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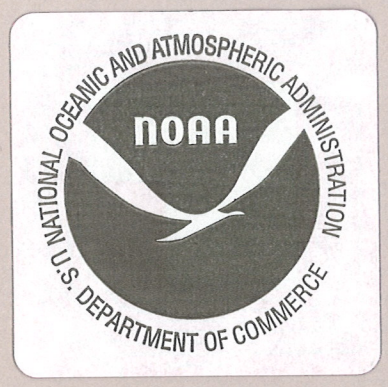
# data report

## PHYSICAL, CHEMICAL AND BIOLOGICAL DATA REPORT

CalCOFI Cruise 8602
5 - 20 February 1986

SIO Reference 86-9
5 May 1986

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Physical, chemical and
biological data
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SCRIPPS INSTITUTION OF OCEANOGRAPHY

# PHYSICAL, CHEMICAL AND BIOLOGICAL DATA

CalCOFI Cruise 8602
5 - 20 February 1986

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Approved for distribution:

W. A. Nierenberg, Director

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## INTRODUCTION

The data in this report were collected during Cruise 8602* of the California Cooperative Oceanic Fisheries Investigations (CalCOFI) program aboard the RV *David Starr Jordan* of the National Marine Fisheries Service. The data were collected and processed by personnel of the Marine Life Research Group (MLRG), the Southwest Fisheries Center, National Marine Fisheries Service (NMFS), and the Physical and Chemical Oceanographic Data Facility (PACODF).

## STANDARD PROCEDURES

*Hydrographic Cast Data*

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

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

Salinity samples were analyzed at sea using inductive-type salinometers. Salinometers were standardized with sub-standard seawater. Periodic checks on the concentration of the substandard were made by comparison with Wormley Standard Seawater batch P-96. The salinity values are reported to three decimal places.

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

Silicate, phosphate, nitrate and nitrite nutrients were determined at sea using an automated analyzer. The procedures used are similar to those described in Atlas *et al.* (1971).

Chlorophyll was measured with a fluorometric technique (Yentsch and Menzel, 1963; Holm-Hansen *et al.*, 1965) from subsamples filtered onto GF/C filters. The pigments were extracted with a cold extraction technique in 90% acetone (Venrick and Hayward, 1984) and the fluorescence determined before and after audification with a Turner fluorometer.

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

*Primary Productivity Casts*

Primary production was estimated from $^{14}C$ uptake using a simulated *in situ* technique. Light penetration was estimated from the Secchi depth (assuming that the 1% light level is three times the Secchi depth). Six depths, corresponding to predetermined levels of light penetration, were sampled with 5 l Niskin bottles. Temperature, salinity, oxygen, nutrients, chlorophyll-*a*, and phaeopigments were determined for all depths sampled. Triplicate samples (two light and one dark control) were drawn from each depth into 250 ml polycarbonate incubation bottles which were innoculated with 10 $\mu$ci of $^{14}C$ as $NaHCO_3$. These were then incubated approximately from local apparent noon to civil twilight in seawater-cooled incubators with neutral-density screens which simulate the *in situ* light levels. At the end of the incubation, the samples were filtered onto HA milipore filters and placed in scintillation vials. One-half ml of 10% HCl was added to each sample. The sample was then allowed to sit, without a cap, at room temperature for 12 hours (after Lean and Burnison, 1979). Following this, 10 ml of scintillation fluor were added to each sample and the samples were returned to S.I.O. where the radioactivity was determined with a scintillation counter.

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

*Macrozooplankton Net Tows*

Macrozooplankton was sampled with a 71 cm mouth diameter paired net (bongo net) equipped with 0.505 mm plankton mesh. Bottom depth permitting, the nets were towed obliquely from 210 m to the surface. The tow time for a standard tow was 21.5 minutes. Volumes filtered were determined from flowmeter readings and the mouth area of the net. Only one sample of each pair was retained and preserved. The biomass, as wet displacement volume, after removal of large (> 5 ml) organisms, was determined in the laboratory ashore. These procedures are summarized in greater detail in Kramer *et al.* (1972).

## TABULATED DATA

The reported hydrographic cast time is the Greenwich Mean Time (GMT) of the messenger release. Bottom depths, determined acoustically, have been corrected using British Admiralty Tables (Carter, 1980) and are reported in meters. Weather conditions have been coded using WMO code 4051.

Data tabulations are presented in the following forms:

*Hydrographic Cast Data*

Observed and interpolated standard depth data from hydrographic casts have been interspersed and are presented together sequentially by depth. Interpolated or extrapolated standard level data are noted by the footnote "ISL" printed after the depth. Density-related parameters have been calculated from the International Equation of State of Seawater 1980 (EOS80, UNESCO, 1981). Some of the differences between EOS80 and the older equations-of-state are discussed in the introduction to SIO Ref. 84-18. Computed values of potential temperature, sigma-theta, specific volume anomaly (SVA), dynamic height or geopotential anomaly, and pressure are included with both observed and interpolated standard depth levels.

*Primary Productivity Casts*

In addition to the normal hydrographic data, the tabulated data include: the light levels at which the samples were incubated, the uptake from each of the replicate light bottles (uptake 1 and uptake 2) which have been corrected for dark uptake by subtracting the dark value, the mean of the two uptake values, the dark uptake, chlorophyll and phaeophytin. The uptake values shown are the total for the incubation period. The times of local apparent noon (LAN), civil twilight, and the vertically integrated value of the mean uptake from the surface to the deepest sample depth (assuming that the shallowest measured value extends to the surface and that negative values are zero) are also shown for each experiment. The uptake data have been presented to two significant digits (values < 1.00) or one decimal (values > 1.00). The higher production values may not warrant all of the significant digits presented. Incubation time, LAN, and civil twilight are given in local Pacific Standard Time (PST); to convert to GMT, add eight hours to the PST time.

*Secchi Disk Observations*

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

*Macrozooplankton Data*

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

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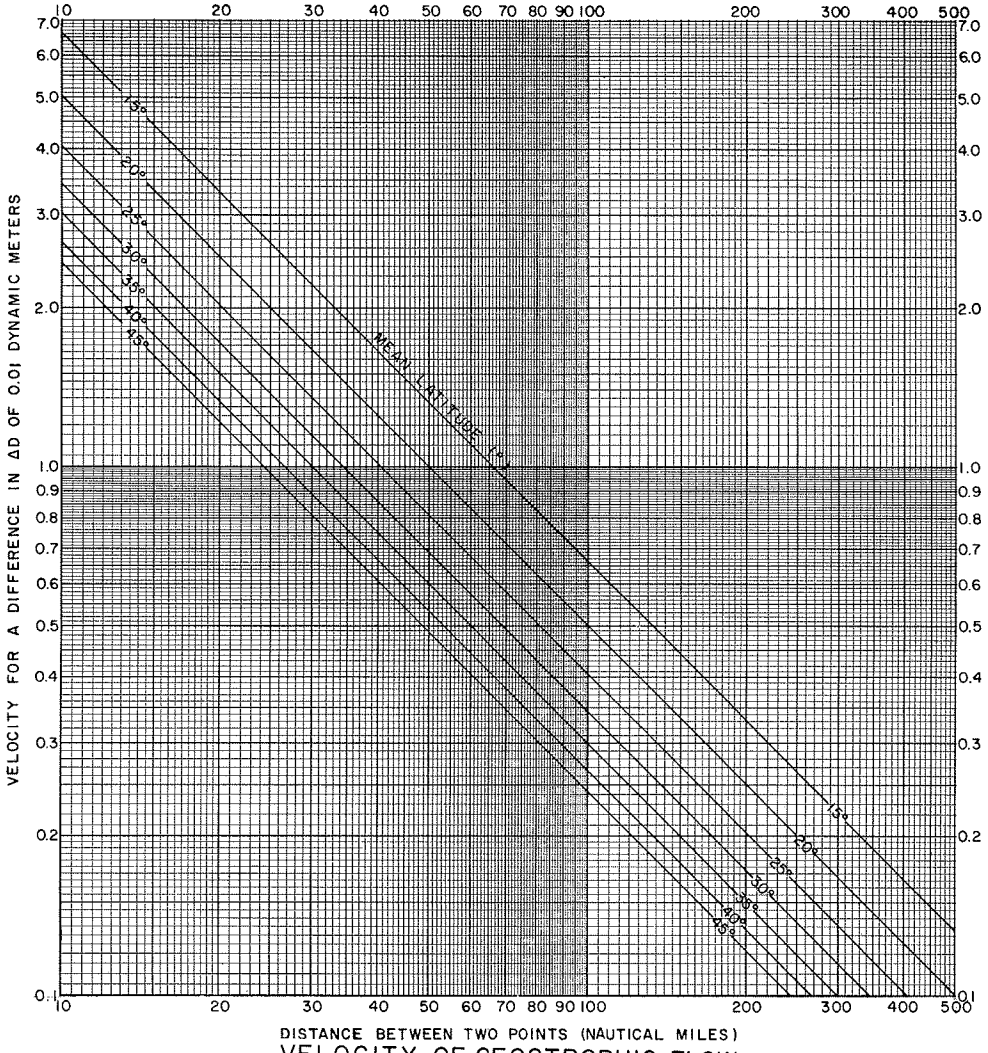


## VELOCITY OF GEOSTROPHIC FLOW
( NAUTICAL MILES PER DAY )

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

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

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

## FIGURES

Cruise 8602

1. CalCOFI Cruise 8602, station positions.
2. Horizontal distribution of chlorophyll-*a* at 10 meters.
3. Horizontal distribution of dynamic height anomaly (0 over 500 m).
4. Horizontal distribution of sigma-theta at 10 meters.
5. Horizontal distribution of temperature at 10 meters.
6. Horizontal distribution of salinity at 10 meters.
7. Horizontal distribution of dynamic height anomaly (200 over 500 m).
8. Horizontal distribution of sigma-theta at 200 meters.
9. Horizontal distribution of temperature at 200 meters.
10. Horizontal distribution of salinity at 200 meters.

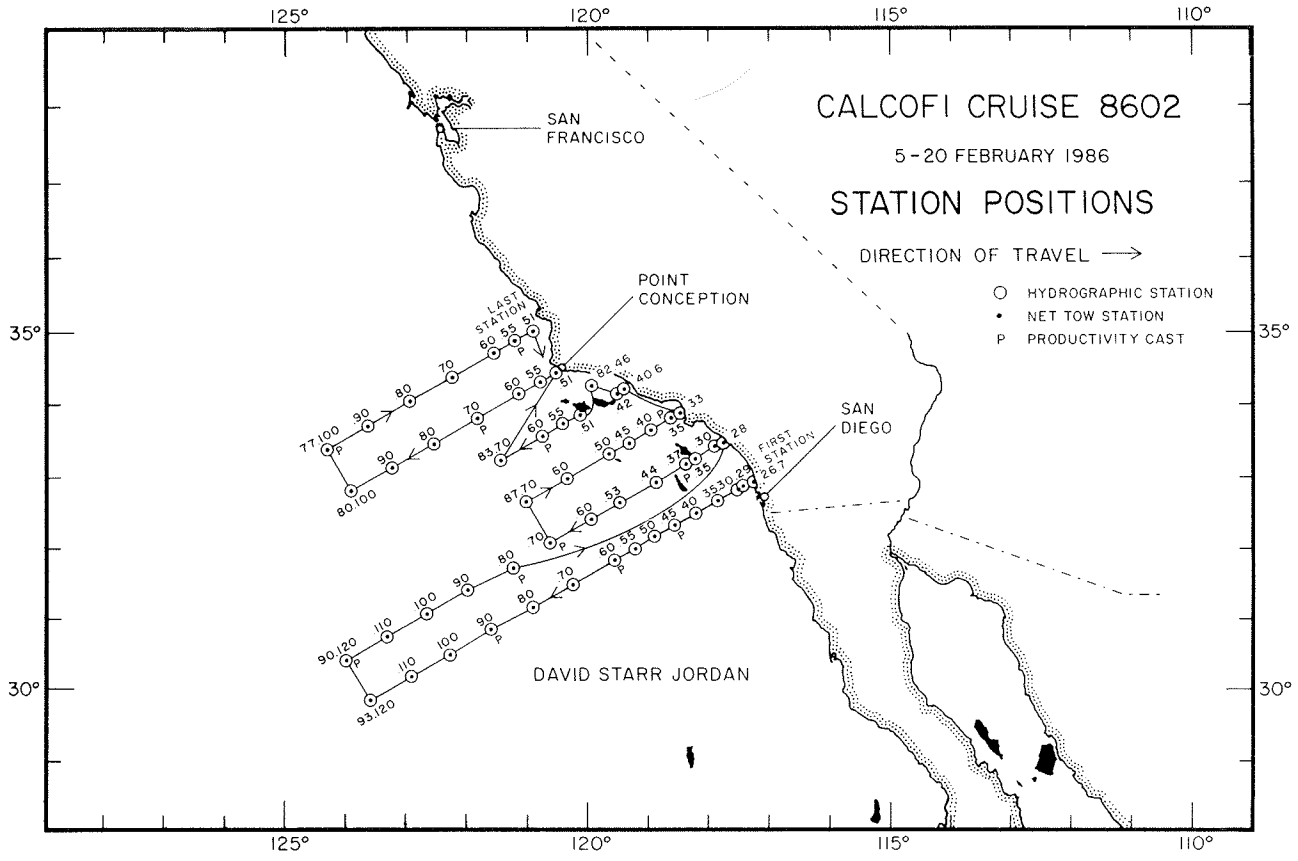


FIGURE 1

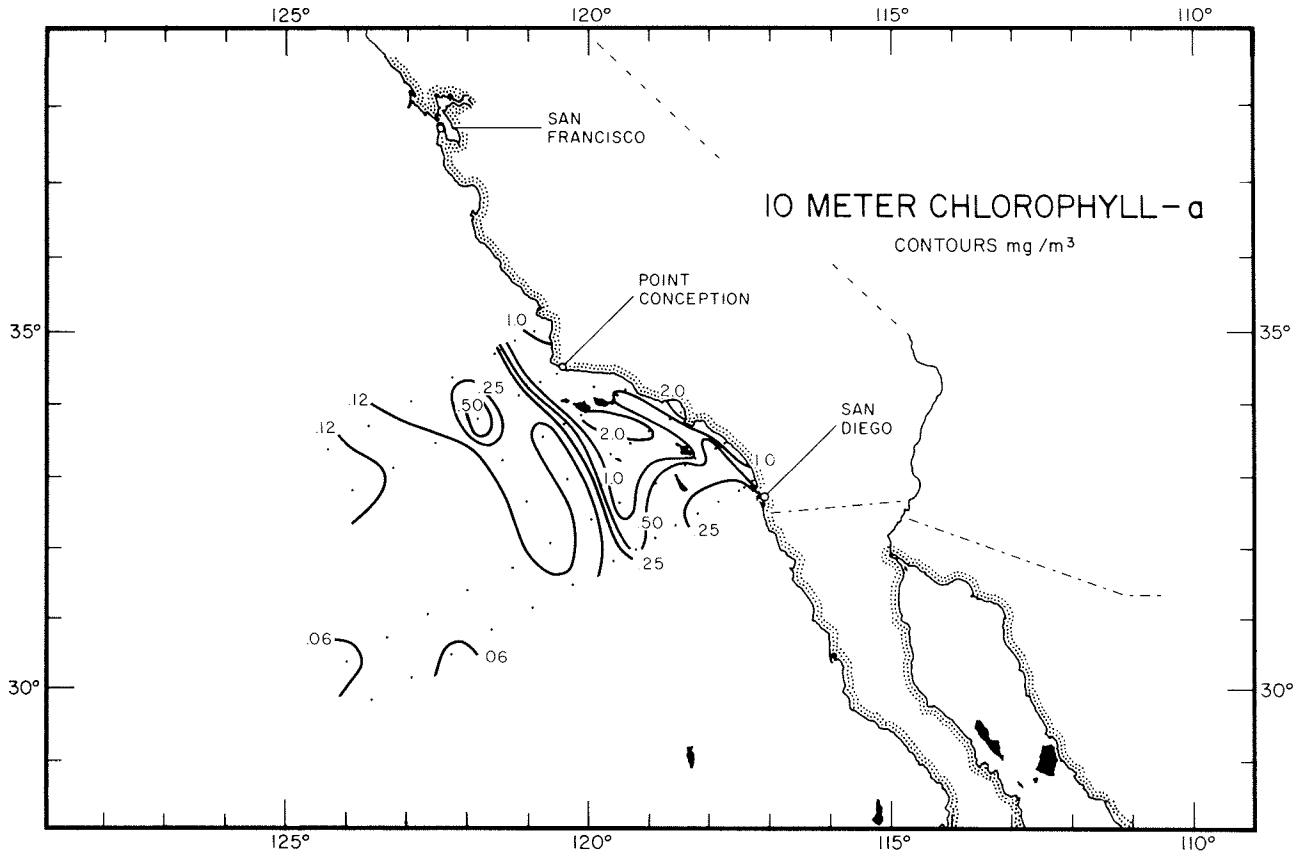


FIGURE 2

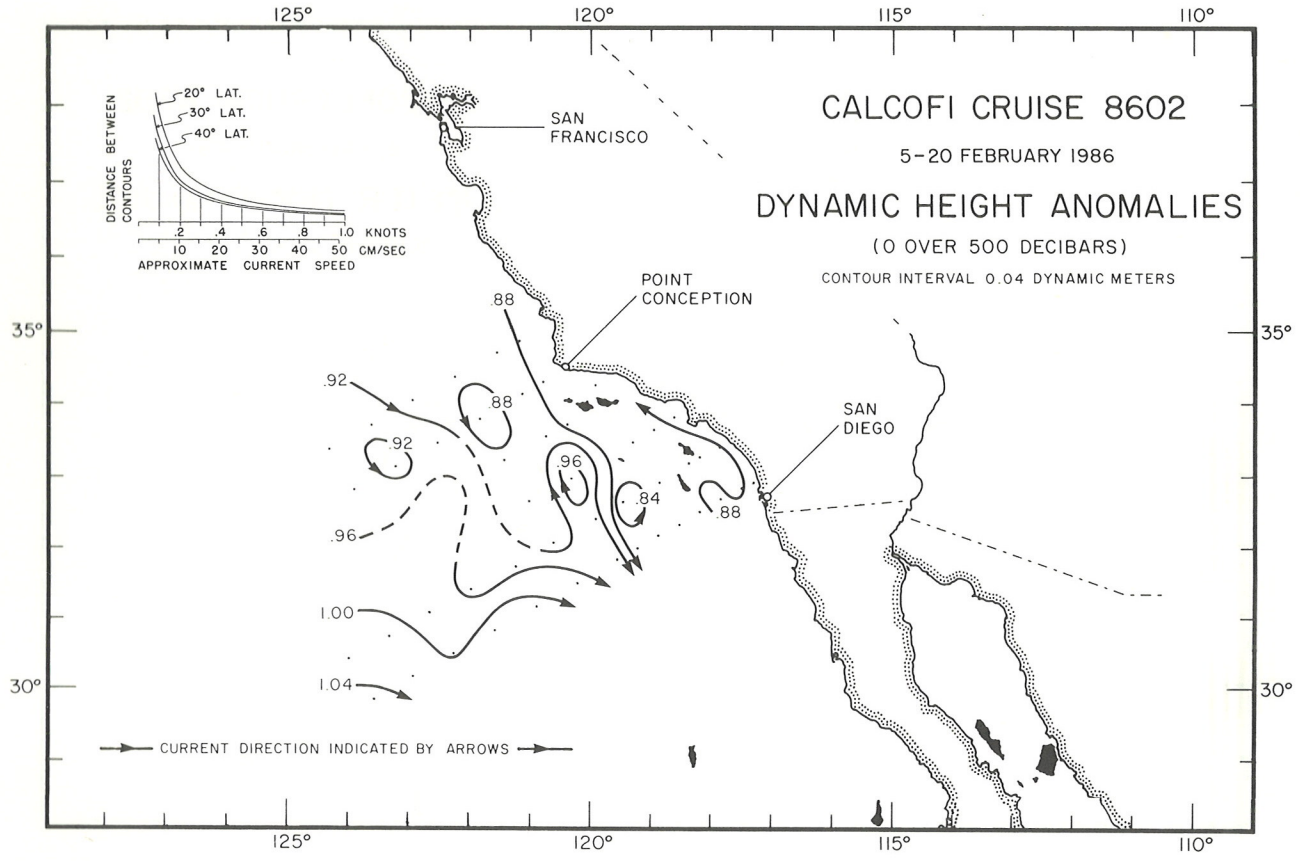


FIGURE 3

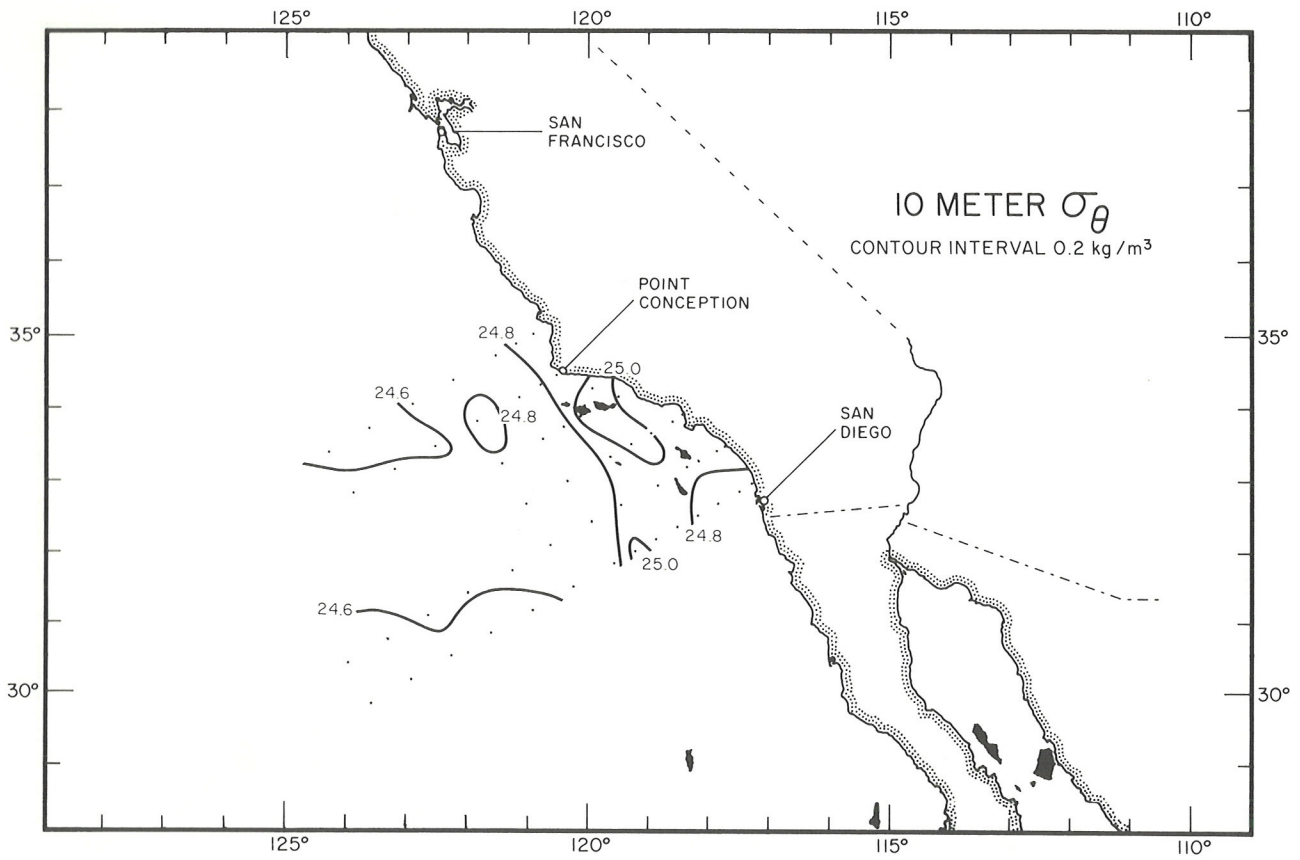


FIGURE 4

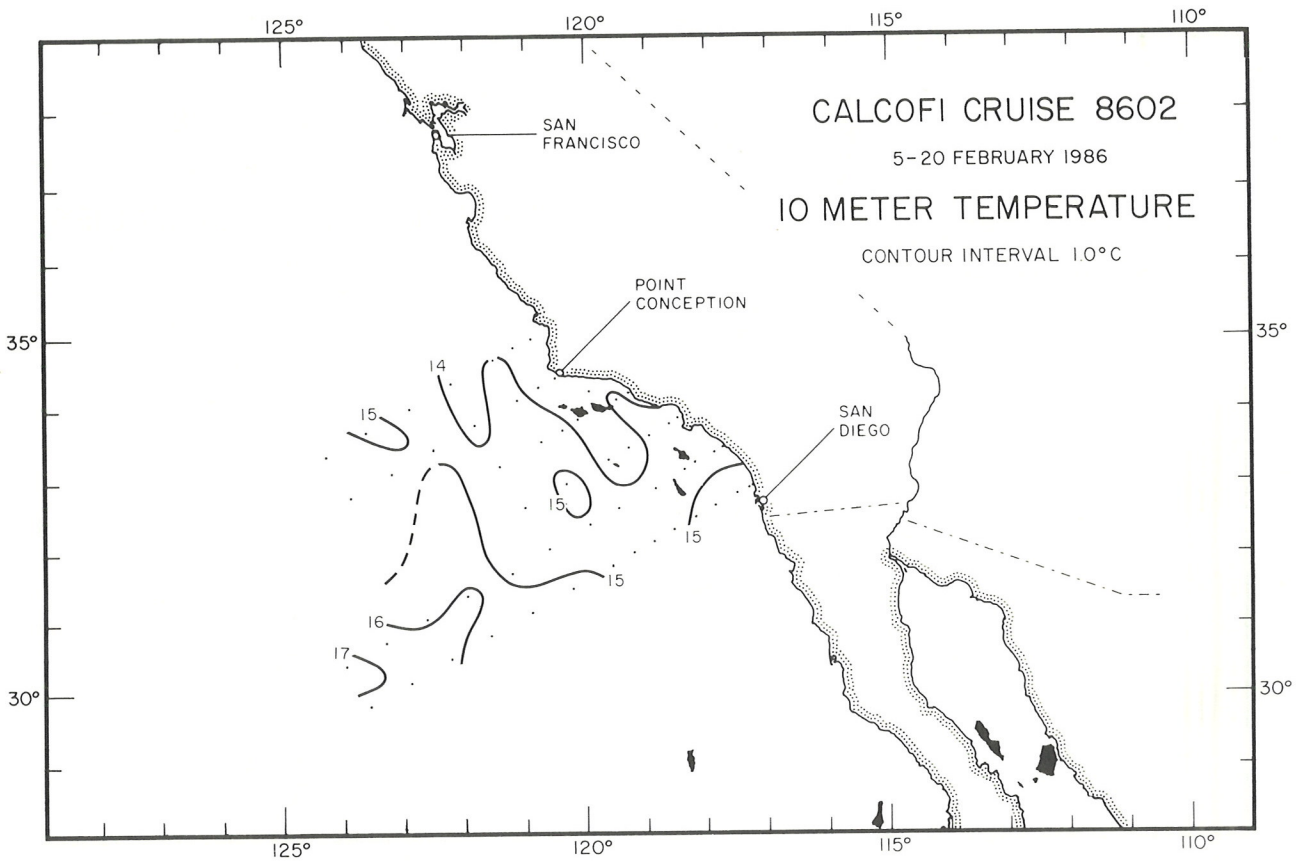


FIGURE 5

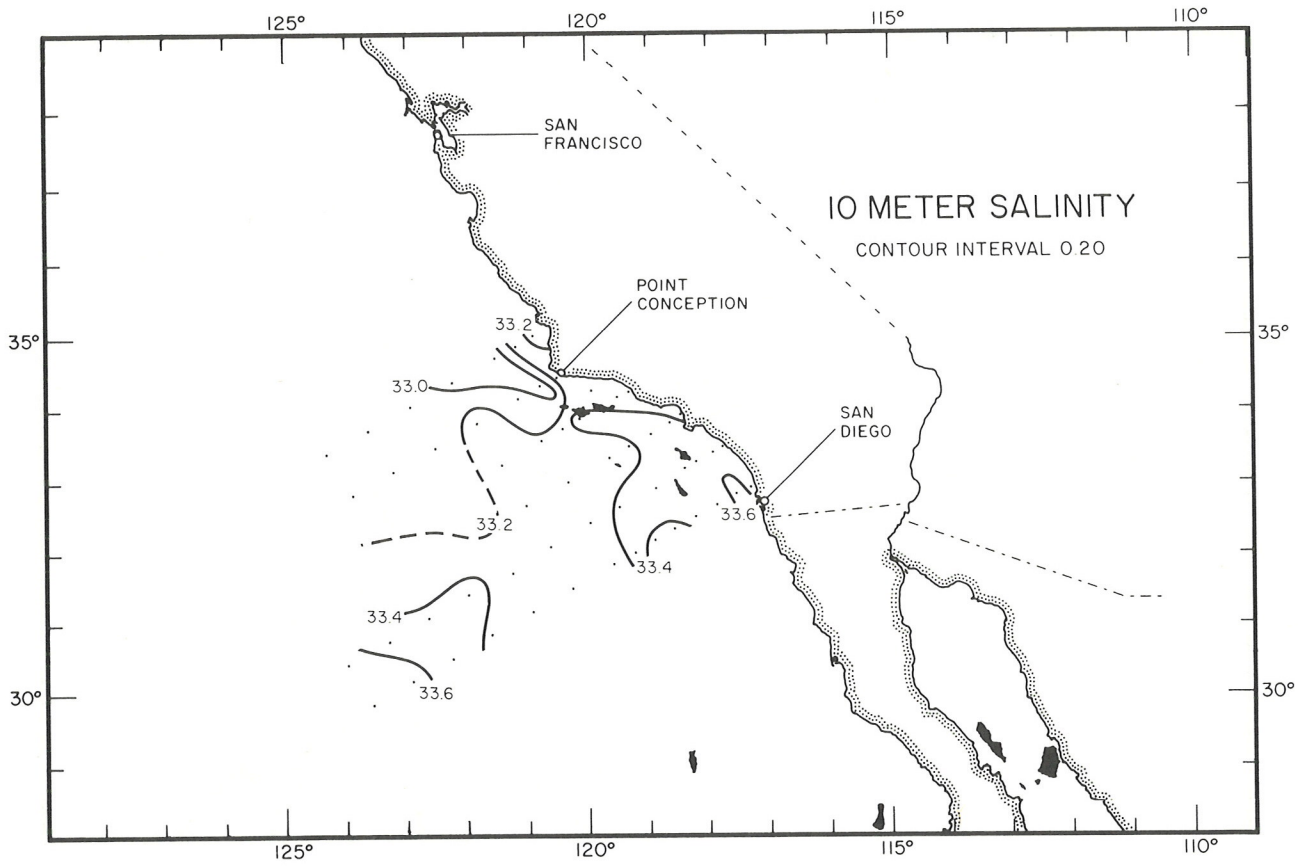


FIGURE 6

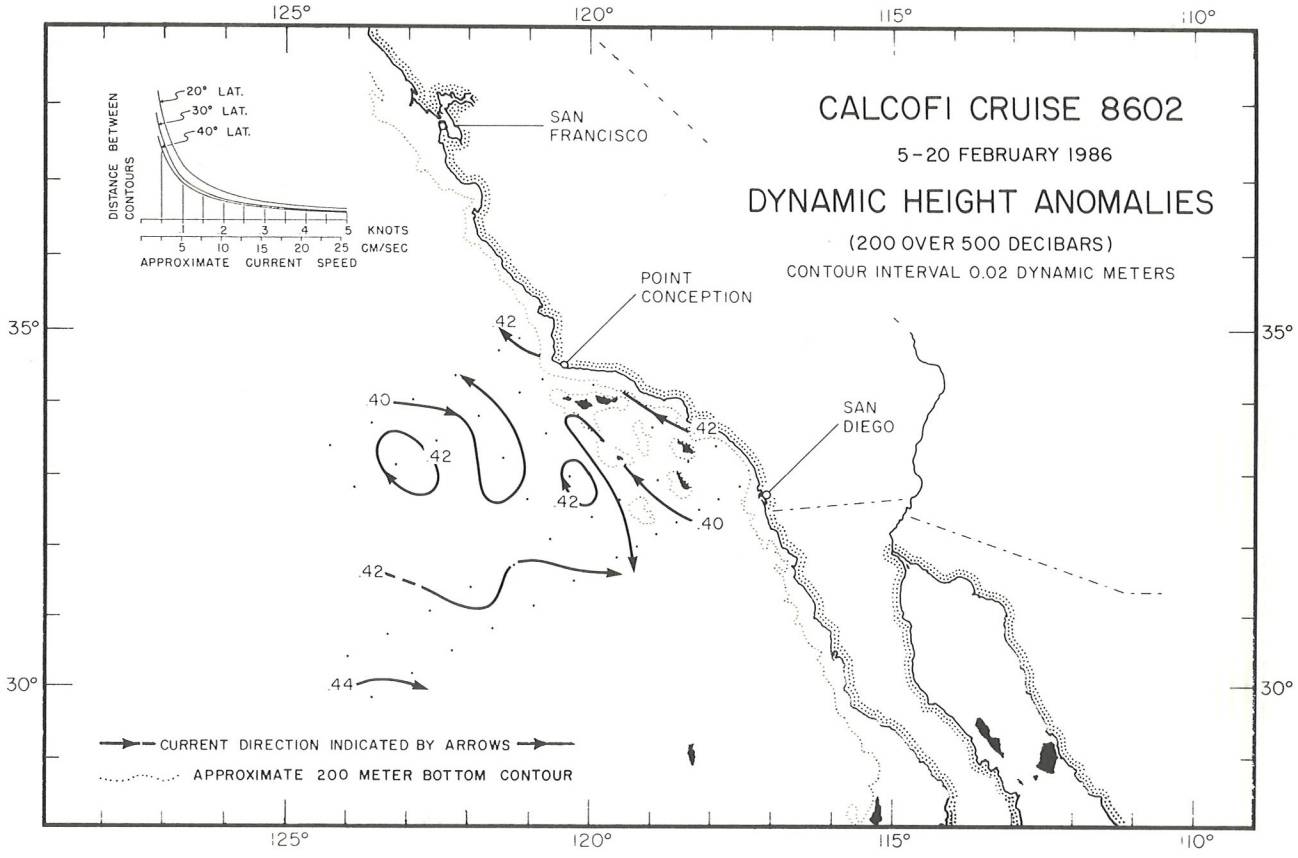


FIGURE 7

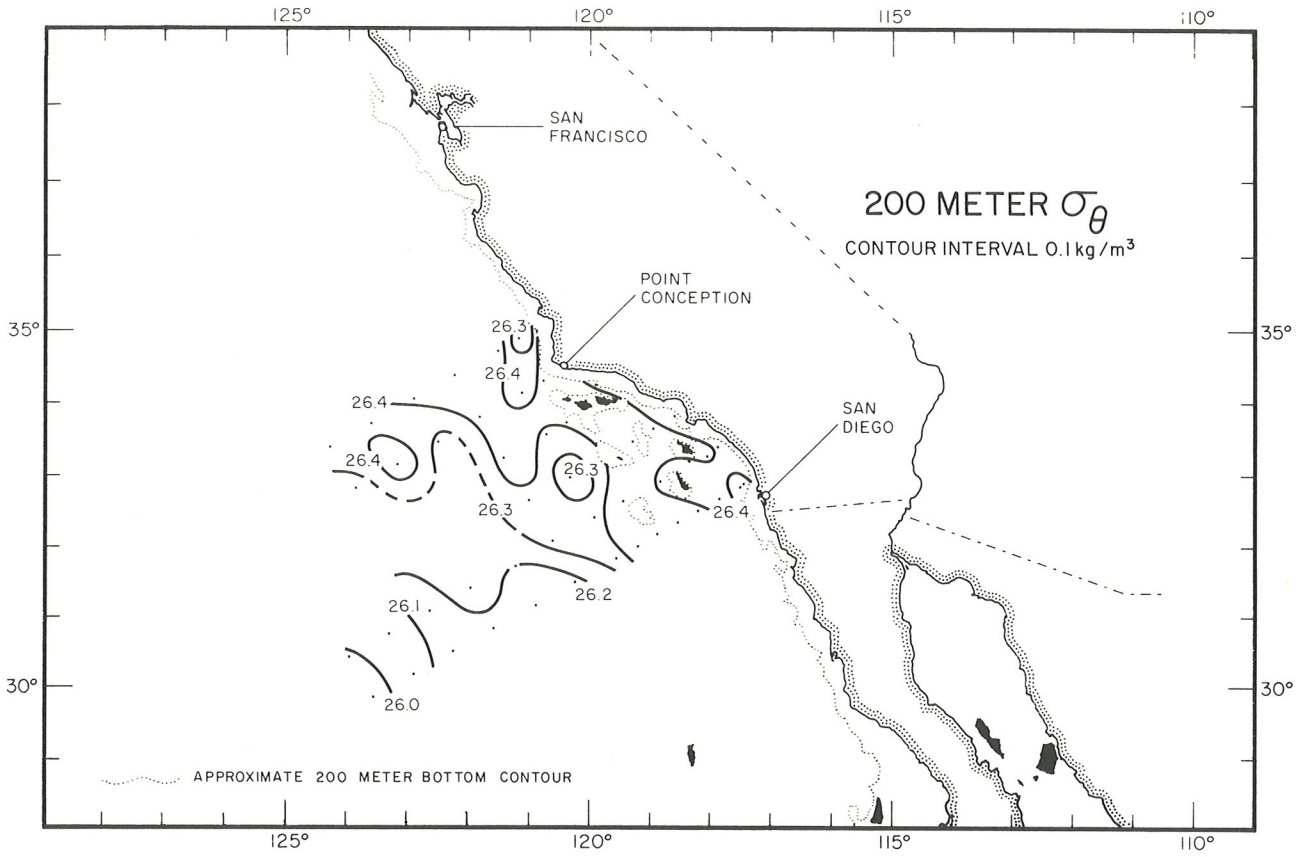


FIGURE 8

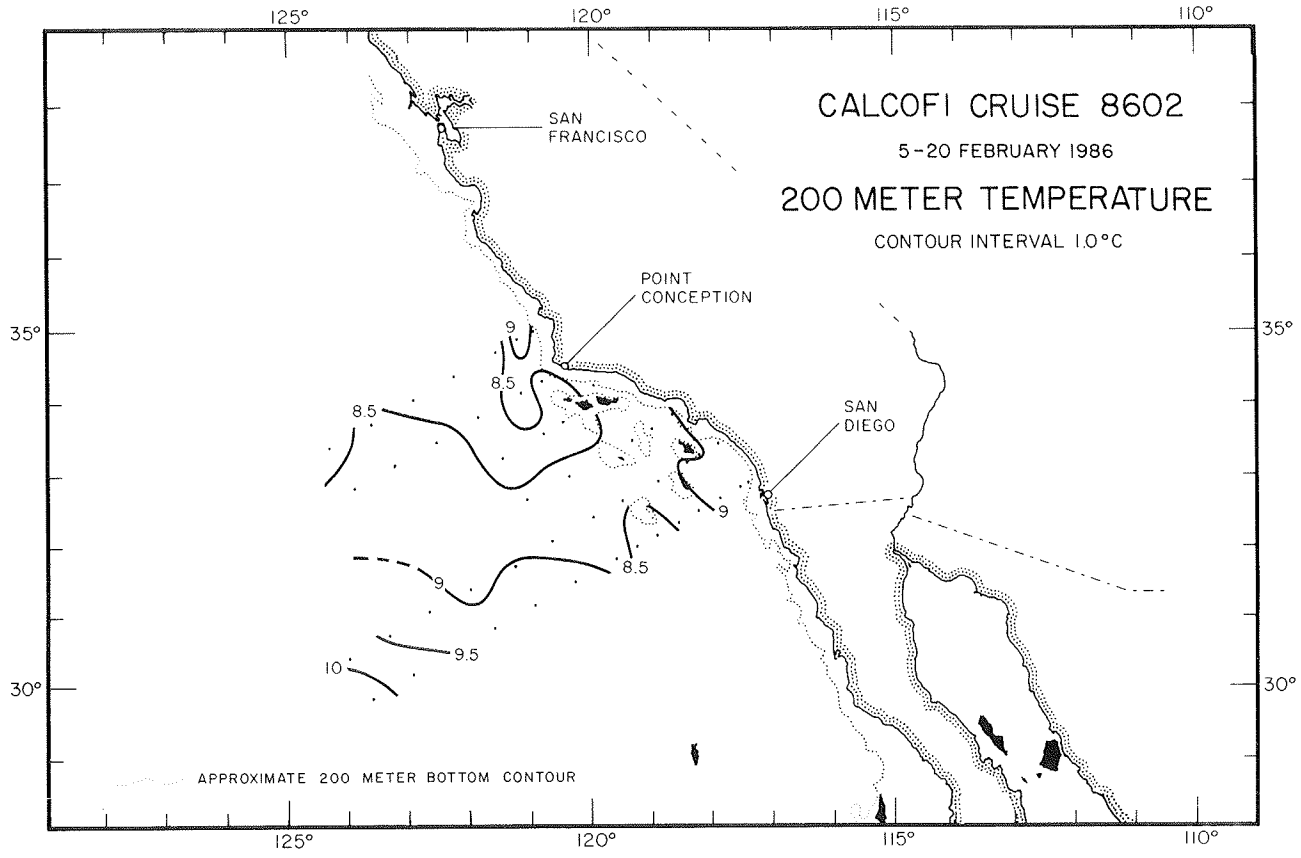


FIGURE 9

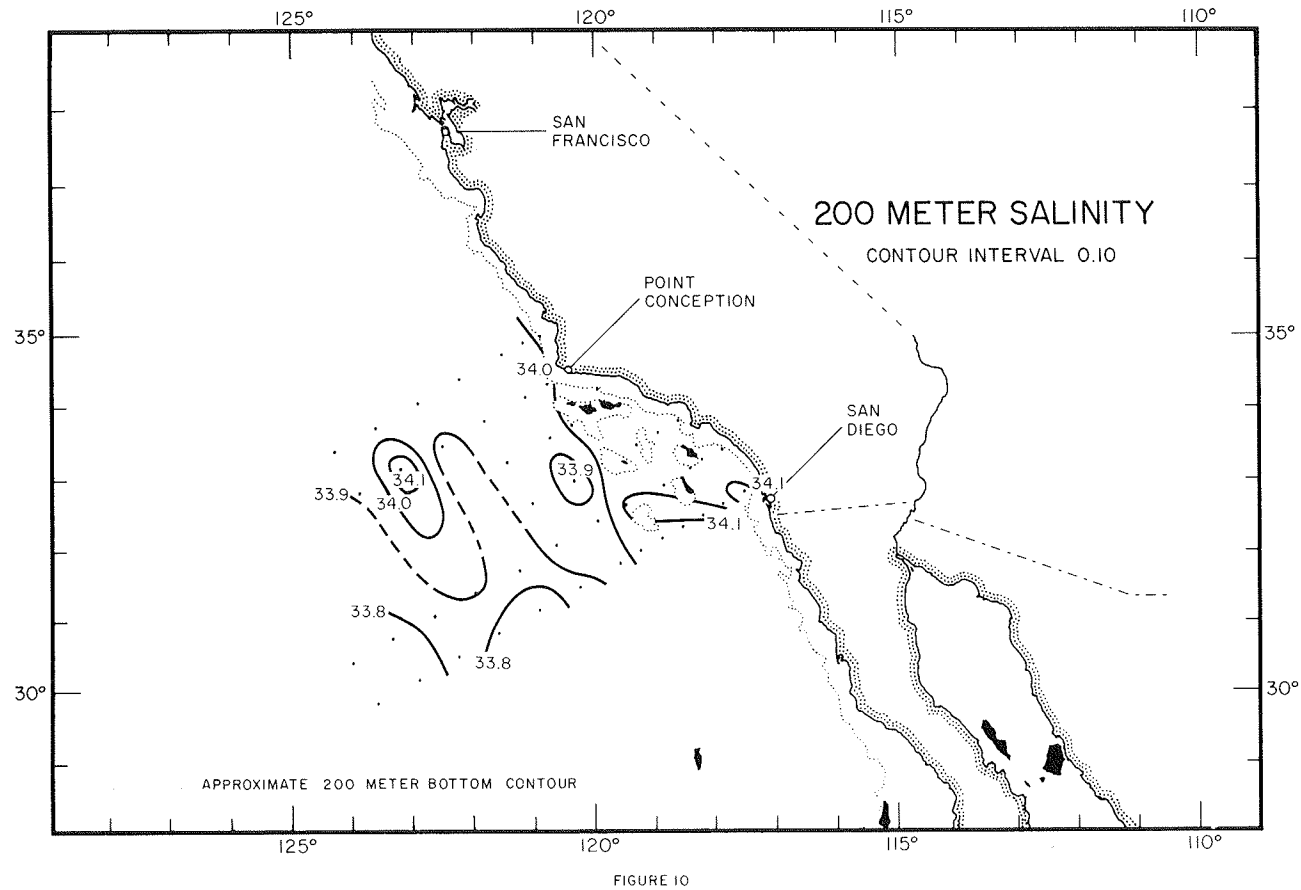


FIGURE 10

## PERSONNEL

Cruise 8602

### SHIP'S CAPTAIN

Milton Roll, RV *David Starr Jordan*

### PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

| | |
|---|---|
| Flerx, William C. (in charge) | Fishery Biologist, NMFS |
| Abramenkoff, Dimitry N. | Fishery Biologist, NMFS |
| Anderson, George C. | Staff Research Associate, SIO |
| Bryan, Walter R. | Marine Technician, SIO |
| Cummings, Sherry L. | Staff Research Associate, SIO |
| Dotson, Ronald C. | Fishery Biologist, NMFS |
| Masten, Douglas M. | Marine Technician, SIO |
| Meyer, Cindy H. | Computer Programmer, NMFS |
| Sweet, Paul R. | Staff Research Associate, SIO |
| Tsuji, Sachiko | U. C. Sea Grant Program, NMFS |

RV DAVID STARR JORDAN CALCOFI CRUISE 8602 STATION 77 51

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 35 01.1 N | 120 55.1 W | 19/02/86 | 2059 GMT | 248 M | 220 | 06 KT | 260 07 10 | 2 | 1016.6 MB | 15.0 C | 14.0 C | 8/8 | SC |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 13.74 | 13.74 | 33.105 | 24.777 | 316.6 | .000 | 6.09 | 103.1 | | | | | | | 0 |
| 1 | 1 | | 13.74 | 13.74 | 33.105 | 24.777 | 316.0 | .003 | 6.09 | 103.1 | 4.0 | .51 | 1.2 | .07 | .85 | .35 | 1 |
| | 10 | ISL | 13.51 | 13.51 | 33.105 | 24.824 | 311.8 | .031 | 6.15 | 103.6 | | | | | | | 10 |
| 1 | 11 | | 13.49 | 13.49 | 33.105 | 24.828 | 311.4 | .034 | 6.15 | 103.6 | 3.8 | .50 | 1.0 | .07 | .95 | .40 | 11 |
| | 20 | ISL | 13.43 | 13.43 | 33.118 | 24.850 | 309.6 | .062 | 6.11 | 102.8 | | | | | | | 20 |
| | 30 | ISL | 13.39 | 13.39 | 33.152 | 24.885 | 306.5 | .093 | 6.06 | 101.9 | | | | | | | 30 |
| 1 | 32 | | 13.39 | 13.38 | 33.161 | 24.893 | 305.8 | .099 | 6.05 | 101.7 | 3.8 | .51 | 1.3 | .09 | .93 | .39 | 32 |
| 1 | 48 | | 13.08 | 13.08 | 33.281 | 25.046 | 291.6 | .147 | 5.91 | 98.8 | 4.6 | .58 | 2.3 | .16 | .46 | .33 | 48 |
| | 50 | ISL | 13.05 | 13.05 | 33.280 | 25.052 | 291.0 | .153 | 5.91 | 98.8 | | | | | | | 50 |
| 1 | 58 | | 12.94 | 12.93 | 33.277 | 25.072 | 289.5 | .175 | 5.90 | 98.4 | 4.7 | .62 | 2.5 | .18 | .41 | .36 | 58 |
| 1 | 74 | | 12.69 | 12.68 | 33.350 | 25.178 | 279.8 | .221 | 5.71 | 94.7 | 5.8 | .69 | 3.8 | .24 | .27 | .27 | 74 |
| | 75 | ISL | 12.67 | 12.66 | 33.352 | 25.183 | 279.3 | .225 | 5.69 | 94.4 | | | | | | | 76 |
| 1 | 89 | | 12.47 | 12.46 | 33.380 | 25.244 | 273.9 | .262 | 5.52 | 91.2 | 7.9 | .83 | 5.1 | .25 | .31 | .42 | 89 |
| | 100 | ISL | 12.31 | 12.29 | 33.441 | 25.323 | 266.6 | .293 | 5.36 | 88.3 | | | | | | | 101 |
| 1 | 108 | | 12.11 | 12.10 | 33.497 | 25.403 | 259.2 | .315 | 5.17 | 84.8 | 9.7 | .95 | 8.1 | .35 | .20 | .24 | 109 |
| | 125 | ISL | 11.36 | 11.34 | 33.599 | 25.624 | 238.5 | .356 | 4.40 | 71.1 | | | | | | | 126 |
| 1 | 134 | | 10.81 | 10.79 | 33.669 | 25.776 | 224.1 | .378 | 3.88 | 62.0 | 19.3 | 1.50 | 17.0 | .14 | .12 | .19 | 135 |
| | 150 | ISL | 9.80 | 9.78 | 33.835 | 26.079 | 195.4 | .411 | 3.06 | 47.9 | | | | | | | 151 |
| 1 | 154 | | 9.55 | 9.53 | 33.878 | 26.155 | 188.3 | .419 | 2.87 | 44.6 | 28.8 | 1.95 | 24.1 | .04 | .02 | .10 | 155 |
| 1 | 186 | | 8.70 | 8.68 | 33.999 | 26.385 | 166.8 | .476 | 2.41 | 36.8 | 37.9 | 2.22 | 27.6 | .07 | .01 | .12 | 187 |
| | 200 | ISL | 8.51 | 8.49 | 34.029 | 26.439 | 161.9 | .499 | 2.27 | 34.5 | | | | | | | 202 |
| 1 | 213 | | 8.42 | 8.40 | 34.043 | 26.462 | 159.9 | .520 | 2.18 | 33.1 | 41.8 | 2.32 | 28.9 | .09 | .01 | .17 | 214 |

RV DAVID STARR JORDAN CALCOFI CRUISE 8602 STATION 77 55

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 53.1 N | 121 12.0 W | 19/02/86 | 1741 GMT | 573 M | 210 | 11 KT | 210 05 07 | 2 | 1015.9 MB | 15.7 C | 14.6 C | 8/8 | SC |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 13.44 | 13.44 | 33.249 | 24.950 | 299.7 | .000 | 6.05 | 101.9 | | | | | | | 0 |
| 1 | 1 | | 13.44 | 13.44 | 33.249 | 24.950 | 299.5 | .003 | 6.05 | 101.9 | 4.2 | .51 | 1.6 | .09 | 1.16 | .55 | 1 |
| | 10 | ISL | 13.38 | 13.38 | 33.253 | 24.964 | 298.4 | .030 | 6.07 | 102.1 | | | | | | | 10 |
| 1 | 11 | | 13.38 | 13.37 | 33.253 | 24.966 | 298.3 | .033 | 6.07 | 102.1 | 4.3 | .52 | 1.7 | .09 | 1.11 | .57 | 11 |
| | 20 | ISL | 13.26 | 13.26 | 33.287 | 25.016 | 293.9 | .060 | 6.01 | 100.9 | | | | | | | 20 |
| | 30 | ISL | 13.06 | 13.06 | 33.339 | 25.096 | 286.4 | .089 | 5.86 | 98.0 | | | | | | | 30 |
| 1 | 32 | | 13.01 | 13.01 | 33.352 | 25.115 | 284.7 | .094 | 5.82 | 97.2 | 5.1 | .62 | 3.0 | .18 | .41 | .38 | 32 |
| 1 | 48 | | 12.49 | 12.49 | 33.442 | 25.287 | 268.7 | .138 | 5.37 | 88.8 | 7.9 | .80 | 6.0 | .27 | .25 | .26 | 48 |
| | 50 | ISL | 12.44 | 12.44 | 33.445 | 25.299 | 267.7 | .144 | 5.34 | 88.3 | | | | | | | 50 |
| 1 | 59 | | 12.23 | 12.23 | 33.461 | 25.352 | 262.8 | .167 | 5.22 | 85.8 | 9.5 | .89 | 7.2 | .26 | .24 | .27 | 59 |
| 1 | 74 | | 11.62 | 11.61 | 33.595 | 25.570 | 242.3 | .205 | 4.62 | 75.1 | 15.0 | 1.21 | 12.2 | .35 | .19 | .29 | 74 |
| | 75 | ISL | 11.58 | 11.57 | 33.600 | 25.583 | 241.1 | .208 | 4.57 | 74.2 | | | | | | | 76 |
| 1 | 90 | | 11.09 | 11.08 | 33.642 | 25.705 | 229.9 | .242 | 4.05 | 65.1 | 17.3 | 1.41 | 15.8 | .08 | .09 | .21 | 90 |
| | 100 | ISL | 10.68 | 10.67 | 33.685 | 25.810 | 220.1 | .266 | 3.71 | 59.1 | | | | | | | 101 |
| 1 | 104 | | 10.52 | 10.50 | 33.705 | 25.855 | 215.9 | .275 | 3.58 | 56.8 | 20.4 | 1.59 | 19.0 | .02 | .04 | .16 | 105 |
| | 125 | ISL | 10.01 | 9.99 | 33.804 | 26.020 | 200.5 | .318 | 3.13 | 49.1 | | | | | | | 126 |
| 1 | 130 | | 9.91 | 9.90 | 33.828 | 26.055 | 197.3 | .329 | 3.04 | 47.7 | 25.5 | 1.83 | 22.6 | .02 | .02 | .11 | 131 |
| | 150 | ISL | 9.63 | 9.61 | 33.889 | 26.149 | 188.7 | .367 | 2.81 | 43.8 | | | | | | | 151 |
| 1 | 151 | | 9.62 | 9.60 | 33.891 | 26.153 | 188.3 | .369 | 2.80 | 43.6 | 28.5 | 1.95 | 24.2 | .01 | .02 | .09 | 152 |
| 1 | 181 | | 9.46 | 9.44 | 33.929 | 26.209 | 183.6 | .424 | 2.66 | 41.3 | 30.4 | 2.02 | 25.1 | .01 | .01 | .08 | 182 |
| | 200 | ISL | 9.19 | 9.17 | 33.978 | 26.292 | 176.1 | .459 | 2.52 | 38.8 | | | | | | | 202 |
| 1 | 212 | | 9.01 | 8.98 | 34.009 | 26.345 | 171.2 | .479 | 2.43 | 37.4 | 34.3 | 2.15 | 27.1 | .00 | .01 | .07 | 213 |
| 1 | 242 | | 8.66 | 8.64 | 34.047 | 26.429 | 163.6 | .529 | 2.33 | 35.6 | 37.3 | 2.23 | 28.2 | .00 | | | 243 |
| | 250 | ISL | 8.51 | 8.48 | 34.057 | 26.461 | 160.7 | .543 | 2.27 | 34.6 | | | | | | | 252 |
| 1 | 282 | | 7.89 | 7.86 | 34.094 | 26.582 | 149.5 | .593 | 1.98 | 29.7 | 45.8 | 2.43 | 30.9 | .00 | | | 284 |
| | 300 | ISL | 7.67 | 7.64 | 34.119 | 26.635 | 144.7 | .619 | 1.74 | 26.0 | | | | | | | 302 |
| 1 | 343 | | 7.26 | 7.22 | 34.164 | 26.729 | 136.2 | .679 | 1.24 | 18.3 | 57.5 | 2.74 | 34.2 | .00 | | | 345 |
| 1 | 398 | | 6.81 | 6.77 | 34.162 | 26.790 | 131.0 | .753 | 1.14 | 16.7 | 61.6 | 2.80 | 35.9 | .00 | | | 401 |
| | 400 | ISL | 6.81 | 6.77 | 34.164 | 26.792 | 130.8 | .755 | 1.13 | 16.5 | | | | | | | 403 |
| 1 | 460 | | 6.60 | 6.56 | 34.239 | 26.879 | 123.3 | .831 | .68 | 9.9 | 69.4 | 3.00 | 37.4 | .00 | | | 463 |
| | 500 | ISL | 6.32 | 6.27 | 34.266 | 26.938 | 118.1 | .880 | .52 | 7.5 | | | | | | | 504 |
| 1 | 523 | | 6.09 | 6.04 | 34.272 | 26.972 | 114.9 | .907 | .47 | 6.8 | 78.4 | 3.10 | 39.1 | .00 | | | 527 |

RV DAVID STARR JORDAN — CALCOFI CRUISE 8602 — STATION 77 60

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 43.1 N | 121 32.7 W | 19/02/86 | 1421 GMT | 940 M | 220 | 15 KT | 190 04 05 | 2 | 1013.3 MB | 14.9 C | 14.0 C | 8/8 | SC |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 14.05 | 14.05 | 32.974 | 24.612 | 331.7 | .000 | 5.98 | 101.9 | | | | | | | 0 |
| 1 | 2 | | 14.05 | 14.05 | 32.974 | 24.612 | 331.8 | .007 | 5.98 | 101.9 | 2.4 | .41 | .0 | .00 | .20 | .08 | 2 |
| | 10 | ISL | 14.05 | 14.05 | 32.972 | 24.611 | 332.1 | .033 | 6.02 | 102.6 | | | | | | | 10 |
| 1 | 12 | | 14.05 | 14.05 | 32.972 | 24.611 | 332.2 | .040 | 6.03 | 102.7 | 2.4 | .40 | .0 | .00 | .21 | .08 | 12 |
| | 20 | ISL | 14.04 | 14.04 | 32.971 | 24.612 | 332.3 | .066 | 6.02 | 102.6 | | | | | | | 20 |
| 1 | 27 | | 14.04 | 14.03 | 32.971 | 24.614 | 332.3 | .089 | 6.02 | 102.5 | 2.4 | .41 | .0 | .00 | .20 | .08 | 27 |
| | 30 | ISL | 13.99 | 13.99 | 32.973 | 24.624 | 331.7 | .100 | 6.02 | 102.4 | | | | | | | 30 |
| 1 | 44 | | 13.66 | 13.65 | 32.981 | 24.699 | 324.6 | .145 | 6.01 | 101.5 | 2.5 | .44 | .4 | .04 | .35 | .15 | 44 |
| | 50 | ISL | 13.44 | 13.44 | 32.999 | 24.757 | 319.4 | .165 | 6.00 | 100.9 | | | | | | | 50 |
| 1 | 58 | | 13.07 | 13.06 | 33.043 | 24.865 | 309.1 | .189 | 5.97 | 99.7 | 3.1 | .50 | 1.2 | .13 | .29 | .21 | 58 |
| 1 | 68 | | 12.34 | 12.33 | 33.162 | 25.100 | 287.0 | .219 | 5.87 | 96.6 | 3.3 | .58 | 2.2 | .11 | .21 | .18 | 68 |
| | 75 | ISL | 11.95 | 11.94 | 33.213 | 25.213 | 276.4 | .239 | 5.79 | 94.5 | | | | | | | 76 |
| 1 | 80 | | 11.76 | 11.75 | 33.236 | 25.267 | 271.3 | .252 | 5.74 | 93.3 | 4.6 | .71 | 4.5 | .03 | .12 | .16 | 80 |
| 1 | 94 | | 11.38 | 11.37 | 33.292 | 25.379 | 260.9 | .289 | 5.59 | 90.2 | 7.7 | .92 | 8.1 | .02 | .07 | .09 | 94 |
| | 100 | ISL | 11.01 | 11.00 | 33.320 | 25.468 | 252.6 | .306 | 5.32 | 85.2 | | | | | | | 101 |
| 1 | 109 | | 10.42 | 10.41 | 33.371 | 25.611 | 239.1 | .329 | 4.89 | 77.3 | 12.3 | 1.23 | 13.5 | .01 | .04 | .07 | 110 |
| 1 | 124 | | 9.81 | 9.79 | 33.485 | 25.804 | 221.0 | .363 | 4.54 | 70.8 | 15.8 | 1.42 | 16.7 | .00 | .02 | .05 | 125 |
| | 125 | ISL | 9.79 | 9.78 | 33.490 | 25.811 | 220.3 | .365 | 4.52 | 70.5 | | | | | | | 126 |
| 1 | 150 | | 9.10 | 9.08 | 33.696 | 26.084 | 194.6 | .417 | 3.80 | 58.4 | 23.2 | 1.71 | 21.9 | .00 | .01 | .04 | 151 |
| 1 | 169 | | 8.56 | 8.54 | 33.830 | 26.274 | 176.9 | .452 | 3.45 | 52.5 | 29.0 | 1.88 | 24.8 | .00 | .00 | .03 | 170 |
| 1 | 190 | | 8.41 | 8.39 | 33.934 | 26.378 | 167.3 | .488 | 3.42 | 51.9 | 31.2 | 1.90 | 24.9 | .00 | | | 191 |
| | 200 | ISL | 8.20 | 8.18 | 33.946 | 26.419 | 163.6 | .505 | 3.50 | 52.8 | | | | | | | 202 |
| 1 | 211 | | 8.00 | 7.98 | 33.954 | 26.456 | 160.2 | .522 | 3.58 | 53.8 | 33.2 | 1.89 | 25.2 | .00 | | | 212 |
| 1 | 240 | | 8.06 | 8.03 | 34.060 | 26.531 | 153.7 | .567 | 2.38 | 35.8 | 40.5 | 2.25 | 29.2 | .00 | | | 241 |
| | 250 | ISL | 7.94 | 7.91 | 34.074 | 26.560 | 151.1 | .583 | 2.19 | 32.8 | | | | | | | 252 |
| 1 | 281 | | 7.44 | 7.41 | 34.086 | 26.642 | 143.6 | .629 | 1.91 | 28.4 | 48.4 | 2.47 | 32.2 | .00 | | | 283 |
| | 300 | ISL | 7.20 | 7.17 | 34.088 | 26.677 | 140.4 | .656 | 1.78 | 26.2 | | | | | | | 302 |
| 1 | 341 | | 6.73 | 6.70 | 34.089 | 26.742 | 134.6 | .712 | 1.53 | 22.3 | 57.9 | 2.66 | 35.1 | .00 | | | 343 |
| | 400 | ISL | 6.19 | 6.15 | 34.118 | 26.837 | 126.0 | .789 | 1.06 | 15.2 | | | | | | | 403 |
| 1 | 416 | | 6.06 | 6.03 | 34.130 | 26.862 | 123.8 | .809 | .93 | 13.4 | 70.3 | 2.92 | 38.4 | .00 | | | 419 |
| 1 | 494 | | 5.67 | 5.63 | 34.201 | 26.968 | 114.4 | .902 | .54 | 7.7 | 80.2 | 3.10 | 40.2 | .00 | | | 497 |
| | 500 | ISL | 5.64 | 5.59 | 34.206 | 26.976 | 113.7 | .909 | .52 | 7.4 | | | | | | | 504 |
| 1 | 572 | | 5.34 | 5.29 | 34.262 | 27.057 | 106.6 | .988 | .35 | 4.9 | 89.1 | 3.19 | 41.4 | .00 | | | 576 |

RV DAVID STARR JORDAN — CALCOFI CRUISE 8602 — STATION 77 70

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 23.3 N | 122 14.8 W | 19/02/86 | 0924 GMT | 4018 M | 260 | 14 KT | | 6 | 1011.8 MB | 15.3 C | 15.2 C | | |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 13.95 | 13.95 | 32.941 | 24.608 | 332.3 | .000 | 6.04 | 102.6 | | | | | | | 0 |
| 1 | 3 | | 13.95 | 13.95 | 32.941 | 24.608 | 332.2 | .010 | 6.04 | 102.6 | 2.8 | .41 | .0 | .00 | .21 | .10 | 3 |
| | 10 | ISL | 13.94 | 13.94 | 32.945 | 24.613 | 331.9 | .033 | 6.06 | 102.9 | | | | | | | 10 |
| 1 | 13 | | 13.93 | 13.93 | 32.947 | 24.615 | 331.8 | .043 | 6.06 | 102.9 | 2.7 | .41 | .0 | .00 | .22 | .08 | 13 |
| | 20 | ISL | 13.90 | 13.90 | 32.946 | 24.622 | 331.3 | .066 | 6.06 | 102.8 | | | | | | | 20 |
| 1 | 29 | | 13.85 | 13.85 | 32.945 | 24.631 | 330.7 | .096 | 6.05 | 102.6 | 2.7 | .41 | .0 | .00 | .23 | .08 | 29 |
| | 30 | ISL | 13.81 | 13.81 | 32.947 | 24.641 | 329.8 | .099 | 6.05 | 102.5 | | | | | | | 30 |
| 1 | 44 | | 13.21 | 13.21 | 32.970 | 24.780 | 316.9 | .144 | 6.02 | 100.8 | 2.8 | .46 | .5 | .05 | .35 | .19 | 44 |
| | 50 | ISL | 13.10 | 13.09 | 32.987 | 24.816 | 313.6 | .164 | 6.01 | 100.4 | | | | | | | 50 |
| 1 | 60 | | 12.78 | 12.77 | 33.029 | 24.912 | 304.7 | .194 | 6.00 | 99.5 | 3.0 | .52 | 1.2 | .10 | .28 | .22 | 60 |
| 1 | 70 | | 11.93 | 11.92 | 33.108 | 25.135 | 283.6 | .223 | 5.91 | 96.4 | 3.9 | .63 | 3.1 | .08 | .25 | .23 | 70 |
| | 75 | ISL | 11.48 | 11.48 | 33.140 | 25.242 | 273.5 | .238 | 5.76 | 93.1 | | | | | | | 76 |
| 1 | 79 | | 11.24 | 11.23 | 33.164 | 25.306 | 267.5 | .248 | 5.65 | 90.8 | 6.6 | .84 | 6.7 | .03 | .12 | .14 | 79 |
| 1 | 96 | | 11.28 | 11.27 | 33.357 | 25.448 | 254.4 | .292 | 5.21 | 83.9 | 9.8 | 1.05 | 10.4 | .02 | .08 | .13 | 96 |
| | 100 | ISL | 11.08 | 11.06 | 33.363 | 25.490 | 250.5 | .303 | 5.08 | 81.5 | | | | | | | 101 |
| 1 | 110 | | 10.44 | 10.43 | 33.386 | 25.619 | 238.4 | .329 | 4.73 | 74.8 | 13.9 | 1.33 | 14.9 | .02 | .04 | .15 | 111 |
| 1 | 125 | | 9.59 | 9.57 | 33.608 | 25.936 | 208.4 | .362 | 4.01 | 62.3 | 20.1 | 1.59 | 19.9 | .00 | .02 | .05 | 126 |
| | 150 | ISL | 8.75 | 8.74 | 33.772 | 26.198 | 183.8 | .410 | 4.12 | 63.0 | | | | | | | 151 |
| 1 | 151 | | 8.72 | 8.71 | 33.776 | 26.206 | 183.1 | .412 | 4.13 | 63.0 | 24.1 | 1.63 | 21.2 | .00 | .01 | .04 | 152 |
| 1 | 172 | | 8.36 | 8.34 | 33.883 | 26.346 | 170.1 | .449 | 3.74 | 56.6 | 29.3 | 1.80 | 23.8 | .00 | .01 | .02 | 173 |
| 1 | 192 | | 8.28 | 8.27 | 33.960 | 26.418 | 163.6 | .482 | 3.00 | 45.4 | 34.2 | 2.03 | 27.1 | .00 | | | 193 |
| | 200 | ISL | 8.15 | 8.13 | 33.981 | 26.454 | 160.3 | .495 | 2.91 | 43.9 | | | | | | | 202 |
| 1 | 213 | | 7.92 | 7.90 | 34.007 | 26.510 | 155.1 | .516 | 2.85 | 42.8 | 38.4 | 2.12 | 28.3 | .00 | | | 214 |
| 1 | 243 | | 7.59 | 7.56 | 34.032 | 26.577 | 149.1 | .561 | 2.45 | 36.5 | 43.6 | 2.28 | 30.3 | .00 | | | 244 |
| | 250 | ISL | 7.51 | 7.49 | 34.035 | 26.591 | 147.8 | .572 | 2.37 | 35.3 | | | | | | | 252 |
| 1 | 283 | | 7.16 | 7.13 | 34.049 | 26.652 | 142.5 | .620 | 2.06 | 30.4 | 49.9 | 2.44 | 32.4 | .00 | | | 285 |
| | 300 | ISL | 6.97 | 6.94 | 34.059 | 26.686 | 139.4 | .644 | 1.86 | 27.3 | | | | | | | 302 |
| 1 | 345 | | 6.51 | 6.47 | 34.088 | 26.771 | 131.6 | .705 | 1.36 | 19.8 | 61.6 | 2.75 | 36.2 | .00 | | | 347 |
| | 400 | ISL | 6.13 | 6.09 | 34.120 | 26.846 | 125.1 | .775 | 1.02 | 14.7 | | | | | | | 403 |
| 1 | 421 | | 6.01 | 5.97 | 34.132 | 26.871 | 122.9 | .802 | .93 | 13.4 | 71.1 | 2.96 | 38.8 | .00 | | | 424 |
| 1 | 497 | | 5.49 | 5.45 | 34.185 | 26.977 | 113.4 | .891 | .56 | 7.9 | 82.9 | 3.12 | 40.7 | .00 | | | 500 |
| | 500 | ISL | 5.47 | 5.43 | 34.188 | 26.981 | 113.0 | .895 | .55 | 7.8 | | | | | | | 504 |
| 1 | 573 | | 5.20 | 5.16 | 34.269 | 27.078 | 104.5 | .974 | .35 | 4.9 | 90.8 | 3.22 | 41.7 | .00 | | | 577 |

RV DAVID STARR JORDAN | CALCOFI CRUISE 8602 | STATION 77 80

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 03.3 N | 122 56.1 W | 19/02/86 | 0438 GMT | 4305 M | 190 | 22 KT | | 4 | 1012.0 MB | 15.0 C | 15.0 C | 7/8 | ST |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 14.26 | 14.26 | 33.068 | 24.640 | 329.0 | .000 | 5.95 | 101.8 | | | | | | | 0 |
| 1 | 1 | | 14.26 | 14.26 | 33.068 | 24.640 | 329.0 | .003 | 5.95 | 101.8 | 2.3 | .38 | .0 | .00 | .15 | .07 | 1 |
| | 10 | ISL | 14.26 | 14.26 | 33.068 | 24.641 | 329.3 | .033 | 5.99 | 102.5 | | | | | | | 10 |
| 1 | 11 | | 14.26 | 14.26 | 33.068 | 24.641 | 329.3 | .036 | 5.99 | 102.5 | 2.3 | .40 | .0 | .00 | .17 | .06 | 11 |
| | 20 | ISL | 14.25 | 14.25 | 33.066 | 24.642 | 329.2 | .066 | 5.99 | 102.5 | | | | | | | 20 |
| 1 | 27 | | 14.23 | 14.22 | 33.065 | 24.647 | 329.2 | .089 | 5.99 | 102.4 | 2.3 | .38 | .0 | .00 | .18 | .07 | 27 |
| | 30 | ISL | 14.20 | 14.20 | 33.062 | 24.650 | 328.9 | .099 | 5.99 | 102.4 | | | | | | | 30 |
| 1 | 42 | | 14.10 | 14.10 | 33.053 | 24.664 | 327.9 | .138 | 5.99 | 102.2 | 2.4 | .39 | .0 | .00 | .22 | .09 | 42 |
| | 50 | ISL | 13.81 | 13.80 | 33.091 | 24.753 | 319.7 | .164 | 6.01 | 101.9 | | | | | | | 50 |
| 1 | 58 | | 13.26 | 13.26 | 33.124 | 24.889 | 306.9 | .188 | 6.03 | 101.1 | 3.2 | .45 | .5 | .07 | .40 | .21 | 58 |
| 1 | 68 | | 11.98 | 11.97 | 33.121 | 25.136 | 283.5 | .218 | 5.87 | 95.8 | 5.1 | .68 | 4.0 | .13 | .23 | .20 | 68 |
| | 75 | ISL | 11.64 | 11.63 | 33.196 | 25.257 | 272.2 | .238 | 5.73 | 92.9 | | | | | | | 76 |
| 1 | 78 | | 11.58 | 11.57 | 33.226 | 25.292 | 268.8 | .245 | 5.67 | 91.8 | 6.5 | .84 | 6.8 | .05 | .15 | .18 | 78 |
| 1 | 94 | | 10.86 | 10.85 | 33.311 | 25.488 | 250.5 | .286 | 5.24 | 83.6 | 8.5 | 1.01 | 9.9 | .02 | .05 | .08 | 94 |
| | 100 | ISL | 10.59 | 10.58 | 33.379 | 25.588 | 241.1 | .302 | 5.03 | 79.9 | | | | | | | 101 |
| 1 | 108 | | 10.24 | 10.23 | 33.469 | 25.718 | 228.8 | .322 | 4.78 | 75.3 | 12.7 | 1.20 | 13.8 | .01 | .03 | .04 | 109 |
| 1 | 124 | | 9.60 | 9.59 | 33.562 | 25.898 | 212.0 | .357 | 4.50 | 69.9 | 16.6 | 1.40 | 16.9 | .00 | .01 | .03 | 125 |
| | 125 | ISL | 9.58 | 9.57 | 33.568 | 25.906 | 211.3 | .359 | 4.47 | 69.4 | | | | | | | 126 |
| 1 | 149 | | 9.00 | 8.98 | 33.779 | 26.166 | 186.9 | .407 | 3.36 | 51.6 | 27.2 | 1.86 | 24.2 | .00 | .01 | .03 | 150 |
| | 150 | ISL | 8.98 | 8.96 | 33.784 | 26.173 | 186.3 | .408 | 3.36 | 51.5 | | | | | | | 151 |
| 1 | 170 | | 8.52 | 8.51 | 33.883 | 26.321 | 172.4 | .444 | 3.32 | 50.5 | 30.3 | 1.90 | 25.2 | .00 | .00 | .02 | 171 |
| 1 | 190 | | 8.20 | 8.19 | 33.927 | 26.404 | 164.9 | .478 | 3.52 | 53.1 | 32.1 | 1.89 | 25.1 | .00 | | | 191 |
| | 200 | ISL | 8.06 | 8.04 | 33.948 | 26.442 | 161.4 | .494 | 3.50 | 52.6 | | | | | | | 202 |
| 1 | 211 | | 7.90 | 7.88 | 33.966 | 26.480 | 157.9 | .511 | 3.47 | 52.0 | 34.9 | 1.94 | 26.0 | .00 | | | 212 |
| 1 | 242 | | 7.30 | 7.28 | 33.974 | 26.572 | 149.4 | .559 | 3.08 | 45.5 | 41.7 | 2.12 | 28.7 | .00 | | | 243 |
| | 250 | ISL | 7.21 | 7.19 | 33.986 | 26.594 | 147.4 | .571 | 2.91 | 43.0 | | | | | | | 252 |
| 1 | 282 | | 6.96 | 6.94 | 34.035 | 26.667 | 140.8 | .618 | 2.25 | 33.0 | 51.1 | 2.42 | 32.2 | .00 | | | 284 |
| | 300 | ISL | 6.81 | 6.78 | 34.047 | 26.698 | 138.1 | .642 | 2.02 | 29.5 | | | | | | | 302 |
| 1 | 344 | | 6.39 | 6.36 | 34.061 | 26.765 | 132.2 | .702 | 1.61 | 23.3 | 61.4 | 2.68 | 35.7 | .00 | | | 346 |
| | 400 | ISL | 5.77 | 5.74 | 34.080 | 26.858 | 123.6 | .774 | 1.20 | 17.1 | | | | | | | 403 |
| 1 | 421 | | 5.57 | 5.54 | 34.091 | 26.891 | 120.5 | .799 | 1.06 | 15.1 | 75.7 | 2.94 | 39.1 | .00 | | | 424 |
| 1 | 498 | | 5.38 | 5.34 | 34.183 | 26.988 | 112.1 | .888 | .54 | 7.6 | 84.9 | 3.12 | 40.9 | .00 | | | 501 |
| | 500 | ISL | 5.37 | 5.33 | 34.187 | 26.992 | 111.9 | .891 | .53 | 7.5 | | | | | | | 504 |
| 1 | 575 | | 5.11 | 5.07 | 34.283 | 27.099 | 102.3 | .971 | .30 | 4.2 | 93.9 | 3.24 | 41.9 | .00 | | | 579 |

RV DAVID STARR JORDAN | CALCOFI CRUISE 8602 | STATION 77 90

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 43.1 N | 123 37.9 W | 18/02/86 | 2338 GMT | 4305 M | 190 | 18 KT | 200 04 07 | 2 | 1013.3 MB | 16.0 C | 15.3 C | 8/8 | ST |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | | 15.22 | 15.22 | 33.130 | 24.483 | 344.0 | .000 | 5.85 | 102.1 | 2.3 | .37 | .1 | .00 | .07 | .03 | 0 |
| 1 | 10 | | 15.13 | 15.13 | 33.119 | 24.494 | 343.2 | .034 | 5.90 | 102.8 | 2.3 | .37 | .1 | .00 | .08 | .03 | 10 |
| | 20 | ISL | 15.05 | 15.05 | 33.107 | 24.503 | 342.7 | .069 | 5.89 | 102.5 | | | | | | | 20 |
| 1 | 26 | | 15.00 | 15.00 | 33.106 | 24.514 | 341.9 | .089 | 5.89 | 102.3 | 2.3 | .39 | .0 | .00 | .10 | .04 | 26 |
| | 30 | ISL | 14.96 | 14.96 | 33.108 | 24.524 | 341.0 | .103 | 5.89 | 102.3 | | | | | | | 30 |
| 1 | 41 | | 14.86 | 14.85 | 33.154 | 24.582 | 335.8 | .140 | 5.89 | 102.1 | 2.3 | .40 | .0 | .00 | .17 | .06 | 41 |
| | 50 | ISL | 14.43 | 14.42 | 33.167 | 24.684 | 326.4 | .170 | 5.95 | 102.3 | | | | | | | 50 |
| 1 | 56 | | 14.09 | 14.08 | 33.184 | 24.768 | 318.4 | .188 | 5.98 | 102.0 | 2.4 | .40 | .0 | .00 | .32 | .22 | 56 |
| 1 | 67 | | 13.47 | 13.46 | 33.279 | 24.968 | 299.6 | .222 | 5.92 | 99.8 | 2.8 | .48 | .7 | .19 | .31 | .25 | 67 |
| | 75 | ISL | 13.24 | 13.23 | 33.333 | 25.057 | 291.4 | .247 | 5.82 | 97.6 | | | | | | | 76 |
| 1 | 78 | | 13.18 | 13.17 | 33.345 | 25.077 | 289.5 | .255 | 5.78 | 96.9 | 3.4 | .55 | 2.2 | .12 | .21 | .20 | 78 |
| 1 | 93 | | 12.88 | 12.86 | 33.371 | 25.159 | 282.2 | .297 | 5.64 | 94.0 | 3.7 | .64 | 3.6 | .02 | .14 | .15 | 93 |
| | 100 | ISL | 12.36 | 12.35 | 33.339 | 25.234 | 275.1 | .318 | 5.53 | 91.1 | | | | | | | 101 |
| 1 | 109 | | 11.67 | 11.66 | 33.326 | 25.353 | 263.8 | .341 | 5.30 | 86.0 | 6.5 | .85 | 7.2 | .01 | .08 | .10 | 109 |
| 1 | 123 | | 10.73 | 10.72 | 33.495 | 25.654 | 235.4 | .378 | 4.47 | 71.2 | 13.1 | 1.29 | 14.7 | .00 | .03 | .05 | 124 |
| | 125 | ISL | 10.66 | 10.64 | 33.506 | 25.676 | 233.3 | .382 | 4.42 | 70.3 | | | | | | | 126 |
| 1 | 149 | | 9.87 | 9.85 | 33.652 | 25.925 | 210.0 | .436 | 3.84 | 60.1 | 19.3 | 1.60 | 19.9 | .00 | .01 | .03 | 150 |
| | 150 | ISL | 9.86 | 9.84 | 33.658 | 25.931 | 209.5 | .437 | 3.81 | 59.6 | | | | | | | 151 |
| 1 | 170 | | 9.62 | 9.60 | 33.808 | 26.088 | 194.9 | .478 | 3.14 | 48.9 | 24.9 | 1.86 | 23.5 | .00 | .01 | .03 | 171 |
| 1 | 190 | | 9.16 | 9.14 | 33.925 | 26.255 | 179.4 | .515 | 2.79 | 43.0 | 30.0 | 2.03 | 25.8 | .00 | | | 191 |
| | 200 | ISL | 8.99 | 8.97 | 33.961 | 26.310 | 174.3 | .533 | 2.67 | 41.1 | | | | | | | 201 |
| 1 | 211 | | 8.82 | 8.80 | 33.990 | 26.359 | 169.8 | .551 | 2.58 | 39.5 | 33.2 | 2.12 | 27.2 | .00 | | | 212 |
| 1 | 242 | | 8.30 | 8.28 | 34.049 | 26.486 | 158.1 | .602 | 2.41 | 36.5 | 38.3 | 2.22 | 28.9 | .00 | | | 243 |
| | 250 | ISL | 8.22 | 8.19 | 34.065 | 26.511 | 155.8 | .615 | 2.31 | 34.9 | | | | | | | 252 |
| 1 | 283 | | 7.91 | 7.89 | 34.117 | 26.597 | 148.1 | .666 | 1.86 | 27.9 | 45.5 | 2.45 | 31.4 | .00 | | | 285 |
| | 300 | ISL | 7.65 | 7.62 | 34.116 | 26.636 | 144.3 | .690 | 1.72 | 25.7 | | | | | | | 302 |
| 1 | 344 | | 6.93 | 6.90 | 34.114 | 26.735 | 135.4 | .751 | 1.44 | 21.1 | 57.2 | 2.70 | 35.1 | .00 | | | 346 |
| | 400 | ISL | 6.42 | 6.38 | 34.138 | 26.823 | 127.5 | .825 | 1.06 | 15.3 | | | | | | | 403 |
| 1 | 421 | | 6.28 | 6.25 | 34.149 | 26.849 | 125.3 | .852 | .93 | 13.4 | 67.9 | 2.93 | 38.0 | .00 | | | 424 |
| 1 | 498 | | 5.89 | 5.84 | 34.185 | 26.929 | 118.4 | .945 | .67 | 9.6 | 76.1 | 3.06 | 39.9 | .00 | | | 501 |
| | 500 | ISL | 5.87 | 5.83 | 34.187 | 26.932 | 118.2 | .948 | .66 | 9.5 | | | | | | | 504 |
| 1 | 574 | | 5.45 | 5.40 | 34.252 | 27.035 | 108.8 | 1.032 | .41 | 5.8 | 85.6 | 3.19 | 41.3 | .00 | | | 578 |

RV DAVID STARR JORDAN — CALCOFI CRUISE 8602 — STATION 77 100

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 23.5 N | 124 19.2 W | 18/02/86 | 1839 GMT | 4688 M | 170 | 15 KT | 220 06 08 | 2 | 1017.1 MB | 15.5 C | 15.5 C | 8/8 ST |

| CAST | DEPTH M | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 ISL | 14.51 | 14.51 | 33.025 | 24.555 | 337.4 | .000 | 5.91 | 101.6 | | | | | | | 0 |
| 1 | 1 | 14.51 | 14.51 | 33.025 | 24.555 | 337.2 | .003 | 5.91 | 101.6 | 2.2 | .39 | .0 | .00 | .13 | .05 | 1 |
| | 10 ISL | 14.44 | 14.44 | 33.025 | 24.571 | 335.9 | .034 | 5.96 | 102.3 | | | | | | | 10 |
| 1 | 11 | 14.43 | 14.43 | 33.025 | 24.572 | 335.9 | .037 | 5.96 | 102.3 | 2.2 | .39 | .0 | .00 | .13 | .05 | 11 |
| | 20 ISL | 14.44 | 14.44 | 33.025 | 24.570 | 336.4 | .067 | 5.95 | 102.3 | | | | | | | 20 |
| 1 | 27 | 14.45 | 14.45 | 33.025 | 24.569 | 336.6 | .090 | 5.95 | 102.2 | 2.1 | .39 | .0 | .00 | .13 | .05 | 27 |
| | 30 ISL | 14.43 | 14.42 | 33.022 | 24.571 | 336.4 | .101 | 5.95 | 102.2 | | | | | | | 30 |
| 1 | 42 | 14.23 | 14.23 | 33.022 | 24.612 | 332.9 | .141 | 5.96 | 101.9 | 2.1 | .39 | .0 | .00 | .22 | .10 | 42 |
| | 50 ISL | 14.06 | 14.05 | 33.048 | 24.669 | 325.1 | .167 | 5.97 | 101.6 | | | | | | | 50 |
| 1 | 58 | 13.63 | 13.62 | 33.072 | 24.776 | 317.7 | .192 | 5.97 | 100.8 | 2.6 | .44 | .4 | .04 | .33 | .23 | 58 |
| 1 | 67 | 12.52 | 12.52 | 33.231 | 25.118 | 285.3 | .219 | 5.93 | 98.0 | 2.9 | .53 | 1.6 | .05 | .22 | .27 | 67 |
| | 75 ISL | 12.45 | 12.44 | 33.324 | 25.204 | 277.4 | .243 | 5.86 | 96.7 | | | | | | | 76 |
| 1 | 78 | 12.43 | 12.42 | 33.326 | 25.210 | 276.8 | .250 | 5.83 | 96.2 | 2.9 | .52 | 1.8 | .04 | .14 | .25 | 78 |
| 1 | 94 | 11.15 | 11.14 | 33.208 | 25.356 | 263.1 | .293 | 5.54 | 88.9 | 6.6 | .89 | 7.6 | .01 | .09 | .13 | 94 |
| | 100 ISL | 10.96 | 10.95 | 33.234 | 25.411 | 258.0 | .310 | 5.40 | 86.3 | | | | | | | 101 |
| 1 | 109 | 10.76 | 10.75 | 33.302 | 25.498 | 249.9 | .331 | 5.15 | 82.0 | 9.5 | 1.08 | 11.1 | .00 | .05 | .08 | 109 |
| 1 | 124 | 9.94 | 9.93 | 33.459 | 25.761 | 225.1 | .369 | 4.39 | 68.7 | 17.2 | 1.51 | 18.2 | .00 | .02 | .05 | 125 |
| | 125 ISL | 9.92 | 9.91 | 33.465 | 25.769 | 224.3 | .370 | 4.36 | 68.2 | | | | | | | 126 |
| 1 | 149 | 9.30 | 9.29 | 33.703 | 26.057 | 197.3 | .422 | 3.52 | 54.4 | 24.0 | 1.81 | 23.4 | .00 | .00 | .03 | 150 |
| | 150 ISL | 9.28 | 9.27 | 33.707 | 26.063 | 196.7 | .423 | 3.53 | 54.5 | | | | | | | 151 |
| 1 | 170 | 8.83 | 8.82 | 33.803 | 26.210 | 183.1 | .461 | 3.70 | 56.6 | 26.2 | 1.77 | 23.4 | .00 | .00 | .02 | 171 |
| 1 | 191 | 8.50 | 8.48 | 33.897 | 26.336 | 171.4 | .498 | 4.37 | 66.4 | 25.1 | 1.58 | 21.1 | .00 | | | 192 |
| | 200 ISL | 8.32 | 8.30 | 33.925 | 26.386 | 166.8 | .513 | 4.28 | 64.8 | | | | | | | 201 |
| 1 | 211 | 8.11 | 8.09 | 33.952 | 26.438 | 161.9 | .531 | 4.05 | 61.0 | 30.2 | 1.73 | 23.4 | .00 | | | 212 |
| 1 | 242 | 7.76 | 7.74 | 33.992 | 26.521 | 154.5 | .580 | 3.60 | 53.8 | 36.1 | 1.90 | 25.8 | .00 | | | 243 |
| | 250 ISL | 7.66 | 7.64 | 33.997 | 26.539 | 152.9 | .593 | 3.45 | 51.5 | | | | | | | 252 |
| 1 | 282 | 7.30 | 7.28 | 34.009 | 26.600 | 147.4 | .641 | 2.85 | 42.2 | 43.5 | 2.19 | 29.7 | .00 | | | 284 |
| | 300 ISL | 7.14 | 7.11 | 34.022 | 26.633 | 144.5 | .667 | 2.53 | 37.2 | | | | | | | 302 |
| 1 | 344 | 6.75 | 6.72 | 34.056 | 26.713 | 137.3 | .729 | 1.82 | 26.6 | 55.4 | 2.57 | 34.5 | .00 | | | 346 |
| | 400 ISL | 6.16 | 6.12 | 34.084 | 26.814 | 128.2 | .803 | 1.27 | 18.3 | | | | | | | 403 |
| 1 | 420 | 5.95 | 5.92 | 34.094 | 26.847 | 125.0 | .829 | 1.13 | 16.2 | 69.4 | 2.88 | 38.4 | .00 | | | 423 |
| 1 | 497 | 5.49 | 5.45 | 34.161 | 26.957 | 115.2 | .921 | .65 | 9.2 | 81.1 | 3.09 | 40.7 | .00 | | | 500 |
| | 500 ISL | 5.47 | 5.43 | 34.163 | 26.962 | 114.8 | .925 | .64 | 9.0 | | | | | | | 504 |
| 1 | 573 | 4.99 | 4.95 | 34.201 | 27.048 | 106.9 | 1.006 | .48 | 6.7 | 92.2 | 3.18 | 42.0 | .00 | | | 577 |

RV DAVID STARR JORDAN — CALCOFI CRUISE 8602 — STATION 80 51

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 27.0 N | 120 31.6 W | 17/02/86 | 0828 GMT | 79 M | 150 | 12 KT | | | 1020.8 MB | 14.2 C | 14.0 C | |

| CAST | DEPTH M | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 ISL | 13.65 | 13.64 | 33.085 | 24.781 | 322.6 | .000 | 6.05 | 102.3 | | | | | | | 0 |
| 1 | 2 | 13.65 | 13.64 | 33.085 | 24.781 | 315.7 | .006 | 6.05 | 102.3 | 4.1 | .71 | 1.4 | .12 | 1.03 | .37 | 2 |
| | 10 ISL | 13.37 | 13.37 | 33.285 | 24.991 | 295.9 | .031 | 6.03 | 101.5 | | | | | | | 10 |
| 1 | 12 | 13.33 | 13.33 | 33.314 | 25.022 | 293.0 | .037 | 6.03 | 101.4 | 2.8 | .49 | 1.1 | .09 | 1.20 | .37 | 12 |
| | 20 ISL | 13.29 | 13.29 | 33.324 | 25.038 | 291.7 | .060 | 6.01 | 101.0 | | | | | | | 20 |
| 1 | 23 | 13.28 | 13.27 | 33.328 | 25.044 | 291.2 | .069 | 6.00 | 100.8 | 2.7 | .49 | 1.1 | .08 | 1.05 | .53 | 23 |
| | 30 ISL | 13.21 | 13.21 | 33.335 | 25.062 | 289.7 | .089 | 5.94 | 99.7 | | | | | | | 30 |
| 1 | 33 | 13.19 | 13.19 | 33.338 | 25.069 | 289.1 | .097 | 5.92 | 99.3 | 2.8 | .54 | 1.2 | .09 | 1.18 | .61 | 33 |
| 1 | 44 | 13.18 | 13.17 | 33.346 | 25.078 | 288.6 | .129 | 5.90 | 98.9 | 3.3 | .55 | 1.5 | .11 | 1.03 | .61 | 44 |
| | 50 ISL | 13.09 | 13.08 | 33.379 | 25.122 | 284.5 | .147 | 5.78 | 96.7 | | | | | | | 50 |
| 1 | 54 | 13.00 | 12.99 | 33.410 | 25.164 | 280.7 | .157 | 5.67 | 94.7 | 4.3 | .67 | 2.9 | .19 | .80 | .71 | 54 |

RV DAVID STARR JORDAN — CALCOFI CRUISE 8602 — STATION 80 55

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 19.3 N | 120 47.7 W | 17/02/86 | 1106 GMT | 849 M | 170 | 13 KT | | | 1020.2 MB | 13.8 C | 13.8 C | |

| CAST | DEPTH M | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 ISL | 13.64 | 13.64 | 32.964 | 24.688 | 324.3 | .000 | 6.12 | 103.4 | | | | | | | 0 |
| 1 | 3 | 13.64 | 13.64 | 32.964 | 24.688 | 324.6 | .010 | 6.12 | 103.4 | 3.2 | .45 | .4 | .03 | .87 | .39 | 3 |
| | 10 ISL | 13.48 | 13.48 | 32.968 | 24.723 | 322.3 | .032 | 6.15 | 103.5 | | | | | | | 10 |
| 1 | 13 | 13.42 | 13.42 | 32.969 | 24.737 | 320.2 | .042 | 6.16 | 103.6 | 3.2 | .45 | .4 | .03 | 1.25 | .51 | 13 |
| | 20 ISL | 13.33 | 13.33 | 33.069 | 24.833 | 311.3 | .064 | 6.11 | 102.6 | | | | | | | 20 |
| 1 | 29 | 13.11 | 13.10 | 33.218 | 24.993 | 296.2 | .091 | 5.93 | 99.2 | 4.3 | .54 | 2.3 | .10 | .99 | .55 | 29 |
| | 30 ISL | 13.03 | 13.03 | 33.229 | 25.016 | 294.1 | .094 | 5.89 | 98.3 | | | | | | | 30 |
| 1 | 44 | 12.02 | 12.01 | 33.337 | 25.296 | 267.7 | .133 | 5.26 | 86.0 | 7.3 | .86 | 7.5 | .23 | .25 | .22 | 44 |
| | 50 ISL | 11.62 | 11.61 | 33.392 | 25.413 | 256.8 | .149 | 4.96 | 80.5 | | | | | | | 50 |
| 1 | 59 | 11.15 | 11.15 | 33.452 | 25.545 | 244.4 | .171 | 4.63 | 74.4 | 11.2 | 1.16 | 12.6 | .10 | .12 | .14 | 59 |
| 1 | 70 | 10.78 | 10.77 | 33.466 | 25.622 | 237.2 | .198 | 4.55 | 72.5 | 12.4 | 1.25 | 14.1 | .09 | .08 | .12 | 70 |
| | 75 ISL | 10.60 | 10.59 | 33.496 | 25.677 | 232.0 | .210 | 4.38 | 69.6 | | | | | | | 76 |
| 1 | 79 | 10.49 | 10.48 | 33.521 | 25.716 | 228.4 | .218 | 4.26 | 67.5 | 14.5 | 1.37 | 16.4 | .05 | .05 | .11 | 79 |
| 1 | 95 | 10.20 | 10.19 | 33.609 | 25.835 | 217.5 | .254 | 3.93 | 61.9 | 17.6 | 1.53 | 18.7 | .02 | .04 | .08 | 95 |
| | 100 ISL | 10.03 | 10.02 | 33.639 | 25.886 | 212.7 | .266 | 3.80 | 59.7 | | | | | | | 101 |
| 1 | 109 | 9.74 | 9.72 | 33.695 | 25.979 | 204.0 | .285 | 3.58 | 55.9 | 21.4 | 1.69 | 21.5 | .01 | .02 | .08 | 110 |
| 1 | 125 | 9.33 | 9.32 | 33.805 | 26.132 | 189.8 | .317 | 3.21 | 49.7 | 25.4 | 1.87 | 23.8 | .12 | .02 | .05 | 126 |
| 1 | 150 | 8.49 | 8.48 | 33.858 | 26.305 | 173.5 | .362 | 3.28 | 49.8 | 29.1 | 1.94 | 25.3 | .05 | .01 | .04 | 151 |
| 1 | 170 | 8.48 | 8.46 | 33.903 | 26.344 | 170.3 | .396 | 3.17 | 48.1 | 30.5 | 1.95 | 26.0 | .04 | .00 | .04 | 171 |
| 1 | 190 | 8.41 | 8.39 | 33.961 | 26.399 | 165.4 | .429 | 2.92 | 44.3 | 33.4 | 2.04 | 27.2 | .04 | | | 191 |
| | 200 ISL | 8.36 | 8.34 | 33.990 | 26.431 | 162.6 | .446 | 2.76 | 41.8 | | | | | | | 202 |
| 1 | 210 | 8.29 | 8.26 | 34.014 | 26.460 | 159.9 | .462 | 2.61 | 39.5 | 36.9 | 2.16 | 28.4 | .02 | | | 211 |
| 1 | 240 | 7.99 | 7.96 | 34.042 | 26.527 | 154.0 | .508 | 2.42 | 36.4 | 40.6 | 2.25 | 29.6 | .01 | | | 241 |
| | 250 ISL | 7.91 | 7.88 | 34.065 | 26.557 | 151.3 | .524 | 2.23 | 33.5 | | | | | | | 252 |
| 1 | 278 | 7.70 | 7.67 | 34.130 | 26.639 | 143.9 | .566 | 1.68 | 25.1 | 48.5 | 2.52 | 32.3 | .00 | | | 280 |
| | 300 ISL | 7.48 | 7.45 | 34.151 | 26.687 | 139.6 | .597 | 1.44 | 21.5 | | | | | | | 302 |
| 1 | 338 | 7.11 | 7.08 | 34.170 | 26.755 | 133.6 | .649 | 1.18 | 17.4 | 57.5 | 2.75 | 35.2 | .00 | | | 340 |
| | 400 ISL | 6.72 | 6.69 | 34.209 | 26.838 | 126.4 | .729 | .81 | 11.8 | | | | | | | 403 |
| 1 | 411 | 6.67 | 6.63 | 34.215 | 26.850 | 125.4 | .744 | .76 | 11.1 | 65.7 | 2.93 | 37.4 | .00 | | | 414 |
| 1 | 486 | 6.35 | 6.31 | 34.257 | 26.926 | 119.0 | .834 | .53 | 7.7 | 71.9 | 3.05 | 38.9 | .00 | | | 489 |
| | 500 ISL | 6.27 | 6.23 | 34.262 | 26.941 | 117.8 | .851 | .50 | 7.2 | | | | | | | 504 |
| 1 | 560 | 5.88 | 5.84 | 34.273 | 26.999 | 112.6 | .921 | .41 | 5.9 | 79.6 | 3.14 | 40.3 | .00 | | | 564 |

RV DAVID STARR JORDAN — CALCOFI CRUISE 8602 — STATION 80 60

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 09.0 N | 121 08.8 W | 17/02/86 | 1446 GMT | 2227 M | 170 | 16 KT | 240 06 09 | 2 | 1019.8 MB | 14.2 C | 14.0 C | 8/8 | ST |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 14.36 | 14.36 | 33.087 | 24.634 | 329.6 | .000 | 5.94 | 101.9 | | | | | | | 0 |
| 1 | 1 | | 14.36 | 14.36 | 33.087 | 24.634 | 329.6 | .003 | 5.94 | 101.9 | 2.5 | .39 | .1 | .00 | .15 | .06 | 1 |
| 1 | 10 | | 14.34 | 14.34 | 33.086 | 24.638 | 329.6 | .033 | 6.00 | 102.9 | 2.5 | .38 | .1 | .00 | .14 | .06 | 10 |
| | 20 | ISL | 14.24 | 14.24 | 33.078 | 24.653 | 328.4 | .066 | 5.99 | 102.4 | | | | | | | 20 |
| 1 | 26 | | 14.17 | 14.17 | 33.073 | 24.665 | 327.5 | .085 | 5.98 | 102.2 | 2.5 | .39 | .1 | .00 | .16 | .07 | 26 |
| | 30 | ISL | 14.15 | 14.14 | 33.072 | 24.669 | 327.1 | .099 | 5.98 | 102.1 | | | | | | | 30 |
| 1 | 41 | | 14.06 | 14.06 | 33.071 | 24.685 | 325.9 | .134 | 5.98 | 101.9 | 2.4 | .39 | .1 | .00 | .20 | .10 | 41 |
| | 50 | ISL | 13.89 | 13.88 | 33.060 | 24.714 | 323.4 | .164 | 5.98 | 101.5 | | | | | | | 50 |
| 1 | 57 | | 13.75 | 13.75 | 33.052 | 24.735 | 321.6 | .186 | 5.98 | 101.3 | 2.6 | .42 | .3 | .02 | .31 | .16 | 57 |
| 1 | 67 | | 12.91 | 12.90 | 33.061 | 24.911 | 304.9 | .217 | 5.96 | 99.2 | 2.9 | .51 | 1.4 | .07 | .28 | .20 | 67 |
| | 75 | ISL | 11.60 | 11.59 | 33.182 | 25.254 | 272.4 | .241 | 5.69 | 92.2 | | | | | | | 76 |
| 1 | 77 | | 11.35 | 11.34 | 33.212 | 25.323 | 265.8 | .245 | 5.63 | 90.7 | 5.2 | .76 | 5.7 | .02 | .09 | .12 | 77 |
| 1 | 94 | | 11.03 | 11.02 | 33.403 | 25.529 | 246.6 | .288 | 5.14 | 82.3 | 7.9 | .94 | 9.4 | .02 | .04 | .06 | 94 |
| | 100 | ISL | 10.95 | 10.94 | 33.442 | 25.574 | 242.5 | .304 | 5.08 | 81.2 | | | | | | | 101 |
| 1 | 108 | | 10.77 | 10.76 | 33.484 | 25.638 | 236.6 | .325 | 4.95 | 78.9 | 9.8 | 1.04 | 11.2 | .02 | .03 | .05 | 109 |
| 1 | 124 | | 9.95 | 9.93 | 33.585 | 25.859 | 215.8 | .360 | 4.16 | 65.2 | 17.4 | 1.47 | 18.1 | .01 | .01 | .03 | 125 |
| | 125 | ISL | 9.92 | 9.91 | 33.589 | 25.866 | 215.1 | .362 | 4.14 | 64.8 | | | | | | | 126 |
| 1 | 150 | | 9.22 | 9.20 | 33.753 | 26.110 | 192.3 | .413 | 3.54 | 54.6 | 23.9 | 1.76 | 22.7 | .00 | .00 | .02 | 151 |
| 1 | 170 | | 9.03 | 9.01 | 33.876 | 26.237 | 180.6 | .450 | 3.07 | 47.2 | 28.5 | 1.91 | 25.1 | .00 | .00 | .03 | 171 |
| 1 | 191 | | 8.80 | 8.78 | 33.954 | 26.335 | 171.7 | .487 | 2.86 | 43.8 | 31.7 | 2.03 | 26.1 | .00 | | | 192 |
| | 200 | ISL | 8.72 | 8.70 | 33.974 | 26.363 | 169.2 | .502 | 2.81 | 42.9 | | | | | | | 202 |
| 1 | 211 | | 8.62 | 8.60 | 33.992 | 26.392 | 166.5 | .521 | 2.75 | 41.9 | 33.6 | 2.08 | 27.0 | .00 | | | 212 |
| 1 | 242 | | 8.21 | 8.18 | 34.041 | 26.494 | 157.3 | .570 | 2.53 | 38.2 | 38.0 | 2.18 | 28.8 | .00 | | | 243 |
| | 250 | ISL | 8.10 | 8.08 | 34.049 | 26.515 | 155.4 | .584 | 2.47 | 37.3 | | | | | | | 252 |
| 1 | 282 | | 7.76 | 7.73 | 34.076 | 26.588 | 148.9 | .633 | 2.21 | 33.0 | 43.7 | 2.35 | 30.7 | .00 | | | 284 |
| | 300 | ISL | 7.66 | 7.63 | 34.100 | 26.622 | 146.0 | .659 | 1.98 | 29.6 | | | | | | | 302 |
| 1 | 344 | | 7.45 | 7.41 | 34.159 | 26.698 | 139.3 | .721 | 1.40 | 20.8 | 52.6 | 2.65 | 33.8 | .00 | | | 346 |
| | 400 | ISL | 6.95 | 6.91 | 34.211 | 26.809 | 129.3 | .797 | .89 | 13.0 | | | | | | | 403 |
| 1 | 420 | | 6.76 | 6.72 | 34.226 | 26.848 | 125.8 | .823 | .75 | 11.0 | 65.5 | 2.92 | 37.0 | .00 | | | 423 |
| 1 | 497 | | 6.14 | 6.09 | 34.270 | 26.964 | 115.4 | .915 | .45 | 6.5 | 76.6 | 3.07 | 39.4 | .00 | | | 500 |
| | 500 | ISL | 6.11 | 6.07 | 34.272 | 26.969 | 115.0 | .919 | .44 | 6.3 | | | | | | | 504 |
| 1 | 572 | | 5.63 | 5.58 | 34.306 | 27.057 | 107.0 | .998 | .32 | 4.6 | 85.7 | 3.19 | 40.9 | .00 | | | 576 |

RV DAVID STARR JORDAN — CALCOFI CRUISE 8602 — STATION 80 70

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 48.9 N | 121 50.5 W | 17/02/86 | 2019 GMT | 3686 M | 170 | 15 KT | 190 06 08 | 4 | 1020.0 MB | 14.8 C | 14.6 C | | |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 14.10 | 14.10 | 33.160 | 24.746 | 326.5 | .000 | 6.06 | 103.4 | | | | | | | 0 |
| 1 | 2 | | 14.10 | 14.10 | 33.160 | 24.746 | 319.0 | .006 | 6.06 | 103.4 | 2.6 | .41 | .4 | .02 | .58 | .19 | 2 |
| | 10 | ISL | 13.39 | 13.39 | 33.287 | 24.990 | 296.0 | .031 | 6.08 | 102.3 | | | | | | | 10 |
| 1 | 12 | | 13.27 | 13.27 | 33.311 | 25.032 | 292.1 | .037 | 6.08 | 102.1 | 3.4 | .53 | 1.4 | .07 | .95 | .33 | 12 |
| | 20 | ISL | 13.19 | 13.19 | 33.337 | 25.068 | 288.8 | .060 | 6.05 | 101.5 | | | | | | | 20 |
| 1 | 28 | | 13.11 | 13.10 | 33.362 | 25.104 | 285.6 | .083 | 6.00 | 100.5 | 4.0 | .54 | 2.2 | .10 | .74 | .39 | 28 |
| | 30 | ISL | 13.10 | 13.09 | 33.367 | 25.110 | 285.1 | .089 | 5.99 | 100.3 | | | | | | | 30 |
| 1 | 43 | | 12.99 | 12.98 | 33.393 | 25.153 | 281.4 | .125 | 5.89 | 98.4 | 4.4 | .60 | 3.1 | .13 | .58 | .36 | 43 |
| | 50 | ISL | 12.90 | 12.90 | 33.419 | 25.189 | 278.1 | .145 | 5.81 | 96.9 | | | | | | | 50 |
| 1 | 59 | | 12.61 | 12.60 | 33.434 | 25.259 | 271.7 | .169 | 5.61 | 93.0 | 5.6 | .71 | 4.9 | .17 | .25 | .26 | 59 |
| 1 | 69 | | 11.78 | 11.77 | 33.398 | 25.389 | 259.5 | .196 | 5.14 | 83.7 | 7.6 | .91 | 8.3 | .10 | .16 | .22 | 69 |
| | 75 | ISL | 11.57 | 11.56 | 33.477 | 25.489 | 250.2 | .212 | 4.75 | 77.0 | | | | | | | 76 |
| 1 | 79 | | 11.50 | 11.49 | 33.529 | 25.542 | 245.2 | .221 | 4.54 | 73.5 | 11.8 | 1.16 | 12.5 | .15 | .21 | .34 | 79 |
| 1 | 94 | | 11.10 | 11.09 | 33.583 | 25.656 | 234.6 | .257 | 4.21 | 67.6 | 14.7 | 1.32 | 15.0 | .06 | .16 | .29 | 94 |
| | 100 | ISL | 10.92 | 10.91 | 33.613 | 25.712 | 229.4 | .272 | 4.05 | 64.9 | | | | | | | 101 |
| 1 | 109 | | 10.58 | 10.57 | 33.661 | 25.809 | 220.3 | .293 | 3.82 | 60.7 | 18.0 | 1.50 | 18.1 | .02 | .08 | .20 | 110 |
| 1 | 124 | | 9.76 | 9.75 | 33.754 | 26.021 | 200.3 | .324 | 3.47 | 54.2 | 23.0 | 1.72 | 22.0 | .01 | .03 | .16 | 125 |
| | 125 | ISL | 9.74 | 9.73 | 33.758 | 26.028 | 199.7 | .325 | 3.46 | 54.0 | | | | | | | 126 |
| 1 | 150 | | 9.18 | 9.16 | 33.863 | 26.202 | 183.6 | .374 | 3.13 | 48.3 | 28.1 | 1.90 | 24.8 | .00 | .01 | .08 | 151 |
| 1 | 169 | | 8.83 | 8.81 | 33.923 | 26.305 | 174.1 | .407 | 3.04 | 46.5 | 31.0 | 1.95 | 26.0 | .00 | .01 | .10 | 170 |
| 1 | 190 | | 8.43 | 8.41 | 33.977 | 26.410 | 164.4 | .443 | 2.96 | 44.9 | 34.2 | 2.03 | 27.1 | .00 | | | 191 |
| | 200 | ISL | 8.26 | 8.24 | 33.994 | 26.448 | 160.9 | .459 | 2.93 | 44.3 | | | | | | | 201 |
| 1 | 210 | | 8.11 | 8.08 | 34.004 | 26.479 | 158.0 | .475 | 2.89 | 43.5 | 37.3 | 2.08 | 28.1 | .00 | | | 211 |
| 1 | 240 | | 7.73 | 7.70 | 34.026 | 26.553 | 151.4 | .521 | 2.64 | 39.4 | 41.7 | 2.22 | 29.9 | .02 | | | 241 |
| | 250 | ISL | 7.56 | 7.53 | 34.036 | 26.585 | 148.4 | .536 | 2.47 | 36.8 | | | | | | | 252 |
| 1 | 280 | | 7.10 | 7.08 | 34.069 | 26.675 | 140.2 | .580 | 1.94 | 28.6 | 52.1 | 2.50 | 33.3 | .00 | | | 282 |
| | 300 | ISL | 6.94 | 6.91 | 34.088 | 26.712 | 136.9 | .607 | 1.68 | 24.7 | | | | | | | 302 |
| 1 | 341 | | 6.72 | 6.69 | 34.124 | 26.771 | 131.8 | .662 | 1.27 | 18.5 | 60.7 | 2.74 | 36.5 | .00 | | | 343 |
| | 400 | ISL | 6.40 | 6.36 | 34.174 | 26.854 | 124.7 | .738 | .87 | 12.7 | | | | | | | 403 |
| 1 | 417 | | 6.32 | 6.28 | 34.189 | 26.876 | 122.7 | .760 | .79 | 11.4 | 69.8 | 2.96 | 38.6 | .00 | | | 420 |
| 1 | 495 | | 6.06 | 6.02 | 34.280 | 26.981 | 113.6 | .851 | .45 | 6.5 | 78.1 | 3.12 | 39.9 | .00 | | | 498 |
| | 500 | ISL | 6.04 | 6.00 | 34.284 | 26.988 | 113.1 | .857 | .44 | 6.4 | | | | | | | 504 |
| 1 | 574 | | 5.62 | 5.57 | 34.320 | 27.069 | 105.9 | .938 | .35 | 5.0 | 87.2 | 3.20 | 41.3 | .00 | | | 578 |

RV DAVID STARR JORDAN | CALCOFI CRUISE 8602 | STATION 80 80

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 28.6 N | 122 31.9 W | 18/02/86 | 0222 GMT | 3924 M | 180 | 18 KT | 220 10 09 | 2 | 1017.2 MB | 16.0 C | 15.3 C | 8/8 | ST |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 14.97 | 14.97 | 33.105 | 24.520 | 340.5 | .000 | 5.85 | 101.6 | | | | | | | 0 |
| 1 | 2 | | 14.97 | 14.97 | 33.105 | 24.520 | 340.6 | .007 | 5.85 | 101.6 | 2.2 | .38 | .2 | .00 | .09 | .03 | 2 |
| | 10 | ISL | 14.96 | 14.96 | 33.104 | 24.520 | 340.7 | .034 | 5.90 | 102.5 | | | | | | | 10 |
| 1 | 12 | | 14.96 | 14.96 | 33.104 | 24.521 | 340.8 | .041 | 5.91 | 102.6 | 2.2 | .38 | .2 | .00 | .09 | .03 | 12 |
| | 20 | ISL | 14.94 | 14.94 | 33.100 | 24.522 | 340.9 | .068 | 5.90 | 102.5 | | | | | | | 20 |
| 1 | 28 | | 14.92 | 14.91 | 33.096 | 24.524 | 341.0 | .095 | 5.90 | 102.3 | 2.1 | .37 | .2 | .00 | .10 | .03 | 28 |
| | 30 | ISL | 14.89 | 14.88 | 33.091 | 24.527 | 340.7 | .102 | 5.90 | 102.3 | | | | | | | 30 |
| 1 | 44 | | 14.64 | 14.64 | 33.067 | 24.561 | 337.9 | .149 | 5.90 | 101.8 | 2.1 | .39 | .2 | .00 | .13 | .05 | 44 |
| | 50 | ISL | 14.56 | 14.55 | 33.081 | 24.589 | 335.4 | .170 | 5.91 | 101.7 | | | | | | | 50 |
| 1 | 60 | | 14.43 | 14.43 | 33.103 | 24.633 | 331.4 | .202 | 5.92 | 101.7 | 2.2 | .39 | .2 | .00 | .22 | .13 | 60 |
| 1 | 70 | | 12.99 | 12.98 | 33.141 | 24.957 | 300.7 | .234 | 6.03 | 100.6 | 2.8 | .47 | .8 | .08 | .33 | .22 | 70 |
| | 75 | ISL | 12.75 | 12.74 | 33.136 | 25.001 | 298.0 | .250 | 6.02 | 99.9 | | | | | | | 76 |
| 1 | 80 | | 12.67 | 12.66 | 33.132 | 25.014 | 295.5 | .264 | 6.01 | 99.5 | 3.0 | .52 | 1.3 | .10 | .26 | .25 | 80 |
| 1 | 96 | | 12.21 | 12.20 | 33.256 | 25.199 | 278.3 | .309 | 5.82 | 95.5 | 3.0 | .53 | 2.1 | .03 | .17 | .22 | 96 |
| | 100 | ISL | 12.06 | 12.05 | 33.263 | 25.233 | 275.2 | .321 | 5.77 | 94.5 | | | | | | | 101 |
| 1 | 112 | | 11.52 | 11.51 | 33.297 | 25.359 | 263.3 | .352 | 5.55 | 89.8 | 4.7 | .68 | 4.9 | .01 | .07 | .09 | 112 |
| | 125 | ISL | 10.45 | 10.43 | 33.478 | 25.691 | 231.9 | .386 | 4.93 | 78.0 | | | | | | | 126 |
| 1 | 126 | | 10.33 | 10.32 | 33.499 | 25.727 | 228.5 | .389 | 4.86 | 76.7 | 11.7 | 1.11 | 12.8 | .00 | .02 | .03 | 127 |
| | 150 | ISL | 9.59 | 9.58 | 33.628 | 25.951 | 207.5 | .441 | 4.31 | 66.9 | | | | | | | 151 |
| 1 | 152 | | 9.56 | 9.55 | 33.634 | 25.961 | 206.5 | .445 | 4.27 | 66.3 | 18.1 | 1.45 | 18.4 | .00 | .01 | .02 | 153 |
| 1 | 172 | | 9.07 | 9.06 | 33.755 | 26.135 | 190.3 | .485 | 3.82 | 58.7 | 24.0 | 1.67 | 21.7 | .00 | .00 | .02 | 173 |
| 1 | 193 | | 8.91 | 8.89 | 33.875 | 26.255 | 179.3 | .523 | 3.35 | 51.4 | 28.0 | 1.84 | 24.4 | .00 | | | 194 |
| | 200 | ISL | 8.76 | 8.74 | 33.894 | 26.294 | 175.7 | .536 | 3.37 | 51.6 | | | | | | | 201 |
| 1 | 213 | | 8.46 | 8.44 | 33.917 | 26.357 | 169.8 | .558 | 3.48 | 52.8 | 30.1 | 1.85 | 24.9 | .00 | | | 214 |
| 1 | 244 | | 8.12 | 8.09 | 33.984 | 26.462 | 160.2 | .609 | 3.32 | 50.0 | 34.2 | 1.94 | 26.3 | .00 | | | 245 |
| | 250 | ISL | 8.04 | 8.01 | 33.993 | 26.482 | 158.5 | .619 | 3.23 | 48.6 | | | | | | | 252 |
| 1 | 284 | | 7.59 | 7.56 | 34.026 | 26.573 | 150.2 | .672 | 2.65 | 39.5 | 42.8 | 2.20 | 30.0 | .00 | | | 286 |
| | 300 | ISL | 7.42 | 7.39 | 34.045 | 26.613 | 146.6 | .695 | 2.37 | 35.1 | | | | | | | 302 |
| 1 | 345 | | 6.96 | 6.93 | 34.093 | 26.714 | 137.4 | .759 | 1.64 | 24.1 | 55.8 | 2.60 | 34.7 | .00 | | | 347 |
| | 400 | ISL | 6.37 | 6.33 | 34.115 | 26.810 | 128.7 | .832 | 1.14 | 16.5 | | | | | | | 403 |
| 1 | 421 | | 6.18 | 6.14 | 34.123 | 26.842 | 125.8 | .859 | 1.01 | 14.6 | 68.8 | 2.88 | 38.3 | .00 | | | 424 |
| 1 | 499 | | 5.91 | 5.87 | 34.214 | 26.948 | 116.5 | .953 | .53 | 7.6 | 77.7 | 3.07 | 40.1 | .00 | | | 502 |
| | 500 | ISL | 5.91 | 5.86 | 34.216 | 26.951 | 116.4 | .955 | .52 | 7.5 | | | | | | | 504 |
| 1 | 576 | | 5.47 | 5.42 | 34.274 | 27.050 | 107.5 | 1.040 | .36 | 5.1 | 87.0 | 3.19 | 41.6 | .00 | | | 580 |

RV DAVID STARR JORDAN | CALCOFI CRUISE 8602 | STATION 80 90

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 09.1 N | 123 13.4 W | 18/02/86 | 0739 GMT | 4305 M | 220 | 16 KT | | | 1018.0 MB | 15.6 C | 15.5 C | | |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 14.53 | 14.53 | 33.107 | 24.615 | 331.4 | .000 | 5.92 | 101.9 | | | | | | | 0 |
| 1 | 1 | | 14.53 | 14.53 | 33.107 | 24.615 | 331.5 | .003 | 5.92 | 101.9 | 2.5 | .39 | .2 | .00 | .11 | .05 | 1 |
| | 10 | ISL | 14.52 | 14.52 | 33.106 | 24.616 | 331.7 | .033 | 5.97 | 102.7 | | | | | | | 10 |
| 1 | 11 | | 14.52 | 14.52 | 33.106 | 24.616 | 331.7 | .036 | 5.97 | 102.7 | 2.5 | .39 | .2 | .00 | .11 | .04 | 11 |
| | 20 | ISL | 14.51 | 14.51 | 33.107 | 24.618 | 331.7 | .066 | 5.96 | 102.6 | | | | | | | 20 |
| 1 | 27 | | 14.51 | 14.51 | 33.108 | 24.620 | 331.7 | .089 | 5.96 | 102.5 | 2.4 | .39 | .2 | .00 | .12 | .05 | 27 |
| | 30 | ISL | 14.47 | 14.47 | 33.111 | 24.630 | 330.9 | .099 | 5.96 | 102.4 | | | | | | | 30 |
| 1 | 42 | | 14.34 | 14.33 | 33.123 | 24.668 | 327.5 | .138 | 5.94 | 101.8 | 2.5 | .38 | .2 | .00 | .19 | .10 | 42 |
| | 50 | ISL | 13.66 | 13.65 | 33.190 | 24.861 | 309.4 | .164 | 5.92 | 100.2 | | | | | | | 50 |
| 1 | 58 | | 12.98 | 12.98 | 33.259 | 25.050 | 291.6 | .188 | 5.91 | 98.6 | 3.0 | .49 | 1.1 | .14 | .37 | .33 | 58 |
| 1 | 68 | | 12.62 | 12.62 | 33.291 | 25.145 | 282.8 | .216 | 5.69 | 94.2 | 4.0 | .61 | 3.1 | .03 | .19 | .24 | 68 |
| | 75 | ISL | 12.45 | 12.44 | 33.302 | 25.188 | 278.9 | .237 | 5.59 | 92.3 | | | | | | | 76 |
| 1 | 78 | | 12.37 | 12.36 | 33.307 | 25.207 | 277.1 | .244 | 5.55 | 91.4 | 4.7 | .69 | 4.5 | .02 | .15 | .18 | 78 |
| 1 | 93 | | 11.26 | 11.24 | 33.390 | 25.479 | 251.5 | .284 | 5.10 | 82.1 | 8.0 | .93 | 9.1 | .01 | .06 | .08 | 93 |
| | 100 | ISL | 10.94 | 10.93 | 33.584 | 25.686 | 231.9 | .302 | 4.58 | 73.3 | | | | | | | 101 |
| 1 | 108 | | 10.62 | 10.61 | 33.798 | 25.909 | 210.8 | .320 | 3.89 | 61.9 | 16.7 | 1.46 | 17.4 | .00 | .07 | .09 | 109 |
| 1 | 123 | | 9.81 | 9.80 | 33.851 | 26.089 | 193.9 | .351 | 2.84 | 44.4 | 26.5 | 1.90 | 24.2 | .00 | .02 | .05 | 124 |
| | 125 | ISL | 9.77 | 9.75 | 33.858 | 26.103 | 192.6 | .354 | 2.81 | 44.0 | | | | | | | 126 |
| 1 | 149 | | 9.37 | 9.36 | 33.968 | 26.253 | 178.8 | .399 | 2.41 | 37.4 | 31.4 | 2.08 | 26.6 | .00 | .00 | .03 | 150 |
| | 150 | ISL | 9.36 | 9.34 | 33.971 | 26.258 | 178.3 | .400 | 2.40 | 37.2 | | | | | | | 151 |
| 1 | 169 | | 9.09 | 9.07 | 34.046 | 26.360 | 168.9 | .433 | 2.14 | 33.0 | 34.6 | 2.21 | 28.2 | .00 | .01 | .03 | 170 |
| 1 | 190 | | 9.01 | 8.99 | 34.085 | 26.403 | 165.3 | .468 | 1.98 | 30.5 | 36.3 | 2.29 | 28.8 | .00 | | | 191 |
| | 200 | ISL | 8.95 | 8.92 | 34.103 | 26.427 | 163.1 | .485 | 1.91 | 29.4 | | | | | | | 201 |
| 1 | 210 | | 8.88 | 8.86 | 34.118 | 26.451 | 161.1 | .500 | 1.85 | 28.4 | 38.4 | 2.34 | 29.5 | .00 | | | 211 |
| 1 | 241 | | 8.74 | 8.72 | 34.161 | 26.506 | 156.4 | .549 | 1.63 | 24.9 | 39.5 | 2.44 | 30.3 | .00 | | | 242 |
| | 250 | ISL | 8.69 | 8.66 | 34.170 | 26.522 | 155.1 | .564 | 1.58 | 24.1 | | | | | | | 252 |
| 1 | 281 | | 8.49 | 8.46 | 34.195 | 26.573 | 150.8 | .612 | 1.43 | 21.8 | 43.5 | 2.54 | 31.3 | .00 | | | 283 |
| | 300 | ISL | 8.38 | 8.35 | 34.205 | 26.598 | 148.7 | .640 | 1.35 | 20.5 | | | | | | | 302 |
| 1 | 343 | | 8.11 | 8.08 | 34.221 | 26.651 | 144.3 | .703 | 1.18 | 17.8 | 48.7 | 2.65 | 32.7 | .00 | | | 345 |
| | 400 | ISL | 7.73 | 7.69 | 34.234 | 26.718 | 138.7 | .783 | .99 | 14.8 | | | | | | | 403 |
| 1 | 419 | | 7.59 | 7.55 | 34.236 | 26.740 | 136.8 | .810 | .93 | 13.9 | 55.6 | 2.78 | 34.6 | .00 | | | 422 |
| 1 | 496 | | 6.99 | 6.94 | 34.245 | 26.832 | 128.8 | .911 | .69 | 10.1 | 63.8 | 2.94 | 36.6 | .00 | | | 499 |
| | 500 | ISL | 6.96 | 6.91 | 34.245 | 26.837 | 128.3 | .917 | .68 | 10.0 | | | | | | | 504 |
| 1 | 573 | | 6.39 | 6.34 | 34.255 | 26.921 | 120.9 | 1.008 | .52 | 7.5 | 73.0 | 3.04 | 38.9 | .00 | | | 577 |

RV DAVID STARR JORDAN — CALCOFI CRUISE 8602 — STATION 80 100

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 49.1 N | 123 54.4 W | 18/02/86 | 1306 GMT | 4114 M | 210 | 13 KT | | 6 | 1016.9 MB | 16.0 C | 15.8 C | |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 14.30 | 14.30 | 33.154 | 24.699 | 323.5 | .000 | 5.97 | 102.3 | | | | | | | 0 |
| 1 | 1 | | 14.30 | 14.30 | 33.154 | 24.699 | 323.4 | .003 | 5.97 | 102.3 | 2.4 | .39 | .2 | .00 | .16 | .06 | 1 |
| | 10 | ISL | 14.25 | 14.25 | 33.151 | 24.708 | 322.8 | .032 | 6.02 | 103.0 | | | | | | | 10 |
| 1 | 11 | | 14.24 | 14.24 | 33.151 | 24.709 | 322.8 | .035 | 6.02 | 103.0 | 2.4 | .39 | .2 | .00 | .16 | .06 | 11 |
| | 20 | ISL | 14.22 | 14.22 | 33.146 | 24.709 | 323.0 | .065 | 6.01 | 102.8 | | | | | | | 20 |
| 1 | 28 | | 14.21 | 14.21 | 33.144 | 24.711 | 323.1 | .090 | 6.00 | 102.6 | 2.4 | .40 | .2 | .00 | .16 | .07 | 28 |
| | 30 | ISL | 14.18 | 14.17 | 33.138 | 24.713 | 323.0 | .097 | 6.00 | 102.6 | | | | | | | 30 |
| 1 | 43 | | 13.97 | 13.96 | 33.110 | 24.735 | 321.2 | .138 | 6.02 | 102.4 | 2.4 | .40 | .1 | .00 | .20 | .08 | 43 |
| | 50 | ISL | 13.94 | 13.93 | 33.125 | 24.754 | 319.6 | .161 | 6.02 | 102.4 | | | | | | | 50 |
| 1 | 60 | | 13.84 | 13.84 | 33.134 | 24.780 | 317.4 | .192 | 6.02 | 102.2 | 2.4 | .40 | .1 | .00 | .34 | .14 | 60 |
| 1 | 70 | | 13.56 | 13.55 | 33.191 | 24.882 | 308.0 | .223 | 5.98 | 100.9 | 2.6 | .44 | .5 | .09 | .28 | .19 | 70 |
| | 75 | ISL | 13.27 | 13.26 | 33.206 | 24.952 | 301.4 | .240 | 5.95 | 99.9 | | | | | | | 76 |
| 1 | 80 | | 13.01 | 13.00 | 33.220 | 25.016 | 295.4 | .253 | 5.92 | 98.8 | 3.1 | .50 | 1.2 | .20 | .20 | .15 | 80 |
| 1 | 96 | | 12.41 | 12.40 | 33.321 | 25.211 | 277.2 | .299 | 5.65 | 93.2 | 4.3 | .65 | 3.8 | .12 | .11 | .12 | 96 |
| | 100 | ISL | 12.21 | 12.19 | 33.340 | 25.264 | 272.2 | .311 | 5.49 | 90.2 | | | | | | | 101 |
| 1 | 110 | | 11.75 | 11.74 | 33.381 | 25.381 | 261.2 | .337 | 5.12 | 83.3 | 7.3 | .92 | 8.6 | .03 | .08 | .11 | 110 |
| | 125 | ISL | 11.00 | 10.98 | 33.474 | 25.591 | 241.5 | .375 | 4.62 | 74.0 | | | | | | | 126 |
| 1 | 126 | | 10.93 | 10.91 | 33.484 | 25.611 | 239.6 | .379 | 4.58 | 73.2 | 12.1 | 1.20 | 13.7 | .01 | .05 | .07 | 127 |
| | 150 | ISL | 9.88 | 9.86 | 33.682 | 25.946 | 208.0 | .432 | 3.91 | 61.1 | | | | | | | 151 |
| 1 | 152 | | 9.78 | 9.77 | 33.702 | 25.978 | 205.0 | .436 | 3.84 | 60.0 | 20.3 | 1.58 | 20.1 | .01 | .01 | .03 | 153 |
| 1 | 171 | | 9.03 | 9.01 | 33.853 | 26.219 | 182.3 | .473 | 3.22 | 49.5 | 27.7 | 1.86 | 24.7 | .00 | .00 | .03 | 172 |
| 1 | 192 | | 8.96 | 8.94 | 33.888 | 26.257 | 179.1 | .511 | 3.08 | 47.3 | 29.7 | 1.92 | 25.2 | .00 | | | 193 |
| | 200 | ISL | 8.89 | 8.87 | 33.906 | 26.282 | 176.9 | .525 | 3.05 | 46.7 | | | | | | | 201 |
| 1 | 213 | | 8.74 | 8.72 | 33.936 | 26.330 | 172.6 | .547 | 3.00 | 45.8 | 31.2 | 1.98 | 26.1 | .00 | | | 214 |
| 1 | 243 | | 8.32 | 8.29 | 34.003 | 26.447 | 161.8 | .597 | 2.77 | 41.9 | 36.5 | 2.10 | 27.7 | .00 | | | 244 |
| | 250 | ISL | 8.17 | 8.15 | 34.017 | 26.480 | 158.7 | .609 | 2.67 | 40.3 | | | | | | | 252 |
| 1 | 283 | | 7.52 | 7.49 | 34.067 | 26.616 | 146.1 | .660 | 2.18 | 32.4 | 46.0 | 2.37 | 31.5 | .00 | | | 285 |
| | 300 | ISL | 7.33 | 7.30 | 34.081 | 26.653 | 142.7 | .684 | 1.98 | 29.3 | | | | | | | 302 |
| 1 | 344 | | 6.99 | 6.95 | 34.105 | 26.720 | 136.9 | .745 | 1.51 | 22.2 | 55.3 | 2.64 | 34.9 | .00 | | | 346 |
| | 400 | ISL | 6.55 | 6.51 | 34.159 | 26.823 | 127.7 | .819 | .98 | 14.2 | | | | | | | 403 |
| 1 | 419 | | 6.39 | 6.36 | 34.176 | 26.856 | 124.6 | .844 | .83 | 12.0 | 67.4 | 2.94 | 38.3 | .00 | | | 422 |
| 1 | 497 | | 5.71 | 5.66 | 34.197 | 26.960 | 115.2 | .937 | .56 | 8.0 | 79.7 | 3.08 | 40.7 | .00 | | | 500 |
| | 500 | ISL | 5.68 | 5.64 | 34.199 | 26.965 | 114.8 | .940 | .55 | 7.8 | | | | | | | 504 |
| 1 | 574 | | 5.27 | 5.22 | 34.260 | 27.063 | 105.9 | 1.022 | .35 | 4.9 | 91.5 | 3.21 | 41.9 | .00 | | | 578 |

RV DAVID STARR JORDAN — CALCOFI CRUISE 8602 — STATION 82 46

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 16.1 N | 119 56.3 W | 16/02/86 | 0642 GMT | 550 M | 190 | 08 KT | | | 1015.9 MB | 15.0 C | 13.9 C | |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 13.53 | 13.53 | 33.387 | 25.038 | 291.3 | .000 | 5.94 | 100.3 | | | | | | | 0 |
| 1 | 1 | | 13.53 | 13.53 | 33.387 | 25.038 | 291.2 | .003 | 5.94 | 100.3 | 4.0 | .53 | 2.2 | .09 | 1.53 | .44 | 1 |
| | 10 | ISL | 13.49 | 13.49 | 33.387 | 25.045 | 290.7 | .029 | 6.02 | 101.6 | | | | | | | 10 |
| 1 | 11 | | 13.49 | 13.49 | 33.387 | 25.046 | 290.7 | .032 | 6.03 | 101.8 | 4.0 | .54 | 2.3 | .09 | 1.57 | .49 | 11 |
| | 20 | ISL | 13.38 | 13.37 | 33.395 | 25.076 | 288.1 | .058 | 5.94 | 100.1 | | | | | | | 20 |
| 1 | 22 | | 13.35 | 13.35 | 33.398 | 25.083 | 287.5 | .064 | 5.91 | 99.5 | 4.6 | .58 | 2.6 | .09 | 1.34 | .40 | 22 |
| | 30 | ISL | 13.27 | 13.27 | 33.411 | 25.110 | 285.2 | .087 | 5.76 | 96.8 | | | | | | | 30 |
| 1 | 32 | | 13.26 | 13.25 | 33.414 | 25.115 | 284.7 | .092 | 5.73 | 96.3 | 4.7 | .59 | 3.1 | .10 | 1.22 | .35 | 32 |
| 1 | 43 | | 13.21 | 13.21 | 33.412 | 25.123 | 284.3 | .123 | 5.74 | 96.3 | 4.7 | .60 | 3.1 | .11 | .39 | .18 | 43 |
| | 50 | ISL | 12.50 | 12.49 | 33.481 | 25.316 | 266.1 | .143 | 4.96 | 82.1 | | | | | | | 50 |
| 1 | 53 | | 12.20 | 12.19 | 33.511 | 25.397 | 258.3 | .150 | 4.64 | 76.3 | 10.7 | 1.06 | 9.7 | .31 | .29 | .36 | 53 |
| 1 | 63 | | 11.66 | 11.65 | 33.554 | 25.532 | 245.7 | .175 | 4.19 | 68.1 | 13.7 | 1.25 | 13.0 | .08 | .16 | .30 | 63 |
| 1 | 73 | | 11.23 | 11.22 | 33.591 | 25.640 | 235.6 | .199 | 4.09 | 65.9 | 14.6 | 1.33 | 14.9 | .03 | .09 | .16 | 73 |
| | 75 | ISL | 11.13 | 11.12 | 33.604 | 25.667 | 233.1 | .205 | 4.03 | 64.8 | | | | | | | 76 |
| 1 | 89 | | 10.73 | 10.72 | 33.679 | 25.798 | 221.0 | .235 | 3.67 | 58.5 | 18.6 | 1.54 | 18.0 | .02 | .05 | .13 | 89 |
| | 100 | ISL | 10.57 | 10.56 | 33.712 | 25.851 | 216.2 | .260 | 3.56 | 56.5 | | | | | | | 101 |
| 1 | 103 | | 10.53 | 10.52 | 33.720 | 25.865 | 214.9 | .268 | 3.53 | 56.1 | 19.7 | 1.60 | 19.1 | .02 | .03 | .14 | 104 |
| 1 | 124 | | 10.09 | 10.08 | 33.815 | 26.014 | 201.1 | .311 | 3.12 | 49.1 | 23.7 | 1.80 | 21.9 | .01 | .02 | .11 | 125 |
| | 125 | ISL | 10.07 | 10.06 | 33.818 | 26.020 | 200.6 | .313 | 3.11 | 48.8 | | | | | | | 126 |
| 1 | 150 | | 9.51 | 9.50 | 33.937 | 26.206 | 183.3 | .361 | 2.59 | 40.3 | 29.7 | 2.03 | 25.4 | .02 | .02 | .16 | 151 |
| 1 | 181 | | 9.09 | 9.08 | 34.019 | 26.338 | 171.3 | .416 | 2.27 | 35.0 | 34.5 | 2.19 | 27.5 | .01 | | | 182 |
| | 200 | ISL | 8.90 | 8.87 | 34.048 | 26.393 | 166.4 | .448 | 2.20 | 33.8 | | | | | | | 202 |
| 1 | 212 | | 8.80 | 8.77 | 34.063 | 26.421 | 163.9 | .467 | 2.13 | 32.6 | 37.2 | 2.27 | 28.7 | .00 | | | 213 |
| 1 | 243 | | 8.61 | 8.58 | 34.121 | 26.496 | 157.3 | .517 | 1.50 | 22.9 | 43.5 | 2.49 | 30.7 | .00 | | | 244 |
| | 250 | ISL | 8.52 | 8.50 | 34.129 | 26.515 | 155.6 | .528 | 1.43 | 21.8 | | | | | | | 252 |
| 1 | 283 | | 8.11 | 8.08 | 34.149 | 26.594 | 148.6 | .579 | 1.27 | 19.2 | 49.7 | 2.63 | 32.5 | .00 | | | 285 |
| | 300 | ISL | 7.95 | 7.92 | 34.158 | 26.625 | 145.8 | .604 | 1.15 | 17.3 | | | | | | | 302 |
| 1 | 345 | | 7.53 | 7.49 | 34.174 | 26.699 | 139.3 | .667 | .84 | 12.5 | 60.4 | 2.87 | 34.4 | .00 | | | 347 |
| | 400 | ISL | 6.92 | 6.88 | 34.196 | 26.802 | 130.0 | .742 | .52 | 7.7 | | | | | | | 403 |
| 1 | 422 | | 6.69 | 6.66 | 34.204 | 26.839 | 126.7 | .770 | .40 | 5.8 | 76.2 | 3.13 | 35.7 | .00 | | | 425 |
| 1 | 468 | | 6.37 | 6.33 | 34.216 | 26.891 | 122.0 | .828 | .13 | 1.9 | 91.3 | 3.31 | 32.5 | .00 | | | 471 |
| | 500 | ISL | 6.33 | 6.28 | 34.218 | 26.899 | 121.8 | .867 | .09 | 1.3 | | | | | | | 504 |
| 1 | 514 | | 6.31 | 6.26 | 34.218 | 26.901 | 121.7 | .884 | .07 | 1.0 | 99.8 | 3.54 | 24.7 | .02 | | | 518 |

RV DAVID STARR JORDAN — CALCOFI CRUISE 8602 — STATION 83 40.6

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 13.5 N | 119 24.7 W | 16/02/86 | 0211 GMT | 36 M | 270 | 10 KT | 260 03 11 | 1 | 1013.2 MB | 15.0 C | 14.0 C | 2/8 SC |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 14.21 | 14.21 | 33.340 | 24.861 | 309.4 | .000 | 5.91 | 101.2 | | | | | | | 0 |
| 1 | 1 | | 14.21 | 14.21 | 33.340 | 24.861 | 308.0 | .003 | 5.91 | 101.2 | 3.1 | .43 | 1.2 | .06 | .88 | .27 | 1 |
| | 10 | ISL | 13.84 | 13.84 | 33.366 | 24.958 | 299.1 | .030 | 5.97 | 101.5 | | | | | | | 10 |
| 1 | 11 | | 13.82 | 13.81 | 33.367 | 24.964 | 298.5 | .033 | 5.97 | 101.4 | 3.3 | .47 | 1.2 | .08 | 1.36 | .45 | 11 |
| | 20 | ISL | 13.71 | 13.71 | 33.379 | 24.995 | 295.8 | .060 | 5.93 | 100.6 | | | | | | | 20 |
| 1 | 22 | | 13.71 | 13.70 | 33.379 | 24.997 | 295.8 | .066 | 5.92 | 100.4 | 3.9 | .48 | 1.6 | .10 | 1.34 | .42 | 22 |
| | 30 | ISL | 13.63 | 13.63 | 33.366 | 25.001 | 295.6 | .090 | 5.86 | 99.3 | | | | | | | 30 |
| 1 | 32 | | 13.62 | 13.61 | 33.362 | 25.001 | 295.5 | .095 | 5.85 | 99.0 | 4.0 | .56 | 1.7 | .11 | 1.28 | .59 | 32 |

RV DAVID STARR JORDAN CALCOFI CRUISE 8602 STATION 83 42

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 10.6 N | 119 30.5 W | 16/02/86 | 0331 GMT | 176 M | 250 | 08 KT | | | 1014.2 MB | 15.0 C | 14.1 C | | |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 14.19 | 14.19 | 33.337 | 24.862 | 308.1 | .000 | 5.93 | 101.5 | | | | | | | 0 |
| 1 | 1 | | 14.19 | 14.19 | 33.337 | 24.862 | 307.9 | .003 | 5.93 | 101.5 | 3.1 | .43 | 1.2 | .05 | .81 | .32 | 1 |
| | 10 | ISL | 14.09 | 14.09 | 33.351 | 24.896 | 305.0 | .031 | 5.95 | 101.6 | | | | | | | 10 |
| 1 | 11 | | 14.07 | 14.07 | 33.353 | 24.900 | 304.6 | .034 | 5.95 | 101.6 | 3.3 | .46 | 1.3 | .07 | .83 | .29 | 11 |
| | 20 | ISL | 13.88 | 13.88 | 33.370 | 24.954 | 299.8 | .061 | 5.96 | 101.4 | | | | | | | 20 |
| 1 | 22 | | 13.81 | 13.81 | 33.375 | 24.971 | 298.1 | .067 | 5.96 | 101.3 | 3.7 | .48 | 1.5 | .09 | .99 | .48 | 22 |
| | 30 | ISL | 13.28 | 13.28 | 33.412 | 25.109 | 285.2 | .090 | 5.77 | 97.0 | | | | | | | 30 |
| 1 | 32 | | 13.15 | 13.15 | 33.422 | 25.142 | 282.1 | .095 | 5.71 | 95.7 | 5.2 | .64 | 3.6 | .24 | 1.45 | .62 | 32 |
| 1 | 43 | | 12.68 | 12.67 | 33.453 | 25.260 | 271.2 | .126 | 5.35 | 88.8 | 7.2 | .82 | 6.2 | .35 | 1.32 | .84 | 43 |
| | 50 | ISL | 12.22 | 12.22 | 33.513 | 25.394 | 258.6 | .145 | 4.85 | 79.8 | | | | | | | 50 |
| 1 | 53 | | 12.06 | 12.05 | 33.535 | 25.443 | 253.9 | .152 | 4.67 | 76.5 | 11.1 | 1.10 | 10.9 | .21 | .35 | .28 | 53 |
| 1 | 64 | | 11.71 | 11.70 | 33.566 | 25.532 | 245.8 | .179 | 4.47 | 72.7 | 12.4 | 1.20 | 12.7 | .14 | .24 | .30 | 64 |
| 1 | 74 | | 11.38 | 11.37 | 33.593 | 25.613 | 238.2 | .203 | 4.21 | 68.0 | 14.1 | 1.29 | 14.3 | .07 | .14 | .20 | 74 |
| | 75 | ISL | 11.31 | 11.31 | 33.603 | 25.633 | 236.4 | .207 | 4.16 | 67.1 | | | | | | | 76 |
| 1 | 89 | | 10.69 | 10.68 | 33.700 | 25.821 | 218.7 | .237 | 3.66 | 58.3 | 19.1 | 1.55 | 18.5 | .02 | .09 | .12 | 89 |
| | 100 | ISL | 10.47 | 10.46 | 33.742 | 25.892 | 212.3 | .262 | 3.47 | 55.0 | | | | | | | 101 |
| 1 | 103 | | 10.44 | 10.42 | 33.751 | 25.905 | 211.1 | .269 | 3.43 | 54.4 | 21.2 | 1.68 | 20.0 | .05 | .06 | .14 | 104 |
| 1 | 123 | | 10.18 | 10.17 | 33.796 | 25.984 | 203.9 | .311 | 3.17 | 50.0 | 23.4 | 1.77 | 21.8 | .04 | .03 | .11 | 124 |
| | 125 | ISL | 10.15 | 10.14 | 33.802 | 25.994 | 203.1 | .314 | 3.14 | 49.5 | | | | | | | 126 |
| 1 | 147 | | 9.65 | 9.64 | 33.912 | 26.164 | 187.3 | .357 | 2.72 | 42.4 | 29.0 | 1.99 | 24.9 | .05 | .03 | .13 | 148 |

RV DAVID STARR JORDAN CALCOFI CRUISE 8602 STATION 83 51

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 52.8 N | 120 08.4 W | 16/02/86 | 1100 GMT | 101 M | 250 | 08 KT | | | 1017.9 MB | 14.8 C | 14.2 C | | |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 13.99 | 13.99 | 33.362 | 24.925 | 304.2 | .000 | 5.98 | 102.0 | | | | | | | 0 |
| 1 | 2 | | 13.99 | 13.99 | 33.362 | 24.925 | 302.0 | .006 | 5.98 | 102.0 | 3.6 | .59 | 1.4 | .06 | 1.36 | .40 | 2 |
| | 10 | ISL | 13.75 | 13.75 | 33.410 | 25.012 | 294.0 | .030 | 5.87 | 99.6 | | | | | | | 10 |
| 1 | 12 | | 13.68 | 13.68 | 33.417 | 25.030 | 292.2 | .036 | 5.84 | 99.0 | 3.5 | .52 | 1.7 | .05 | 2.00 | .50 | 12 |
| | 20 | ISL | 13.41 | 13.41 | 33.430 | 25.096 | 286.2 | .059 | 5.71 | 96.2 | | | | | | | 20 |
| 1 | 23 | | 13.32 | 13.31 | 33.432 | 25.117 | 284.3 | .067 | 5.66 | 95.2 | 4.5 | .59 | 3.1 | .07 | 1.97 | .72 | 23 |
| | 30 | ISL | 13.14 | 13.13 | 33.442 | 25.161 | 280.3 | .087 | 5.54 | 92.9 | | | | | | | 30 |
| 1 | 33 | | 13.07 | 13.06 | 33.447 | 25.178 | 278.7 | .095 | 5.49 | 91.9 | 5.6 | .68 | 4.4 | .09 | 1.76 | .55 | 33 |
| | 50 | ISL | 12.49 | 12.48 | 33.481 | 25.319 | 265.8 | .142 | 5.09 | 84.1 | | | | | | | 50 |
| 1 | 54 | | 12.34 | 12.33 | 33.492 | 25.355 | 262.4 | .152 | 4.98 | 82.1 | 9.4 | .93 | 8.6 | .10 | .99 | .43 | 54 |
| | 75 | ISL | 11.37 | 11.36 | 33.602 | 25.623 | 237.3 | .205 | 4.26 | 68.9 | | | | | | | 76 |
| 1 | 80 | | 11.12 | 11.11 | 33.635 | 25.693 | 230.8 | .216 | 4.08 | 65.6 | 16.7 | 1.38 | 15.1 | .12 | .43 | 1.02 | 80 |

RV DAVID STARR JORDAN CALCOFI CRUISE 8602 STATION 83 55

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 44.6 N | 120 24.9 W | 16/02/86 | 1320 GMT | 1052 M | 230 | 08 KT | | | 1016.8 MB | 14.8 C | 14.3 C | | |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 14.38 | 14.38 | 33.239 | 24.748 | 318.7 | .000 | 5.93 | 101.8 | | | | | | | 0 |
| 1 | 2 | | 14.38 | 14.38 | 33.239 | 24.748 | 318.8 | .006 | 5.93 | 101.8 | 2.5 | .38 | .2 | .02 | .27 | .09 | 2 |
| | 10 | ISL | 14.38 | 14.38 | 33.237 | 24.747 | 319.2 | .032 | 5.95 | 102.2 | | | | | | | 10 |
| 1 | 11 | | 14.38 | 14.38 | 33.236 | 24.746 | 319.2 | .035 | 5.95 | 102.2 | 2.5 | .38 | .2 | .02 | .26 | .10 | 11 |
| | 20 | ISL | 14.27 | 14.27 | 33.250 | 24.779 | 316.4 | .064 | 5.95 | 102.0 | | | | | | | 20 |
| 1 | 27 | | 14.14 | 14.13 | 33.269 | 24.823 | 312.5 | .085 | 5.95 | 101.7 | 2.7 | .41 | .4 | .05 | .41 | .16 | 27 |
| | 30 | ISL | 14.10 | 14.09 | 33.280 | 24.840 | 310.9 | .095 | 5.94 | 101.5 | | | | | | | 30 |
| 1 | 43 | | 13.68 | 13.68 | 33.328 | 24.963 | 299.5 | .134 | 5.84 | 98.9 | 3.5 | .50 | 1.5 | .13 | .44 | .22 | 43 |
| | 50 | ISL | 13.07 | 13.07 | 33.348 | 25.100 | 286.6 | .155 | 5.69 | 95.2 | | | | | | | 50 |
| 1 | 58 | | 12.34 | 12.33 | 33.369 | 25.261 | 271.4 | .177 | 5.47 | 90.1 | 5.4 | .72 | 5.2 | .12 | .28 | .26 | 58 |
| 1 | 68 | | 11.57 | 11.56 | 33.390 | 25.421 | 256.4 | .203 | 5.13 | 83.1 | 8.0 | .92 | 8.5 | .05 | .13 | .21 | 68 |
| | 75 | ISL | 11.10 | 11.09 | 33.427 | 25.535 | 245.7 | .221 | 4.85 | 77.8 | | | | | | | 76 |
| 1 | 80 | | 10.83 | 10.82 | 33.460 | 25.608 | 238.7 | .233 | 4.66 | 74.4 | 11.9 | 1.17 | 13.3 | .02 | .06 | .09 | 80 |
| 1 | 94 | | 10.12 | 10.11 | 33.610 | 25.849 | 216.1 | .264 | 4.06 | 63.8 | 17.4 | 1.47 | 18.1 | .00 | .02 | .04 | 94 |
| | 100 | ISL | 9.87 | 9.86 | 33.669 | 25.936 | 207.9 | .278 | 3.86 | 60.4 | | | | | | | 101 |
| 1 | 109 | | 9.59 | 9.58 | 33.741 | 26.040 | 198.2 | .297 | 3.63 | 56.5 | 23.0 | 1.67 | 21.4 | .00 | .02 | .10 | 110 |
| | 125 | ISL | 9.25 | 9.23 | 33.822 | 26.159 | 187.2 | .327 | 3.31 | 51.2 | | | | | | | 126 |
| 1 | 126 | | 9.22 | 9.21 | 33.827 | 26.167 | 186.4 | .330 | 3.29 | 50.8 | 27.0 | 1.82 | 23.7 | .00 | .01 | .10 | 127 |
| | 150 | ISL | 8.87 | 8.86 | 33.911 | 26.289 | 175.3 | .372 | 3.05 | 46.7 | | | | | | | 151 |
| 1 | 152 | | 8.86 | 8.84 | 33.919 | 26.297 | 174.5 | .376 | 3.02 | 46.3 | 30.9 | 1.94 | 25.7 | .00 | .01 | .09 | 153 |
| 1 | 171 | | 8.93 | 8.91 | 34.019 | 26.364 | 168.5 | .409 | 2.47 | 37.9 | 34.2 | 2.11 | 27.0 | .00 | .00 | .03 | 172 |
| 1 | 191 | | 8.48 | 8.46 | 34.027 | 26.442 | 161.4 | .441 | 2.59 | 39.4 | 36.7 | 2.12 | 27.7 | .00 | | | 192 |
| | 200 | ISL | 8.32 | 8.30 | 34.032 | 26.469 | 158.9 | .456 | 2.59 | 39.2 | | | | | | | 201 |
| 1 | 212 | | 8.15 | 8.13 | 34.039 | 26.500 | 156.1 | .475 | 2.58 | 38.9 | 38.7 | 2.16 | 28.7 | .00 | | | 213 |
| 1 | 241 | | 7.85 | 7.83 | 34.071 | 26.570 | 149.9 | .519 | 2.26 | 33.9 | 43.5 | 2.29 | 30.2 | .00 | | | 242 |
| | 250 | ISL | 7.82 | 7.79 | 34.088 | 26.588 | 148.3 | .533 | 2.12 | 31.7 | | | | | | | 252 |
| 1 | 278 | | 7.74 | 7.71 | 34.138 | 26.639 | 144.0 | .574 | 1.69 | 25.3 | 48.3 | 2.50 | 32.0 | .00 | | | 280 |
| | 300 | ISL | 7.52 | 7.49 | 34.158 | 26.687 | 139.7 | .605 | 1.47 | 21.9 | | | | | | | 302 |
| 1 | 332 | | 7.17 | 7.14 | 34.181 | 26.754 | 133.6 | .648 | 1.22 | 18.0 | 55.6 | 2.67 | 34.4 | .00 | | | 334 |
| | 400 | ISL | 6.88 | 6.85 | 34.240 | 26.842 | 126.2 | .737 | .80 | 11.7 | | | | | | | 403 |
| 1 | 401 | | 6.88 | 6.84 | 34.241 | 26.843 | 126.1 | .739 | .79 | 11.6 | 63.3 | 2.88 | 36.2 | .00 | | | 404 |
| 1 | 468 | | 5.97 | 5.93 | 34.232 | 26.955 | 115.6 | .819 | .55 | 7.9 | 75.6 | 3.02 | 39.6 | .00 | | | 471 |
| | 500 | ISL | 5.75 | 5.70 | 34.247 | 26.995 | 112.0 | .856 | .47 | 6.7 | | | | | | | 504 |
| 1 | 534 | | 5.66 | 5.62 | 34.275 | 27.028 | 109.3 | .894 | .40 | 5.7 | 82.8 | 3.12 | 40.8 | .00 | | | 538 |

RV DAVID STARR JORDAN CALCOFI CRUISE 8602 STATION 83 60

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 34.7 N | 120 45.1 W | 16/02/86 | 1641 GMT | 1296 M | 200 | 09 KT | 270 10 11 | 2 | 1019.2 MB | 15.6 C | 14.8 C | 8/8 | CS |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 14.66 | 14.66 | 33.196 | 24.655 | 327.7 | .000 | 5.88 | 101.5 | | | | | | | 0 |
| 1 | 2 | | 14.66 | 14.66 | 33.196 | 24.655 | 327.7 | .007 | 5.88 | 101.5 | 2.4 | .37 | .2 | .00 | .12 | .05 | 2 |
| | 10 | ISL | 14.66 | 14.65 | 33.196 | 24.656 | 327.8 | .033 | 5.95 | 102.7 | | | | | | | 10 |
| 1 | 11 | | 14.66 | 14.65 | 33.196 | 24.656 | 327.8 | .036 | 5.95 | 102.7 | 2.4 | .37 | .2 | .00 | .12 | .05 | 11 |
| | 20 | ISL | 14.66 | 14.65 | 33.196 | 24.656 | 328.1 | .066 | 5.94 | 102.5 | | | | | | | 20 |
| 1 | 28 | | 14.66 | 14.65 | 33.196 | 24.656 | 328.3 | .091 | 5.93 | 102.4 | 2.3 | .37 | .2 | .00 | .12 | .06 | 28 |
| | 30 | ISL | 14.65 | 14.64 | 33.198 | 24.661 | 328.0 | .098 | 5.93 | 102.4 | | | | | | | 30 |
| 1 | 44 | | 14.56 | 14.55 | 33.208 | 24.688 | 325.8 | .144 | 5.94 | 102.4 | 2.4 | .37 | .2 | .00 | .17 | .08 | 44 |
| | 50 | ISL | 14.17 | 14.17 | 33.225 | 24.782 | 317.0 | .163 | 5.97 | 102.1 | | | | | | | 50 |
| 1 | 60 | | 13.52 | 13.52 | 33.279 | 24.957 | 300.5 | .194 | 6.02 | 101.6 | 2.9 | .42 | .3 | .07 | .45 | .38 | 60 |
| 1 | 70 | | 13.21 | 13.20 | 33.379 | 25.098 | 287.3 | .223 | 5.85 | 98.1 | 4.0 | .53 | 1.9 | .12 | .58 | .52 | 70 |
| | 75 | ISL | 12.95 | 12.94 | 33.396 | 25.164 | 281.2 | .238 | 5.69 | 95.0 | | | | | | | 76 |
| 1 | 81 | | 12.60 | 12.59 | 33.400 | 25.235 | 274.6 | .254 | 5.49 | 90.9 | 5.4 | .72 | 5.3 | .05 | .25 | .33 | 81 |
| 1 | 96 | | 11.40 | 11.39 | 33.404 | 25.463 | 253.0 | .293 | 4.87 | 78.6 | 9.9 | 1.06 | 11.0 | .01 | .09 | .15 | 96 |
| | 100 | ISL | 11.14 | 11.13 | 33.436 | 25.535 | 246.2 | .304 | 4.67 | 75.0 | | | | | | | 101 |
| 1 | 111 | | 10.61 | 10.60 | 33.531 | 25.703 | 230.5 | .331 | 4.26 | 67.7 | 14.9 | 1.37 | 16.3 | .00 | .03 | .07 | 112 |
| | 125 | ISL | 10.18 | 10.16 | 33.587 | 25.821 | 219.4 | .362 | 4.23 | 66.6 | | | | | | | 126 |
| 1 | 126 | | 10.14 | 10.13 | 33.593 | 25.833 | 218.4 | .365 | 4.23 | 66.5 | 16.6 | 1.42 | 17.3 | .00 | .02 | .04 | 127 |
| | 150 | ISL | 9.31 | 9.29 | 33.802 | 26.133 | 190.1 | .413 | 3.48 | 53.8 | | | | | | | 151 |
| 1 | 152 | | 9.24 | 9.22 | 33.822 | 26.160 | 187.6 | .417 | 3.40 | 52.5 | 25.8 | 1.78 | 23.4 | .00 | .00 | .02 | 153 |
| 1 | 172 | | 8.89 | 8.87 | 33.894 | 26.273 | 177.2 | .453 | 3.18 | 48.7 | 29.5 | 1.90 | 25.0 | .00 | .00 | .03 | 173 |
| 1 | 193 | | 8.53 | 8.51 | 33.948 | 26.372 | 168.1 | .489 | 3.08 | 46.8 | 32.5 | 1.98 | 26.5 | .00 | | | 194 |
| | 200 | ISL | 8.45 | 8.43 | 33.967 | 26.398 | 165.7 | .501 | 3.01 | 45.7 | | | | | | | 201 |
| 1 | 213 | | 8.32 | 8.30 | 33.997 | 26.442 | 161.8 | .522 | 2.89 | 43.8 | 35.5 | 2.05 | 27.5 | .00 | | | 214 |
| 1 | 243 | | 7.84 | 7.82 | 34.018 | 26.530 | 153.7 | .569 | 2.83 | 42.4 | 39.7 | 2.13 | 28.8 | .00 | | | 244 |
| | 250 | ISL | 7.75 | 7.72 | 34.024 | 26.548 | 152.0 | .580 | 2.75 | 41.1 | | | | | | | 252 |
| 1 | 283 | | 7.39 | 7.36 | 34.053 | 26.623 | 145.3 | .630 | 2.27 | 33.6 | 46.9 | 2.35 | 31.6 | .00 | | | 285 |
| | 300 | ISL | 7.23 | 7.20 | 34.065 | 26.656 | 142.5 | .654 | 2.06 | 30.4 | | | | | | | 302 |
| 1 | 343 | | 6.86 | 6.83 | 34.100 | 26.733 | 135.6 | .714 | 1.55 | 22.7 | 57.2 | 2.65 | 35.3 | .00 | | | 345 |
| | 400 | ISL | 6.53 | 6.49 | 34.180 | 26.841 | 126.0 | .788 | .95 | 13.8 | | | | | | | 403 |
| 1 | 418 | | 6.44 | 6.40 | 34.204 | 26.873 | 123.1 | .811 | .80 | 11.6 | 69.4 | 2.95 | 38.2 | .00 | | | 421 |
| 1 | 495 | | 5.91 | 5.87 | 34.241 | 26.969 | 114.5 | .902 | .54 | 7.7 | 78.2 | 3.08 | 40.1 | .00 | | | 498 |
| | 500 | ISL | 5.88 | 5.84 | 34.245 | 26.977 | 113.9 | .908 | .53 | 7.5 | | | | | | | 504 |
| 1 | 571 | | 5.54 | 5.49 | 34.306 | 27.067 | 105.9 | .986 | .37 | 5.3 | 86.3 | 3.19 | 41.5 | .00 | | | 575 |

RV DAVID STARR JORDAN CALCOFI CRUISE 8602 STATION 83 70

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 14.7 N | 121 26.4 W | 16/02/86 | 2317 GMT | 3863 M | 200 | 12 KT | 270 07 09 | 1 | 1019.5 MB | 15.9 C | 15.2 C | 7/8 | SC |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 14.77 | 14.77 | 33.267 | 24.687 | 326.3 | .000 | 5.92 | 102.5 | | | | | | | 0 |
| 1 | 3 | | 14.77 | 14.77 | 33.267 | 24.687 | 324.7 | .010 | 5.92 | 102.5 | 1.4 | .36 | .2 | .00 | .14 | .05 | 3 |
| | 10 | ISL | 14.61 | 14.61 | 33.265 | 24.720 | 321.8 | .032 | 5.97 | 103.0 | | | | | | | 10 |
| 1 | 13 | | 14.56 | 14.56 | 33.264 | 24.730 | 320.9 | .042 | 5.98 | 103.1 | 1.4 | .36 | .2 | .00 | .13 | .06 | 13 |
| | 20 | ISL | 14.51 | 14.51 | 33.265 | 24.741 | 320.0 | .064 | 5.97 | 102.8 | | | | | | | 20 |
| 1 | 28 | | 14.49 | 14.48 | 33.267 | 24.748 | 319.6 | .090 | 5.96 | 102.6 | 1.3 | .36 | .2 | .00 | .18 | .07 | 28 |
| | 30 | ISL | 14.47 | 14.47 | 33.267 | 24.751 | 319.4 | .096 | 5.96 | 102.6 | | | | | | | 30 |
| 1 | 43 | | 14.39 | 14.38 | 33.269 | 24.770 | 317.9 | .137 | 5.97 | 102.6 | 1.3 | .37 | .1 | .00 | .21 | .09 | 43 |
| | 50 | ISL | 14.35 | 14.34 | 33.274 | 24.782 | 317.0 | .160 | 5.97 | 102.5 | | | | | | | 50 |
| 1 | 59 | | 14.31 | 14.30 | 33.279 | 24.796 | 315.9 | .188 | 5.97 | 102.4 | 4.0 | .37 | .1 | .01 | .27 | .15 | 59 |
| 1 | 68 | | 13.07 | 13.06 | 33.356 | 25.108 | 286.4 | .215 | 5.77 | 96.5 | 5.0 | .54 | 2.2 | .12 | .44 | .41 | 68 |
| | 75 | ISL | 12.60 | 12.59 | 33.354 | 25.198 | 277.8 | .235 | 5.64 | 93.3 | | | | | | | 76 |
| 1 | 80 | | 12.40 | 12.39 | 33.345 | 25.230 | 275.0 | .248 | 5.53 | 91.2 | 6.0 | .67 | 4.9 | .02 | .19 | .24 | 80 |
| 1 | 94 | | 11.56 | 11.55 | 33.405 | 25.435 | 255.7 | .285 | 4.96 | 80.4 | 9.9 | .99 | 10.1 | .00 | .09 | .14 | 94 |
| | 100 | ISL | 11.15 | 11.14 | 33.463 | 25.554 | 244.5 | .301 | 4.77 | 76.7 | | | | | | | 101 |
| 1 | 108 | | 10.64 | 10.63 | 33.548 | 25.711 | 229.6 | .321 | 4.51 | 71.7 | 14.1 | 1.23 | 14.5 | .00 | .03 | .05 | 109 |
| 1 | 124 | | 9.90 | 9.88 | 33.680 | 25.942 | 208.0 | .356 | 3.75 | 58.7 | 21.2 | 1.60 | 20.4 | .00 | .01 | .03 | 125 |
| | 125 | ISL | 9.87 | 9.86 | 33.684 | 25.949 | 207.2 | .357 | 3.73 | 58.4 | | | | | | | 126 |
| 1 | 149 | | 8.99 | 8.97 | 33.852 | 26.224 | 181.4 | .404 | 3.37 | 51.8 | 28.1 | 1.81 | 24.1 | .00 | .00 | .02 | 150 |
| | 150 | ISL | 8.97 | 8.96 | 33.855 | 26.229 | 180.9 | .406 | 3.36 | 51.6 | | | | | | | 151 |
| 1 | 170 | | 8.74 | 8.73 | 33.912 | 26.310 | 173.6 | .441 | 3.21 | 49.0 | 30.7 | 1.90 | 25.4 | .00 | .00 | .02 | 171 |
| 1 | 190 | | 8.48 | 8.46 | 33.947 | 26.379 | 167.4 | .475 | 3.24 | 49.2 | 32.8 | 1.94 | 26.0 | .00 | | | 191 |
| | 200 | ISL | 8.17 | 8.15 | 33.973 | 26.446 | 161.1 | .492 | 3.14 | 47.3 | | | | | | | 201 |
| 1 | 211 | | 7.84 | 7.81 | 33.999 | 26.515 | 154.5 | .509 | 3.00 | 44.9 | 38.8 | 2.07 | 28.2 | .00 | | | 212 |
| 1 | 242 | | 7.59 | 7.56 | 34.012 | 26.562 | 150.5 | .556 | 2.76 | 41.1 | 42.7 | 2.16 | 29.6 | .00 | | | 243 |
| | 250 | ISL | 7.49 | 7.47 | 34.017 | 26.579 | 149.0 | .568 | 2.66 | 39.5 | | | | | | | 252 |
| 1 | 283 | | 7.11 | 7.08 | 34.039 | 26.651 | 142.4 | .617 | 2.22 | 32.7 | 50.5 | 2.38 | 32.4 | .00 | | | 285 |
| | 300 | ISL | 6.96 | 6.93 | 34.051 | 26.681 | 139.9 | .640 | 2.02 | 29.7 | | | | | | | 302 |
| 1 | 345 | | 6.62 | 6.59 | 34.085 | 26.754 | 133.4 | .702 | 1.53 | 22.3 | 59.8 | 2.67 | 36.1 | .00 | | | 347 |
| | 400 | ISL | 6.20 | 6.16 | 34.144 | 26.856 | 124.2 | .773 | .96 | 13.9 | | | | | | | 403 |
| 1 | 424 | | 6.02 | 5.98 | 34.171 | 26.900 | 120.2 | .802 | .76 | 10.9 | 73.6 | 2.98 | 39.5 | .00 | | | 427 |
| 1 | 500 | | 5.57 | 5.53 | 34.244 | 27.014 | 110.0 | .889 | .45 | 6.4 | 83.8 | 3.13 | 41.2 | .00 | | | 503 |
| 1 | 576 | | 5.31 | 5.26 | 34.322 | 27.107 | 101.9 | .970 | .32 | 4.5 | 91.9 | 3.22 | 42.2 | .00 | | | 580 |

RV DAVID STARR JORDAN CALCOFI CRUISE 8602 STATION 87 33

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 53.3 N | 118 29.4 W | 15/02/86 | 2047 GMT | 60 M | 210 | 12 KT | 230 04 08 | 1 | 1012.8 MB | 16.6 C | 15.5 C | 4/8 | SC |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | | 14.24 | 14.24 | 33.240 | 24.779 | 315.8 | .000 | 6.19 | 106.0 | 3.0 | .44 | .3 | .03 | 3.71 | .71 | 0 |
| | 10 | ISL | 14.06 | 14.06 | 33.307 | 24.868 | 307.6 | .031 | 6.05 | 103.3 | | | | | | | 10 |
| | 20 | ISL | 13.94 | 13.94 | 33.348 | 24.923 | 302.7 | .062 | 5.97 | 101.6 | | | | | | | 20 |
| 1 | 21 | | 13.94 | 13.94 | 33.350 | 24.927 | 302.4 | .064 | 5.96 | 101.5 | 4.0 | .53 | 1.2 | .09 | 3.00 | .49 | 21 |
| | 30 | ISL | 13.90 | 13.90 | 33.360 | 24.942 | 301.1 | .092 | 5.93 | 100.9 | | | | | | | 30 |
| 1 | 31 | | 13.90 | 13.89 | 33.361 | 24.943 | 301.1 | .094 | 5.93 | 100.9 | 4.1 | .56 | 1.2 | .10 | 2.61 | .58 | 31 |
| 1 | 41 | | 13.88 | 13.88 | 33.365 | 24.950 | 300.7 | .124 | 5.93 | 100.9 | 4.2 | .57 | 1.2 | .11 | 2.32 | .56 | 41 |
| | 50 | ISL | 13.80 | 13.79 | 33.385 | 24.983 | 297.8 | .152 | 5.87 | 99.7 | | | | | | | 50 |
| 1 | 52 | | 13.77 | 13.77 | 33.391 | 24.993 | 296.9 | .157 | 5.85 | 99.3 | 4.2 | .56 | 1.3 | .10 | 1.97 | .54 | 52 |

RV DAVID STARR JORDAN CALCOFI CRUISE 8602 STATION 87 35

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 49.4 N | 118 37.4 W | 15/02/86 | 1849 GMT | 642 M | 210 | 13 KT | 200 04 08 | 2 | 1013.2 MB | 16.5 C | 15.6 C | 8/8 | SC |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 14.54 | 14.54 | 33.403 | 24.841 | 310.1 | .000 | 5.97 | 103.0 | | | | | | | 0 |
| 1 | 1 | | 14.54 | 14.54 | 33.403 | 24.841 | 310.0 | .003 | 5.97 | 103.0 | 1.4 | .34 | .2 | .00 | .69 | .25 | 1 |
| | 10 | ISL | 14.49 | 14.49 | 33.404 | 24.852 | 309.1 | .031 | 5.99 | 103.2 | | | | | | | 10 |
| 1 | 11 | | 14.49 | 14.48 | 33.405 | 24.854 | 309.0 | .034 | 5.99 | 103.2 | 1.3 | .34 | .2 | .00 | .71 | .23 | 11 |
| | 20 | ISL | 14.44 | 14.44 | 33.442 | 24.893 | 305.6 | .062 | 5.94 | 102.3 | | | | | | | 20 |
| 1 | 27 | | 14.40 | 14.40 | 33.510 | 24.953 | 300.0 | .083 | 5.91 | 101.7 | 2.1 | .36 | .4 | .01 | 1.09 | .55 | 27 |
| | 30 | ISL | 14.11 | 14.10 | 33.498 | 25.006 | 295.1 | .092 | 5.78 | 98.8 | | | | | | | 30 |
| 1 | 43 | | 12.76 | 12.76 | 33.448 | 25.240 | 273.1 | .128 | 5.16 | 85.8 | 6.1 | .78 | 6.0 | .12 | .35 | .37 | 43 |
| | 50 | ISL | 12.35 | 12.34 | 33.454 | 25.325 | 265.1 | .148 | 4.98 | 82.1 | | | | | | | 50 |
| 1 | 58 | | 12.01 | 12.01 | 33.480 | 25.408 | 257.4 | .168 | 4.79 | 78.4 | 8.8 | .97 | 9.5 | .04 | .26 | .24 | 58 |
| 1 | 69 | | 11.54 | 11.53 | 33.550 | 25.551 | 244.1 | .195 | 4.34 | 70.4 | 12.0 | 1.20 | 12.9 | .06 | .36 | .15 | 69 |
| | 75 | ISL | 11.33 | 11.32 | 33.587 | 25.619 | 237.8 | .210 | 4.19 | 67.7 | | | | | | | 76 |
| 1 | 79 | | 11.22 | 11.21 | 33.605 | 25.652 | 234.6 | .219 | 4.13 | 66.5 | 14.0 | 1.32 | 14.9 | .02 | .16 | .12 | 79 |
| 1 | 95 | | 10.90 | 10.89 | 33.655 | 25.749 | 225.8 | .256 | 3.90 | 62.4 | 16.1 | 1.42 | 16.7 | .00 | .07 | .08 | 95 |
| | 100 | ISL | 10.70 | 10.69 | 33.681 | 25.804 | 220.6 | .268 | 3.79 | 60.4 | | | | | | | 101 |
| 1 | 109 | | 10.35 | 10.34 | 33.732 | 25.904 | 211.3 | .288 | 3.59 | 56.8 | 19.9 | 1.59 | 19.6 | .00 | .04 | .04 | 110 |
| 1 | 125 | | 10.07 | 10.05 | 33.828 | 26.028 | 199.8 | .321 | 3.24 | 51.0 | 23.5 | 1.75 | 21.7 | .00 | .02 | .05 | 126 |
| 1 | 150 | | 9.73 | 9.71 | 33.959 | 26.188 | 185.1 | .369 | 2.76 | 43.1 | 28.3 | 1.95 | 24.5 | .00 | .01 | .03 | 151 |
| 1 | 171 | | 9.53 | 9.51 | 33.975 | 26.233 | 181.2 | .407 | 2.71 | 42.2 | 29.4 | 2.00 | 25.4 | .00 | .01 | .02 | 172 |
| 1 | 191 | | 9.14 | 9.12 | 34.012 | 26.325 | 172.7 | .442 | 2.66 | 41.0 | 32.0 | 2.06 | 26.4 | .00 | | | 192 |
| | 200 | ISL | 9.00 | 8.98 | 34.029 | 26.361 | 169.5 | .458 | 2.61 | 40.2 | | | | | | | 201 |
| 1 | 212 | | 8.85 | 8.83 | 34.051 | 26.403 | 165.7 | .477 | 2.53 | 38.8 | 34.7 | 2.14 | 27.4 | .00 | | | 213 |
| 1 | 242 | | 8.60 | 8.58 | 34.115 | 26.492 | 157.7 | .526 | 2.18 | 33.2 | 38.9 | 2.28 | 29.0 | .00 | | | 243 |
| | 250 | ISL | 8.55 | 8.52 | 34.125 | 26.507 | 156.4 | .539 | 2.11 | 32.1 | | | | | | | 252 |
| 1 | 282 | | 8.37 | 8.34 | 34.147 | 26.553 | 152.5 | .589 | 1.86 | 28.2 | 42.6 | 2.42 | 30.5 | .00 | | | 284 |
| | 300 | ISL | 8.25 | 8.22 | 34.159 | 26.581 | 150.2 | .615 | 1.74 | 26.3 | | | | | | | 302 |
| 1 | 343 | | 7.94 | 7.90 | 34.188 | 26.651 | 144.2 | .679 | 1.45 | 21.8 | 49.2 | 2.61 | 32.6 | .00 | | | 345 |
| | 400 | ISL | 7.49 | 7.45 | 34.226 | 26.746 | 135.8 | .758 | 1.02 | 15.2 | | | | | | | 403 |
| 1 | 419 | | 7.33 | 7.29 | 34.239 | 26.779 | 132.9 | .784 | .88 | 13.0 | 59.4 | 2.85 | 35.5 | .00 | | | 422 |
| 1 | 497 | | 6.71 | 6.67 | 34.299 | 26.912 | 120.9 | .883 | .46 | 6.7 | 70.5 | 3.05 | 38.0 | .00 | | | 500 |
| | 500 | ISL | 6.69 | 6.64 | 34.301 | 26.917 | 120.5 | .887 | .45 | 6.6 | | | | | | | 504 |
| 1 | 574 | | 6.28 | 6.23 | 34.325 | 26.990 | 114.2 | .973 | .33 | 4.8 | 77.8 | 3.16 | 39.1 | .01 | | | 578 |

RV DAVID STARR JORDAN CALCOFI CRUISE 8602 STATION 87 40

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 39.4 N | 118 58.5 W | 15/02/86 | 1458 GMT | 773 M | 210 | 12 KT | 240 06 08 | 2 | 1012.1 MB | 15.2 C | 14.6 C | 8/8 | SC |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 14.11 | 14.11 | 33.436 | 24.956 | 299.0 | .000 | 6.00 | 102.6 | | | | | | | 0 |
| 1 | 2 | | 14.11 | 14.11 | 33.436 | 24.956 | 299.0 | .006 | 6.00 | 102.6 | 1.2 | .37 | .3 | .00 | 2.20 | .46 | 2 |
| | 10 | ISL | 14.11 | 14.11 | 33.435 | 24.956 | 299.2 | .030 | 6.06 | 103.6 | | | | | | | 10 |
| 1 | 11 | | 14.11 | 14.11 | 33.435 | 24.956 | 299.3 | .033 | 6.06 | 103.6 | 1.0 | .36 | .3 | .00 | 2.08 | .63 | 11 |
| | 20 | ISL | 14.11 | 14.11 | 33.435 | 24.955 | 299.6 | .060 | 6.03 | 103.1 | | | | | | | 20 |
| 1 | 27 | | 14.12 | 14.11 | 33.435 | 24.955 | 299.9 | .080 | 6.01 | 102.8 | 1.0 | .36 | .3 | .00 | 2.16 | .55 | 27 |
| | 30 | ISL | 14.08 | 14.08 | 33.442 | 24.968 | 298.7 | .090 | 5.98 | 102.3 | | | | | | | 30 |
| 1 | 44 | | 13.91 | 13.90 | 33.473 | 25.028 | 293.4 | .131 | 5.87 | 100.0 | 2.1 | .42 | .9 | .02 | 1.99 | .65 | 44 |
| | 50 | ISL | 13.27 | 13.27 | 33.481 | 25.164 | 280.6 | .148 | 5.49 | 92.3 | | | | | | | 50 |
| 1 | 58 | | 12.36 | 12.36 | 33.504 | 25.360 | 262.0 | .169 | 4.95 | 81.7 | 8.2 | .90 | 8.4 | .11 | .50 | .42 | 58 |
| 1 | 69 | | 11.45 | 11.44 | 33.566 | 25.580 | 241.3 | .197 | 4.38 | 70.9 | 12.4 | 1.19 | 13.1 | .05 | .19 | .26 | 69 |
| | 75 | ISL | 11.25 | 11.24 | 33.587 | 25.633 | 236.3 | .212 | 4.25 | 68.6 | | | | | | | 76 |
| 1 | 79 | | 11.18 | 11.17 | 33.597 | 25.653 | 234.5 | .221 | 4.21 | 67.7 | 13.7 | 1.28 | 14.5 | .02 | .13 | .19 | 79 |
| 1 | 96 | | 10.72 | 10.71 | 33.668 | 25.790 | 221.8 | .259 | 3.87 | 61.7 | 16.6 | 1.45 | 17.2 | .01 | .05 | .11 | 96 |
| | 100 | ISL | 10.60 | 10.59 | 33.689 | 25.828 | 218.4 | .269 | 3.78 | 60.1 | | | | | | | 101 |
| 1 | 109 | | 10.36 | 10.35 | 33.736 | 25.906 | 211.0 | .289 | 3.59 | 56.8 | 19.4 | 1.58 | 19.5 | .00 | .03 | .10 | 110 |
| 1 | 125 | | 9.98 | 9.96 | 33.816 | 26.034 | 199.2 | .322 | 3.26 | 51.2 | 23.2 | 1.76 | 21.8 | .00 | .01 | .05 | 126 |
| 1 | 150 | | 9.71 | 9.70 | 33.880 | 26.129 | 190.7 | .370 | 2.94 | 45.9 | 27.1 | 1.89 | 23.7 | .00 | .02 | .05 | 151 |
| 1 | 171 | | 9.28 | 9.26 | 33.973 | 26.273 | 177.3 | .409 | 2.57 | 39.8 | 31.4 | 2.06 | 26.0 | .00 | .01 | .04 | 172 |
| 1 | 192 | | 8.96 | 8.94 | 34.043 | 26.379 | 167.6 | .445 | 2.40 | 36.9 | 34.5 | 2.15 | 27.4 | .00 | | | 193 |
| | 200 | ISL | 8.86 | 8.84 | 34.066 | 26.413 | 164.5 | .458 | 2.32 | 35.5 | | | | | | | 201 |
| 1 | 212 | | 8.73 | 8.71 | 34.096 | 26.457 | 160.5 | .477 | 2.19 | 33.5 | 37.6 | 2.27 | 28.7 | .00 | | | 213 |
| 1 | 244 | | 8.46 | 8.43 | 34.149 | 26.541 | 153.0 | .527 | 1.83 | 27.8 | 41.3 | 2.41 | 30.2 | .00 | | | 245 |
| | 250 | ISL | 8.41 | 8.38 | 34.158 | 26.555 | 151.7 | .537 | 1.76 | 26.7 | | | | | | | 252 |
| 1 | 282 | | 8.15 | 8.12 | 34.197 | 26.625 | 145.6 | .585 | 1.41 | 21.3 | 46.8 | 2.59 | 32.0 | .00 | | | 284 |
| | 300 | ISL | 7.98 | 7.95 | 34.217 | 26.666 | 142.0 | .610 | 1.23 | 18.5 | | | | | | | 302 |
| 1 | 344 | | 7.57 | 7.54 | 34.256 | 26.757 | 133.9 | .671 | .85 | 12.7 | 56.5 | 2.83 | 34.8 | .00 | | | 346 |
| | 400 | ISL | 7.20 | 7.16 | 34.281 | 26.830 | 127.6 | .744 | .62 | 9.1 | | | | | | | 403 |
| 1 | 420 | | 7.08 | 7.04 | 34.286 | 26.852 | 125.8 | .770 | .57 | 8.4 | 64.3 | 2.98 | 36.5 | .00 | | | 423 |
| 1 | 497 | | 6.49 | 6.45 | 34.307 | 26.948 | 117.3 | .863 | .40 | 5.8 | 74.3 | 3.08 | 38.3 | .00 | | | 500 |
| | 500 | ISL | 6.47 | 6.42 | 34.308 | 26.951 | 117.0 | .867 | .39 | 5.7 | | | | | | | 504 |
| 1 | 574 | | 5.94 | 5.89 | 34.337 | 27.043 | 108.8 | .950 | .32 | 4.6 | 84.7 | 3.19 | 39.8 | .00 | | | 578 |

RV DAVID STARR JORDAN CALCOFI CRUISE 8602 STATION 87 45

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 29.2 N | 119 19.1 W | 15/02/86 | 1127 GMT | 1677 M | 180 | 12 KT | | 4 | 1010.2 MB | 14.5 C | 14.5 C | |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 13.19 | 13.19 | 33.384 | 25.104 | 284.7 | .000 | 6.00 | 100.6 | | | | | | | 0 |
| 1 | 3 | | 13.19 | 13.19 | 33.384 | 25.104 | 284.9 | .009 | 6.00 | 100.6 | 2.8 | .50 | 1.7 | .06 | 1.37 | .56 | 3 |
| | 10 | ISL | 13.19 | 13.19 | 33.383 | 25.103 | 285.3 | .029 | 6.02 | 101.0 | | | | | | | 10 |
| 1 | 13 | | 13.19 | 13.19 | 33.382 | 25.103 | 285.4 | .037 | 6.03 | 101.1 | 2.8 | .53 | 1.8 | .06 | 1.41 | .63 | 13 |
| | 20 | ISL | 13.18 | 13.17 | 33.382 | 25.105 | 285.3 | .057 | 6.03 | 101.0 | | | | | | | 20 |
| 1 | 29 | | 13.16 | 13.16 | 33.382 | 25.109 | 285.2 | .082 | 6.02 | 100.9 | 3.0 | .53 | 1.9 | .06 | 1.63 | .52 | 29 |
| | 30 | ISL | 13.16 | 13.16 | 33.382 | 25.109 | 285.2 | .086 | 6.02 | 100.9 | | | | | | | 30 |
| 1 | 44 | | 13.17 | 13.16 | 33.383 | 25.109 | 285.6 | .125 | 6.01 | 100.8 | 3.0 | .53 | 2.0 | .06 | 1.61 | .55 | 44 |
| | 50 | ISL | 13.12 | 13.11 | 33.398 | 25.131 | 283.7 | .143 | 5.89 | 98.6 | | | | | | | 50 |
| 1 | 60 | | 13.04 | 13.03 | 33.422 | 25.165 | 280.7 | .170 | 5.70 | 95.3 | 4.3 | .61 | 3.5 | .08 | 1.24 | .49 | 60 |
| 1 | 70 | | 11.61 | 11.61 | 33.541 | 25.530 | 246.1 | .196 | 4.48 | 72.7 | 11.4 | 1.15 | 12.2 | .06 | .17 | .22 | 70 |
| | 75 | ISL | 11.57 | 11.56 | 33.547 | 25.542 | 245.0 | .209 | 4.46 | 72.3 | | | | | | | 76 |
| 1 | 80 | | 11.54 | 11.53 | 33.552 | 25.553 | 244.1 | .221 | 4.44 | 72.0 | 11.7 | 1.18 | 12.6 | .05 | .17 | .30 | 80 |
| 1 | 96 | | 10.88 | 10.87 | 33.639 | 25.739 | 226.7 | .258 | 3.95 | 63.2 | 15.8 | 1.41 | 16.5 | .02 | .08 | .13 | 96 |
| | 100 | ISL | 10.68 | 10.67 | 33.657 | 25.789 | 222.0 | .268 | 3.86 | 61.5 | | | | | | | 101 |
| 1 | 110 | | 10.24 | 10.22 | 33.708 | 25.906 | 211.1 | .291 | 3.65 | 57.6 | 19.6 | 1.59 | 19.5 | .01 | .03 | .09 | 111 |
| | 125 | ISL | 9.86 | 9.84 | 33.836 | 26.070 | 195.8 | .320 | 3.12 | 48.8 | | | | | | | 126 |
| 1 | 126 | | 9.83 | 9.82 | 33.848 | 26.084 | 194.5 | .323 | 3.07 | 48.0 | 24.9 | 1.83 | 22.8 | .00 | .01 | .04 | 127 |
| | 150 | ISL | 9.41 | 9.39 | 33.962 | 26.243 | 179.8 | .367 | 2.66 | 41.2 | | | | | | | 151 |
| 1 | 152 | | 9.38 | 9.36 | 33.968 | 26.253 | 178.9 | .371 | 2.64 | 40.9 | 29.7 | 2.03 | 25.6 | .00 | .00 | .03 | 153 |
| 1 | 172 | | 9.10 | 9.09 | 34.012 | 26.331 | 171.8 | .406 | 2.50 | 38.5 | 32.6 | 2.12 | 26.6 | .00 | .00 | .03 | 173 |
| 1 | 193 | | 8.81 | 8.79 | 34.064 | 26.419 | 163.7 | .441 | 2.27 | 34.8 | 36.2 | 2.21 | 28.2 | .00 | | | 194 |
| | 200 | ISL | 8.69 | 8.67 | 34.079 | 26.448 | 161.1 | .452 | 2.18 | 33.3 | | | | | | | 201 |
| 1 | 213 | | 8.51 | 8.49 | 34.102 | 26.496 | 156.8 | .473 | 2.03 | 30.9 | 39.7 | 2.34 | 29.6 | .00 | | | 214 |
| 1 | 244 | | 8.32 | 8.29 | 34.137 | 26.552 | 151.9 | .520 | 1.79 | 27.1 | 42.9 | 2.43 | 30.6 | .00 | | | 245 |
| | 250 | ISL | 8.28 | 8.25 | 34.145 | 26.566 | 150.7 | .530 | 1.73 | 26.2 | | | | | | | 252 |
| 1 | 285 | | 8.03 | 8.01 | 34.187 | 26.635 | 144.7 | .582 | 1.42 | 21.4 | 47.7 | 2.59 | 32.2 | .00 | | | 287 |
| | 300 | ISL | 7.95 | 7.92 | 34.201 | 26.659 | 142.6 | .603 | 1.30 | 19.6 | | | | | | | 302 |
| 1 | 347 | | 7.66 | 7.63 | 34.239 | 26.731 | 136.5 | .669 | .98 | 14.6 | 54.4 | 2.77 | 34.0 | .00 | | | 349 |
| | 400 | ISL | 7.25 | 7.21 | 34.271 | 26.816 | 129.0 | .739 | .70 | 10.3 | | | | | | | 403 |
| 1 | 423 | | 7.05 | 7.01 | 34.283 | 26.853 | 125.7 | .769 | .60 | 8.8 | 64.0 | 2.98 | 36.7 | .00 | | | 426 |
| | 500 | ISL | 6.43 | 6.39 | 34.311 | 26.958 | 116.3 | .862 | .38 | 5.5 | | | | | | | 504 |
| 1 | 501 | | 6.43 | 6.38 | 34.311 | 26.959 | 116.3 | .862 | .38 | 5.5 | 74.6 | 3.12 | 38.7 | .00 | | | 504 |
| 1 | 577 | | 6.02 | 5.97 | 34.330 | 27.027 | 110.5 | .949 | .30 | 4.3 | 81.7 | 3.18 | 39.6 | .00 | | | 581 |

RV DAVID STARR JORDAN CALCOFI CRUISE 8602 STATION 87 50

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 19.7 N | 119 38.7 W | 15/02/86 | 0837 GMT | 79 M | 140 | 14 KT | | 6 | 1009.6 MB | 14.2 C | 14.0 C | |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 13.74 | 13.73 | 33.259 | 24.897 | 304.7 | .000 | 6.06 | 102.7 | | | | | | | 0 |
| 1 | 2 | | 13.74 | 13.73 | 33.259 | 24.897 | 304.6 | .006 | 6.06 | 102.7 | 1.7 | .38 | .4 | .00 | 1.17 | .42 | 2 |
| | 10 | ISL | 13.71 | 13.71 | 33.262 | 24.905 | 304.1 | .030 | 6.06 | 102.7 | | | | | | | 10 |
| 1 | 12 | | 13.71 | 13.71 | 33.264 | 24.907 | 303.9 | .036 | 6.06 | 102.7 | 1.6 | .38 | .3 | .00 | 1.21 | .44 | 12 |
| | 20 | ISL | 13.70 | 13.70 | 33.283 | 24.923 | 302.7 | .061 | 6.07 | 102.8 | | | | | | | 20 |
| 1 | 23 | | 13.70 | 13.70 | 33.289 | 24.927 | 302.3 | .070 | 6.07 | 102.8 | 1.6 | .38 | .3 | .00 | 1.24 | .49 | 23 |
| | 30 | ISL | 13.36 | 13.35 | 33.356 | 25.050 | 290.9 | .091 | 6.01 | 101.1 | | | | | | | 30 |
| 1 | 33 | | 13.16 | 13.15 | 33.389 | 25.115 | 284.8 | .099 | 5.98 | 100.2 | 2.7 | .49 | 1.8 | .04 | 1.08 | .58 | 33 |
| | 50 | ISL | 11.45 | 11.45 | 33.564 | 25.577 | 241.1 | .144 | 4.71 | 76.3 | | | | | | | 50 |
| 1 | 54 | | 10.95 | 10.95 | 33.607 | 25.701 | 229.4 | .153 | 4.25 | 68.1 | 15.5 | 1.32 | 15.0 | .08 | .17 | .31 | 54 |

RV DAVID STARR JORDAN CALCOFI CRUISE 8602 STATION 87 60

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 59.4 N | 120 20.8 W | 15/02/86 | 0318 GMT | 738 M | 190 | 14 KT | 220 08 | 6 | 1010.0 MB | 15.2 C | 14.7 C | |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 15.00 | 15.00 | 33.259 | 24.632 | 329.6 | .000 | 5.82 | 101.2 | | | | | | | 0 |
| 1 | 3 | | 15.00 | 15.00 | 33.259 | 24.632 | 329.9 | .010 | 5.82 | 101.2 | 2.1 | .36 | .3 | .00 | .12 | .05 | 3 |
| | 10 | ISL | 15.02 | 15.01 | 33.260 | 24.628 | 330.4 | .033 | 5.86 | 102.0 | | | | | | | 10 |
| 1 | 13 | | 15.02 | 15.02 | 33.261 | 24.628 | 330.6 | .043 | 5.87 | 102.1 | 2.1 | .37 | .3 | .00 | .12 | .06 | 13 |
| | 20 | ISL | 15.02 | 15.02 | 33.262 | 24.629 | 330.7 | .066 | 5.86 | 101.9 | | | | | | | 20 |
| 1 | 23 | | 15.02 | 15.02 | 33.263 | 24.630 | 330.7 | .076 | 5.85 | 101.8 | 2.0 | .38 | .2 | .00 | .12 | .05 | 23 |
| | 30 | ISL | 15.01 | 15.01 | 33.264 | 24.634 | 330.6 | .099 | 5.84 | 101.6 | | | | | | | 30 |
| 1 | 34 | | 15.01 | 15.00 | 33.265 | 24.635 | 330.5 | .112 | 5.84 | 101.6 | 2.1 | .37 | .2 | .00 | .13 | .05 | 34 |
| 1 | 44 | | 15.02 | 15.01 | 33.266 | 24.634 | 331.0 | .145 | 5.85 | 101.8 | 2.0 | .36 | .2 | .00 | .12 | .05 | 44 |
| | 50 | ISL | 15.02 | 15.01 | 33.267 | 24.635 | 331.0 | .165 | 5.85 | 101.8 | | | | | | | 50 |
| 1 | 55 | | 15.01 | 15.00 | 33.268 | 24.637 | 331.0 | .181 | 5.85 | 101.8 | 1.9 | .36 | .2 | .00 | .13 | .06 | 55 |
| 1 | 64 | | 14.94 | 14.94 | 33.277 | 24.659 | 329.2 | .211 | 5.86 | 101.8 | 1.9 | .36 | .2 | .00 | .16 | .08 | 64 |
| 1 | 74 | | 14.67 | 14.66 | 33.298 | 24.733 | 322.4 | .243 | 5.88 | 101.6 | 2.2 | .39 | .3 | .01 | .23 | .14 | 74 |
| | 75 | ISL | 14.61 | 14.60 | 33.301 | 24.750 | 320.8 | .247 | 5.89 | 101.6 | | | | | | | 76 |
| 1 | 90 | | 13.59 | 13.58 | 33.335 | 24.987 | 298.5 | .293 | 5.95 | 100.6 | 2.9 | .48 | .8 | .08 | .27 | .26 | 90 |
| | 100 | ISL | 12.69 | 12.67 | 33.339 | 25.171 | 281.1 | .323 | 5.70 | 94.5 | | | | | | | 101 |
| 1 | 105 | | 12.29 | 12.28 | 33.345 | 25.252 | 273.4 | .335 | 5.54 | 91.1 | 4.7 | .67 | 4.4 | .03 | .12 | .17 | 105 |
| 1 | 124 | | 11.00 | 10.98 | 33.473 | 25.591 | 241.6 | .387 | 4.80 | 76.9 | 10.1 | 1.07 | 11.8 | .01 | .04 | .08 | 125 |
| | 125 | ISL | 10.97 | 10.95 | 33.476 | 25.598 | 240.9 | .388 | 4.79 | 76.6 | | | | | | | 126 |
| 1 | 150 | | 10.02 | 10.00 | 33.614 | 25.870 | 215.3 | .446 | 4.25 | 66.7 | 17.0 | 1.42 | 17.5 | .00 | .03 | .12 | 151 |
| 1 | 181 | | 9.17 | 9.15 | 33.823 | 26.173 | 186.9 | .507 | 3.32 | 51.2 | 26.3 | 1.81 | 23.8 | .00 | | | 182 |
| | 200 | ISL | 8.82 | 8.80 | 33.884 | 26.276 | 177.4 | .542 | 3.16 | 48.3 | | | | | | | 201 |
| 1 | 212 | | 8.65 | 8.63 | 33.912 | 26.324 | 173.0 | .563 | 3.11 | 47.4 | 30.7 | 1.94 | 26.0 | .00 | | | 213 |
| 1 | 240 | | 8.32 | 8.29 | 34.002 | 26.447 | 161.8 | .609 | 2.77 | 41.9 | 36.1 | 2.10 | 27.9 | .00 | | | 241 |
| | 250 | ISL | 8.23 | 8.21 | 34.021 | 26.474 | 159.3 | .626 | 2.68 | 40.5 | | | | | | | 252 |
| 1 | 280 | | 7.99 | 7.96 | 34.053 | 26.536 | 153.9 | .674 | 2.45 | 36.8 | 40.6 | 2.24 | 29.4 | .00 | | | 282 |
| | 300 | ISL | 7.73 | 7.70 | 34.061 | 26.580 | 149.9 | .703 | 2.28 | 34.0 | | | | | | | 302 |
| 1 | 339 | | 7.19 | 7.16 | 34.076 | 26.670 | 141.7 | .760 | 1.88 | 27.7 | 50.9 | 2.50 | 33.1 | .00 | | | 341 |
| | 400 | ISL | 6.63 | 6.59 | 34.174 | 26.824 | 127.6 | .842 | 1.04 | 15.1 | | | | | | | 403 |
| 1 | 412 | | 6.53 | 6.50 | 34.195 | 26.853 | 125.0 | .858 | .88 | 12.8 | 66.7 | 2.89 | 37.4 | .00 | | | 415 |
| 1 | 485 | | 6.03 | 5.99 | 34.227 | 26.944 | 117.0 | .945 | .58 | 8.3 | 75.0 | 3.04 | 39.3 | .00 | | | 488 |
| | 500 | ISL | 5.92 | 5.88 | 34.239 | 26.967 | 114.9 | .963 | .52 | 7.5 | | | | | | | 504 |
| 1 | 556 | | 5.52 | 5.47 | 34.302 | 27.067 | 105.7 | 1.025 | .34 | 4.8 | 86.8 | 3.20 | 41.3 | .00 | | | 560 |

RV DAVID STARR JORDAN CALCOFI CRUISE 8602 STATION 87 70

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 40.0 N | 121 01.9 W | 14/02/86 | 2152 GMT | 3781 M | 160 | 28 KT | 190 08 07 | 2 | 1008.1 MB | 15.9 C | 14.8 C | 8/8 | NS |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 14.37 | 14.37 | 33.280 | 24.781 | 315.7 | .000 | 5.96 | 102.4 | | | | | | | 0 |
| 1 | 2 | | 14.37 | 14.37 | 33.280 | 24.781 | 315.7 | .006 | 5.96 | 102.4 | 2.6 | .40 | .3 | .00 | .21 | .07 | 2 |
| | 10 | ISL | 14.37 | 14.37 | 33.280 | 24.782 | 315.8 | .032 | 5.98 | 102.7 | | | | | | | 10 |
| 1 | 12 | | 14.37 | 14.37 | 33.280 | 24.782 | 315.9 | .038 | 5.98 | 102.7 | 2.6 | .40 | .3 | .00 | .22 | .08 | 12 |
| | 20 | ISL | 14.38 | 14.37 | 33.280 | 24.781 | 316.2 | .063 | 5.97 | 102.6 | | | | | | | 20 |
| 1 | 28 | | 14.38 | 14.37 | 33.280 | 24.781 | 316.5 | .088 | 5.96 | 102.4 | 2.5 | .40 | .3 | .00 | .22 | .09 | 28 |
| | 30 | ISL | 14.38 | 14.37 | 33.282 | 24.782 | 316.4 | .095 | 5.96 | 102.4 | | | | | | | 30 |
| 1 | 43 | | 14.34 | 14.34 | 33.283 | 24.791 | 315.9 | .135 | 5.95 | 102.1 | 2.5 | .40 | .2 | .00 | .24 | .10 | 43 |
| | 50 | ISL | 14.27 | 14.27 | 33.290 | 24.811 | 314.2 | .158 | 5.95 | 101.9 | | | | | | | 50 |
| 1 | 59 | | 14.19 | 14.18 | 33.298 | 24.835 | 312.2 | .185 | 5.94 | 101.6 | 2.6 | .41 | .3 | .01 | .38 | .18 | 59 |
| 1 | 69 | | 13.16 | 13.15 | 33.353 | 25.089 | 288.2 | .215 | 5.81 | 97.3 | 3.5 | .54 | 2.0 | .09 | .55 | .51 | 69 |
| | 75 | ISL | 12.87 | 12.86 | 33.374 | 25.162 | 281.3 | .233 | 5.66 | 94.3 | | | | | | | 76 |
| 1 | 79 | | 12.74 | 12.73 | 33.382 | 25.194 | 278.4 | .243 | 5.56 | 92.4 | 4.6 | .67 | 4.5 | .03 | .33 | .31 | 79 |
| 1 | 95 | | 11.66 | 11.65 | 33.392 | 25.406 | 258.5 | .286 | 5.01 | 81.4 | 8.5 | .98 | 9.6 | .01 | .11 | .17 | 95 |
| | 100 | ISL | 11.38 | 11.36 | 33.413 | 25.475 | 252.0 | .300 | 4.83 | 78.0 | | | | | | | 101 |
| 1 | 109 | | 10.94 | 10.92 | 33.469 | 25.597 | 240.5 | .323 | 4.52 | 72.3 | 12.5 | 1.25 | 14.1 | .00 | .06 | .09 | 110 |
| 1 | 124 | | 10.32 | 10.30 | 33.607 | 25.813 | 220.2 | .358 | 4.00 | 63.2 | 17.6 | 1.50 | 18.3 | .00 | .02 | .05 | 125 |
| | 125 | ISL | 10.30 | 10.28 | 33.612 | 25.821 | 219.5 | .359 | 3.98 | 62.8 | | | | | | | 126 |
| 1 | 150 | | 9.58 | 9.56 | 33.783 | 26.075 | 195.7 | .411 | 3.34 | 51.9 | 24.3 | 1.78 | 22.6 | .00 | .00 | .04 | 151 |
| 1 | 170 | | 9.17 | 9.15 | 33.855 | 26.198 | 184.3 | .449 | 3.16 | 48.7 | 28.0 | 1.90 | 24.4 | .00 | .00 | .02 | 171 |
| 1 | 191 | | 8.79 | 8.77 | 33.955 | 26.337 | 171.4 | .486 | 2.79 | 42.7 | 32.4 | 2.05 | 26.8 | .00 | | | 192 |
| | 200 | ISL | 8.69 | 8.67 | 33.981 | 26.373 | 168.2 | .502 | 2.70 | 41.2 | | | | | | | 201 |
| 1 | 211 | | 8.57 | 8.55 | 34.001 | 26.407 | 165.1 | .520 | 2.64 | 40.2 | 35.3 | 2.13 | 27.8 | .00 | | | 212 |
| 1 | 242 | | 8.05 | 8.02 | 34.006 | 26.490 | 157.6 | .569 | 2.84 | 42.7 | 37.7 | 2.12 | 28.1 | .00 | | | 243 |
| | 250 | ISL | 7.88 | 7.86 | 34.009 | 26.517 | 155.1 | .582 | 2.80 | 41.9 | | | | | | | 252 |
| 1 | 282 | | 7.29 | 7.26 | 34.030 | 26.619 | 145.6 | .631 | 2.45 | 36.2 | 46.6 | 2.33 | 31.3 | .00 | | | 284 |
| | 300 | ISL | 7.09 | 7.06 | 34.049 | 26.662 | 141.8 | .656 | 2.18 | 32.1 | | | | | | | 302 |
| 1 | 343 | | 6.71 | 6.68 | 34.094 | 26.749 | 133.9 | .716 | 1.52 | 22.2 | 58.8 | 2.68 | 35.5 | .00 | | | 345 |
| | 400 | ISL | 6.14 | 6.10 | 34.127 | 26.850 | 124.7 | .789 | 1.01 | 14.6 | | | | | | | 403 |
| 1 | 419 | | 5.96 | 5.93 | 34.137 | 26.880 | 122.0 | .813 | .90 | 12.9 | 72.2 | 2.96 | 39.0 | .00 | | | 422 |
| 1 | 496 | | 5.52 | 5.48 | 34.200 | 26.985 | 112.6 | .903 | .57 | 8.1 | 82.5 | 3.11 | 41.1 | .00 | | | 499 |
| | 500 | ISL | 5.50 | 5.46 | 34.204 | 26.991 | 112.1 | .908 | .56 | 7.9 | | | | | | | 504 |
| 1 | 573 | | 5.22 | 5.17 | 34.269 | 27.076 | 104.6 | .987 | .36 | 5.1 | 91.3 | 3.21 | 42.1 | .00 | | | 577 |

RV DAVID STARR JORDAN CALCOFI CRUISE 8602 STATION 90 28

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 29.2 N | 117 46.4 W | 13/02/86 | 1026 GMT | 69 M | 100 | 11 KT | | 6 | 1019.3 MB | 12.7 C | 11.8 C | | |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 14.58 | 14.58 | 33.479 | 24.890 | 305.4 | .000 | 6.23 | 107.6 | | | | | | | 0 |
| 1 | 3 | | 14.58 | 14.58 | 33.479 | 24.890 | 305.4 | .009 | 6.23 | 107.6 | 1.8 | .31 | .1 | .00 | 1.14 | .30 | 3 |
| | 10 | ISL | 14.58 | 14.58 | 33.480 | 24.892 | 305.3 | .031 | 6.24 | 107.8 | | | | | | | 10 |
| 1 | 14 | | 14.58 | 14.57 | 33.482 | 24.894 | 305.3 | .043 | 6.25 | 107.9 | 1.8 | .30 | .1 | .00 | 1.18 | .32 | 14 |
| | 20 | ISL | 14.42 | 14.42 | 33.470 | 24.918 | 303.1 | .061 | 6.27 | 108.0 | | | | | | | 20 |
| 1 | 24 | | 14.32 | 14.32 | 33.463 | 24.934 | 301.8 | .073 | 6.29 | 108.0 | 1.6 | .31 | .0 | .00 | 3.08 | .57 | 24 |
| | 30 | ISL | 13.59 | 13.58 | 33.418 | 25.051 | 290.8 | .091 | 5.55 | 93.8 | | | | | | | 30 |
| 1 | 34 | | 13.07 | 13.06 | 33.396 | 25.139 | 282.5 | .102 | 5.02 | 84.0 | 7.7 | 1.14 | 5.8 | .28 | .63 | .30 | 34 |
| 1 | 45 | | 12.13 | 12.13 | 33.439 | 25.353 | 262.3 | .132 | 4.42 | 72.5 | 11.4 | 1.41 | 10.5 | .32 | .18 | .22 | 45 |
| | 50 | ISL | 11.90 | 11.90 | 33.456 | 25.410 | 257.0 | .145 | 4.16 | 67.9 | | | | | | | 50 |
| 1 | 65 | | 10.85 | 10.84 | | | | | 3.50 | 55.9 | 21.2 | | 16.3 | .60 | | | 65 |

RV DAVID STARR JORDAN CALCOFI CRUISE 8602 STATION 90 30

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 25.3 N | 117 54.1 W | 13/02/86 | 1227 GMT | 626 M | 130 | 22 KT | | | 1017.5 MB | 13.1 C | 12.4 C | | |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 14.61 | 14.61 | 33.496 | 24.897 | 304.6 | .000 | 5.95 | 102.8 | | | | | | | 0 |
| 1 | 1 | | 14.61 | 14.61 | 33.496 | 24.897 | 304.6 | .003 | 5.95 | 102.8 | 2.2 | .47 | .1 | .00 | .46 | .17 | 1 |
| 1 | 10 | | 14.62 | 14.62 | 33.499 | 24.898 | 304.8 | .030 | 6.02 | 104.1 | 2.2 | .47 | .1 | .00 | .47 | .15 | 10 |
| | 20 | ISL | 14.62 | 14.62 | 33.505 | 24.902 | 304.7 | .061 | 6.00 | 103.7 | | | | | | | 20 |
| 1 | 25 | | 14.62 | 14.62 | 33.507 | 24.904 | 304.6 | .076 | 5.99 | 103.5 | 2.1 | .46 | .1 | .00 | .53 | .22 | 25 |
| | 30 | ISL | 14.43 | 14.43 | 33.493 | 24.934 | 302.0 | .091 | 5.90 | 101.6 | | | | | | | 30 |
| 1 | 40 | | 13.84 | 13.84 | 33.465 | 25.036 | 292.5 | .121 | 5.61 | 95.4 | 4.0 | .65 | 1.8 | .26 | 1.28 | .60 | 40 |
| | 50 | ISL | 12.89 | 12.89 | 33.474 | 25.234 | 274.6 | .149 | 5.10 | 85.0 | | | | | | | 50 |
| 1 | 55 | | 12.48 | 12.47 | 33.478 | 25.318 | 265.9 | .162 | 4.86 | 80.3 | 8.5 | 1.04 | 8.1 | .12 | .39 | .33 | 55 |
| 1 | 63 | | 12.13 | 12.12 | 33.530 | 25.425 | 255.9 | .183 | 4.62 | 75.8 | 9.9 | 1.14 | 10.0 | .06 | .22 | .29 | 63 |
| 1 | 73 | | 11.74 | 11.73 | 33.587 | 25.542 | 245.0 | .208 | 4.33 | 70.5 | 12.6 | 1.27 | 12.5 | .05 | .14 | .27 | 73 |
| | 75 | ISL | 11.65 | 11.64 | 33.596 | 25.567 | 242.7 | .214 | 4.28 | 69.6 | | | | | | | 76 |
| 1 | 89 | | 11.11 | 11.10 | 33.649 | 25.706 | 229.7 | .246 | 4.01 | 64.5 | 15.1 | 1.45 | 15.5 | .03 | .06 | .12 | 89 |
| | 100 | ISL | 10.71 | 10.70 | 33.718 | 25.831 | 218.1 | .271 | 3.65 | 58.1 | | | | | | | 101 |
| 1 | 102 | | 10.63 | 10.61 | 33.733 | 25.858 | 215.5 | .277 | 3.57 | 56.8 | 19.2 | 1.66 | 18.5 | .03 | .03 | .08 | 103 |
| 1 | 116 | | 10.18 | 10.17 | 33.807 | 25.992 | 203.1 | .306 | 3.32 | 52.3 | 22.6 | 1.80 | 20.9 | .02 | .01 | .10 | 117 |
| | 125 | ISL | 10.01 | 9.99 | 33.854 | 26.059 | 196.9 | .323 | 3.16 | 49.7 | | | | | | | 126 |
| 1 | 142 | | 9.77 | 9.76 | 33.934 | 26.161 | 187.5 | .356 | 2.89 | 45.2 | 27.1 | 2.00 | 23.9 | .01 | .00 | .04 | 143 |
| | 150 | ISL | 9.71 | 9.69 | 33.955 | 26.189 | 185.0 | .371 | 2.81 | 43.9 | | | | | | | 151 |
| 1 | 162 | | 9.58 | 9.56 | 33.980 | 26.229 | 181.4 | .393 | 2.72 | 42.4 | 28.9 | 2.07 | 24.9 | .01 | .00 | .03 | 163 |
| 1 | 181 | | 9.17 | 9.15 | 34.014 | 26.323 | 172.8 | .426 | 2.66 | 41.1 | 31.6 | 2.14 | 26.1 | .01 | | | 182 |
| | 200 | ISL | 9.05 | 9.03 | 34.080 | 26.393 | 166.5 | .458 | 2.41 | 37.1 | | | | | | | 201 |
| 1 | 202 | | 9.05 | 9.03 | 34.087 | 26.399 | 165.9 | .462 | 2.38 | 36.6 | 34.6 | 2.25 | 27.3 | .01 | | | 203 |
| 1 | 232 | | 8.81 | 8.78 | 34.168 | 26.501 | 156.8 | .510 | 1.90 | 29.1 | 39.3 | 2.43 | 29.0 | .01 | | | 233 |
| | 250 | ISL | 8.54 | 8.51 | 34.181 | 26.553 | 152.0 | .538 | 1.73 | 26.4 | | | | | | | 252 |
| 1 | 272 | | 8.18 | 8.15 | 34.181 | 26.608 | 147.1 | .571 | 1.60 | 24.2 | 46.2 | 2.59 | 31.2 | .01 | | | 274 |
| | 300 | ISL | 7.84 | 7.81 | 34.175 | 26.655 | 143.0 | .611 | 1.49 | 22.4 | | | | | | | 302 |
| 1 | 335 | | 7.49 | 7.46 | 34.170 | 26.701 | 138.9 | .661 | 1.37 | 20.4 | 53.2 | 2.73 | 33.8 | .01 | | | 337 |
| | 400 | ISL | 7.07 | 7.03 | 34.216 | 26.798 | 130.5 | .748 | .92 | 13.6 | | | | | | | 403 |
| 1 | 412 | | 7.01 | 6.97 | 34.229 | 26.816 | 128.9 | .764 | .83 | 12.2 | 63.8 | 2.96 | 36.3 | .00 | | | 415 |
| 1 | 490 | | 6.60 | 6.56 | 34.305 | 26.932 | 118.9 | .860 | .40 | 5.8 | 71.8 | 3.16 | 38.2 | .00 | | | 493 |
| | 500 | ISL | 6.54 | 6.49 | 34.312 | 26.945 | 117.6 | .872 | .38 | 5.5 | | | | | | | 504 |
| 1 | 567 | | 6.04 | 5.99 | 34.337 | 27.030 | 110.0 | .949 | .26 | 3.7 | 82.6 | 3.27 | 39.6 | .00 | | | 571 |

RV DAVID STARR JORDAN CALCOFI CRUISE 8602 STATION 90 35

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 15.6 N | 118 14.5 W | 13/02/86 | 1609 GMT | 389 M | 150 | 20 KT | 150 05 07 | 6 | 1017.2 MB | 14.0 C | 13.9 C | 8/8 | NS |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 14.47 | 14.47 | 33.442 | 24.885 | 305.9 | .000 | 6.02 | 103.7 | | | | | | | 0 |
| 1 | 2 | | 14.47 | 14.47 | 33.442 | 24.885 | 305.7 | .006 | 6.02 | 103.7 | 2.2 | .36 | .2 | .01 | .94 | .25 | 2 |
| | 10 | ISL | 14.46 | 14.46 | 33.450 | 24.894 | 305.1 | .031 | 6.03 | 103.8 | | | | | | | 10 |
| 1 | 17 | | 14.45 | 14.45 | 33.457 | 24.902 | 304.6 | .052 | 6.03 | 103.8 | 2.1 | .36 | .2 | .01 | .95 | .26 | 17 |
| | 20 | ISL | 14.41 | 14.41 | 33.457 | 24.909 | 303.9 | .061 | 6.01 | 103.4 | | | | | | | 20 |
| | 30 | ISL | 14.14 | 14.14 | 33.457 | 24.967 | 298.7 | .091 | 5.86 | 100.3 | | | | | | | 30 |
| 1 | 32 | | 14.06 | 14.06 | 33.457 | 24.983 | 297.3 | .097 | 5.82 | 99.4 | 3.1 | .46 | .8 | .11 | 1.37 | .36 | 32 |
| | 50 | ISL | 12.58 | 12.57 | 33.452 | 25.279 | 269.8 | .148 | 5.05 | 83.6 | | | | | | | 50 |
| 1 | 52 | | 12.42 | 12.41 | 33.451 | 25.309 | 266.7 | .153 | 4.96 | 81.9 | 7.3 | .88 | 7.7 | .05 | .27 | .31 | 52 |
| | 75 | ISL | 11.24 | 11.23 | 33.608 | 25.650 | 234.7 | .211 | 4.12 | 66.4 | | | | | | | 76 |
| 1 | 77 | | 11.18 | 11.17 | 33.621 | 25.671 | 232.8 | .215 | 4.07 | 65.5 | 14.6 | 1.30 | 15.0 | .01 | .08 | .17 | 77 |
| | 100 | ISL | 10.50 | 10.49 | 33.750 | 25.893 | 212.2 | .267 | 3.51 | 55.8 | | | | | | | 101 |
| 1 | 106 | | 10.35 | 10.34 | 33.779 | 25.941 | 207.7 | .281 | 3.40 | 53.8 | 21.1 | 1.62 | 20.1 | .01 | .02 | .06 | 107 |
| | 125 | ISL | 9.87 | 9.85 | 33.853 | 26.081 | 194.7 | .318 | 3.17 | 49.6 | | | | | | | 126 |
| 1 | 142 | | 9.49 | 9.47 | 33.911 | 26.190 | 184.6 | .351 | 3.01 | 46.8 | 27.8 | 1.88 | 24.1 | .01 | .00 | .03 | 143 |
| | 150 | ISL | 9.37 | 9.35 | 33.938 | 26.230 | 180.9 | .365 | 2.93 | 45.4 | | | | | | | 151 |
| 1 | 178 | | 9.06 | 9.04 | 34.024 | 26.347 | 170.3 | .414 | 2.64 | 40.7 | 32.6 | 2.06 | 26.5 | .01 | .01 | .06 | 179 |
| | 200 | ISL | 8.87 | 8.85 | 34.077 | 26.419 | 164.0 | .451 | 2.38 | 36.6 | | | | | | | 201 |
| 1 | 218 | | 8.73 | 8.71 | 34.107 | 26.465 | 159.8 | .479 | 2.20 | 33.6 | 37.9 | 2.24 | 28.4 | .01 | .00 | .04 | 219 |
| | 250 | ISL | 8.43 | 8.40 | 34.129 | 26.530 | 154.1 | .530 | 2.03 | 30.8 | | | | | | | 252 |
| 1 | 263 | | 8.31 | 8.28 | 34.133 | 26.552 | 152.3 | .551 | 1.97 | 29.8 | 42.8 | 2.34 | 30.2 | .01 | .00 | .03 | 265 |
| | 300 | ISL | 8.06 | 8.03 | 34.153 | 26.605 | 147.8 | .605 | 1.75 | 26.3 | | | | | | | 302 |
| 1 | 304 | | 8.03 | 8.00 | 34.155 | 26.610 | 147.4 | .612 | 1.72 | 25.9 | 46.4 | 2.46 | 31.5 | .01 | .00 | .03 | 306 |

RV DAVID STARR JORDAN CALCOFI CRUISE 8602 STATION 90 37

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 11.5 N | 118 23.4 W | 13/02/86 | 1904 GMT | 1208 M | 160 | 15 KT | 160 05 05 | 5 | 1019.4 MB | 14.3 C | 14.2 C | 8/8 | NS |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 14.86 | 14.86 | 33.484 | 24.833 | 310.7 | .000 | 5.95 | 103.4 | | | | | | | 0 |
| 1 | 1 | | 14.86 | 14.86 | 33.484 | 24.833 | 310.7 | .003 | 5.95 | 103.4 | 2.1 | .33 | .0 | .00 | .47 | .18 | 1 |
| | 10 | ISL | 14.84 | 14.84 | 33.484 | 24.839 | 310.4 | .031 | 5.98 | 103.8 | | | | | | | 10 |
| 1 | 11 | | 14.84 | 14.84 | 33.484 | 24.839 | 310.4 | .034 | 5.98 | 103.8 | 2.0 | .33 | .0 | .00 | .48 | .16 | 11 |
| | 20 | ISL | 14.83 | 14.83 | 33.487 | 24.843 | 310.3 | .062 | 5.97 | 103.7 | | | | | | | 20 |
| 1 | 27 | | 14.83 | 14.83 | 33.489 | 24.846 | 310.3 | .083 | 5.97 | 103.6 | 1.9 | .36 | .0 | .00 | .48 | .20 | 27 |
| | 30 | ISL | 14.56 | 14.55 | 33.477 | 24.895 | 305.7 | .093 | 5.87 | 101.4 | | | | | | | 30 |
| 1 | 43 | | 13.20 | 13.19 | 33.450 | 25.155 | 281.2 | .131 | 5.34 | 89.6 | 5.3 | .70 | 4.2 | .19 | .46 | .26 | 43 |
| | 50 | ISL | 12.58 | 12.58 | 33.478 | 25.297 | 267.8 | .150 | 5.04 | 83.4 | | | | | | | 50 |
| 1 | 58 | | 12.06 | 12.06 | | | | .170 | 4.72 | 77.4 | 9.1 | 1.00 | 9.5 | .03 | .19 | .23 | 58 |
| 1 | 69 | | 11.64 | 11.63 | 33.573 | 25.551 | 244.1 | .198 | 4.33 | 70.4 | 12.0 | 1.18 | 12.6 | .01 | .12 | .16 | 69 |
| | 75 | ISL | 11.48 | 11.47 | 33.596 | 25.598 | 239.8 | .213 | 4.21 | 68.1 | | | | | | | 76 |
| 1 | 79 | | 11.40 | 11.39 | 33.608 | 25.622 | 237.6 | .222 | 4.15 | 67.1 | 13.8 | 1.28 | 14.1 | .00 | .08 | .16 | 79 |
| 1 | 95 | | 11.03 | 11.02 | 33.666 | 25.734 | 227.2 | .259 | 3.86 | 61.9 | 16.2 | 1.42 | 16.0 | .00 | .04 | .11 | 95 |
| | 100 | ISL | 10.86 | 10.85 | 33.695 | 25.787 | 222.3 | .271 | 3.73 | 59.6 | | | | | | | 101 |
| 1 | 109 | | 10.60 | 10.59 | 33.746 | 25.873 | 214.3 | .292 | 3.51 | 55.8 | 19.5 | 1.59 | 18.8 | .00 | .02 | .07 | 110 |
| 1 | 125 | | 10.36 | 10.35 | 33.802 | 25.958 | 206.5 | .325 | 3.32 | 52.5 | 22.3 | 1.69 | 20.5 | .00 | .01 | .07 | 126 |
| | 150 | ISL | 9.82 | 9.80 | 33.959 | 26.173 | 186.5 | .374 | 2.76 | 43.1 | | | | | | | 151 |
| 1 | 151 | | 9.79 | 9.77 | 33.966 | 26.183 | 185.6 | .376 | 2.73 | 42.7 | 28.3 | 1.96 | 24.2 | .00 | .01 | .04 | 152 |
| 1 | 171 | | 9.56 | 9.54 | 34.012 | 26.258 | 178.9 | .412 | 2.59 | 40.3 | 30.6 | 2.04 | 25.3 | .00 | .00 | .04 | 172 |
| 1 | 192 | | 9.22 | 9.20 | 34.067 | 26.356 | 169.8 | .448 | 2.41 | 37.3 | 33.6 | 2.17 | 26.7 | .00 | | | 193 |
| | 200 | ISL | 9.12 | 9.10 | 34.083 | 26.384 | 167.3 | .462 | 2.35 | 36.2 | | | | | | | 201 |
| 1 | 213 | | 8.96 | 8.94 | 34.102 | 26.425 | 163.6 | .483 | 2.25 | 34.6 | 36.2 | 2.23 | 27.5 | .00 | | | 214 |
| 1 | 244 | | 8.34 | 8.31 | 34.129 | 26.543 | 152.7 | .532 | 2.02 | 30.6 | 42.0 | 2.39 | 29.7 | .00 | | | 245 |
| | 250 | ISL | 8.25 | 8.23 | 34.134 | 26.560 | 151.2 | .542 | 1.97 | 29.8 | | | | | | | 252 |
| 1 | 284 | | 7.91 | 7.88 | 34.154 | 26.627 | 145.3 | .593 | 1.68 | 25.2 | 47.5 | 2.54 | 31.6 | .00 | | | 286 |
| | 300 | ISL | 7.78 | 7.75 | 34.166 | 26.656 | 142.7 | .615 | 1.54 | 23.0 | | | | | | | 302 |
| 1 | 346 | | 7.44 | 7.41 | 34.204 | 26.735 | 135.9 | .679 | 1.14 | 16.9 | 56.0 | 2.76 | 34.1 | .00 | | | 348 |
| | 400 | ISL | 7.10 | 7.06 | 34.244 | 26.815 | 129.0 | .751 | .80 | 11.8 | | | | | | | 403 |
| 1 | 422 | | 6.97 | 6.93 | 34.259 | 26.845 | 126.3 | .779 | .69 | 10.1 | 64.8 | 2.98 | 36.4 | .00 | | | 425 |
| 1 | 499 | | 6.48 | 6.43 | 34.315 | 26.956 | 116.6 | .872 | .38 | 5.5 | 74.2 | 3.14 | 38.2 | .00 | | | 502 |
| | 500 | ISL | 6.47 | 6.42 | 34.316 | 26.958 | 116.4 | .874 | .38 | 5.5 | | | | | | | 504 |
| 1 | 575 | | 5.86 | 5.81 | 34.344 | 27.058 | 107.3 | .957 | .28 | 4.0 | 84.7 | 3.23 | 39.6 | .00 | | | 579 |

RV DAVID STARR JORDAN CALCOFI CRUISE 8602 STATION 90 44

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 55.1 N | 118 52.7 W | 13/02/86 | 2357 GMT | 1631 M | 160 | 13 KT | 190 05 08 | 5 | 1016.5 MB | 14.7 C | 14.7 C | 8/8 | ST |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | | 14.59 | 14.59 | 33.483 | 24.892 | 305.1 | .000 | 5.94 | 102.6 | 2.3 | .37 | .3 | .00 | .35 | .14 | 0 |
| | 10 | ISL | 14.56 | 14.56 | 33.488 | 24.901 | 304.5 | .030 | 5.98 | 103.2 | | | | | | | 10 |
| 1 | 11 | | 14.56 | 14.56 | 33.488 | 24.902 | 304.5 | .033 | 5.98 | 103.2 | 2.3 | .37 | .3 | .00 | .38 | .14 | 11 |
| | 20 | ISL | 14.55 | 14.55 | 33.489 | 24.904 | 304.5 | .061 | 5.97 | 103.1 | | | | | | | 20 |
| 1 | 22 | | 14.55 | 14.55 | 33.489 | 24.905 | 304.5 | .067 | 5.97 | 103.0 | 2.2 | .37 | .3 | .00 | .37 | .19 | 22 |
| | 30 | ISL | 14.53 | 14.53 | 33.488 | 24.909 | 304.4 | .091 | 5.96 | 102.9 | | | | | | | 30 |
| 1 | 32 | | 14.53 | 14.52 | 33.488 | 24.910 | 304.3 | .097 | 5.96 | 102.8 | 2.2 | .37 | .2 | .00 | .44 | .18 | 32 |
| 1 | 44 | | 14.50 | 14.49 | 33.489 | 24.917 | 303.9 | .133 | 5.87 | 101.2 | 2.5 | .41 | .7 | .03 | .45 | .24 | 44 |
| | 50 | ISL | 13.35 | 13.34 | 33.459 | 25.131 | 283.7 | .152 | 5.43 | 91.5 | | | | | | | 50 |
| 1 | 53 | | 12.81 | 12.80 | 33.451 | 25.233 | 274.0 | .159 | 5.23 | 87.1 | 6.2 | .77 | 5.6 | .12 | .54 | .38 | 53 |
| 1 | 64 | | 12.19 | 12.18 | 33.474 | 25.371 | 261.1 | .189 | 4.93 | 81.0 | 8.4 | .95 | 8.8 | .05 | .35 | .34 | 64 |
| 1 | 74 | | 11.78 | 11.77 | 33.498 | 25.466 | 252.4 | .214 | 4.69 | 76.4 | 9.9 | 1.06 | 10.8 | .02 | .25 | .29 | 74 |
| | 75 | ISL | 11.74 | 11.73 | 33.502 | 25.477 | 251.2 | .217 | 4.66 | 75.8 | | | | | | | 76 |
| 1 | 89 | | 11.27 | 11.26 | 33.567 | 25.615 | 238.5 | .251 | 4.31 | 69.5 | 12.8 | 1.26 | 14.1 | .01 | .10 | .21 | 89 |
| | 100 | ISL | 10.75 | 10.74 | 33.638 | 25.761 | 224.7 | .277 | 3.98 | 63.5 | | | | | | | 101 |
| 1 | 106 | | 10.47 | 10.46 | 33.680 | 25.844 | 217.0 | .292 | 3.80 | 60.2 | 18.5 | 1.51 | 18.5 | .01 | .03 | .08 | 107 |
| 1 | 124 | | 10.00 | 9.99 | 33.780 | 26.002 | 202.3 | .329 | 3.40 | 53.4 | 22.3 | 1.69 | 21.2 | .00 | .01 | .05 | 125 |
| | 125 | ISL | 9.99 | 9.97 | 33.784 | 26.007 | 201.8 | .330 | 3.39 | 53.2 | | | | | | | 126 |
| 1 | 150 | | 9.45 | 9.44 | 33.913 | 26.198 | 184.1 | .379 | 2.97 | 46.1 | 27.9 | 1.90 | 24.3 | .00 | .01 | .03 | 151 |
| 1 | 181 | | 9.08 | 9.06 | 33.990 | 26.318 | 173.2 | .434 | 2.74 | 42.2 | 31.6 | 2.04 | 26.1 | .00 | | | 182 |
| | 200 | ISL | 8.85 | 8.83 | 34.030 | 26.386 | 167.0 | .466 | 2.60 | 39.8 | | | | | | | 201 |
| 1 | 213 | | 8.70 | 8.68 | 34.053 | 26.427 | 163.3 | .487 | 2.49 | 38.0 | 35.6 | 2.15 | 27.6 | .00 | | | 214 |
| 1 | 243 | | 8.46 | 8.44 | 34.099 | 26.501 | 156.8 | .535 | 2.20 | 33.4 | 39.6 | 2.27 | 29.0 | .00 | | | 244 |
| | 250 | ISL | 8.39 | 8.37 | 34.108 | 26.519 | 155.2 | .547 | 2.12 | 32.2 | | | | | | | 252 |
| 1 | 285 | | 8.06 | 8.03 | 34.152 | 26.604 | 147.6 | .600 | 1.72 | 25.9 | 45.6 | 2.48 | 31.3 | .00 | | | 287 |
| | 300 | ISL | 7.95 | 7.92 | 34.174 | 26.637 | 144.6 | .622 | 1.53 | 23.1 | | | | | | | 302 |
| 1 | 346 | | 7.62 | 7.59 | 34.237 | 26.735 | 136.0 | .686 | 1.01 | 15.1 | 54.7 | 2.77 | 34.1 | .00 | | | 348 |
| | 400 | ISL | 7.16 | 7.12 | 34.271 | 26.829 | 127.7 | .757 | .66 | 9.8 | | | | | | | 403 |
| 1 | 423 | | 6.95 | 6.91 | 34.280 | 26.865 | 124.5 | .787 | .57 | 8.4 | 65.4 | 2.99 | 36.9 | .00 | | | 426 |
| | 500 | ISL | 6.29 | 6.25 | 34.317 | 26.982 | 113.9 | .878 | .35 | 5.1 | | | | | | | 504 |
| 1 | 502 | | 6.28 | 6.23 | 34.318 | 26.984 | 113.7 | .880 | .35 | 5.1 | 76.3 | 3.13 | 39.2 | .00 | | | 505 |
| 1 | 579 | | 5.84 | 5.79 | 34.308 | 27.032 | 109.7 | .966 | .28 | 4.0 | 84.0 | 3.22 | 40.5 | .00 | | | 583 |

RV DAVID STARR JORDAN CALCOFI CRUISE 8602 STATION 90 53

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 39.0 N | 119 28.9 W | 14/02/86 | 0526 GMT | 1343 M | 170 | 14 KT | | | 1017.2 MB | 15.0 C | 14.8 C | | |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 14.36 | 14.36 | 33.468 | 24.929 | 301.7 | .000 | 6.07 | 104.3 | | | | | | | 0 |
| 1 | 1 | | 14.36 | 14.36 | 33.468 | 24.929 | 301.5 | .003 | 6.07 | 104.3 | 1.4 | .34 | .2 | .00 | 1.16 | .34 | 1 |
| | 10 | ISL | 14.26 | 14.25 | 33.465 | 24.949 | 299.9 | .030 | 6.12 | 105.1 | | | | | | | 10 |
| 1 | 11 | | 14.25 | 14.24 | 33.465 | 24.951 | 299.8 | .033 | 6.13 | 105.1 | 1.3 | .34 | .2 | .00 | 1.17 | .31 | 11 |
| | 20 | ISL | 14.19 | 14.18 | 33.469 | 24.967 | 298.5 | .060 | 6.05 | 103.7 | | | | | | | 20 |
| 1 | 27 | | 14.11 | 14.11 | 33.473 | 24.985 | 297.0 | .080 | 5.97 | 102.1 | 2.3 | .39 | .5 | .03 | .73 | .30 | 27 |
| | 30 | ISL | 14.08 | 14.08 | 33.473 | 24.992 | 296.4 | .090 | 5.95 | 101.7 | | | | | | | 30 |
| 1 | 43 | | 13.68 | 13.68 | 33.472 | 25.073 | 289.0 | .127 | 5.87 | 99.5 | 2.9 | .43 | 1.1 | .03 | .53 | .30 | 43 |
| | 50 | ISL | 13.08 | 13.07 | 33.476 | 25.198 | 277.9 | .148 | 5.47 | 91.6 | | | | | | | 50 |
| 1 | 58 | | 12.36 | 12.35 | 33.480 | 25.342 | 263.8 | .169 | 4.98 | 82.1 | 8.1 | .91 | 8.3 | .15 | .33 | .29 | 58 |
| 1 | 69 | | 11.61 | 11.60 | 33.546 | 25.534 | 245.6 | .196 | 4.54 | 73.7 | 11.5 | 1.14 | 12.1 | .08 | .29 | .31 | 69 |
| | 75 | ISL | 11.17 | 11.16 | 33.586 | 25.645 | 235.2 | .212 | 4.28 | 68.9 | | | | | | | 76 |
| 1 | 79 | | 10.94 | 10.93 | 33.610 | 25.706 | 229.4 | .220 | 4.14 | 66.3 | 15.3 | 1.35 | 15.7 | .03 | .14 | .21 | 79 |
| 1 | 95 | | 10.20 | 10.19 | 33.726 | 25.926 | 208.8 | .255 | 3.60 | 56.8 | 20.4 | 1.60 | 19.8 | .01 | .03 | .08 | 95 |
| | 100 | ISL | 9.96 | 9.95 | 33.780 | 26.008 | 201.1 | .266 | 3.41 | 53.5 | | | | | | | 101 |
| 1 | 109 | | 9.62 | 9.61 | 33.862 | 26.129 | 189.8 | .285 | 3.14 | 48.9 | 25.9 | 1.83 | 23.2 | .01 | .01 | .05 | 110 |
| 1 | 125 | | 9.41 | 9.40 | 33.912 | 26.203 | 183.1 | .314 | 2.99 | 46.4 | 27.9 | 1.92 | 24.2 | .00 | .01 | .05 | 126 |
| | 150 | ISL | 9.08 | 9.06 | 33.997 | 26.323 | 172.1 | .358 | 2.64 | 40.7 | | | | | | | 151 |
| 1 | 151 | | 9.06 | 9.05 | 34.001 | 26.329 | 171.5 | .360 | 2.62 | 40.3 | 32.3 | 2.07 | 26.3 | .00 | .01 | .04 | 152 |
| 1 | 171 | | 8.75 | 8.73 | 34.063 | 26.428 | 162.5 | .393 | 2.32 | 35.5 | 36.5 | 2.22 | 27.9 | .01 | .01 | .03 | 172 |
| 1 | 192 | | 8.58 | 8.56 | 34.098 | 26.481 | 157.8 | .427 | 2.17 | 33.1 | 38.7 | 2.29 | 28.9 | .00 | | | 193 |
| | 200 | ISL | 8.53 | 8.51 | 34.108 | 26.497 | 156.4 | .439 | 2.11 | 32.1 | | | | | | | 201 |
| 1 | 213 | | 8.45 | 8.42 | 34.119 | 26.519 | 154.5 | .459 | 2.02 | 30.7 | 40.3 | 2.36 | 29.7 | .00 | | | 214 |
| 1 | 244 | | 8.22 | 8.20 | 34.130 | 26.561 | 151.0 | .506 | 1.86 | 28.1 | 43.3 | 2.44 | 30.5 | .00 | | | 245 |
| | 250 | ISL | 8.16 | 8.13 | 34.133 | 26.574 | 149.9 | .516 | 1.82 | 27.5 | | | | | | | 252 |
| 1 | 284 | | 7.77 | 7.74 | 34.153 | 26.647 | 143.4 | .566 | 1.59 | 23.8 | 48.4 | 2.56 | 32.4 | .01 | | | 286 |
| | 300 | ISL | 7.64 | 7.61 | 34.172 | 26.681 | 140.4 | .588 | 1.43 | 21.3 | | | | | | | 302 |
| 1 | 346 | | 7.26 | 7.23 | 34.219 | 26.772 | 132.2 | .651 | .97 | 14.4 | 58.4 | 2.82 | 34.9 | .00 | | | 348 |
| | 400 | ISL | 6.60 | 6.57 | 34.224 | 26.866 | 123.6 | .720 | .71 | 10.3 | | | | | | | 403 |
| 1 | 422 | | 6.35 | 6.31 | 34.224 | 26.900 | 120.6 | .747 | .64 | 9.3 | 70.0 | 3.04 | 38.4 | .00 | | | 425 |
| 1 | 499 | | 5.98 | 5.94 | 34.279 | 26.990 | 112.7 | .836 | .39 | 5.6 | 78.3 | 3.15 | 40.0 | .00 | | | 502 |
| | 500 | ISL | 5.98 | 5.93 | 34.280 | 26.993 | 112.6 | .838 | .39 | 5.6 | | | | | | | 504 |
| 1 | 574 | | 5.64 | 5.59 | 34.330 | 27.074 | 105.5 | .919 | .28 | 4.0 | 86.0 | 3.24 | 41.1 | .00 | | | 578 |

RV DAVID STARR JORDAN | CALCOFI CRUISE 8602 | STATION 90 60

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 25.0 N | 119 57.2 W | 14/02/86 | 0958 GMT | 2402 M | 150 | 16 KT | | | 1015.1 MB | 15.1 C | 14.8 C | | |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 14.98 | 14.98 | 33.259 | 24.635 | 329.5 | .000 | 5.86 | 101.9 | | | | | | | 0 |
| 1 | 1 | | 14.98 | 14.98 | 33.259 | 24.635 | 329.5 | .003 | 5.86 | 101.9 | 2.1 | .37 | .3 | .00 | .09 | .04 | 1 |
| | 10 | ISL | 14.97 | 14.97 | 33.257 | 24.636 | 329.7 | .033 | 5.86 | 101.9 | | | | | | | 10 |
| 1 | 11 | | 14.97 | 14.97 | 33.257 | 24.636 | 329.7 | .036 | 5.86 | 101.9 | 2.1 | .37 | .3 | .00 | .10 | .04 | 11 |
| | 20 | ISL | 14.93 | 14.93 | 33.260 | 24.647 | 329.0 | .066 | 5.87 | 102.0 | | | | | | | 20 |
| 1 | 27 | | 14.91 | 14.90 | 33.263 | 24.655 | 328.4 | .089 | 5.88 | 102.1 | 2.1 | .37 | .2 | .00 | .12 | .07 | 27 |
| | 30 | ISL | 14.67 | 14.67 | 33.268 | 24.709 | 323.4 | .099 | 5.91 | 102.1 | | | | | | | 30 |
| 1 | 43 | | 13.68 | 13.68 | 33.305 | 24.945 | 301.3 | .139 | 6.02 | 102.0 | 2.8 | .42 | .3 | .01 | .45 | .17 | 43 |
| | 50 | ISL | 13.53 | 13.52 | 33.330 | 24.996 | 296.5 | .160 | 5.99 | 101.2 | | | | | | | 50 |
| 1 | 58 | | 13.44 | 13.43 | 33.350 | 25.030 | 293.6 | .183 | 5.96 | 100.5 | 2.9 | .45 | .8 | .05 | .36 | .18 | 58 |
| 1 | 69 | | 13.10 | 13.09 | 33.350 | 25.098 | 287.3 | .215 | 5.83 | 97.6 | 3.1 | .51 | 1.8 | .08 | .23 | .16 | 69 |
| | 75 | ISL | 12.83 | 12.82 | 33.344 | 25.146 | 282.8 | .233 | 5.76 | 95.8 | | | | | | | 76 |
| 1 | 79 | | 12.67 | 12.65 | 33.340 | 25.176 | 280.1 | .243 | 5.71 | 94.7 | 4.0 | .60 | 3.1 | .10 | .17 | .15 | 79 |
| 1 | 95 | | 12.01 | 12.00 | 33.340 | 25.301 | 268.5 | .287 | 5.46 | 89.3 | 5.2 | .73 | 5.4 | .04 | .12 | .15 | 95 |
| | 100 | ISL | 11.75 | 11.73 | 33.377 | 25.379 | 261.2 | .301 | 5.25 | 85.4 | | | | | | | 101 |
| 1 | 109 | | 11.30 | 11.29 | 33.453 | 25.520 | 248.0 | .325 | 4.86 | 78.3 | 9.6 | 1.05 | 10.8 | .01 | .08 | .16 | 110 |
| 1 | 125 | | 10.77 | 10.76 | 33.538 | 25.681 | 232.9 | .364 | 4.43 | 70.6 | 13.2 | 1.28 | 14.6 | .01 | .04 | .08 | 126 |
| 1 | 150 | | 9.74 | 9.72 | 33.728 | 26.006 | 202.3 | .418 | 3.61 | 56.3 | 22.0 | 1.68 | 21.3 | .01 | .01 | .04 | 151 |
| 1 | 171 | | 9.13 | 9.11 | 33.846 | 26.197 | 184.5 | .458 | 3.19 | 49.1 | 27.5 | 1.87 | 24.5 | .01 | .01 | .03 | 172 |
| 1 | 191 | | 8.75 | 8.73 | 33.932 | 26.325 | 172.5 | .494 | 2.97 | 45.4 | 31.6 | 2.00 | 26.4 | .00 | | | 192 |
| | 200 | ISL | 8.64 | 8.62 | 33.955 | 26.360 | 169.4 | .509 | 2.91 | 44.4 | | | | | | | 201 |
| 1 | 212 | | 8.52 | 8.49 | 33.976 | 26.396 | 166.2 | .529 | 2.85 | 43.3 | 33.6 | 2.05 | 27.2 | .00 | | | 213 |
| 1 | 242 | | 8.07 | 8.04 | 34.021 | 26.499 | 156.7 | .577 | 2.69 | 40.5 | 38.4 | 2.15 | 28.5 | .00 | | | 243 |
| | 250 | ISL | 7.98 | 7.96 | 34.033 | 26.521 | 154.7 | .590 | 2.60 | 39.0 | | | | | | | 252 |
| 1 | 282 | | 7.70 | 7.68 | 34.072 | 26.593 | 148.4 | .639 | 2.20 | 32.9 | 44.6 | 2.36 | 31.0 | .00 | | | 284 |
| | 300 | ISL | 7.51 | 7.48 | 34.076 | 26.624 | 145.6 | .665 | 2.07 | 30.8 | | | | | | | 302 |
| 1 | 343 | | 7.03 | 7.00 | 34.077 | 26.692 | 139.6 | .726 | 1.80 | 26.5 | 53.2 | 2.55 | 33.8 | .00 | | | 345 |
| | 400 | ISL | 6.56 | 6.52 | 34.121 | 26.792 | 130.6 | .803 | 1.22 | 17.7 | | | | | | | 403 |
| 1 | 419 | | 6.43 | 6.39 | 34.142 | 26.825 | 127.6 | .828 | 1.02 | 14.8 | 64.8 | 2.87 | 37.6 | .00 | | | 422 |
| 1 | 495 | | 6.07 | 6.02 | 34.229 | 26.941 | 117.5 | .921 | .53 | 7.6 | 74.6 | 3.08 | 39.6 | .00 | | | 498 |
| | 500 | ISL | 6.04 | 6.00 | 34.234 | 26.948 | 116.8 | .927 | .51 | 7.3 | | | | | | | 504 |
| 1 | 572 | | 5.63 | 5.58 | 34.274 | 27.032 | 109.4 | 1.008 | .36 | 5.1 | 83.0 | 3.18 | 41.0 | .00 | | | 576 |

RV DAVID STARR JORDAN | CALCOFI CRUISE 8602 | STATION 90 70

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 05.1 N | 120 38.2 W | 14/02/86 | 1549 GMT | 4018 M | 190 | 22 KT | 200 08 05 | 2 | 1015.0 MB | 15.5 C | 14.8 C | 8/8 | NS |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 14.41 | 14.41 | 33.301 | 24.790 | 314.8 | .000 | 5.94 | 102.1 | | | | | | | 0 |
| 1 | 1 | | 14.41 | 14.41 | 33.301 | 24.790 | 314.9 | .003 | 5.94 | 102.1 | 2.5 | .38 | .2 | .00 | .17 | .07 | 1 |
| | 10 | ISL | 14.41 | 14.41 | 33.301 | 24.790 | 315.0 | .031 | 5.96 | 102.4 | | | | | | | 10 |
| 1 | 11 | | | | 33.301 | | | .034 | 5.96 | 102.5 | 2.5 | .39 | .2 | .00 | .16 | .07 | 11 |
| | 20 | ISL | 14.41 | 14.40 | 33.301 | 24.791 | 315.4 | .063 | 5.97 | 102.5 | | | | | | | 20 |
| 1 | 27 | | 14.41 | 14.40 | 33.301 | 24.791 | 315.5 | .085 | 5.97 | 102.6 | 2.5 | .38 | .2 | .00 | .17 | .07 | 27 |
| | 30 | ISL | 14.40 | 14.39 | 33.300 | 24.792 | 315.3 | .095 | 5.97 | 102.6 | | | | | | | 30 |
| 1 | 43 | | 14.32 | 14.31 | 33.295 | 24.805 | 314.6 | .135 | 5.96 | 102.3 | 2.5 | .39 | .2 | .00 | .22 | .09 | 43 |
| | 50 | ISL | 14.26 | 14.25 | 33.297 | 24.821 | 312.4 | .157 | 5.96 | 102.0 | | | | | | | 50 |
| 1 | 59 | | 14.07 | 14.07 | 33.300 | 24.861 | 309.7 | .185 | 5.95 | 101.6 | 2.6 | .41 | .3 | .03 | .35 | .19 | 59 |
| 1 | 70 | | 13.56 | 13.55 | 33.337 | 24.994 | 297.3 | .218 | 5.90 | 99.7 | 2.9 | .47 | .8 | .17 | .45 | .30 | 70 |
| | 75 | ISL | 13.29 | 13.28 | 33.355 | 25.063 | 290.9 | .233 | 5.82 | 97.8 | | | | | | | 76 |
| 1 | 80 | | 13.05 | 13.04 | 33.364 | 25.119 | 285.6 | .247 | 5.74 | 96.0 | 3.5 | .56 | 2.4 | .14 | .32 | .27 | 80 |
| 1 | 96 | | 12.17 | 12.16 | 33.311 | 25.249 | 273.6 | .291 | 5.55 | 91.1 | 4.6 | .69 | 4.8 | .02 | .12 | .19 | 96 |
| | 100 | ISL | 11.94 | 11.92 | 33.337 | 25.313 | 267.5 | .303 | 5.33 | 87.0 | | | | | | | 101 |
| 1 | 110 | | 11.36 | 11.34 | 33.434 | 25.495 | 250.3 | .331 | 4.74 | 76.5 | 10.5 | 1.10 | 12.0 | .01 | .06 | .09 | 111 |
| | 125 | ISL | 10.37 | 10.35 | 33.586 | 25.788 | 222.6 | .365 | 4.16 | 65.7 | | | | | | | 126 |
| 1 | 126 | | 10.28 | 10.26 | 33.601 | 25.815 | 220.0 | .368 | 4.11 | 64.8 | 16.5 | 1.46 | 17.8 | .00 | .03 | .05 | 127 |
| | 150 | ISL | 9.66 | 9.65 | 33.760 | 26.043 | 198.8 | .417 | 3.45 | 53.8 | | | | | | | 151 |
| 1 | 152 | | 9.64 | 9.62 | 33.771 | 26.056 | 197.6 | .422 | 3.40 | 52.9 | 23.4 | 1.77 | 22.6 | .00 | .00 | .04 | 153 |
| 1 | 172 | | 9.26 | 9.24 | 33.881 | 26.203 | 183.9 | .460 | 3.00 | 46.4 | 28.0 | 1.92 | 24.9 | .00 | .00 | .03 | 173 |
| 1 | 193 | | 8.83 | 8.81 | 33.942 | 26.320 | 173.1 | .497 | 2.90 | 44.4 | 31.3 | 2.00 | 26.4 | .00 | | | 194 |
| | 200 | ISL | 8.71 | 8.68 | 33.957 | 26.351 | 170.3 | .509 | 2.89 | 44.1 | | | | | | | 201 |
| 1 | 213 | | 8.49 | 8.47 | 33.980 | 26.403 | 165.5 | .531 | 2.86 | 43.5 | 33.8 | 2.05 | 27.3 | .00 | | | 214 |
| 1 | 244 | | 8.02 | 7.99 | 34.031 | 26.514 | 155.3 | .580 | 2.66 | 40.0 | 39.0 | 2.18 | 28.8 | .00 | | | 245 |
| | 250 | ISL | 7.93 | 7.91 | 34.041 | 26.535 | 153.4 | .590 | 2.56 | 38.5 | | | | | | | 252 |
| 1 | 283 | | 7.50 | 7.47 | 34.083 | 26.631 | 144.6 | .640 | 2.01 | 29.9 | 47.7 | 2.44 | 32.1 | .00 | | | 285 |
| | 300 | ISL | 7.25 | 7.22 | 34.091 | 26.672 | 140.9 | .663 | 1.82 | 26.8 | | | | | | | 302 |
| 1 | 344 | | 6.61 | 6.58 | 34.096 | 26.763 | 132.5 | .723 | 1.43 | 20.8 | 59.8 | 2.72 | 36.2 | .00 | | | 346 |
| | 400 | ISL | 5.96 | 5.92 | 34.104 | 26.855 | 124.1 | .795 | 1.07 | 15.4 | | | | | | | 403 |
| 1 | 420 | | 5.78 | 5.74 | 34.111 | 26.883 | 121.6 | .820 | .97 | 13.8 | 73.2 | 2.94 | 39.5 | .00 | | | 423 |
| 1 | 498 | | 5.47 | 5.43 | 34.190 | 26.982 | 112.8 | .911 | .59 | 8.4 | 83.1 | 3.11 | 41.3 | .00 | | | 501 |
| | 500 | ISL | 5.47 | 5.43 | 34.193 | 26.986 | 112.6 | .913 | .58 | 8.2 | | | | | | | 504 |
| 1 | 577 | | 5.29 | 5.24 | 34.289 | 27.083 | 104.1 | .997 | .35 | 4.9 | 90.5 | 3.22 | 42.3 | .00 | | | 581 |

RV DAVID STARR JORDAN | CALCOFI CRUISE 8602 | STATION 90 80

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 44.0 N | 121 15.2 W | 10/02/86 | 1911 GMT | 3543 M | 130 | 03 KT | 320 02 08 | 1 | 1019.8 MB | 13.6 C | 9.8 C | 4/8 | SC |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 14.79 | 14.79 | 33.214 | 24.641 | 329.6 | .000 | 5.88 | 101.8 | | | | | | | 0 |
| 1 | 2 | | 14.79 | 14.79 | 33.214 | 24.641 | 329.0 | .007 | 5.88 | 101.8 | 2.4 | .38 | .1 | .00 | .09 | .03 | 2 |
| | 10 | ISL | 14.69 | 14.69 | 33.215 | 24.663 | 327.1 | .033 | 5.91 | 102.2 | | | | | | | 10 |
| 1 | 12 | | 14.67 | 14.67 | 33.216 | 24.668 | 326.7 | .039 | 5.92 | 102.3 | 2.4 | .38 | .1 | .00 | .09 | .03 | 12 |
| | 20 | ISL | 14.64 | 14.64 | 33.220 | 24.678 | 326.1 | .065 | 5.93 | 102.3 | | | | | | | 20 |
| 1 | 28 | | 14.63 | 14.62 | 33.223 | 24.684 | 325.7 | .091 | 5.93 | 102.3 | 2.5 | .38 | .1 | .00 | .10 | .03 | 28 |
| | 30 | ISL | 14.61 | 14.61 | 33.224 | 24.688 | 325.4 | .098 | 5.93 | 102.3 | | | | | | | 30 |
| 1 | 44 | | 14.52 | 14.51 | 33.230 | 24.713 | 323.4 | .143 | 5.94 | 102.3 | 2.5 | .38 | .1 | .00 | .13 | .06 | 44 |
| | 50 | ISL | 14.13 | 14.12 | 33.227 | 24.794 | 315.9 | .163 | 6.00 | 102.5 | | | | | | | 50 |
| 1 | 59 | | 13.52 | 13.51 | 33.227 | 24.918 | 304.2 | .190 | 6.08 | 102.6 | 2.8 | .43 | .2 | .02 | .41 | .30 | 59 |
| 1 | 69 | | 13.17 | 13.16 | 33.235 | 24.994 | 297.2 | .220 | 6.07 | 101.7 | 2.7 | .45 | .3 | .07 | .33 | .35 | 69 |
| | 75 | ISL | 13.03 | 13.02 | 33.242 | 25.029 | 294.1 | .238 | 6.04 | 100.9 | | | | | | | 76 |
| 1 | 80 | | 12.92 | 12.91 | 33.252 | 25.057 | 291.5 | .252 | 6.02 | 100.3 | 2.8 | .48 | .8 | .11 | .33 | .36 | 80 |
| 1 | 95 | | 12.40 | 12.39 | 33.332 | 25.220 | 276.3 | .294 | 5.68 | 93.7 | 3.8 | .61 | 3.2 | .02 | .13 | .23 | 95 |
| | 100 | ISL | 12.26 | 12.25 | 33.359 | 25.269 | 271.8 | .309 | 5.59 | 91.9 | | | | | | | 101 |
| 1 | 110 | | 11.99 | 11.98 | 33.406 | 25.356 | 263.7 | .335 | 5.43 | 88.8 | 4.9 | .70 | 5.4 | .02 | .07 | .12 | 110 |
| 1 | 124 | | 11.41 | 11.39 | 33.486 | 25.527 | 247.7 | .373 | 5.05 | 81.6 | 8.6 | .97 | 9.7 | .01 | .04 | .06 | 125 |
| | 125 | ISL | 11.38 | 11.37 | 33.488 | 25.533 | 247.1 | .374 | 5.04 | 81.3 | | | | | | | 126 |
| 1 | 150 | | 10.41 | 10.39 | 33.595 | 25.788 | 223.2 | .434 | 4.41 | 69.8 | 14.8 | 1.32 | 15.6 | .00 | .02 | .03 | 151 |
| 1 | 170 | | 9.67 | 9.65 | 33.710 | 26.003 | 203.0 | .476 | 4.01 | 62.5 | 20.0 | 1.53 | 19.3 | .00 | .01 | .02 | 171 |
| 1 | 190 | | 9.31 | 9.29 | 33.787 | 26.122 | 192.0 | .515 | 3.91 | 60.5 | 22.7 | 1.62 | 20.9 | .00 | | | 191 |
| | 200 | ISL | 9.08 | 9.06 | 33.839 | 26.200 | 184.7 | .534 | 3.77 | 58.0 | | | | | | | 201 |
| 1 | 210 | | 8.85 | 8.83 | 33.889 | 26.275 | 177.6 | .552 | 3.59 | 55.0 | 27.3 | 1.79 | 23.4 | .00 | | | 211 |
| 1 | 240 | | 8.38 | 8.36 | 33.983 | 26.422 | 164.2 | .603 | 2.95 | 44.7 | 34.3 | 2.06 | 27.0 | .00 | | | 241 |
| | 250 | ISL | 8.21 | 8.18 | 34.002 | 26.463 | 160.5 | .620 | 2.84 | 42.8 | | | | | | | 252 |
| 1 | 279 | | 7.74 | 7.72 | 34.037 | 26.559 | 151.5 | .666 | 2.58 | 38.6 | 41.7 | 2.25 | 29.7 | .00 | | | 281 |
| | 300 | ISL | 7.52 | 7.49 | 34.065 | 26.614 | 146.6 | .696 | 2.27 | 33.7 | | | | | | | 302 |
| 1 | 339 | | 7.15 | 7.12 | 34.106 | 26.699 | 138.9 | .752 | 1.66 | 24.5 | 53.7 | 2.62 | 33.9 | | | | 341 |
| | 400 | ISL | 6.40 | 6.36 | 34.126 | 26.816 | 128.2 | .833 | 1.12 | 16.2 | | | | | | | 403 |
| 1 | 415 | | 6.22 | 6.18 | 34.129 | 26.842 | 125.8 | .853 | 1.02 | 14.7 | 67.8 | 2.93 | 38.2 | .00 | | | 418 |
| 1 | 494 | | 5.68 | 5.64 | 34.187 | 26.955 | 115.6 | .948 | .61 | 8.7 | 80.1 | 3.12 | 40.6 | .00 | | | 497 |
| | 500 | ISL | 5.64 | 5.60 | 34.191 | 26.963 | 114.9 | .955 | .59 | 8.4 | | | | | | | 504 |
| 1 | 574 | | 5.15 | 5.11 | 34.219 | 27.044 | 107.6 | 1.037 | .45 | 6.3 | 89.9 | 3.22 | 41.9 | .00 | | | 578 |

RV DAVID STARR JORDAN | CALCOFI CRUISE 8602 | STATION 90 90

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 25.1 N | 121 59.2 W | 10/02/86 | 1128 GMT | 3924 M | 340 | 02 KT | 330 03 07 | | 1019.0 MB | 13.7 C | 9.6 C | | |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 16.17 | 16.17 | 33.566 | 24.606 | 332.2 | .000 | 5.71 | 101.9 | | | | | | | 0 |
| 1 | 2 | | 16.17 | 16.17 | 33.566 | 24.606 | 332.3 | .007 | 5.71 | 101.9 | 2.1 | .33 | .0 | .00 | .07 | .03 | 2 |
| | 10 | ISL | 16.19 | 16.19 | 33.565 | 24.603 | 332.9 | .033 | 5.71 | 101.9 | | | | | | | 10 |
| 1 | 12 | | 16.19 | 16.19 | 33.565 | 24.602 | 333.0 | .040 | | | 1.9 | .32 | .0 | .00 | .07 | .03 | 12 |
| | 20 | ISL | 16.19 | 16.19 | 33.565 | 24.602 | 333.3 | .067 | 5.72 | 102.0 | | | | | | | 20 |
| 1 | 28 | | 16.19 | 16.19 | 33.565 | 24.603 | 333.5 | .093 | 5.72 | 102.1 | 1.9 | .32 | .0 | .00 | .07 | .02 | 28 |
| | 30 | ISL | 16.19 | 16.18 | 33.565 | 24.603 | 333.5 | .100 | 5.72 | 102.1 | | | | | | | 30 |
| 1 | 43 | | 16.19 | 16.18 | 33.565 | 24.604 | 333.9 | .143 | 5.73 | 102.2 | 1.8 | .32 | .0 | .00 | .07 | .02 | 43 |
| | 50 | ISL | 16.19 | 16.18 | 33.565 | 24.604 | 334.2 | .167 | 5.72 | 102.0 | | | | | | | 50 |
| 1 | 59 | | 16.19 | 16.19 | 33.566 | 24.604 | 334.4 | .196 | 5.71 | 101.9 | 1.8 | .32 | .0 | .00 | .07 | .02 | 59 |
| 1 | 69 | | 16.20 | 16.19 | 33.576 | 24.611 | 334.0 | .229 | 5.75 | 102.6 | 1.8 | .32 | .0 | .00 | .08 | .03 | 69 |
| | 75 | ISL | 15.67 | 15.66 | 33.630 | 24.771 | 319.0 | .250 | 5.85 | 103.3 | | | | | | | 76 |
| 1 | 79 | | 15.23 | 15.22 | 33.642 | 24.879 | 308.8 | .261 | 5.90 | 103.3 | 2.3 | .32 | .0 | .00 | .15 | .15 | 79 |
| 1 | 95 | | 12.65 | 12.63 | 33.230 | 25.094 | 288.2 | .309 | 5.89 | 97.6 | 2.7 | .50 | 1.3 | .04 | .27 | .32 | 95 |
| | 100 | ISL | 12.25 | 12.24 | 33.238 | 25.177 | 280.5 | .324 | 5.73 | 94.2 | | | | | | | 101 |
| 1 | 110 | | 11.90 | 11.88 | 33.332 | 25.316 | 267.4 | .350 | 5.38 | 87.8 | 5.5 | .77 | 6.1 | .01 | .12 | .18 | 110 |
| 1 | 124 | | 11.71 | 11.69 | 33.512 | 25.491 | 251.1 | .389 | 4.85 | 78.9 | 8.7 | .96 | 9.9 | .00 | .08 | .13 | 125 |
| | 125 | ISL | 11.69 | 11.68 | 33.517 | 25.498 | 250.5 | .390 | 4.83 | 78.5 | | | | | | | 126 |
| 1 | 150 | | 10.82 | 10.80 | 33.719 | 25.814 | 220.9 | .450 | 3.83 | 61.2 | 16.7 | 1.39 | 16.8 | .00 | .04 | .06 | 151 |
| 1 | 171 | | 9.92 | 9.90 | 33.820 | 26.047 | 199.0 | .494 | 3.54 | 55.5 | 21.9 | 1.62 | 20.5 | .00 | .01 | .03 | 172 |
| 1 | 191 | | 9.20 | 9.18 | 33.887 | 26.219 | 182.8 | .532 | 3.28 | 50.6 | 27.2 | 1.81 | 23.5 | | | | 192 |
| | 200 | ISL | 8.92 | 8.90 | 33.918 | 26.287 | 176.4 | .548 | 3.12 | 47.8 | | | | | | | 201 |
| 1 | 212 | | 8.61 | 8.59 | 33.959 | 26.368 | 168.9 | .568 | 2.89 | 44.0 | 33.1 | 2.00 | 26.6 | | | | 213 |
| 1 | 243 | | 8.09 | 8.07 | 34.045 | 26.514 | 155.4 | .618 | 2.40 | 36.2 | 40.2 | 2.22 | 29.2 | .00 | | | 244 |
| | 250 | ISL | 8.00 | 7.97 | 34.062 | 26.541 | 152.9 | .630 | 2.26 | 34.0 | | | | | | | 252 |
| 1 | 283 | | 7.63 | 7.60 | 34.123 | 26.644 | 143.6 | .679 | 1.64 | 24.5 | 49.0 | 2.52 | 32.5 | .00 | | | 285 |
| | 300 | ISL | 7.47 | 7.44 | 34.146 | 26.684 | 139.9 | .703 | 1.41 | 21.0 | | | | | | | 302 |
| 1 | 345 | | 7.10 | 7.07 | 34.193 | 26.773 | 131.9 | .764 | .96 | 14.1 | 59.3 | 2.79 | 35.6 | .00 | | | 347 |
| | 400 | ISL | 6.72 | 6.68 | 34.240 | 26.863 | 124.0 | .834 | .63 | 9.2 | | | | | | | 403 |
| 1 | 421 | | 6.59 | 6.55 | 34.254 | 26.892 | 121.5 | .860 | .55 | 8.0 | 69.4 | 2.99 | 37.8 | .00 | | | 424 |
| 1 | 498 | | 6.19 | 6.15 | 34.290 | 26.973 | 114.6 | .951 | .38 | 5.5 | 76.7 | 3.11 | 39.2 | .00 | | | 501 |
| | 500 | ISL | 6.18 | 6.14 | 34.291 | 26.975 | 114.4 | .953 | .38 | 5.4 | | | | | | | 504 |
| 1 | 575 | | 5.90 | 5.85 | 34.313 | 27.028 | 110.1 | 1.038 | .30 | 4.3 | 82.5 | 3.15 | 40.1 | .00 | | | 579 |

RV DAVID STARR JORDAN | CALCOFI CRUISE 8602 | STATION 90 100

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 05.3 N | 122 39.7 W | 10/02/86 | 0408 GMT | 3924 M | 040 | 04 KT | | | 1018.7 MB | 13.2 C | 9.6 C | | |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 15.62 | 15.62 | 33.414 | 24.615 | 331.5 | .000 | 5.78 | 101.9 | | | | | | | 0 |
| 1 | 1 | | 15.62 | 15.62 | 33.414 | 24.615 | 331.5 | .003 | 5.78 | 101.9 | 1.7 | .35 | .0 | .00 | .08 | .03 | 1 |
| | 10 | ISL | 15.62 | 15.62 | 33.414 | 24.614 | 331.8 | .033 | 5.83 | 102.7 | | | | | | | 10 |
| 1 | 11 | | 15.62 | 15.62 | 33.414 | 24.614 | 331.9 | .036 | 5.83 | 102.8 | 1.7 | .35 | .0 | .00 | .08 | .03 | 11 |
| | 20 | ISL | 15.64 | 15.63 | 33.416 | 24.613 | 332.3 | .066 | 5.82 | 102.6 | | | | | | | 20 |
| 1 | 27 | | 15.65 | 15.64 | 33.417 | 24.612 | 332.6 | .089 | 5.81 | 102.5 | 1.7 | .35 | .0 | .00 | .08 | .03 | 27 |
| | 30 | ISL | 15.64 | 15.64 | 33.417 | 24.612 | 332.7 | .100 | 5.80 | 102.3 | | | | | | | 30 |
| 1 | 43 | | 15.64 | 15.63 | 33.417 | 24.613 | 333.0 | .142 | 5.78 | 101.9 | 1.7 | .35 | .0 | .00 | .09 | .03 | 43 |
| | 50 | ISL | 15.64 | 15.63 | 33.417 | 24.614 | 333.0 | .166 | 5.78 | 101.9 | | | | | | | 50 |
| 1 | 58 | | 15.63 | 15.62 | 33.417 | 24.617 | 333.1 | .192 | 5.78 | 101.9 | 1.7 | .35 | .0 | .00 | .09 | .05 | 58 |
| 1 | 69 | | 15.59 | 15.58 | 33.411 | 24.619 | 333.1 | .229 | 5.79 | 102.0 | 1.7 | .35 | .0 | .00 | .10 | .05 | 69 |
| | 75 | ISL | 15.06 | 15.05 | 33.357 | 24.696 | 325.9 | .249 | 5.86 | 102.2 | | | | | | | 76 |
| 1 | 79 | | 14.68 | 14.67 | 33.324 | 24.752 | 320.7 | .261 | 5.91 | 102.2 | 2.1 | .38 | .0 | .00 | .19 | .17 | 79 |
| 1 | 95 | | 13.58 | 13.56 | 33.269 | 24.940 | 303.1 | .311 | 5.94 | 100.3 | 2.5 | .44 | .3 | .15 | .27 | .36 | 95 |
| | 100 | ISL | 13.24 | 13.22 | 33.268 | 25.007 | 297.3 | .327 | 5.90 | 98.9 | | | | | | | 101 |
| 1 | 110 | | 12.68 | 12.67 | 33.266 | 25.116 | 286.6 | .355 | 5.76 | 95.5 | 3.2 | .57 | 2.2 | .10 | .20 | .30 | 110 |
| 1 | 125 | | 11.83 | 11.82 | 33.346 | 25.340 | 265.6 | .399 | 5.39 | 87.8 | 5.6 | .79 | 6.3 | .01 | .08 | .17 | 126 |
| | 150 | ISL | 10.82 | 10.80 | 33.495 | 25.640 | 237.4 | .461 | 4.69 | 74.8 | | | | | | | 151 |
| 1 | 151 | | 10.77 | 10.75 | 33.504 | 25.655 | 236.0 | .464 | 4.65 | 74.1 | 11.7 | 1.18 | 13.5 | .00 | .03 | .06 | 152 |
| 1 | 171 | | 9.99 | 9.97 | 33.642 | 25.896 | 213.2 | .508 | 4.00 | 62.7 | 18.3 | 1.52 | 18.9 | .00 | .02 | .04 | 172 |
| 1 | 192 | | 9.40 | 9.37 | 33.796 | 26.116 | 192.7 | .551 | 3.45 | 53.4 | 24.3 | 1.75 | 22.5 | .00 | | | 193 |
| | 200 | ISL | 9.22 | 9.20 | 33.834 | 26.174 | 187.3 | .566 | 3.35 | 51.7 | | | | | | | 201 |
| 1 | 212 | | 8.98 | 8.95 | 33.879 | 26.248 | 180.4 | .588 | 3.26 | 50.0 | 28.0 | 1.86 | 24.2 | .00 | | | 213 |
| 1 | 243 | | 8.35 | 8.32 | 33.982 | 26.427 | 163.7 | .641 | 3.13 | 47.4 | 34.0 | 1.98 | 25.8 | .00 | | | 244 |
| | 250 | ISL | 8.21 | 8.19 | 33.996 | 26.458 | 160.9 | .652 | 3.05 | 46.1 | | | | | | | 252 |
| 1 | 283 | | 7.68 | 7.66 | 34.036 | 26.568 | 150.8 | .705 | 2.61 | 38.9 | 42.3 | 2.21 | 29.2 | .00 | | | 285 |
| | 300 | ISL | 7.49 | 7.46 | 34.052 | 26.609 | 147.1 | .729 | 2.37 | 35.2 | | | | | | | 302 |
| 1 | 345 | | 7.06 | 7.02 | 34.088 | 26.698 | 139.1 | .794 | 1.74 | 25.6 | 53.4 | 2.56 | 33.6 | .00 | | | 347 |
| | 400 | ISL | 6.58 | 6.55 | 34.141 | 26.803 | 129.6 | .868 | 1.13 | 16.4 | | | | | | | 403 |
| 1 | 421 | | 6.45 | 6.41 | 34.165 | 26.841 | 126.2 | .895 | .93 | 13.5 | 66.1 | 2.90 | 37.4 | .00 | | | 424 |
| 1 | 497 | | 6.30 | 6.25 | 34.271 | 26.944 | 117.4 | .987 | .45 | 6.5 | 73.5 | 3.08 | 38.8 | .00 | | | 500 |
| | 500 | ISL | 6.29 | 6.24 | 34.274 | 26.949 | 117.1 | .991 | .44 | 6.4 | | | | | | | 504 |
| 1 | 572 | | 5.84 | 5.79 | 34.314 | 27.037 | 109.2 | 1.072 | .31 | 4.4 | 82.3 | 3.20 | 40.2 | .00 | | | 576 |

RV DAVID STARR JORDAN | CALCOFI CRUISE 8602 | STATION 90 110

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30 45.4 N | 123 19.9 W | 09/02/86 | 2213 GMT | 4018 M | 360 | 12 KT | 320 05 07 | 1 | 1017.7 MB | 15.8 C | 10.9 C | 7/8 | SC |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 16.51 | 16.51 | 33.544 | 24.512 | 341.3 | .000 | 5.69 | 102.2 | | | | | | | 0 |
| 1 | 1 | | 16.51 | 16.51 | 33.544 | 24.512 | 341.3 | .003 | 5.69 | 102.2 | 2.0 | .32 | .0 | .00 | .08 | .03 | 1 |
| | 10 | ISL | 16.50 | 16.50 | 33.544 | 24.515 | 341.3 | .034 | 5.77 | 103.5 | | | | | | | 10 |
| 1 | 11 | | 16.50 | 16.50 | 33.545 | 24.516 | 341.2 | .037 | 5.77 | 103.6 | 1.9 | .32 | .0 | .00 | .08 | .03 | 11 |
| | 20 | ISL | 16.50 | 16.50 | 33.548 | 24.518 | 341.4 | .068 | 5.75 | 103.3 | | | | | | | 20 |
| 1 | 27 | | 16.51 | 16.50 | 33.550 | 24.518 | 341.6 | .092 | 5.72 | 102.7 | 1.9 | .32 | .0 | .00 | .08 | .03 | 27 |
| | 30 | ISL | 16.51 | 16.50 | 33.550 | 24.518 | 341.6 | .102 | 5.71 | 102.6 | | | | | | | 30 |
| 1 | 43 | | 16.51 | 16.50 | 33.550 | 24.519 | 342.0 | .146 | 5.70 | 102.3 | 1.9 | .32 | .0 | .00 | .08 | .03 | 43 |
| | 50 | ISL | 16.50 | 16.50 | 33.549 | 24.519 | 342.2 | .171 | 5.70 | 102.3 | | | | | | | 50 |
| 1 | 59 | | 16.50 | 16.49 | 33.548 | 24.520 | 342.5 | .201 | 5.70 | 102.3 | 1.9 | .32 | .0 | .00 | .08 | .03 | 59 |
| 1 | 70 | | 16.50 | 16.49 | 33.549 | 24.520 | 342.7 | .238 | 5.70 | 102.3 | 1.9 | .31 | .0 | .00 | .08 | .04 | 70 |
| | 75 | ISL | 16.42 | 16.41 | 33.559 | 24.546 | 340.5 | .256 | 5.73 | 102.7 | | | | | | | 76 |
| 1 | 80 | | 16.35 | 16.34 | 33.599 | 24.593 | 336.1 | .272 | 5.77 | 103.3 | 2.0 | .31 | .0 | .00 | .11 | .06 | 80 |
| 1 | 96 | | 14.37 | 14.36 | 33.543 | 24.988 | 298.7 | .323 | 5.89 | 101.3 | 2.3 | .35 | .2 | .02 | .18 | .22 | 96 |
| | 100 | ISL | 14.09 | 14.07 | 33.519 | 25.029 | 294.9 | .336 | 5.88 | 100.5 | | | | | | | 101 |
| 1 | 111 | | 13.56 | 13.54 | 33.455 | 25.088 | 289.5 | .367 | 5.79 | 97.9 | 2.8 | .43 | .8 | .07 | .17 | .27 | 111 |
| | 125 | ISL | 12.64 | 12.62 | 33.384 | 25.217 | 277.5 | .408 | 5.57 | 92.3 | | | | | | | 126 |
| 1 | 126 | | 12.55 | 12.53 | 33.381 | 25.231 | 276.1 | .412 | 5.54 | 91.6 | 3.9 | .59 | 3.4 | .02 | .12 | .25 | 127 |
| | 150 | ISL | 11.79 | 11.77 | 33.554 | 25.509 | 250.1 | .474 | 5.01 | 81.6 | | | | | | | 151 |
| 1 | 152 | | 11.72 | 11.70 | 33.577 | 25.540 | 247.2 | .479 | 4.95 | 80.6 | 8.3 | .88 | 9.0 | .01 | .04 | .09 | 153 |
| 1 | 172 | | 10.57 | 10.55 | 33.645 | 25.800 | 222.7 | .526 | 4.50 | 71.5 | 13.5 | 1.21 | 14.2 | .00 | .02 | .05 | 173 |
| 1 | 193 | | 9.76 | 9.74 | 33.711 | 25.990 | 204.8 | .571 | 4.00 | 62.4 | 19.7 | 1.51 | 19.0 | .00 | | | 194 |
| | 200 | ISL | 9.49 | 9.47 | 33.758 | 26.071 | 197.1 | .585 | 3.84 | 59.6 | | | | | | | 201 |
| 1 | 213 | | 9.03 | 9.01 | 33.850 | 26.217 | 183.4 | .609 | 3.60 | 55.3 | 26.0 | 1.73 | 22.7 | .00 | | | 214 |
| 1 | 244 | | 8.41 | 8.39 | 33.966 | 26.404 | 165.9 | .663 | 3.46 | 52.5 | 31.9 | 1.86 | 24.9 | .00 | | | 245 |
| | 250 | ISL | 8.29 | 8.26 | 33.978 | 26.432 | 163.4 | .673 | 3.40 | 51.4 | | | | | | | 252 |
| 1 | 285 | | 7.66 | 7.64 | 34.012 | 26.552 | 152.2 | .728 | 2.94 | 43.8 | 40.7 | 2.11 | 28.2 | .00 | | | 286 |
| | 300 | ISL | 7.41 | 7.39 | 34.024 | 26.596 | 148.2 | .751 | 2.70 | 40.0 | | | | | | | 302 |
| 1 | 345 | | 6.79 | 6.76 | 34.049 | 26.702 | 138.4 | .816 | 2.01 | 29.4 | 54.5 | 2.50 | 33.6 | .00 | | | 347 |
| | 400 | ISL | 6.22 | 6.19 | 34.087 | 26.808 | 128.8 | .889 | 1.36 | 19.6 | | | | | | | 403 |
| 1 | 421 | | 6.05 | 6.01 | 34.105 | 26.844 | 125.4 | .916 | 1.15 | 16.5 | 69.4 | 2.85 | 38.1 | .00 | | | 424 |
| 1 | 499 | | 5.59 | 5.55 | 34.197 | 26.974 | 113.8 | 1.009 | .59 | 8.4 | 81.2 | 3.10 | 40.5 | .00 | | | 502 |
| | 500 | ISL | 5.59 | 5.55 | 34.198 | 26.975 | 113.7 | 1.010 | .58 | 8.3 | | | | | | | 504 |
| 1 | 577 | | 5.40 | 5.35 | 34.263 | 27.051 | 107.4 | 1.096 | .39 | 5.5 | 87.8 | 3.18 | 41.3 | .00 | | | 581 |

RV DAVID STARR JORDAN | CALCOFI CRUISE 8602 | STATION 90 120

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30 25.4 N | 124 00.0 W | 09/02/86 | 1508 GMT | 4210 M | 360 | 15 KT | 310 05 05 | 2 | 1016.1 MB | 14.1 C | 10.4 C | 8/8 | SC |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 17.25 | 17.25 | 33.766 | 24.510 | 341.5 | .000 | 5.60 | 102.2 | | | | | | | 0 |
| 1 | 1 | | 17.25 | 17.25 | 33.766 | 24.510 | 341.6 | .003 | 5.60 | 102.2 | 2.0 | .29 | .1 | .00 | .06 | .02 | 1 |
| 1 | 10 | | 17.25 | 17.25 | 33.765 | 24.508 | 341.9 | .034 | 5.64 | 102.9 | 2.0 | .29 | .1 | .00 | .06 | .02 | 10 |
| | 20 | ISL | 17.26 | 17.26 | 33.765 | 24.506 | 342.5 | .068 | 5.63 | 102.7 | | | | | | | 20 |
| 1 | 26 | | 17.27 | 17.26 | 33.765 | 24.505 | 342.8 | .089 | 5.62 | 102.5 | 2.0 | .29 | .1 | .00 | .06 | .02 | 26 |
| | 30 | ISL | 17.27 | 17.26 | 33.764 | 24.505 | 342.9 | .103 | 5.61 | 102.4 | | | | | | | 30 |
| 1 | 43 | | 17.27 | 17.26 | 33.764 | 24.505 | 343.4 | .147 | 5.59 | 102.0 | 2.0 | .29 | .1 | .00 | .06 | .02 | 43 |
| | 50 | ISL | 17.26 | 17.26 | 33.763 | 24.506 | 343.6 | .171 | 5.59 | 102.1 | | | | | | | 50 |
| 1 | 58 | | 17.26 | 17.25 | 33.763 | 24.506 | 343.8 | .198 | 5.60 | 102.2 | 2.0 | .29 | .1 | .00 | .06 | .02 | 58 |
| 1 | 70 | | 17.28 | 17.27 | 33.766 | 24.505 | 344.3 | .239 | 5.63 | 102.7 | 2.0 | .29 | .1 | .00 | .06 | .02 | 70 |
| | 75 | ISL | 17.20 | 17.19 | 33.812 | 24.559 | 339.4 | .257 | 5.69 | 103.7 | | | | | | | 76 |
| 1 | 79 | | 17.07 | 17.05 | 33.838 | 24.611 | 334.5 | .270 | 5.74 | 104.4 | 2.0 | .29 | .1 | .00 | .10 | .06 | 79 |
| 1 | 94 | | 15.42 | 15.41 | 33.718 | 24.896 | 307.7 | .318 | 5.87 | 103.2 | 2.3 | .30 | .1 | .00 | .13 | .17 | 94 |
| | 100 | ISL | 15.03 | 15.02 | 33.691 | 24.959 | 301.7 | .337 | 5.84 | 101.9 | | | | | | | 101 |
| 1 | 110 | | 14.64 | 14.62 | 33.674 | 25.031 | 295.1 | .366 | 5.80 | 100.4 | 2.4 | .34 | .2 | .04 | .19 | .31 | 110 |
| 1 | 125 | | 14.10 | 14.08 | 33.719 | 25.182 | 281.2 | .411 | 5.62 | 96.2 | 2.9 | .41 | 1.2 | .03 | .12 | .28 | 126 |
| | 150 | ISL | 12.47 | 12.45 | 33.673 | 25.474 | 253.6 | .477 | 5.20 | 86.0 | | | | | | | 151 |
| 1 | 151 | | 12.37 | 12.35 | 33.670 | 25.490 | 252.1 | .480 | 5.17 | 85.4 | 6.8 | .75 | 6.9 | .01 | .04 | .08 | 152 |
| 1 | 171 | | 11.44 | 11.42 | 33.695 | 25.684 | 233.9 | .529 | 4.84 | 78.4 | 9.5 | .94 | 10.3 | .00 | .03 | .04 | 172 |
| 1 | 193 | | 10.32 | 10.30 | 33.715 | 25.898 | 213.7 | .578 | 4.43 | 70.0 | 15.2 | 1.24 | 15.3 | .00 | | | 194 |
| | 200 | ISL | 9.94 | 9.91 | 33.755 | 25.995 | 204.5 | .592 | 4.21 | 65.9 | | | | | | | 201 |
| 1 | 213 | | 9.27 | 9.25 | 33.841 | 26.171 | 187.8 | .618 | 3.78 | 58.4 | 24.3 | 1.62 | 21.4 | .00 | | | 214 |
| 1 | 243 | | 8.50 | 8.47 | 33.956 | 26.384 | 167.9 | .671 | 3.28 | 49.8 | 32.1 | 1.89 | 25.2 | .00 | | | 244 |
| | 250 | ISL | 8.34 | 8.32 | 33.973 | 26.420 | 164.5 | .683 | 3.17 | 48.0 | | | | | | | 252 |
| 1 | 286 | | 7.72 | 7.69 | 34.025 | 26.553 | 152.1 | .739 | 2.67 | 39.9 | 41.6 | 2.18 | 29.2 | .00 | | | 287 |
| | 300 | ISL | 7.54 | 7.51 | 34.039 | 26.591 | 148.8 | .761 | 2.47 | 36.7 | | | | | | | 302 |
| 1 | 346 | | 7.02 | 6.99 | 34.065 | 26.683 | 140.3 | .827 | 1.88 | 27.6 | 53.1 | 2.51 | 33.5 | .00 | | | 348 |
| | 400 | ISL | 6.26 | 6.22 | 34.084 | 26.801 | 129.5 | .900 | 1.35 | 19.4 | | | | | | | 403 |
| 1 | 422 | | 5.96 | 5.92 | 34.093 | 26.846 | 125.2 | .929 | 1.16 | 16.6 | 69.9 | 2.84 | 38.2 | .00 | | | 425 |
| 1 | 499 | | 5.42 | 5.38 | 34.164 | 26.968 | 114.1 | 1.020 | .64 | 9.1 | 82.4 | 3.07 | 40.9 | .00 | | | 502 |
| | 500 | ISL | 5.42 | 5.37 | 34.166 | 26.971 | 113.9 | 1.021 | .63 | 9.0 | | | | | | | 504 |
| 1 | 575 | | 5.14 | 5.09 | 34.257 | 27.076 | 104.6 | 1.103 | .35 | 4.9 | 92.2 | 3.20 | 42.1 | .00 | | | 579 |

RV DAVID STARR JORDAN | CALCOFI CRUISE 8602 | STATION 93 26.7

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 57.1 N | 117 18.1 W | 05/02/86 | 2254 GMT | 64 M | 200 | 11 KT | 240 05 08 | 1 | 1018.7 MB | 16.8 C | 14.9 C | 2/8 | SC |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 15.62 | 15.62 | 33.506 | 24.684 | 325.3 | .000 | 5.95 | 105.0 | | | | | | | 0 |
| 1 | 1 | | 15.62 | 15.62 | 33.506 | 24.684 | 324.9 | .003 | 5.95 | 105.0 | 2.4 | .36 | .3 | .03 | .48 | .24 | 1 |
| | 10 | ISL | 15.42 | 15.42 | 33.504 | 24.729 | 320.9 | .032 | 5.98 | 105.0 | | | | | | | 10 |
| 1 | 11 | | 15.40 | 15.39 | 33.504 | 24.733 | 320.5 | .035 | 5.98 | 105.0 | 2.2 | .36 | .2 | .01 | .60 | .33 | 11 |
| | 20 | ISL | 14.50 | 14.50 | 33.476 | 24.906 | 304.3 | .064 | 5.75 | 99.2 | | | | | | | 20 |
| 1 | 22 | | 14.25 | 14.25 | 33.469 | 24.953 | 299.9 | .069 | 5.68 | 97.4 | 4.1 | .55 | 1.5 | .18 | .38 | .38 | 22 |
| | 30 | ISL | 13.13 | 13.13 | 33.440 | 25.160 | 280.4 | .093 | 5.33 | 89.4 | | | | | | | 30 |
| 1 | 32 | | 12.88 | 12.87 | 33.439 | 25.210 | 275.7 | .098 | 5.24 | 87.3 | 6.1 | .78 | 5.6 | .15 | .34 | .37 | 32 |
| | 50 | ISL | 11.24 | 11.24 | 33.607 | 25.648 | 234.4 | .144 | 4.15 | 66.9 | | | | | | | 50 |
| 1 | 54 | | 11.05 | 11.04 | 33.671 | 25.734 | 226.3 | .153 | 3.88 | 62.3 | 16.8 | 1.41 | 16.4 | .08 | .05 | .24 | 54 |

RV DAVID STARR JORDAN | CALCOFI CRUISE 8602 | STATION 93 29

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 52.6 N | 117 27.4 W | 06/02/86 | 0115 GMT | 659 M | 240 | 11 KT | 240 04 08 | 1 | 1017.7 MB | 15.8 C | 13.9 C | 1/8 | SC |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 15.68 | 15.68 | 33.529 | 24.689 | 324.2 | .000 | 5.87 | 103.7 | | | | | | | 0 |
| 1 | 2 | | 15.68 | 15.68 | 33.529 | 24.689 | 324.4 | .006 | 5.87 | 103.7 | 2.1 | .33 | .2 | .00 | .14 | .06 | 2 |
| | 10 | ISL | 15.69 | 15.69 | 33.527 | 24.686 | 325.0 | .032 | 5.93 | 104.7 | | | | | | | 10 |
| 1 | 12 | | 15.69 | 15.69 | 33.527 | 24.685 | 325.1 | .039 | 5.93 | 104.8 | 2.1 | .32 | .3 | .00 | .13 | .06 | 12 |
| | 20 | ISL | 15.59 | 15.59 | 33.525 | 24.706 | 323.4 | .065 | 5.89 | 103.9 | | | | | | | 20 |
| 1 | 23 | | 15.56 | 15.55 | 33.524 | 24.713 | 322.8 | .074 | 5.88 | 103.6 | 2.1 | .33 | .2 | .02 | .14 | .07 | 23 |
| | 30 | ISL | 14.62 | 14.62 | 33.472 | 24.877 | 307.4 | .097 | 5.90 | 102.0 | | | | | | | 30 |
| 1 | 33 | | 14.18 | 14.18 | 33.451 | 24.954 | 300.1 | .105 | 5.91 | 101.2 | 3.2 | .43 | .5 | .04 | .52 | .34 | 33 |
| 1 | 43 | | 13.09 | 13.09 | 33.419 | 25.152 | 281.5 | .134 | 5.48 | 91.7 | 5.0 | .64 | 3.5 | .13 | .47 | .40 | 43 |
| | 50 | ISL | 12.68 | 12.67 | 33.425 | 25.238 | 273.5 | .154 | 5.27 | 87.5 | | | | | | | 50 |
| 1 | 54 | | 12.52 | 12.51 | 33.437 | 25.279 | 269.6 | .164 | 5.16 | 85.4 | 6.4 | .81 | 6.5 | .06 | .41 | .37 | 54 |
| 1 | 63 | | 12.01 | 12.00 | 33.490 | 25.417 | 256.6 | .188 | 4.76 | 77.9 | 9.2 | 1.00 | 9.8 | .03 | .20 | .30 | 63 |
| 1 | 73 | | 11.65 | 11.64 | 33.570 | 25.547 | 244.6 | .213 | 4.36 | 70.9 | 12.3 | 1.17 | 12.7 | .02 | .12 | .20 | 73 |
| | 75 | ISL | 11.55 | 11.54 | 33.578 | 25.570 | 242.4 | .219 | 4.31 | 69.8 | | | | | | | 76 |
| 1 | 90 | | 11.01 | 11.00 | 33.636 | 25.714 | 229.0 | .253 | 4.00 | 64.1 | 15.5 | 1.37 | 16.0 | .00 | .05 | .11 | 90 |
| | 100 | ISL | 10.74 | 10.73 | 33.740 | 25.842 | 217.1 | .276 | 3.64 | 58.1 | | | | | | | 101 |
| 1 | 104 | | 10.65 | 10.64 | 33.783 | 25.893 | 212.3 | .286 | 3.49 | 55.6 | 20.6 | 1.62 | 19.4 | .00 | .02 | .06 | 105 |
| 1 | 124 | | 10.29 | 10.28 | 33.842 | 26.001 | 202.4 | .327 | 3.13 | 49.5 | 23.5 | 1.73 | 21.4 | .00 | .01 | .06 | 125 |
| | 125 | ISL | 10.28 | 10.27 | 33.845 | 26.005 | 202.0 | .328 | 3.12 | 49.3 | | | | | | | 126 |
| 1 | 150 | | 9.85 | 9.83 | 33.978 | 26.183 | 185.6 | .377 | 2.68 | 42.0 | 27.9 | 1.95 | 24.1 | .00 | .00 | .04 | 151 |
| 1 | 180 | | 9.36 | 9.34 | 34.045 | 26.316 | 173.5 | .431 | 2.43 | 37.7 | 32.3 | 2.08 | 26.1 | .01 | | | 181 |
| | 200 | ISL | 9.09 | 9.07 | 34.052 | 26.365 | 169.2 | .465 | 2.19 | 33.7 | | | | | | | 201 |
| 1 | 210 | | 8.98 | 8.96 | 34.058 | 26.388 | 167.1 | .482 | 2.07 | 31.8 | 37.2 | 2.25 | 28.0 | .00 | | | 211 |
| 1 | 241 | | 8.70 | 8.68 | 34.166 | 26.516 | 155.5 | .531 | 1.86 | 28.4 | 40.3 | 2.37 | 29.2 | .00 | | | 242 |
| | 250 | ISL | 8.64 | 8.61 | 34.167 | 26.527 | 154.1 | .546 | 1.81 | 27.7 | | | | | | | 252 |
| 1 | 280 | | 8.40 | 8.37 | 34.171 | 26.567 | 151.2 | .592 | 1.68 | 25.5 | 43.4 | 2.44 | 30.3 | .00 | | | 282 |
| | 300 | ISL | 8.12 | 8.09 | 34.171 | 26.610 | 147.4 | .621 | 1.58 | 23.8 | | | | | | | 302 |
| 1 | 341 | | 7.51 | 7.48 | 34.178 | 26.705 | 138.7 | .680 | 1.33 | 19.8 | 53.1 | 2.63 | 33.3 | .00 | | | 343 |
| | 400 | ISL | 7.08 | 7.04 | 34.225 | 26.802 | 130.1 | .759 | .88 | 12.9 | | | | | | | 403 |
| 1 | 417 | | 6.99 | 6.95 | 34.241 | 26.828 | 127.9 | .782 | .75 | 11.0 | 62.5 | 2.88 | 36.1 | .00 | | | 420 |
| 1 | 495 | | 6.48 | 6.43 | 34.296 | 26.941 | 117.9 | .877 | .43 | 6.2 | 71.8 | 3.05 | 38.1 | .00 | | | 498 |
| | 500 | ISL | 6.44 | 6.40 | 34.299 | 26.948 | 117.3 | .883 | .42 | 6.0 | | | | | | | 504 |
| 1 | 573 | | 5.97 | 5.91 | 34.335 | 27.038 | 109.2 | .966 | .30 | 4.3 | 80.8 | 3.17 | 39.7 | .00 | | | 577 |

RV DAVID STARR JORDAN CALCOFI CRUISE 8602 STATION 93 30

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 50.8 N | 117 31.9 W | 06/02/86 | 0322 GMT | 886 M | 240 | 07 KT | | | 1017.8 MB | 14.9 C | 13.1 C | | |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 15.71 | 15.71 | 33.533 | 24.686 | 324.7 | .000 | 5.85 | 103.4 | | | | | | | 0 |
| 1 | 1 | | 15.71 | 15.71 | 33.533 | 24.686 | 324.7 | .003 | 5.85 | 103.4 | 1.8 | .31 | .0 | .00 | .22 | .09 | 1 |
| 1 | 10 | | 15.70 | 15.70 | 33.531 | 24.687 | 324.9 | .032 | 5.88 | 103.9 | 1.8 | .31 | .0 | .00 | .21 | .09 | 10 |
| | 20 | ISL | 15.58 | 15.57 | 33.525 | 24.710 | 323.0 | .065 | 5.86 | 103.3 | | | | | | | 20 |
| 1 | 21 | | 15.57 | 15.56 | 33.525 | 24.712 | 322.8 | .068 | 5.86 | 103.3 | 1.8 | .33 | .0 | .01 | .21 | .10 | 21 |
| | 30 | ISL | 14.83 | 14.82 | 33.480 | 24.839 | 311.0 | .097 | 5.89 | 102.2 | | | | | | | 30 |
| 1 | 31 | | 14.73 | 14.73 | 33.475 | 24.856 | 309.4 | .099 | 5.89 | 102.0 | 3.0 | .44 | .6 | .07 | .87 | .37 | 31 |
| 1 | 41 | | 13.43 | 13.42 | 33.432 | 25.094 | 286.9 | .129 | 5.65 | 95.3 | 3.8 | .55 | 2.1 | .16 | .56 | .44 | 41 |
| | 50 | ISL | 12.80 | 12.80 | 33.471 | 25.249 | 272.4 | .155 | 4.87 | 81.1 | | | | | | | 50 |
| 1 | 52 | | 12.72 | 12.71 | 33.481 | 25.273 | 270.1 | .159 | 4.73 | 78.6 | 8.5 | .94 | 7.6 | .66 | .35 | .32 | 52 |
| 1 | 62 | | 12.17 | 12.16 | 33.505 | 25.399 | 258.4 | .186 | 4.65 | 76.4 | 9.6 | 1.03 | 10.0 | .09 | .19 | .30 | 62 |
| 1 | 72 | | 11.86 | 11.85 | 33.551 | 25.493 | 249.7 | .211 | 4.38 | 71.5 | 11.5 | 1.12 | 11.6 | .04 | .18 | .24 | 72 |
| | 75 | ISL | 11.73 | 11.72 | 33.569 | 25.531 | 246.1 | .219 | 4.29 | 69.8 | | | | | | | 76 |
| 1 | 87 | | 11.25 | 11.24 | 33.639 | 25.673 | 232.9 | .247 | 3.98 | 64.2 | 15.0 | 1.32 | 15.1 | .01 | .06 | .13 | 87 |
| | 100 | ISL | 10.83 | 10.81 | 33.722 | 25.814 | 219.7 | .277 | 3.74 | 59.8 | | | | | | | 101 |
| 1 | 103 | | 10.76 | 10.74 | 33.739 | 25.839 | 217.3 | .283 | 3.69 | 58.9 | 18.7 | 1.50 | 18.0 | .01 | .03 | .10 | 103 |
| 1 | 121 | | 10.36 | 10.34 | 33.902 | 26.036 | 199.0 | .322 | 2.87 | 45.5 | 24.6 | 1.80 | 21.9 | .00 | .01 | .05 | 122 |
| | 125 | ISL | 10.28 | 10.27 | 33.913 | 26.058 | 197.1 | .329 | 2.86 | 45.3 | | | | | | | 126 |
| 1 | 148 | | 9.84 | 9.82 | 33.947 | 26.160 | 187.7 | .374 | 2.81 | 44.0 | 26.9 | 1.90 | 23.5 | .00 | .01 | .05 | 149 |
| | 150 | ISL | 9.81 | 9.80 | 33.955 | 26.170 | 186.8 | .377 | 2.79 | 43.6 | | | | | | | 151 |
| 1 | 177 | | 9.46 | 9.44 | 34.074 | 26.323 | 172.8 | .426 | 2.36 | 36.7 | 32.2 | 2.10 | 26.0 | .00 | | | 178 |
| | 200 | ISL | 9.22 | 9.20 | 34.142 | 26.414 | 164.5 | .465 | 2.07 | 32.1 | | | | | | | 201 |
| 1 | 209 | | 9.15 | 9.13 | 34.162 | 26.443 | 162.0 | .479 | 1.97 | 30.4 | 36.4 | 2.27 | 27.9 | .00 | | | 210 |
| 1 | 238 | | 8.94 | 8.92 | 34.221 | 26.521 | 155.0 | .525 | 1.60 | 24.6 | 40.1 | 2.41 | 29.3 | .00 | | | 239 |
| | 250 | ISL | 8.86 | 8.83 | 34.239 | 26.549 | 152.6 | .544 | 1.47 | 22.6 | | | | | | | 252 |
| 1 | 278 | | 8.60 | 8.57 | 34.259 | 26.606 | 147.6 | .586 | 1.26 | 19.2 | 44.8 | 2.56 | 30.8 | .00 | | | 280 |
| | 300 | ISL | 8.23 | 8.20 | 34.237 | 26.645 | 144.1 | .618 | 1.25 | 18.8 | | | | | | | 302 |
| 1 | 338 | | 7.57 | 7.54 | 34.192 | 26.707 | 138.5 | .672 | 1.22 | 18.2 | 52.8 | 2.66 | 33.4 | .00 | | | 340 |
| | 400 | ISL | 7.10 | 7.06 | 34.222 | 26.797 | 130.6 | .755 | .89 | 13.1 | | | | | | | 403 |
| 1 | 414 | | 7.03 | 6.99 | 34.235 | 26.817 | 128.9 | .774 | .80 | 11.8 | 61.3 | 2.86 | 35.9 | .00 | | | 417 |
| 1 | 489 | | 6.47 | 6.43 | 34.277 | 26.926 | 119.2 | .866 | .46 | 6.7 | 70.9 | 3.02 | 38.0 | .00 | | | 492 |
| | 500 | ISL | 6.41 | 6.36 | 34.284 | 26.941 | 118.0 | .879 | .43 | 6.2 | | | | | | | 504 |
| 1 | 565 | | 6.13 | 6.07 | 34.325 | 27.010 | 112.0 | .954 | .32 | 4.6 | 78.2 | 3.12 | 39.4 | .00 | | | 569 |

RV DAVID STARR JORDAN CALCOFI CRUISE 8602 STATION 93 35

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 40.8 N | 117 52.4 W | 06/02/86 | 0704 GMT | 617 M | 310 | 15 KT | | | 1018.3 MB | 14.9 C | 13.2 C | | |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 15.23 | 15.23 | 33.513 | 24.777 | 316.0 | .000 | 5.92 | 103.6 | | | | | | | 0 |
| 1 | 1 | | 15.23 | 15.23 | 33.513 | 24.777 | 316.1 | .003 | 5.92 | 103.6 | 2.2 | .32 | .1 | .00 | .15 | .06 | 1 |
| | 10 | ISL | 15.24 | 15.24 | 33.512 | 24.773 | 316.7 | .032 | 5.89 | 103.2 | | | | | | | 10 |
| 1 | 11 | | 15.24 | 15.24 | 33.512 | 24.773 | 316.7 | .035 | 5.89 | 103.1 | 2.2 | .33 | .0 | .00 | .14 | .09 | 11 |
| | 20 | ISL | 15.19 | 15.19 | 33.509 | 24.783 | 316.1 | .063 | 5.95 | 104.1 | | | | | | | 20 |
| 1 | 22 | | 15.18 | 15.17 | 33.508 | 24.785 | 316.0 | .069 | 5.96 | 104.2 | 2.2 | .33 | .0 | .00 | .16 | .09 | 22 |
| | 30 | ISL | 14.52 | 14.52 | 33.473 | 24.898 | 305.3 | .094 | 5.89 | 101.5 | | | | | | | 30 |
| 1 | 32 | | 14.33 | 14.33 | 33.465 | 24.933 | 302.1 | .100 | 5.85 | 100.5 | 2.8 | .40 | .4 | .05 | .50 | .31 | 32 |
| 1 | 43 | | 13.26 | 13.25 | 33.440 | 25.135 | 283.1 | .132 | 5.43 | 91.2 | 4.6 | .61 | 3.2 | .11 | .53 | .42 | 43 |
| | 50 | ISL | 12.94 | 12.93 | 33.441 | 25.199 | 277.5 | .152 | 5.33 | 89.0 | | | | | | | 50 |
| 1 | 53 | | 12.84 | 12.83 | 33.442 | 25.219 | 275.3 | .160 | 5.29 | 88.1 | 5.6 | .72 | 5.1 | .09 | .41 | .40 | 53 |
| 1 | 63 | | 12.21 | 12.20 | 33.518 | 25.401 | 258.3 | .186 | 4.82 | 79.3 | 8.4 | .93 | 8.9 | .03 | .19 | .31 | 63 |
| 1 | 74 | | 11.70 | 11.69 | 33.575 | 25.542 | 245.1 | .214 | 4.45 | 72.4 | 10.7 | 1.10 | 11.8 | .02 | .11 | .19 | 74 |
| | 75 | ISL | 11.65 | 11.64 | 33.583 | 25.557 | 243.7 | .217 | 4.40 | 71.5 | | | | | | | 76 |
| 1 | 88 | | 11.24 | 11.23 | 33.649 | 25.683 | 232.0 | .247 | 4.01 | 64.6 | 14.5 | 1.29 | 14.8 | .01 | .06 | .12 | 88 |
| | 100 | ISL | 10.98 | 10.97 | 33.685 | 25.758 | 225.1 | .276 | 3.82 | 61.2 | | | | | | | 101 |
| 1 | 104 | | 10.91 | 10.90 | 33.693 | 25.777 | 223.4 | .283 | 3.78 | 60.5 | | 1.44 | 17.0 | .01 | .04 | .09 | 104 |
| 1 | 125 | | 10.31 | 10.30 | 33.784 | 25.952 | 207.1 | .331 | 3.39 | 53.6 | 21.3 | 1.63 | 20.0 | .00 | .02 | .05 | 126 |
| 1 | 150 | | 9.89 | 9.87 | 33.936 | 26.143 | 189.4 | .380 | 2.86 | 44.8 | 26.4 | 1.87 | 23.2 | .00 | .01 | .05 | 151 |
| 1 | 181 | | 9.58 | 9.56 | 34.059 | 26.292 | 175.9 | .436 | 2.44 | 38.0 | 30.8 | 2.06 | 25.5 | .00 | | | 182 |
| | 200 | ISL | 9.30 | 9.28 | 34.090 | 26.361 | 169.6 | .469 | 2.36 | 36.6 | | | | | | | 201 |
| 1 | 212 | | 9.12 | 9.10 | 34.101 | 26.398 | 166.2 | .489 | 2.33 | 35.9 | 34.5 | 2.14 | 26.9 | .00 | | | 213 |
| 1 | 243 | | 8.76 | 8.74 | 34.137 | 26.484 | 158.6 | .539 | 2.07 | 31.7 | 38.5 | 2.26 | 28.4 | .00 | | | 244 |
| | 250 | ISL | 8.66 | 8.64 | 34.144 | 26.505 | 156.6 | .550 | 2.00 | 30.5 | | | | | | | 252 |
| 1 | 283 | | 8.20 | 8.17 | 34.170 | 26.596 | 148.4 | .601 | 1.68 | 25.4 | 45.0 | 2.44 | 30.6 | .00 | | | 285 |
| | 300 | ISL | 8.01 | 7.98 | 34.181 | 26.634 | 145.0 | .626 | 1.53 | 23.0 | | | | | | | 302 |
| 1 | 345 | | 7.52 | 7.48 | 34.206 | 26.726 | 136.8 | .689 | 1.14 | 17.0 | 54.8 | 2.70 | 33.5 | .00 | | | 347 |
| | 400 | ISL | 6.94 | 6.90 | 34.245 | 26.837 | 126.7 | .761 | .72 | 10.6 | | | | | | | 403 |
| 1 | 422 | | 6.74 | 6.70 | 34.261 | 26.878 | 123.1 | .789 | .59 | 8.6 | 66.9 | 2.96 | 36.9 | .00 | | | 425 |
| 1 | 499 | | 6.32 | 6.27 | 34.310 | 26.973 | 114.8 | .880 | .38 | 5.5 | 74.3 | 3.08 | 38.3 | .00 | | | 502 |
| | 500 | ISL | 6.31 | 6.27 | 34.311 | 26.974 | 114.7 | .882 | .38 | 5.5 | | | | | | | 504 |
| 1 | 576 | | 5.85 | 5.80 | 34.345 | 27.061 | 107.0 | .966 | .25 | 3.6 | 83.5 | 3.17 | 39.6 | .01 | | | 580 |

RV DAVID STARR JORDAN CALCOFI CRUISE 8602 STATION 93 40

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 30.8 N | 118 12.8 W | 06/02/86 | 1132 GMT | 1603 M | 310 | 24 KT | | | 1016.5 MB | 13.7 C | 12.0 C | | |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 15.32 | 15.32 | 33.513 | 24.757 | 318.0 | .000 | 5.85 | 102.6 | | | | | | | 0 |
| 1 | 3 | | 15.32 | 15.32 | 33.513 | 24.757 | 318.0 | .010 | 5.85 | 102.6 | 1.7 | .32 | .1 | .00 | .18 | .07 | 3 |
| | 10 | ISL | 15.32 | 15.32 | 33.513 | 24.757 | 318.3 | .032 | 5.86 | 102.7 | | | | | | | 10 |
| 1 | 13 | | 15.32 | 15.32 | 33.512 | 24.756 | 318.4 | .041 | 5.86 | 102.7 | 1.7 | .35 | .1 | .00 | .17 | .08 | 13 |
| | 20 | ISL | 15.33 | 15.33 | 33.511 | 24.753 | 319.0 | .064 | 5.85 | 102.6 | | | | | | | 20 |
| 1 | 23 | | 15.34 | 15.33 | 33.511 | 24.752 | 319.1 | .073 | 5.85 | 102.6 | 1.8 | .33 | .1 | .00 | .17 | .08 | 23 |
| 1 | 30 | | 15.32 | 15.31 | 33.510 | 24.756 | 319.0 | .095 | 5.87 | 102.9 | 1.8 | .34 | .1 | .00 | .17 | .08 | 30 |
| 1 | 42 | | 13.77 | 13.76 | 33.395 | 24.997 | 296.3 | .132 | 5.91 | 100.3 | 2.5 | .44 | .9 | .11 | .60 | .27 | 42 |
| | 50 | ISL | 12.66 | 12.66 | 33.344 | 25.178 | 279.2 | .155 | 5.61 | 93.1 | | | | | | | 50 |
| 1 | 52 | | 12.47 | 12.46 | 33.339 | 25.212 | 276.0 | .160 | 5.54 | 91.5 | 4.4 | .68 | 4.5 | .07 | .41 | .27 | 52 |
| 1 | 62 | | 12.24 | 12.23 | 33.379 | 25.288 | 269.0 | .188 | 5.30 | 87.1 | 6.2 | .78 | 6.4 | .05 | .32 | .27 | 62 |
| 1 | 72 | | 11.89 | 11.88 | 33.454 | 25.412 | 257.4 | .214 | 4.90 | 80.0 | 8.3 | .96 | 9.1 | .04 | .22 | .26 | 72 |
| | 75 | ISL | 11.79 | 11.78 | 33.483 | 25.453 | 253.6 | .222 | 4.76 | 77.6 | | | | | | | 76 |
| 1 | 87 | | 11.42 | 11.41 | 33.582 | 25.597 | 240.1 | .251 | 4.31 | 69.7 | 12.3 | 1.20 | 13.0 | .02 | .10 | .16 | 87 |
| 1 | 100 | | 10.81 | 10.80 | 33.674 | 25.780 | 223.0 | .281 | 3.88 | 62.0 | 16.1 | 1.42 | 16.5 | .01 | .04 | .10 | 100 |
| 1 | 121 | | 10.17 | 10.15 | 33.764 | 25.962 | 206.0 | .328 | 3.50 | 55.1 | 20.9 | 1.61 | 19.9 | .00 | .02 | .04 | 122 |
| | 125 | ISL | 10.05 | 10.04 | 33.787 | 25.999 | 202.6 | .335 | 3.42 | 53.8 | | | | | | | 126 |
| 1 | 144 | | 9.51 | 9.50 | 33.910 | 26.185 | 185.2 | .372 | 3.01 | 46.8 | 26.3 | 1.85 | 23.3 | .00 | .00 | .04 | 145 |
| | 150 | ISL | 9.41 | 9.39 | 33.934 | 26.221 | 181.9 | .383 | 2.94 | 45.6 | | | | | | | 151 |
| 1 | 177 | | 9.08 | 9.06 | 34.022 | 26.343 | 170.7 | .431 | 2.66 | 41.0 | 31.8 | 2.03 | 25.8 | .00 | | | 178 |
| | 200 | ISL | 8.90 | 8.88 | 34.106 | 26.437 | 162.2 | .469 | 2.25 | 34.6 | | | | | | | 201 |
| 1 | 207 | | 8.86 | 8.84 | 34.127 | 26.460 | 160.1 | .480 | 2.13 | 32.7 | 37.5 | 2.24 | 27.8 | .00 | | | 208 |
| 1 | 237 | | 8.69 | 8.67 | 34.175 | 26.525 | 154.5 | .527 | 1.81 | 27.7 | 40.1 | 2.36 | 28.9 | .00 | | | 238 |
| | 250 | ISL | 8.61 | 8.59 | 34.195 | 26.553 | 152.1 | .547 | 1.66 | 25.3 | | | | | | | 252 |
| 1 | 279 | | 8.39 | 8.36 | 34.229 | 26.614 | 146.7 | .591 | 1.36 | 20.7 | 45.6 | 2.54 | 30.7 | .00 | | | 281 |
| | 300 | ISL | 8.13 | 8.10 | 34.229 | 26.654 | 142.9 | .621 | 1.22 | 18.4 | | | | | | | 302 |
| 1 | 342 | | 7.56 | 7.53 | 34.228 | 26.737 | 135.7 | .679 | 1.01 | 15.0 | 54.8 | 2.74 | 33.6 | .00 | | | 344 |
| | 400 | ISL | 7.03 | 7.00 | 34.242 | 26.822 | 128.2 | .756 | .78 | 11.4 | | | | | | | 403 |
| 1 | 421 | | 6.88 | 6.84 | 34.250 | 26.850 | 125.8 | .783 | .70 | 10.3 | 64.5 | 2.92 | 36.3 | .00 | | | 424 |
| | 500 | ISL | 6.35 | 6.31 | 34.295 | 26.957 | 116.4 | .878 | .40 | 5.7 | | | | | | | 504 |
| 1 | 502 | | 6.34 | 6.30 | 34.296 | 26.958 | 116.2 | .880 | .39 | 5.6 | 74.0 | 3.07 | 38.4 | .00 | | | 505 |
| 1 | 578 | | 5.86 | 5.81 | 34.344 | 27.058 | 107.4 | .966 | .26 | 3.7 | 83.2 | 3.17 | 39.9 | .00 | | | 582 |

RV DAVID STARR JORDAN CALCOFI CRUISE 8602 STATION 93 45

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 20.5 N | 118 33.7 W | 06/02/86 | 1521 GMT | 1169 M | 300 | 28 KT | 300 07 06 | 1 | 1016.7 MB | 12.8 C | 11.2 C | 5/8 | SC |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 14.19 | 14.19 | 33.391 | 24.905 | 303.8 | .000 | 5.95 | 101.9 | | | | | | | 0 |
| 1 | 2 | | 14.19 | 14.19 | 33.391 | 24.905 | 303.8 | .006 | 5.95 | 101.9 | 2.5 | .37 | .3 | .02 | .48 | .16 | 2 |
| | 10 | ISL | 14.19 | 14.19 | 33.391 | 24.905 | 304.1 | .030 | 5.99 | 102.5 | | | | | | | 10 |
| 1 | 12 | | 14.19 | 14.19 | 33.391 | 24.905 | 304.2 | .036 | 5.99 | 102.6 | 2.6 | .38 | .3 | .02 | .47 | .17 | 12 |
| | 20 | ISL | 14.18 | 14.18 | 33.391 | 24.907 | 304.2 | .061 | 5.98 | 102.4 | | | | | | | 20 |
| 1 | 26 | | 14.18 | 14.18 | 33.391 | 24.908 | 304.3 | .079 | 5.97 | 102.2 | 2.6 | .39 | .3 | .02 | .45 | .19 | 26 |
| | 30 | ISL | 14.00 | 14.00 | 33.389 | 24.944 | 300.7 | .091 | 5.94 | 101.3 | | | | | | | 30 |
| 1 | 43 | | | | 33.383 | | | .129 | 5.85 | 98.1 | 3.2 | .45 | 1.0 | .08 | .47 | .22 | 43 |
| | 50 | ISL | 12.72 | 12.72 | 33.386 | 25.199 | 276.9 | .149 | 5.57 | 92.4 | | | | | | | 50 |
| 1 | 57 | | 12.33 | 12.32 | 33.388 | 25.277 | 269.9 | .167 | 5.30 | 87.3 | 6.3 | .78 | 6.2 | .05 | .34 | .25 | 57 |
| 1 | 66 | | 12.11 | 12.11 | 33.402 | 25.329 | 265.2 | .191 | 5.16 | 84.6 | 7.0 | .85 | 7.3 | .04 | .23 | .30 | 66 |
| | 75 | ISL | 11.61 | 11.60 | 33.453 | 25.463 | 252.6 | .215 | 4.84 | 78.6 | | | | | | | 76 |
| 1 | 77 | | 11.51 | 11.50 | 33.465 | 25.490 | 250.1 | .220 | 4.78 | 77.4 | 10.1 | 1.06 | 10.9 | .02 | .14 | .20 | 77 |
| 1 | 91 | | 10.91 | 10.90 | 33.549 | 25.664 | 233.8 | .253 | 4.35 | 69.6 | 13.7 | 1.27 | 14.5 | .01 | .07 | .13 | 91 |
| | 100 | ISL | 10.53 | 10.52 | 33.618 | 25.784 | 222.5 | .275 | 4.04 | 64.1 | | | | | | | 101 |
| 1 | 104 | | 10.37 | 10.36 | 33.649 | 25.837 | 217.5 | .285 | 3.91 | 61.8 | 18.0 | 1.47 | 17.8 | .00 | .02 | .08 | 105 |
| 1 | 120 | | 9.93 | 9.91 | 33.718 | 25.966 | 205.5 | .318 | 3.66 | 57.4 | 21.1 | 1.60 | 20.0 | .00 | .01 | .06 | 121 |
| | 125 | ISL | 9.86 | 9.84 | 33.732 | 25.989 | 203.5 | .328 | 3.60 | 56.4 | | | | | | | 126 |
| 1 | 143 | | 9.60 | 9.58 | 33.800 | 26.085 | 194.6 | .364 | 3.34 | 52.0 | 24.4 | 1.75 | 22.1 | .00 | .01 | .05 | 144 |
| | 150 | ISL | 9.41 | 9.40 | 33.853 | 26.156 | 187.9 | .377 | 3.17 | 49.2 | | | | | | | 151 |
| 1 | 163 | | 9.09 | 9.07 | 33.949 | 26.284 | 176.1 | .401 | 2.87 | 44.2 | 30.2 | 1.95 | 25.1 | .00 | .00 | .03 | 164 |
| 1 | 180 | | 9.00 | 8.98 | 33.988 | 26.329 | 172.1 | .430 | 2.71 | 41.7 | 32.1 | 2.02 | 26.0 | .00 | | | 181 |
| 1 | 199 | | 8.58 | 8.56 | 34.021 | 26.421 | 163.5 | .462 | 2.68 | 40.8 | 34.7 | 2.06 | 27.0 | .00 | | | 200 |
| | 200 | ISL | 8.56 | 8.54 | 34.023 | 26.426 | 163.1 | .464 | 2.67 | 40.7 | | | | | | | 201 |
| 1 | 226 | | 8.23 | 8.21 | 34.087 | 26.526 | 154.0 | .504 | 2.34 | 35.4 | 39.7 | 2.22 | 28.6 | .00 | | | 227 |
| | 250 | ISL | 8.07 | 8.04 | 34.149 | 26.600 | 147.4 | .541 | 1.87 | 28.2 | | | | | | | 252 |
| 1 | 264 | | 7.98 | 7.96 | 34.182 | 26.638 | 143.9 | .562 | 1.59 | 23.9 | 46.5 | 2.50 | 31.2 | .00 | | | 266 |
| | 300 | ISL | 7.61 | 7.58 | 34.228 | 26.729 | 135.8 | .612 | 1.15 | 17.2 | | | | | | | 302 |
| 1 | 320 | | 7.38 | 7.35 | 34.241 | 26.772 | 131.9 | .639 | .98 | 14.5 | 56.0 | 2.75 | 34.2 | .00 | | | 322 |
| 1 | 395 | | 6.76 | 6.72 | 34.255 | 26.870 | 123.4 | .735 | .65 | 9.5 | 65.0 | 2.92 | 36.6 | .00 | | | 398 |
| | 400 | ISL | 6.74 | 6.70 | 34.257 | 26.875 | 123.0 | .741 | .63 | 9.3 | | | | | | | 403 |
| 1 | 474 | | 6.37 | 6.32 | 34.293 | 26.953 | 116.4 | .829 | .43 | 6.2 | 72.3 | 3.04 | 38.2 | .00 | | | 477 |
| | 500 | ISL | 6.22 | 6.18 | 34.305 | 26.981 | 113.9 | .859 | .37 | 5.4 | | | | | | | 504 |
| 1 | 561 | | 5.86 | 5.81 | 34.332 | 27.049 | 107.9 | .927 | .27 | 3.9 | 82.2 | 3.16 | 40.0 | .00 | | | 565 |

RV DAVID STARR JORDAN | CALCOFI CRUISE 8602 | STATION 93 50

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 10.8 N | 118 53.9 W | 07/02/86 | 1254 GMT | 1508 M | 310 | 13 KT | 300 05 05 | | 1015.2 MB | 13.0 C | 9.7 C | | |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 14.03 | 14.03 | 33.353 | 24.910 | 303.3 | .000 | 5.93 | 101.2 | | | | | | | 0 |
| 1 | 1 | | 14.03 | 14.03 | 33.353 | 24.910 | 303.4 | .003 | 5.93 | 101.2 | 2.7 | .41 | .7 | .02 | .45 | .21 | 1 |
| 1 | 10 | | 14.03 | 14.03 | 33.351 | 24.907 | 303.9 | .030 | 6.00 | 102.4 | 2.9 | .41 | .7 | .02 | .44 | .17 | 10 |
| | 20 | ISL | 14.04 | 14.04 | 33.351 | 24.906 | 304.3 | .061 | 5.98 | 102.0 | | | | | | | 20 |
| 1 | 27 | | 14.04 | 14.04 | 33.351 | 24.906 | 304.5 | .082 | 5.94 | 101.4 | 2.9 | .41 | .7 | .02 | .45 | .17 | 27 |
| | 30 | ISL | 14.04 | 14.03 | 33.351 | 24.906 | 304.5 | .091 | 5.93 | 101.3 | | | | | | | 30 |
| 1 | 42 | | 14.02 | 14.02 | 33.349 | 24.909 | 304.6 | .127 | 5.91 | 100.8 | 3.0 | .42 | .8 | .03 | .44 | .18 | 42 |
| | 50 | ISL | 13.18 | 13.17 | 33.388 | 25.112 | 285.5 | .151 | 5.51 | 92.3 | | | | | | | 50 |
| 1 | 57 | | 12.33 | 12.33 | 33.425 | 25.305 | 267.2 | .170 | 5.14 | 84.7 | 6.9 | .83 | 7.0 | .10 | .32 | .35 | 57 |
| 1 | 68 | | 11.34 | 11.33 | 33.433 | 25.496 | 249.2 | .198 | 4.85 | 78.2 | 9.7 | 1.04 | 11.0 | .03 | .15 | .22 | 68 |
| | 75 | ISL | 11.14 | 11.14 | 33.486 | 25.573 | 242.0 | .216 | 4.60 | 73.9 | | | | | | | 76 |
| 1 | 78 | | 11.12 | 11.11 | 33.509 | 25.596 | 239.9 | .223 | 4.50 | 72.3 | 12.5 | 1.21 | 13.3 | .01 | .09 | .15 | 78 |
| 1 | 95 | | 10.74 | 10.73 | 33.632 | 25.759 | 224.8 | .262 | 3.95 | 63.0 | 16.8 | 1.43 | 17.1 | .01 | .07 | .19 | 95 |
| | 100 | ISL | 10.38 | 10.37 | 33.686 | 25.863 | 215.0 | .274 | 3.73 | 59.0 | | | | | | | 101 |
| 1 | 109 | | 9.76 | 9.75 | 33.778 | 26.040 | 198.2 | .293 | 3.37 | 52.6 | 23.8 | 1.73 | 21.9 | .00 | .01 | .05 | 110 |
| 1 | 124 | | 9.40 | 9.39 | 33.869 | 26.171 | 186.1 | .322 | 3.08 | 47.7 | 27.4 | 1.86 | 23.9 | .00 | .01 | .05 | 125 |
| | 125 | ISL | 9.38 | 9.37 | 33.870 | 26.175 | 185.7 | .323 | 3.08 | 47.7 | | | | | | | 126 |
| 1 | 150 | | 8.82 | 8.81 | 33.919 | 26.303 | 173.9 | .369 | 3.12 | 47.8 | 30.4 | 1.90 | 25.2 | .00 | .00 | .03 | 151 |
| 1 | 17[illegible] | | 8.77 | 8.75 | 33.983 | 26.362 | 168.7 | .403 | 2.77 | 42.4 | 33.2 | 2.03 | 26.4 | .00 | .00 | .04 | 171 |
| 1 | 19[illegible] | | 8.65 | 8.63 | 34.060 | 26.441 | 161.5 | .435 | 2.38 | 36.3 | 36.6 | 2.17 | 28.0 | .00 | | | 191 |
| | 200 | ISL | 8.38 | 8.36 | 34.056 | 26.479 | 158.1 | .451 | 2.44 | 36.9 | | | | | | | 201 |
| 1 | 212 | | 8.05 | 8.03 | 34.044 | 26.519 | 154.3 | .470 | 2.52 | 37.9 | 40.3 | 2.19 | 28.9 | .00 | | | 213 |
| 1 | 241 | | 7.80 | 7.78 | 34.102 | 26.601 | 146.9 | .513 | 2.01 | 30.1 | 45.6 | 2.37 | 30.9 | .00 | | | 242 |
| | 250 | ISL | 7.74 | 7.71 | 34.109 | 26.617 | 145.6 | .527 | 1.88 | 28.1 | | | | | | | 252 |
| 1 | 283 | | 7.51 | 7.49 | 34.126 | 26.663 | 141.7 | .575 | 1.49 | 22.2 | 51.3 | 2.58 | 32.9 | .00 | | | 285 |
| | 300 | ISL | 7.40 | 7.37 | 34.146 | 26.695 | 138.9 | .598 | 1.30 | 19.3 | | | | | | | 302 |
| 1 | 343 | | 7.12 | 7.09 | 34.202 | 26.779 | 131.5 | .656 | .88 | 13.0 | 59.5 | 2.80 | 35.4 | .00 | | | 345 |
| | 400 | ISL | 6.85 | 6.81 | 34.268 | 26.869 | 123.7 | .729 | .56 | 8.2 | | | | | | | 403 |
| 1 | 419 | | 6.76 | 6.72 | 34.286 | 26.895 | 121.4 | .753 | .49 | 7.2 | 67.7 | 3.01 | 37.2 | .00 | | | 422 |
| 1 | 495 | | 6.21 | 6.16 | 34.311 | 26.988 | 113.2 | .841 | .32 | 4.6 | 76.6 | 3.10 | 39.1 | .00 | | | 498 |
| | 500 | ISL | 6.17 | 6.12 | 34.313 | 26.994 | 112.6 | .847 | .31 | 4.5 | | | | | | | 504 |
| 1 | 572 | | 5.65 | 5.60 | 34.355 | 27.093 | 103.7 | .925 | .26 | 3.7 | 86.6 | 3.20 | 40.4 | .00 | | | 576 |

RV DAVID STARR JORDAN | CALCOFI CRUISE 8602 | STATION 93 55

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 00.8 N | 119 13.9 W | 07/02/86 | 1620 GMT | 1575 M | 320 | 10 KT | 320 05 06 | 1 | 1016.4 MB | 13.8 C | 10.4 C | 1/8 | AS |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | | 14.07 | 14.07 | 33.481 | 25.000 | 294.8 | .000 | 5.87 | 100.3 | 2.9 | .47 | 1.3 | .05 | .49 | .19 | 0 |
| | 10 | ISL | 14.05 | 14.04 | 33.481 | 25.005 | 294.6 | .029 | 5.93 | 101.2 | | | | | | | 10 |
| 1 | 11 | | 14.05 | 14.04 | 33.481 | 25.005 | 294.6 | .032 | 5.93 | 101.3 | 3.1 | .49 | 1.3 | .05 | .50 | .21 | 11 |
| | 20 | ISL | 14.05 | 14.05 | 33.481 | 25.004 | 294.9 | .059 | 5.92 | 101.2 | | | | | | | 20 |
| 1 | 27 | | 14.06 | 14.05 | 33.481 | 25.003 | 295.3 | .079 | 5.92 | 101.1 | 2.8 | .45 | 1.3 | .05 | .48 | .22 | 27 |
| | 30 | ISL | 14.06 | 14.05 | 33.481 | 25.003 | 295.3 | .088 | 5.91 | 101.0 | | | | | | | 30 |
| 1 | 42 | | 14.05 | 14.04 | 33.481 | 25.005 | 295.5 | .123 | 5.88 | 100.4 | 2.9 | .46 | 1.3 | .05 | .49 | .19 | 42 |
| | 50 | ISL | 13.64 | 13.64 | 33.491 | 25.097 | 287.0 | .147 | 5.65 | 95.7 | | | | | | | 50 |
| 1 | 59 | | 13.21 | 13.20 | 33.503 | 25.194 | 278.0 | .172 | 5.40 | 90.7 | 5.7 | .70 | 4.9 | .12 | .40 | .24 | 59 |
| 1 | 68 | | 11.54 | 11.53 | 33.568 | 25.565 | 242.7 | .195 | 4.44 | 72.0 | 12.2 | 1.20 | 12.9 | .13 | .26 | .32 | 68 |
| | 75 | ISL | 11.08 | 11.08 | 33.599 | 25.671 | 232.7 | .213 | 4.19 | 67.3 | | | | | | | 76 |
| 1 | 80 | | 10.99 | 10.98 | 33.611 | 25.698 | 230.3 | .223 | 4.14 | 66.4 | 15.2 | 1.38 | 15.9 | .03 | .15 | .21 | 80 |
| 1 | 95 | | 10.41 | 10.40 | 33.676 | 25.850 | 216.1 | .257 | 3.79 | 60.0 | 18.5 | 1.55 | 18.6 | .01 | .07 | .12 | 95 |
| | 100 | ISL | 10.20 | 10.19 | 33.707 | 25.910 | 210.4 | .268 | 3.66 | 57.7 | | | | | | | 101 |
| 1 | 110 | | 9.84 | 9.83 | 33.766 | 26.018 | 200.4 | .290 | 3.45 | 54.0 | 22.9 | 1.72 | 21.3 | .00 | .02 | .07 | 111 |
| 1 | 125 | | 9.47 | 9.46 | 33.822 | 26.123 | 190.6 | .319 | 3.32 | 51.5 | 25.3 | 1.82 | 22.8 | .00 | .02 | .08 | 126 |
| | 150 | ISL | 9.01 | 9.00 | 33.948 | 26.295 | 174.7 | .364 | 2.84 | 43.7 | | | | | | | 151 |
| 1 | 151 | | 9.00 | 8.98 | 33.953 | 26.302 | 174.1 | .366 | 2.82 | 43.3 | 30.8 | 2.02 | 25.7 | .00 | .02 | .07 | 152 |
| 1 | 170 | | 8.75 | 8.73 | 33.993 | 26.373 | 167.6 | .398 | 2.70 | 41.3 | 32.9 | 2.10 | 26.7 | .00 | .02 | .05 | 171 |
| 1 | 191 | | 8.52 | 8.50 | 34.045 | 26.449 | 160.7 | .432 | 2.43 | 37.0 | 36.6 | 2.21 | 28.1 | .00 | | | 192 |
| | 200 | ISL | 8.44 | 8.42 | 34.063 | 26.476 | 158.4 | .447 | 2.33 | 35.4 | | | | | | | 201 |
| 1 | 212 | | 8.34 | 8.32 | 34.084 | 26.507 | 155.6 | .465 | 2.21 | 33.5 | 39.5 | 2.32 | 29.1 | .00 | | | 213 |
| 1 | 242 | | 8.01 | 7.99 | 34.119 | 26.584 | 148.6 | .511 | 1.92 | 28.9 | 43.8 | 2.45 | 30.6 | .00 | | | 243 |
| | 250 | ISL | 7.94 | 7.92 | 34.129 | 26.602 | 147.1 | .523 | 1.84 | 27.6 | | | | | | | 252 |
| 1 | 283 | | 7.70 | 7.67 | 34.163 | 26.665 | 141.6 | .571 | 1.52 | 22.7 | 49.5 | 2.62 | 32.4 | .00 | | | 285 |
| | 300 | ISL | 7.59 | 7.56 | 34.180 | 26.694 | 139.1 | .595 | 1.36 | 20.3 | | | | | | | 302 |
| 1 | 344 | | 7.30 | 7.26 | 34.219 | 26.767 | 132.7 | .654 | .99 | 14.7 | 56.8 | 2.84 | 34.8 | .00 | | | 346 |
| | 400 | ISL | 6.79 | 6.75 | 34.250 | 26.863 | 124.2 | .726 | .66 | 9.7 | | | | | | | 403 |
| 1 | 420 | | 6.60 | 6.56 | 34.260 | 26.895 | 121.2 | .751 | .58 | 8.5 | 67.7 | 3.04 | 37.4 | .00 | | | 423 |
| 1 | 497 | | 6.09 | 6.05 | 34.297 | 26.991 | 112.8 | .841 | .41 | 5.9 | 76.6 | 3.16 | 39.2 | .00 | | | 500 |
| | 500 | ISL | 6.07 | 6.03 | 34.299 | 26.995 | 112.5 | .844 | .40 | 5.8 | | | | | | | 504 |
| 1 | 574 | | 5.77 | 5.72 | 34.334 | 27.061 | 106.8 | .925 | .30 | 4.3 | 83.3 | 3.23 | 40.4 | .00 | | | 578 |

RV DAVID STARR JORDAN CALCOFI CRUISE 8602 STATION 93 60

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 50.4 N | 119 34.6 W | 07/02/86 | 2027 GMT | 1761 M | 290 | 09 KT | 310 05 06 | 1 | 1016.2 MB | 15.8 C | 12.0 C | 3/8 | CU |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 14.95 | 14.95 | 33.258 | 24.640 | 329.3 | .000 | 5.88 | 102.2 | | | | | | | 0 |
| 1 | 2 | | 14.95 | 14.95 | 33.258 | 24.640 | 329.1 | .007 | 5.88 | 102.2 | 2.1 | .38 | .2 | .00 | .13 | .05 | 2 |
| | 10 | ISL | 14.84 | 14.84 | 33.257 | 24.665 | 327.0 | .033 | 5.93 | 102.8 | | | | | | | 10 |
| 1 | 12 | | 14.80 | 14.80 | 33.257 | 24.672 | 326.3 | .039 | 5.94 | 102.9 | 2.2 | .38 | .2 | .00 | .13 | .07 | 12 |
| | 20 | ISL | 14.60 | 14.60 | 33.268 | 24.724 | 321.7 | .065 | 5.95 | 102.7 | | | | | | | 20 |
| 1 | 28 | | 14.42 | 14.42 | 33.279 | 24.771 | 317.5 | .090 | 5.96 | 102.5 | 2.3 | .38 | .2 | .00 | .18 | .11 | 28 |
| | 30 | ISL | 14.42 | 14.41 | 33.280 | 24.772 | 317.4 | .097 | 5.96 | 102.5 | | | | | | | 30 |
| 1 | 43 | | 14.39 | 14.38 | 33.281 | 24.780 | 317.0 | .138 | 5.96 | 102.4 | 2.3 | .38 | .2 | .00 | .22 | .11 | 43 |
| | 50 | ISL | 14.32 | 14.31 | 33.281 | 24.795 | 315.7 | .161 | 5.96 | 102.2 | | | | | | | 50 |
| 1 | 58 | | 14.21 | 14.20 | 33.285 | 24.820 | 313.6 | .185 | 5.94 | 101.7 | 2.4 | .39 | .3 | .04 | .27 | .16 | 58 |
| 1 | 69 | | 14.05 | 14.04 | 33.306 | 24.872 | 308.9 | .219 | 5.89 | 100.5 | 2.4 | .43 | .5 | .12 | .27 | .20 | 69 |
| | 75 | ISL | 13.42 | 13.41 | 33.298 | 24.993 | 297.5 | .238 | 5.82 | 98.1 | | | | | | | 76 |
| 1 | 79 | | 13.02 | 13.01 | 33.294 | 25.071 | 290.1 | .249 | 5.77 | 96.4 | 3.3 | .55 | 2.1 | .10 | .20 | .22 | 79 |
| 1 | 94 | | 12.16 | 12.15 | 33.317 | 25.255 | 272.9 | .291 | 5.42 | 88.9 | 5.1 | .73 | 5.5 | .02 | .11 | .18 | 94 |
| | 100 | ISL | 11.91 | 11.90 | 33.341 | 25.321 | 266.7 | .308 | 5.30 | 86.4 | | | | | | | 101 |
| 1 | 110 | | 11.56 | 11.55 | 33.388 | 25.422 | 257.3 | .333 | 5.08 | 82.3 | 8.1 | .94 | 9.2 | .01 | .06 | .13 | 110 |
| 1 | 125 | | 10.80 | 10.78 | 33.491 | 25.639 | 236.8 | .372 | 4.48 | 71.4 | 13.1 | 1.25 | 14.8 | .00 | .03 | .06 | 126 |
| 1 | 149 | | 9.81 | 9.79 | 33.709 | 25.979 | 204.8 | .425 | 3.81 | 59.5 | 20.5 | 1.57 | 20.4 | .00 | .01 | .03 | 150 |
| | 150 | ISL | 9.78 | 9.76 | 33.714 | 25.988 | 204.0 | .427 | 3.79 | 59.2 | | | | | | | 151 |
| 1 | 170 | | 9.14 | 9.13 | 33.839 | 26.189 | 185.1 | .466 | 3.35 | 51.6 | 26.6 | 1.79 | 24.1 | .00 | .00 | .02 | 171 |
| 1 | 190 | | 8.75 | 8.73 | 33.925 | 26.320 | 173.1 | .501 | 3.15 | 48.1 | 30.5 | 1.92 | 25.8 | .00 | | | 191 |
| | 200 | ISL | 8.62 | 8.60 | 33.947 | 26.358 | 169.6 | .519 | 3.10 | 47.2 | | | | | | | 201 |
| 1 | 211 | | 8.50 | 8.48 | 33.963 | 26.387 | 167.0 | .537 | 3.06 | 46.5 | 32.8 | 1.97 | 26.6 | .00 | | | 212 |
| 1 | 241 | | 8.23 | 8.21 | 33.998 | 26.457 | 160.8 | .586 | 2.97 | 44.9 | 35.7 | 2.04 | 27.6 | .00 | | | 242 |
| | 250 | ISL | 8.10 | 8.08 | 34.007 | 26.483 | 158.4 | .601 | 2.90 | 43.7 | | | | | | | 252 |
| 1 | 280 | | 7.64 | 7.61 | 34.035 | 26.573 | 150.2 | .648 | 2.58 | 38.5 | 42.7 | 2.21 | 30.1 | .00 | | | 282 |
| | 300 | ISL | 7.34 | 7.31 | 34.051 | 26.629 | 145.0 | .676 | 2.26 | 33.5 | | | | | | | 302 |
| 1 | 341 | | 6.78 | 6.75 | 34.090 | 26.736 | 135.1 | .734 | 1.57 | 22.9 | 57.3 | 2.64 | 35.3 | .00 | | | 343 |
| | 400 | ISL | 6.36 | 6.32 | 34.165 | 26.852 | 124.8 | .811 | .91 | 13.1 | | | | | | | 403 |
| 1 | 417 | | 6.27 | 6.23 | 34.185 | 26.879 | 122.4 | .832 | .77 | 11.1 | 69.5 | 2.94 | 38.5 | .00 | | | 420 |
| 1 | 494 | | 5.79 | 5.75 | 34.244 | 26.987 | 112.8 | .922 | .47 | 6.7 | 78.6 | 3.11 | 40.5 | .00 | | | 497 |
| | 500 | ISL | 5.76 | 5.72 | 34.250 | 26.995 | 112.1 | .929 | .45 | 6.4 | | | | | | | 504 |
| 1 | 570 | | 5.52 | 5.47 | 34.307 | 27.071 | 105.6 | 1.005 | .30 | 4.3 | 85.8 | 3.20 | 41.4 | .00 | | | 574 |

RV DAVID STARR JORDAN CALCOFI CRUISE 8602 STATION 93 70

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 30.3 N | 120 15.0 W | 08/02/86 | 0248 GMT | 3733 M | 240 | 19 KT | | 5 | 1012.7 MB | 13.8 C | 13.8 C | 8/8 | ST |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 15.32 | 15.32 | 33.383 | 24.656 | 327.5 | .000 | 5.85 | 102.5 | | | | | | | 0 |
| 1 | 1 | | 15.32 | 15.32 | 33.383 | 24.656 | 327.6 | .003 | 5.85 | 102.5 | 2.0 | .37 | .2 | .00 | .12 | .05 | 1 |
| | 10 | ISL | 15.34 | 15.34 | 33.388 | 24.656 | 327.8 | .033 | 5.88 | 103.0 | | | | | | | 10 |
| 1 | 11 | | 15.34 | 15.34 | 33.388 | 24.656 | 327.8 | .036 | 5.88 | 103.1 | 2.1 | .37 | .2 | .00 | .11 | .05 | 11 |
| | 20 | ISL | 15.35 | 15.34 | 33.408 | 24.671 | 326.7 | .066 | 5.86 | 102.8 | | | | | | | 20 |
| 1 | 27 | | 15.35 | 15.34 | 33.424 | 24.683 | 325.8 | .088 | 5.84 | 102.4 | 2.2 | .37 | .2 | .00 | .11 | .06 | 27 |
| | 30 | ISL | 15.35 | 15.34 | 33.423 | 24.683 | 325.9 | .098 | 5.84 | 102.3 | | | | | | | 30 |
| 1 | 43 | | 15.32 | 15.32 | 33.420 | 24.686 | 326.0 | .140 | 5.83 | 102.2 | 2.2 | .37 | .2 | .00 | .12 | .06 | 43 |
| | 50 | ISL | 15.31 | 15.30 | 33.417 | 24.688 | 326.1 | .163 | 5.83 | 102.1 | | | | | | | 50 |
| 1 | 58 | | 15.29 | 15.28 | 33.414 | 24.689 | 326.2 | .189 | 5.83 | 102.1 | 2.1 | .37 | .2 | .00 | .13 | .06 | 58 |
| 1 | 69 | | 15.27 | 15.26 | 33.410 | 24.690 | 326.4 | .224 | 5.85 | 102.4 | 2.1 | .37 | .2 | .00 | .14 | .06 | 69 |
| | 75 | ISL | 15.19 | 15.17 | 33.401 | 24.702 | 325.4 | .245 | 5.86 | 102.5 | | | | | | | 76 |
| 1 | 79 | | 15.14 | 15.12 | 33.395 | 24.709 | 324.9 | .257 | 5.87 | 102.4 | 2.1 | .38 | .2 | .00 | .16 | .10 | 79 |
| 1 | 95 | | 13.07 | 13.06 | 33.278 | 25.048 | 292.7 | .306 | 5.82 | 97.3 | 3.1 | .51 | 1.1 | .14 | .21 | .25 | 95 |
| | 100 | ISL | 12.74 | 12.73 | 33.284 | 25.118 | 286.2 | .322 | 5.71 | 94.8 | | | | | | | 101 |
| 1 | 110 | | 12.38 | 12.37 | 33.326 | 25.220 | 276.6 | .348 | 5.47 | 90.1 | 4.8 | .69 | 4.5 | .03 | .15 | .20 | 110 |
| 1 | 125 | | 11.85 | 11.84 | 33.459 | 25.424 | 257.6 | .391 | 5.05 | 82.4 | 7.5 | .93 | 8.5 | .02 | .08 | .14 | 126 |
| | 150 | ISL | 10.60 | 10.58 | 33.592 | 25.753 | 226.6 | .450 | 4.37 | 69.4 | | | | | | | 151 |
| 1 | 151 | | 10.54 | 10.52 | 33.600 | 25.770 | 225.0 | .453 | 4.32 | 68.6 | 14.9 | 1.34 | 15.6 | .00 | .03 | .05 | 152 |
| 1 | 171 | | 10.19 | 10.17 | 33.806 | 25.992 | 204.3 | .496 | 3.26 | 51.4 | 22.3 | 1.74 | 21.0 | .00 | .01 | .04 | 172 |
| 1 | 191 | | 9.40 | 9.37 | 33.839 | 26.149 | 189.5 | .535 | 3.43 | 53.1 | 25.1 | 1.75 | 22.4 | .00 | | | 192 |
| | 200 | ISL | 9.35 | 9.33 | 33.886 | 26.193 | 185.5 | .552 | 3.30 | 51.0 | | | | | | | 201 |
| 1 | 212 | | 9.30 | 9.28 | 33.939 | 26.243 | 181.0 | .574 | 3.06 | 47.3 | 28.2 | 1.89 | 24.2 | .00 | | | 213 |
| 1 | 244 | | 8.63 | 8.61 | 34.019 | 26.412 | 165.3 | .629 | 2.84 | 43.3 | 34.0 | 2.05 | 26.6 | .00 | | | 245 |
| | 250 | ISL | 8.48 | 8.46 | 34.024 | 26.439 | 162.8 | .639 | 2.81 | 42.7 | | | | | | | 252 |
| 1 | 283 | | 7.75 | 7.72 | 34.036 | 26.558 | 151.7 | .692 | 2.63 | 39.3 | 41.8 | 2.21 | 29.3 | .01 | | | 285 |
| | 300 | ISL | 7.53 | 7.50 | 34.046 | 26.597 | 148.2 | .717 | 2.46 | 36.6 | | | | | | | 302 |
| 1 | 346 | | 7.10 | 7.07 | 34.074 | 26.681 | 140.7 | .783 | 1.91 | 28.1 | 52.3 | 2.51 | 33.1 | .00 | | | 348 |
| | 400 | ISL | 6.59 | 6.56 | 34.126 | 26.791 | 130.8 | .856 | 1.24 | 18.1 | | | | | | | 403 |
| 1 | 422 | | 6.40 | 6.37 | 34.148 | 26.833 | 126.9 | .885 | 1.00 | 14.5 | 66.1 | 2.87 | 37.7 | .00 | | | 425 |
| 1 | 498 | | 5.87 | 5.83 | 34.199 | 26.942 | 117.1 | .977 | .60 | 8.6 | 76.3 | 3.05 | 39.7 | .00 | | | 501 |
| | 500 | ISL | 5.86 | 5.81 | 34.202 | 26.946 | 116.8 | .980 | .59 | 8.5 | | | | | | | 504 |
| 1 | 574 | | 5.45 | 5.40 | 34.269 | 27.049 | 107.5 | 1.063 | .36 | 5.1 | 86.3 | 3.20 | 41.3 | .00 | | | 578 |

RV DAVID STARR JORDAN CALCOFI CRUISE 8602 STATION 93 80

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 10.6 N | 120 55.4 W | 08/02/86 | 0829 GMT | 3924 M | 320 | 21 KT | 310 08 06 | 1 | 1011.5 MB | 13.5 C | 10.8 C | | |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 15.64 | 15.64 | 33.318 | 24.535 | 339.1 | .000 | 5.77 | 101.7 | | | | | | | 0 |
| 1 | 1 | | 15.64 | 15.64 | 33.318 | 24.535 | 339.1 | .003 | 5.77 | 101.7 | 1.7 | .36 | .0 | .00 | .08 | .04 | 1 |
| | 10 | ISL | 15.62 | 15.62 | 33.316 | 24.540 | 339.0 | .034 | 5.78 | 101.9 | | | | | | | 10 |
| 1 | 13 | | 15.61 | 15.61 | 33.316 | 24.540 | 339.0 | .044 | | | 1.7 | .36 | .0 | .00 | .08 | .03 | 13 |
| | 20 | ISL | 15.63 | 15.62 | 33.317 | 24.538 | 339.4 | .068 | 5.79 | 102.1 | | | | | | | 20 |
| 1 | 29 | | 15.65 | 15.65 | 33.318 | 24.534 | 340.0 | .098 | 5.80 | 102.2 | 1.7 | .36 | .0 | .00 | .07 | .03 | 29 |
| | 30 | ISL | 15.65 | 15.65 | 33.318 | 24.535 | 340.0 | .102 | 5.80 | 102.2 | | | | | | | 30 |
| 1 | 44 | | 15.65 | 15.64 | 33.326 | 24.541 | 339.8 | .149 | 5.80 | 102.2 | 1.7 | .37 | .0 | .00 | .08 | .03 | 44 |
| | 50 | ISL | 15.64 | 15.64 | 33.325 | 24.542 | 339.9 | .170 | 5.79 | 102.1 | | | | | | | 50 |
| 1 | 60 | | 15.63 | 15.62 | 33.324 | 24.544 | 340.1 | .203 | 5.78 | 101.8 | 1.7 | .35 | .0 | .00 | .08 | .04 | 60 |
| 1 | 70 | | 15.64 | 15.63 | 33.310 | 24.531 | 341.6 | .237 | 5.79 | 102.0 | 1.7 | .37 | .0 | .00 | .09 | .04 | 70 |
| | 75 | ISL | 15.63 | 15.62 | 33.314 | 24.538 | 341.1 | .255 | 5.78 | 101.9 | | | | | | | 76 |
| 1 | 80 | | 15.61 | 15.60 | 33.318 | 24.544 | 340.7 | .271 | 5.78 | 101.8 | 1.7 | .37 | .0 | .00 | .10 | .05 | 80 |
| 1 | 93 | | 14.02 | 14.00 | 33.255 | 24.839 | 312.8 | .313 | 5.98 | 101.9 | 2.3 | .43 | .2 | .06 | .23 | .26 | 93 |
| | 100 | ISL | 13.48 | 13.46 | 33.275 | 24.965 | 300.9 | .336 | 5.92 | 99.8 | | | | | | | 101 |
| 1 | 110 | | 13.02 | 13.01 | 33.305 | 25.080 | 290.1 | .364 | 5.80 | 96.9 | 2.7 | .51 | 1.4 | .05 | .21 | .23 | 110 |
| 1 | 121 | | 12.60 | 12.58 | 33.277 | 25.141 | 284.5 | .398 | 5.78 | 95.7 | 3.3 | .56 | 2.3 | | .16 | .25 | 122 |
| | 125 | ISL | 12.45 | 12.43 | 33.280 | 25.173 | 281.6 | .408 | 5.72 | 94.4 | | | | | | | 126 |
| 1 | 150 | | 11.25 | 11.23 | 33.403 | 25.491 | 251.7 | .476 | 5.04 | 81.1 | 8.3 | .96 | 9.6 | .01 | .05 | .08 | 151 |
| 1 | 170 | | 10.34 | 10.32 | 33.586 | 25.794 | 223.0 | .523 | 4.42 | 69.8 | 14.5 | 1.33 | 15.5 | .00 | .02 | .03 | 171 |
| 1 | 190 | | 9.59 | 9.57 | 33.687 | 26.000 | 203.7 | .565 | 3.96 | 61.6 | 20.4 | 1.57 | 20.0 | .00 | | | 191 |
| | 200 | ISL | 9.27 | 9.25 | 33.764 | 26.111 | 193.2 | .585 | 3.71 | 57.3 | | | | | | | 201 |
| 1 | 210 | | 8.99 | 8.97 | 33.840 | 26.215 | 183.4 | .604 | 3.48 | 53.4 | 26.6 | 1.79 | 23.5 | .00 | | | 211 |
| 1 | 240 | | 8.40 | 8.37 | 33.945 | 26.390 | 167.2 | .656 | 3.19 | 48.4 | 32.3 | 1.95 | 26.1 | .00 | | | 241 |
| | 250 | ISL | 8.22 | 8.20 | 33.970 | 26.436 | 162.9 | .673 | 3.07 | 46.3 | | | | | | | 252 |
| 1 | 281 | | 7.77 | 7.74 | 34.026 | 26.548 | 152.7 | .721 | 2.66 | 39.8 | 40.9 | 2.18 | 29.1 | .00 | | | 282 |
| | 300 | ISL | 7.54 | 7.51 | 34.049 | 26.599 | 148.0 | .750 | 2.37 | 35.2 | | | | | | | 302 |
| 1 | 342 | | 7.10 | 7.07 | 34.087 | 26.690 | 139.8 | .811 | 1.74 | 25.6 | 52.8 | 2.55 | 33.7 | .00 | | | 344 |
| | 400 | ISL | 6.50 | 6.47 | 34.151 | 26.822 | 127.7 | .888 | 1.00 | 14.5 | | | | | | | 403 |
| 1 | 417 | | 6.34 | 6.30 | 34.168 | 26.857 | 124.4 | .911 | .82 | 11.9 | 68.2 | 2.93 | 38.0 | .00 | | | 420 |
| 1 | 495 | | 5.73 | 5.68 | 34.217 | 26.974 | 114.0 | 1.003 | .51 | 7.3 | 79.2 | 3.09 | 40.3 | .00 | | | 498 |
| | 500 | ISL | 5.70 | 5.65 | 34.221 | 26.980 | 113.4 | 1.009 | .49 | 7.0 | | | | | | | 504 |
| 1 | 575 | | 5.40 | 5.35 | 34.287 | 27.069 | 105.5 | 1.091 | .29 | 4.1 | 88.0 | 3.20 | 41.6 | .00 | | | 579 |

RV DAVID STARR JORDAN CALCOFI CRUISE 8602 STATION 93 90

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30 50.9 N | 121 35.7 W | 08/02/86 | 1622 GMT | 4114 M | 340 | 17 KT | 300 08 06 | 1 | 1012.9 MB | 13.5 C | 10.5 C | 4/8 | SC |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 15.72 | 15.72 | 33.381 | 24.566 | 336.1 | .000 | 5.76 | 101.7 | | | | | | | 0 |
| 1 | 2 | | 15.72 | 15.72 | 33.381 | 24.566 | 336.1 | .007 | 5.76 | 101.7 | 1.6 | .38 | .0 | .00 | .08 | .04 | 2 |
| | 10 | ISL | 15.72 | 15.72 | 33.380 | 24.566 | 336.4 | .034 | 5.83 | 103.0 | | | | | | | 10 |
| 1 | 12 | | 15.72 | 15.72 | 33.379 | 24.565 | 336.5 | .040 | 5.84 | 103.1 | 1.6 | .38 | .0 | .00 | .08 | .04 | 12 |
| | 20 | ISL | 15.73 | 15.73 | 33.379 | 24.563 | 337.0 | .067 | 5.82 | 102.8 | | | | | | | 20 |
| 1 | 28 | | 15.74 | 15.74 | 33.379 | 24.561 | 337.5 | .094 | 5.80 | 102.5 | 1.6 | .38 | .0 | .00 | .08 | .04 | 28 |
| | 30 | ISL | 15.74 | 15.74 | 33.379 | 24.561 | 337.6 | .101 | 5.79 | 102.4 | | | | | | | 30 |
| 1 | 42 | | 15.74 | 15.73 | 33.377 | 24.561 | 337.9 | .141 | 5.77 | 101.9 | 1.6 | .36 | .0 | .00 | .08 | .04 | 42 |
| | 50 | ISL | 15.74 | 15.73 | 33.377 | 24.562 | 338.1 | .169 | 5.76 | 101.8 | | | | | | | 50 |
| 1 | 58 | | 15.74 | 15.73 | 33.377 | 24.562 | 338.3 | .195 | 5.76 | 101.7 | 1.6 | .36 | .0 | .00 | .08 | .03 | 58 |
| 1 | 68 | | 15.75 | 15.74 | 33.379 | 24.560 | 338.8 | .229 | 5.76 | 101.8 | 1.5 | .36 | .0 | .00 | .08 | .04 | 68 |
| | 75 | ISL | 15.75 | 15.73 | 33.378 | 24.561 | 339.0 | .253 | 5.76 | 101.7 | | | | | | | 76 |
| 1 | 78 | | 15.74 | 15.73 | 33.378 | 24.562 | 339.0 | .262 | 5.76 | 101.7 | 1.5 | .36 | .0 | .00 | .08 | .04 | 78 |
| 1 | 93 | | 13.40 | 13.39 | 33.263 | 24.971 | 300.1 | .310 | 5.97 | 100.5 | 2.3 | .45 | .3 | .11 | .20 | .30 | 93 |
| | 100 | ISL | 12.99 | 12.97 | 33.267 | 25.056 | 292.2 | .332 | 5.89 | 98.2 | | | | | | | 101 |
| 1 | 108 | | 12.80 | 12.79 | 33.283 | 25.106 | 287.6 | .354 | 5.76 | 95.7 | 3.1 | .56 | 2.1 | .06 | .17 | .28 | 108 |
| 1 | 122 | | 12.31 | 12.29 | 33.314 | 25.225 | 276.5 | .396 | 5.64 | 92.8 | 3.5 | .63 | 3.5 | .02 | .13 | .19 | 123 |
| | 125 | ISL | 12.22 | 12.20 | 33.318 | 25.246 | 274.5 | .403 | 5.60 | 91.9 | | | | | | | 126 |
| 1 | 149 | | 11.24 | 11.22 | 33.412 | 25.500 | 250.7 | .467 | 5.01 | 80.6 | 8.3 | .98 | 9.8 | .01 | .05 | .07 | 150 |
| | 150 | ISL | 11.21 | 11.19 | 33.418 | 25.510 | 249.8 | .468 | 4.99 | 80.2 | | | | | | | 151 |
| 1 | 169 | | 10.31 | 10.29 | 33.593 | 25.804 | 222.1 | .514 | 4.36 | 68.8 | 14.7 | 1.32 | 15.7 | .00 | .02 | .04 | 170 |
| 1 | 188 | | 9.47 | 9.45 | 33.710 | 26.036 | 200.2 | .554 | 3.93 | 60.9 | 21.0 | 1.59 | 20.5 | .00 | | | 189 |
| | 200 | ISL | 9.17 | 9.15 | 33.786 | 26.145 | 190.0 | .577 | 3.65 | 56.2 | | | | | | | 201 |
| 1 | 209 | | 9.00 | 8.97 | 33.839 | 26.214 | 183.6 | .594 | 3.46 | 53.1 | 26.2 | 1.79 | 23.6 | .00 | | | 210 |
| 1 | 240 | | 8.37 | 8.35 | 33.958 | 26.404 | 165.9 | .647 | 3.15 | 47.7 | 32.8 | 1.96 | 26.2 | .00 | | | 241 |
| | 250 | ISL | 8.21 | 8.19 | 33.974 | 26.440 | 162.6 | .664 | 3.12 | 47.1 | | | | | | | 252 |
| 1 | 280 | | 7.81 | 7.78 | 33.992 | 26.515 | 155.8 | .711 | 3.01 | 45.0 | 38.0 | 2.05 | 27.7 | .00 | | | 281 |
| | 300 | ISL | 7.51 | 7.48 | 34.010 | 26.572 | 150.5 | .743 | 2.74 | 40.7 | | | | | | | 302 |
| 1 | 339 | | 6.99 | 6.96 | 34.043 | 26.671 | 141.4 | .800 | 2.12 | 31.1 | 51.2 | 2.43 | 32.8 | .00 | | | 341 |
| | 400 | ISL | 6.47 | 6.44 | 34.093 | 26.780 | 131.6 | .883 | 1.39 | 20.2 | | | | | | | 403 |
| 1 | 415 | | 6.38 | 6.34 | 34.104 | 26.801 | 129.7 | .902 | 1.25 | 18.1 | 63.6 | 2.77 | 36.9 | .00 | | | 417 |
| 1 | 491 | | 5.89 | 5.85 | 34.151 | 26.901 | 120.9 | .998 | .80 | 11.5 | 73.9 | 2.97 | 39.3 | .00 | | | 494 |
| | 500 | ISL | 5.84 | 5.79 | 34.158 | 26.913 | 119.8 | 1.008 | .76 | 10.8 | | | | | | | 504 |
| 1 | 567 | | 5.43 | 5.38 | 34.209 | 27.004 | 111.6 | 1.086 | .51 | 7.2 | 84.0 | 3.11 | 41.1 | .00 | | | 571 |

RV DAVID STARR JORDAN CALCOFI CRUISE 8602 STATION 93 100

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30 30.8 N | 122 15.7 W | 08/02/86 | 2213 GMT | 4209 M | 330 | 17 KT | 310 07 06 | 2 | 1014.2 MB | 14.0 C | 11.0 C | 8/8 | SC |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 16.07 | 16.07 | 33.493 | 24.573 | 335.6 | .000 | 5.73 | 102.0 | | | | | | | 0 |
| 1 | 2 | | 16.07 | 16.07 | 33.493 | 24.573 | 335.4 | .007 | 5.73 | 102.0 | 2.1 | .36 | .0 | .00 | .06 | .03 | 2 |
| 1 | 10 | | 16.04 | 16.04 | 33.492 | 24.581 | 335.0 | .033 | 5.80 | 103.1 | 2.0 | .36 | .0 | .00 | .06 | .03 | 10 |
| | 20 | ISL | 16.05 | 16.05 | 33.492 | 24.578 | 335.5 | .067 | 5.77 | 102.7 | | | | | | | 20 |
| 1 | 28 | | 16.06 | 16.06 | 33.492 | 24.576 | 336.0 | .094 | 5.75 | 102.3 | 2.0 | .33 | .0 | .00 | .07 | .02 | 28 |
| | 30 | ISL | 16.06 | 16.06 | 33.494 | 24.577 | 336.0 | .101 | 5.75 | 102.3 | | | | | | | 30 |
| 1 | 43 | | 16.08 | 16.07 | 33.504 | 24.582 | 336.0 | .144 | 5.74 | 102.2 | 2.0 | .33 | .0 | .00 | .07 | .02 | 43 |
| | 50 | ISL | 16.17 | 16.16 | 33.534 | 24.585 | 335.8 | .168 | 5.73 | 102.1 | | | | | | | 50 |
| 1 | 59 | | 16.29 | 16.28 | 33.581 | 24.594 | 335.4 | .197 | 5.71 | 102.1 | 2.0 | .32 | .0 | .00 | .08 | .03 | 59 |
| 1 | 69 | | 16.39 | 16.38 | 33.627 | 24.606 | 334.5 | .231 | 5.70 | 102.1 | 1.9 | .32 | .0 | .00 | .11 | .05 | 69 |
| | 75 | ISL | 15.50 | 15.49 | 33.455 | 24.675 | 328.1 | .251 | 5.80 | 102.0 | | | | | | | 76 |
| 1 | 78 | | 15.07 | 15.06 | 33.378 | 24.709 | 324.8 | .260 | 5.85 | 102.0 | 2.0 | .36 | .0 | .00 | .16 | .15 | 78 |
| 1 | 95 | | 14.58 | 14.56 | 33.418 | 24.847 | 312.1 | .314 | 5.86 | 101.1 | 2.5 | .40 | .0 | .01 | .24 | .26 | 95 |
| | 100 | ISL | 13.74 | 13.72 | 33.349 | 24.969 | 300.5 | .331 | 5.81 | 98.5 | | | | | | | 101 |
| 1 | 109 | | 12.48 | 12.47 | 33.281 | 25.166 | 281.8 | .355 | 5.65 | 93.3 | 3.8 | .61 | 3.2 | .05 | .15 | .29 | 109 |
| 1 | 125 | | 12.75 | 12.74 | 33.547 | 25.320 | 267.7 | .402 | 4.95 | 82.3 | 6.6 | .83 | 6.9 | .02 | .12 | .22 | 126 |
| 1 | 150 | | 11.11 | 11.09 | 33.673 | 25.727 | 229.3 | .464 | 4.28 | 68.8 | 13.0 | 1.21 | 13.9 | .00 | .03 | .08 | 151 |
| 1 | 171 | | 10.50 | 10.48 | 33.758 | 25.901 | 213.0 | .510 | 3.75 | 59.5 | 18.6 | 1.48 | 18.2 | .00 | .02 | .06 | 172 |
| 1 | 191 | | 9.87 | 9.85 | 33.854 | 26.083 | 195.9 | .551 | 3.36 | 52.6 | 23.7 | 1.72 | 21.6 | .00 | | | 192 |
| | 200 | ISL | 9.50 | 9.48 | 33.867 | 26.154 | 189.3 | .568 | 3.42 | 53.1 | | | | | | | 201 |
| 1 | 212 | | 9.04 | 9.02 | 33.877 | 26.237 | 181.5 | .590 | 3.54 | 54.4 | 26.9 | 1.76 | 23.0 | .00 | | | 213 |
| 1 | 244 | | 8.46 | 8.43 | 33.954 | 26.388 | 167.5 | .645 | 3.30 | 50.1 | 32.2 | 1.91 | 25.3 | .00 | | | 245 |
| | 250 | ISL | 8.36 | 8.33 | 33.966 | 26.413 | 165.2 | .656 | 3.25 | 49.3 | | | | | | | 252 |
| 1 | 283 | | 7.87 | 7.84 | 34.018 | 26.526 | 154.8 | .709 | 2.94 | 44.1 | 39.1 | 2.08 | 28.0 | .00 | | | 285 |
| | 300 | ISL | 7.67 | 7.64 | 34.040 | 26.572 | 150.7 | .735 | 2.68 | 40.0 | | | | | | | 302 |
| 1 | 346 | | 7.19 | 7.16 | 34.086 | 26.677 | 141.1 | .802 | 1.90 | 28.0 | 51.8 | 2.51 | 32.8 | .00 | | | 348 |
| | 400 | ISL | 6.62 | 6.58 | 34.133 | 26.792 | 130.6 | .875 | 1.23 | 17.9 | | | | | | | 403 |
| 1 | 422 | | 6.40 | 6.37 | 34.151 | 26.835 | 126.7 | .904 | 1.01 | 14.6 | 66.4 | 2.86 | 37.3 | .00 | | | 425 |
| 1 | 500 | | 5.85 | 5.81 | 34.224 | 26.964 | 115.0 | .997 | .56 | 8.0 | 78.3 | 3.09 | 39.9 | .00 | | | 503 |
| 1 | 577 | | 5.55 | 5.50 | 34.286 | 27.050 | 107.6 | 1.084 | .35 | 5.0 | 86.1 | 3.19 | 41.0 | .00 | | | 581 |

RV DAVID STARR JORDAN CALCOFI CRUISE 8602 STATION 93 110

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30 10.8 N | 122 55.4 W | 09/02/86 | 0347 GMT | 3733 M | 350 | 16 KT | | | 1013.9 MB | 14.4 C | 11.3 C | | |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 16.85 | 16.85 | 33.663 | 24.525 | 340.0 | .000 | 5.66 | 102.4 | | | | | | | 0 |
| 1 | 1 | | 16.85 | 16.85 | 33.663 | 24.525 | 340.1 | .003 | 5.66 | 102.4 | 2.0 | .31 | .0 | .00 | .07 | .03 | 1 |
| | 10 | ISL | 16.86 | 16.85 | 33.660 | 24.521 | 340.7 | .034 | 5.73 | 103.6 | | | | | | | 10 |
| 1 | 11 | | 16.86 | 16.86 | 33.660 | 24.521 | 340.8 | .037 | 5.73 | 103.7 | 2.0 | .31 | .0 | .00 | .07 | .03 | 11 |
| | 20 | ISL | 16.87 | 16.87 | 33.660 | 24.518 | 341.4 | .068 | 5.71 | 103.3 | | | | | | | 20 |
| 1 | 27 | | 16.88 | 16.87 | 33.660 | 24.517 | 341.7 | .092 | 5.67 | 102.6 | 2.0 | .31 | .0 | .00 | .07 | .03 | 27 |
| | 30 | ISL | 16.88 | 16.87 | 33.660 | 24.517 | 341.8 | .102 | 5.66 | 102.5 | | | | | | | 30 |
| 1 | 43 | | 16.87 | 16.86 | 33.661 | 24.520 | 342.0 | .146 | 5.65 | 102.2 | 2.0 | .31 | .0 | .00 | .07 | .03 | 43 |
| | 50 | ISL | 16.85 | 16.85 | 33.661 | 24.524 | 341.9 | .171 | 5.65 | 102.1 | | | | | | | 50 |
| 1 | 58 | | 16.85 | 16.84 | 33.660 | 24.525 | 341.9 | .197 | 5.64 | 102.0 | 2.0 | .31 | .0 | .00 | .07 | .03 | 58 |
| 1 | 69 | | 16.88 | 16.87 | 33.659 | 24.516 | 343.1 | .235 | 5.66 | 102.4 | 2.0 | .31 | .0 | .00 | .07 | .03 | 69 |
| | 75 | ISL | 16.88 | 16.87 | 33.659 | 24.517 | 343.3 | .256 | 5.67 | 102.7 | | | | | | | 76 |
| 1 | 78 | | 16.88 | 16.87 | 33.659 | 24.517 | 343.4 | .266 | 5.68 | 102.8 | 2.0 | .31 | .0 | .00 | .07 | .03 | 78 |
| 1 | 93 | | 16.25 | 16.23 | 33.711 | 24.704 | 326.0 | .316 | 5.76 | 103.0 | 2.1 | .31 | .0 | .00 | .15 | .16 | 93 |
| | 100 | ISL | 14.91 | 14.89 | 33.503 | 24.842 | 312.8 | .339 | 5.85 | 101.7 | | | | | | | 101 |
| 1 | 111 | | 12.98 | 12.97 | 33.231 | 25.030 | 294.9 | .371 | 5.93 | 98.9 | 2.5 | .48 | .8 | .11 | .18 | .20 | 111 |
| 1 | 124 | | 12.32 | 12.31 | 33.237 | 25.163 | 282.5 | .411 | 5.76 | 94.8 | 3.3 | .57 | 2.6 | .02 | .13 | .27 | 125 |
| | 125 | ISL | 12.32 | 12.31 | 33.242 | 25.166 | 282.2 | .413 | 5.75 | 94.6 | | | | | | | 126 |
| 1 | 150 | | 12.18 | 12.16 | 33.520 | 25.410 | 259.6 | .482 | 5.15 | 84.6 | 6.3 | .78 | 6.8 | .01 | .05 | .10 | 151 |
| 1 | 169 | | 10.92 | 10.89 | 33.661 | 25.752 | 227.2 | .528 | 4.60 | 73.6 | 12.2 | 1.11 | 12.9 | .00 | .02 | .04 | 170 |
| 1 | 190 | | 9.82 | 9.79 | 33.700 | 25.972 | 206.5 | .573 | 4.03 | 63.0 | 19.3 | 1.48 | 18.9 | .00 | | | 191 |
| | 200 | ISL | 9.52 | 9.50 | 33.751 | 26.061 | 198.1 | .593 | 3.87 | 60.2 | | | | | | | 201 |
| 1 | 212 | | 9.24 | 9.22 | 33.821 | 26.161 | 188.7 | .616 | 3.73 | 57.6 | 24.2 | 1.65 | 21.7 | .00 | | | 213 |
| 1 | 240 | | 8.54 | 8.51 | 33.947 | 26.370 | 169.2 | .666 | 3.38 | 51.4 | 31.0 | 1.86 | 24.9 | .00 | | | 241 |
| | 250 | ISL | 8.35 | 8.32 | 33.974 | 26.420 | 164.5 | .683 | 3.24 | 49.1 | | | | | | | 252 |
| 1 | 281 | | 7.89 | 7.86 | 34.024 | 26.528 | 154.6 | .731 | 2.81 | 42.1 | 39.2 | 2.11 | 28.3 | .00 | | | 282 |
| | 300 | ISL | 7.64 | 7.61 | 34.042 | 26.579 | 149.9 | .761 | 2.55 | 38.0 | | | | | | | 302 |
| 1 | 341 | | 7.15 | 7.12 | 34.063 | 26.664 | 142.2 | .821 | 2.04 | 30.1 | 50.9 | 2.44 | 32.6 | .00 | | | 343 |
| | 400 | ISL | 6.51 | 6.47 | 34.090 | 26.773 | 132.3 | .902 | 1.43 | 20.7 | | | | | | | 403 |
| 1 | 419 | | 6.34 | 6.30 | 34.100 | 26.804 | 129.5 | .926 | 1.26 | 18.2 | 64.2 | 2.77 | 36.9 | .00 | | | 421 |
| 1 | 496 | | 5.88 | 5.84 | 34.168 | 26.916 | 119.6 | 1.023 | .72 | 10.3 | 74.9 | 3.01 | 39.4 | .00 | | | 499 |
| | 500 | ISL | 5.86 | 5.81 | 34.172 | 26.922 | 119.0 | 1.028 | .70 | 10.0 | | | | | | | 504 |
| 1 | 574 | | 5.39 | 5.34 | 34.252 | 27.042 | 108.1 | 1.112 | .37 | 5.2 | 86.4 | 3.17 | 41.3 | .00 | | | 578 |

RV DAVID STARR JORDAN | CALCOFI CRUISE 8602 | STATION 93 120

| LATITUDE | LONGITUDE | DAY/MO/YR | MESSENGER | BOTTOM | WIND | SPEED | WAVES | WEATHER | BAROMETER | DRY | WET | CLOUD AMT | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29 50.8 N | 123 35.3 W | 09/02/86 | 0921 GMT | 4210 M | 330 | 18 KT | 310 05 06 | | 1015.6 MB | 14.7 C | 10.8 C | | |

| CAST | DEPTH M | | TEMP DEG C | POT TEMP DEG C | SALINITY | SIGMA THETA | SVA | DYN HT | OXYGEN ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL-A UG/L | PHAEO UG/L | PRESS D.BAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | ISL | 16.85 | 16.85 | 33.664 | 24.524 | 340.1 | .000 | 5.63 | 101.9 | | | | | | | 0 |
| 1 | 1 | | 16.85 | 16.85 | 33.664 | 24.524 | 340.1 | .003 | 5.63 | 101.9 | 1.9 | .32 | .1 | .00 | .07 | .03 | 1 |
| | 10 | ISL | 16.86 | 16.86 | 33.662 | 24.523 | 340.6 | .034 | 5.67 | 102.7 | | | | | | | 10 |
| 1 | 13 | | 16.86 | 16.86 | 33.662 | 24.522 | 340.8 | .044 | 5.68 | 102.8 | 1.9 | .32 | .1 | .00 | .07 | .03 | 13 |
| | 20 | ISL | 16.87 | 16.86 | 33.662 | 24.520 | 341.2 | .068 | 5.67 | 102.5 | | | | | | | 20 |
| 1 | 29 | | 16.87 | 16.87 | 33.661 | 24.518 | 341.6 | .098 | 5.64 | 102.1 | 1.8 | .33 | .1 | .00 | .07 | .03 | 29 |
| | 30 | ISL | 16.87 | 16.87 | 33.661 | 24.518 | 341.6 | .102 | 5.64 | 102.1 | | | | | | | 30 |
| 1 | 44 | | 16.87 | 16.86 | 33.661 | 24.521 | 341.9 | .150 | 5.65 | 102.2 | 1.8 | .33 | .1 | .00 | .07 | .03 | 44 |
| | 50 | ISL | 16.86 | 16.86 | 33.660 | 24.521 | 342.0 | .171 | 5.65 | 102.2 | | | | | | | 50 |
| 1 | 60 | | 16.86 | 16.85 | 33.659 | 24.522 | 342.3 | .204 | 5.65 | 102.2 | 1.7 | .33 | .1 | .00 | .07 | .03 | 60 |
| 1 | 70 | | 16.88 | 16.87 | 33.661 | 24.518 | 343.0 | .238 | 5.64 | 102.1 | 1.6 | .33 | .1 | .00 | .07 | .03 | 70 |
| | 75 | ISL | 16.88 | 16.86 | 33.662 | 24.521 | 342.9 | .256 | 5.65 | 102.1 | | | | | | | 76 |
| 1 | 80 | | 16.87 | 16.86 | 33.663 | 24.523 | 342.9 | .272 | 5.65 | 102.2 | 1.7 | .33 | .1 | .00 | .08 | .03 | 80 |
| 1 | 95 | | 16.61 | 16.59 | 33.736 | 24.640 | 332.2 | .323 | 5.74 | 103.4 | 2.0 | .32 | .1 | .00 | .15 | .17 | 95 |
| | 100 | ISL | 15.74 | 15.72 | 33.602 | 24.736 | 323.0 | .340 | 5.81 | 102.8 | | | | | | | 101 |
| 1 | 111 | | 13.96 | 13.95 | 33.367 | 24.937 | 303.9 | .373 | 5.90 | 100.5 | 2.3 | .45 | .3 | .10 | .17 | .22 | 111 |
| 1 | 125 | | 13.37 | 13.35 | 33.431 | 25.108 | 287.9 | .415 | 5.73 | 96.5 | 2.7 | .50 | 1.4 | .07 | .13 | .23 | 125 |
| | 150 | ISL | 11.77 | 11.75 | 33.368 | 25.368 | 263.4 | .485 | 5.26 | 85.6 | | | | | | | 151 |
| 1 | 151 | | 11.69 | 11.67 | 33.366 | 25.382 | 262.1 | .489 | 5.23 | 85.0 | 6.4 | .88 | 7.8 | .01 | .05 | .11 | 152 |
| 1 | 172 | | 11.13 | 11.11 | 33.542 | 25.621 | 239.8 | .541 | 4.74 | 76.1 | 10.4 | 1.10 | 11.9 | .00 | .02 | .06 | 173 |
| 1 | 192 | | 10.49 | 10.47 | 33.741 | 25.889 | 214.6 | .586 | 4.50 | 71.4 | 14.2 | 1.22 | 14.4 | .00 | | | 193 |
| | 200 | ISL | 10.15 | 10.12 | 33.767 | 25.969 | 207.1 | .603 | 4.34 | 68.3 | | | | | | | 201 |
| 1 | 213 | | 9.59 | 9.56 | 33.792 | 26.082 | 196.4 | .629 | 4.06 | 63.2 | 20.3 | 1.49 | 19.0 | .00 | | | 214 |
| 1 | 244 | | 8.79 | 8.77 | 33.922 | 26.311 | 174.9 | .686 | 3.67 | 56.1 | 27.4 | 1.75 | 23.1 | .00 | | | 245 |
| | 250 | ISL | 8.65 | 8.63 | 33.938 | 26.345 | 171.7 | .697 | 3.61 | 55.0 | | | | | | | 252 |
| 1 | 285 | | 7.97 | 7.94 | 33.996 | 26.494 | 157.9 | .754 | 3.24 | 48.7 | 36.1 | 1.97 | 26.6 | .00 | | | 286 |
| | 300 | ISL | 7.72 | 7.69 | 34.010 | 26.542 | 153.5 | .778 | 3.02 | 45.1 | | | | | | | 302 |
| 1 | 345 | | 7.10 | 7.07 | 34.035 | 26.649 | 143.7 | .845 | 2.36 | 34.7 | 49.0 | 2.36 | 31.6 | .00 | | | 347 |
| | 400 | ISL | 6.45 | 6.41 | 34.060 | 26.758 | 133.7 | .921 | 1.70 | 24.6 | | | | | | | 403 |
| 1 | 423 | | 6.21 | 6.17 | 34.072 | 26.797 | 130.1 | .951 | 1.46 | 21.1 | 63.9 | 2.73 | 36.7 | .00 | | | 425 |
| 1 | 499 | | 5.53 | 5.49 | 34.133 | 26.931 | 117.7 | 1.045 | .82 | 11.6 | 78.8 | 3.02 | 40.2 | .00 | | | 502 |
| | 500 | ISL | 5.52 | 5.48 | 34.134 | 26.933 | 117.6 | 1.047 | .81 | 11.5 | | | | | | | 504 |
| 1 | 575 | | 5.12 | 5.08 | 34.226 | 27.053 | 106.7 | 1.131 | .43 | 6.0 | 89.9 | 3.17 | 42.1 | .00 | | | 579 |

RV DAVID STARR JORDAN — CALCOFI CRUISE 8602 — STATION 77 55

| LATITUDE | LONGITUDE | MO/DAY/YR | MESSENGER | SECCHI DEPTH | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 34 52.9 N | 121 12.3 W | 02/19/86 | 1808 GMT | 10 M | 1225 - 1820 PST | 1226 PST | 1814 PST | 289.4 MG C/M2 |

| DEPTH M | TEMP DEG C | SALINITY | SIGMA THETA | DISS O2 ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL UG/L | PHAEO UG/L | LIGHT % | UPTAKE (MGC/M3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.37 | 33.256 | 24.969 | 6.03 | 101.4 | 4.5 | 0.53 | 1.7 | 0.10 | 1.26 | 0.48 | 96 | 7.6 | 14.2 | 10.9 | 1.2 |
| 8 | 13.33 | 33.270 | 24.988 | 5.98 | 100.5 | 4.5 | 0.55 | 2.0 | 0.12 | 1.08 | 0.47 | 34 | 16.6 | 13.3 | 14.9 | 0.16 |
| 10 | 13.32 | 33.271 | 24.991 | 5.98 | 100.5 | 4.5 | 0.55 | 2.0 | 0.12 | 1.07 | 0.50 | 24 | 12.7 | 12.0 | 12.4 | 0.16 |
| 16 | 13.31 | 33.276 | 24.997 | 5.98 | 100.5 | 4.6 | 0.56 | 2.1 | 0.12 | 1.00 | 0.50 | 12 | 10.6 | 9.5 | 10.0 | 0.15 |
| 26 | 13.22 | 33.309 | 25.041 | 5.91 | 99.1 | 4.7 | 0.58 | 2.5 | 0.15 | 0.67 | 0.42 | 2.6 | 2.5 | 2.8 | 2.7 | 0.12 |
| 46 | 12.45 | 33.444 | 25.296 | 5.36 | 88.6 | 8.1 | 0.83 | 6.2 | 0.27 | 0.26 | 0.26 | 0.13 | 0.30 | 0.34 | 0.32 | 0.11 |

RV DAVID STARR JORDAN — CALCOFI CRUISE 8602 — STATION 77 100

| LATITUDE | LONGITUDE | MO/DAY/YR | MESSENGER | SECCHI DEPTH | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 33 23.4 N | 124 19.4 W | 02/18/86 | 1814 GMT | 23 M | 1229 - 1828 PST | 1231 PST | 1828 PST | 77.4 MG C/M2 |

| DEPTH M | TEMP DEG C | SALINITY | SIGMA THETA | DISS O2 ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL UG/L | PHAEO UG/L | LIGHT % | UPTAKE (MGC/M3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.45 | 33.019 | 24.563 | 5.94 | 102.0 | 2.4 | 0.40 | 0.0 | 0.00 | 0.13 | 0.05 | 96 | 1.1 | 1.0 | 1.0 | 0.13 |
| 17 | 14.43 | 33.020 | 24.568 | 5.95 | 102.2 | 2.3 | 0.39 | 0.0 | 0.00 | 0.14 | 0.05 | 34 | 0.58 | 1.2 | 0.87 | 0.13 |
| 22 | 14.39 | 33.022 | 24.579 | 5.95 | 102.1 | 2.3 | 0.39 | 0.0 | 0.00 | 0.15 | 0.06 | 24 | 1.3 | 1.4 | 1.3 | 0.14 |
| 33 | 14.25 | 33.021 | 24.609 | 5.96 | 101.9 | 2.3 | 0.39 | 0.0 | 0.00 | 0.22 | 0.09 | 12 | 1.6 | 1.4 | 1.5 | 0.10 |
| 57 | 12.56 | 33.197 | 25.084 | 5.92 | 97.9 | 3.1 | 0.53 | 1.5 | 0.05 | 0.26 | 0.26 | 2.6 | 0.70 | 0.56 | 0.63 | 0.09 |
| 104 | 10.01 | 33.434 | 25.730 | 4.47 | 70.0 | 16.5 | 1.47 | 17.2 | 0.00 | 0.02 | 0.06 | 0.13 | 0.01 | 0.01 | 0.01 | 0.09 |

RV DAVID STARR JORDAN — CALCOFI CRUISE 8602 — STATION 80 70

| LATITUDE | LONGITUDE | MO/DAY/YR | MESSENGER | SECCHI DEPTH | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 33 49.1 N | 121 50.4 W | 02/17/86 | 1952 GMT | 14 M | 1219 - 1821 PST | 1221 PST | 1821 PST | 372.0 MG C/M2 |

| DEPTH M | TEMP DEG C | SALINITY | SIGMA THETA | DISS O2 ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL UG/L | PHAEO UG/L | LIGHT % | UPTAKE (MGC/M3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.23 | 33.106 | 24.677 | 6.02 | 103.0 | 2.5 | 0.40 | 0.2 | 0.00 | 0.44 | 0.15 | 96 | 5.8 | 7.2 | 6.5 | 0.14 |
| 10 | 13.75 | 33.250 | 24.888 | 6.07 | 102.9 | 3.0 | 0.45 | 0.7 | 0.04 | 0.69 | 0.24 | 34 | 18.4 | 12.9 | 15.7 | 0.31 |
| 15 | 13.27 | 33.314 | 25.034 | 6.06 | 101.8 | 3.4 | 0.51 | 1.3 | 0.07 | 0.93 | 0.36 | 24 | 15.3 | 16.0 | 15.7 | 0.18 |
| 20 | 13.18 | 33.362 | 25.090 | 6.01 | 100.8 | 3.6 | 0.53 | 2.0 | 0.09 | 0.81 | 0.38 | 12 | 10.8 | 7.2 | 9.0 | 0.15 |
| 34 | 13.02 | 33.378 | 25.133 | 5.85 | 97.8 | 4.3 | 0.59 | 2.9 | 0.14 | 0.47 | 0.34 | 2.6 | 2.6 | 2.4 | 2.5 | 0.12 |
| 64 | 11.64 | 33.397 | 25.413 | 5.06 | 82.1 | 8.3 | 0.94 | 9.0 | 0.07 | 0.17 | 0.22 | 0.13 | 0.17 | 0.20 | 0.18 | 0.10 |

RV DAVID STARR JORDAN — CALCOFI CRUISE 8602 — STATION 83 60

| LATITUDE | LONGITUDE | MO/DAY/YR | MESSENGER | SECCHI DEPTH | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 33 34.4 N | 120 45.0 W | 02/16/86 | 1810 GMT | 24 M | 1217 - 1818 PST | 1218 PST | 1816 PST | 117.7 MG C/M2 |

| DEPTH M | TEMP DEG C | SALINITY | SIGMA THETA | DISS O2 ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL UG/L | PHAEO UG/L | LIGHT % | UPTAKE (MGC/M3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.65 | 33.201 | 24.661 | 5.91 | 102.0 | 2.3 | 0.38 | 0.2 | 0.00 | 0.11 | 0.05 | 96 | 0.35 | 0.29 | 0.32 | 0.11 |
| 18 | 14.50 | 33.218 | 24.706 | 5.93 | 102.1 | 2.4 | 0.38 | 0.2 | 0.00 | 0.15 | 0.07 | 34 | 1.6 | 0.96 | 1.3 | 0.14 |
| 23 | 14.45 | 33.232 | 24.728 | 5.95 | 102.3 | 2.2 | 0.38 | 0.2 | 0.00 | 0.20 | 0.10 | 24 | 0.93 | 1.3 | 1.1 | 0.13 |
| 34 | 14.46 | 33.234 | 24.728 | 5.96 | 102.5 | 2.2 | 0.38 | 0.2 | 0.00 | 0.20 | 0.11 | 12 | 1.8 | 1.8 | 1.8 | 0.13 |
| 59 | 13.14 | 33.365 | 25.101 | 5.78 | 96.8 | 3.8 | 0.55 | 2.1 | 0.12 | 0.50 | 0.48 | 2.6 | 1.8 | 1.3 | 1.6 | 0.09 |
| 107 | 10.56 | 33.531 | 25.712 | 4.35 | 69.0 | 14.5 | 1.32 | 15.9 | 0.00 | 0.03 | 0.06 | 0.13 | 0.04 | 0.03 | 0.03 | 0.08 |

RV DAVID STARR JORDAN — CALCOFI CRUISE 8602 — STATION 87 35

| LATITUDE | LONGITUDE | MO/DAY/YR | MESSENGER | SECCHI DEPTH | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 33 49.4 N | 118 37.7 W | 02/15/86 | 1824 GMT | 17 M | 1207 - 1807 PST | 1208 PST | 1807 PST | 260.3 MG C/M2 |

| DEPTH M | TEMP DEG C | SALINITY | SIGMA THETA | DISS O2 ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL UG/L | PHAEO UG/L | LIGHT % | UPTAKE (MGC/M3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.54 | 33.402 | 24.841 | 5.97 | 103.0 | 1.5 | 0.34 | 0.3 | 0.00 | 0.69 | 0.26 | 96 | 2.5 | 2.3 | 2.4 | 0.16 |
| 13 | 14.50 | 33.406 | 24.851 | 5.98 | 103.1 | 1.4 | 0.35 | 0.3 | 0.00 | 0.77 | 0.30 | 34 | 9.3 | 9.3 | 9.3 | 0.16 |
| 18 | 14.47 | 33.415 | 24.865 | 5.97 | 102.8 | 1.4 | 0.35 | 0.3 | 0.00 | 0.79 | 0.35 | 24 | 8.3 | 9.3 | 8.8 | 0.14 |
| 25 | 14.40 | 33.509 | 24.952 | 5.91 | 101.7 | 2.1 | 0.38 | 0.4 | 0.01 | 1.17 | 0.48 | 12 | 7.1 | 6.2 | 6.7 | 0.12 |
| 43 | 12.78 | 33.447 | 25.236 | 5.18 | 86.2 | 6.1 | 0.77 | 5.9 | 0.12 | 0.32 | 0.34 | 2.6 | 0.89 | 0.99 | 0.94 | 0.10 |
| 78 | 11.45 | 33.565 | 25.578 | 4.27 | 69.1 | 12.8 | 1.23 | 13.4 | 0.05 | 0.19 | 0.17 | 0.13 | 0.19 | 0.15 | 0.17 | 0.10 |

RV DAVID STARR JORDAN — CALCOFI CRUISE 8602 — STATION 90 37

| LATITUDE | LONGITUDE | MO/DAY/YR | MESSENGER | SECCHI DEPTH | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 33 11.3 N | 118 23.4 W | 02/13/86 | 1839 GMT | 16 M | 1208 - 1806 PST | 1208 PST | 1805 PST | 145.8 MG C/M2 |

| DEPTH M | TEMP DEG C | SALINITY | SIGMA THETA | DISS O2 ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL UG/L | PHAEO UG/L | LIGHT % | UPTAKE (MGC/M3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.84 | 33.485 | 24.840 | 5.96 | 103.5 | 2.1 | 0.33 | 0.0 | 0.00 | 0.44 | 0.16 | 96 | 3.7 | 4.6 | 4.1 | 0.13 |
| 12 | 14.86 | 33.481 | 24.833 | 5.96 | 103.5 | 2.0 | 0.33 | 0.0 | 0.00 | 0.43 | 0.18 | 34 | 4.7 | 4.8 | 4.7 | 0.14 |
| 16 | 14.83 | 33.482 | 24.839 | 5.96 | 103.5 | 2.0 | 0.35 | 0.0 | 0.00 | 0.45 | 0.17 | 24 | 3.5 | 3.8 | 3.6 | 0.15 |
| 24 | 14.83 | 33.487 | 24.844 | 5.97 | 103.6 | 1.9 | 0.35 | 0.0 | 0.00 | 0.49 | 0.19 | 12 | 3.1 | 3.1 | 3.1 | 0.13 |
| 40 | 13.91 | 33.458 | 25.016 | 5.57 | 94.9 | 3.7 | 0.55 | 2.1 | 0.20 | 0.72 | 0.32 | 2.6 | 0.95 | 1.1 | 1.0 | 0.12 |
| 72 | 11.48 | 33.599 | 25.600 | 4.18 | 67.7 | 13.3 | 1.24 | 13.7 | 0.00 | 0.09 | 0.13 | 0.13 | 0.08 | 0.06 | 0.07 | 0.09 |

RV DAVID STARR JORDAN — CALCOFI CRUISE 8602 — STATION 90 70

| LATITUDE | LONGITUDE | MO/DAY/YR | MESSENGER | SECCHI DEPTH | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 32 04.9 N | 120 37.0 W | 02/14/86 | 1716 GMT | 16 M | 1216 - 1815 PST | 1218 PST | 1809 PST | 44.3 MG C/M2 |

| DEPTH M | TEMP DEG C | SALINITY | SIGMA THETA | DISS O2 ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL UG/L | PHAEO UG/L | LIGHT % | UPTAKE (MGC/M3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.43 | 33.272 | 24.763 | 5.95 | 102.3 | 2.6 | 0.40 | 0.3 | 0.00 | 0.15 | 0.06 | 96 | 0.74 | 0.62 | 0.68 | 0.13 |
| 12 | 14.43 | 33.272 | 24.764 | 5.95 | 102.3 | 2.6 | 0.40 | 0.3 | 0.00 | 0.17 | 0.06 | 34 | 1.4 | 1.4 | 1.4 | 0.13 |
| 17 | 14.41 | 33.270 | 24.765 | 5.95 | 102.3 | 2.6 | 0.40 | 0.3 | 0.00 | 0.16 | 0.06 | 24 | 1.1 | 1.0 | 1.1 | 0.19 |
| 24 | 14.41 | 33.271 | 24.767 | 5.95 | 102.3 | 2.5 | 0.40 | 0.3 | 0.00 | 0.16 | 0.07 | 12 | 0.77 | 0.82 | 0.79 | 0.12 |
| 40 | 14.26 | 33.296 | 24.818 | 5.97 | 102.3 | 2.5 | 0.40 | 0.2 | 0.00 | 0.27 | 0.13 | 2.6 | 0.42 | 0.49 | 0.45 | 0.11 |
| 73 | 13.10 | 33.349 | 25.097 | 5.78 | 96.7 | 3.5 | 0.55 | 2.1 | 0.15 | 0.36 | 0.30 | 0.13 | 0.11 | 0.14 | 0.12 | 0.10 |

RV DAVID STARR JORDAN — CALCOFI CRUISE 8602 — STATION 90 80

| LATITUDE | LONGITUDE | MO/DAY/YR | MESSENGER | SECCHI DEPTH | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 31 44.0 N | 121 15.2 W | 02/10/86 | 1836 GMT | 35 M | 1219 - 1810 PST | 1219 PST | 1807 PST | 126.6 MG C/M2 |

| DEPTH M | TEMP DEG C | SALINITY | SIGMA THETA | DISS O2 ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL UG/L | PHAEO UG/L | LIGHT % | UPTAKE (MGC/M3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.77 | 33.214 | 24.646 | 5.89 | 101.9 | 2.9 | 0.38 | 0.1 | 0.00 | 0.08 | 0.03 | 96 | 0.25 | 0.29 | 0.27 | 0.12 |
| 26 | 14.60 | 33.223 | 24.690 | 5.91 | 101.9 | 2.8 | 0.39 | 0.1 | 0.00 | 0.09 | 0.04 | 34 | 1.4 | 1.2 | 1.3 | 0.12 |
| 34 | 14.57 | 33.226 | 24.699 | 5.92 | 102.0 | 2.8 | 0.39 | 0.1 | 0.00 | 0.10 | 0.05 | 24 | 0.83 | 1.2 | 1.0 | 0.12 |
| 50 | 14.36 | 33.240 | 24.754 | 5.97 | 102.5 | 2.8 | 0.40 | 0.1 | 0.00 | 0.16 | 0.07 | 12 | 1.2 | 1.2 | 1.2 | 0.11 |
| 86 | 12.84 | 33.259 | 25.079 | 5.96 | 99.1 | 3.1 | 0.48 | 1.2 | 0.09 | 0.33 | 0.29 | 2.6 | 1.2 | 1.1 | 1.1 | 0.09 |
| 156 | 10.22 | 33.618 | 25.839 | 4.30 | 67.8 | 16.0 | 1.35 | 16.3 | 0.01 | 0.02 | 0.03 | 0.13 | 0* | 0 | 0 | 0.09 |

*DARK UPTAKE EXCEEDED LIGHT UPTAKE.

RV DAVID STARR JORDAN — CALCOFI CRUISE 8602 — STATION 90 120

| LATITUDE | LONGITUDE | MO/DAY/YR | MESSENGER | SECCHI DEPTH | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 30 24.7 N | 123 59.6 W | 02/09/86 | 1726 GMT | 36 M | 1224 - 1820 PST | 1228 PST | 1818 PST | 51.3 MG C/M2 |

| DEPTH M | TEMP DEG C | SALINITY | SIGMA THETA | DISS O2 ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL UG/L | PHAEO UG/L | LIGHT % | UPTAKE (MGC/M3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 17.22 | 33.758 | 24.509 | 5.58 | 101.7 | 2.2 | 0.30 | 0.0 | 0.00 | 0.06 | 0.03 | 96 | 0.10 | 0.11 | 0.11 | 0.10 |
| 26 | 17.23 | 33.758 | 24.509 | 5.59 | 101.9 | 2.2 | 0.30 | 0.0 | 0.00 | 0.06 | 0.03 | 34 | 0.56 | 0.65 | 0.61 | 0.08 |
| 34 | 17.22 | 33.756 | 24.510 | 5.59 | 101.9 | 2.1 | 0.30 | 0.0 | 0.00 | 0.06 | 0.03 | 24 | 0.51 | 0.46 | 0.48 | 0.09 |
| 52 | 17.23 | 33.755 | 24.508 | 5.60 | 102.1 | 2.0 | 0.30 | 0.0 | 0.00 | 0.06 | 0.02 | 12 | 0.47 | 0.48 | 0.48 | 0.08 |
| 89 | 15.57 | 33.693 | 24.842 | 5.87 | 103.5 | 2.2 | 0.31 | 0.0 | 0.00 | 0.11 | 0.11 | 2.6 | 0.34 | 0.39 | 0.36 | 0.08 |
| 161 | 11.72 | 33.700 | 25.636 | 4.91 | 80.0 | 8.7 | 0.89 | 9.1 | 0.00 | 0.03 | 0.05 | 0.13 | 0.01 | 0.02 | 0.02 | 0.07 |

RV DAVID STARR JORDAN — CALCOFI CRUISE 8602 — STATION 93 45

| LATITUDE | LONGITUDE | MO/DAY/YR | MESSENGER | SECCHI DEPTH | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 32 20.5 N | 118 33.7 W | 02/06/86 | 1837 GMT | 13 M | 1206 - 1758 PST | 1210 PST | 1758 PST | 141.0 MG C/M2 |

| DEPTH M | TEMP DEG C | SALINITY | SIGMA THETA | DISS O2 ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL UG/L | PHAEO UG/L | LIGHT % | UPTAKE (MGC/M3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.19 | 33.391 | 24.905 | 5.96 | 102.1 | 2.7 | 0.39 | 0.2 | 0.02 | 0.51 | 0.17 | 96 | 0.56 | 0.51 | 0.53 | 0.13 |
| 10 | 14.20 | 33.393 | 24.905 | 5.97 | 102.2 | 2.8 | 0.39 | 0.2 | 0.02 | 0.49 | 0.21 | 34 | 4.4 | 4.6 | 4.5 | 0.13 |
| 13 | 14.19 | 33.389 | 24.904 | 5.97 | 102.2 | 2.8 | 0.38 | 0.2 | 0.02 | 0.48 | 0.19 | 24 | 4.5 | 4.3 | 4.4 | 0.13 |
| 19 | 14.19 | 33.389 | 24.904 | 5.97 | 102.2 | 2.8 | 0.38 | 0.2 | 0.02 | 0.50 | 0.19 | 12 | 3.5 | 3.9 | 3.7 | 0.14 |
| 33 | 14.17 | 33.387 | 24.907 | 5.97 | 102.2 | 2.8 | 0.38 | 0.3 | 0.02 | 0.47 | 0.21 | 2.6 | 2.2 | 2.6 | 2.4 | 0.10 |
| 59 | 12.79 | 33.411 | 25.206 | 5.42 | 90.2 | 5.4 | 0.69 | 4.8 | 0.12 | 0.39 | 0.30 | 0.13 | 0.46 | 0.49 | 0.48 | 0.10 |

RV DAVID STARR JORDAN — CALCOFI CRUISE 8602 — STATION 93 60

| LATITUDE | LONGITUDE | MO/DAY/YR | MESSENGER | SECCHI DEPTH | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 31 50.9 N | 119 34.2 W | 02/07/86 | 1953 GMT | 33 M | 1212 - 1807 PST | 1212 PST | 1807 PST | 164.1 MG C/M2 |

| DEPTH M | TEMP DEG C | SALINITY | SIGMA THETA | DISS O2 ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL UG/L | PHAEO UG/L | LIGHT % | UPTAKE (MGC/M3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.99 | 33.258 | 24.632 | 5.89 | 102.4 | 2.2 | 0.38 | 0.2 | 0.00 | 0.13 | 0.06 | 96 | 0.75 | 0.69 | 0.72 | 0.12 |
| 24 | 14.50 | 33.274 | 24.750 | 5.94 | 102.3 | 2.4 | 0.43 | 0.2 | 0.00 | 0.18 | 0.09 | 34 | 2.8 | 2.1 | 2.4 | 0.12 |
| 32 | 14.41 | 33.280 | 24.774 | 5.95 | 102.3 | 2.5 | 0.39 | 0.2 | 0.00 | 0.19 | 0.11 | 24 | 1.9 | 1.9 | 1.9 | 0.12 |
| 49 | 14.38 | 33.280 | 24.780 | 5.96 | 102.4 | 2.5 | 0.39 | 0.1 | 0.02 | 0.22 | 0.11 | 12 | 2.6 | 2.5 | 2.5 | 0.11 |
| 81 | 12.90 | 33.293 | 25.094 | 5.74 | 95.6 | 3.5 | 0.58 | 2.3 | 0.09 | 0.17 | 0.25 | 2.6 | 0.69 | 0.59 | 0.64 | 0.08 |
| 147 | 9.91 | 33.695 | 25.951 | 3.87 | 60.6 | 19.7 | 1.53 | 19.7 | 0.04 | 0.01 | 0.04 | 0.13 | 0.02 | 0.02 | 0.02 | 0.07 |

RV DAVID STARR JORDAN — CALCOFI CRUISE 8602 — STATION 93 90

| LATITUDE | LONGITUDE | MO/DAY/YR | MESSENGER | SECCHI DEPTH | INCUBATION TIME | LAN | CIVIL TWILIGHT | INTEGRATED VALUE |
|---|---|---|---|---|---|---|---|---|
| 30 51.3 N | 121 37.5 W | 02/08/86 | 1753 GMT | 28 M | 1216 - 1817 PST | 1222 PST | 1817 PST | 35.1 MG C/M2 |

| DEPTH M | TEMP DEG C | SALINITY | SIGMA THETA | DISS O2 ML/L | OXY PCT | SIO3 UM/L | PO4 UM/L | NO3 UM/L | NO2 UM/L | CHL UG/L | PHAEO UG/L | LIGHT % | UPTAKE (MGC/M3) 1 | 2 | MEAN | DARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.67 | 33.367 | 24.566 | 5.77 | 101.8 | 2.3 | 0.37 | 0.2 | 0.00 | 0.07 | 0.03 | 96 | 0.06 | 0.05 | 0.06 | 0.10 |
| 21 | 15.70 | 33.366 | 24.560 | 5.77 | 101.8 | 2.2 | 0.36 | 0.2 | 0.00 | 0.07 | 0.04 | 34 | 0.74 | 0.81 | 0.78 | 0.10 |
| 27 | 15.68 | 33.365 | 24.564 | 5.77 | 101.8 | 2.1 | 0.36 | 0.0 | 0.00 | 0.07 | 0.03 | 24 | 0.66 | 0.65 | 0.65 | 0.12* |
| 40 | 15.70 | 33.366 | 24.561 | 5.78 | 102.0 | 2.1 | 0.36 | 0.0 | 0.00 | 0.07 | 0.03 | 12 | 0.48 | 0.53 | 0.51 | 0.19 |
| 70 | 15.71 | 33.366 | 24.560 | 5.77 | 101.8 | 2.1 | 0.36 | 0.0 | 0.00 | 0.07 | 0.04 | 2.6 | 0.13 | 0.16 | 0.15 | 0.11 |
| 125 | 12.07 | 33.345 | 25.294 | 5.47 | 89.6 | 5.0 | 0.71 | 5.1 | 0.01 | 0.09 | 0.15 | 0.13 | 0.04 | 0.02 | 0.03 | 0.12 |

* DARK VALUE UNCERTAIN, REPORTED VALUE BASED ON AVERAGE OF OTHER 5 DARK VALUES.

Secchi Disk Observations

CalCOFI Cruise 8602

| Line | Sta. | Day | Mo | Local Time (+8: PST) | Secchi Depth (m) | Weather | Clouds Type | Clouds Amt |
|---|---|---|---|---|---|---|---|---|
| 77 | 51 | 19 | 2 | 1245 | 7 | 2 | SC | 8/8 |
| 77 | 55 | 19 | 2 | 1000 | 10 | 2 | SC | 8/8 |
| 77 | 90 | 18 | 2 | 1510 | 23 | 2 | ST | 8/8 |
| 77 | 100 | 18 | 2 | 1000 | 23 | 2 | ST | 8/8 |
| 80 | 70 | 17 | 2 | 1145 | 14 | 4 | - | - |
| 83 | 60 | 16 | 2 | 1000 | 24 | 2 | CS | 8/8 |
| 83 | 70 | 16 | 2 | 1455 | 24 | 1 | SC | 7/8 |
| 87 | 33 | 15 | 2 | 1235 | 9 | 1 | SC | 4/8 |
| 87 | 35 | 15 | 2 | 1015 | 17 | 2 | SC | 8/8 |
| 87 | 70 | 14 | 2 | 1315 | 15 | 2 | NS | 8/8 |
| 90 | 35 | 13 | 2 | 0745 | 13 | 6 | NS | 8/8 |
| 90 | 37 | 13 | 2 | 1020 | 16 | 5 | NS | 8/8 |
| 90 | 45 | 13 | 2 | 1525 | 15 | 5 | ST | 8/8 |
| 90 | 70 | 14 | 2 | 0905 | 16 | 2 | NS | 8/8 |
| 90 | 80 | 10 | 2 | 1030 | 35 | 1 | SC | 4/8 |
| 90 | 110 | 9 | 2 | 1325 | 36 | 1 | SC | 7/8 |
| 90 | 120 | 9 | 2 | 0915 | 36 | 2 | SC | 8/8 |
| 93 | 26.4 | 5 | 2 | 1420 | 3 | - | - | - |
| 93 | 26.7 | 5 | 2 | 1440 | 7 | 1 | SC | 2/8 |
| 93 | 29 | 5 | 2 | 1650 | 20 | 1 | SC | 1/8 |
| 93 | 45 | 6 | 2 | 1030 | 13 | 1 | SC | 5/8 |
| 93 | 55 | 7 | 2 | 0755 | 21 | 1 | AS | 1/8 |
| 93 | 60 | 7 | 2 | 1140 | 33 | 1 | CU | 3/8 |
| 93 | 90 | 8 | 2 | 0935 | 28 | 1 | SC | 4/8 |
| 93 | 100 | 8 | 2 | 1345 | 24 | 2 | SC | 8/8 |

CalCOFI Cruise 8602

MACROZOOPLANKTON BIOMASS
Net Mesh Size: 0.505 mm

| Line | Sta. | Position | | Date Mo/Day | Time (GMT) Start | Time (GMT) End | Water Volume Strained ($m^3$) | Max. Tow Depth (m) | Volume per 1000 $m^3$ Strained Total ($cm^3$) | Volume per 1000 $m^3$ Strained Small ($cm^3$) |
|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 51 | 35 01.1N | 120 55.1W | 2/19 | 2130 | 2152 | 436 | 206 | 135 | 135 |
| 77 | 55 | 34 53.3N | 121 11.9W | 2/19 | 1829 | 1851 | 458 | 206 | 94 | 94 |
| 77 | 60 | 34 43.3N | 121 32.9W | 2/19 | 1454 | 1516 | 454 | 205 | 48 | 48 |
| 77 | 70 | 34 23.3N | 122 14.8W | 2/19 | 1002 | 1024 | 434 | 214 | 78 | 78 |
| 77 | 80 | 34 03.2N | 122 56.5W | 2/19 | 0518 | 0540 | 457 | 207 | 59 | 48 |
| 77 | 90 | 33 43.3N | 123 38.0W | 2/19 | 0017 | 0040 | 439 | 223 | 23 | 23 |
| 77 | 100 | 33 23.3N | 124 19.4W | 2/18 | 1912 | 1934 | 434 | 210 | 30 | 30 |
| 80 | 51 | 34 27.0N | 120 31.4W | 2/17 | 0852 | 0900 | 149 | 71 | 281 | 281 |
| 80 | 55 | 34 19.0N | 120 48.1W | 2/17 | 1146 | 1209 | 447 | 204 | 127 | 127 |
| 80 | 60 | 34 09.0N | 121 08.9W | 2/17 | 1521 | 1543 | 426 | 212 | 19 | 19 |
| 80 | 70 | 33 49.1N | 121 50.4W | 2/17 | 2135 | 2156 | 421 | 211 | 178 | 142 |
| 80 | 80 | 33 28.8N | 122 32.0W | 2/18 | 0301 | 0323 | 447 | 210 | 29 | 29 |
| 80 | 90 | 33 09.0N | 123 13.2W | 2/18 | 0817 | 0839 | 431 | 212 | 37 | 37 |
| 80 | 100 | 32 49.0N | 123 54.6W | 2/18 | 1345 | 1407 | 431 | 208 | 58 | 58 |
| 82 | 46 | 34 16.2N | 119 56.3W | 2/16 | 0723 | 0745 | 430 | 204 | 149 | 149 |
| 83 | 40.6 | 34 13.5N | 119 24.7W | 2/16 | 0235 | 0238 | 51 | 20 | 311 | 311 |
| 83 | 42 | 34 10.7N | 119 30.5W | 2/16 | 0400 | 0418 | 342 | 166 | 129 | 129 |
| 83 | 55 | 33 44.6N | 120 24.7W | 2/16 | 1356 | 1418 | 447 | 208 | 49 | 49 |
| 83 | 60 | 33 34.7N | 120 45.3W | 2/16 | 1715 | 1737 | 439 | 209 | 23 | 23 |
| 83 | 70 | 33 14.7N | 121 26.6W | 2/17 | 0000 | 0022 | 425 | 211 | 28 | 28 |
| 87 | 33 | 33 53.3N | 118 29.5W | 2/15 | 2115 | 2121 | 111 | 49 | 117 | 117 |
| 87 | 35 | 33 49.4N | 118 37.7W | 2/15 | 1921 | 1943 | 428 | 213 | 42 | 42 |
| 87 | 40 | 33 39.4N | 118 58.5W | 2/15 | 1533 | 1555 | 419 | 209 | 55 | 55 |
| 87 | 45 | 33 29.4N | 119 19.1W | 2/15 | 1206 | 1228 | 428 | 211 | 131 | 131 |
| 87 | 50 | 33 19.4N | 119 39.8W | 2/15 | 0909 | 0917 | 155 | 68 | 174 | 174 |
| 87 | 60 | 32 59.3N | 120 21.0W | 2/15 | 0403 | 0425 | 465 | 206 | 45 | 34 |
| 90 | 28 | 33 29.1N | 117 46.1W | 2/13 | 1057 | 1105 | 148 | 70 | 95 | 95 |
| 90 | 30 | 33 25.1N | 117 54.2W | 2/13 | 1307 | 1329 | 426 | 206 | 56 | 56 |
| 90 | 35 | 33 15.2N | 118 14.9W | 2/13 | 1643 | 1705 | 432 | 209 | 25 | 25 |
| 90 | 37 | 33 11.1N | 118 23.2W | 2/13 | 1938 | 2000 | 418 | 211 | 24 | 24 |
| 90 | 45 | 32 55.1N | 118 56.1W | 2/14 | 0055 | 0118 | 433 | 234 | 23 | 23 |
| 90 | 53 | 32 39.1N | 119 28.9W | 2/14 | 0605 | 0627 | 419 | 212 | 96 | 96 |
| 90 | 60 | 32 25.1N | 119 57.5W | 2/14 | 1040 | 1103 | 467 | 206 | 158 | 101 |
| 90 | 70 | 32 05.1N | 120 38.3W | 2/14 | 1626 | 1648 | 445 | 212 | 18 | 18 |
| 90 | 90 | 31 25.1N | 121 59.5W | 2/10 | 1024 | 1046 | 417 | 210 | 60 | 60 |
| 90 | 100 | 31 05.1N | 122 39.7W | 2/10 | 0449 | 0511 | 425 | 222 | 47 | 47 |
| 90 | 110 | 30 45.1N | 123 19.9W | 2/9 | 2330 | 2352 | 411 | 209 | 19 | 19 |
| 90 | 120 | 30 25.1N | 124 00.0W | 2/9 | 1545 | 1607 | 418 | 214 | 19 | 19 |
| 93 | 26.7 | 32 57.3N | 117 18.3W | 2/5 | 2332 | 2339 | 129 | 57 | 77 | 77 |
| 93 | 29 | 32 52.8N | 117 27.7W | 2/6 | 0202 | 0224 | 425 | 210 | 54 | 54 |
| 93 | 30 | 32 50.8N | 117 31.9W | 2/6 | 0407 | 0429 | 417 | 214 | 48 | 48 |
| 93 | 35 | 32 40.9N | 117 52.4W | 2/6 | 0755 | 0819 | 464 | 210 | 41 | 41 |
| 93 | 40 | 32 30.8N | 118 12.8W | 2/6 | 1216 | 1238 | 491 | 197 | 26 | 26 |
| 93 | 45 | 32 20.7N | 118 33.2W | 2/6 | 1601 | 1625 | 487 | 243 | 29 | 29 |
| 93 | 50 | 32 11.0N | 118 53.6W | 2/7 | 1329 | 1351 | 432 | 213 | 42 | 42 |
| 93 | 55 | 32 00.9N | 119 13.9W | 2/7 | 1700 | 1722 | 404 | 216 | 37 | 37 |
| 93 | 60 | 31 50.9N | 119 34.2W | 2/7 | 2143 | 2205 | 403 | 214 | 62 | 62 |
| 93 | 70 | 31 30.5N | 120 14.9W | 2/8 | 0330 | 0352 | 442 | 211 | 36 | 36 |
| 93 | 90 | 30 50.8N | 121 35.6W | 2/8 | 1701 | 1723 | 449 | 214 | 13 | 13 |
| 93 | 100 | 30 30.8N | 122 15.5W | 2/8 | 2300 | 2322 | 442 | 211 | 16 | 16 |
| 93 | 110 | 30 10.8N | 122 55.4W | 2/9 | 0430 | 0452 | 430 | 217 | 37 | 37 |
| 93 | 120 | 29 50.8N | 123 35.2W | 2/9 | 1000 | 1023 | 435 | 212 | 28 | 28 |

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