2.94 | 36.0 | 0.01 | | | 381 | 203 |
| 400 ISL | 7.15 D | 7.11 | 34.293 D | 26.847 | 126.0 | 0.686 | 0.50 | 7.4 | 63.9 | 3.00 | 36.8 | 0.01 | | | 403 | |
| 441 | 6.72 | 6.68 | 34.311 | 26.920 | 119.3 | 0.737 | 0.36 | 5.3 | 70.9 | 3.10 | 38.2 | 0.00 | | | 444 | 202 |
| 500 ISL | 6.25 D | 6.21 | 34.331 D | 26.998 | 112.4 | 0.805 | 0.26 | 3.8 | 78.3 | 3.17 | 39.3 | 0.01 | | | 503 | |
| 513 | 6.20 | 6.15 | 34.332 | 27.005 | 111.8 | 0.820 | 0.24 | 3.5 | 79.9 | 3.19 | 39.6 | 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 0704 STATION 93.3 30.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 50.7 N | 117 31.6 W | 28/03/07 | 1509 UTC | 829 m | 010 14 kn | 320 03 06 | 1 | 1018.3 mb | 13.8 C | 10.9 C | 13m | 1/8 CI |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.30 | 14.30 | 33.598 | 25.042 | 290.8 | 0.000 | 6.04 | 103.8 | 3.0 | 0.36 | 0.3 | 0.05 | 1.04 | 0.36 | 0 | |
| 3 | 14.30 | 14.30 | 33.598 | 25.042 | 290.9 | 0.009 | 6.04 | 103.8 | 3.0 | 0.36 | 0.3 | 0.05 | 1.04 | 0.36 | 3 | 220 |
| 10 ISL | 14.30 D | 14.30 | 33.597 D | 25.041 | 291.1 | 0.029 | 6.03 | 103.6 | 3.0 | 0.37 | 0.3 | 0.05 | 1.03 | 0.35 | 10 | |
| 11 | 14.30 | 14.30 | 33.599 | 25.043 | 291.0 | 0.032 | 6.03 | 103.6 | 3.0 | 0.37 | 0.3 | 0.05 | 1.03 | 0.35 | 11 | 219 |
| 20 ISL | 14.30 D | 14.30 | 33.596 D | 25.041 | 291.5 | 0.058 | 6.05 | 104.0 | 3.0 | 0.36 | 0.3 | 0.05 | 1.02 | 0.35 | 20 | |
| 21 | 14.30 | 14.30 | 33.601 | 25.045 | 291.1 | 0.061 | 6.05 | 104.0 | 3.0 | 0.36 | 0.3 | 0.05 | 1.02 | 0.35 | 21 | 218 |
| 30 ISL | 13.85 D | 13.85 | 33.571 D | 25.115 | 284.6 | 0.087 | 5.87 | 99.9 | 3.5 | 0.43 | 1.1 | 0.11 | 0.94 | 0.34 | 30 | |
| 31 | 14.03 | 14.03 | 33.581 | 25.086 | 287.5 | 0.090 | 5.85 | 100.0 | 3.6 | 0.44 | 1.2 | 0.12 | 0.93 | 0.34 | 31 | 217 |
| 40 | 12.62 | 12.61 | 33.535 | 25.334 | 264.0 | 0.115 | 4.77 | 79.1 | 7.9 | 0.91 | 8.1 | 0.22 | 0.38 | 0.30 | 40 | 216 |
| 50 | 12.12 | 12.11 | 33.587 D | 25.471 | 251.3 | 0.140 | 4.35 D | 71.4 | | | | | | | 50 | 215 |
| 59 | 11.37 | 11.36 | 33.616 | 25.633 | 236.0 | 0.162 | 3.75 | 60.6 | 14.6 | 1.40 | 15.8 | 0.04 | 0.09 | 0.14 | 59 | 214 |
| 70 | 11.04 | 11.03 | 33.692 | 25.752 | 224.9 | 0.188 | 3.26 | 52.3 | 17.8 | 1.61 | 18.6 | 0.03 | 0.05 | 0.09 | 70 | 213 |
| 75 ISL | 10.75 D | 10.74 | 33.747 D | 25.846 | 216.0 | 0.199 | 3.00 | 47.9 | 19.6 | 1.72 | 19.9 | 0.03 | 0.04 | 0.09 | 75 | |
| 85 | 10.63 | 10.62 | 33.819 | 25.924 | 208.9 | 0.220 | 2.62 | 41.7 | 22.5 | 1.90 | 22.1 | 0.02 | 0.02 | 0.09 | 85 | 212 |
| 100 | 10.19 | 10.18 | 33.850 | 26.024 | 199.6 | 0.251 | 2.76 | 43.5 | 23.4 | 1.89 | 22.8 | 0.02 | 0.01 | 0.07 | 101 | 211 |
| 120 | 9.99 | 9.98 | 34.016 | 26.188 | 184.5 | 0.289 | 2.18 | 34.3 | 28.0 | 2.12 | 25.4 | 0.02 | 0.01 | 0.06 | 121 | 210 |
| 125 ISL | 9.84 D | 9.83 | 34.026 D | 26.221 | 181.4 | 0.298 | 2.22 | 34.8 | 28.6 | 2.12 | 25.6 | 0.02 | 0.01 | 0.06 | 126 | |
| 138 | 9.41 | 9.39 | 34.036 | 26.300 | 174.1 | 0.321 | 2.41 | 37.4 | 29.7 | 2.08 | 26.0 | 0.02 | 0.01 | 0.05 | 139 | 209 |
| 150 ISL | 8.88 D | 8.86 | 33.984 D | 26.344 | 170.0 | 0.342 | 2.32 | 35.6 | 31.4 | 2.11 | 26.6 | 0.02 | 0.01 | 0.04 | 151 | |
| 169 | 8.96 | 8.94 | 34.112 | 26.432 | 162.1 | 0.374 | 2.19 | 33.7 | 34.3 | 2.20 | 27.8 | 0.02 | 0.01 | 0.03 | 170 | 208 |
| 199 | 9.15 | 9.13 | 34.232 | 26.497 | 156.7 | 0.421 | 1.45 | 22.4 | 37.9 | 2.43 | 29.4 | 0.02 | 0.01 | 0.04 | 200 | 207 |
| 200 ISL | 9.14 D | 9.12 | 34.233 D | 26.499 | 156.5 | 0.423 | 1.44 | 22.2 | 38.0 | 2.44 | 29.5 | 0.02 | | | 201 | |
| 229 | 8.75 | 8.73 | 34.245 | 26.571 | 150.1 | 0.467 | 1.24 | 19.0 | 42.1 | 2.55 | 30.9 | 0.02 | | | 230 | 206 |
| 250 ISL | 8.47 D | 8.44 | 34.240 D | 26.610 | 146.6 | 0.499 | 1.12 | 17.0 | 44.7 | 2.61 | 31.8 | 0.01 | | | 251 | |
| 268 | 8.33 | 8.30 | 34.259 | 26.647 | 143.4 | 0.525 | 1.04 | 15.8 | 46.7 | 2.66 | 32.4 | 0.01 | | | 270 | 205 |
| 300 ISL | 8.01 D | 7.98 | 34.252 D | 26.690 | 139.8 | 0.570 | 0.95 | 14.3 | 49.8 | 2.73 | 33.4 | 0.01 | | | 302 | |
| 318 | 7.84 | 7.81 | 34.257 | 26.719 | 137.2 | 0.595 | 0.90 | 13.5 | 51.5 | 2.76 | 34.0 | 0.01 | | | 320 | 204 |
| 378 | 7.27 | 7.23 | 34.287 D | 26.825 | 127.8 | 0.674 | 0.61 D | 9.0 | | | | | | | 380 | 203 |
| 400 ISL | 7.13 D | 7.09 | 34.298 D | 26.853 | 125.4 | 0.702 | 0.53 | 7.8 | 61.8 | 2.96 | 36.6 | 0.01 | | | 403 | |
| 436 | 6.86 | 6.82 | 34.307 | 26.898 | 121.5 | 0.747 | 0.41 | 6.0 | 66.8 | 3.05 | 37.7 | 0.01 | | | 439 | 202 |
| 500 ISL | 6.37 D | 6.32 | 34.326 D | 26.979 | 114.3 | 0.822 | 0.29 | 4.2 | 75.7 | 3.16 | 39.3 | 0.01 | | | 503 | |
| 514 | 6.23 | 6.18 | 34.331 | 27.001 | 112.3 | 0.838 | 0.26 | 3.8 | 77.7 | 3.18 | 39.6 | 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 0704 STATION 93.3 35.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND | SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 40.5 N | 117 52.1 W | 28/03/07 | 2004 | UTC | 623 m | 360 | 12 kn | 320 03 05 | 1 | 1019.9 mb | 15.7 C | 13.0 C | 16m | 1/8 | CI |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.73 | 14.73 | 33.568 | 24.927 | 301.7 | 0.000 | 5.98 | 103.6 | 2.2 | 0.35 | 0.0 | 0.02 | 0.53 | 0.18 | 0 | |
| 3 A | 14.73 | 14.73 | 33.568 | 24.927 | 301.8 | 0.009 | 5.98 | 103.6 | 2.2 | 0.35 | 0.0 | 0.02 | 0.53 | 0.18 | 3 | 223 |
| 8 A | 14.64 | 14.64 | 33.572 | 24.950 | 299.8 | 0.024 | 5.99 | 103.6 | 2.2 | 0.33 | 0.0 | 0.02 | 0.60 | 0.20 | 8 | 222 |
| 10 ISL | 14.62 D | 14.62 | 33.565 D | 24.949 | 300.0 | 0.030 | 5.99 | 103.6 | 2.2 | 0.33 | 0.0 | 0.01 | 0.61 | 0.21 | 10 | |
| 11 | 14.61 | 14.61 | 33.566 | 24.952 | 299.7 | 0.033 | 5.99 | 103.6 | 2.2 | 0.33 | 0.0 | 0.01 | 0.61 | 0.21 | 11 | 221 |
| 14 | 14.60 | 14.60 | 33.566 | 24.954 | 299.6 | 0.042 | 5.99 | 103.5 | 1.6 | 0.33 | 0.0 | 0.01 | 0.63 | 0.22 | 14 | 220 |
| 20 ISL | 14.59 D | 14.59 | 33.564 D | 24.955 | 299.7 | 0.060 | 5.99 | 103.5 | 1.7 | 0.33 | 0.0 | 0.01 | 0.67 | 0.25 | 20 | |
| 21 A | 14.58 | 14.58 | 33.566 | 24.958 | 299.4 | 0.063 | 5.99 | 103.5 | 1.7 | 0.33 | 0.0 | 0.01 | 0.68 | 0.25 | 21 | 219 |
| 30 ISL | 14.57 D | 14.57 | 33.564 D | 24.959 | 299.6 | 0.090 | 5.97 | 103.1 | 1.7 | 0.33 | 0.0 | 0.02 | 0.74 | 0.25 | 30 | |
| 31 A | 14.56 | 14.56 | 33.566 | 24.963 | 299.2 | 0.093 | 5.97 | 103.1 | 1.7 | 0.33 | 0.0 | 0.02 | 0.74 | 0.25 | 31 | 218 |
| 39 A | 14.52 | 14.51 | 33.564 | 24.970 | 298.8 | 0.117 | 5.95 | 102.7 | 1.8 | 0.34 | 0.1 | 0.03 | 0.73 | 0.28 | 39 | 217 |
| 50 | 13.59 | 13.58 | 33.539 | 25.145 | 282.4 | 0.149 | 5.53 | 93.6 | 3.7 | 0.55 | 2.4 | 0.37 | 0.80 | 0.40 | 50 | 216 |
| 52 | 13.53 | 13.52 | 33.538 | 25.156 | 281.4 | 0.155 | 5.50 | 93.0 | 3.9 | 0.58 | 2.6 | 0.40 | 0.81 | 0.40 | 52 | 215 |
| 62 A | 13.11 | 13.10 | 33.555 | 25.254 | 272.3 | 0.182 | 5.07 | 85.0 | 6.0 | 0.77 | 5.4 | 0.52 | 0.45 | 0.29 | 62 | 214 |
| 74 | 12.56 | 12.55 | 33.565 | 25.370 | 261.5 | 0.214 | 4.53 | 75.1 | 8.8 | 1.00 | 9.5 | 0.12 | 0.26 | 0.19 | 74 | 213 |
| 75 ISL | 12.36 D | 12.35 | 33.581 D | 25.421 | 256.7 | 0.217 | 4.46 | 73.6 | 9.3 | 1.03 | 10.0 | 0.11 | 0.24 | 0.18 | 75 | |
| 85 | 11.57 | 11.56 | 33.621 | 25.601 | 239.7 | 0.242 | 3.75 | 60.9 | 14.2 | 1.38 | 15.6 | 0.03 | 0.06 | 0.11 | 85 | 212 |
| 100 | 10.69 | 10.68 | 33.731 D | 25.845 | 216.7 | 0.276 | 3.15 D | 50.2 | | | | | | | 100 | 211 |
| 120 | 10.20 | 10.19 | 33.856 | 26.027 | 199.8 | 0.318 | 2.67 | 42.1 | 23.7 | 1.91 | 23.1 | 0.03 | 0.01 | 0.07 | 121 | 210 |
| 125 ISL | 9.98 D | 9.97 | 33.888 D | 26.090 | 193.9 | 0.327 | 2.58 | 40.5 | 24.5 | 1.95 | 23.6 | 0.03 | 0.01 | 0.07 | 126 | |
| 140 | 10.05 | 10.03 | 33.942 | 26.120 | 191.4 | 0.356 | 2.40 | 37.8 | 26.3 | 2.03 | 24.5 | 0.02 | 0.00 | 0.06 | 141 | 209 |
| 150 ISL | 9.85 D | 9.83 | 33.997 D | 26.197 | 184.2 | 0.375 | 2.45 | 38.4 | 27.2 | 2.03 | 24.9 | 0.02 | 0.00 | 0.06 | 151 | |
| 169 | 9.35 | 9.33 | 34.002 | 26.284 | 176.3 | 0.409 | 2.58 | 40.0 | 28.9 | 2.03 | 25.6 | 0.01 | 0.00 | 0.05 | 170 | 208 |
| 199 | 9.03 | 9.01 | 34.099 | 26.412 | 164.7 | 0.460 | 2.22 | 34.2 | 33.6 | 2.20 | 27.6 | 0.01 | 0.00 | 0.04 | 200 | 207 |
| 200 ISL | 9.02 D | 9.00 | 34.101 D | 26.415 | 164.4 | 0.462 | 2.20 | 33.9 | 33.8 | 2.21 | 27.7 | 0.01 | | | 201 | |
| 229 | 8.63 | 8.61 | 34.166 | 26.527 | 154.1 | 0.508 | 1.76 | 26.9 | 39.1 | 2.37 | 30.0 | 0.01 | | | 230 | 206 |
| 250 ISL | 8.46 D | 8.43 | 34.176 D | 26.562 | 151.2 | 0.540 | 1.47 | 22.3 | 42.0 | 2.48 | 30.9 | 0.01 | | | 251 | |
| 268 | 8.45 | 8.42 | 34.232 | 26.607 | 147.2 | 0.567 | 1.26 | 19.2 | 44.1 | 2.57 | 31.5 | 0.01 | | | 270 | 205 |
| 300 ISL | 8.21 D | 8.18 | 34.233 D | 26.645 | 144.1 | 0.614 | 1.02 | 15.4 | 48.1 | 2.69 | 32.7 | 0.01 | | | 302 | |
| 318 | 7.97 | 7.94 | 34.264 | 26.705 | 138.6 | 0.639 | 0.92 | 13.8 | 50.3 | 2.74 | 33.4 | 0.01 | | | 320 | 204 |
| 377 | 7.40 | 7.36 | 34.277 | 26.799 | 130.4 | 0.719 | 0.67 | 9.9 | 57.8 | 2.89 | 35.5 | 0.00 | | | 379 | 203 |
| 400 ISL | 7.10 D | 7.06 | 34.289 D | 26.850 | 125.6 | 0.748 | 0.59 | 8.7 | 60.5 | 2.95 | 36.2 | 0.00 | | | 403 | |
| 438 | 6.91 | 6.87 | 34.296 | 26.882 | 123.0 | 0.795 | 0.47 | 6.9 | 65.0 | 3.04 | 37.3 | 0.00 | | | 441 | 202 |
| 500 ISL | 6.48 D | 6.43 | 34.322 D | 26.961 | 116.1 | 0.869 | 0.34 | 4.9 | 73.4 | 3.12 | 38.8 | 0.00 | | | 503 | |
| 513 | 6.35 | 6.30 | 34.327 | 26.982 | 114.1 | 0.884 | 0.31 | 4.5 | 75.2 | 3.14 | 39.1 | 0.00 | | | 517 | 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 0704 STATION 93.3 40.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND | SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 30.5 N | 118 12.7 W | 29/03/07 | 0031 | UTC | 1653 m | 340 | 20 kn | 320 04 06 | 0 | 1018.3 mb | 15.1 C | 12.7 C | | 0/8 | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 15.00 | 15.00 | 33.531 | 24.840 | 310.0 | 0.000 | 5.83 | 101.6 | 1.9 | 0.34 | 0.1 | 0.01 | 0.37 | 0.08 | 0 | |
| 2 | 15.00 | 15.00 | 33.531 | 24.840 | 310.0 | 0.006 | 5.83 | 101.6 | 1.9 | 0.34 | 0.1 | 0.01 | 0.37 | 0.08 | 2 | 224 |
| 10 CSL | 15.00 | 15.00 | 33.526 | 24.837 | 310.6 | 0.031 | | | | | | | | | 10 | 200 |
| 10 | 14.99 | 14.99 | 33.526 | 24.839 | 310.4 | 0.031 | | | | | | | | | 10 | 223 |
| 11 | 15.00 | 15.00 | 33.528 | 24.838 | 310.5 | 0.034 | 5.83 | 101.6 | 1.9 | 0.33 | 0.1 | 0.01 | 0.42 | 0.04 | 11 | 222 |
| 20 | 14.96 | 14.96 | 33.524 | 24.844 | 310.2 | 0.062 | 5.82 | 101.3 | 1.9 | 0.33 | 0.1 | 0.01 | 0.44 | 0.06 | 20 | 221 |
| 30 ISL | 14.86 D | 14.86 | 33.521 D | 24.864 | 308.6 | 0.093 | 5.85 | 101.6 | 1.9 | 0.33 | 0.1 | 0.01 | 0.44 | 0.11 | 30 | |
| 31 | 14.86 | 14.86 | 33.522 | 24.865 | 308.6 | 0.096 | 5.85 | 101.6 | 1.9 | 0.33 | 0.1 | 0.01 | 0.44 | 0.11 | 31 | 220 |
| 40 | 14.81 | 14.80 | 33.520 | 24.874 | 307.9 | 0.124 | 5.84 | 101.3 | 2.0 | 0.34 | 0.1 | 0.01 | 0.47 | 0.13 | 40 | 219 |
| 50 | 14.80 | 14.79 | 33.519 | 24.876 | 308.1 | 0.155 | 5.82 | 101.0 | 1.9 | 0.34 | 0.1 | 0.01 | 0.49 | 0.15 | 50 | 218 |
| 60 | 14.78 | 14.77 | 33.517 | 24.879 | 308.1 | 0.185 | 5.81 | 100.8 | | | | | 0.47 | 0.15 | 60 | 217 |
| 70 | 13.82 | 13.81 | 33.486 | 25.057 | 291.3 | 0.215 | 5.37 | 91.3 | 4.3 | 0.58 | 3.4 | 0.11 | 0.42 | 0.25 | 70 | 216 |
| 75 ISL | 13.21 D | 13.20 | 33.493 D | 25.186 | 279.1 | 0.230 | 5.12 | 86.0 | 5.7 | 0.71 | 5.4 | 0.09 | 0.35 | 0.23 | 75 | |
| 85 | 12.29 | 12.28 | 33.493 | 25.366 | 262.1 | 0.257 | 4.62 | 76.1 | 8.9 | 0.98 | 9.7 | 0.05 | 0.21 | 0.15 | 85 | 215 |
| 99 | 11.21 | 11.20 | 33.551 | 25.612 | 238.9 | 0.292 | 4.09 | 65.8 | 13.1 | 1.28 | 14.8 | 0.03 | 0.08 | 0.08 | 99 | 214 |
| 100 ISL | 10.89 D | 10.88 | 33.587 D | 25.697 | 230.8 | 0.294 | 4.05 | 64.8 | 13.4 | 1.30 | 15.1 | 0.03 | 0.08 | 0.08 | 100 | |
| 119 | 10.38 | 10.37 | 33.708 | 25.881 | 213.7 | 0.336 | 3.30 | 52.2 | 19.4 | 1.67 | 20.3 | 0.02 | 0.03 | 0.06 | 120 | 213 |
| 125 ISL | 10.28 D | 10.27 | 33.744 D | 25.927 | 209.5 | 0.349 | 3.13 | 49.4 | 21.2 | 1.75 | 21.5 | 0.02 | 0.02 | 0.05 | 126 | |
| 139 | 9.83 | 9.81 | 33.879 | 26.108 | 192.4 | 0.377 | 2.81 | 44.0 | 25.0 | 1.91 | 23.7 | 0.02 | 0.01 | 0.04 | 140 | 212 |
| 150 ISL | 9.71 D | 9.69 | 33.945 D | 26.180 | 185.8 | 0.398 | 2.62 | 40.9 | 26.7 | 1.99 | 24.7 | 0.02 | 0.00 | 0.04 | 151 | |
| 169 | 9.66 | 9.64 | 34.008 | 26.238 | 180.7 | 0.433 | 2.34 | 36.5 | 29.0 | 2.09 | 25.8 | 0.01 | 0.00 | 0.04 | 170 | 211 |
| 199 | 9.33 | 9.31 | 34.135 | 26.392 | 166.7 | 0.485 | 1.90 | 29.5 | 34.1 | 2.27 | 28.0 | 0.01 | 0.00 | 0.04 | 200 | 210 |
| 200 ISL | 9.31 D | 9.29 | 34.136 D | 26.396 | 166.3 | 0.487 | 1.89 | 29.3 | 34.2 | 2.27 | 28.0 | 0.01 | | | 201 | |
| 229 | 8.96 | 8.94 | 34.193 | 26.497 | 157.2 | 0.534 | 1.71 | 26.3 | 37.9 | 2.38 | 29.2 | 0.01 | | | 230 | 209 |
| 250 ISL | 8.71 D | 8.68 | 34.251 D | 26.582 | 149.4 | 0.566 | 1.47 | 22.5 | 41.0 | 2.49 | 30.3 | 0.01 | | | 251 | |
| 269 | 8.49 | 8.46 | 34.248 | 26.614 | 146.7 | 0.594 | 1.25 | 19.0 | 43.9 | 2.58 | 31.3 | 0.01 | | | 271 | 208 |
| 300 ISL | 8.08 D | 8.05 | 34.267 D | 26.691 | 139.7 | 0.638 | 1.06 | 16.0 | 48.2 | 2.68 | 32.8 | 0.01 | | | 302 | |
| 321 | 7.92 | 7.89 | 34.256 | 26.706 | 138.5 | 0.667 | 0.96 | 14.4 | 51.0 | 2.74 | 33.7 | 0.01 | | | 323 | 207 |
| 375 | 7.33 | 7.29 | 34.272 | 26.805 | 129.7 | 0.740 | 0.66 | 9.8 | 58.6 | 2.91 | 35.9 | 0.01 | | | 377 | 206 |
| 400 ISL | 7.03 D | 6.99 | 34.292 D | 26.862 | 124.4 | 0.772 | 0.57 | 8.4 | 62.2 | 2.97 | 36.7 | 0.01 | | | 403 | |
| 436 | 6.80 | 6.76 | 34.291 | 26.893 | 121.8 | 0.816 | 0.46 | 6.7 | 67.3 | 3.04 | 37.8 | 0.01 | | | 439 | 205 |
| 500 ISL | 6.28 D | 6.23 | 34.324 D | 26.989 | 113.3 | 0.891 | 0.31 | 4.5 | 75.8 | 3.15 | 39.6 | 0.01 | | | 503 | |
| 512 | 6.20 | 6.15 | 34.329 | 27.003 | 112.0 | 0.905 | 0.29 | 4.2 | 77.3 | 3.17 | 39.9 | 0.01 | | | 515 | 204 |
| 569 | 5.86 | 5.81 | 34.348 | 27.061 | 106.9 | 0.967 | 0.24 | 3.4 | 83.6 | 3.22 | 40.9 | 0.01 | | | 573 | 203 |
| 600 ISL | 5.55 D | 5.50 | 34.349 D | 27.100 | 103.2 | 1.000 | 0.23 | 3.3 | 86.2 | 3.25 | 41.5 | 0.01 | | | 604 | |
| 667 | 5.33 | 5.27 | 34.385 | 27.156 | 98.5 | 1.067 | 0.21 | 3.0 | 91.7 | 3.29 | 42.5 | 0.01 | | | 672 | 202 |
| 700 ISL | 5.17 D | 5.11 | 34.391 D | 27.180 | 96.4 | 1.099 | 0.23 | 3.2 | 95.4 | 3.30 | 42.8 | 0.01 | | | 705 | |
| 766 | 4.83 | 4.77 | 34.421 | 27.243 | 90.7 | 1.161 | 0.27 | 3.8 | 102.8 | 3.31 | 43.4 | 0.01 | | | 772 | 201 |

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

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 STATION 93.3 45.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 20.9 N | 118 33.1 W | 29/03/07 | 0513 UTC | 1316 m | 330 14 kn | | | 1019.3 mb | 13.7 C | 12.2 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.87 | 14.87 | 33.534 | 24.871 | 307.1 | 0.000 | 5.84 | 101.5 | 1.9 | 0.33 | 0.1 | 0.01 | 0.35 | 0.11 | 0 | |
| 3 | 14.87 | 14.87 | 33.534 | 24.871 | 307.1 | 0.009 | 5.84 | 101.5 | 1.9 | 0.33 | 0.1 | 0.01 | 0.35 | 0.11 | 3 | 220 |
| 10 ISL | 14.87 D | 14.87 | 33.524 D | 24.863 | 308.1 | 0.031 | 5.84 | 101.5 | 1.9 | 0.33 | 0.1 | 0.01 | 0.34 | 0.10 | 10 | |
| 16 | 14.88 | 14.88 | 33.532 | 24.868 | 307.9 | 0.049 | 5.84 | 101.5 | 1.8 | 0.33 | 0.1 | 0.01 | 0.34 | 0.09 | 16 | 219 |
| 20 ISL | 14.88 D | 14.88 | 33.524 D | 24.862 | 308.6 | 0.062 | 5.84 | 101.5 | 1.8 | 0.33 | 0.1 | 0.01 | 0.34 | 0.09 | 20 | |
| 30 ISL | 14.88 D | 14.88 | 33.523 D | 24.861 | 308.9 | 0.092 | 5.85 | 101.7 | 1.8 | 0.34 | 0.1 | 0.01 | 0.35 | 0.10 | 30 | |
| 31 | 14.88 | 14.88 | 33.538 | 24.873 | 307.8 | 0.096 | 5.85 | 101.7 | 1.8 | 0.34 | 0.1 | 0.01 | 0.35 | 0.10 | 31 | 218 |
| 46 | 14.87 | 14.86 | 33.531 | 24.870 | 308.5 | 0.142 | 5.85 | 101.6 | 1.7 | 0.33 | 0.1 | 0.01 | 0.36 | 0.11 | 46 | 217 |
| 50 ISL | 14.74 D | 14.73 | 33.515 D | 24.886 | 307.2 | 0.154 | 5.86 | 101.5 | 1.8 | 0.34 | 0.1 | 0.01 | 0.42 | 0.15 | 50 | |
| 56 | 14.44 | 14.43 | 33.510 | 24.946 | 301.6 | 0.172 | 5.87 | 101.1 | 2.0 | 0.35 | 0.1 | 0.03 | 0.52 | 0.22 | 56 | 216 |
| 66 | 13.09 | 13.08 | 33.459 | 25.184 | 279.1 | 0.201 | 5.35 | 89.6 | 4.9 | 0.66 | 4.5 | 0.10 | 0.63 | 0.37 | 66 | 215 |
| 75 | 12.47 | 12.46 | 33.483 | 25.324 | 265.9 | 0.226 | 4.81 | 79.5 | 7.7 | 0.90 | 8.6 | 0.04 | 0.30 | 0.22 | 75 | 214 |
| 86 | 11.91 | 11.90 | 33.501 | 25.444 | 254.6 | 0.255 | 4.43 | 72.4 | 10.2 | 1.08 | 11.6 | 0.03 | 0.19 | 0.16 | 86 | 213 |
| 95 | 11.44 | 11.43 | 33.548 | 25.568 | 243.1 | 0.277 | 4.11 | 66.5 | 12.5 | 1.25 | 14.2 | 0.02 | 0.11 | 0.11 | 95 | 212 |
| 100 ISL | 10.78 D | 10.77 | 33.612 D | 25.736 | 227.1 | 0.289 | 3.95 | 63.0 | 14.0 | 1.34 | 15.7 | 0.02 | 0.08 | 0.09 | 100 | |
| 110 | 10.31 | 10.30 | 33.664 D | 25.859 | 215.6 | 0.311 | 3.66 D | 57.8 | | | | | | | 111 | 211 |
| 125 | 9.85 | 9.84 | 33.764 | 26.015 | 201.0 | 0.342 | 3.35 | 52.4 | 21.4 | 1.70 | 21.6 | 0.01 | 0.01 | 0.04 | 126 | 210 |
| 146 | 9.49 | 9.47 | 33.899 | 26.180 | 185.7 | 0.383 | 3.03 | 47.1 | 25.4 | 1.86 | 23.8 | 0.01 | 0.00 | 0.03 | 147 | 209 |
| 150 ISL | 9.44 D | 9.42 | 33.910 D | 26.197 | 184.1 | 0.390 | 3.00 | 46.6 | 25.9 | 1.88 | 24.1 | 0.01 | 0.00 | 0.03 | 151 | |
| 170 | 9.24 | 9.22 | 33.984 | 26.287 | 175.9 | 0.426 | 2.83 | 43.7 | 28.2 | 1.96 | 25.2 | 0.01 | 0.00 | 0.03 | 171 | 208 |
| 198 | 9.02 | 9.00 | 34.091 | 26.407 | 165.1 | 0.474 | 2.32 | 35.7 | 33.3 | 2.15 | 27.5 | 0.01 | 0.00 | 0.02 | 199 | 207 |
| 200 ISL | 8.99 D | 8.97 | 34.099 D | 26.418 | 164.0 | 0.477 | 2.28 | 35.1 | 33.7 | 2.17 | 27.7 | 0.01 | | | 201 | |
| 229 | 8.63 | 8.61 | 34.176 | 26.535 | 153.4 | 0.523 | 1.78 | 27.2 | 39.5 | 2.38 | 29.9 | 0.01 | | | 230 | 206 |
| 250 ISL | 8.49 D | 8.46 | 34.190 D | 26.568 | 150.6 | 0.555 | 1.58 | 24.0 | 41.9 | 2.46 | 30.8 | 0.00 | | | 251 | |
| 269 | 8.34 | 8.31 | 34.205 | 26.603 | 147.6 | 0.583 | 1.45 | 22.0 | 43.9 | 2.52 | 31.5 | 0.00 | | | 271 | 205 |
| 300 ISL | 7.71 D | 7.68 | 34.198 D | 26.691 | 139.4 | 0.628 | 1.26 | 18.8 | 49.8 | 2.64 | 33.5 | 0.00 | | | 302 | |
| 320 | 7.36 | 7.33 | 34.185 | 26.731 | 135.7 | 0.655 | 1.16 | 17.2 | 53.8 | 2.72 | 34.7 | 0.00 | | | 322 | 204 |
| 379 | 6.83 | 6.79 | 34.202 | 26.818 | 128.0 | 0.733 | 0.93 | 13.6 | 60.8 | 2.85 | 36.6 | 0.00 | | | 381 | 203 |
| 400 ISL | 6.73 D | 6.69 | 34.216 D | 26.843 | 125.9 | 0.760 | 0.80 | 11.7 | 63.7 | 2.91 | 37.3 | 0.00 | | | 403 | |
| 436 | 6.49 | 6.45 | 34.254 | 26.905 | 120.4 | 0.804 | 0.58 | 8.4 | 68.7 | 3.02 | 38.5 | 0.00 | | | 439 | 202 |
| 500 ISL | 6.11 D | 6.07 | 34.290 D | 26.983 | 113.5 | 0.879 | 0.39 | 5.6 | 76.7 | 3.14 | 40.1 | 0.00 | | | 503 | |
| 518 | 5.98 | 5.93 | 34.298 | 27.006 | 111.5 | 0.899 | 0.34 | 4.9 | 78.9 | 3.17 | 40.6 | 0.00 | | | 522 | 201 |

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

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 STATION 93.3 50.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 10.7 N | 118 53.5 W | 29/03/07 | 0944 UTC | 1462 m | 310 08 kn | | | 1019.4 mb | 13.9 C | 12.2 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.98 | 13.98 | 33.578 | 25.093 | 285.9 | 0.000 | 5.95 | 101.6 | 3.1 | 0.41 | 0.8 | 0.08 | 0.75 | 0.27 | 0 | |
| 3 | 13.98 | 13.98 | 33.578 | 25.093 | 286.0 | 0.009 | 5.95 | 101.6 | 3.1 | 0.41 | 0.8 | 0.08 | 0.75 | 0.27 | 3 | 220 |
| 10 | 13.97 | 13.97 | 33.578 | 25.096 | 286.0 | 0.029 | 5.95 | 101.5 | 3.1 | 0.41 | 0.8 | 0.08 | 0.77 | 0.27 | 10 | 219 |
| 20 | 13.98 | 13.98 | 33.578 | 25.094 | 286.4 | 0.057 | 5.95 | 101.6 | 3.1 | 0.42 | 0.8 | 0.08 | 0.74 | 0.29 | 20 | 218 |
| 30 | 13.97 | 13.97 | 33.579 | 25.097 | 286.4 | 0.086 | 5.96 | 101.7 | 3.1 | 0.41 | 0.8 | 0.08 | 0.76 | 0.27 | 30 | 217 |
| 41 | 13.79 | 13.78 | 33.591 | 25.144 | 282.3 | 0.117 | 5.94 | 101.0 | 2.8 | 0.45 | 1.0 | 0.11 | 0.76 | 0.33 | 41 | 216 |
| 50 | 12.71 | 12.70 | 33.593 | 25.362 | 261.7 | 0.142 | 5.36 | 89.1 | 6.0 | 0.82 | 5.9 | 0.50 | 0.24 | 0.21 | 50 | 215 |
| 59 | 12.23 | 12.22 | 33.618 | 25.474 | 251.2 | 0.165 | 4.91 | 80.8 | 8.7 | 1.01 | 9.3 | 0.48 | 0.16 | 0.20 | 59 | 214 |
| 69 | 11.93 | 11.92 | 33.621 | 25.534 | 245.8 | 0.190 | 4.58 | 74.9 | 10.7 | 1.14 | 11.8 | 0.23 | 0.10 | 0.22 | 69 | 213 |
| 75 ISL | 11.73 D | 11.72 | 33.613 D | 25.565 | 242.9 | 0.204 | 4.40 | 71.7 | 11.8 | 1.21 | 13.1 | 0.14 | 0.08 | 0.21 | 75 | |
| 86 | 11.04 | 11.03 | 33.611 | 25.689 | 231.3 | 0.230 | 4.07 | 65.3 | 14.3 | 1.35 | 15.7 | 0.04 | 0.06 | 0.17 | 86 | 212 |
| 99 | 10.09 | 10.08 | 33.683 | 25.911 | 210.3 | 0.259 | 3.58 | 56.3 | 18.8 | 1.62 | 19.8 | 0.02 | 0.03 | 0.09 | 99 | 211 |
| 100 ISL | 9.99 D | 9.98 | 33.721 D | 25.957 | 205.9 | 0.261 | 3.53 | 55.4 | 19.2 | 1.64 | 20.1 | 0.02 | 0.03 | 0.09 | 100 | |
| 119 | 9.66 | 9.65 | 33.885 | 26.141 | 188.9 | 0.299 | 2.82 | 44.0 | 25.6 | 1.92 | 24.1 | 0.02 | 0.01 | 0.06 | 120 | 210 |
| 125 ISL | 9.58 D | 9.57 | 33.899 D | 26.165 | 186.7 | 0.310 | 2.82 | 43.9 | 25.8 | 1.93 | 24.2 | 0.02 | 0.01 | 0.06 | 126 | |
| 140 | 9.44 | 9.42 | 33.918 | 26.203 | 183.3 | 0.338 | 2.81 | 43.6 | 26.4 | 1.94 | 24.6 | 0.02 | 0.01 | 0.06 | 141 | 209 |
| 150 ISL | 9.26 D | 9.24 | 33.983 D | 26.283 | 175.9 | 0.356 | 2.67 | 41.3 | 28.2 | 2.00 | 25.5 | 0.02 | 0.01 | 0.07 | 151 | |
| 170 | 9.03 | 9.01 | 34.033 | 26.359 | 169.0 | 0.390 | 2.32 | 35.7 | 32.2 | 2.14 | 27.5 | 0.02 | 0.01 | 0.08 | 171 | 208 |
| 198 | 9.02 | 9.00 | 34.104 | 26.417 | 164.1 | 0.437 | 1.93 | 29.7 | 35.3 | 2.28 | 28.7 | 0.06 | 0.00 | 0.05 | 199 | 207 |
| 200 ISL | 8.96 D | 8.94 | 34.121 D | 26.440 | 162.0 | 0.440 | 1.91 | 29.4 | 35.5 | 2.29 | 28.8 | 0.06 | | | 201 | |
| 229 | 8.75 | 8.73 | 34.156 | 26.501 | 156.7 | 0.486 | 1.67 | 25.6 | 39.0 | 2.40 | 30.1 | 0.04 | | | 230 | 206 |
| 250 ISL | 8.58 D | 8.55 | 34.181 D | 26.547 | 152.6 | 0.519 | 1.50 | 22.9 | 41.4 | 2.48 | 30.9 | 0.03 | | | 251 | |
| 267 | 8.46 | 8.43 | 34.195 | 26.577 | 150.1 | 0.544 | 1.36 | 20.7 | 43.5 | 2.54 | 31.5 | 0.02 | | | 269 | 205 |
| 300 ISL | 8.02 D | 7.99 | 34.230 D | 26.671 | 141.5 | 0.592 | 1.07 | 16.1 | 49.4 | 2.69 | 33.3 | 0.01 | | | 302 | |
| 319 | 7.73 | 7.70 | 34.239 | 26.721 | 137.0 | 0.619 | 0.92 | 13.8 | 53.0 | 2.78 | 34.4 | 0.01 | | | 321 | 204 |
| 378 | 7.05 | 7.01 | 34.269 D | 26.841 | 126.1 | 0.697 | 0.67 D | 9.9 | | | | | | | 380 | 203 |
| 400 ISL | 6.86 D | 6.82 | 34.285 D | 26.880 | 122.6 | 0.724 | 0.57 | 8.4 | 64.9 | 3.02 | 37.3 | 0.00 | | | 403 | |
| 436 | 6.66 | 6.62 | 34.292 | 26.913 | 119.9 | 0.768 | 0.44 | 6.4 | 69.3 | 3.09 | 38.2 | 0.00 | | | 439 | 202 |
| 500 ISL | 6.21 D | 6.17 | 34.304 D | 26.982 | 113.8 | 0.842 | 0.36 | 5.2 | 75.8 | 3.15 | 39.5 | 0.00 | | | 503 | |
| 512 | 6.19 | 6.14 | 34.305 | 26.985 | 113.7 | 0.856 | 0.34 | 4.9 | 77.0 | 3.16 | 39.7 | 0.00 | | | 516 | 201 |

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

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 STATION 93.3 55.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND | SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 0.8 N | 119 13.8 W | 29/03/07 | 1359 | UTC | 1583 m | 320 | 05 kn | 320 04 07 | 1 | 1019.0 mb | 13.9 C | 12.3 C | 20m | 1/8 | CI |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.76 | 13.76 | 33.473 | 25.057 | 289.3 | 0.000 | 5.98 | 101.6 | 2.7 | 0.38 | 0.6 | 0.07 | 0.56 | 0.13 | 0 | |
| 1 | 13.76 | 13.76 | 33.473 | 25.057 | 289.3 | 0.003 | 5.98 | 101.6 | 2.7 | 0.38 | 0.6 | 0.07 | 0.56 | 0.13 | 1 | 221 |
| 10 | 13.76 | 13.76 | 33.473 | 25.058 | 289.5 | 0.029 | 5.99 | 101.7 | 2.7 | 0.38 | 0.6 | 0.07 | 0.50 | 0.16 | 10 | 219 |
| 10 | 13.76 | 13.76 | 33.474 | 25.058 | 289.5 | 0.029 | | | | | | | | | 10 | 220 |
| 20 | 13.77 | 13.77 | 33.474 | 25.057 | 289.9 | 0.058 | 5.98 | 101.6 | 2.7 | 0.38 | 0.6 | 0.07 | 0.52 | 0.23 | 20 | 218 |
| 30 | 13.76 | 13.76 | 33.474 | 25.059 | 290.0 | 0.087 | 5.96 | 101.2 | 2.7 | 0.39 | 0.6 | 0.07 | 0.59 | 0.09 | 30 | 217 |
| 40 | 13.70 | 13.69 | 33.492 | 25.086 | 287.8 | 0.116 | 5.98 | 101.4 | 2.7 | 0.41 | 0.7 | 0.08 | 0.55 | 0.17 | 40 | 216 |
| 49 | 13.22 | 13.21 | 33.550 | 25.228 | 274.5 | 0.141 | 5.80 | 97.4 | 3.0 | 0.56 | 2.4 | 0.20 | 0.40 | 0.16 | 49 | 215 |
| 50 ISL | 13.11 D | 13.10 | 33.551 D | 25.251 | 272.3 | 0.144 | 5.79 | 97.0 | 3.1 | 0.57 | 2.5 | 0.22 | 0.38 | 0.16 | 50 | |
| 60 | 12.93 | 12.92 | 33.555 | 25.290 | 268.8 | 0.171 | 5.62 | 93.8 | 4.0 | 0.67 | 4.0 | 0.35 | 0.22 | 0.17 | 60 | 214 |
| 70 | 12.51 | 12.50 | 33.547 | 25.366 | 261.8 | 0.197 | 5.28 | 87.4 | 5.9 | 0.82 | 6.7 | 0.35 | 0.12 | 0.13 | 70 | 213 |
| 75 ISL | 12.17 D | 12.16 | 33.543 D | 25.428 | 256.0 | 0.210 | 4.93 | 81.0 | 8.1 | 0.96 | 9.2 | 0.25 | 0.10 | 0.13 | 75 | |
| 84 | 11.37 | 11.36 | 33.595 | 25.617 | 238.1 | 0.233 | 4.25 | 68.7 | 12.7 | 1.24 | 13.9 | 0.05 | 0.08 | 0.12 | 84 | 212 |
| 99 | 10.32 | 10.31 | 33.714 D | 25.896 | 211.8 | 0.266 | 3.45 D | 54.5 | | | | | | | 99 | 211 |
| 100 ISL | 10.22 D | 10.21 | 33.733 D | 25.928 | 208.8 | 0.268 | 3.41 | 53.8 | 18.8 | 1.58 | 19.3 | 0.04 | 0.05 | 0.11 | 100 | |
| 119 | 9.93 | 9.92 | 33.859 | 26.076 | 195.1 | 0.307 | 2.76 | 43.3 | 24.7 | 1.89 | 23.5 | 0.02 | 0.02 | 0.09 | 120 | 210 |
| 125 ISL | 9.86 D | 9.85 | 33.928 D | 26.141 | 189.0 | 0.318 | 2.50 | 39.2 | 26.6 | 1.99 | 24.6 | 0.02 | 0.02 | 0.09 | 126 | |
| 138 | 9.78 | 9.76 | 34.032 | 26.236 | 180.3 | 0.342 | 2.00 | 31.3 | 30.1 | 2.18 | 26.6 | 0.02 | 0.01 | 0.08 | 139 | 209 |
| 150 ISL | 9.61 D | 9.59 | 34.086 D | 26.307 | 173.8 | 0.364 | 1.90 | 29.6 | 31.9 | 2.26 | 27.5 | 0.02 | 0.01 | 0.08 | 151 | |
| 168 | 9.48 | 9.46 | 34.119 | 26.354 | 169.6 | 0.395 | 1.75 | 27.2 | 33.6 | 2.30 | 28.1 | 0.01 | 0.01 | 0.07 | 169 | 208 |
| 198 | 9.25 | 9.23 | 34.162 | 26.426 | 163.4 | 0.444 | 1.60 | 24.8 | 36.0 | 2.37 | 29.1 | 0.01 | 0.01 | 0.06 | 199 | 207 |
| 200 ISL | 9.18 D | 9.16 | 34.172 D | 26.445 | 161.6 | 0.448 | 1.60 | 24.7 | 36.2 | 2.37 | 29.2 | 0.01 | | | 201 | |
| 227 | 8.84 | 8.82 | 34.165 | 26.494 | 157.4 | 0.491 | 1.61 | 24.7 | 38.5 | 2.41 | 30.0 | 0.01 | | | 228 | 206 |
| 250 ISL | 8.71 D | 8.68 | 34.186 D | 26.531 | 154.2 | 0.527 | 1.44 | 22.0 | 40.7 | 2.48 | 30.7 | 0.01 | | | 251 | |
| 268 | 8.62 | 8.59 | 34.215 | 26.568 | 151.1 | 0.554 | 1.28 | 19.5 | 42.5 | 2.55 | 31.3 | 0.01 | | | 270 | 205 |
| 300 ISL | 8.30 D | 8.27 | 34.237 D | 26.635 | 145.2 | 0.601 | 1.11 | 16.8 | 46.0 | 2.64 | 32.3 | 0.01 | | | 302 | |
| 319 | 8.17 | 8.14 | 34.243 | 26.659 | 143.1 | 0.629 | 1.03 | 15.6 | 47.9 | 2.68 | 32.9 | 0.01 | | | 321 | 204 |
| 377 | 7.47 | 7.43 | 34.254 | 26.771 | 133.1 | 0.709 | 0.88 | 13.1 | 51.6 | 2.77 | 34.0 | 0.01 | | | 379 | 203 |
| 400 ISL | 7.33 D | 7.29 | 34.261 D | 26.796 | 130.9 | 0.739 | 0.75 | 11.1 | 56.5 | 2.86 | 35.3 | 0.01 | | | 403 | |
| 438 | 6.87 | 6.83 | 34.273 | 26.870 | 124.2 | 0.788 | 0.54 | 7.9 | 65.2 | 3.00 | 37.4 | 0.01 | | | 441 | 202 |
| 500 ISL | 6.51 D | 6.46 | 34.291 D | 26.933 | 118.8 | 0.863 | 0.42 | 6.1 | 71.3 | 3.08 | 38.6 | 0.01 | | | 503 | |
| 513 | 6.44 | 6.39 | 34.294 | 26.944 | 117.8 | 0.878 | 0.40 | 5.8 | 72.6 | 3.10 | 38.9 | 0.01 | | | 516 | 201 |

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

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 STATION 93.3 60.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND | SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 50.8 N | 119 34.0 W | 29/03/07 | 2023 | UTC | 1830 m | 300 | 06 kn | 310 04 08 | 0 | 1020.0 mb | 16.5 C | 15.0 C | | 0/8 | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.18 | 14.18 | 33.522 | 25.008 | 294.0 | 0.000 | 6.08 | 104.2 | 3.1 | 0.44 | 0.9 | 0.09 | 0.67 | 0.12 | 0 | |
| 2 | 14.18 | 14.18 | 33.522 | 25.008 | 294.0 | 0.006 | 6.08 | 104.2 | 3.1 | 0.44 | 0.9 | 0.09 | 0.67 | 0.12 | 2 | 220 |
| 10 ISL | 13.69 D | 13.69 | 33.517 D | 25.106 | 285.0 | 0.029 | 6.10 | 103.5 | 3.1 | 0.44 | 1.1 | 0.12 | 0.81 | 0.15 | 10 | |
| 11 | 13.65 | 13.65 | 33.516 | 25.114 | 284.3 | 0.032 | 6.10 | 103.4 | 3.1 | 0.44 | 1.1 | 0.12 | 0.83 | 0.16 | 11 | 219 |
| 20 ISL | 13.58 D | 13.58 | 33.511 D | 25.124 | 283.5 | 0.057 | 6.07 | 102.7 | 3.2 | 0.46 | 1.1 | 0.12 | 0.88 | 0.25 | 20 | |
| 21 | 13.58 | 13.58 | 33.514 | 25.127 | 283.3 | 0.060 | 6.07 | 102.7 | 3.2 | 0.46 | 1.1 | 0.12 | 0.88 | 0.26 | 21 | 218 |
| 30 ISL | 13.55 D | 13.55 | 33.511 D | 25.130 | 283.2 | 0.086 | 6.07 | 102.6 | 3.1 | 0.44 | 1.1 | 0.12 | 0.92 | 0.24 | 30 | |
| 31 | 13.55 | 13.55 | 33.512 | 25.131 | 283.1 | 0.089 | 6.07 | 102.6 | 3.1 | 0.44 | 1.1 | 0.12 | 0.92 | 0.24 | 31 | 217 |
| 41 | 13.55 | 13.54 | 33.513 | 25.132 | 283.3 | 0.117 | 6.04 | 102.1 | 3.1 | 0.45 | 1.1 | 0.12 | 0.88 | 0.27 | 41 | 216 |
| 50 | 13.56 | 13.55 | 33.520 | 25.136 | 283.2 | 0.142 | 6.03 | 102.0 | 3.1 | 0.44 | 1.0 | 0.11 | 0.83 | 0.28 | 50 | 215 |
| 60 | 13.56 | 13.55 | 33.519 | 25.136 | 283.6 | 0.171 | 6.02 | 101.8 | 3.0 | 0.45 | 1.0 | 0.11 | 0.79 | 0.31 | 60 | 214 |
| 70 | 13.55 | 13.54 | 33.518 | 25.137 | 283.7 | 0.199 | 5.99 | 101.3 | 3.0 | 0.46 | 1.0 | 0.11 | 0.73 | 0.28 | 70 | 213 |
| 75 ISL | 13.55 D | 13.54 | 33.517 D | 25.136 | 283.9 | 0.213 | 5.92 | 100.1 | 3.2 | 0.50 | 1.6 | 0.17 | 0.60 | 0.25 | 75 | |
| 85 | 13.03 | 13.02 | 33.481 | 25.213 | 276.8 | 0.241 | 5.79 | 96.8 | 3.7 | 0.57 | 2.8 | 0.26 | 0.30 | 0.18 | 85 | 212 |
| 100 | 11.60 | 11.59 | 33.531 | 25.526 | 247.2 | 0.281 | 4.71 | 76.4 | 9.3 | 1.02 | 10.9 | 0.04 | 0.08 | 0.08 | 100 | 211 |
| 121 | 10.21 | 10.20 | 33.642 | 25.859 | 215.8 | 0.329 | 4.17 | 65.7 | 15.6 | 1.37 | 17.0 | 0.02 | 0.02 | 0.06 | 122 | 210 |
| 125 ISL | 10.06 D | 10.05 | 33.667 D | 25.904 | 211.6 | 0.338 | 4.06 | 63.8 | 16.9 | 1.43 | 18.0 | 0.02 | 0.02 | 0.05 | 126 | |
| 139 | 9.55 | 9.53 | 33.771 | 26.070 | 196.0 | 0.366 | 3.61 | 56.1 | 21.2 | 1.65 | 21.1 | 0.02 | 0.01 | 0.04 | 140 | 209 |
| 150 ISL | 9.43 D | 9.41 | 33.839 D | 26.143 | 189.2 | 0.388 | 3.10 | 48.1 | 24.5 | 1.83 | 23.2 | 0.02 | 0.01 | 0.04 | 151 | |
| 168 | 9.52 | 9.50 | 34.024 | 26.273 | 177.3 | 0.421 | 2.36 | 36.7 | 29.3 | 2.09 | 25.9 | 0.01 | 0.01 | 0.05 | 169 | 208 |
| 199 | 9.10 | 9.08 | 34.115 | 26.413 | 164.6 | 0.473 | 2.08 | 32.1 | 34.2 | 2.26 | 27.9 | 0.01 | 0.00 | 0.04 | 200 | 207 |
| 200 ISL | 8.89 D | 8.87 | 34.114 D | 26.446 | 161.4 | 0.475 | 2.08 | 31.9 | 34.4 | 2.26 | 28.0 | 0.01 | | | 201 | |
| 229 | 8.37 | 8.35 | 34.096 | 26.512 | 155.4 | 0.521 | 2.00 | 30.3 | 39.2 | 2.32 | 30.1 | 0.01 | | | 230 | 206 |
| 250 ISL | 8.17 D | 8.14 | 34.116 D | 26.558 | 151.3 | 0.553 | 1.75 | 26.4 | 42.2 | 2.43 | 31.1 | 0.01 | | | 251 | |
| 269 | 8.15 | 8.12 | 34.174 | 26.607 | 147.1 | 0.582 | 1.48 | 22.3 | 44.8 | 2.54 | 31.9 | 0.01 | | | 271 | 205 |
| 300 ISL | 7.87 D | 7.84 | 34.213 D | 26.680 | 140.6 | 0.626 | 1.16 | 17.4 | 48.8 | 2.66 | 33.0 | 0.00 | | | 302 | |
| 318 | 7.85 | 7.82 | 34.241 | 26.705 | 138.5 | 0.651 | 1.01 | 15.1 | 51.0 | 2.72 | 33.6 | 0.00 | | | 320 | 204 |
| 378 | 7.36 | 7.32 | 34.261 | 26.792 | 131.0 | 0.732 | 0.74 | 11.0 | 57.6 | 2.89 | 35.5 | 0.01 | | | 380 | 203 |
| 400 ISL | 7.25 D | 7.21 | 34.262 D | 26.808 | 129.7 | 0.761 | 0.66 | 9.8 | 60.4 | 2.94 | 36.2 | 0.01 | | | 403 | |
| 437 | 6.82 | 6.78 | 34.269 | 26.873 | 123.8 | 0.808 | 0.55 | 8.1 | 65.2 | 3.01 | 37.4 | 0.01 | | | 440 | 202 |
| 500 ISL | 6.45 D | 6.40 | 34.315 D | 26.959 | 116.2 | 0.883 | 0.39 | 5.7 | 72.4 | 3.11 | 38.9 | 0.00 | | | 503 | |
| 511 | 6.35 | 6.30 | 34.309 | 26.968 | 115.5 | 0.896 | 0.36 | 5.2 | 73.7 | 3.13 | 39.2 | 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 0704 STATION 93.3 70.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 30.4 N | 120 15.4 W | 02/04/07 | 1714 | UTC | 3930 m | 320 21 kn | 300 06 07 | 2 | 1016.3 mb | 14.9 C | 14.0 C | 21m | 8/8 | CC |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 15.04 | 15.04 | 33.465 | 24.781 | 315.6 | 0.000 | 5.87 | 102.3 | 2.0 | 0.30 | 0.0 | 0.00 | 0.16 | 0.03 | 0 | |
| 2 A | 15.04 | 15.04 | 33.465 | 24.781 | 315.7 | 0.006 | 5.87 | 102.3 | 2.0 | 0.30 | 0.0 | 0.00 | 0.16 | 0.03 | 2 | 220 |
| 10 ISL | 15.03 D | 15.03 | 33.465 D | 24.783 | 315.7 | 0.032 | 5.87 | 102.3 | 1.9 | 0.30 | 0.0 | 0.00 | 0.17 | 0.03 | 10 | |
| 12 A | 15.03 | 15.03 | 33.464 | 24.783 | 315.8 | 0.038 | 5.87 | 102.3 | 1.9 | 0.30 | 0.0 | 0.00 | 0.17 | 0.03 | 12 | 219 |
| 20 ISL | 14.98 D | 14.98 | 33.459 D | 24.790 | 315.4 | 0.063 | 5.87 | 102.2 | 1.8 | 0.30 | 0.0 | 0.00 | 0.16 | 0.03 | 20 | |
| 21 | 15.01 | 15.01 | 33.463 | 24.786 | 315.7 | 0.066 | 5.87 | 102.2 | 1.8 | 0.30 | 0.0 | 0.00 | 0.16 | 0.03 | 21 | 218 |
| 29 A | 13.85 | 13.85 | 33.297 | 24.904 | 304.7 | 0.091 | 6.15 | 104.5 | 2.2 | 0.36 | 0.0 | 0.00 | 0.33 | 0.09 | 29 | 217 |
| 30 ISL | 13.79 D | 13.79 | 33.294 D | 24.914 | 303.8 | 0.094 | 6.14 | 104.2 | 2.2 | 0.36 | 0.0 | 0.00 | 0.37 | 0.11 | 30 | |
| 40 A | 13.65 | 13.64 | 33.281 | 24.933 | 302.3 | 0.124 | 6.08 | 102.9 | 2.3 | 0.35 | 0.0 | 0.03 | 0.71 | 0.24 | 40 | 216 |
| 50 ISL | 13.61 D | 13.60 | 33.423 D | 25.051 | 291.3 | 0.154 | 5.94 | 100.5 | 2.5 | 0.41 | 0.6 | 0.10 | 0.58 | 0.23 | 50 | |
| 51 A | 13.63 | 13.62 | 33.426 | 25.049 | 291.5 | 0.157 | 5.93 | 100.4 | 2.5 | 0.42 | 0.7 | 0.11 | 0.57 | 0.23 | 51 | 215 |
| 66 | 12.85 | 12.84 | 33.388 | 25.176 | 279.8 | 0.200 | 5.85 | 97.4 | 3.7 | 0.56 | 2.3 | 0.37 | 0.29 | 0.18 | 66 | 214 |
| 75 ISL | 12.89 D | 12.88 | 33.442 D | 25.210 | 276.8 | 0.225 | 5.77 | 96.2 | 3.8 | 0.60 | 2.8 | 0.44 | 0.23 | 0.15 | 75 | |
| 81 A | 12.93 | 12.92 | 33.517 | 25.261 | 272.1 | 0.241 | 5.71 | 95.3 | 4.0 | 0.63 | 3.4 | 0.48 | 0.21 | 0.13 | 81 | 213 |
| 90 | 12.87 | 12.86 | 33.551 D | 25.299 | 268.7 | 0.266 | 5.66 D | 94.4 | | | | | | | 90 | 212 |
| 100 ISL | 11.79 D | 11.78 | 33.403 D | 25.391 | 260.1 | 0.292 | 5.10 | 83.0 | 7.3 | 0.87 | 8.4 | 0.06 | 0.06 | 0.06 | 100 | |
| 101 | 11.77 | 11.76 | 33.405 | 25.396 | 259.6 | 0.295 | 5.03 | 81.9 | 7.6 | 0.89 | 8.8 | 0.03 | 0.05 | 0.06 | 101 | 211 |
| 120 | 10.41 | 10.40 | 33.518 | 25.728 | 228.2 | 0.341 | 4.21 | 66.6 | 14.6 | 1.36 | 16.4 | 0.02 | 0.02 | 0.04 | 121 | 210 |
| 125 ISL | 10.01 D | 10.00 | 33.606 D | 25.865 | 215.3 | 0.352 | 4.01 | 62.9 | 16.3 | 1.46 | 17.9 | 0.02 | 0.02 | 0.04 | 126 | |
| 140 | 9.66 | 9.64 | 33.731 | 26.021 | 200.7 | 0.383 | 3.54 | 55.1 | 20.9 | 1.68 | 21.3 | 0.02 | 0.01 | 0.03 | 141 | 209 |
| 150 ISL | 9.43 D | 9.41 | 33.789 D | 26.104 | 192.9 | 0.403 | 3.54 | 54.9 | 22.7 | 1.72 | 22.3 | 0.02 | 0.01 | 0.03 | 151 | |
| 170 | 8.99 | 8.97 | 33.909 | 26.269 | 177.6 | 0.440 | 3.53 | 54.2 | 25.6 | 1.76 | 23.3 | 0.01 | 0.01 | 0.04 | 171 | 208 |
| 200 | 8.69 | 8.67 | 33.997 | 26.385 | 167.0 | 0.492 | 2.84 | 43.4 | 31.6 | 2.01 | 26.6 | 0.01 | 0.01 | 0.03 | 201 | 207 |
| 230 | 8.56 | 8.54 | 34.093 | 26.481 | 158.5 | 0.541 | 2.02 | 30.8 | 37.6 | 2.48 | 29.8 | 0.01 | | | 231 | 206 |
| 250 ISL | 8.19 D | 8.16 | 34.107 D | 26.548 | 152.3 | 0.572 | 1.95 | 29.5 | 41.3 | 2.46 | 31.1 | 0.01 | | | 251 | |
| 269 | 7.78 | 7.75 | 34.090 | 26.596 | 147.9 | 0.600 | 1.89 | 28.3 | 44.7 | 2.44 | 32.0 | 0.01 | | | 271 | 205 |
| 300 ISL | 7.38 D | 7.35 | 34.111 D | 26.670 | 141.2 | 0.645 | 1.61 | 23.9 | 49.8 | 2.56 | 33.8 | 0.00 | | | 302 | |
| 319 | 7.21 | 7.18 | 34.117 | 26.699 | 138.7 | 0.672 | 1.42 | 21.0 | 53.0 | 2.66 | 34.9 | 0.00 | | | 321 | 204 |
| 378 | 6.30 | 6.27 | 34.104 | 26.811 | 128.2 | 0.750 | 1.16 | 16.8 | 64.4 | 2.85 | 37.9 | 0.00 | | | 380 | 203 |
| 400 ISL | 6.22 D | 6.18 | 34.117 D | 26.832 | 126.5 | 0.778 | 1.02 | 14.7 | 67.7 | 2.91 | 38.7 | 0.00 | | | 403 | |
| 437 | 5.97 | 5.93 | 34.158 | 26.896 | 120.7 | 0.824 | 0.78 | 11.2 | 72.5 | 3.01 | 39.7 | 0.00 | | | 440 | 202 |
| 500 ISL | 5.83 D | 5.79 | 34.253 D | 26.989 | 112.7 | 0.898 | 0.44 | 6.3 | 79.6 | 3.15 | 40.9 | 0.00 | | | 503 | |
| 512 | 5.76 | 5.72 | 34.259 | 27.003 | 111.5 | 0.911 | 0.38 | 5.4 | 80.9 | 3.18 | 41.1 | 0.00 | | | 515 | 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 0704 STATION 93.3 80.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 10.6 N | 120 54.9 W | 02/04/07 | 2253 | UTC | 3826 m | 320 18 kn | 310 05 05 | 1 | 1017.8 mb | 16.2 C | 14.5 C | | 5/8 | AC |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 14.42 | 14.42 | 33.430 | 24.887 | 305.6 | 0.000 | 6.02 | 103.6 | 1.3 | 0.32 | 0.0 | 0.00 | 0.31 | 0.06 | 0 | |
| 2 | 14.42 | 14.42 | 33.430 | 24.887 | 305.6 | 0.006 | 6.02 | 103.6 | 1.3 | 0.32 | 0.0 | 0.00 | 0.31 | 0.06 | 2 | 221 |
| 10 | 14.38 | 14.38 | 33.431 | 24.896 | 304.9 | 0.031 | 6.04 | 103.9 | 1.3 | 0.31 | 0.0 | 0.00 | 0.30 | 0.06 | 10 | 220 |
| 20 | 14.10 | 14.10 | 33.428 | 24.953 | 299.8 | 0.061 | 6.07 | 103.8 | 1.3 | 0.32 | 0.0 | 0.00 | 0.37 | 0.06 | 20 | 219 |
| 30 | 13.88 | 13.88 | 33.426 | 24.997 | 295.9 | 0.091 | 6.06 | 103.1 | 1.4 | 0.32 | 0.0 | 0.01 | 0.85 | 0.17 | 30 | 218 |
| 35 | 13.87 | 13.87 | 33.428 | 25.001 | 295.7 | 0.105 | 6.10 D | 103.8 | 1.4 | 0.35 | 0.0 | 0.02 | 0.87 | 0.25 | 35 | 217 |
| 41 | 13.86 | 13.85 | 33.428 | 25.003 | 295.6 | 0.123 | 6.01 | 102.2 | 1.5 | 0.35 | 0.0 | 0.03 | 0.86 | 0.22 | 41 | 216 |
| 50 | 12.90 | 12.89 | 33.443 | 25.208 | 276.3 | 0.149 | 5.73 | 95.6 | 3.5 | 0.62 | 3.3 | 0.29 | 0.87 | 0.32 | 50 | 215 |
| 60 | 12.74 | 12.73 | 33.533 | 25.310 | 266.9 | 0.176 | 5.58 | 92.8 | 5.0 | 0.70 | 4.6 | 0.31 | 0.20 | 0.14 | 60 | 214 |
| 70 | 12.39 | 12.38 | 33.529 | 25.375 | 260.9 | 0.202 | 5.30 | 87.5 | 6.7 | 0.82 | 7.1 | 0.05 | 0.12 | 0.10 | 70 | 213 |
| 75 ISL | 11.97 D | 11.96 | 33.513 D | 25.442 | 254.6 | 0.215 | 5.02 | 82.1 | 8.2 | 0.93 | 9.0 | 0.04 | 0.10 | 0.09 | 75 | |
| 85 | 11.43 | 11.42 | 33.535 | 25.560 | 243.6 | 0.240 | 4.36 | 70.5 | 11.9 | 1.21 | 13.4 | 0.02 | 0.07 | 0.08 | 85 | 212 |
| 100 | 10.30 | 10.29 | 33.650 | 25.849 | 216.2 | 0.275 | 3.40 | 53.7 | 18.8 | 1.65 | 20.3 | 0.02 | 0.02 | 0.05 | 100 | 211 |
| 120 | 9.81 | 9.80 | 33.829 | 26.072 | 195.4 | 0.316 | 2.69 | 42.1 | 24.9 | 1.94 | 24.2 | 0.01 | 0.01 | 0.05 | 121 | 210 |
| 125 ISL | 9.78 D | 9.77 | 33.842 D | 26.087 | 194.1 | 0.326 | 2.74 | 42.8 | 25.3 | 1.93 | 24.2 | 0.01 | 0.01 | 0.05 | 126 | |
| 140 | 9.29 | 9.27 | 33.880 | 26.198 | 183.8 | 0.354 | 3.01 | 46.5 | 25.8 | 1.90 | 24.2 | 0.01 | 0.01 | 0.04 | 141 | 209 |
| 150 ISL | 9.01 D | 8.99 | 33.924 D | 26.277 | 176.4 | 0.372 | 2.96 | 45.5 | 27.3 | 1.91 | 24.8 | 0.01 | 0.01 | 0.04 | 151 | |
| 168 | 8.74 | 8.72 | 33.992 | 26.373 | 167.6 | 0.403 | 2.88 | 44.0 | 30.8 | 1.98 | 26.2 | 0.01 | 0.01 | 0.03 | 169 | 208 |
| 199 | 8.38 | 8.36 | 34.052 | 26.476 | 158.3 | 0.453 | 2.41 | 36.5 | 36.2 | 2.19 | 28.7 | 0.01 | 0.00 | 0.03 | 200 | 207 |
| 200 ISL | 8.38 D | 8.36 | 34.059 D | 26.481 | 157.8 | 0.455 | 2.38 | 36.1 | 36.3 | 2.20 | 28.8 | 0.01 | | | 201 | |
| 229 | 8.43 | 8.41 | 34.133 | 26.532 | 153.6 | 0.500 | 1.70 | 25.8 | 40.3 | 2.41 | 30.8 | 0.01 | | | 230 | 206 |
| 250 ISL | 8.10 D | 8.07 | 34.138 D | 26.586 | 148.7 | 0.532 | 1.51 | 22.8 | 43.5 | 2.50 | 31.9 | 0.01 | | | 251 | |
| 268 | 7.90 | 7.87 | 34.151 | 26.626 | 145.1 | 0.558 | 1.45 | 21.8 | 46.2 | 2.55 | 32.8 | 0.01 | | | 270 | 205 |
| 300 ISL | 7.56 D | 7.53 | 34.161 D | 26.684 | 140.0 | 0.604 | 1.29 | 19.2 | 50.7 | 2.64 | 34.2 | 0.01 | | | 302 | |
| 318 | 7.27 | 7.24 | 34.151 | 26.717 | 137.0 | 0.629 | 1.22 | 18.0 | 53.4 | 2.69 | 34.9 | 0.01 | | | 320 | 204 |
| 378 | 6.39 | 6.36 | 34.124 | 26.815 | 127.9 | 0.708 | 1.06 | 15.4 | 64.0 | 2.85 | 37.7 | 0.00 | | | 380 | 203 |
| 400 ISL | 6.32 D | 6.28 | 34.163 D | 26.855 | 124.4 | 0.736 | 0.89 | 12.9 | 66.8 | 2.92 | 38.3 | 0.00 | | | 403 | |
| 437 | 6.23 | 6.19 | 34.217 | 26.910 | 119.7 | 0.781 | 0.59 | 8.5 | 71.3 | 3.04 | 39.1 | 0.00 | | | 440 | 202 |
| 500 ISL | 5.55 D | 5.51 | 34.231 D | 27.006 | 110.7 | 0.854 | 0.44 | 6.3 | 81.9 | 3.14 | 41.1 | 0.00 | | | 503 | |
| 513 | 5.47 | 5.43 | 34.234 | 27.018 | 109.7 | 0.868 | 0.41 | 5.8 | 84.1 | 3.16 | 41.5 | 0.00 | | | 516 | 201 |

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

RV DAVID STARR JORDAN CALCOFI CRUISE 0704 STATION 93.3 90.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30 50.6 N | 121 34.6 W | 03/04/07 | 0520 UTC | 4084 m | 320 16 kn | | | 1019.3 mb | 14.2 C | 13.0 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 13.97 | 13.97 | 33.326 | 24.901 | 304.2 | 0.000 | 6.13 | 104.5 | 2.3 | 0.36 | 0.1 | 0.03 | 0.54 | 0.01 | 0 | |
| 2 | 13.97 | 13.97 | 33.326 | 24.901 | 304.3 | 0.006 | 6.13 | 104.5 | 2.3 | 0.36 | 0.1 | 0.03 | 0.54 | 0.01 | 2 | 220 |
| 10 ISL | 13.97 D | 13.97 | 33.325 D | 24.900 | 304.6 | 0.030 | 6.13 | 104.5 | 2.3 | 0.37 | 0.1 | 0.03 | 0.47 | 0.03 | 10 | |
| 11 | 13.97 | 13.97 | 33.327 | 24.902 | 304.5 | 0.033 | 6.13 | 104.5 | 2.3 | 0.37 | 0.1 | 0.03 | 0.47 | 0.03 | 11 | 219 |
| 20 | 13.75 | 13.75 | 33.327 | 24.947 | 300.4 | 0.061 | 6.13 | 104.0 | 2.5 | 0.37 | 0.1 | 0.04 | 0.67 | 0.09 | 20 | 218 |
| 30 | 13.67 | 13.67 | 33.321 | 24.959 | 299.5 | 0.091 | 6.10 | 103.3 | 2.5 | 0.37 | 0.2 | 0.05 | 0.78 | 0.05 | 30 | 217 |
| 40 | 13.33 | 13.32 | 33.265 | 24.985 | 297.3 | 0.121 | 6.05 | 101.7 | 2.8 | 0.41 | 0.5 | 0.09 | 0.70 | 0.10 | 40 | 216 |
| 50 | 13.37 | 13.36 | 33.304 | 25.007 | 295.4 | 0.150 | 6.12 | 103.0 | 2.6 | 0.39 | 0.4 | 0.07 | 0.71 | 0.22 | 50 | 215 |
| 60 | 13.28 | 13.27 | 33.307 | 25.028 | 293.7 | 0.180 | 6.09 | 102.3 | 2.7 | 0.41 | 0.6 | 0.09 | 0.74 | 0.13 | 60 | 214 |
| 69 | 13.18 | 13.17 | 33.312 | 25.052 | 291.7 | 0.206 | 6.06 | 101.6 | 3.0 | 0.44 | 0.8 | 0.11 | 0.49 | 0.15 | 69 | 213 |
| 75 ISL | 12.95 D | 12.94 | 33.311 D | 25.097 | 287.5 | 0.223 | 5.89 | 98.2 | 3.3 | 0.50 | 1.9 | 0.08 | 0.34 | 0.12 | 75 | |
| 85 | 12.74 | 12.73 | 33.355 | 25.173 | 280.6 | 0.252 | 5.59 | 92.8 | 4.0 | 0.61 | 4.0 | 0.03 | 0.14 | 0.05 | 85 | 212 |
| 100 | 12.55 | 12.54 | 33.411 | 25.253 | 273.3 | 0.293 | 5.46 | 90.4 | 4.8 | 0.68 | 5.1 | 0.02 | 0.07 | 0.04 | 100 | 211 |
| 122 | 11.35 | 11.33 | 33.419 | 25.485 | 251.6 | 0.351 | 4.80 | 77.4 | 9.2 | 1.01 | 10.8 | 0.02 | 0.03 | 0.04 | 123 | 210 |
| 125 ISL | 11.06 D | 11.04 | 33.446 D | 25.558 | 244.6 | 0.358 | 4.71 | 75.5 | 9.9 | 1.06 | 11.6 | 0.02 | 0.03 | 0.04 | 126 | |
| 140 | 10.51 | 10.49 | 33.544 | 25.731 | 228.4 | 0.394 | 4.28 | 67.8 | 13.9 | 1.28 | 15.4 | 0.02 | 0.02 | 0.04 | 141 | 209 |
| 150 ISL | 9.80 D | 9.78 | 33.636 D | 25.924 | 210.1 | 0.416 | 4.01 | 62.6 | 17.1 | 1.45 | 18.0 | 0.02 | 0.01 | 0.04 | 151 | |
| 171 | 9.22 | 9.20 | 33.814 | 26.158 | 188.2 | 0.458 | 3.54 | 54.6 | 23.3 | 1.74 | 22.4 | 0.01 | 0.00 | 0.04 | 172 | 208 |
| 200 | 8.84 | 8.82 | 33.963 | 26.335 | 171.8 | 0.510 | 3.20 | 49.0 | 28.5 | 1.86 | 24.7 | 0.01 | 0.00 | 0.03 | 201 | 207 |
| 228 | 8.36 | 8.34 | 34.013 | 26.449 | 161.4 | 0.557 | 2.72 | 41.2 | 34.7 | 2.06 | 27.6 | 0.01 | | | 229 | 206 |
| 250 ISL | 8.10 D | 8.07 | 34.058 D | 26.523 | 154.6 | 0.591 | 2.30 | 34.7 | 38.9 | 2.23 | 29.6 | 0.01 | | | 251 | |
| 271 | 7.98 | 7.95 | 34.089 | 26.566 | 150.9 | 0.623 | 1.93 | 29.0 | 42.7 | 2.38 | 31.3 | 0.00 | | | 273 | 205 |
| 300 ISL | 7.42 D | 7.39 | 34.103 D | 26.658 | 142.4 | 0.666 | 1.61 | 23.9 | 48.1 | 2.54 | 33.1 | 0.00 | | | 302 | |
| 318 | 7.38 | 7.35 | 34.124 | 26.680 | 140.5 | 0.691 | 1.44 | 21.3 | 51.3 | 2.62 | 34.1 | 0.00 | | | 320 | 204 |
| 378 | 6.98 | 6.94 | 34.215 | 26.808 | 129.1 | 0.772 | 0.77 | 11.3 | 60.8 | 2.89 | 36.8 | 0.00 | | | 380 | 203 |
| 400 ISL | 6.85 D | 6.81 | 34.227 D | 26.836 | 126.8 | 0.800 | 0.69 | 10.1 | 64.1 | 2.94 | 37.5 | 0.00 | | | 402 | |
| 436 | 6.31 | 6.27 | 34.210 | 26.894 | 121.3 | 0.845 | 0.64 | 9.3 | 69.3 | 3.00 | 38.6 | 0.00 | | | 439 | 202 |
| 500 ISL | 5.72 D | 5.68 | 34.207 D | 26.966 | 114.7 | 0.921 | 0.50 | 7.1 | 78.8 | 3.11 | 40.3 | 0.00 | | | 503 | |
| 515 | 5.67 | 5.63 | 34.221 | 26.984 | 113.2 | 0.938 | 0.47 | 6.7 | 81.0 | 3.14 | 40.7 | 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 0704 STATION 93.3 100.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | BOTTOM | WIND SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30 30.8 N | 122 15.3 W | 03/04/07 | 1152 UTC | 4172 m | 330 15 kn | | | 1019.2 mb | 15.2 C | 13.0 C | | |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 15.56 | 15.56 | 33.547 | 24.730 | 320.5 | 0.000 | 5.76 | 101.5 | 1.6 | 0.28 | 0.0 | 0.00 | 0.11 | 0.01 | 0 | |
| 2 | 15.56 | 15.56 | 33.547 | 24.730 | 320.6 | 0.006 | 5.76 | 101.5 | 1.6 | 0.28 | 0.0 | 0.00 | 0.11 | 0.01 | 2 | 220 |
| 10 ISL | 15.57 D | 15.57 | 33.546 D | 24.727 | 321.1 | 0.032 | 5.76 | 101.5 | 1.6 | 0.28 | 0.0 | 0.00 | 0.12 | 0.00 | 10 | |
| 16 | 15.57 | 15.57 | 33.547 | 24.728 | 321.2 | 0.051 | 5.76 | 101.5 | 1.6 | 0.28 | 0.0 | 0.00 | 0.12 | 0.00 | 16 | 219 |
| 20 ISL | 15.57 D | 15.57 | 33.545 D | 24.727 | 321.4 | 0.064 | 5.76 | 101.5 | 1.6 | 0.28 | 0.0 | 0.00 | 0.12 | 0.00 | 20 | |
| 30 | 15.56 | 15.56 | 33.545 | 24.729 | 321.5 | 0.096 | 5.77 | 101.7 | 1.6 | 0.28 | 0.0 | 0.00 | 0.12 | 0.01 | 30 | 218 |
| 45 | 15.56 | 15.55 | 33.545 | 24.730 | 321.9 | 0.145 | 5.77 | 101.7 | 1.7 | 0.28 | 0.0 | 0.00 | 0.12 | 0.02 | 45 | 217 |
| 50 ISL | 15.56 D | 15.55 | 33.544 D | 24.729 | 322.1 | 0.161 | 5.76 | 101.5 | 1.7 | 0.28 | 0.0 | 0.00 | 0.13 | 0.02 | 50 | |
| 60 | 15.54 | 15.53 | 33.548 | 24.737 | 321.7 | 0.193 | 5.76 | 101.4 | 1.6 | 0.28 | 0.0 | 0.00 | 0.17 | 0.04 | 60 | 216 |
| 75 | 15.03 | 15.02 | 33.495 | 24.809 | 315.3 | 0.241 | 5.79 | 100.9 | 1.7 | 0.30 | 0.0 | 0.00 | 0.27 | 0.09 | 75 | 215 |
| 85 | 14.88 | 14.87 | 33.481 | 24.830 | 313.5 | 0.272 | 5.78 | 100.4 | 1.7 | 0.30 | 0.0 | 0.00 | 0.37 | 0.13 | 85 | 214 |
| 95 | 14.42 | 14.41 | 33.449 | 24.904 | 306.7 | 0.303 | 5.69 | 97.9 | 2.3 | 0.37 | 0.5 | 0.06 | 0.61 | 0.24 | 95 | 213 |
| 100 ISL | 13.83 D | 13.82 | 33.431 D | 25.014 | 296.3 | 0.318 | 5.55 | 94.3 | 3.0 | 0.45 | 1.7 | 0.05 | 0.56 | 0.23 | 100 | |
| 105 | 13.59 | 13.58 | 33.432 | 25.063 | 291.7 | 0.333 | 5.41 | 91.5 | 3.7 | 0.54 | 3.0 | 0.03 | 0.45 | 0.20 | 105 | 212 |
| 115 | 13.18 | 13.16 | 33.465 | 25.172 | 281.6 | 0.362 | 5.27 | 88.4 | 4.5 | 0.62 | 4.4 | 0.03 | 0.26 | 0.20 | 115 | 211 |
| 125 | 12.74 | 12.72 | 33.481 | 25.271 | 272.3 | 0.389 | 5.04 | 83.8 | 5.8 | 0.73 | 6.4 | 0.03 | 0.24 | 0.12 | 126 | 210 |
| 139 | 11.93 | 11.91 | 33.573 | 25.498 | 250.9 | 0.426 | 4.78 | 78.1 | 8.0 | 0.87 | 9.1 | 0.02 | 0.14 | 0.07 | 140 | 209 |
| 150 ISL | 10.93 D | 10.91 | 33.578 D | 25.684 | 233.2 | 0.452 | 4.57 | 73.1 | 10.9 | 1.06 | 12.2 | 0.01 | 0.08 | 0.05 | 151 | |
| 164 | 10.12 | 10.10 | 33.641 | 25.874 | 215.2 | 0.484 | 4.33 | 68.1 | 14.8 | 1.30 | 16.0 | 0.01 | 0.03 | 0.04 | 165 | 208 |
| 193 | 9.45 | 9.43 | 33.805 | 26.114 | 192.9 | 0.543 | 4.00 | 62.0 | 20.1 | 1.50 | 19.6 | 0.01 | 0.00 | 0.01 | 194 | 207 |
| 200 ISL | 9.21 D | 9.19 | 33.855 D | 26.192 | 185.6 | 0.556 | 3.92 | 60.5 | 21.4 | 1.54 | 20.3 | 0.01 | | | 201 | |
| 229 | 8.85 | 8.83 | 33.937 | 26.314 | 174.4 | 0.609 | 3.57 | 54.7 | 26.7 | 1.72 | 23.1 | 0.01 | | | 230 | 206 |
| 250 ISL | 8.53 D | 8.50 | 33.977 D | 26.395 | 167.0 | 0.644 | 3.31 | 50.3 | 30.2 | 1.83 | 24.8 | 0.01 | | | 251 | |
| 268 | 8.33 | 8.30 | 34.001 | 26.444 | 162.5 | 0.674 | 3.07 | 46.5 | 33.3 | 1.93 | 26.3 | 0.01 | | | 269 | 205 |
| 300 ISL | 7.92 D | 7.89 | 34.034 D | 26.532 | 154.6 | 0.725 | 2.56 | 38.4 | 39.1 | 2.14 | 29.1 | 0.00 | | | 302 | |
| 318 | 7.70 | 7.67 | 34.050 | 26.577 | 150.5 | 0.752 | 2.28 | 34.0 | 42.7 | 2.26 | 30.7 | 0.00 | | | 320 | 204 |
| 377 | 6.67 | 6.64 | 34.079 | 26.743 | 135.0 | 0.836 | 1.56 | 22.7 | 56.9 | 2.62 | 35.3 | 0.00 | | | 379 | 203 |
| 400 ISL | 6.38 D | 6.34 | 34.086 D | 26.787 | 130.9 | 0.867 | 1.36 | 19.7 | 61.2 | 2.72 | 36.6 | 0.00 | | | 402 | |
| 438 | 6.08 | 6.04 | 34.113 | 26.847 | 125.5 | 0.916 | 1.07 | 15.4 | 67.6 | 2.85 | 38.2 | 0.00 | | | 441 | 202 |
| 500 ISL | 5.73 D | 5.69 | 34.196 D | 26.956 | 115.6 | 0.990 | 0.66 | 9.4 | 77.4 | 3.03 | 40.1 | 0.00 | | | 503 | |
| 515 | 5.65 | 5.61 | 34.205 | 26.973 | 114.1 | 1.008 | 0.56 | 8.0 | 79.8 | 3.07 | 40.5 | 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 0704 STATION 93.3 110.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND | SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30 10.8 N | 122 55.2 W | 03/04/07 | 1824 | UTC | 3996 m | 330 | 05 kn | 030 02 08 | 1 | 1019.2 mb | 17.0 C | 16.0 C | 29m | 3/8 | CS |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 15.09 | 15.09 | 33.330 | 24.666 | 326.6 | 0.000 | 5.86 | 102.2 | 1.9 | 0.31 | 0.0 | 0.00 | 0.12 | 0.03 | 0 | |
| 2 A | 15.09 | 15.09 | 33.330 | 24.666 | 326.6 | 0.007 | 5.86 | 102.2 | 1.9 | 0.31 | 0.0 | 0.00 | 0.12 | 0.03 | 2 | 221 |
| 10 ISL | 14.95 D | 14.95 | 33.329 D | 24.696 | 324.0 | 0.033 | 5.87 | 102.0 | 1.9 | 0.31 | 0.0 | 0.00 | 0.13 | 0.03 | 10 | |
| 15 A | 14.94 | 14.94 | 33.328 | 24.697 | 324.0 | 0.049 | 5.87 | 102.0 | 1.9 | 0.31 | 0.0 | 0.00 | 0.13 | 0.03 | 15 | 220 |
| 20 ISL | 14.93 D | 14.93 | 33.330 D | 24.701 | 323.8 | 0.065 | 5.87 | 102.0 | 1.9 | 0.31 | 0.0 | 0.00 | 0.13 | 0.03 | 20 | |
| 27 | 14.95 | 14.95 | 33.338 | 24.703 | 323.8 | 0.088 | 5.86 | 101.9 | 1.9 | 0.31 | 0.0 | 0.00 | 0.13 | 0.03 | 27 | 219 |
| 30 ISL | 15.11 D | 15.11 | 33.438 D | 24.746 | 319.9 | 0.097 | 5.88 | 102.6 | 1.9 | 0.31 | 0.0 | 0.00 | 0.15 | 0.04 | 30 | |
| 39 A | 14.53 | 14.52 | 33.299 | 24.764 | 318.4 | 0.126 | 5.92 | 102.0 | 1.8 | 0.32 | 0.0 | 0.00 | 0.21 | 0.07 | 39 | 218 |
| 47 | 14.48 | 14.47 | 33.286 | 24.764 | 318.6 | 0.151 | 5.92 | 101.9 | 2.0 | 0.31 | 0.0 | 0.00 | 0.27 | 0.10 | 47 | 217 |
| 50 ISL | 14.50 D | 14.49 | 33.294 D | 24.766 | 318.5 | 0.161 | 5.92 | 101.9 | 1.9 | 0.31 | 0.0 | 0.00 | 0.28 | 0.11 | 50 | |
| 55 A | 14.48 | 14.47 | 33.290 | 24.768 | 318.5 | 0.177 | 5.91 | 101.7 | 1.8 | 0.31 | 0.0 | 0.00 | 0.31 | 0.13 | 55 | 216 |
| 63 | 14.45 | 14.44 | 33.291 | 24.775 | 318.0 | 0.202 | 5.88 | 101.1 | 1.8 | 0.33 | 0.0 | 0.01 | 0.37 | 0.17 | 63 | 215 |
| 70 A | 15.12 | 15.11 | 33.500 | 24.793 | 316.7 | 0.225 | 5.78 | 100.9 | 1.7 | 0.32 | 0.1 | 0.03 | 0.34 | 0.20 | 70 | 214 |
| 75 ISL | 16.05 D | 16.04 | 33.838 D | 24.846 | 311.9 | 0.240 | 5.71 | 101.8 | 1.6 | 0.28 | 0.1 | 0.02 | 0.31 | 0.17 | 75 | |
| 84 | 16.44 | 16.43 | 33.972 | 24.860 | 310.9 | 0.268 | 5.60 | 100.6 | 1.5 | 0.22 | 0.0 | 0.00 | 0.27 | 0.13 | 84 | 213 |
| 98 | 15.59 | 15.57 | 33.847 | 24.957 | 302.0 | 0.311 | 5.54 | 97.8 | 2.0 | 0.27 | 0.4 | 0.07 | 0.25 | 0.25 | 98 | 212 |
| 100 ISL | 15.52 D | 15.50 | 33.836 D | 24.964 | 301.3 | 0.317 | 5.53 | 97.5 | 2.1 | 0.29 | 0.6 | 0.07 | 0.24 | 0.25 | 100 | |
| 111 A | 14.06 | 14.04 | 33.630 | 25.120 | 286.6 | 0.350 | 5.45 | 93.2 | 3.0 | 0.44 | 2.0 | 0.07 | 0.18 | 0.22 | 111 | 211 |
| 125 ISL | 13.37 D | 13.35 | 33.710 D | 25.324 | 267.5 | 0.388 | 5.19 | 87.5 | 4.6 | 0.55 | 4.5 | 0.04 | 0.10 | 0.12 | 126 | |
| 127 | 12.97 | 12.95 | 33.688 | 25.387 | 261.5 | 0.394 | 5.14 | 86.0 | 4.9 | 0.57 | 4.9 | 0.03 | 0.09 | 0.11 | 128 | 210 |
| 145 | 11.44 | 11.42 | 33.572 | 25.588 | 242.4 | 0.439 | 4.66 | 75.4 | 9.4 | 0.97 | 10.7 | 0.01 | 0.05 | 0.05 | 146 | 209 |
| 150 ISL | 11.28 D | 11.26 | 33.578 D | 25.622 | 239.2 | 0.451 | 4.60 | 74.2 | 10.3 | 1.04 | 11.8 | 0.01 | 0.04 | 0.04 | 151 | |
| 169 | 10.27 | 10.25 | 33.639 | 25.847 | 218.0 | 0.495 | 4.40 | 69.4 | 14.0 | 1.25 | 15.4 | 0.01 | 0.01 | 0.02 | 170 | 208 |
| 199 | 9.24 | 9.22 | 33.852 | 26.185 | 186.2 | 0.555 | 3.82 | 59.0 | 22.4 | 1.61 | 21.2 | 0.01 | 0.00 | 0.02 | 200 | 207 |
| 200 ISL | 9.24 D | 9.22 | 33.850 D | 26.183 | 186.4 | 0.557 | 3.82 | 59.0 | 22.5 | 1.61 | 21.2 | 0.01 | | | 201 | |
| 229 | 8.71 | 8.69 | 33.964 | 26.357 | 170.3 | 0.609 | 3.92 | 59.9 | 26.5 | 1.63 | 22.1 | 0.01 | | | 230 | 206 |
| 250 ISL | 8.30 D | 8.27 | 33.989 D | 26.439 | 162.7 | 0.644 | 3.49 | 52.8 | 31.8 | 1.80 | 24.8 | 0.00 | | | 251 | |
| 268 | 7.98 | 7.95 | 34.004 | 26.499 | 157.2 | 0.672 | 3.02 | 45.4 | 36.7 | 1.98 | 27.4 | 0.00 | | | 269 | 205 |
| 300 ISL | 7.57 D | 7.54 | 34.018 D | 26.570 | 150.8 | 0.722 | 2.49 | 37.1 | 42.6 | 2.21 | 30.3 | 0.00 | | | 302 | |
| 319 | 7.38 | 7.35 | 34.036 | 26.611 | 147.1 | 0.750 | 2.23 | 33.0 | 46.0 | 2.33 | 31.8 | 0.00 | | | 321 | 204 |
| 378 | 6.47 | 6.44 | 34.078 | 26.768 | 132.4 | 0.832 | 1.42 | 20.6 | 60.2 | 2.73 | 36.6 | 0.00 | | | 380 | 203 |
| 400 ISL | 6.30 D | 6.26 | 34.106 D | 26.813 | 128.4 | 0.861 | 1.18 | 17.1 | 63.9 | 2.83 | 37.6 | 0.00 | | | 402 | |
| 438 | 6.12 | 6.08 | 34.148 | 26.869 | 123.4 | 0.909 | 0.86 | 12.4 | 69.4 | 2.95 | 38.8 | 0.00 | | | 441 | 202 |
| 500 ISL | 5.72 D | 5.68 | 34.201 D | 26.962 | 115.1 | 0.983 | 0.60 | 8.6 | 77.7 | 3.07 | 40.5 | 0.00 | | | 503 | |
| 515 | 5.65 | 5.61 | 34.208 | 26.976 | 113.9 | 1.000 | 0.54 | 7.7 | 79.7 | 3.10 | 40.9 | 0.00 | | | 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 0704 STATION 93.3 120.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST | TIME | BOTTOM | WIND | SPEED | WAVES | WEA | BAROMETER | DRY | WET | SECCHI | CLD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29 50.6 N | 123 35.0 W | 04/04/07 | 0038 | UTC | 4097 m | 350 | 10 kn | 330 03 04 | 1 | 1019.4 mb | 18.0 C | 16.0 C | | 3/8 | CC |

| DEPTH m | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | PRES db | SAMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 ISL | 15.87 | 15.87 | 33.497 | 24.622 | 330.8 | 0.000 | 5.77 | 102.3 | 1.8 | 0.28 | 0.0 | 0.00 | 0.07 | 0.01 | 0 | |
| 2 | 15.87 | 15.87 | 33.497 | 24.622 | 330.8 | 0.007 | 5.77 | 102.3 | 1.8 | 0.28 | 0.0 | 0.00 | 0.07 | 0.01 | 2 | 221 |
| 10 ISL | 15.52 D | 15.52 | 33.494 D | 24.698 | 323.8 | 0.033 | 5.78 | 101.7 | 1.7 | 0.28 | 0.0 | 0.00 | 0.08 | 0.02 | 10 | |
| 16 | 15.50 | 15.50 | 33.493 | 24.702 | 323.6 | 0.052 | 5.79 | 101.9 | 1.7 | 0.28 | 0.0 | 0.00 | 0.08 | 0.02 | 16 | 219 |
| 20 ISL | 15.49 D | 15.49 | 33.493 D | 24.704 | 323.5 | 0.065 | 5.79 | 101.8 | 1.7 | 0.29 | 0.0 | 0.00 | 0.08 | 0.02 | 20 | |
| 30 ISL | 15.48 D | 15.48 | 33.494 D | 24.708 | 323.6 | 0.098 | 5.78 | 101.6 | 1.7 | 0.31 | 0.0 | 0.00 | 0.08 | 0.02 | 30 | |
| 31 | 15.48 | 15.48 | 33.494 | 24.708 | 323.6 | 0.101 | 5.78 | 101.6 | 1.7 | 0.31 | 0.0 | 0.00 | 0.08 | 0.02 | 31 | 218 |
| 45 | 15.48 | 15.47 | 33.525 | 24.732 | 321.7 | 0.146 | 5.80 | 102.0 | 1.7 | 0.27 | 0.0 | 0.00 | 0.09 | 0.02 | 45 | 217 |
| 50 ISL | 15.45 D | 15.44 | 33.525 D | 24.739 | 321.2 | 0.162 | 5.80 | 102.0 | 1.7 | 0.27 | 0.0 | 0.00 | 0.10 | 0.02 | 50 | |
| 60 | 15.44 | 15.43 | 33.526 | 24.742 | 321.2 | 0.194 | 5.79 | 101.8 | 1.6 | 0.27 | 0.0 | 0.00 | 0.13 | 0.04 | 60 | 216 |
| 75 | 15.77 | 15.76 | 33.724 | 24.822 | 314.2 | 0.242 | 5.71 | 101.1 | 1.6 | 0.24 | 0.0 | 0.00 | 0.23 | 0.10 | 75 | 215 |
| 85 | 15.77 | 15.76 | 33.726 | 24.823 | 314.3 | 0.273 | 5.70 | 100.9 | 1.6 | 0.25 | 0.0 | 0.00 | 0.26 | 0.14 | 85 | 214 |
| 95 | 15.77 | 15.76 | 33.738 | 24.833 | 313.7 | 0.305 | 5.67 | 100.4 | 1.6 | 0.25 | 0.0 | 0.02 | 0.33 | 0.23 | 95 | 213 |
| 100 ISL | 15.81 D | 15.79 | 33.770 D | 24.849 | 312.4 | 0.320 | 5.65 | 100.2 | 1.7 | 0.26 | 0.1 | 0.06 | 0.32 | 0.24 | 100 | |
| 105 | 15.53 | 15.51 | 33.732 | 24.882 | 309.3 | 0.336 | 5.62 | 99.1 | 1.8 | 0.28 | 0.1 | 0.10 | 0.30 | 0.25 | 105 | 212 |
| 115 | 14.98 | 14.96 | 33.693 | 24.973 | 300.8 | 0.366 | 5.58 | 97.2 | 2.2 | 0.34 | 0.8 | 0.10 | 0.27 | 0.25 | 115 | 211 |
| 125 | 13.95 | 13.93 | 33.543 | 25.076 | 291.1 | 0.396 | 5.59 | 95.3 | 2.8 | 0.42 | 1.6 | 0.05 | 0.21 | 0.16 | 126 | 210 |
| 140 | 13.52 | 13.50 | 33.542 | 25.164 | 283.1 | 0.439 | 5.47 | 92.4 | 3.4 | 0.51 | 2.7 | 0.02 | 0.12 | 0.10 | 141 | 209 |
| 150 ISL | 12.93 D | 12.91 | 33.580 D | 25.311 | 269.2 | 0.467 | 5.27 | 88.0 | 4.4 | 0.59 | 4.3 | 0.02 | 0.08 | 0.07 | 151 | |
| 165 | 12.23 | 12.21 | 33.628 | 25.485 | 252.9 | 0.506 | 4.91 | 80.8 | 6.9 | 0.76 | 7.7 | 0.01 | 0.05 | 0.05 | 166 | 208 |
| 195 | 10.15 | 10.13 | 33.621 | 25.854 | 217.8 | 0.576 | 4.30 | 67.7 | 15.3 | 1.32 | 16.4 | 0.01 | 0.00 | 0.02 | 196 | 207 |
| 200 ISL | 9.91 D | 9.89 | 33.701 D | 25.957 | 208.1 | 0.587 | 4.17 | 65.3 | 17.1 | 1.40 | 17.6 | 0.01 | | | 201 | |
| 229 | 8.85 | 8.83 | 33.942 | 26.318 | 174.1 | 0.642 | 3.51 | 53.8 | 27.2 | 1.75 | 23.4 | 0.01 | | | 230 | 206 |
| 250 ISL | 8.60 D | 8.57 | 33.966 D | 26.375 | 168.9 | 0.678 | 3.26 | 49.7 | 31.3 | 1.87 | 25.4 | 0.01 | | | 251 | |
| 271 | 8.19 | 8.16 | 33.998 | 26.463 | 160.7 | 0.713 | 3.08 | 46.5 | 34.7 | 1.96 | 26.8 | 0.00 | | | 272 | 205 |
| 300 ISL | 7.55 D | 7.52 | 34.016 D | 26.571 | 150.6 | 0.758 | 2.72 | 40.5 | 41.0 | 2.14 | 29.4 | 0.00 | | | 302 | |
| 317 | 7.42 | 7.39 | 34.019 | 26.592 | 148.8 | 0.784 | 2.49 | 36.9 | 44.8 | 2.25 | 30.9 | 0.00 | | | 319 | 204 |
| 378 | 6.64 | 6.61 | 34.053 | 26.726 | 136.5 | 0.871 | 1.67 | 24.3 | 57.1 | 2.61 | 35.6 | 0.00 | | | 380 | 203 |
| 400 ISL | 6.44 D | 6.40 | 34.071 D | 26.767 | 132.8 | 0.900 | 1.42 | 20.6 | 61.6 | 2.73 | 36.8 | 0.00 | | | 402 | |
| 439 | 6.06 | 6.02 | 34.114 | 26.850 | 125.2 | 0.951 | 1.05 | 15.1 | 69.1 | 2.91 | 38.6 | 0.00 | | | 442 | 202 |
| 500 ISL | 5.72 D | 5.68 | 34.174 D | 26.940 | 117.1 | 1.025 | 0.68 | 9.7 | 77.6 | 3.04 | 40.4 | 0.00 | | | 503 | |
| 515 | 5.65 | 5.61 | 34.185 | 26.958 | 115.6 | 1.042 | 0.59 | 8.4 | 79.7 | 3.07 | 40.8 | 0.00 | | | 518 | 201 |

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

PRIMARY PRODUCTIVITY CASTS

RV DAVID STARR JORDAN — CALCOFI CRUISE 0704 — STATION 80.0 80.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | SECCHI | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 33 29.3 N | 122 30.8 W | 14/04/07 | 2017 UTC | 14 m | 1255 - 1909 PST | 1210 PST | 1908 PST | 203.8 mg C/m2 |

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | LIGHT PCT | UPTAKE (mg C/m3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 13.49 | 33.259 | 24.947 | 6.12 | 103.2 | 2.8 | 0.42 | 1.0 | 0.09 | 0.52 | 0.11 | 80. A | 6.2 | 6.1 | 6.1 | 0.09 |
| 8 | 13.48 | 33.259 | 24.949 | 6.11 | 103.0 | 2.8 | 0.47 | 1.1 | 0.09 | 0.55 | 0.08 | 42. | 8.5 | 7.9 | 8.2 | 0.07 |
| 19 | 13.40 | 33.263 | 24.969 | 6.13 | 103.2 | 2.6 | 0.43 | 1.0 | 0.09 | 0.70 | 0.06 | 12. | 5.8 | 5.5 | 5.7 | 0.12 |
| 27 | 13.10 | 33.335 | 25.085 | 6.18 | 103.4 | 2.8 | 0.49 | 2.1 | 0.12 | 0.67 | 0.20 | 5.2 | 3.6 | 3.7 | 3.6 | 0.10 |
| 34 | 13.05 | 33.342 | 25.100 | 6.19 | 103.5 | 2.9 | 0.49 | 2.3 | 0.13 | 0.71 | 0.22 | 2.4 | 1.6 | 1.5 | 1.6 | 0.06 |
| 54 | 12.71 | 33.425 | 25.232 | 6.09 | 101.1 | 2.7 | 0.60 | 3.3 | 0.21 | 0.39 | 0.19 | 0.27 | 0.07 | 0.11 | 0.09 | 0.03 |

RV DAVID STARR JORDAN — CALCOFI CRUISE 0704 — STATION 81.8 46.9

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | SECCHI | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 34 16.7 N | 120 1.5 W | 13/04/07 | 1848 UTC | 11 m | 1203 - 1900 PST | 1201 PST | 1859 PST | 1411.5 mg C/m2 |

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | LIGHT PCT | UPTAKE (mg C/m3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 13.03 | 33.746 | 25.416 | 5.23 | 87.6 | 10.9 | 0.95 | 10.6 | 0.56 | 4.32 | 0.27 | 76.A | 81.7 | 81.5 | 81.6 | 0.30 |
| 7 | 12.09 | 33.748 | 25.600 | 4.77 | 78.4 | 12.7 | 1.13 | 12.1 | 0.56 | 4.82 | 0.46 | 38. | 89.0 | 91.2 | 90.1 | 0.28 |
| 15 B | 11.76 | 33.749 D | 25.663 | 4.45 D | 72.6 | | | | | | | 12. | 41.1 | 38.5 | 39.8 | 0.24 |
| 22 | 11.59 | 33.753 | 25.698 | 4.18 | 67.9 | 15.9 | 1.36 | 15.5 | 0.35 | 2.88 | 0.34 | 4.6 | 17.3 | 21.5 | 19.4 | 0.13 |
| 28 | 11.23 | 33.771 | 25.778 | 3.82 | 61.6 | 18.5 | 1.54 | 17.8 | 0.27 | 1.09 | 0.23 | 2.0 | 3.8 | 3.0 | 3.4 | 0.09 |
| 42 | 9.96 | 33.930 | 26.124 | 2.38 | 37.4 | 27.2 | 2.02 | 24.9 | 0.03 | 0.04 | 0.18 | 0.28 | 0.00 | 0.00 | 0.00 | 0.04 |

B) 15 METER PRIMARY PRODUCTIVITY SAMPLE WAS DRAWN FROM THE 7 METER BOTTLE DUE TO SURFACE BOTTLE NON-CLOSURE AND INCUBATED AT THE 12% LIGHT LEVEL.

RV DAVID STARR JORDAN — CALCOFI CRUISE 0704 — STATION 83.3 70.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | SECCHI | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 33 14.6 N | 121 26.6 W | 11/04/07 | 1825 UTC | 14 m | 1203 - 1856 PST | 1207 PST | 1856 PST | 333.0 mg C/m2 |

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | LIGHT PCT | UPTAKE (mg C/m3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 B | 13.14 | 33.423 D | 25.144 | 6.15 D | 103.1 | | | | | | | 90.A | 10.1 | 10.1 | 10.1 | 0.08 |
| 8 | 13.14 | 33.423 | 25.144 | 6.05 | 101.4 | 3.7 | 0.53 | 2.8 | 0.15 | 0.73 | 0.21 | 42. | 13.5 | 12.9 | 13.2 | 0.09 |
| 11 | 13.12 | 33.424 | 25.149 | 6.07 | 101.7 | 3.6 | 0.53 | 2.8 | 0.15 | 0.75 | 0.22 | | | | | |
| 19 | 13.13 | 33.424 | 25.147 | 6.06 | 101.5 | 3.8 | 0.53 | 2.8 | 0.15 | 0.74 | 0.22 | 12. | 9.8 | 9.8 | 9.8 | 0.10 |
| 28 | 13.09 | 33.424 | 25.156 | 6.06 | 101.5 | 3.7 | 0.53 | 2.8 | 0.15 | 0.80 | 0.24 | 4.6 | 5.2 | 5.7 | 5.4 | 0.09 |
| 34 | 13.08 | 33.424 | 25.158 | 6.05 | 101.3 | 3.6 | 0.53 | 2.8 | 0.15 | 0.80 | 0.24 | 2.4 | 2.3 | 2.2 | 2.3 | 0.07 |
| 45 | 12.68 | 33.443 | 25.251 | 5.81 | 96.4 | 4.5 | 0.67 | 4.5 | 0.27 | 0.50 | 0.22 | | | | | |
| 54 | 12.07 | 33.557 | 25.457 | 4.96 | 81.3 | 8.9 | 1.03 | 10.6 | 0.25 | 0.11 | 0.12 | 0.27 | 0.03 | 0.04 | 0.04 | 0.06 |

B) SURFACE PRIMARY PRODUCTIVITY SAMPLE WAS DRAWN FROM THE 8 METER BOTTLE DUE TO SURFACE BOTTLE NON-CLOSURE AND INCUBATED AT THE 90% LIGHT LEVEL.

RV DAVID STARR JORDAN — CALCOFI CRUISE 0704 — STATION 83.3 90.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | SECCHI | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 32 34.5 N | 122 48.7 W | 10/04/07 | 1848 UTC | 15 m | 1204 - 1933 PST | 1213 PST | 1900 PST | 244.9 mg C/m2 |

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | LIGHT PCT | UPTAKE (mg C/m3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 13.92 | 33.403 | 24.970 | 6.17 | 105.1 | 3.4 | 0.39 | 0.8 | 0.05 | 0.44 | 0.09 | 81. A | 6.5 | 6.5 | 6.5 | 0.09 |
| 8 | 13.91 | 33.401 | 24.971 | 6.16 | 104.9 | 3.3 | 0.39 | 0.7 | 0.05 | 0.46 | 0.10 | 44. | 9.6 | 9.3 | 9.4 | 0.08 |
| 10 | 13.90 | 33.401 | 24.973 | 6.17 | 105.0 | 3.1 | 0.39 | 0.7 | 0.05 | 0.46 | 0.11 | | | | | |
| 21 | 13.82 | 33.404 | 24.992 | 6.16 | 104.7 | 3.2 | 0.39 | 0.8 | 0.06 | 0.47 | 0.12 | 12. | 6.4 | 6.8 | 6.6 | 0.09 |
| 28 | 13.46 | 33.431 | 25.087 | 6.21 | 104.8 | 3.2 | 0.44 | 1.4 | 0.08 | 0.61 | 0.16 | 5.7 | 4.1 | 4.3 | 4.2 | 0.07 |
| 38 | 13.14 | 33.438 | 25.157 | 6.08 | 101.9 | 3.4 | 0.51 | 2.1 | 0.13 | 0.52 | 0.22 | 2.0 | 1.4 | 1.3 | 1.4 | 0.05 |
| 49 | 12.73 | 33.398 | 25.207 | 5.95 | 98.8 | 3.9 | 0.55 | 2.8 | 0.19 | 0.33 | 0.17 | | | | | |
| 58 | 11.80 | 33.341 | 25.340 | 5.49 | 89.4 | 7.0 | 0.83 | 7.8 | 0.04 | 0.15 | 0.12 | 0.26 | 0.04 | 0.05 | 0.04 | 0.04 |

A) INCUBATION LIGHT INTENSITIES WERE 96, 45, 13, 5.4, 2.4, 0.26 PERCENT RESPECTIVELY.

RV DAVID STARR JORDAN — CALCOFI CRUISE 0704 — STATION 86.7 40.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | SECCHI | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 33 39.6 N | 118 58.4 W | 07/04/07 | 1929 UTC | 21 m | 1238 - 1848 PST | 1158 PST | 1849 PST | 314.0 mg C/m2 |

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | LIGHT PCT | UPTAKE (mg C/m3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 B | 14.96 | 33.559 D | 24.871 | 6.09 D | 106.0 | | | | | | | 86. A | 4.3 | 4.9 | 4.6 | 0.10 |
| 11 | 14.86 | 33.559 | 24.893 | 6.04 | 105.0 | 2.6 | 0.33 | 0.0 | 0.01 | 0.35 | 0.11 | 45. | 7.7 | 7.7 | 7.7 | 0.10 |
| 20 | 14.65 | 33.555 | 24.935 | 6.03 | 104.3 | 2.6 | 0.34 | 0.0 | 0.01 | 0.38 | 0.14 | | | | | |
| 28 | 14.24 | 33.556 | 25.023 | 5.96 | 102.3 | 2.9 | 0.38 | 0.4 | 0.06 | 0.58 | 0.25 | 13. | 8.1 | 8.1 | 8.1 | 0.10 |
| 40 | 12.75 | 33.540 | 25.313 | 4.94 | 82.2 | 7.1 | 0.83 | 7.1 | 0.19 | 0.61 | 0.42 | 5.4 | 4.2 | 4.3 | 4.2 | 0.07 |
| 51 | 12.00 | 33.552 | 25.466 | 4.34 | 71.1 | 10.6 | 1.10 | 11.7 | 0.08 | 0.36 | 0.26 | 2.4 | 0.87 | 0.91 | 0.89 | 0.04 |
| 66 | 10.87 | 33.626 | 25.731 | 3.71 | 59.3 | 16.0 | 1.45 | 17.2 | 0.04 | 0.08 | 0.09 | | | | | |
| 81 | 10.13 | 33.751 | 25.957 | 3.17 | 49.9 | 21.3 | 1.72 | 21.3 | 0.01 | 0.01 | 0.10 | 0.27 | 0.00 | 0.00 | 0.00 | 0.02 |

B) SURFACE PRIMARY PRODUCTIVITY SAMPLE WAS DRAWN FROM THE 11 METER BOTTLE DUE TO SURFACE BOTTLE NON-CLOSURE AND INCUBATED AT THE 86% LIGHT LEVEL.

RV DAVID STARR JORDAN — CALCOFI CRUISE 0704 — STATION 86.7 70.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | SECCHI | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 32 39.2 N | 121 2.2 W | 08/04/07 | 1953 UTC | 10 m | 1251 - 1857 PST | 1206 PST | 1856 PST | 136.4 mg C/m2 |

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | LIGHT PCT | UPTAKE (mg C/m3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 14.22 | 33.471 | 24.961 | 6.05 | 103.7 | 2.8 | 0.35 | 0.1 | 0.02 | 0.60 | 0.15 | 74. A | 7.1 | 7.4 | 7.2 | 0.09 |
| 5 | 14.21 | 33.471 | 24.963 | 6.08 | 104.2 | 2.8 | 0.35 | 0.1 | 0.02 | 0.58 | 0.13 | 46. | 9.1 | 8.8 | 8.9 | 0.10 |
| 14 | 14.20 | 33.471 | 24.965 | 6.08 | 104.2 | 2.7 | 0.34 | 0.1 | 0.02 | 0.57 | 0.13 | 12. | 5.5 | 5.6 | 5.6 | 0.11 |
| 19 | 14.18 | 33.471 | 24.969 | 6.06 | 103.8 | 2.6 | 0.36 | 0.1 | 0.02 | 0.58 | 0.15 | 5.4 | 2.4 | 2.5 | 2.5 | 0.10 |
| 24 | 14.15 | 33.471 | 24.976 | 6.07 | 103.9 | 2.5 | 0.34 | 0.2 | 0.02 | 0.61 | 0.14 | 2.5 | 0.50 | 0.62 | 0.56 | 0.11 |
| 32 | 14.03 | 33.469 | 25.000 | 6.03 | 103.0 | 2.6 | 0.37 | 0.3 | 0.04 | 0.62 | 0.15 | | | | | |
| 40 | 13.59 | 33.466 | 25.088 | 6.08 | 102.9 | 2.7 | 0.41 | 0.9 | 0.08 | 0.64 | 0.21 | 0.22 | 0.02 | 0.05 | 0.03 | 0.08 |

RV DAVID STARR JORDAN — CALCOFI CRUISE 0704 — STATION 86.7 100.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | SECCHI | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 31 38.9 N | 123 5.2 W | 09/04/07 | 1652 UTC | 25 m | 1216 - 1906 PST | 1214 PST | 1905 PST | 130.5 mg C/m2 |

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | LIGHT PCT | UPTAKE (mg C/m3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 15.25 | 33.368 | 24.660 | 5.85 | 102.3 | 1.8 | 0.31 | 0.0 | 0.00 | 0.11 | 0.02 | 88. A | 1.8 | 1.8 | 1.8 | 0.07 |
| 11 | 15.24 | 33.370 | 24.664 | 5.86 | 102.5 | 1.8 | 0.30 | 0.0 | 0.00 | 0.12 | 0.03 | | | | | |
| 13 | 15.24 | 33.369 | 24.664 | 5.85 | 102.3 | 1.7 | 0.30 | 0.0 | 0.00 | 0.12 | 0.03 | 45. | 2.4 | 2.4 | 2.4 | 0.06 |
| 23 | 15.24 | 33.377 | 24.670 | 5.85 | 102.3 | 1.7 | 0.30 | 0.0 | 0.00 | 0.12 | 0.03 | | | | | |
| 34 | 15.14 | 33.380 | 24.695 | 5.88 | 102.6 | 1.7 | 0.30 | 0.0 | 0.00 | 0.13 | 0.03 | 12. | 1.7 | 1.8 | 1.8 | 0.06 |
| 40 | 14.70 | 33.323 | 24.746 | 5.96 | 103.1 | 1.7 | 0.31 | 0.0 | 0.00 | 0.17 | 0.05 | | | | | |
| 47 | 14.40 | 33.287 | 24.782 | 6.00 | 103.1 | 1.8 | 0.32 | 0.0 | 0.00 | 0.27 | 0.11 | 5.6 | 1.7 | 1.7 | 1.7 | 0.08 |
| 54 | 14.20 | 33.287 | 24.824 | 6.00 | 102.7 | 1.8 | 0.33 | 0.0 | 0.00 | 0.30 | 0.11 | | | | | |
| 61 | 13.77 | 33.245 | 24.881 | 6.05 | 102.6 | 1.8 | 0.34 | 0.1 | 0.01 | 0.44 | 0.25 | 2.4 | 0.96 | 1.1 | 1.0 | 0.06 |
| 72 | 13.31 | 33.254 | 24.981 | 5.84 | 98.1 | 2.4 | 0.44 | 1.0 | 0.31 | 0.54 | 0.31 | | | | | |
| 85 | 13.15 | 33.334 | 25.076 | 5.70 | 95.5 | 3.1 | 0.50 | 2.5 | 0.15 | 0.31 | 0.20 | | | | | |
| 96 | 12.63 | 33.388 | 25.220 | 5.53 | 91.7 | 4.2 | 0.64 | 4.9 | 0.03 | 0.07 | 0.06 | 0.28 | 0.03 | 0.03 | 0.03 | 0.02 |

RV DAVID STARR JORDAN — CALCOFI CRUISE 0704 — STATION 90.0 37.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | SECCHI | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 33 10.7 N | 118 24.0 W | 06/04/07 | 1732 UTC | 23 m | 1201 - 1840 PST | 1155 PST | 1840 PST | 534.6 mg C/m2 |

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | LIGHT PCT | UPTAKE (mg C/m3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 15.53 | 33.548 | 24.737 | 5.84 | 102.8 | 1.7 | 0.32 | 0.0 | 0.00 | 0.24 | 0.04 | 88. A | 5.6 | 5.7 | 5.7 | 0.05 |
| 12 | 15.50 | 33.549 | 24.745 | 5.85 | 103.0 | 1.7 | 0.32 | 0.0 | 0.00 | 0.27 | 0.04 | 45. | 7.1 | 6.9 | 7.0 | 0.06 |
| 22 | 15.26 | 33.542 | 24.793 | 5.91 | 103.5 | 1.9 | 0.32 | 0.0 | 0.00 | 0.32 | 0.07 | | | | | |
| 31 | 14.43 | 33.525 | 24.959 | 5.85 | 100.7 | 2.5 | 0.39 | 0.4 | 0.03 | 1.63 | 0.41 | 13. | 18.7 | 19.6 | 19.2 | 0.07 |
| 38 | 14.09 | 33.524 | 25.030 | 5.64 | 96.4 | 3.4 | 0.48 | 1.8 | 0.11 | 0.95 | 0.43 | | | | | |
| 44 | 13.87 | 33.521 | 25.073 | 5.51 | 93.8 | 3.9 | 0.54 | 2.6 | 0.15 | 0.74 | 0.43 | 5.3 | 5.5 | 5.0 | 5.3 | 0.06 |
| 56 | 13.34 | 33.608 | 25.249 | 5.28 | 88.9 | 6.1 | 0.72 | 4.9 | 0.35 | 0.34 | 0.15 | 2.4 | 0.86 | 0.88 | 0.87 | 0.05 |
| 72 | 12.03 | 33.597 | 25.496 | 4.32 | 70.8 | 10.8 | 1.13 | 12.2 | 0.14 | 0.10 | 0.13 | | | | | |
| 89 | 11.25 | 33.649 | 25.681 | 3.73 | 60.1 | 15.1 | 1.41 | 16.4 | 0.03 | 0.06 | 0.14 | 0.26 | 0.01 | 0.00 | 0.01 | 0.03 |

A) INCUBATION LIGHT INTENSITIES WERE 96, 45, 13, 5.4, 2.4, 0.26 PERCENT RESPECTIVELY.

PRIMARY PRODUCTIVITY CASTS

RV DAVID STARR JORDAN — CALCOFI CRUISE 0704 — STATION 90.0 70.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | SECCHI | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 32 3.8 N | 120 39.1 W | 05/04/07 | 1705 UTC | 16 m | 1205 - 1846 PST | 1205 PST | 1846 PST | 117.2 mg C/m2 |

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | LIGHT PCT | UPTAKE (mg C/m3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 14.56 | 33.432 | 24.859 | 5.94 | 102.5 | 1.9 | 0.31 | 0.0 | 0.00 | 0.22 | 0.05 | 83. A | 2.6 | 2.9 | 2.8 | 0.08 |
| 8 | 14.56 | 33.433 | 24.860 | 5.96 | 102.9 | 1.9 | 0.31 | 0.0 | 0.00 | 0.23 | 0.05 | 46. | 4.3 | 4.3 | 4.3 | 0.07 |
| 15 | 14.54 | 33.433 | 24.864 | 5.95 | 102.6 | 1.8 | 0.32 | 0.0 | 0.00 | 0.22 | 0.06 | | | | | |
| 22 | 14.55 | 33.433 | 24.862 | 5.94 | 102.5 | 1.8 | 0.32 | 0.0 | 0.00 | 0.24 | 0.06 | 12. | 3.0 | 2.9 | 2.9 | 0.08 |
| 30 | 14.54 | 33.433 | 24.865 | 5.94 | 102.5 | 1.8 | 0.32 | 0.0 | 0.00 | 0.24 | 0.06 | 5.6 | 1.2 | 1.3 | 1.3 | 0.08 |
| 40 | 14.00 | 33.421 | 24.969 | 6.07 | 103.5 | 2.3 | 0.35 | 0.1 | 0.03 | 0.64 | 0.19 | 2.2 | 0.97 | 0.93 | 0.95 | 0.08 |
| 50 | 13.90 | 33.482 | 25.037 | 6.11 | 104.0 | 2.6 | 0.37 | 0.3 | 0.04 | 0.63 | 0.23 | | | | | |
| 62 | 13.01 | 33.404 | 25.157 | 5.83 | 97.4 | 3.2 | 0.52 | 2.4 | 0.22 | 0.72 B | 0.29 B | 0.26 | 0.11 | 0.16 | 0.13 | 0.04 |

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

RV DAVID STARR JORDAN — CALCOFI CRUISE 0704 — STATION 90.0 100.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | SECCHI | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 31 4.8 N | 122 39.8 W | 04/04/07 | 1954 UTC | 21 m | 1250 - 1854 PST | 1214 PST | 1854 PST | 119.2 mg C/m2 |

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | LIGHT PCT | UPTAKE (mg C/m3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 14.51 | 33.297 | 24.765 | 5.96 | 102.7 | 2.1 | 0.33 | 0.1 | 0.00 | 0.15 | 0.04 | 86. A | 4.3 | 3.1 | 3.7 | 0.06 |
| 12 | 14.48 | 33.301 | 24.775 | 5.94 | 102.3 | 2.1 | 0.32 | 0.0 | 0.00 | 0.15 | 0.04 | 42. | 2.6 | 2.0 | 2.3 | 0.06 |
| 16 | 14.38 | 33.289 | 24.787 | 5.96 | 102.4 | 2.1 | 0.32 | 0.0 | 0.00 | 0.19 | 0.05 | | | | | |
| 20 | 14.31 | 33.281 | 24.796 | 5.98 | 102.6 | 2.1 | 0.33 | 0.0 | 0.00 | 0.22 | 0.06 | | | | | |
| 29 | 14.12 | 33.274 | 24.830 | 6.03 | 103.0 | 2.3 | 0.35 | 0.1 | 0.01 | 0.33 | 0.17 | 12. | 3.0 | 3.0 | 3.0 | 0.07 |
| 40 | 14.05 | 33.275 | 24.846 | 6.04 | 103.0 | 2.3 | 0.35 | 0.1 | 0.01 | 0.34 | 0.11 | 5.4 | 1.2 | 1.3 | 1.3 | 0.06 |
| 45 | 14.01 | 33.278 | 24.857 | 6.05 | 103.1 | 2.4 | 0.35 | 0.1 | 0.02 | 0.34 | 0.11 | | | | | |
| 50 | 14.01 | 33.279 | 24.857 | 6.05 | 103.1 | 2.4 | 0.35 | 0.1 | 0.02 | 0.34 | 0.12 | 2.6 | 0.27 | 0.33 | 0.30 | 0.08 |
| 65 | 13.95 | 33.286 | 24.876 | 6.05 | 103.0 | 2.5 | 0.36 | 0.2 | 0.03 | 0.38 | 0.12 | | | | | |
| 75 | 13.66 | 33.288 | 24.937 | 6.00 | 101.5 | 2.6 | 0.39 | 0.3 | 0.11 | 0.41 | 0.16 | | | | | |
| 80 | 13.31 | 33.262 | 24.988 | 5.84 | 98.1 | 2.8 | 0.44 | 1.0 | 0.27 | 0.37 | 0.19 | 0.29 | 0.03 | 0.06 | 0.04 | 0.03 |

RV DAVID STARR JORDAN — CALCOFI CRUISE 0704 — STATION 93.3 35.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | SECCHI | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 32 40.5 N | 117 52.1 W | 28/03/07 | 2004 UTC | 16 m | 1304 - 1835 PST | 1157 PST | 1835 PST | 324.5 mg C/m2 |

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | LIGHT PCT | UPTAKE (mg C/m3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 14.73 | 33.568 | 24.927 | 5.98 | 103.6 | 2.2 | 0.35 | 0.0 | 0.02 | 0.53 | 0.18 | 75. A | 8.0 | 8.2 | 8.1 | 0.12 |
| 8 | 14.64 | 33.572 | 24.950 | 5.99 | 103.6 | 2.2 | 0.33 | 0.0 | 0.02 | 0.60 | 0.20 | 46. | 12.5 | 12.4 | 12.4 | 0.15 |
| 11 | 14.61 | 33.566 | 24.952 | 5.99 | 103.6 | 2.2 | 0.33 | 0.0 | 0.01 | 0.61 | 0.21 | | | | | |
| 14 | 14.60 | 33.566 | 24.954 | 5.99 | 103.5 | 1.6 | 0.33 | 0.0 | 0.01 | 0.63 | 0.22 | | | | | |
| 21 | 14.58 | 33.566 | 24.958 | 5.99 | 103.5 | 1.7 | 0.33 | 0.0 | 0.01 | 0.68 | 0.25 | 13. | 9.5 | 8.8 | 9.2 | 0.18 |
| 31 | 14.56 | 33.566 | 24.963 | 5.97 | 103.1 | 1.7 | 0.33 | 0.0 | 0.02 | 0.74 | 0.25 | 5.1 | 4.7 | 4.6 | 4.6 | 0.10 |
| 39 | 14.52 | 33.564 | 24.970 | 5.95 | 102.7 | 1.8 | 0.34 | 0.1 | 0.03 | 0.73 | 0.28 | 2.4 | 1.3 | 1.4 | 1.3 | 0.08 |
| 50 | 13.59 | 33.539 | 25.145 | 5.53 | 93.6 | 3.7 | 0.55 | 2.4 | 0.37 | 0.80 | 0.40 | | | | | |
| 52 | 13.53 | 33.538 | 25.156 | 5.50 | 93.0 | 3.9 | 0.58 | 2.6 | 0.40 | 0.81 | 0.40 | | | | | |
| 62 | 13.11 | 33.555 | 25.254 | 5.07 | 85.0 | 6.0 | 0.77 | 5.4 | 0.52 | 0.45 | 0.29 | 0.26 | 0.08 | 0.10 | 0.09 | 0.05 |

RV DAVID STARR JORDAN — CALCOFI CRUISE 0704 — STATION 93.3 70.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | SECCHI | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 31 30.4 N | 120 15.4 W | 02/04/07 | 1714 UTC | 21 m | 1205 - 1849 PST | 1205 PST | 1848 PST | 235.3 mg C/m2 |

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | LIGHT PCT | UPTAKE (mg C/m3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 15.04 | 33.465 | 24.781 | 5.87 | 102.3 | 2.0 | 0.30 | 0.0 | 0.00 | 0.16 | 0.03 | 86. A | 1.6 | 1.6 | 1.6 | 0.08 |
| 12 | 15.03 | 33.464 | 24.783 | 5.87 | 102.3 | 1.9 | 0.30 | 0.0 | 0.00 | 0.17 | 0.03 | 42. | 3.1 | 3.0 | 3.0 | 0.06 |
| 21 | 15.01 | 33.463 | 24.786 | 5.87 | 102.2 | 1.8 | 0.30 | 0.0 | 0.00 | 0.16 | 0.03 | | | | | |
| 29 | 13.85 | 33.297 | 24.904 | 6.15 | 104.5 | 2.2 | 0.36 | 0.0 | 0.00 | 0.33 | 0.09 | 12. | 4.9 | 4.7 | 4.8 | 0.12 |
| 40 | 13.65 | 33.281 | 24.933 | 6.08 | 102.9 | 2.3 | 0.35 | 0.0 | 0.03 | 0.71 | 0.24 | 5.4 | 6.7 | 6.7 | 6.7 | 0.08 |
| 51 | 13.63 | 33.426 | 25.049 | 5.93 | 100.4 | 2.5 | 0.42 | 0.7 | 0.11 | 0.57 | 0.23 | 2.4 | 2.0 | 1.9 | 2.0 | 0.08 |
| 66 | 12.85 | 33.388 | 25.176 | 5.85 | 97.4 | 3.7 | 0.56 | 2.3 | 0.37 | 0.29 | 0.18 | | | | | |
| 81 | 12.93 | 33.517 | 25.261 | 5.71 | 95.3 | 4.0 | 0.63 | 3.4 | 0.48 | 0.21 | 0.13 | 0.27 | 0.13 | 0.09 | 0.11 | 0.05 |

RV DAVID STARR JORDAN — CALCOFI CRUISE 0704 — STATION 93.3 110.0

| LATITUDE | LONGITUDE | DAY/MO/YR | CAST TIME | SECCHI | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 30 10.8 N | 122 55.2 W | 03/04/07 | 1824 UTC | 29 m | 1205 - 1856 PST | 1215 PST | 1858 PST | 192.2 mg C/m2 |

| DEPTH m | TEMP DEG C | SALINITY | SIGMA THETA | OXYGEN ml/l | OXY PCT | SIO3 uM/l | PO4 uM/l | NO3 uM/l | NO2 uM/l | CHL-A ug/l | PHAEO ug/l | LIGHT PCT | UPTAKE (mg C/m3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 15.09 | 33.330 | 24.666 | 5.86 | 102.2 | 1.9 | 0.31 | 0.0 | 0.00 | 0.12 | 0.03 | 90. A | 2.3 | 1.9 | 2.1 | 0.06 |
| 15 | 14.94 | 33.328 | 24.697 | 5.87 | 102.0 | 1.9 | 0.31 | 0.0 | 0.00 | 0.13 | 0.03 | 45. | 2.5 | 2.6 | 2.5 | 0.07 |
| 27 | 14.95 | 33.338 | 24.703 | 5.86 | 101.9 | 1.9 | 0.31 | 0.0 | 0.00 | 0.13 | 0.03 | | | | | |
| 39 | 14.53 | 33.299 | 24.764 | 5.92 | 102.0 | 1.8 | 0.32 | 0.0 | 0.00 | 0.21 | 0.07 | 13. | 2.6 | 2.7 | 2.7 | 0.10 |
| 47 | 14.48 | 33.286 | 24.764 | 5.92 | 101.9 | 2.0 | 0.31 | 0.0 | 0.00 | 0.27 | 0.10 | | | | | |
| 55 | 14.48 | 33.290 | 24.768 | 5.91 | 101.7 | 1.8 | 0.31 | 0.0 | 0.00 | 0.31 | 0.13 | 5.4 | 2.4 | 2.3 | 2.3 | 0.06 |
| 63 | 14.45 | 33.291 | 24.775 | 5.88 | 101.1 | 1.8 | 0.33 | 0.0 | 0.01 | 0.37 | 0.17 | | | | | |
| 70 | 15.12 | 33.500 | 24.793 | 5.78 | 100.9 | 1.7 | 0.32 | 0.1 | 0.03 | 0.34 | 0.20 | 2.5 | 1.3 | 1.4 | 1.3 | 0.04 |
| 84 | 16.44 | 33.972 | 24.860 | 5.60 | 100.6 | 1.5 | 0.22 | 0.0 | 0.00 | 0.27 | 0.13 | | | | | |
| 98 | 15.59 | 33.847 | 24.957 | 5.54 | 97.8 | 2.0 | 0.27 | 0.4 | 0.07 | 0.25 | 0.25 | | | | | |
| 111 | 14.06 | 33.630 | 25.120 | 5.45 | 93.2 | 3.0 | 0.44 | 2.0 | 0.07 | 0.18 | 0.22 | 0.28 | 0.12 | 0.09 | 0.10 | 0.02 |

A) INCUBATION LIGHT INTENSITIES WERE 96, 45, 13, 5.4, 2.4, 0.26 PERCENT RESPECTIVELY.

MACROZOOPLANKTON BIOMASS
Net Mesh Size: 0.505mm

| Line | Sta. | Latitude N | Longitude W | Date Mo/Day | Time (PST) Start | Time (PST) End | Water Volume Strained ($m^3$) | Max. Tow Depth (m) | Volume per 1000 $m^3$ Strained Total ($cm^3$) | Volume per 1000 $m^3$ Strained Small ($cm^3$) |
|---|---|---|---|---|---|---|---|---|---|---|
| 66.7 | 50.0 | 36 47.2 | 122 03.3 | 04/27 | 1506 | 1528 | 457 | 192 | 64 | 64 |
| 66.7 | 55.0 | 36 37.4 | 122 25.0 | 04/27 | 2059 | 2121 | 440 | 202 | 134 | 134 |
| 66.7 | 60.0 | 36 27.2 | 122 46.3 | 04/28 | 0111 | 0133 | 377 | 212 | 223 | 223 |
| 66.7 | 70.0 | 36 07.2 | 123 29.1 | 04/28 | 1115 | 1137 | 387 | 212 | 59 | 59 |
| 66.7 | 80.0 | 35 47.2 | 124 11.8 | 04/28 | 1945 | 2007 | 386 | 212 | 130 | 130 |
| 66.7 | 90.0 | 35 27.3 | 124 54.1 | 04/29 | 0803 | 0824 | 392 | 217 | 36 | 36 |
| 66.7 | 100.0 | 35 07.3 | 125 36.2 | 04/29 | 1627 | 1648 | 405 | 204 | 41 | 41 |
| 76.7 | 49.0 | 35 05.3 | 120 46.9 | 04/23 | 1746 | 1754 | 168 | 64 | 24 | 24 |
| 76.7 | 51.0 | 35 01.5 | 120 54.8 | 04/23 | 2005 | 2027 | 397 | 207 | 78 | 78 |
| 76.7 | 55.0 | 34 53.3 | 121 11.9 | 04/23 | 2348 | 0010 | 387 | 213 | 140 | 140 |
| 76.7 | 60.0 | 34 43.4 | 121 32.8 | 04/24 | 0359 | 0421 | 419 | 208 | 45 | 45 |
| 76.7 | 70.0 | 34 23.4 | 122 14.7 | 04/24 | 1049 | 1111 | 420 | 213 | 26 | 26 |
| 76.7 | 80.0 | 34 03.3 | 122 56.4 | 04/24 | 1853 | 1914 | 413 | 211 | 15 | 15 |
| 76.7 | 100.0 | 33 23.2 | 124 19.4 | 04/25 | 1348 | 1410 | 490 | 163 | 4 | 4 |
| 80.0 | 51.0 | 34 26.9 | 120 31.4 | 04/13 | 1647 | 1656 | 189 | 74 | 42 | 42 |
| 80.0 | 55.0 | 34 19.0 | 120 48.1 | 04/13 | 2105 | 2127 | 442 | 200 | 86 | 86 |
| 80.0 | 60.0 | 34 09.1 | 121 08.9 | 04/14 | 0113 | 0135 | 403 | 212 | 136 | 136 |
| 80.0 | 70.0 | 33 49.1 | 121 50.5 | 04/14 | 0719 | 0741 | 382 | 212 | 42 | 42 |
| 80.0 | 80.0 | 33 29.4 | 122 30.9 | 04/14 | 1255 | 1317 | 401 | 213 | 30 | 30 |
| 80.0 | 90.0 | 33 09.0 | 123 13.3 | 04/14 | 2002 | 2024 | 502 | 172 | 40 | 40 |
| 80.0 | 100.0 | 32 49.0 | 123 54.3 | 04/15 | 0159 | 0220 | 411 | 204 | 51 | 51 |
| 81.8 | 46.9 | 34 16.5 | 120 01.5 | 04/13 | 1205 | 1227 | 391 | 214 | 59 | 59 |
| 83.3 | 70.0 | 33 14.7 | 121 26.6 | 04/11 | 1133 | 1154 | 395 | 213 | 40 | 40 |
| 83.3 | 90.0 | 32 34.7 | 122 48.7 | 04/10 | 1148 | 1209 | 428 | 199 | 42 | 42 |
| 83.3 | 100.0 | 32 14.6 | 123 29.5 | 04/10 | 0445 | 0507 | 386 | 216 | 26 | 26 |
| 83.3 | 110.0 | 31 54.7 | 124 10.3 | 04/09 | 2147 | 2209 | 420 | 213 | 17 | 17 |
| 86.7 | 33.0 | 33 53.4 | 118 29.3 | 04/07 | 0455 | 0500 | 95 | 47 | 105 | 105 |
| 86.7 | 35.0 | 33 49.5 | 118 37.7 | 04/07 | 0749 | 0810 | 388 | 206 | 41 | 41 |
| 86.7 | 40.0 | 33 39.4 | 118 58.5 | 04/07 | 1303 | 1325 | 389 | 212 | 26 | 26 |
| 86.7 | 45.0 | 33 29.5 | 119 19.1 | 04/07 | 1739 | 1801 | 399 | 205 | 58 | 58 |
| 86.7 | 50.0 | 33 19.5 | 119 39.7 | 04/07 | 2142 | 2150 | 126 | 70 | 71 | 71 |
| 86.7 | 55.0 | 33 09.4 | 120 00.4 | 04/08 | 0156 | 0217 | 348 | 213 | 89 | 89 |
| 86.7 | 70.0 | 32 39.3 | 121 02.2 | 04/08 | 1323 | 1345 | 397 | 206 | 40 | 40 |
| 86.7 | 80.0 | 32 19.3 | 121 42.9 | 04/08 | 1939 | 2001 | 394 | 217 | 51 | 51 |
| 86.7 | 90.0 | 31 59.4 | 122 23.6 | 04/09 | 0139 | 0200 | 377 | 214 | 72 | 72 |
| 86.7 | 100.0 | 31 39.4 | 123 04.2 | 04/09 | 0754 | 0815 | 414 | 207 | 19 | 19 |
| 86.7 | 110.0 | 31 19.4 | 123 44.5 | 04/09 | 1520 | 1541 | 413 | 208 | 60 | 24 |
| 86.8 | 32.5 | 33 53.4 | 118 26.7 | 04/07 | 0325 | 0327 | 38 | 13 | 105 | 105 |
| 88.5 | 30.1 | 33 40.1 | 118 05.1 | 04/06 | 2343 | 2345 | 38 | 12 | 240 | 240 |
| 90.0 | 27.7 | 33 29.8 | 117 45.0 | 04/06 | 2102 | 2105 | 65 | 14 | 123 | 123 |
| 90.0 | 28.0 | 33 29.3 | 117 45.9 | 04/06 | 2000 | 2007 | 147 | 65 | 259 | 259 |
| 90.0 | 30.0 | 33 25.1 | 117 54.4 | 04/06 | 1722 | 1744 | 384 | 203 | 138 | 138 |
| 90.0 | 35.0 | 33 15.1 | 118 15.0 | 04/06 | 1242 | 1304 | 375 | 213 | 40 | 40 |
| 90.0 | 37.0 | 33 11.1 | 118 23.2 | 04/06 | 0837 | 0859 | 392 | 207 | 41 | 41 |
| 90.0 | 45.0 | 32 55.1 | 118 56.1 | 04/06 | 0325 | 0347 | 389 | 216 | 118 | 118 |
| 90.0 | 53.0 | 32 39.1 | 119 29.0 | 04/05 | 2154 | 2216 | 400 | 215 | 180 | 180 |
| 90.0 | 60.0 | 32 25.0 | 119 57.6 | 04/05 | 1607 | 1628 | 393 | 209 | 84 | 84 |
| 90.0 | 70.0 | 32 05.1 | 120 38.4 | 04/05 | 0808 | 0830 | 408 | 208 | 24 | 24 |
| 90.0 | 80.0 | 31 45.1 | 121 18.9 | 04/05 | 0226 | 0248 | 386 | 213 | 96 | 96 |
| 90.0 | 90.0 | 31 25.0 | 121 59.5 | 04/04 | 1957 | 2018 | 387 | 209 | 106 | 106 |
| 90.0 | 100.0 | 31 05.0 | 122 39.8 | 04/04 | 1312 | 1334 | 381 | 213 | 47 | 47 |
| 90.0 | 110.0 | 30 45.0 | 123 20.0 | 04/04 | 0643 | 0705 | 374 | 214 | 37 | 37 |
| 90.0 | 120.0 | 30 25.0 | 123 59.9 | 04/04 | 0017 | 0039 | 395 | 212 | 33 | 33 |
| 91.7 | 26.4 | 33 13.9 | 117 26.8 | 03/28 | 0117 | 0120 | 56 | 20 | 106 | 106 |
| 93.3 | 28.0 | 32 54.8 | 117 23.2 | 03/28 | 0517 | 0539 | 404 | 214 | 59 | 59 |
| 93.3 | 30.0 | 32 50.8 | 117 31.8 | 03/28 | 0830 | 0852 | 399 | 215 | 40 | 40 |
| 93.3 | 35.0 | 32 40.6 | 117 52.2 | 03/28 | 1311 | 1333 | 409 | 214 | 24 | 24 |
| 93.3 | 40.0 | 32 30.8 | 118 12.8 | 03/28 | 1758 | 1820 | 414 | 210 | 39 | 39 |
| 93.3 | 45.0 | 32 20.8 | 118 33.3 | 03/28 | 2219 | 2241 | 398 | 216 | 161 | 161 |
| 93.3 | 50.0 | 32 10.8 | 118 53.6 | 03/29 | 0248 | 0309 | 426 | 211 | 132 | 132 |
| 93.3 | 55.0 | 32 00.9 | 119 13.9 | 03/29 | 0723 | 0745 | 399 | 217 | 30 | 30 |
| 93.3 | 60.0 | 31 50.8 | 119 34.3 | 03/29 | 1338 | 1359 | 408 | 214 | 69 | 69 |
| 93.3 | 70.0 | 31 30.8 | 120 14.8 | 04/02 | 0805 | 0829 | 468 | 242 | 30 | 30 |
| 93.3 | 80.0 | 31 10.8 | 120 55.0 | 04/02 | 1601 | 1623 | 401 | 210 | 55 | 55 |
| 93.3 | 90.0 | 30 50.8 | 121 35.2 | 04/02 | 2224 | 2246 | 390 | 211 | 98 | 98 |
| 93.3 | 100.0 | 30 30.8 | 122 15.3 | 04/03 | 0503 | 0525 | 404 | 212 | 30 | 30 |
| 93.3 | 110.0 | 30 10.8 | 122 55.3 | 04/03 | 1138 | 1160 | 410 | 214 | 22 | 22 |
| 93.3 | 120.0 | 29 50.8 | 123 35.1 | 04/03 | 1747 | 1809 | 410 | 209 | 32 | 32 |