

UNIVERSITY OF CALIFORNIA    SCRIPPS INSTITUTION OF OCEANOGRAPHY

# data report

PHYSICAL AND CHEMICAL DATA

CalCOFI Cruise 6801  
7-26 January 1968

CalCOFI Cruise 6804  
23 April - 6 May 1968

and

CalCOFI Cruise 6806  
31 May - 22 June 1968

SIO Reference 71-3



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## INTRODUCTION

The data in this report were collected on Cruises 6801, 6804 and 6806 of the California Cooperative Fisheries Investigations (CalCOFI) program by the RV David Starr Jordan of the Bureau of Commercial Fisheries (now National Marine Fisheries Service) and the RV Horizon of the Scripps Institution of Oceanography. The first two digits in this cruise-numbering system represent the year of the cruise; the last two digits, the month. The cruises preceding these in the series are 6610, 6612 and Special Cruise 6611 all of which appear in SIO Ref. 69-2; and 6707 and 6712, both of which appear in SIO Ref. 69-8.

These data were collected in part and processed completely by personnel of the Data Collection and Processing Group (DCPG, MLR), Scripps Institution of Oceanography.

### TABULATED DATA

Data for all cruises presented in this report were obtained by bottle casts and by the in situ Salinity/Temperature/Depth Monitoring and Recording System (STD) and appear in two forms:

1. Data from the sample bottle casts are tabulated with the observed levels of depth on the left of a page and standard levels of depth values interpolated and computed from these observations to the right.

2. For each STD lowering, temperature and salinity values are read only at standard levels of depth and appear with the same computed values as the sample bottle data on the right of the page. Corrections may have been applied to the temperature or salinity values or to both from continuing comparison of sample bottle data and STD data collected on the same station.

The data tabulated are of the same type as have previously appeared in these reports; the column headings from the computer are explained as follows:

|       |                 |         |
|-------|-----------------|---------|
| Z     | Depth in meters |         |
| T     | Temperature     | °C      |
| S     | Salinity        | ‰       |
| OXY   | Oxygen          | ml/L    |
| PHO   | Phosphate       | µg at/L |
| SIL   | Silicate        | µg at/L |
| NIT   | Nitrate         | µg at/L |
| D*T   | $\delta_T$      | cl/ton  |
| SIG*T | $\sigma_t$      | g/L     |
| DD    | $\Delta D$      | dyn. m  |

Tabulations of the nitrite values follow the computer tabulations of other data for Cruises 6804 and 6806. No nutrient samples were collected on Cruise 6801.

## STANDARD PROCEDURES

### In situ Salinity/Temperature/Depth Recorder

The manufacturer of the STD claims for the temperature an accuracy of  $\pm 0.05^\circ\text{C}$  on all ranges with repeatability of  $\pm 0.01^\circ\text{C}$  and for the salinity an accuracy of  $\pm 0.03\text{‰}$  on all ranges with repeatability of  $\pm 0.01\text{‰}$ .<sup>1/</sup> Except for the depth range corresponding to the steepest part of the thermocline, where the salinity trace appears to fluctuate more widely than the bottle samples can confirm, the results of this cruise support the manufacturer's claims.

Continuing comparison of the data from each STD lowering with the sample bottle observations for the corresponding location resulted in the following corrections being applied to the STD standard depth values tabulated for each cruise:

The temperature from the bottle cast and STD recording agreed very well on Cruise 6801. However, some adjusting of the salinity occurred during the early lowerings of the STD finally resulting in a correction varying from  $-0.01\text{‰}$  at the surface to  $-0.05\text{‰}$  at 500 meters.

Cruise 6804 required no correction to the temperature but a correction varying from  $\pm 0.00\text{‰}$  at the surface to  $+0.03\text{‰}$  at 500 meters was applied to all stations.

Cruise 6806 was the first cruise on which a digital data logger was used for data tabulation from the STD. A temperature correction varying from  $\pm 0.00^\circ\text{C}$  at the surface to  $-0.05^\circ\text{C}$  at 600 meters and a salinity correction of  $+0.01\text{‰}$  to  $-0.04\text{‰}$  over the same depth range were applied to these tabulations.

### Hydrographic Casts

The observed data have been plotted and then evaluated using the method described by Klein.<sup>2/</sup> This involves consideration of their variation as functions of density or depth and their relations to each other and comparison with concurrent STD observations and with previous or adjacent observations. The Nansen-bottle cast data are

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<sup>1/</sup>In situ Salinity/Temperature/Depth Monitoring and Recording System, Model 9006, Tech. Rep. No. 102, HYTECH Marine Products, The Bissett-Berman Corporation.  
<sup>2/</sup>Klein, Hans T. A new technique for processing physical oceanographic data. MS.



tabulated at observed depths; the values at standard depths are computer interpolations according to a modified Rattray technique,<sup>3/</sup> except that some property values at standard depths have been determined from consideration of the STD recording for the station. These property values were entered in the "observed" columns to prevent instabilities or to indicate features not covered by the hydrographic cast. The values are indicated by notations (see FOOTNOTES). To indicate degree of accuracy, temperatures are recorded in tenths of a degree when obtained by bucket thermometer while temperatures from reversing thermometers or the STD are recorded in hundredths of a degree. The salinity values obtained by salinometer are recorded to three decimal places, provided they meet accepted standards. The values recorded "have a reproducibility of  $\pm 0.004\%$  salinity at the 95 per cent probability level, and a probable accuracy of  $\pm 0.01\%$  salinity or better at the same level of probability."<sup>4/</sup> The values are recorded to two decimal places when only one determination per sample was obtained, or where there is doubt concerning the accuracy of a particular sample, or of all samples on a station. The accuracy of all samples obtained by salinometer and recorded to two decimal places is believed to be equal to or better than those obtained by manual titration.

The nutrient data for Cruises 6804 and 6806 are the first in these reports determined using the Technicon AutoAnalyzer.

On stations consisting of bottle casts only, extrapolated values and values interpolated between remote observations are not indicated but can be determined from the tabulation of observed depths. A hyphen is used to indicate a missing observed or interpolated value. The time on these stations is the time of messenger release for the bottle cast. The time listed for all STD stations is the startdown time for the lowering. When more than one bottle cast was made on station, messenger times and wire angles are given in the order of increasing depth and a significant change in position during a multiple cast is listed similarly. Multiple casts are indicated by a letter following all observed depths of each cast except the cast originating at the surface. Footnotes corresponding to each letter will explain the type of cast.

On stations where more than one cast was lowered, slight discrepancies in the property values may be noted. These may be caused by changes in geographical position, real changes with time, slight errors in measurement or a combination of these factors. Values at standard depths in the area of these discrepancies may be determined from reconciliation of the plotted observed values and entered in the "observed" columns with notations.

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<sup>3/</sup>Rattray, Maurice (1962). Interpolation errors and oceanographic sampling. Deep-Sea Res. 9: 25-37.

<sup>4/</sup>Quotation from Department of Oceanography, University of Washington, Tech. Rep. No. 66, UW Ref. 60-18, October 1960.

## FOOTNOTES

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

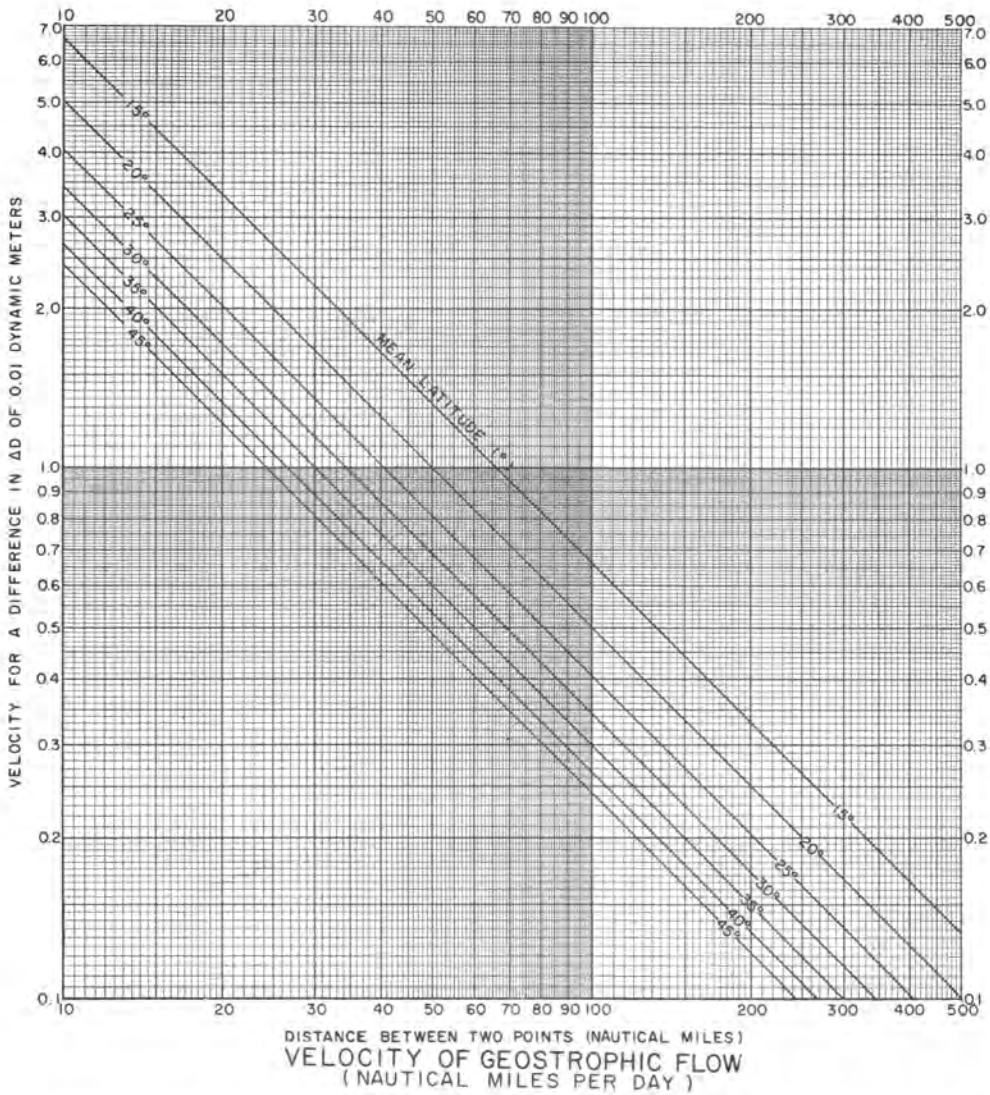
Values which are not used in interpolation because they seem to be in error without apparent reason are indicated by the following notation.

u: uncertain value

Values at standard levels of depth entered in the observed columns to limit machine interpolations may have either of the following notations.

k: a value determined from another measurement  
such as a bathythermogram or STD recording.

g: a value determined from considerations such as  
stability or previous or surrounding stations.



| cm/sec | 0                                     | 1             | 2             | 3             | 4             | 5             | 6             | 7             | 8             | 9             |
|--------|---------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 0      | <i>KNOTS</i><br>0.02<br><i>NM/DAY</i> | 0.04<br>0.47  | 0.06<br>0.93  | 0.08<br>1.40  | 0.10<br>1.86  | 0.12<br>2.33  | 0.14<br>2.80  | 0.16<br>3.26  | 0.17<br>3.73  | 0.17<br>4.20  |
| 10     | 0.19<br>4.66                          | 0.21<br>5.13  | 0.23<br>5.59  | 0.25<br>6.06  | 0.27<br>6.53  | 0.29<br>6.99  | 0.31<br>7.46  | 0.33<br>7.93  | 0.35<br>8.39  | 0.37<br>8.86  |
| 20     | 0.39<br>9.32                          | 0.41<br>9.79  | 0.43<br>10.26 | 0.45<br>10.72 | 0.47<br>11.19 | 0.49<br>11.66 | 0.51<br>12.12 | 0.52<br>12.59 | 0.54<br>13.05 | 0.56<br>13.52 |
| 30     | 0.58<br>13.99                         | 0.60<br>14.45 | 0.62<br>14.92 | 0.64<br>15.38 | 0.66<br>15.85 | 0.68<br>16.32 | 0.70<br>16.78 | 0.72<br>17.25 | 0.74<br>17.72 | 0.76<br>18.18 |
| 40     | 0.78<br>18.65                         | 0.80<br>19.11 | 0.82<br>19.58 | 0.84<br>20.05 | 0.85<br>20.51 | 0.87<br>20.98 | 0.89<br>21.45 | 0.91<br>21.91 | 0.93<br>22.38 | 0.95<br>22.84 |
| 50     | 0.97<br>23.31                         | 0.99<br>23.78 | 1.01<br>24.24 | 1.03<br>24.71 | 1.05<br>25.17 | 1.07<br>25.64 | 1.09<br>26.11 | 1.11<br>26.57 | 1.13<br>27.04 | 1.15<br>27.51 |
| 60     | 1.17<br>27.98                         | 1.18<br>28.44 | 1.20<br>28.90 | 1.22<br>29.37 | 1.24<br>29.84 | 1.26<br>30.30 | 1.28<br>30.77 | 1.30<br>31.24 | 1.32<br>31.70 | 1.34<br>32.17 |
| 70     | 1.36<br>32.63                         | 1.38<br>33.10 | 1.40<br>33.57 | 1.42<br>34.03 | 1.44<br>34.50 | 1.46<br>34.96 | 1.48<br>35.43 | 1.50<br>35.90 | 1.52<br>36.36 | 1.53<br>36.83 |
| 80     | 1.55<br>37.30                         | 1.57<br>37.76 | 1.59<br>38.23 | 1.61<br>38.69 | 1.63<br>39.16 | 1.65<br>39.63 | 1.67<br>40.09 | 1.69<br>40.56 | 1.71<br>41.03 | 1.73<br>41.49 |
| 90     | 1.75<br>41.96                         | 1.77<br>42.42 | 1.79<br>42.89 | 1.81<br>43.36 | 1.83<br>43.82 | 1.85<br>44.29 | 1.86<br>44.76 | 1.88<br>45.22 | 1.90<br>45.69 | 1.92<br>46.15 |
| 100    | 1.94<br>46.62                         | 1.96<br>47.09 | 1.98<br>47.55 | 2.00<br>48.02 | 2.02<br>48.48 | 2.04<br>48.95 | 2.06<br>49.42 | 2.08<br>49.88 | 2.10<br>50.35 | 2.12<br>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 6806

1. CalCOFI Cruise 6806, station positions
2. Horizontal distribution of dynamic height anomaly (0 over 500 d-bar)
3. Horizontal distribution of dynamic height anomaly (200 over 500 d-bar)
4. Horizontal distribution of temperature at 10 meters
5. Horizontal distribution of salinity at 10 meters
6. Horizontal distribution of thermosteric anomaly at 10 meters
7. Horizontal distribution of temperature at 200 meters
8. Horizontal distribution of salinity at 200 meters
9. Horizontal distribution of thermosteric anomaly at 200 meters

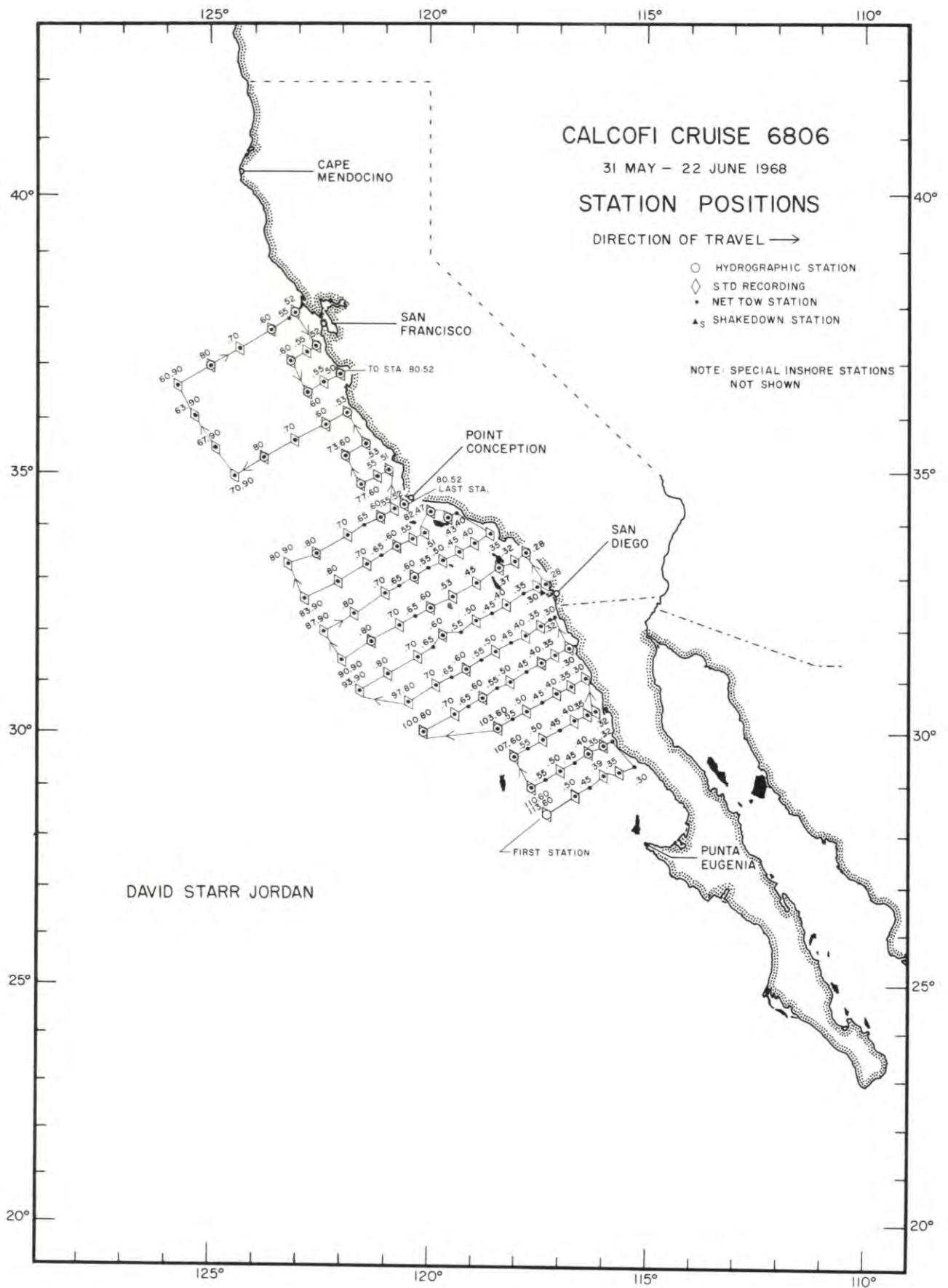


FIGURE 1



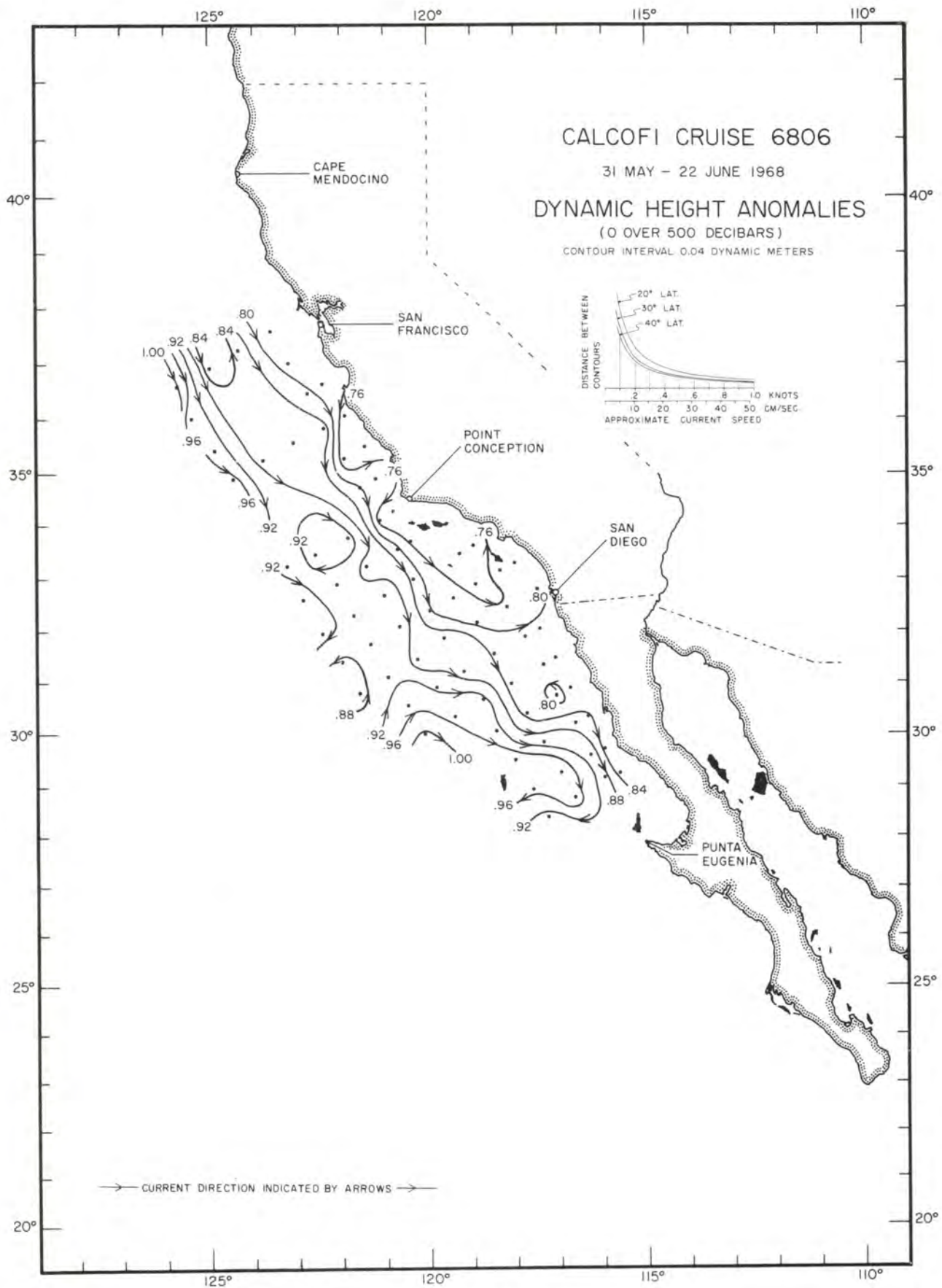


FIGURE 2





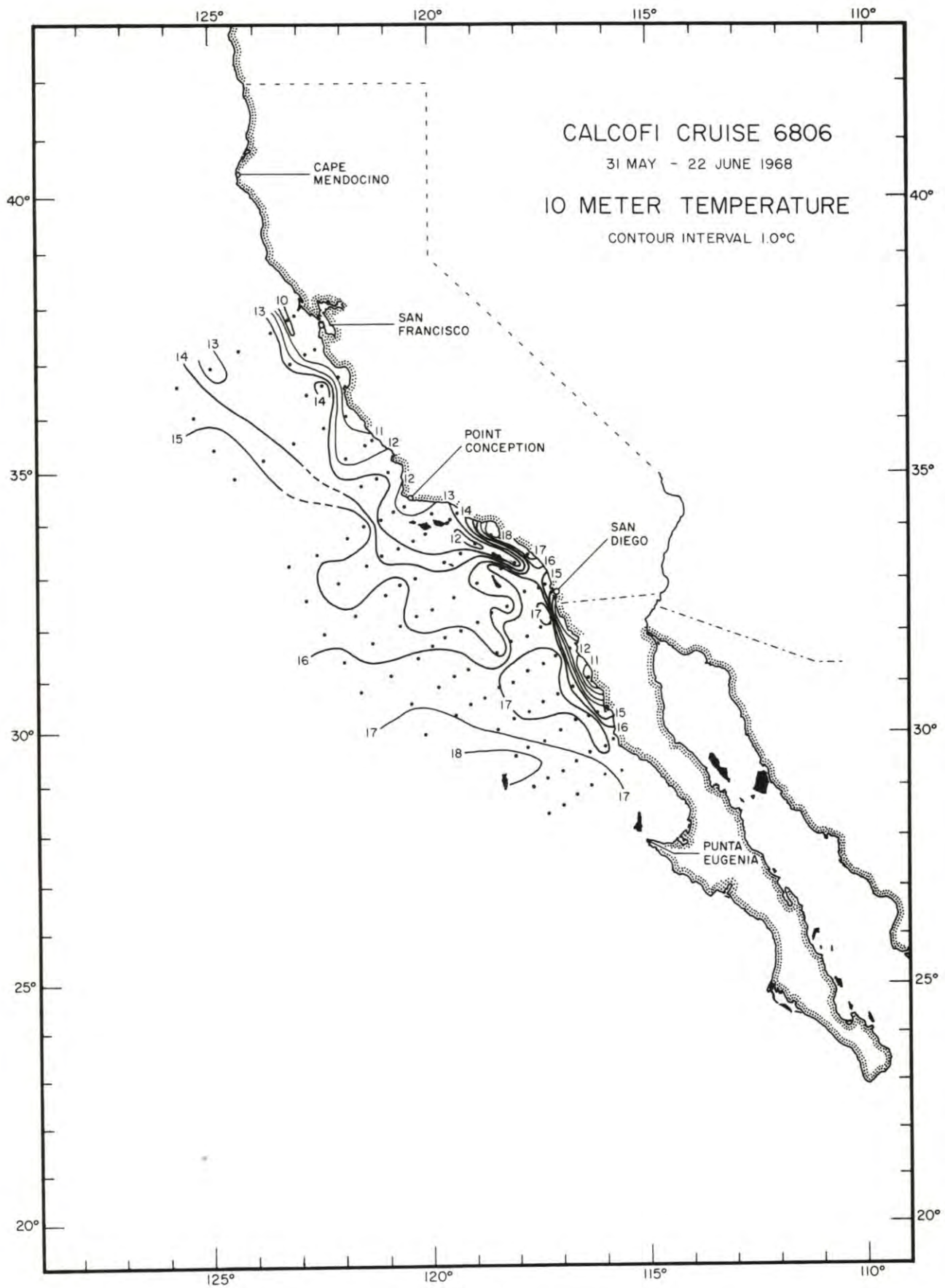


FIGURE 4

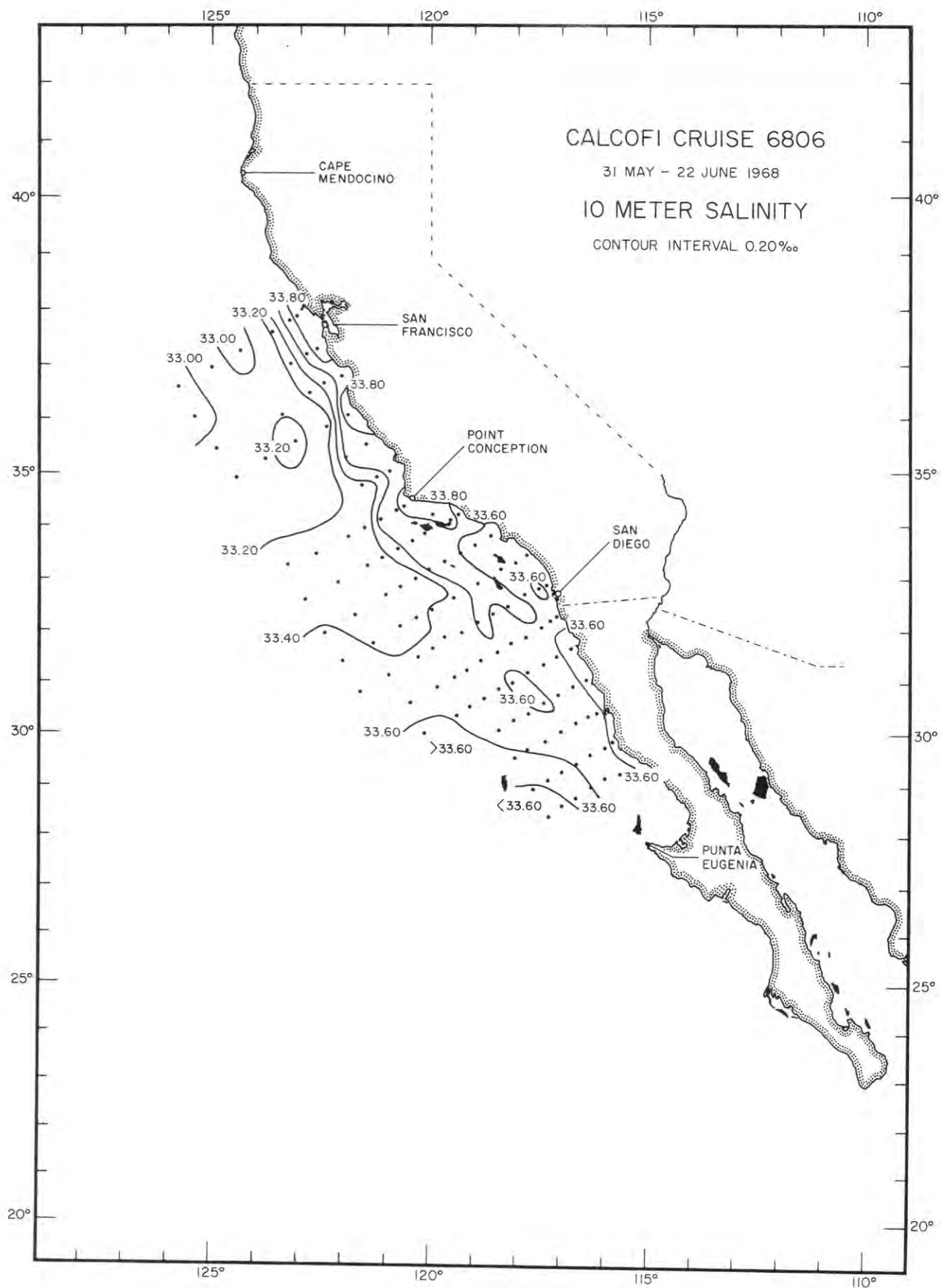


FIGURE 5



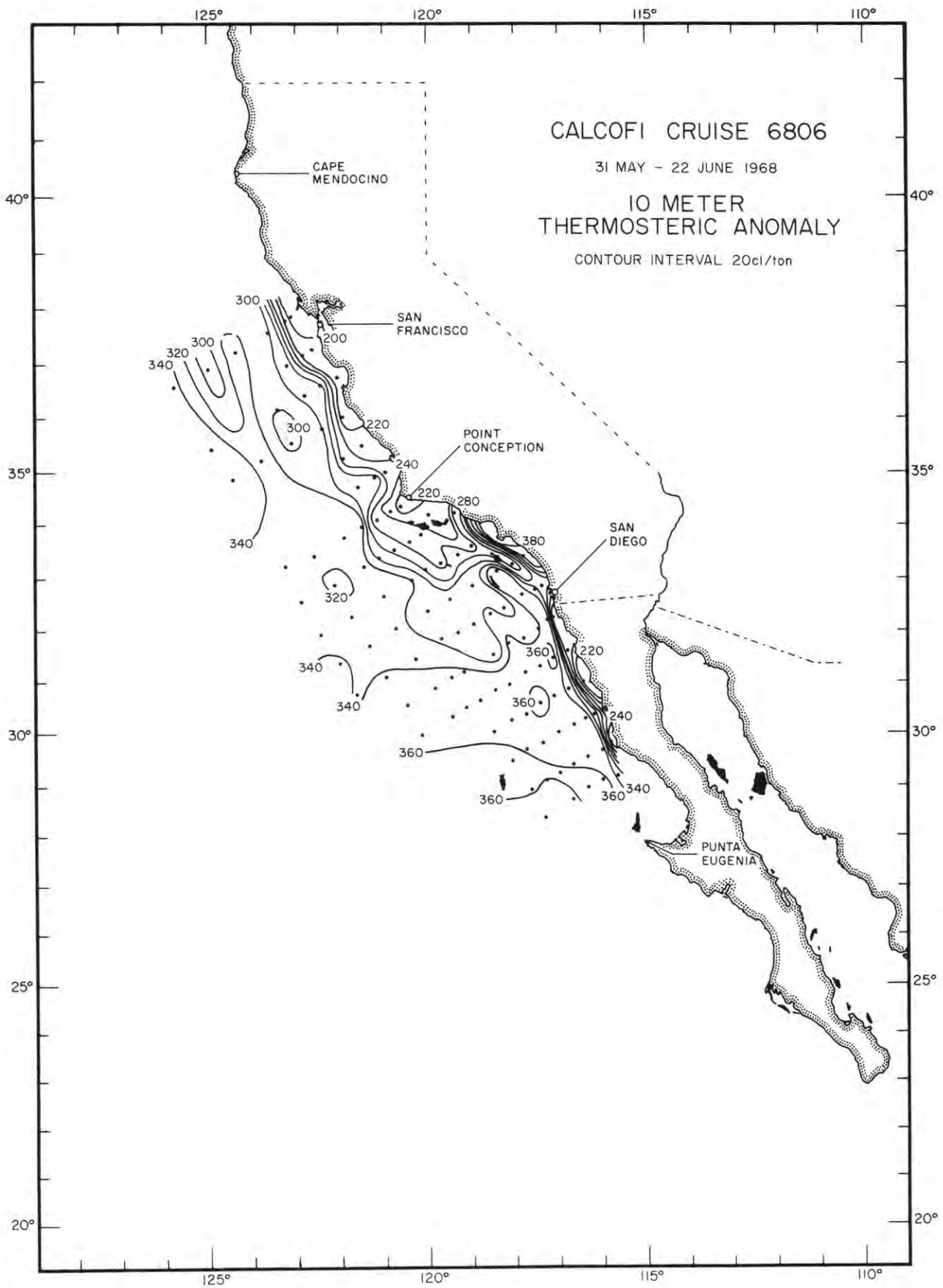


FIGURE 6

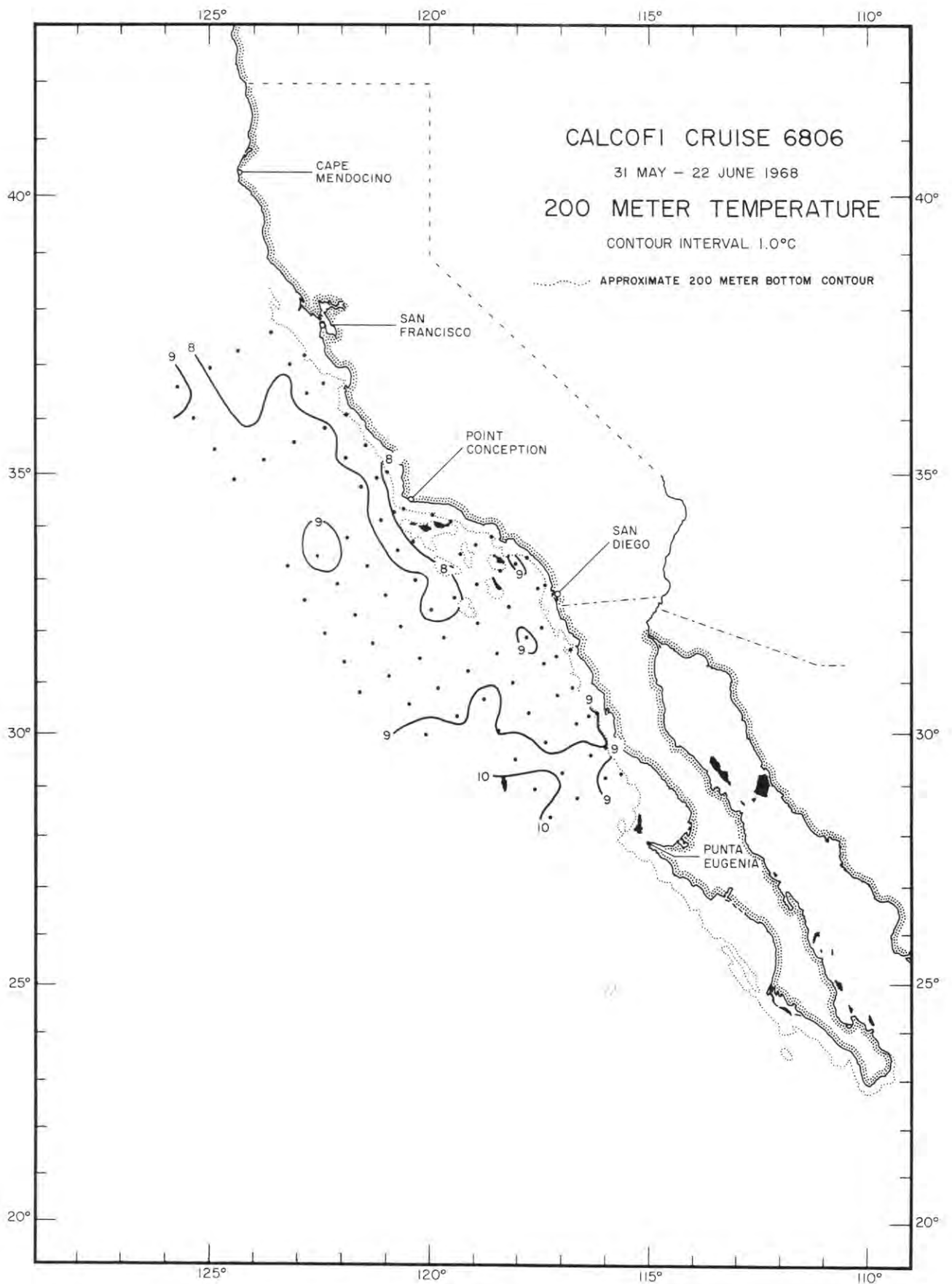


FIGURE 7

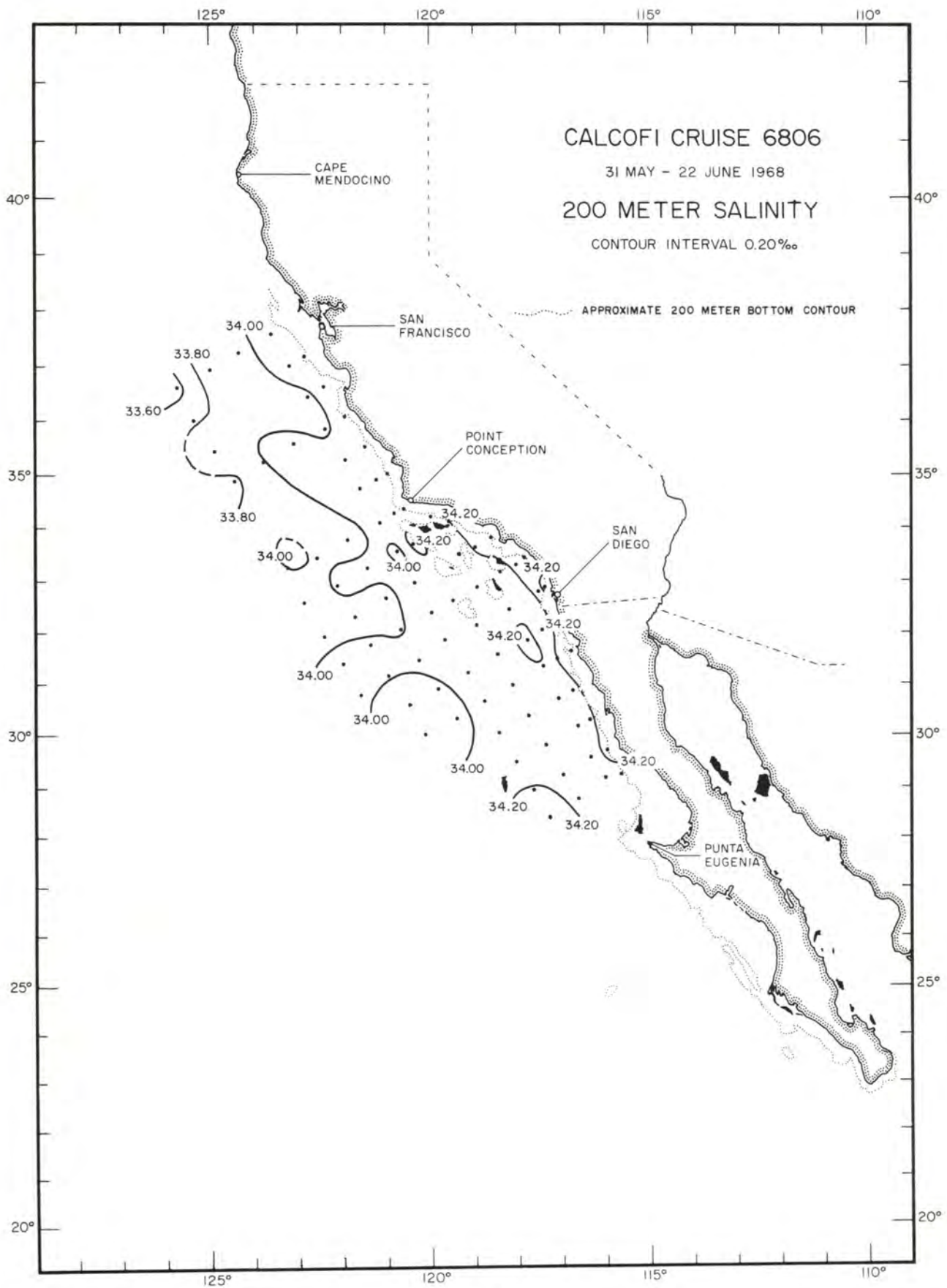


FIGURE 8



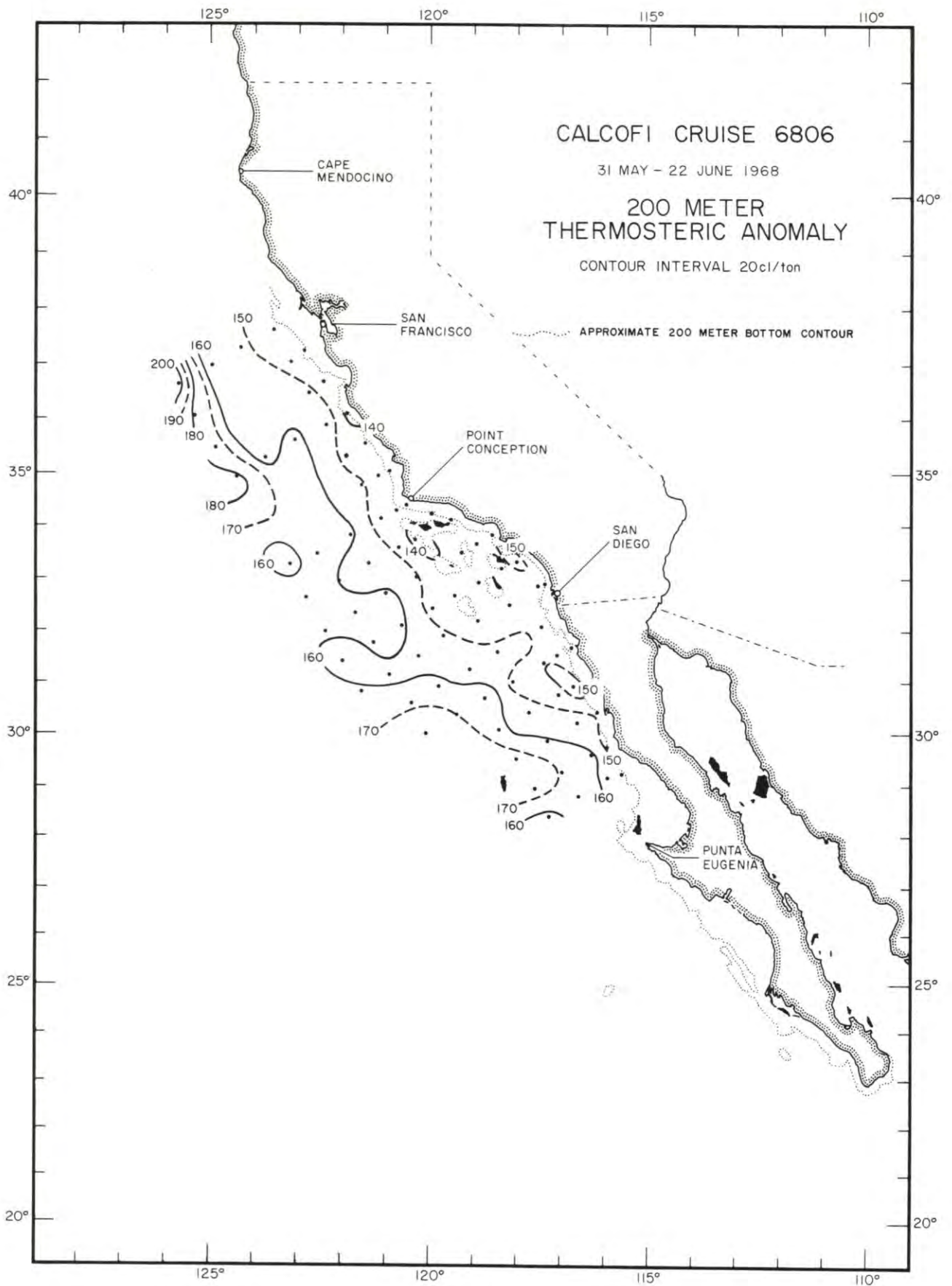


FIGURE 9

PERSONNEL  
Cruise 6806

SHIP'S CAPTAIN

Forster, Charles W., RV David Starr Jordan

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

RV David Starr Jordan

Counts, Robert C., Fishery Biologist, Bureau of Commercial Fisheries\*  
(in charge)

Irani, Rustan, Marine Technician

Mauck, William W., Marine Technician

Metoyer, Jack D., Biology Technician (Fisheries), Bureau of Commercial  
Fisheries\*

Michel, Fred, Marine Technician

Palmer, Don H., Marine Technician

Shuey, Raymond E., Physical Science Technician, Bureau of Commercial  
Fisheries\*

\*\*Smith, Paul E., Dr., Fishery Biologist (Research), Bureau of Commercial  
Fisheries\*

Wells, James A., Marine Technician

\*Now National Marine Fisheries Service.

\*\*San Francisco to San Diego.

| OBSERVED LEVELS OF DEPTH  |   |   |     |          |     |     |                 | STANDARD LEVELS OF DEPTH |       |       |     |                   |                 |      |  |       |  |  |  |  |  |  |  |
|---|---|---|-----|----------|-----|-----|-----------------|--------------------------|-------|-------|-----|-------------------|-----------------|------|--|-------|--|--|--|--|--|--|--|
| INPUT   |   |   |     | COMPUTED |     |     |                 | INPUT                    |       |       |     | COMPUTED          |                 |      |  |       |  |  |  |  |  |  |  |
| Z   | T | S | QXY | PHO      | SIL | NIT | D* <sup>T</sup> | Z                        | T     | S     | QXY | SIG* <sup>T</sup> | D* <sup>T</sup> | DD   |  |       |  |  |  |  |  |  |  |
| 60.52   |   |   |     |          |     |     |                 | CALCOFI CRUISE 6806      |       |       |     |                   |                 |      |  | 60.52 |  |  |  |  |  |  |  |
| DAVID STARR JORDAN, JUNE 19 1968, 2333 GMT, 37 52.5N 123 04W, SOUNDING 48 FM, WIND 300 5 KNOTS, WEATHER OVERCAST, SEA MODERATE. |   |   |     |          |     |     |                 |                          |       |       |     |                   |                 |      |  |       |  |  |  |  |  |  |  |
|   |   |   |     |          |     |     |                 | 0                        | 11.49 | 33.95 | -   | 25.89             | 212.1           | 0    |  |       |  |  |  |  |  |  |  |
|   |   |   |     |          |     |     |                 | 10                       | 10.24 | 33.92 | -   | 26.09             | 193.2           | .020 |  |       |  |  |  |  |  |  |  |
|   |   |   |     |          |     |     |                 | 20                       | 9.61  | 33.97 | -   | 26.23             | 179.4           | .039 |  |       |  |  |  |  |  |  |  |
|   |   |   |     |          |     |     |                 | 30                       | 9.40  | 33.97 | -   | 26.27             | 176.1           | .057 |  |       |  |  |  |  |  |  |  |
|   |   |   |     |          |     |     |                 | 50                       | 8.87  | 34.00 | -   | 26.38             | 165.8           | .091 |  |       |  |  |  |  |  |  |  |
|   |   |   |     |          |     |     |                 | 75                       | 8.26  | 34.02 | -   | 26.49             | 155.4           | .132 |  |       |  |  |  |  |  |  |  |

| INPUT  |       |        |      |      |     |      |                 | OUTPUT AT STANDARD LEVELS OF DEPTH |       |        |      |                   |                 |      |  |       |  |  |  |  |  |  |  |
|--|-------|--------|------|------|-----|------|-----------------|------------------------------------|-------|--------|------|-------------------|-----------------|------|--|-------|--|--|--|--|--|--|--|
| Z  | T     | S      | QXY  | PHO  | SIL | NIT  | D* <sup>T</sup> | Z                                  | T     | S      | QXY  | SIG* <sup>T</sup> | D* <sup>T</sup> | DD   |  |       |  |  |  |  |  |  |  |
| 60.52  |       |        |      |      |     |      |                 | CALCOFI CRUISE 6806                |       |        |      |                   |                 |      |  | 60.52 |  |  |  |  |  |  |  |
| DAVID STARR JORDAN, JUNE 19 1968, 2351 GMT, 37 52.5N 123 04W, SOUNDING 48 FM, WIND 300 5 KNOTS, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 02. |       |        |      |      |     |      |                 |                                    |       |        |      |                   |                 |      |  |       |  |  |  |  |  |  |  |
| 0  | 11.71 | 33.969 | 9.95 | 1.31 | 18  | 6.5  | 214.6           | 0                                  | 11.71 | 33.969 | 9.95 | 25.86             | 214.6           | 0    |  |       |  |  |  |  |  |  |  |
| 10   | 10.38 | 34.009 | 8.07 | 1.61 | 22  | 14.7 | 188.9           | 10                                 | 10.38 | 34.009 | 8.07 | 26.13             | 188.9           | .020 |  |       |  |  |  |  |  |  |  |
| 19   | 9.63  | 34.010 | 6.26 | 1.88 | 35  | 23.6 | 176.7           | 20                                 | 9.61  | 34.010 | 6.23 | 26.26             | 176.5           | .038 |  |       |  |  |  |  |  |  |  |
| 29   | 9.45  | 34.008 | 5.84 | 2.13 | 36  | 25.5 | 174.1           | 30                                 | 9.43  | 34.008 | 5.79 | 26.29             | 173.8           | .056 |  |       |  |  |  |  |  |  |  |
| 50   | 8.97  | 34.007 | 4.28 | 2.31 | 37  | 29.6 | 166.8           | 50                                 | 8.97  | 34.007 | 4.28 | 26.37             | 166.8           | .090 |  |       |  |  |  |  |  |  |  |

| OBSERVED LEVELS OF DEPTH   |   |   |     |          |     |     |                 | STANDARD LEVELS OF DEPTH |       |       |     |                   |                 |      |  |       |  |  |  |  |  |  |  |
|--|---|---|-----|----------|-----|-----|-----------------|--------------------------|-------|-------|-----|-------------------|-----------------|------|--|-------|--|--|--|--|--|--|--|
| INPUT  |   |   |     | COMPUTED |     |     |                 | INPUT                    |       |       |     | COMPUTED          |                 |      |  |       |  |  |  |  |  |  |  |
| Z  | T | S | QXY | PHO      | SIL | NIT | D* <sup>T</sup> | Z                        | T     | S     | QXY | SIG* <sup>T</sup> | D* <sup>T</sup> | DD   |  |       |  |  |  |  |  |  |  |
| 60.60  |   |   |     |          |     |     |                 | CALCOFI CRUISE 6806      |       |       |     |                   |                 |      |  | 60.60 |  |  |  |  |  |  |  |
| DAVID STARR JORDAN, JUNE 19 1968, 1804 GMT, 37 36.5N 123 38.5W, SOUNDING 1800 FM, WIND 340 12 KNOTS, WEATHER OVERCAST, SEA MODERATE. |   |   |     |          |     |     |                 |                          |       |       |     |                   |                 |      |  |       |  |  |  |  |  |  |  |
|  |   |   |     |          |     |     |                 | 0                        | 13.58 | 33.20 | -   | 24.90             | 305.8           | 0    |  |       |  |  |  |  |  |  |  |
|  |   |   |     |          |     |     |                 | 10                       | 13.55 | 33.21 | -   | 24.92             | 304.5           | .031 |  |       |  |  |  |  |  |  |  |
|  |   |   |     |          |     |     |                 | 20                       | 11.97 | 33.27 | -   | 25.27             | 270.7           | .059 |  |       |  |  |  |  |  |  |  |
|  |   |   |     |          |     |     |                 | 30                       | 10.44 | 33.40 | -   | 25.65             | 234.9           | .085 |  |       |  |  |  |  |  |  |  |
|  |   |   |     |          |     |     |                 | 50                       | 9.86  | 33.75 | -   | 26.02             | 199.6           | .128 |  |       |  |  |  |  |  |  |  |
|  |   |   |     |          |     |     |                 | 75                       | 9.51  | 33.82 | -   | 26.13             | 188.9           | .177 |  |       |  |  |  |  |  |  |  |
|  |   |   |     |          |     |     |                 | 100                      | 9.20  | 33.90 | -   | 26.25             | 178.2           | .223 |  |       |  |  |  |  |  |  |  |
|  |   |   |     |          |     |     |                 | 125                      | 8.92  | 33.95 | -   | 26.33             | 170.3           | .268 |  |       |  |  |  |  |  |  |  |
|  |   |   |     |          |     |     |                 | 150                      | 8.33  | 33.98 | -   | 26.44             | 159.3           | .309 |  |       |  |  |  |  |  |  |  |
|  |   |   |     |          |     |     |                 | 200                      | 7.61  | 34.05 | -   | 26.61             | 144.0           | .387 |  |       |  |  |  |  |  |  |  |
|  |   |   |     |          |     |     |                 | 250                      | 6.87  | 34.02 | -   | 26.69             | 136.4           | .459 |  |       |  |  |  |  |  |  |  |
|  |   |   |     |          |     |     |                 | 300                      | 6.45  | 34.08 | -   | 26.79             | 126.6           | .526 |  |       |  |  |  |  |  |  |  |
|  |   |   |     |          |     |     |                 | 400                      | 6.01  | 34.17 | -   | 26.92             | 114.5           | .652 |  |       |  |  |  |  |  |  |  |
|  |   |   |     |          |     |     |                 | 500                      | 5.13  | 34.18 | -   | 27.03             | 103.6           | .766 |  |       |  |  |  |  |  |  |  |
|  |   |   |     |          |     |     |                 | 600                      | 4.93  | 34.28 | -   | 27.13             | 93.9            | .871 |  |       |  |  |  |  |  |  |  |

| INPUT   |       |        |      |      |     |       |                 | OUTPUT AT STANDARD LEVELS OF DEPTH |       |        |      |                   |                 |      |  |       |  |  |  |  |  |  |  |
|---|-------|--------|------|------|-----|-------|-----------------|------------------------------------|-------|--------|------|-------------------|-----------------|------|--|-------|--|--|--|--|--|--|--|
| Z   | T     | S      | QXY  | PHO  | SIL | NIT   | D* <sup>T</sup> | Z                                  | T     | S      | QXY  | SIG* <sup>T</sup> | D* <sup>T</sup> | DD   |  |       |  |  |  |  |  |  |  |
| 60.60   |       |        |      |      |     |       |                 | CALCOFI CRUISE 6806                |       |        |      |                   |                 |      |  | 60.60 |  |  |  |  |  |  |  |
| DAVID STARR JORDAN, JUNE 19 1968, 1938 GMT, 37 36.5N 123 38.5W, SOUNDING 1800 FM, WIND 340 12 KNOTS, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 05. |       |        |      |      |     |       |                 |                                    |       |        |      |                   |                 |      |  |       |  |  |  |  |  |  |  |
| 1   | 13.60 | 33.215 | 6.33 | 0.78 | 8   | 5.1   | 305.1           | 0                                  | 13.60 | 33.215 | 6.33 | 24.91             | 305.1           | 0    |  |       |  |  |  |  |  |  |  |
| 12  | 13.57 | 33.217 | 6.29 | 0.76 | 8   | 4.8   | 304.4           | 10                                 | 13.58 | 33.222 | 6.30 | 24.92             | 304.1           | .030 |  |       |  |  |  |  |  |  |  |
| 30  | 10.50 | 33.077 | 6.05 | 0.90 | 8   | 7.2   | 259.8           | 20                                 | 12.22 | 33.105 | 6.23 | 25.10             | 287.3           | .060 |  |       |  |  |  |  |  |  |  |
| 40  | 10.32 | 33.423 | 5.70 | 1.26 | 15  | 13.4  | 231.2           | 30                                 | 10.50 | 33.077 | 6.05 | 25.39             | 259.8           | .087 |  |       |  |  |  |  |  |  |  |
| 54  | 9.84  | 33.768 | 5.28 | 1.75 | 27  | 22.1  | 198.0           | 50                                 | 9.98  | 33.693 | 5.39 | 25.96             | 205.8           | .134 |  |       |  |  |  |  |  |  |  |
| 69  | 9.51  | 33.806 | 5.01 | 1.83 | 29  | 23.1  | 190.0           | 75                                 | 9.42  | 33.824 | 4.87 | 26.15             | 187.3           | .184 |  |       |  |  |  |  |  |  |  |
| 94  | 9.21  | 33.879 | 4.90 | 1.97 | 33  | 26.0  | 179.9           | 100                                | 9.16  | 33.895 | 4.82 | 26.25             | 178.0           | .230 |  |       |  |  |  |  |  |  |  |
| 112   | 4.05  | 33.923 | 4.60 | 2.25 | 37  | 27.5  | 174.2           | 125                                | 8.91  | 33.949 | 4.36 | 26.33             | 170.2           | .274 |  |       |  |  |  |  |  |  |  |
| 132   | 8.81  | 33.961 | 4.14 | 2.15 | 39  | 29.2  | 167.8           | 150                                | 8.45  | 33.990 | 2.94 | 26.43             | 160.4           | .316 |  |       |  |  |  |  |  |  |  |
| 151   | 8.43  | 33.991 | 2.88 | 2.39 | 42  | 31.2  | 160.0           | 200                                | 7.44  | 33.996 | 2.81 | 26.59             | 145.7           | .394 |  |       |  |  |  |  |  |  |  |
| 180   | 7.70  | 33.991 | 3.01 | 2.12 | 42  | 29.6  | 149.7           | 250                                | 6.82  | 34.013 | 2.32 | 26.69             | 136.3           | .466 |  |       |  |  |  |  |  |  |  |
| 213   | 7.31  | 34.001 | 2.63 | 2.30 | 47  | 32.5  | 143.6           | 300                                | 6.35  | 34.037 | 1.87 | 26.77             | 128.5           | .534 |  |       |  |  |  |  |  |  |  |
| 243   | 6.90  | 34.011 | 2.38 | 2.42 | 52  | 33.8  | 137.5           | 400                                | 5.86  | 34.146 | .95  | 26.92             | 114.5           | .660 |  |       |  |  |  |  |  |  |  |
| 291   | 6.42  | 34.030 | 1.97 | 2.59 | 59  | 37.9  | 130.0           | 500                                | 5.17  | 34.206 | .56  | 27.05             | 102.1           | .774 |  |       |  |  |  |  |  |  |  |
| 344   | 6.05  | 34.079 | 1.37 | 2.79 | 67  | 40.2  | 121.8           | 600                                | 5.02  | 34.319 | .32  | 27.16             | 92.0            | .877 |  |       |  |  |  |  |  |  |  |
| 426   | 5.77  | 34.174 | .81  | 2.98 | 75  | 41.9  | 111.3           |                                    |       |        |      |                   |                 |      |  |       |  |  |  |  |  |  |  |
| 509   | 5.13  | 34.213 | .53  | 3.14 | 84  | 44.6  | 101.1           |                                    |       |        |      |                   |                 |      |  |       |  |  |  |  |  |  |  |
| 590   | 5.03  | 34.304 | .34  | 3.24 | 92  | 46.50 | 93.2            |                                    |       |        |      |                   |                 |      |  |       |  |  |  |  |  |  |  |



## OBSERVED LEVELS OF DEPTH STANDARD LEVELS OF DEPTH

| INPUT |   |   |     |     |     |     |                 | COMPUTED |   | INPUT |     |                   |                 |    |  |  |  | COMPUTED |  |
|-------|---|---|-----|-----|-----|-----|-----------------|----------|---|-------|-----|-------------------|-----------------|----|--|--|--|----------|--|
| Z     | T | S | OXY | PHO | SIL | NIT | D* <sup>T</sup> | Z        | T | S     | OXY | SIG* <sup>T</sup> | D* <sup>T</sup> | DD |  |  |  |          |  |

60.70 CALCOFI CRUISE 6806 60.70

DAVID STARR JORDAN, JUNE 19 1968, 1432 GMT, 37 17N 124 21W, SOUNDING 2150 FM, WIND 330 12 KNOTS, WEATHER OVERCAST, SEA ROUGH.

|     |       |       |   |       |       |      |
|-----|-------|-------|---|-------|-------|------|
| 0   | 13.52 | 32.89 | - | 24.68 | 327.4 | 0    |
| 10  | 13.52 | 32.89 | - | 24.68 | 327.4 | .033 |
| 20  | 11.76 | 32.78 | - | 24.93 | 303.1 | .064 |
| 30  | 11.55 | 32.86 | - | 25.03 | 293.5 | .094 |
| 50  | 10.81 | 32.96 | - | 25.24 | 273.5 | .151 |
| 75  | 9.79  | 33.24 | - | 25.63 | 236.3 | .215 |
| 100 | 9.36  | 33.56 | - | 25.95 | 205.9 | .271 |
| 125 | 8.58  | 33.69 | - | 26.18 | 184.5 | .320 |
| 150 | 8.54  | 33.91 | - | 26.36 | 167.6 | .365 |
| 200 | 7.80  | 33.96 | - | 26.51 | 153.3 | .446 |
| 250 | 7.20  | 34.00 | - | 26.63 | 142.2 | .522 |
| 300 | 7.02  | 34.07 | - | 26.71 | 134.6 | .593 |
| 400 | 5.79  | 34.08 | - | 26.87 | 118.6 | .725 |
| 500 | 5.21  | 34.15 | - | 27.00 | 106.7 | .843 |
| 600 | 4.55  | 34.18 | - | 27.10 | 97.4  | .951 |

60.80 CALCOFI CRUISE 6806 60.80

DAVID STARR JORDAN, JUNE 19 1968, 0956 GMT, 36 57.5N 125 00W, SOUNDING 2350 FM, WIND 330 18 KNOTS, WEATHER MISSING, SEA MISSING.

|     |       |       |   |       |       |      |
|-----|-------|-------|---|-------|-------|------|
| 0   | 12.75 | 33.12 | - | 25.01 | 295.9 | 0    |
| 10  | 12.79 | 33.14 | - | 25.02 | 295.2 | .030 |
| 20  | 12.82 | 33.21 | - | 25.06 | 290.6 | .059 |
| 30  | 12.47 | 33.22 | - | 25.14 | 283.4 | .088 |
| 50  | 10.45 | 32.97 | - | 25.31 | 266.8 | .143 |
| 75  | 9.33  | 33.32 | - | 25.77 | 223.2 | .204 |
| 100 | 9.09  | 33.62 | - | 26.04 | 197.3 | .257 |
| 125 | 8.83  | 33.76 | - | 26.20 | 183.0 | .305 |
| 150 | 8.36  | 33.88 | - | 26.36 | 167.2 | .350 |
| 200 | 7.66  | 33.96 | - | 26.53 | 151.4 | .431 |
| 250 | 7.01  | 33.97 | - | 26.63 | 142.0 | .506 |
| 300 | 6.40  | 33.99 | - | 26.73 | 132.7 | .577 |
| 400 | 5.86  | 34.09 | - | 26.87 | 118.7 | .707 |
| 500 | 5.22  | 34.18 | - | 27.02 | 104.6 | .824 |
| 600 | 4.80  | 34.23 | - | 27.11 | 96.3  | .931 |

## OBSERVED LEVELS OF DEPTH STANDARD LEVELS OF DEPTH

| INPUT |   |   |     |     |     |     |                 | COMPUTED |   | INPUT |     |                   |                 |    |  |  |  | COMPUTED |  |
|-------|---|---|-----|-----|-----|-----|-----------------|----------|---|-------|-----|-------------------|-----------------|----|--|--|--|----------|--|
| Z     | T | S | OXY | PHO | SIL | NIT | D* <sup>T</sup> | Z        | T | S     | OXY | SIG* <sup>T</sup> | D* <sup>T</sup> | DD |  |  |  |          |  |

60.80 CALCOFI CRUISE 6806 60.80

DAVID STARR JORDAN, JUNE 19 1968, 1036 GMT, 36 57.5N 125 00W, SOUNDING 2350 FM, WIND 330 18 KNOTS, WEATHER MISSING, SEA MISSING, WIRE ANGLE 05.

|     |       |   |      |      |    |      |   |
|-----|-------|---|------|------|----|------|---|
| 1   | 12.76 | - | 6.39 | 0.90 | 11 | 6.6  | - |
| 12  | 12.79 | - | 6.44 | 0.92 | 11 | 7.1  | - |
| 31  | 12.50 | - | 6.40 | 0.98 | 11 | 8.0  | - |
| 40  | 12.09 | - | 6.30 | 0.83 | 9  | 6.1  | - |
| 54  | 10.44 | - | 6.03 | 0.84 | 8  | 6.5  | - |
| 69  | 10.20 | - | 5.63 | 1.08 | 11 | 10.2 | - |
| 93  | 8.87  | - | 4.52 | 1.54 | 22 | 19.4 | - |
| 113 | 9.07  | - | 4.52 | 1.80 | 27 | 24.0 | - |
| 132 | 8.62  | - | 3.52 | 1.90 | 31 | 25.4 | - |
| 152 | 8.29  | - | 3.19 | 1.99 | 35 | 26.9 | - |
| 181 | 8.11  | - | 3.06 | 2.12 | 38 | 28.6 | - |
| 215 | 7.66  | - | 2.94 | 2.13 | 43 | 30.5 | - |
| 245 | 7.25  | - | 2.76 | 2.25 | 46 | 31.4 | - |
| 294 | 6.54  | - | 2.59 | 2.33 | 54 | 34.2 | - |
| 348 | 6.14  | - | 1.69 | 2.64 | 64 | 38.1 | - |
| 430 | 5.64  | - | .91  | 3.03 | 75 | 42.3 | - |
| 513 | 5.14  | - | .54  | 3.02 | 85 | 43.2 | - |
| 594 | 4.83  | - | .37  | 3.22 | 94 | 46.5 | - |



## OBSERVED LEVELS OF DEPTH STANDARD LEVELS OF DEPTH

| INPUT |   |   |     |     |     |     |     | COMPUTED |   |   |     |       |     |    |  |
|-------|---|---|-----|-----|-----|-----|-----|----------|---|---|-----|-------|-----|----|--|
| Z     | T | S | OXY | PHO | SIL | NIT | D*T | Z        | T | S | OXY | SIG*T | D*T | DD |  |

63.60 CALCOFI CRUISE 6806 63.60

DAVID STARR JORDAN, JUNE 21 1968, 0007 GMT, 37 02.5N 123 11.5 W, SOUNDING 1500 FM, WIND 330 18 KNOTS, WEATHER CLEAR, SEA MODERATE.

|     |       |       |   |       |       |      |
|-----|-------|-------|---|-------|-------|------|
| 0   | 13.04 | 33.25 | - | 25.05 | 291.8 | 0    |
| 10  | 12.92 | 33.24 | - | 25.07 | 290.3 | .029 |
| 20  | 11.67 | 33.24 | - | 25.31 | 267.6 | .057 |
| 30  | 10.12 | 33.30 | - | 25.63 | 237.1 | .082 |
| 50  | 9.56  | 33.65 | - | 25.99 | 202.3 | .126 |
| 75  | 9.55  | 33.84 | - | 26.14 | 188.1 | .176 |
| 100 | 9.42  | 33.89 | - | 26.20 | 182.3 | .222 |
| 125 | 8.67  | 33.93 | - | 26.35 | 168.0 | .267 |
| 150 | 8.50  | 33.96 | - | 26.40 | 163.3 | .309 |
| 200 | 7.94  | 34.09 | - | 26.59 | 145.6 | .387 |
| 250 | 7.57  | 34.12 | - | 26.67 | 138.3 | .460 |
| 300 | 7.29  | 34.16 | - | 26.74 | 131.5 | .530 |
| 400 | 6.56  | 34.17 | - | 26.85 | 121.3 | .661 |
| 500 | 5.73  | 34.21 | - | 26.98 | 108.2 | .782 |
| 600 | 5.16  | 34.29 | - | 27.12 | 95.7  | .891 |

## INPUT

## OUTPUT AT STANDARD LEVELS OF DEPTH

| Z | T | S | OXY | PHO | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |
|---|---|---|-----|-----|-----|-----|-----|---|---|---|-----|-------|-----|----|
|---|---|---|-----|-----|-----|-----|-----|---|---|---|-----|-------|-----|----|

63.60 CALCOFI CRUISE 6806 63.60

DAVID STARR JORDAN, JUNE 21 1968, 0048 GMT, 37 02.5N 123 11.5W, SOUNDING 1500 FM, WIND 330 18 KNOTS, WEATHER CLEAR, SEA MODERATE, WIRE ANGLE 10.

|     |       |        |      |      |    |      |       |     |       |        |      |       |       |      |
|-----|-------|--------|------|------|----|------|-------|-----|-------|--------|------|-------|-------|------|
| 1   | 13.03 | 33.219 | 6.31 | 0.82 | 8  | 5.8  | 293.9 | 0   | 13.03 | 33.219 | 6.31 | 25.03 | 293.9 | 0    |
| 11  | 12.82 | 33.235 | 6.35 | 0.85 | 9  | 6.7  | 288.8 | 10  | 12.86 | 33.232 | 6.35 | 25.07 | 289.7 | .029 |
| 30  | 11.50 | 33.324 | 6.17 | 1.04 | 11 | 9.1  | 256.4 | 20  | 12.52 | 33.275 | 6.29 | 25.17 | 280.4 | .058 |
| 39  | 9.46  | 33.354 | 4.99 | 1.34 | 16 | 15.5 | 222.7 | 30  | 11.50 | 33.324 | 6.17 | 25.40 | 258.4 | .085 |
| 53  | 9.41  | 33.595 | 4.64 | 1.62 | 21 | 19.9 | 204.0 | 50  | 9.42  | 33.537 | 4.69 | 25.93 | 208.5 | .132 |
| 67  | 9.48  | 33.762 | 4.69 | 1.84 | 27 | 24.7 | 192.8 | 75  | 9.56  | 33.815 | 4.88 | 26.12 | 190.0 | .182 |
| 91  | 9.52  | 33.873 | 4.88 | 2.00 | 32 | 25.5 | 185.2 | 100 | 9.19  | 33.892 | 4.11 | 26.24 | 178.7 | .228 |
| 111 | 8.76  | 33.910 | 3.14 | 2.10 | 34 | 27.7 | 170.8 | 125 | 8.55  | 33.946 | 2.91 | 26.38 | 165.1 | .272 |
| 129 | 8.52  | 33.956 | 2.85 | 2.09 | 36 | 29.0 | 163.9 | 150 | 8.26  | 33.992 | 2.65 | 26.47 | 157.4 | .313 |
| 149 | 8.27  | 33.989 | 2.68 | 2.20 | 39 | 30.0 | 157.8 | 200 | 7.78  | 34.102 | 1.71 | 26.62 | 142.5 | .389 |
| 178 | 7.92  | 34.084 | 1.84 | 2.49 | 46 | 33.4 | 145.8 | 250 | 7.55  | 34.136 | 1.51 | 26.68 | 136.8 | .461 |
| 213 | 7.72  | 34.111 | 1.64 | 2.56 | 50 | 33.9 | 141.0 | 300 | 7.30  | 34.168 | 1.23 | 26.74 | 131.0 | .530 |
| 244 | 7.58  | 34.132 | 1.54 | 2.65 | 52 | 34.8 | 137.5 | 400 | 6.58  | 34.207 | .90  | 26.87 | 118.8 | .660 |
| 292 | 7.34  | 34.164 | 1.27 | 2.74 | 56 | 35.4 | 131.9 | 500 | 5.76  | 34.238 | .64  | 27.00 | 106.5 | .779 |
| 347 | 7.00  | 34.185 | 1.06 | 2.82 | 61 | 37.8 | 125.8 | 600 | 5.32  | 34.300 | .42  | 27.11 | 96.7  | .887 |
| 428 | 6.35  | 34.218 | .82  | 2.97 | 69 | 40.2 | 115.1 |     |       |        |      |       |       |      |
| 510 | 5.70  | 34.242 | .62  | 3.12 | 76 | 42.5 | 105.4 |     |       |        |      |       |       |      |
| 591 | 5.34  | 34.293 | .44  | 3.16 | 86 | 46.0 | 97.5  |     |       |        |      |       |       |      |

## OBSERVED LEVELS OF DEPTH STANDARD LEVELS OF DEPTH

| INPUT |   |   |     |     |     |     |     | COMPUTED |   |   |     |       |     |    |  |
|-------|---|---|-----|-----|-----|-----|-----|----------|---|---|-----|-------|-----|----|--|
| Z     | T | S | OXY | PHO | SIL | NIT | D*T | Z        | T | S | OXY | SIG*T | D*T | DD |  |

63.90 CALCOFI CRUISE 6806 63.90

DAVID STARR JORDAN, JUNE 19 1968, 0000 GMT, 36 02N 125 22W, SOUNDING 2500 FM, WIND 340 18 KNOTS, WEATHER OVERCAST, SEA ROUGH.

|     |       |       |   |       |       |       |
|-----|-------|-------|---|-------|-------|-------|
| 0   | 14.48 | 32.86 | - | 24.46 | 348.5 | 0     |
| 10  | 14.46 | 32.86 | - | 24.46 | 348.1 | .035  |
| 20  | 13.66 | 32.91 | - | 24.66 | 328.6 | .069  |
| 30  | 13.11 | 32.88 | - | 24.75 | 320.3 | .101  |
| 50  | 12.88 | 33.08 | - | 24.95 | 301.3 | .164  |
| 75  | 11.45 | 32.83 | - | 25.03 | 294.0 | .238  |
| 100 | 10.62 | 33.11 | - | 25.39 | 259.3 | .308  |
| 125 | 9.71  | 33.20 | - | 25.62 | 238.0 | .371  |
| 150 | 9.34  | 33.47 | - | 25.89 | 212.2 | .428  |
| 200 | 8.75  | 33.79 | - | 26.23 | 179.6 | .527  |
| 250 | 8.13  | 33.95 | - | 26.45 | 158.7 | .614  |
| 300 | 7.57  | 34.02 | - | 26.59 | 145.7 | .692  |
| 400 | 6.07  | 34.04 | - | 26.81 | 124.9 | .833  |
| 500 | 5.01  | 34.05 | - | 26.94 | 112.0 | .956  |
| 600 | 5.04  | 34.21 | - | 27.07 | 100.4 | 1.069 |



| OBSERVED LEVELS OF DEPTH  |   |   |     |     |     |     |                 | STANDARD LEVELS OF DEPTH |       |       |     |                   |                 |      |  |       |  |
|---|---|---|-----|-----|-----|-----|-----------------|--------------------------|-------|-------|-----|-------------------|-----------------|------|--|-------|--|
| INPUT   |   |   |     |     |     |     |                 | COMPUTED                 |       |       |     |                   |                 |      |  |       |  |
| Z   | T | S | OXY | PHO | SIL | NIT | D* <sup>T</sup> | Z                        | T     | S     | OXY | SIG* <sup>T</sup> | D* <sup>T</sup> | DD   |  |       |  |
| 67.50   |   |   |     |     |     |     |                 | CALCOFI CRUISE 6806      |       |       |     |                   |                 |      |  | 67.50 |  |
| DAVID STARR JORDAN, JUNE 21 1968, 1120 GMT, 36 49N 122 04.5W, SOUNDING 65 FM, WIND 320 10 KNOTS, WEATHER MISSING, SEA MODERATE. |   |   |     |     |     |     |                 |                          |       |       |     |                   |                 |      |  |       |  |
|   |   |   |     |     |     |     |                 | 0                        | 12.00 | 33.87 | -   | 25.73             | 227.0           | 0    |  |       |  |
|   |   |   |     |     |     |     |                 | 10                       | 10.43 | 33.77 | -   | 25.94             | 207.4           | .022 |  |       |  |
|   |   |   |     |     |     |     |                 | 20                       | 9.74  | 33.71 | -   | 26.01             | 200.7           | .042 |  |       |  |
|   |   |   |     |     |     |     |                 | 30                       | 9.47  | 33.78 | -   | 26.11             | 191.3           | .062 |  |       |  |
|   |   |   |     |     |     |     |                 | 50                       | 9.32  | 33.95 | -   | 26.27             | 176.3           | .099 |  |       |  |
|   |   |   |     |     |     |     |                 | 75                       | 9.02  | 33.97 | -   | 26.33             | 170.3           | .142 |  |       |  |

| INPUT   |       |        |      |      |     |      |                 | OUTPUT AT STANDARD LEVELS OF DEPTH |       |        |      |                   |                 |      |  |       |  |
|---|-------|--------|------|------|-----|------|-----------------|------------------------------------|-------|--------|------|-------------------|-----------------|------|--|-------|--|
| Z   | T     | S      | OXY  | PHO  | SIL | NIT  | D* <sup>T</sup> | Z                                  | T     | S      | OXY  | SIG* <sup>T</sup> | D* <sup>T</sup> | DD   |  |       |  |
| 67.50   |       |        |      |      |     |      |                 | CALCOFI CRUISE 6806                |       |        |      |                   |                 |      |  | 67.50 |  |
| DAVID STARR JORDAN, JUNE 21 1968, 1151 GMT, 36 49N 122 04.5W, SOUNDING 65 FM, WIND 320 10 KNOTS, WEATHER MISSING, SEA MODERATE, WIRE ANGLE 11°. |       |        |      |      |     |      |                 |                                    |       |        |      |                   |                 |      |  |       |  |
| 2   | 11.72 | 33.859 | 7.04 | 0.69 | 4   | 5.6  | 222.9           | 0                                  | 11.72 | 33.859 | 7.04 | 25.78             | 222.9           | 0    |  |       |  |
| 11  | 10.63 | 33.778 | 5.10 | 1.39 | 9   | 13.7 | 210.1           | 10                                 | 10.73 | 33.784 | 5.27 | 25.90             | 211.4           | .022 |  |       |  |
| 27  | 9.51  | 33.761 | 3.76 | 1.75 | 23  | 23.3 | 193.3           | 20                                 | 9.89  | 33.759 | 4.14 | 26.02             | 199.5           | .042 |  |       |  |
| 36  | 9.18  | 33.817 | 3.32 | 1.86 | 29  | 25.6 | 184.1           | 30                                 | 9.37  | 33.774 | 3.58 | 26.12             | 190.1           | .062 |  |       |  |
| 46  | 9.25  | 33.943 | 3.31 | 2.05 | 34  | 26.9 | 175.8           | 50                                 | 9.22  | 33.950 | 3.26 | 26.28             | 174.8           | .098 |  |       |  |
| 59  | 9.09  | 33.937 | 3.10 | 2.09 | 34  | 27.3 | 173.8           | 75                                 | 8.86  | 33.977 | 2.82 | 26.36             | 167.4           | .142 |  |       |  |
| 75  | 8.86  | 33.977 | 2.82 | 2.13 | 36  | 28.7 | 167.4           | 100                                | 8.51  | 33.997 | 2.28 | 26.43             | 160.7           | .183 |  |       |  |
| 98  | 8.54  | 33.996 | 2.33 | 2.24 | 40  | 31.6 | 161.2           |                                    |       |        |      |                   |                 |      |  |       |  |

| OBSERVED LEVELS OF DEPTH  |   |   |     |     |     |     |                 | STANDARD LEVELS OF DEPTH |       |       |     |                   |                 |      |  |       |  |
|---|---|---|-----|-----|-----|-----|-----------------|--------------------------|-------|-------|-----|-------------------|-----------------|------|--|-------|--|
| INPUT   |   |   |     |     |     |     |                 | COMPUTED                 |       |       |     |                   |                 |      |  |       |  |
| Z   | T | S | OXY | PHO | SIL | NIT | D* <sup>T</sup> | Z                        | T     | S     | OXY | SIG* <sup>T</sup> | D* <sup>T</sup> | DD   |  |       |  |
| 67.55   |   |   |     |     |     |     |                 | CALCOFI CRUISE 6806      |       |       |     |                   |                 |      |  | 67.55 |  |
| DAVID STARR JORDAN, JUNE 21 1968, 0835 GMT, 36 39N 122 26W, SOUNDING 1200 FM, WIND 330 16 KNOTS, WEATHER CLEAR, SEA MODERATE. |   |   |     |     |     |     |                 |                          |       |       |     |                   |                 |      |  |       |  |
|   |   |   |     |     |     |     |                 | 0                        | 14.16 | 33.44 | -   | 24.97             | 299.6           | 0    |  |       |  |
|   |   |   |     |     |     |     |                 | 10                       | 14.13 | 33.44 | -   | 24.98             | 299.0           | .030 |  |       |  |
|   |   |   |     |     |     |     |                 | 20                       | 13.76 | 33.49 | -   | 25.09             | 288.0           | .059 |  |       |  |
|   |   |   |     |     |     |     |                 | 30                       | 12.11 | 33.40 | -   | 25.35             | 263.6           | .087 |  |       |  |
|   |   |   |     |     |     |     |                 | 50                       | 11.17 | 33.60 | -   | 25.68             | 232.4           | .137 |  |       |  |
|   |   |   |     |     |     |     |                 | 75                       | 9.70  | 33.64 | -   | 25.96             | 205.2           | .192 |  |       |  |
|   |   |   |     |     |     |     |                 | 100                      | 8.86  | 33.80 | -   | 26.22             | 180.5           | .240 |  |       |  |
|   |   |   |     |     |     |     |                 | 125                      | 8.60  | 33.94 | -   | 26.37             | 166.2           | .284 |  |       |  |
|   |   |   |     |     |     |     |                 | 150                      | 8.39  | 34.00 | -   | 26.45             | 158.7           | .326 |  |       |  |
|   |   |   |     |     |     |     |                 | 200                      | 7.71  | 34.05 | -   | 26.59             | 145.4           | .403 |  |       |  |
|   |   |   |     |     |     |     |                 | 250                      | 7.64  | 34.16 | -   | 26.69             | 136.2           | .475 |  |       |  |
|   |   |   |     |     |     |     |                 | 300                      | 7.07  | 34.18 | -   | 26.78             | 127.1           | .543 |  |       |  |
|   |   |   |     |     |     |     |                 | 400                      | 6.03  | 34.17 | -   | 26.91             | 114.7           | .669 |  |       |  |
|   |   |   |     |     |     |     |                 | 500                      | 5.44  | 34.22 | -   | 27.03             | 104.1           | .784 |  |       |  |
|   |   |   |     |     |     |     |                 | 600                      | 5.10  | 34.30 | -   | 27.13             | 94.3            | .890 |  |       |  |

| INPUT   |   |   |     |     |     |     |                 | COMPUTED            |       |       |     |                   |                 |      |  |       |  |
|---|---|---|-----|-----|-----|-----|-----------------|---------------------|-------|-------|-----|-------------------|-----------------|------|--|-------|--|
| Z   | T | S | OXY | PHO | SIL | NIT | D* <sup>T</sup> | Z                   | T     | S     | OXY | SIG* <sup>T</sup> | D* <sup>T</sup> | DD   |  |       |  |
| 67.60   |   |   |     |     |     |     |                 | CALCOFI CRUISE 6806 |       |       |     |                   |                 |      |  | 67.60 |  |
| DAVID STARR JORDAN, JUNE 21 1968, 0503 GMT, 36 28N 122 47W, SOUNDING 1600 FM, WIND 300 14 KNOTS, WEATHER CLEAR, SEA MODERATE. |   |   |     |     |     |     |                 |                     |       |       |     |                   |                 |      |  |       |  |
|   |   |   |     |     |     |     |                 | 0                   | 13.52 | 33.17 | -   | 24.89             | 306.8           | 0    |  |       |  |
|   |   |   |     |     |     |     |                 | 10                  | 13.37 | 33.26 | -   | 24.99             | 297.4           | .030 |  |       |  |
|   |   |   |     |     |     |     |                 | 20                  | 13.18 | 33.25 | -   | 25.02             | 294.5           | .060 |  |       |  |
|   |   |   |     |     |     |     |                 | 30                  | 12.22 | 33.16 | -   | 25.14             | 283.3           | .089 |  |       |  |
|   |   |   |     |     |     |     |                 | 50                  | 10.10 | 33.10 | -   | 25.47             | 251.6           | .142 |  |       |  |
|   |   |   |     |     |     |     |                 | 75                  | 9.43  | 33.40 | -   | 25.82             | 218.8           | .202 |  |       |  |
|   |   |   |     |     |     |     |                 | 100                 | 8.97  | 33.69 | -   | 26.12             | 190.3           | .253 |  |       |  |
|   |   |   |     |     |     |     |                 | 125                 | 8.76  | 33.78 | -   | 26.22             | 180.5           | .300 |  |       |  |
|   |   |   |     |     |     |     |                 | 150                 | 8.66  | 33.92 | -   | 26.35             | 168.6           | .344 |  |       |  |
|   |   |   |     |     |     |     |                 | 200                 | 7.70  | 33.97 | -   | 26.53             | 151.2           | .426 |  |       |  |
|   |   |   |     |     |     |     |                 | 250                 | 7.15  | 34.03 | -   | 26.66             | 139.3           | .500 |  |       |  |
|   |   |   |     |     |     |     |                 | 300                 | 6.58  | 34.06 | -   | 26.76             | 129.7           | .569 |  |       |  |
|   |   |   |     |     |     |     |                 | 400                 | 5.80  | 34.13 | -   | 26.91             | 115.0           | .696 |  |       |  |
|   |   |   |     |     |     |     |                 | 500                 | 5.48  | 34.22 | -   | 27.02             | 104.5           | .812 |  |       |  |
|   |   |   |     |     |     |     |                 | 600                 | 5.01  | 34.29 | -   | 27.13             | 94.0            | .917 |  |       |  |

## OBSERVED LEVELS OF DEPTH STANDARD LEVELS OF DEPTH

| INPUT  |       |        |      |      |     |       |       | COMPUTED            |       |        |      |       |       |      |  |       |  |
|--|-------|--------|------|------|-----|-------|-------|---------------------|-------|--------|------|-------|-------|------|--|-------|--|
| Z  | T     | S      | OXY  | PHO  | SIL | NIT   | D*1   | Z                   | T     | S      | OXY  | SIG*1 | D*1   | DD   |  |       |  |
| 67.60  |       |        |      |      |     |       |       | CALCOFI CRUISE 6806 |       |        |      |       |       |      |  | 67.60 |  |
| DAVID STARR JORDAN, JUNE 21 1968, 0548 GMT, 36 28N 122 47W, SOUNDING 1600 FM, WIND 300 14 KNOTS, WEATHER CLEAR, SEA MODERATE, WIRE ANGLE 12. |       |        |      |      |     |       |       |                     |       |        |      |       |       |      |  |       |  |
| 1  | 13.53 | 33.139 | 6.30 | 0.59 | 6   | 2.8   | 309.3 | 0                   | 13.53 | 33.139 | 6.30 | 24.87 | 309.3 | 0    |  |       |  |
| 11   | 13.52 | 33.135 | 6.33 | 0.60 | 8   | 3.5   | 309.4 | 10                  | 13.52 | 33.135 | 6.33 | 24.87 | 309.4 | .031 |  |       |  |
| 30   | 12.60 | 33.128 | 6.40 | 0.60 | 4   | 3.2   | 292.6 | 20                  | 13.17 | 33.131 | 6.38 | 24.93 | 303.0 | .062 |  |       |  |
| 39   | 12.10 | 33.130 | 6.35 | 0.48 | 5   | 2.3   | 283.3 | 30                  | 12.60 | 33.128 | 6.40 | 25.04 | 292.6 | .091 |  |       |  |
| 53   | 10.34 | 33.015 | 5.88 | 0.79 | 7   | 8.6   | 261.7 | 50                  | 10.71 | 33.032 | 6.00 | 25.32 | 266.5 | .148 |  |       |  |
| 67   | 9.99  | 33.223 | 5.54 | 0.99 | 10  | 10.4  | 240.7 | 75                  | 9.76  | 33.320 | 5.18 | 25.70 | 229.8 | .210 |  |       |  |
| 92   | 9.31  | 33.501 | 4.42 | 1.40 | 19  | 10.6  | 209.5 | 100                 | 9.18  | 33.586 | 4.21 | 26.00 | 201.1 | .264 |  |       |  |
| 110  | 9.03  | 33.681 | 3.99 | 1.63 | 25  | 22.6  | 191.9 | 125                 | 8.78  | 33.784 | 3.63 | 26.22 | 180.4 | .312 |  |       |  |
| 129  | 8.71  | 33.806 | 3.55 | 1.76 | 29  | 25.0  | 177.8 | 150                 | 8.44  | 33.893 | 3.36 | 26.36 | 167.5 | .356 |  |       |  |
| 148  | 8.47  | 33.887 | 3.35 | 1.89 | 33  | 26.4  | 168.3 | 200                 | 7.79  | 33.963 | 3.36 | 26.51 | 153.0 | .426 |  |       |  |
| 176  | 8.09  | 33.942 | 3.53 | 1.76 | 35  | 28.5  | 158.7 | 250                 | 7.27  | 34.024 | 2.44 | 26.63 | 141.4 | .514 |  |       |  |
| 210  | 7.68  | 33.971 | 3.21 | 2.04 | 41  | 29.5  | 150.9 | 300                 | 6.72  | 34.053 | 1.95 | 26.73 | 132.1 | .584 |  |       |  |
| 238  | 7.44  | 34.022 | 2.56 | 2.21 | 46  | 32.5  | 143.8 | 400                 | 5.96  | 34.130 | 1.04 | 26.89 | 116.9 | .713 |  |       |  |
| 285  | 6.80  | 34.030 | 2.19 | 2.38 | 54  | 35.3  | 134.8 | 500                 | 5.50  | 34.218 | .58  | 27.02 | 104.9 | .830 |  |       |  |
| 338  | 6.58  | 34.116 | 1.34 | 2.68 | 62  | 38.6  | 125.6 | 600                 | 5.17  | 34.310 | .36  | 27.13 | 94.2  | .936 |  |       |  |
| 422  | 5.74  | 34.139 | .95  | 2.89 | 74  | 42.9  | 113.6 |                     |       |        |      |       |       |      |  |       |  |
| 505  | 5.48  | 34.223 | .56  | 2.92 | 79  | 43.8  | 104.3 |                     |       |        |      |       |       |      |  |       |  |
| 587  | 5.21  | 34.299 | .37  | 3.11 | 89  | 47.40 | 95.6  |                     |       |        |      |       |       |      |  |       |  |

## OBSERVED LEVELS OF DEPTH STANDARD LEVELS OF DEPTH

| INPUT   |   |   |     |     |     |     |     | COMPUTED            |       |       |     |       |       |       |  |       |  |
|---|---|---|-----|-----|-----|-----|-----|---------------------|-------|-------|-----|-------|-------|-------|--|-------|--|
| Z   | T | S | OXY | PHO | SIL | NIT | D*1 | Z                   | T     | S     | OXY | SIG*1 | D*1   | DD    |  |       |  |
| 67.90   |   |   |     |     |     |     |     | CALCOFI CRUISE 6806 |       |       |     |       |       |       |  | 67.90 |  |
| DAVID STARR JORDAN, JUNE 18 1968, 1900 GMT, 35 28N 124 55W, SOUNDING 2400 FM, WIND 340 13 KNOTS, WEATHER OVERCAST, SEA ROUGH. |   |   |     |     |     |     |     |                     |       |       |     |       |       |       |  |       |  |
|   |   |   |     |     |     |     |     | 0                   | 15.83 | 33.10 | -   | 24.35 | 358.9 | 0     |  |       |  |
|   |   |   |     |     |     |     |     | 10                  | 15.82 | 33.10 | -   | 24.35 | 358.7 | .036  |  |       |  |
|   |   |   |     |     |     |     |     | 20                  | 15.76 | 33.10 | -   | 24.36 | 357.4 | .072  |  |       |  |
|   |   |   |     |     |     |     |     | 30                  | 15.67 | 33.10 | -   | 24.38 | 355.5 | .107  |  |       |  |
|   |   |   |     |     |     |     |     | 50                  | 13.83 | 33.08 | -   | 24.76 | 319.5 | .175  |  |       |  |
|   |   |   |     |     |     |     |     | 75                  | 12.44 | 33.05 | -   | 25.01 | 295.4 | .252  |  |       |  |
|   |   |   |     |     |     |     |     | 100                 | 10.95 | 33.10 | -   | 25.33 | 265.5 | .323  |  |       |  |
|   |   |   |     |     |     |     |     | 125                 | 9.73  | 33.37 | -   | 25.75 | 225.7 | .385  |  |       |  |
|   |   |   |     |     |     |     |     | 150                 | 9.05  | 33.63 | -   | 26.06 | 196.0 | .438  |  |       |  |
|   |   |   |     |     |     |     |     | 200                 | 8.61  | 33.89 | -   | 26.33 | 170.1 | .531  |  |       |  |
|   |   |   |     |     |     |     |     | 250                 | 7.83  | 33.98 | -   | 26.52 | 152.3 | .614  |  |       |  |
|   |   |   |     |     |     |     |     | 300                 | 7.13  | 34.00 | -   | 26.63 | 141.3 | .690  |  |       |  |
|   |   |   |     |     |     |     |     | 400                 | 6.21  | 34.09 | -   | 26.83 | 122.9 | .827  |  |       |  |
|   |   |   |     |     |     |     |     | 500                 | 5.59  | 34.16 | -   | 26.96 | 110.3 | .949  |  |       |  |
|   |   |   |     |     |     |     |     | 600                 | 5.04  | 34.22 | -   | 27.07 | 99.6  | 1.080 |  |       |  |

70.53

CALCOFI CRUISE 6806

70.53

DAVID STARR JORDAN, JUNE 17 1968, 1835 GMT, 36 06.5N 121 54W, SOUNDING 580 FM, WIND MISSING, WEATHER FOG, SEA SLIGHT.

|  |  |  |  |  |  |  |  |     |       |       |   |       |       |      |
|--|--|--|--|--|--|--|--|-----|-------|-------|---|-------|-------|------|
|  |  |  |  |  |  |  |  | 0   | 11.44 | 33.82 | - | 25.80 | 220.8 | 0    |
|  |  |  |  |  |  |  |  | 10  | 10.69 | 33.87 | - | 25.97 | 204.3 | .021 |
|  |  |  |  |  |  |  |  | 20  | 10.25 | 33.93 | - | 26.09 | 192.6 | .041 |
|  |  |  |  |  |  |  |  | 30  | 9.92  | 33.92 | - | 26.14 | 188.0 | .060 |
|  |  |  |  |  |  |  |  | 50  | 9.76  | 33.92 | - | 26.17 | 185.4 | .098 |
|  |  |  |  |  |  |  |  | 75  | 9.13  | 33.94 | - | 26.29 | 174.2 | .143 |
|  |  |  |  |  |  |  |  | 100 | 8.63  | 33.98 | - | 26.40 | 163.7 | .186 |
|  |  |  |  |  |  |  |  | 125 | 8.32  | 34.02 | - | 26.48 | 156.2 | .226 |
|  |  |  |  |  |  |  |  | 150 | 7.95  | 34.04 | - | 26.55 | 149.5 | .265 |
|  |  |  |  |  |  |  |  | 200 | 7.55  | 34.12 | - | 26.67 | 138.0 | .338 |
|  |  |  |  |  |  |  |  | 250 | 7.45  | 34.18 | - | 26.73 | 132.2 | .408 |
|  |  |  |  |  |  |  |  | 300 | 7.21  | 34.22 | - | 26.80 | 126.0 | .474 |
|  |  |  |  |  |  |  |  | 400 | 6.56  | 34.21 | - | 26.88 | 118.3 | .602 |
|  |  |  |  |  |  |  |  | 500 | 5.96  | 34.26 | - | 26.99 | 107.2 | .721 |
|  |  |  |  |  |  |  |  | 600 | 5.41  | 34.28 | - | 27.08 | 99.2  | .831 |

| OBSERVED LEVELS OF DEPTH  |       |        |      |          |     |      |       | STANDARD LEVELS OF DEPTH |       |        |      |          |       |      |  |       |  |
|---|-------|--------|------|----------|-----|------|-------|--------------------------|-------|--------|------|----------|-------|------|--|-------|--|
| INPUT   |       |        |      | COMPUTED |     |      |       | INPUT                    |       |        |      | COMPUTED |       |      |  |       |  |
| Z   | T     | S      | OXY  | PHO      | SIL | NIT  | D*T   | Z                        | T     | S      | OXY  | SIG*T    | D*T   | DD   |  |       |  |
| 70.53   |       |        |      |          |     |      |       | CALCOFI CRUISE 6806      |       |        |      |          |       |      |  | 70.53 |  |
| DAVID STARR JORDAN, JUNE 17 1968, 1920 GMT, 36 06.5N 121 54W, SOUNDING 580 FM, WIND CALM, WEATHER FOG, SEA SLIGHT, WIRE ANGLE 06. |       |        |      |          |     |      |       |                          |       |        |      |          |       |      |  |       |  |
| 0   | 11.49 | 33.820 | 5.97 | 1.69     | 25  | 19.0 | 221.7 | 0                        | 11.49 | 33.820 | 5.97 | 25.79    | 221.7 | 0    |  |       |  |
| 11  | 10.97 | 33.838 | 5.80 | 1.66     | 25  | 19.5 | 211.4 | 10                       | 11.02 | 33.837 | 5.82 | 25.89    | 212.3 | .022 |  |       |  |
| 28  | 10.17 | 33.855 | 5.34 | 1.65     | 27  | 20.4 | 196.8 | 20                       | 10.51 | 33.847 | 5.53 | 25.98    | 203.0 | .043 |  |       |  |
| 39  | 9.93  | 33.917 | 5.36 | 1.61     | 30  | 20.1 | 188.4 | 30                       | 10.11 | 33.867 | 5.34 | 26.07    | 195.0 | .062 |  |       |  |
| 49  | 9.88  | 33.918 | 5.21 | 1.80     | 31  | 22.4 | 187.5 | 50                       | 9.67  | 33.918 | 5.20 | 26.15    | 187.4 | .101 |  |       |  |
| 63  | 9.75  | 33.913 | 5.03 | 1.95     | 30  | 23.5 | 185.8 | 75                       | 9.65  | 33.912 | 4.78 | 26.18    | 184.2 | .148 |  |       |  |
| 78  | 9.60  | 33.913 | 4.67 | 1.96     | 31  | 23.4 | 183.4 | 100                      | 8.84  | 33.942 | 3.04 | 26.34    | 169.7 | .192 |  |       |  |
| 95  | 8.97  | 33.931 | 3.24 | 2.03     | 32  | 25.9 | 172.4 | 125                      | 8.35  | 34.006 | 2.64 | 26.46    | 157.7 | .234 |  |       |  |
| 121   | 8.43  | 33.996 | 2.68 | 2.13     | 36  | 28.0 | 159.6 | 150                      | 7.93  | 34.047 | 2.48 | 26.56    | 148.7 | .273 |  |       |  |
| 141   | 8.05  | 34.040 | 2.54 | 2.23     | 40  | 29.0 | 150.9 | 200                      | 7.46  | 34.077 | 2.05 | 26.65    | 140.0 | .346 |  |       |  |
| 169   | 7.74  | 34.053 | 2.35 | 2.36     | 44  | 31.3 | 145.6 | 250                      | 7.41  | 34.169 | 1.32 | 26.73    | 132.4 | .416 |  |       |  |
| 198   | 7.47  | 34.074 | 2.08 | 2.47     | 48  | 32.5 | 140.3 | 300                      | 7.31  | 34.210 | 1.02 | 26.78    | 128.0 | .483 |  |       |  |
| 228   | 7.42  | 34.132 | 1.60 | 2.62     | 52  | 33.8 | 135.3 | 400                      | 6.66  | 34.221 | .81  | 26.87    | 118.8 | .612 |  |       |  |
| 267   | 7.40  | 34.191 | 1.16 | 2.77     | 55  | 35.0 | 130.7 | 500                      | 6.09  | 34.251 | .67  | 26.97    | 109.5 | .732 |  |       |  |
| 326   | 7.19  | 34.215 | .97  | 2.38     | 58  | 32.1 | 126.1 |                          |       |        |      |          |       |      |  |       |  |
| 399   | 6.67  | 34.221 | .81  | 3.02     | 64  | 38.2 | 118.9 |                          |       |        |      |          |       |      |  |       |  |
| 471   | 6.27  | 34.239 | .75  | 3.04     | 70  | 38.2 | 112.5 |                          |       |        |      |          |       |      |  |       |  |
| 549   | 5.78  | 34.278 | .46  | 3.18     | 76  | 40.7 | 103.7 |                          |       |        |      |          |       |      |  |       |  |

| OBSERVED LEVELS OF DEPTH  |   |   |     |          |     |     |     | STANDARD LEVELS OF DEPTH |       |       |     |          |       |      |  |       |  |
|---|---|---|-----|----------|-----|-----|-----|--------------------------|-------|-------|-----|----------|-------|------|--|-------|--|
| INPUT   |   |   |     | COMPUTED |     |     |     | INPUT                    |       |       |     | COMPUTED |       |      |  |       |  |
| Z   | T | S | OXY | PHO      | SIL | NIT | D*T | Z                        | T     | S     | OXY | SIG*T    | D*T   | DD   |  |       |  |
| 70.60   |   |   |     |          |     |     |     | CALCOFI CRUISE 6806      |       |       |     |          |       |      |  | 70.60 |  |
| DAVID STARR JORDAN, JUNE 17 1968, 2243 GMT, 35 52N 122 24W, SOUNDING 1740 FM, WIND 230 4 KNOTS, WEATHER OVERCAST, SEA SLIGHT. |   |   |     |          |     |     |     |                          |       |       |     |          |       |      |  |       |  |
|   |   |   |     |          |     |     |     | 0                        | 14.82 | 33.10 | -   | 24.57    | 337.8 | 0    |  |       |  |
|   |   |   |     |          |     |     |     | 10                       | 13.37 | 33.09 | -   | 24.86    | 309.8 | .032 |  |       |  |
|   |   |   |     |          |     |     |     | 20                       | 12.01 | 33.09 | -   | 25.13    | 284.7 | .062 |  |       |  |
|   |   |   |     |          |     |     |     | 30                       | 12.00 | 33.19 | -   | 25.21    | 277.1 | .090 |  |       |  |
|   |   |   |     |          |     |     |     | 50                       | 11.59 | 33.39 | -   | 25.44    | 255.1 | .144 |  |       |  |
|   |   |   |     |          |     |     |     | 75                       | 10.81 | 33.61 | -   | 25.75    | 225.5 | .204 |  |       |  |
|   |   |   |     |          |     |     |     | 100                      | 9.35  | 33.51 | -   | 25.92    | 209.4 | .259 |  |       |  |
|   |   |   |     |          |     |     |     | 125                      | 9.29  | 33.77 | -   | 26.13    | 189.2 | .309 |  |       |  |
|   |   |   |     |          |     |     |     | 150                      | 8.86  | 33.86 | -   | 26.27    | 176.0 | .356 |  |       |  |
|   |   |   |     |          |     |     |     | 200                      | 8.14  | 33.98 | -   | 26.47    | 156.6 | .440 |  |       |  |
|   |   |   |     |          |     |     |     | 250                      | 7.65  | 34.06 | -   | 26.61    | 143.8 | .517 |  |       |  |
|   |   |   |     |          |     |     |     | 300                      | 7.18  | 34.11 | -   | 26.71    | 133.8 | .589 |  |       |  |
|   |   |   |     |          |     |     |     | 400                      | 6.16  | 34.12 | -   | 26.86    | 120.0 | .721 |  |       |  |
|   |   |   |     |          |     |     |     | 500                      | 5.77  | 34.21 | -   | 26.98    | 108.7 | .841 |  |       |  |
|   |   |   |     |          |     |     |     | 600                      | 5.18  | 34.27 | -   | 27.10    | 97.4  | .951 |  |       |  |

| INPUT   |       |         |      |      |     |      |       | OUTPUT AT STANDARD LEVELS OF DEPTH |       |        |      |       |       |      |  |       |  |
|---|-------|---------|------|------|-----|------|-------|------------------------------------|-------|--------|------|-------|-------|------|--|-------|--|
| Z   | T     | S       | OXY  | PHO  | SIL | NIT  | D*T   | Z                                  | T     | S      | OXY  | SIG*T | D*T   | DD   |  |       |  |
| 70.60   |       |         |      |      |     |      |       | CALCOFI CRUISE 6806                |       |        |      |       |       |      |  | 70.60 |  |
| DAVID STARR JORDAN, JUNE 17 1968, 2317 GMT, 35 52N, 122 24W, SOUNDING 1740 FM, WIND 230 4 KNOTS, WEATHER OVERCAST, SEA SLIGHT, WIRE ANGLE 05. |       |         |      |      |     |      |       |                                    |       |        |      |       |       |      |  |       |  |
| 0   | 14.97 | 33.117  | 6.15 | 0.39 | 1   | 0.3  | 339.6 | 0                                  | 14.97 | 33.117 | 6.15 | 24.55 | 339.6 | 0    |  |       |  |
| 11  | 13.38 | 33.183  | 6.44 | 0.53 | 3   | 1.8  | 303.2 | 10                                 | 13.51 | 33.180 | 6.42 | 24.90 | 305.8 | .032 |  |       |  |
| 30  | 11.73 | 33.117  | 6.39 | 0.60 | 3   | 2.7  | 277.7 | 20                                 | 12.41 | 33.144 | 6.46 | 25.09 | 288.0 | .062 |  |       |  |
| 40  | 11.49 | 33.226  | 6.15 | 0.76 | 5   | 5.8  | 265.5 | 30                                 | 11.73 | 33.117 | 6.39 | 25.20 | 277.7 | .090 |  |       |  |
| 49  | 11.58 | 33.339  | 6.05 | 0.91 | 7   | 8.1  | 258.7 | 50                                 | 11.52 | 33.338 | 6.04 | 25.41 | 257.8 | .144 |  |       |  |
| 64  | 10.64 | 33.339  | 5.80 | 1.02 | 9   | 9.8  | 242.7 | 75                                 | 10.76 | 33.560 | 5.57 | 25.72 | 228.4 | .205 |  |       |  |
| 78  | 10.80 | 33.618  | 5.49 | 1.32 | 13  | 15.3 | 224.8 | 100                                | 9.48  | 33.508 | 4.50 | 25.89 | 211.6 | .261 |  |       |  |
| 97  | 9.55  | 33.485  | 4.63 | 1.43 | 17  | 17.4 | 214.4 | 125                                | 9.24  | 33.759 | 3.66 | 26.13 | 189.2 | .311 |  |       |  |
| 121   | 9.30  | 33.738  | 3.74 | 1.80 | 25  | 23.7 | 191.8 | 150                                | 8.78  | 33.866 | 3.38 | 26.29 | 174.5 | .357 |  |       |  |
| 141   | 8.95  | 33.822  | 3.43 | 1.92 | 29  | 26.2 | 180.2 | 200                                | 8.10  | 34.003 | 2.98 | 26.50 | 154.3 | .441 |  |       |  |
| 170   | 8.44  | 33.951  | 3.30 | 2.01 | 33  | 27.8 | 163.1 | 250                                | 7.66  | 34.062 | 2.15 | 26.61 | 143.9 | .518 |  |       |  |
| 200   | 8.10  | 34.003  | 2.98 | 2.12 | 37  | 30.2 | 154.3 | 300                                | 7.28  | 34.108 | 1.67 | 26.70 | 135.2 | .590 |  |       |  |
| 228   | 7.81  | 34.0434 | 2.43 | 2.31 | 43  | 32.9 | 147.3 | 400                                | 6.27  | 34.137 | 1.09 | 26.86 | 120.1 | .722 |  |       |  |
| 267   | 7.56  | 34.074A | 1.99 | 2.49 | 48  | 35.7 | 141.6 | 500                                | 5.74  | 34.208 | .65  | 26.98 | 108.5 | .842 |  |       |  |
| 325   | 7.04  | 34.130  | 1.46 | 2.71 | 55  | 38.8 | 130.4 |                                    |       |        |      |       |       |      |  |       |  |
| 398   | 6.28  | 34.136  | 1.10 | 2.92 | 64  | 41.9 | 120.3 |                                    |       |        |      |       |       |      |  |       |  |
| 471   | 5.88  | 34.182  | .78  | 3.02 | 71  | -    | 112.0 |                                    |       |        |      |       |       |      |  |       |  |
| 548   | 5.53  | 34.259  | .45  | 3.16 | 80  | -    | 102.2 |                                    |       |        |      |       |       |      |  |       |  |

A) THE SALINITY SAMPLES AT 228 AND 267 METERS APPEAR TO HAVE BEEN REVERSED. COMPARISON WITH THE STD INDICATES THEY ARE IN THE CORRECT ORDER.

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

| INPUT |   |   |     |     |     |     | COMPUTED |   |   |   |     |       |     |    |
|-------|---|---|-----|-----|-----|-----|----------|---|---|---|-----|-------|-----|----|
| Z     | T | S | OXY | PHO | SIL | NIT | D*T      | Z | T | S | OXY | SIG*T | D*T | DD |

70.70

CALCOFI CRUISE 6806

70.70

DAVID STARR JORDAN, JUNE 18 1968, 0418 GMT, 35 33N 123 05W, SOUNDING 2100 FM, WIND 320 10 KNOTS, WEATHER MISSING, SEA MISSING.

|     |       |       |   |       |       |      |
|-----|-------|-------|---|-------|-------|------|
| 0   | 14.00 | 33.27 | - | 24.87 | 308.9 | 0    |
| 10  | 13.45 | 33.30 | - | 25.01 | 296.0 | .030 |
| 20  | 13.10 | 33.40 | - | 25.15 | 281.9 | .059 |
| 30  | 12.95 | 33.42 | - | 25.20 | 277.6 | .087 |
| 50  | 12.62 | 33.46 | - | 25.30 | 268.5 | .142 |
| 75  | 12.10 | 33.47 | - | 25.40 | 258.3 | .208 |
| 100 | 10.97 | 33.52 | - | 25.65 | 234.9 | .270 |
| 125 | 10.03 | 33.66 | - | 25.92 | 209.0 | .326 |
| 150 | 9.42  | 33.80 | - | 26.13 | 189.0 | .377 |
| 200 | 8.71  | 34.03 | - | 26.43 | 161.2 | .466 |
| 250 | 7.99  | 34.06 | - | 26.56 | 148.6 | .546 |
| 300 | 7.42  | 34.10 | - | 26.67 | 137.7 | .619 |
| 400 | 6.46  | 34.14 | - | 26.84 | 122.3 | .755 |
| 500 | 5.52  | 34.15 | - | 26.96 | 110.2 | .877 |
| 600 | 5.09  | 34.23 | - | 27.08 | 99.4  | .988 |

70.80

CALCOFI CRUISE 6806

70.80

DAVID STARR JORDAN, JUNE 18 1968, 0834 GMT, 35 14N 123 45.5W, SOUNDING 2250 FM, WIND 340 10 KNOTS, WEATHER MISSING, SEA MISSING.

|     |       |       |   |       |       |      |
|-----|-------|-------|---|-------|-------|------|
| 0   | 15.16 | 33.12 | - | 24.51 | 343.3 | 0    |
| 10  | 14.94 | 33.16 | - | 24.59 | 335.9 | .034 |
| 20  | 14.26 | 33.18 | - | 24.75 | 320.6 | .067 |
| 30  | 13.04 | 33.13 | - | 24.96 | 300.6 | .098 |
| 50  | 13.34 | 33.42 | - | 25.12 | 285.0 | .157 |
| 75  | 10.95 | 33.43 | - | 25.58 | 241.2 | .223 |
| 100 | 10.04 | 33.70 | - | 25.95 | 206.2 | .279 |
| 125 | 9.54  | 33.82 | - | 26.13 | 189.4 | .329 |
| 150 | 8.89  | 33.90 | - | 26.30 | 173.5 | .375 |
| 200 | 8.21  | 34.00 | - | 26.48 | 156.1 | .459 |
| 250 | 7.48  | 34.03 | - | 26.61 | 143.7 | .536 |
| 300 | 6.93  | 34.08 | - | 26.73 | 132.7 | .607 |
| 400 | 5.86  | 34.12 | - | 26.90 | 116.4 | .737 |
| 500 | 5.38  | 34.21 | - | 27.03 | 104.1 | .853 |
| 600 | 4.84  | 34.25 | - | 27.12 | 95.2  | .958 |

## INPUT

## OUTPUT AT STANDARD LEVELS OF DEPTH

| Z | T | S | OXY | PHO | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |
|---|---|---|-----|-----|-----|-----|-----|---|---|---|-----|-------|-----|----|
|---|---|---|-----|-----|-----|-----|-----|---|---|---|-----|-------|-----|----|

70.80

CALCOFI CRUISE 6806

70.80

DAVID STARR JORDAN, JUNE 18 1968, 0930 GMT, 35 14N 123 45.5W, SOUNDING 2250 FM, WIND 300 10 KNOTS, WEATHER MISSING, SEA MISSING, WIRE ANGLE 00.

|     |       |        |      |      |    |      |       |     |       |        |      |       |       |      |
|-----|-------|--------|------|------|----|------|-------|-----|-------|--------|------|-------|-------|------|
| 1   | 14.62 | 33.168 | 6.11 | 0.40 | 2  | 1.1  | 328.7 | 0   | 14.62 | 33.168 | 6.11 | 24.66 | 328.7 | 0    |
| 11  | 14.55 | 33.218 | 6.15 | 0.45 | 2  | 1.4  | 323.7 | 10  | 14.57 | 33.213 | 6.15 | 24.71 | 324.4 | .033 |
| 30  | 13.81 | 33.296 | 6.27 | 0.55 | 2  | 1.5  | 303.2 | 20  | 14.23 | 33.245 | 6.23 | 24.80 | 315.2 | .065 |
| 40  | 13.54 | 33.407 | 6.18 | 0.66 | 3  | 3.6  | 289.8 | 30  | 13.81 | 33.296 | 6.27 | 24.93 | 303.2 | .096 |
| 50  | 13.23 | 33.412 | 6.18 | 0.73 | 4  | 4.2  | 283.5 | 50  | 13.23 | 33.412 | 6.18 | 25.14 | 283.5 | .155 |
| 64  | 11.44 | 33.351 | 6.06 | 0.91 | 5  | 7.1  | 255.4 | 75  | 10.71 | 33.511 | 5.36 | 25.69 | 231.1 | .219 |
| 79  | 10.54 | 33.582 | 5.07 | 1.42 | 15 | 15.5 | 223.1 | 100 | 9.89  | 33.712 | 4.18 | 25.99 | 202.9 | .274 |
| 98  | 9.94  | 33.700 | 4.24 | 1.07 | 22 | 20.1 | 204.6 | 125 | 9.33  | 33.843 | 3.50 | 26.18 | 184.4 | .323 |
| 122 | 9.40  | 33.830 | 3.58 | 1.78 | 28 | 23.6 | 186.5 | 150 | 8.78  | 33.936 | 2.97 | 26.34 | 169.2 | .368 |
| 141 | 8.97  | 33.903 | 3.10 | 2.07 | 31 | 25.7 | 174.5 | 200 | 8.12  | 34.008 | 2.71 | 26.50 | 154.2 | .450 |
| 171 | 8.40  | 33.993 | 2.80 | 2.07 | 36 | 27.0 | 159.4 | 250 | 7.44  | 34.046 | 2.26 | 26.63 | 142.0 | .526 |
| 201 | 8.11  | 34.009 | 2.71 | 2.18 | 39 | 28.5 | 154.0 | 300 | 6.99  | 34.091 | 1.69 | 26.73 | 132.7 | .597 |
| 229 | 7.72  | 34.035 | 2.43 | 2.31 | 43 | 30.1 | 146.7 | 400 | 5.92  | 34.125 | 1.03 | 26.89 | 116.8 | .727 |
| 268 | 7.22  | 34.055 | 2.10 | 2.49 | 49 | 32.9 | 138.4 | 500 | 5.33  | 34.206 | .51  | 27.03 | 103.8 | .842 |
| 327 | 6.82  | 34.120 | 1.36 | 2.74 | 57 | 36.2 | 128.3 |     |       |        |      |       |       |      |
| 399 | 5.93  | 34.124 | 1.04 | 2.91 | 68 | 38.5 | 117.0 |     |       |        |      |       |       |      |
| 472 | 5.46  | 34.180 | .62  | 3.06 | 77 | 41.0 | 107.3 |     |       |        |      |       |       |      |
| 549 | 5.16  | 34.258 | .37  | 3.18 | 86 | 44.3 | 98.1  |     |       |        |      |       |       |      |





## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

| INPUT |   |   |     |     |     |     |     | COMPUTED            |   |   |     |       |     |    |  |       |
|-------|---|---|-----|-----|-----|-----|-----|---------------------|---|---|-----|-------|-----|----|--|-------|
| Z     | T | S | OXY | PHO | SIL | NIT | D*T | Z                   | T | S | OXY | SIG*T | D*T | DC |  |       |
| 73.60 |   |   |     |     |     |     |     | CALCOFI CRUISE 6806 |   |   |     |       |     |    |  | 73.60 |

DAVID STARR JORDAN, JUNE 17 1968, 0611 GMT, 35 18N 121 57.5W, SOUNDING 1300 FM, WIND CALM, WEATHER MISSING, SEA MISSING.

|     |       |       |   |       |       |      |
|-----|-------|-------|---|-------|-------|------|
| 0   | 13.28 | 33.63 | - | 25.30 | 268.5 | 0    |
| 10  | 11.89 | 33.65 | - | 25.58 | 241.3 | .025 |
| 20  | 10.86 | 33.73 | - | 25.83 | 217.5 | .048 |
| 30  | 10.54 | 33.76 | - | 25.91 | 209.9 | .070 |
| 50  | 9.66  | 33.88 | - | 26.16 | 186.8 | .110 |
| 75  | 8.98  | 33.90 | - | 26.28 | 174.9 | .155 |
| 100 | 8.75  | 33.97 | - | 26.37 | 166.2 | .198 |
| 125 | 8.55  | 34.00 | - | 26.43 | 161.1 | .240 |
| 150 | 8.31  | 34.05 | - | 26.50 | 153.9 | .280 |
| 200 | 7.86  | 34.11 | - | 26.62 | 143.0 | .355 |
| 250 | 7.44  | 34.14 | - | 26.70 | 135.0 | .427 |
| 300 | 7.01  | 34.15 | - | 26.77 | 128.5 | .495 |
| 400 | 6.34  | 34.22 | - | 26.91 | 114.8 | .622 |
| 500 | 5.72  | 34.26 | - | 27.02 | 104.3 | .737 |
| 600 | 5.18  | 34.29 | - | 27.11 | 95.9  | .844 |

## INPUT

## OUTPUT AT STANDARD LEVELS OF DEPTH

| Z     | T | S | OXY | PHO | SIL | NIT | D*T | Z                   | T | S | OXY | SIG*T | D*T | DD |  |       |
|-------|---|---|-----|-----|-----|-----|-----|---------------------|---|---|-----|-------|-----|----|--|-------|
| 73.60 |   |   |     |     |     |     |     | CALCOFI CRUISE 6806 |   |   |     |       |     |    |  | 73.60 |

DAVID STARR JORDAN, JUNE 17 1968, 0651 GMT, 35 18N 121 57.5W, SOUNDING 1300 FM, WIND CALM, WEATHER MISSING, SEA SLIGHT, WIRE ANGLE 17.

|     |       |        |      |      |    |      |       |     |       |        |      |       |       |      |
|-----|-------|--------|------|------|----|------|-------|-----|-------|--------|------|-------|-------|------|
| 1   | 13.21 | 33.627 | 7.38 | 0.34 | 0  | 5.4  | 267.3 | 0   | 13.21 | 33.627 | 7.38 | 25.31 | 267.3 | 0    |
| 10  | 11.78 | 33.645 | 6.52 | 0.82 | 1  | 10.1 | 239.7 | 10  | 11.78 | 33.645 | 6.52 | 25.60 | 239.7 | .025 |
| 29  | 10.72 | 33.747 | 5.43 | 1.51 | 19 | 18.5 | 213.9 | 20  | 11.08 | 33.702 | 5.92 | 25.77 | 223.2 | .049 |
| 38  | 10.11 | 33.747 | 4.73 | 1.54 | 21 | 19.3 | 203.8 | 30  | 10.64 | 33.746 | 5.35 | 25.88 | 212.7 | .070 |
| 48  | 9.86  | 33.813 | 4.41 | 1.79 | 25 | 22.2 | 195.0 | 50  | 9.74  | 33.818 | 4.24 | 26.09 | 192.6 | .111 |
| 61  | 9.09  | 33.834 | 3.30 | 1.94 | 29 | 25.5 | 181.4 | 75  | 8.98  | 33.877 | 3.02 | 26.26 | 176.6 | .158 |
| 75  | 8.98  | 33.877 | 3.02 | 1.98 | 30 | 26.3 | 176.6 | 100 | 8.79  | 33.939 | 2.89 | 26.34 | 169.1 | .201 |
| 92  | 8.85  | 33.917 | 3.00 | 1.99 | 32 | 26.1 | 171.7 | 125 | 8.57  | 33.982 | 2.80 | 26.41 | 162.7 | .243 |
| 115 | 8.67  | 33.975 | 2.72 | 2.05 | 34 | 27.1 | 164.7 | 150 | 8.40  | 34.030 | 2.53 | 26.47 | 156.6 | .284 |
| 135 | 8.48  | 33.990 | 2.85 | 2.15 | 36 | 28.4 | 160.8 | 200 | 7.95  | 34.102 | 1.90 | 26.60 | 144.8 | .361 |
| 161 | 8.34  | 34.061 | 2.25 | 2.29 | 40 | 30.1 | 153.5 | 250 | 7.34  | 34.133 | 1.51 | 26.71 | 134.1 | .432 |
| 189 | 8.09  | 34.087 | 2.04 | 2.28 | 43 | 30.9 | 148.0 | 300 | 6.99  | 34.180 | 1.21 | 26.80 | 126.1 | .499 |
| 217 | 7.72  | 34.124 | 1.70 | 2.49 | 48 | 33.1 | 140.0 | 400 | 6.35  | 34.223 | .73  | 26.92 | 114.6 | .625 |
| 254 | 7.30  | 34.135 | 1.49 | 2.57 | 52 | 34.8 | 133.5 | 500 | 5.76  | 34.264 | .49  | 27.02 | 104.5 | .740 |
| 310 | 6.94  | 34.190 | 1.15 | 2.71 | 59 | 35.6 | 124.6 |     |       |        |      |       |       |      |
| 379 | 6.47  | 34.217 | .80  | 2.76 | 66 | 38.8 | 116.6 |     |       |        |      |       |       |      |
| 449 | 6.06  | 34.241 | .60  | 2.94 | 71 | 39.2 | 109.8 |     |       |        |      |       |       |      |
| 526 | 5.61  | 34.277 | .44  | -    | 79 | 44.1 | 101.8 |     |       |        |      |       |       |      |

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

| INPUT |   |   |     |     |     |     |     | COMPUTED            |   |   |     |       |     |    |  |       |
|-------|---|---|-----|-----|-----|-----|-----|---------------------|---|---|-----|-------|-----|----|--|-------|
| Z     | T | S | OXY | PHO | SIL | NIT | D*T | Z                   | T | S | OXY | SIG*T | D*T | DD |  |       |
| 77.51 |   |   |     |     |     |     |     | CALCOFI CRUISE 6806 |   |   |     |       |     |    |  | 77.51 |

DAVID STARR JORDAN, JUNE 16 1968, 1950 GMT, 35 02N 120 57W, SOUNDING 150 FM, WIND 230 8 KNOTS, WEATHER OVERCAST, SEA MODERATE.

|     |       |       |   |       |       |      |
|-----|-------|-------|---|-------|-------|------|
| 0   | 12.47 | 33.78 | - | 25.57 | 242.2 | 0    |
| 10  | 12.32 | 33.76 | - | 25.59 | 240.9 | .024 |
| 20  | 11.65 | 33.77 | - | 25.72 | 228.2 | .048 |
| 30  | 11.14 | 33.78 | - | 25.82 | 218.6 | .070 |
| 50  | 9.96  | 33.83 | - | 26.07 | 195.3 | .112 |
| 75  | 9.10  | 33.98 | - | 26.32 | 170.8 | .158 |
| 100 | 8.80  | 34.06 | - | 26.43 | 160.3 | .199 |
| 125 | 8.69  | 34.07 | - | 26.46 | 157.9 | .240 |
| 150 | 8.52  | 34.09 | - | 26.50 | 153.9 | .279 |
| 200 | 8.20  | 34.14 | - | 26.59 | 145.6 | .356 |
| 250 | 7.80  | 34.13 | - | 26.64 | 140.7 | .429 |

| OBSERVED LEVELS OF DEPTH  |       |        |      |          |     |      |                | STANDARD LEVELS OF DEPTH |       |        |      |                  |                |      |  |       |  |
|---|-------|--------|------|----------|-----|------|----------------|--------------------------|-------|--------|------|------------------|----------------|------|--|-------|--|
| INPUT   |       |        |      | COMPUTED |     |      |                | INPUT                    |       |        |      | COMPUTED         |                |      |  |       |  |
| Z   | T     | S      | OXY  | PHO      | SIL | NIT  | σ <sub>T</sub> | Z                        | T     | S      | OXY  | SIG <sub>T</sub> | σ <sub>T</sub> | DD   |  |       |  |
| 77.51   |       |        |      |          |     |      |                | CALCOFI CRUISE 6806      |       |        |      |                  |                |      |  | 77.51 |  |
| DAVID STARR JORDAN, JUNE 16 1968, 2014 GMT, 35 02N 120 57W, SOUNDING 150 FM, WIND 230 8 KNOTS, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 12. |       |        |      |          |     |      |                |                          |       |        |      |                  |                |      |  |       |  |
| 1   | 12.31 | 33.782 | 7.03 | 0.30     | 1   | 6.6  | 239.1          | 0                        | 12.31 | 33.782 | 7.03 | 25.60            | 239.1          | 0    |  |       |  |
| 10  | 12.01 | 33.78  | 7.02 | 0.70     | 1   | 6.7  | 233.9          | 10                       | 12.01 | 33.780 | 7.02 | 25.66            | 233.9          | .024 |  |       |  |
| 30  | 10.96 | 33.799 | 5.77 | 1.18     | 8   | 11.9 | 214.1          | 20                       | 11.52 | 33.789 | 6.54 | 25.76            | 224.6          | .047 |  |       |  |
| 44  | 10.17 | 33.798 | 4.53 | 1.52     | 18  | 17.1 | 201.0          | 30                       | 10.96 | 33.799 | 5.77 | 25.87            | 214.1          | .069 |  |       |  |
| 53  | 9.81  | 33.822 | 4.01 | 1.73     | 24  | 20.5 | 193.5          | 50                       | 9.92  | 33.813 | 4.17 | 26.06            | 196.0          | .110 |  |       |  |
| 67  | 9.22  | 33.854 | 3.20 | 1.89     | 29  | 24.5 | 181.9          | 75                       | 9.20  | 33.892 | 2.99 | 26.24            | 178.7          | .157 |  |       |  |
| 81  | 9.16  | 33.925 | 2.87 | 2.03     | 32  | 26.5 | 175.7          | 100                      | 8.82  | 34.031 | 2.24 | 26.41            | 162.8          | .200 |  |       |  |
| 100   | 8.82  | 34.031 | 2.24 | 2.23     | 38  | 28.6 | 162.8          | 125                      | 8.69  | 34.063 | 2.02 | 26.45            | 158.5          | .241 |  |       |  |
| 124   | 8.70  | 34.061 | 2.03 | 2.31     | 41  | 29.7 | 158.7          | 150                      | 8.50  | 34.093 | 1.86 | 26.51            | 153.5          | .280 |  |       |  |
| 142   | 8.54  | 34.087 | 1.89 | 2.42     | 43  | 30.9 | 154.5          | 200                      | 8.19  | 34.139 | 1.61 | 26.59            | 145.6          | .357 |  |       |  |
| 175   | 8.40  | 34.109 | 1.79 | 2.44     | 44  | 31.1 | 150.8          |                          |       |        |      |                  |                |      |  |       |  |
| 203   | 8.17  | 34.141 | 1.60 | 2.45     | 47  | 32.1 | 145.1          |                          |       |        |      |                  |                |      |  |       |  |
| 239   | 7.94  | 34.150 | 1.54 | 2.53     | 50  | 32.6 | 141.2          |                          |       |        |      |                  |                |      |  |       |  |

| OBSERVED LEVELS OF DEPTH  |   |   |     |          |     |     |                | STANDARD LEVELS OF DEPTH |       |       |     |                  |                |      |  |       |  |
|---|---|---|-----|----------|-----|-----|----------------|--------------------------|-------|-------|-----|------------------|----------------|------|--|-------|--|
| INPUT   |   |   |     | COMPUTED |     |     |                | INPUT                    |       |       |     | COMPUTED         |                |      |  |       |  |
| Z   | T | S | OXY | PHO      | SIL | NIT | σ <sub>T</sub> | Z                        | T     | S     | OXY | SIG <sub>T</sub> | σ <sub>T</sub> | DD   |  |       |  |
| 77.55   |   |   |     |          |     |     |                | CALCOFI CRUISE 6806      |       |       |     |                  |                |      |  | 77.55 |  |
| DAVID STARR JORDAN, JUNE 16 1968, 2223 GMT, 34 54N 121 12W, SOUNDING 305 FM, WIND 300 5 KNOTS, WEATHER OVERCAST, SEA ROUGH. |   |   |     |          |     |     |                |                          |       |       |     |                  |                |      |  |       |  |
|   |   |   |     |          |     |     |                | 0                        | 14.03 | 33.41 | -   | 24.97            | 299.2          | 0    |  |       |  |
|   |   |   |     |          |     |     |                | 10                       | 13.88 | 33.41 | -   | 25.00            | 296.2          | .030 |  |       |  |
|   |   |   |     |          |     |     |                | 20                       | 13.47 | 33.44 | -   | 25.11            | 286.1          | .059 |  |       |  |
|   |   |   |     |          |     |     |                | 30                       | 13.15 | 33.45 | -   | 25.18            | 279.2          | .087 |  |       |  |
|   |   |   |     |          |     |     |                | 50                       | 11.37 | 33.56 | -   | 25.61            | 238.8          | .139 |  |       |  |
|   |   |   |     |          |     |     |                | 75                       | 10.63 | 33.70 | -   | 25.85            | 215.9          | .196 |  |       |  |
|   |   |   |     |          |     |     |                | 100                      | 9.16  | 33.77 | -   | 26.15            | 187.2          | .247 |  |       |  |
|   |   |   |     |          |     |     |                | 125                      | 8.84  | 33.96 | -   | 26.35            | 168.3          | .292 |  |       |  |
|   |   |   |     |          |     |     |                | 150                      | 8.71  | 34.06 | -   | 26.45            | 159.0          | .334 |  |       |  |
|   |   |   |     |          |     |     |                | 200                      | 7.87  | 34.09 | -   | 26.60            | 144.6          | .411 |  |       |  |
|   |   |   |     |          |     |     |                | 250                      | 7.36  | 34.10 | -   | 26.68            | 136.9          | .483 |  |       |  |
|   |   |   |     |          |     |     |                | 300                      | 7.10  | 34.21 | -   | 26.80            | 125.2          | .551 |  |       |  |
|   |   |   |     |          |     |     |                | 400                      | 6.39  | 34.23 | -   | 26.92            | 114.7          | .676 |  |       |  |
|   |   |   |     |          |     |     |                | 500                      | 5.91  | 34.27 | -   | 27.01            | 105.8          | .793 |  |       |  |

| OBSERVED LEVELS OF DEPTH  |   |   |     |          |     |     |                | STANDARD LEVELS OF DEPTH |       |       |     |                  |                |      |  |       |  |
|---|---|---|-----|----------|-----|-----|----------------|--------------------------|-------|-------|-----|------------------|----------------|------|--|-------|--|
| INPUT   |   |   |     | COMPUTED |     |     |                | INPUT                    |       |       |     | COMPUTED         |                |      |  |       |  |
| Z   | T | S | OXY | PHO      | SIL | NIT | σ <sub>T</sub> | Z                        | T     | S     | OXY | SIG <sub>T</sub> | σ <sub>T</sub> | DD   |  |       |  |
| 77.60   |   |   |     |          |     |     |                | CALCOFI CRUISE 6806      |       |       |     |                  |                |      |  | 77.60 |  |
| DAVID STARR JORDAN, JUNE 17 1968, 0100 GMT, 34 44.5N 121 34W, SOUNDING 520 FM, WIND VARIABLE, WEATHER CLOUDY, SEA MODERATE. |   |   |     |          |     |     |                |                          |       |       |     |                  |                |      |  |       |  |
|   |   |   |     |          |     |     |                | 0                        | 14.16 | 33.44 | -   | 24.97            | 299.6          | 0    |  |       |  |
|   |   |   |     |          |     |     |                | 10                       | 13.44 | 33.39 | -   | 25.08            | 289.2          | .029 |  |       |  |
|   |   |   |     |          |     |     |                | 20                       | 13.10 | 33.42 | -   | 25.17            | 280.5          | .058 |  |       |  |
|   |   |   |     |          |     |     |                | 30                       | 13.00 | 33.44 | -   | 25.21            | 277.1          | .086 |  |       |  |
|   |   |   |     |          |     |     |                | 50                       | 11.77 | 33.60 | -   | 25.57            | 242.8          | .138 |  |       |  |
|   |   |   |     |          |     |     |                | 75                       | 11.27 | 33.62 | -   | 25.67            | 232.6          | .198 |  |       |  |
|   |   |   |     |          |     |     |                | 100                      | 9.68  | 33.69 | -   | 26.00            | 201.2          | .253 |  |       |  |
|   |   |   |     |          |     |     |                | 125                      | 9.12  | 33.85 | -   | 26.22            | 180.7          | .301 |  |       |  |
|   |   |   |     |          |     |     |                | 150                      | 8.83  | 34.00 | -   | 26.38            | 165.2          | .345 |  |       |  |
|   |   |   |     |          |     |     |                | 200                      | 8.24  | 34.06 | -   | 26.52            | 152.1          | .426 |  |       |  |
|   |   |   |     |          |     |     |                | 250                      | 7.63  | 34.13 | -   | 26.67            | 138.3          | .500 |  |       |  |
|   |   |   |     |          |     |     |                | 300                      | 7.12  | 34.17 | -   | 26.77            | 128.5          | .569 |  |       |  |
|   |   |   |     |          |     |     |                | 400                      | 6.19  | 34.22 | -   | 26.93            | 112.9          | .665 |  |       |  |
|   |   |   |     |          |     |     |                | 500                      | 5.70  | 34.28 | -   | 27.04            | 102.6          | .808 |  |       |  |
|   |   |   |     |          |     |     |                | 600                      | 5.32  | 34.32 | -   | 27.12            | 95.2           | .914 |  |       |  |

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

| OBSERVED LEVELS OF DEPTH  |       |        |      |      |     |      |       | STANDARD LEVELS OF DEPTH |       |        |      |       |       |      |       |
|---|-------|--------|------|------|-----|------|-------|--------------------------|-------|--------|------|-------|-------|------|-------|
| INPUT   |       |        |      |      |     |      |       | COMPUTED                 |       |        |      |       |       |      |       |
| Z   | T     | S      | OXY  | PHO  | SIL | NIT  | D*T   | Z                        | T     | S      | OXY  | SIG*T | D*T   | DD   |       |
| 77.60   |       |        |      |      |     |      |       | CALCOFI CRUISE 6806      |       |        |      |       |       |      | 77.60 |
| DAVID STARR JORDAN, JUNE 17 1968, 0138 GMT, 34 44.5N 121 34W, SOUNDING 520 FM, WIND VARIABLE 1 KNOT, WEATHER CLOUDY, SEA SLIGHT, WIRE ANGLE 00. |       |        |      |      |     |      |       |                          |       |        |      |       |       |      |       |
| 1   | 14.04 | 33.448 | 6.27 | 0.66 | 1   | 4.5  | 296.6 | 0                        | 14.04 | 33.448 | 6.27 | 25.00 | 296.6 | 0    |       |
| 11  | 13.41 | 33.455 | 6.20 | 0.65 | 1   | 4.4  | 283.8 | 10                       | 13.46 | 33.454 | 6.21 | 25.12 | 284.8 | .029 |       |
| 30  | 13.03 | 33.461 | 6.18 | 0.73 | 2   | 5.3  | 276.1 | 20                       | 13.23 | 33.458 | 6.19 | 25.17 | 280.0 | .057 |       |
| 40  | 12.42 | 33.530 | 5.94 | 0.94 | 3   | 7.9  | 259.7 | 30                       | 13.03 | 33.461 | 6.18 | 25.22 | 276.1 | .085 |       |
| 50  | 11.79 | 33.604 | 5.68 | 1.14 | 5   | 11.4 | 242.9 | 50                       | 11.79 | 33.604 | 5.68 | 25.57 | 242.9 | .137 |       |
| 64  | 11.50 | 33.623 | 5.52 | 1.23 | 8   | 12.5 | 236.4 | 75                       | 11.02 | 33.591 | 5.17 | 25.69 | 230.6 | .197 |       |
| 79  | 10.81 | 33.582 | 5.00 | 1.29 | 11  | 13.6 | 227.6 | 100                      | 9.55  | 33.706 | 3.73 | 26.04 | 197.9 | .251 |       |
| 98  | 9.62  | 33.690 | 3.82 | 1.72 | 23  | 21.5 | 200.3 | 125                      | 9.01  | 33.907 | 2.90 | 26.28 | 174.8 | .298 |       |
| 124   | 9.02  | 33.900 | 2.92 | 2.00 | 31  | 26.4 | 175.5 | 150                      | 8.77  | 34.013 | 2.58 | 26.40 | 163.4 | .341 |       |
| 141   | 8.83  | 33.995 | 2.60 | 2.17 | 35  | 27.8 | 165.6 | 200                      | 8.26  | 34.050 | 2.40 | 26.51 | 153.2 | .422 |       |
| 170   | 8.65  | 34.024 | 2.52 | 2.20 | 37  | 28.7 | 160.7 | 250                      | 7.72  | 34.120 | 1.72 | 26.65 | 140.3 | .497 |       |
| 201   | 8.25  | 34.051 | 2.39 | 2.29 | 40  | 29.9 | 152.9 | 300                      | 7.18  | 34.135 | 1.46 | 26.73 | 131.9 | .567 |       |
| 229   | 7.89  | 34.090 | 2.00 | 2.45 | 45  | 31.7 | 144.9 | 400                      | 6.19  | 34.213 | .71  | 26.93 | 113.4 | .695 |       |
| 268   | 7.58  | 34.140 | 1.52 | 2.64 | 51  | 34.4 | 136.9 | 500                      | 5.78  | 34.290 | .34  | 27.04 | 102.7 | .809 |       |
| 326   | 6.84  | 34.128 | 1.38 | 2.73 | 58  | 36.4 | 128.0 |                          |       |        |      |       |       |      |       |
| 399   | 6.19  | 34.212 | .72  | 3.00 | 69  | 40.0 | 113.5 |                          |       |        |      |       |       |      |       |
| 472   | 5.90  | 34.274 | .41  | 3.14 | 75  | 40.7 | 105.4 |                          |       |        |      |       |       |      |       |
| 551   | 5.53  | 34.310 | .30  | 3.26 | 82  | 43.8 | 98.4  |                          |       |        |      |       |       |      |       |

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

| OBSERVED LEVELS OF DEPTH   |   |   |     |     |     |     |     | STANDARD LEVELS OF DEPTH |       |       |     |       |       |      |       |
|--|---|---|-----|-----|-----|-----|-----|--------------------------|-------|-------|-----|-------|-------|------|-------|
| INPUT  |   |   |     |     |     |     |     | COMPUTED                 |       |       |     |       |       |      |       |
| Z  | T | S | OXY | PHO | SIL | NIT | D*T | Z                        | T     | S     | OXY | SIG*T | D*T   | DD   |       |
| 80.52  |   |   |     |     |     |     |     | CALCOFI CRUISE 6806      |       |       |     |       |       |      | 80.52 |
| DAVID STARR JORDAN, JUNE 22 1968, 0355 GMT, 34 24.5N 120 36.5W, SOUNDING 153 FM, WIND 310 20 KNOTS, WEATHER CLOUDY, SEA ROUGH. |   |   |     |     |     |     |     |                          |       |       |     |       |       |      |       |
|  |   |   |     |     |     |     |     | 0                        | 11.03 | 33.86 | -   | 25.90 | 210.8 | 0    |       |
|  |   |   |     |     |     |     |     | 10                       | 11.04 | 33.86 | -   | 25.90 | 211.0 | .021 |       |
|  |   |   |     |     |     |     |     | 20                       | 11.01 | 33.86 | -   | 25.91 | 210.4 | .042 |       |
|  |   |   |     |     |     |     |     | 30                       | 10.54 | 33.89 | -   | 26.01 | 200.3 | .063 |       |
|  |   |   |     |     |     |     |     | 50                       | 9.87  | 33.91 | -   | 26.14 | 187.9 | .102 |       |
|  |   |   |     |     |     |     |     | 75                       | 9.27  | 34.03 | -   | 26.34 | 169.6 | .147 |       |
|  |   |   |     |     |     |     |     | 100                      | 9.13  | 34.07 | -   | 26.39 | 164.5 | .189 |       |
|  |   |   |     |     |     |     |     | 125                      | 8.97  | 34.10 | -   | 26.44 | 159.9 | .230 |       |
|  |   |   |     |     |     |     |     | 150                      | 8.82  | 34.10 | -   | 26.46 | 157.6 | .270 |       |
|  |   |   |     |     |     |     |     | 200                      | 8.38  | 34.17 | -   | 26.59 | 146.0 | .348 |       |
|  |   |   |     |     |     |     |     | 250                      | 8.06  | 34.18 | -   | 26.64 | 140.6 | .422 |       |

## INPUT

## OUTPUT AT STANDARD LEVELS OF DEPTH

| INPUT   |       |        |      |      |     |      |       | OUTPUT AT STANDARD LEVELS OF DEPTH |       |        |      |       |       |      |       |
|---|-------|--------|------|------|-----|------|-------|------------------------------------|-------|--------|------|-------|-------|------|-------|
| Z   | T     | S      | OXY  | PHO  | SIL | NIT  | D*T   | Z                                  | T     | S      | OXY  | SIG*T | D*T   | DD   |       |
| 80.52   |       |        |      |      |     |      |       | CALCOFI CRUISE 6806                |       |        |      |       |       |      | 80.52 |
| DAVID STARR JORDAN, JUNE 22 1968, 0430 GMT, 34 24.5N 120 36.5W, SOUNDING 153 FM, WIND 310 20 KNOTS, WEATHER CLOUDY, SEA ROUGH, WIRE ANGLE 12. |       |        |      |      |     |      |       |                                    |       |        |      |       |       |      |       |
| 3   | 11.00 | 33.845 | 4.86 | 1.66 | 20  | 19.1 | 211.4 | 0                                  | 11.00 | 33.845 | 4.86 | 25.90 | 211.4 | 0    |       |
| 13  | 11.02 | 33.844 | 4.85 | 1.64 | 20  | 19.0 | 211.8 | 10                                 | 11.02 | 33.844 | 4.85 | 25.89 | 211.7 | .021 |       |
| 32  | 10.99 | 33.843 | 4.82 | 1.66 | 21  | 18.6 | 211.4 | 20                                 | 11.01 | 33.841 | 4.84 | 25.89 | 211.9 | .042 |       |
| 47  | 10.58 | 33.871 | 4.11 | 1.80 | 26  | 20.2 | 202.4 | 30                                 | 11.01 | 33.842 | 4.82 | 25.89 | 211.7 | .064 |       |
| 55  | 10.18 | 33.893 | 3.38 | 1.93 | 27  | 22.3 | 194.2 | 50                                 | 10.44 | 33.878 | 3.83 | 26.02 | 199.5 | .105 |       |
| 70  | 9.27  | 33.956 | 2.74 | 2.08 | 31  | 27.1 | 175.1 | 75                                 | 9.27  | 33.962 | 2.67 | 26.28 | 174.6 | .152 |       |
| 85  | 9.26  | 33.971 | 2.59 | 2.08 | 31  | 27.1 | 173.9 | 100                                | 9.16  | 34.022 | 2.30 | 26.35 | 168.6 | .195 |       |
| 106   | 9.11  | 34.043 | 2.18 | 2.27 | 35  | 29.6 | 166.2 | 125                                | 9.00  | 34.070 | 1.99 | 26.41 | 162.6 | .237 |       |
| 129   | 8.98  | 34.073 | 1.97 | 2.29 | 37  | 30.0 | 162.0 | 150                                | 8.82  | 34.081 | 1.90 | 26.45 | 159.1 | .278 |       |
| 149   | 8.83  | 34.081 | 1.90 | 2.39 | 40  | 30.7 | 159.2 | 200                                | 8.56  | 34.131 | 1.81 | 26.53 | 151.6 | .357 |       |
| 181   | 8.66  | 34.102 | 1.82 | 2.41 | 41  | 31.7 | 155.1 | 250                                | 8.04  | 34.142 | 1.33 | 26.62 | 143.1 | .433 |       |
| 210   | 8.49  | 34.140 | 1.77 | 2.44 | 43  | 31.5 | 149.8 |                                    |       |        |      |       |       |      |       |
| 245   | 8.11  | 34.142 | 1.41 | 2.64 | 49  | 34.8 | 144.2 |                                    |       |        |      |       |       |      |       |





## OBSERVED LEVELS OF DEPTH STANDARD LEVELS OF DEPTH

| INPUT   |   |   |     |     |     |     |     | COMPUTED            |       |       |     |       |       |       |  |       |
|---|---|---|-----|-----|-----|-----|-----|---------------------|-------|-------|-----|-------|-------|-------|--|-------|
| Z   | T | S | OXY | PHO | SIL | NIT | D*T | Z                   | T     | S     | OXY | SIG*T | D*T   | DD    |  |       |
| 80.70   |   |   |     |     |     |     |     | CALCOFI CRUISE 6806 |       |       |     |       |       |       |  | 80.70 |
| DAVID STARR JORDAN, JUNE 16 1968, 0428 GMT, 33 48N 121 52W, SOUNDING 2000 FM, WIND 340 10 KNOTS, WEATHER OVERCAST, SEA ROUGH. |   |   |     |     |     |     |     |                     |       |       |     |       |       |       |  |       |
|   |   |   |     |     |     |     |     | 0                   | 15.12 | 33.24 | -   | 24.61 | 333.7 | 0     |  |       |
|   |   |   |     |     |     |     |     | 10                  | 15.12 | 33.24 | -   | 24.61 | 333.7 | .033  |  |       |
|   |   |   |     |     |     |     |     | 20                  | 15.06 | 33.24 | -   | 24.62 | 332.5 | .067  |  |       |
|   |   |   |     |     |     |     |     | 30                  | 15.01 | 33.25 | -   | 24.64 | 330.7 | .100  |  |       |
|   |   |   |     |     |     |     |     | 50                  | 15.00 | 33.25 | -   | 24.64 | 330.5 | .166  |  |       |
|   |   |   |     |     |     |     |     | 75                  | 13.30 | 33.28 | -   | 25.02 | 294.5 | .245  |  |       |
|   |   |   |     |     |     |     |     | 100                 | 11.42 | 33.26 | -   | 25.37 | 261.8 | .315  |  |       |
|   |   |   |     |     |     |     |     | 125                 | 9.76  | 33.54 | -   | 25.87 | 213.6 | .375  |  |       |
|   |   |   |     |     |     |     |     | 150                 | 9.32  | 33.72 | -   | 26.09 | 193.4 | .426  |  |       |
|   |   |   |     |     |     |     |     | 200                 | 8.68  | 33.95 | -   | 26.34 | 169.7 | .519  |  |       |
|   |   |   |     |     |     |     |     | 250                 | 8.13  | 34.04 | -   | 26.52 | 152.0 | .601  |  |       |
|   |   |   |     |     |     |     |     | 300                 | 7.56  | 34.12 | -   | 26.67 | 138.1 | .676  |  |       |
|   |   |   |     |     |     |     |     | 400                 | 6.54  | 34.17 | -   | 26.85 | 121.0 | .811  |  |       |
|   |   |   |     |     |     |     |     | 500                 | 5.67  | 34.19 | -   | 26.98 | 109.0 | .932  |  |       |
|   |   |   |     |     |     |     |     | 600                 | 5.27  | 34.26 | -   | 27.08 | 99.2  | 1.043 |  |       |

80.80 CALCOFI CRUISE 6806 80.80  
 DAVID STARR JORDAN, JUNE 15 1968, 2153 GMT, 33 29N 122 33W, SOUNDING 2450 FM, WIND 340 14 KNOTS, WEATHER OVERCAST, SEA ROUGH.

|  |  |  |  |  |  |  |  |     |       |       |   |       |       |       |
|--|--|--|--|--|--|--|--|-----|-------|-------|---|-------|-------|-------|
|  |  |  |  |  |  |  |  | 0   | 15.21 | 33.23 | - | 24.58 | 336.3 | 0     |
|  |  |  |  |  |  |  |  | 10  | 15.10 | 33.24 | - | 24.62 | 333.3 | .033  |
|  |  |  |  |  |  |  |  | 20  | 15.05 | 33.23 | - | 24.62 | 333.0 | .067  |
|  |  |  |  |  |  |  |  | 30  | 15.02 | 33.24 | - | 24.63 | 331.7 | .100  |
|  |  |  |  |  |  |  |  | 50  | 15.00 | 33.24 | - | 24.64 | 331.2 | .167  |
|  |  |  |  |  |  |  |  | 75  | 12.98 | 33.39 | - | 25.17 | 280.4 | .244  |
|  |  |  |  |  |  |  |  | 100 | 10.55 | 33.32 | - | 25.57 | 242.6 | .309  |
|  |  |  |  |  |  |  |  | 125 | 9.79  | 33.64 | - | 25.95 | 206.7 | .366  |
|  |  |  |  |  |  |  |  | 150 | 9.56  | 33.77 | - | 26.09 | 193.4 | .417  |
|  |  |  |  |  |  |  |  | 200 | 9.07  | 33.99 | - | 26.34 | 169.6 | .509  |
|  |  |  |  |  |  |  |  | 250 | 8.49  | 34.06 | - | 26.48 | 155.7 | .593  |
|  |  |  |  |  |  |  |  | 300 | 7.71  | 34.07 | - | 26.61 | 143.9 | .670  |
|  |  |  |  |  |  |  |  | 400 | 6.78  | 34.16 | - | 26.81 | 124.8 | .810  |
|  |  |  |  |  |  |  |  | 500 | 5.74  | 34.17 | - | 26.95 | 111.3 | .934  |
|  |  |  |  |  |  |  |  | 600 | 5.36  | 34.27 | - | 27.08 | 99.4  | 1.046 |

80.80 CALCOFI CRUISE 6806 80.80  
 DAVID STARR JORDAN, JUNE 15 1968, 2244 GMT, 33 29N 122 33W, SOUNDING 2450 FM, WIND 340 14 KNOTS, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 07.

| INPUT |   |   |     |     |     |     |     | OUTPUT AT STANDARD LEVELS OF DEPTH |        |         |      |       |       |      |       |       |
|-------|---|---|-----|-----|-----|-----|-----|------------------------------------|--------|---------|------|-------|-------|------|-------|-------|
| Z     | T | S | OXY | PHO | SIL | NIT | D*T | Z                                  | T      | S       | OXY  | SIG*T | D*T   | DD   |       |       |
| 80.80 |   |   |     |     |     |     |     | CALCOFI CRUISE 6806                |        |         |      |       |       |      |       | 80.80 |
|       |   |   |     |     |     |     |     | 0                                  | 15.17  | 33.237  | 5.93 | 24.60 | 335.0 | 0    |       |       |
|       |   |   |     |     |     |     |     | 10                                 | 15.13  | 33.234  | 5.98 | 24.60 | 334.5 | .033 |       |       |
|       |   |   |     |     |     |     |     | 20                                 | 15.07  | 33.233  | 5.97 | 24.62 | 333.3 | .067 |       |       |
|       |   |   |     |     |     |     |     | 30                                 | 15.01  | 33.233  | 5.97 | 24.63 | 332.0 | .100 |       |       |
|       |   |   |     |     |     |     |     | 50                                 | 14.95K | 33.24 K | -    | -     | -     | .167 |       |       |
|       |   |   |     |     |     |     |     | 56                                 | 13.36  | 33.386  | 6.19 | 0.46  | 2     | 0.9  | 287.9 |       |
|       |   |   |     |     |     |     |     | 66                                 | 13.00  | 33.338  | 6.11 | 0.59  | 2     | 2.3  | 284.6 |       |
|       |   |   |     |     |     |     |     | 80                                 | 12.86  | 33.372  | 6.08 | 0.63  | 2     | 2.9  | 279.5 |       |
|       |   |   |     |     |     |     |     | 93                                 | 10.75  | 33.272  | 5.42 | 0.89  | 8     | 8.0  | 249.5 |       |
|       |   |   |     |     |     |     |     | 107                                | 10.37  | 33.303  | 5.21 | 1.00  | 10    | 9.4  | 240.9 |       |
|       |   |   |     |     |     |     |     | 130                                | 9.79   | 33.631  | 3.67 | 1.60  | 22    | 19.2 | 207.3 |       |
|       |   |   |     |     |     |     |     | 149                                | 9.54   | 33.785  | 3.09 | 1.90  | 27    | 23.0 | 192.0 |       |
|       |   |   |     |     |     |     |     | 177                                | 9.25   | 33.924  | 2.66 | 2.08  | 32    | 25.6 | 177.2 |       |
|       |   |   |     |     |     |     |     | 205                                | 9.04   | 33.985  | 2.41 | 2.16  | 35    | 27.1 | 169.5 |       |
|       |   |   |     |     |     |     |     | 234                                | 8.71   | 34.051  | 2.14 | 2.30  | 39    | 28.1 | 159.6 |       |
|       |   |   |     |     |     |     |     | 280                                | 7.90   | 34.045  | 2.43 | 2.30  | 44    | 29.0 | 148.4 |       |
|       |   |   |     |     |     |     |     | 332                                | 7.43   | 34.131  | 1.57 | 2.60  | 53    | 32.6 | 135.5 |       |
|       |   |   |     |     |     |     |     | 413                                | 6.63   | 34.170  | 1.06 | 2.84  | 64    | 35.9 | 122.2 |       |
|       |   |   |     |     |     |     |     | 495                                | 5.80   | 34.188  | .72  | 3.00  | 75    | 39.4 | 110.7 |       |
|       |   |   |     |     |     |     |     | 576                                | 5.41   | 34.286  | .39  | 3.16  | 84    | 40.8 | 98.8  |       |



## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

| INPUT |   |   |     |     |     |     |     | COMPUTED |   |   |     |       |     |    |   | INPUT |   |     |       |     |    |   |   | COMPUTED |     |       |     |    |  |  |  |
|-------|---|---|-----|-----|-----|-----|-----|----------|---|---|-----|-------|-----|----|---|-------|---|-----|-------|-----|----|---|---|----------|-----|-------|-----|----|--|--|--|
| Z     | T | S | OXY | PHO | SIL | NIT | D*T | Z        | T | S | OXY | SIG*T | D*T | DD | Z | T     | S | OXY | SIG*T | D*T | DD | Z | T | S        | OXY | SIG*T | D*T | DD |  |  |  |

83.43 CALCOFI CRUISE 6806 83.43

DAVID STARR JORDAN, JUNE 14 1968, 0447 GMT, 34 08N 119 34W, SOUNDING 130 FM, WIND 340 1 KNOT, WEATHER MISSING, SEA MISSING.

|     |       |       |   |       |       |      |
|-----|-------|-------|---|-------|-------|------|
| 0   | 13.59 | 33.90 | - | 25.44 | 254.6 | 0    |
| 10  | 12.16 | 33.91 | - | 25.73 | 227.0 | .024 |
| 20  | 12.02 | 33.90 | - | 25.75 | 225.2 | .047 |
| 30  | 11.71 | 33.92 | - | 25.83 | 218.2 | .069 |
| 50  | 11.07 | 33.93 | - | 25.95 | 206.3 | .112 |
| 75  | 9.74  | 33.94 | - | 26.19 | 183.6 | .161 |
| 100 | 9.21  | 34.06 | - | 26.37 | 166.5 | .205 |
| 125 | 8.92  | 34.12 | - | 26.46 | 157.6 | .246 |
| 150 | 8.78  | 34.16 | - | 26.52 | 152.6 | .285 |
| 200 | 8.44  | 34.20 | - | 26.60 | 144.6 | .361 |

## INPUT

## OUTPUT AT STANDARD LEVELS OF DEPTH

| Z | T | S | OXY | PHO | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |
|---|---|---|-----|-----|-----|-----|-----|---|---|---|-----|-------|-----|----|
|---|---|---|-----|-----|-----|-----|-----|---|---|---|-----|-------|-----|----|

83.43 CALCOFI CRUISE 6806 83.43

DAVID STARR JORDAN, JUNE 14 1968, 0522 GMT, 34 08N 119 34W, SOUNDING 130 FM, WIND 340 1 KNOT, WEATHER MISSING, SEA SLIGHT, WIRE ANGLE 03.

|     |       |        |      |      |    |      |       |     |       |        |      |       |       |      |
|-----|-------|--------|------|------|----|------|-------|-----|-------|--------|------|-------|-------|------|
| 2   | 13.60 | 33.884 | 6.34 | 0.96 | 11 | 8.5  | 256.0 | 0   | 13.60 | 33.884 | 6.34 | 25.43 | 256.0 | 0    |
| 12  | 12.09 | 33.914 | 6.13 | 0.95 | 13 | 7.2  | 225.4 | 10  | 12.32 | 33.910 | 6.15 | 25.70 | 229.9 | .024 |
| 31  | 11.77 | 33.901 | 6.34 | 0.94 | 11 | 9.1  | 220.7 | 20  | 11.98 | 33.912 | 6.30 | 25.77 | 223.6 | .047 |
| 46  | 11.12 | 33.911 | 4.94 | 1.41 | 17 | 14.7 | 208.6 | 30  | 11.79 | 33.902 | 6.35 | 25.80 | 220.9 | .069 |
| 56  | 10.99 | 33.917 | 4.70 | 1.50 | 18 | 15.6 | 205.9 | 50  | 11.08 | 33.913 | 4.84 | 25.94 | 207.7 | .112 |
| 70  | 10.16 | 33.936 | 3.63 | 1.92 | 26 | 20.1 | 190.7 | 75  | 9.88  | 33.954 | 3.28 | 26.18 | 184.9 | .162 |
| 85  | 9.45  | 33.989 | 2.74 | 2.09 | 32 | 23.9 | 175.5 | 100 | 9.34  | 33.998 | 2.70 | 26.30 | 173.2 | .207 |
| 105 | 9.30  | 34.005 | 2.66 | 2.13 | 32 | 24.8 | 172.0 | 125 | 8.96  | 34.099 | 2.16 | 26.44 | 159.8 | .249 |
| 128 | 8.91  | 34.114 | 2.08 | 2.33 | 38 | 27.1 | 157.9 | 150 | 8.79  | 34.146 | 1.93 | 26.50 | 153.7 | .289 |
| 148 | 8.80  | 34.142 | 1.95 | 2.44 | 40 | 28.1 | 154.2 | 200 | 8.44  | 34.195 | 1.40 | 26.60 | 145.0 | .365 |
| 177 | 8.61  | 34.184 | 1.67 | 2.50 | 43 | 29.4 | 148.3 |     |       |        |      |       |       |      |
| 202 | 8.43  | 34.195 | 1.37 | 2.62 | 46 | 29.9 | 144.8 |     |       |        |      |       |       |      |

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

| INPUT |   |   |     |     |     |     |     | COMPUTED |   |   |     |       |     |    |   | INPUT |   |     |       |     |    |   |   | COMPUTED |     |       |     |    |  |  |  |
|-------|---|---|-----|-----|-----|-----|-----|----------|---|---|-----|-------|-----|----|---|-------|---|-----|-------|-----|----|---|---|----------|-----|-------|-----|----|--|--|--|
| Z     | T | S | OXY | PHO | SIL | NIT | D*T | Z        | T | S | OXY | SIG*T | D*T | DD | Z | T     | S | OXY | SIG*T | D*T | DD | Z | T | S        | OXY | SIG*T | D*T | DD |  |  |  |

83.51 CALCOFI CRUISE 6806 83.51

DAVID STARR JORDAN, JUNE 14 1968, 1250 GMT, 33 52N 120 08.5W, SOUNDING 60 FM, WIND 300 4 KNOTS, WEATHER CLEAR, SEA ROUGH.

|     |       |       |   |       |       |      |
|-----|-------|-------|---|-------|-------|------|
| 0   | 13.53 | 33.61 | - | 25.23 | 274.7 | 0    |
| 10  | 12.72 | 33.62 | - | 25.40 | 258.6 | .027 |
| 20  | 12.50 | 33.60 | - | 25.43 | 256.0 | .052 |
| 30  | 11.01 | 33.58 | - | 25.69 | 231.1 | .077 |
| 50  | 10.62 | 33.76 | - | 25.90 | 211.3 | .121 |
| 75  | 9.18  | 34.03 | - | 26.35 | 168.3 | .169 |
| 100 | 9.01  | 34.07 | - | 26.41 | 162.7 | .211 |

83.55 CALCOFI CRUISE 6806 83.55

DAVID STARR JORDAN, JUNE 14 1968, 1455 GMT, 33 45N 120 22.5W, SOUNDING 675 FM, WIND 320 14 KNOTS, WEATHER CLEAR, SEA ROUGH.

|     |       |       |   |       |       |      |
|-----|-------|-------|---|-------|-------|------|
| 0   | 12.66 | 33.70 | - | 25.47 | 251.6 | 0    |
| 10  | 12.65 | 33.70 | - | 25.48 | 251.4 | .025 |
| 20  | 12.51 | 33.66 | - | 25.47 | 251.8 | .050 |
| 30  | 11.62 | 33.69 | - | 25.66 | 233.5 | .075 |
| 50  | 10.15 | 33.75 | - | 25.97 | 204.3 | .119 |
| 75  | 8.95  | 33.87 | - | 26.26 | 176.6 | .167 |
| 100 | 8.84  | 34.07 | - | 26.44 | 160.2 | .209 |
| 125 | 8.64  | 34.10 | - | 26.49 | 155.0 | .249 |
| 150 | 8.48  | 34.17 | - | 26.57 | 147.4 | .287 |
| 200 | 8.04  | 34.23 | - | 26.68 | 136.6 | .360 |
| 250 | 7.83  | 34.23 | - | 26.72 | 133.7 | .429 |
| 300 | 7.63  | 34.24 | - | 26.75 | 130.2 | .498 |
| 400 | 7.08  | 34.24 | - | 26.83 | 122.7 | .630 |
| 500 | 6.25  | 34.28 | - | 26.97 | 109.2 | .752 |
| 600 | 5.58  | 34.31 | - | 27.08 | 98.9  | .863 |



| OBSERVED LEVELS OF DEPTH   |   |   |     |     |     |     |     | STANDARD LEVELS OF DEPTH |       |       |     |       |       |      |  |       |
|--|---|---|-----|-----|-----|-----|-----|--------------------------|-------|-------|-----|-------|-------|------|--|-------|
| INPUT  |   |   |     |     |     |     |     | COMPUTED                 |       |       |     |       |       |      |  |       |
| Z  | T | S | OXY | PHO | SIL | NIT | D*T | Z                        | T     | S     | OXY | SIG*T | D*T   | DD   |  |       |
| 83.60  |   |   |     |     |     |     |     | CALCOFI CRUISE 6806      |       |       |     |       |       |      |  | 83.60 |
| DAVID STARR JORDAN, JUNE 14 1968, 1747 GMT, 33 34N 120 45W, SOUNDING 800 FM, WIND 330 20 KNOTS, WEATHER CLEAR, SEA HIGH. |   |   |     |     |     |     |     |                          |       |       |     |       |       |      |  |       |
|  |   |   |     |     |     |     |     | 0                        | 13.35 | 33.50 | -   | 25.18 | 279.3 | 0    |  |       |
|  |   |   |     |     |     |     |     | 10                       | 13.34 | 33.51 | -   | 25.19 | 278.4 | .028 |  |       |
|  |   |   |     |     |     |     |     | 20                       | 12.72 | 33.52 | -   | 25.32 | 266.0 | .055 |  |       |
|  |   |   |     |     |     |     |     | 30                       | 12.46 | 33.49 | -   | 25.35 | 263.4 | .082 |  |       |
|  |   |   |     |     |     |     |     | 50                       | 11.42 | 33.54 | -   | 25.58 | 241.1 | .132 |  |       |
|  |   |   |     |     |     |     |     | 75                       | 10.94 | 33.64 | -   | 25.75 | 225.5 | .191 |  |       |
|  |   |   |     |     |     |     |     | 100                      | 9.64  | 33.63 | -   | 25.96 | 205.0 | .245 |  |       |
|  |   |   |     |     |     |     |     | 125                      | 9.11  | 33.80 | -   | 26.18 | 184.3 | .294 |  |       |
|  |   |   |     |     |     |     |     | 150                      | 8.62  | 33.94 | -   | 26.37 | 166.5 | .339 |  |       |
|  |   |   |     |     |     |     |     | 200                      | 7.65  | 33.99 | -   | 26.55 | 149.0 | .419 |  |       |
|  |   |   |     |     |     |     |     | 250                      | 7.18  | 34.01 | -   | 26.64 | 141.2 | .494 |  |       |
|  |   |   |     |     |     |     |     | 300                      | 7.04  | 34.13 | -   | 26.75 | 130.4 | .564 |  |       |
|  |   |   |     |     |     |     |     | 400                      | 6.27  | 34.22 | -   | 26.92 | 113.9 | .691 |  |       |
|  |   |   |     |     |     |     |     | 500                      | 5.81  | 34.27 | -   | 27.02 | 104.6 | .806 |  |       |
|  |   |   |     |     |     |     |     | 600                      | 5.17  | 34.30 | -   | 27.12 | 95.0  | .913 |  |       |

| INPUT  |       |        |      |      |     |      |       | OUTPUT AT STANDARD LEVELS OF DEPTH |       |        |      |       |       |      |  |       |
|--|-------|--------|------|------|-----|------|-------|------------------------------------|-------|--------|------|-------|-------|------|--|-------|
| Z  | T     | S      | OXY  | PHO  | SIL | NIT  | D*T   | Z                                  | T     | S      | OXY  | SIG*T | D*T   | DD   |  |       |
| 83.60  |       |        |      |      |     |      |       | CALCOFI CRUISE 6806                |       |        |      |       |       |      |  | 83.60 |
| DAVID STARR JORDAN, JUNE 14 1968, 1841 GMT, 33 34N 120 45W, SOUNDING 800 FM, WIND 330 20 KNOTS, WEATHER CLEAR, SEA VERY HIGH, WIRE ANGLE 18. |       |        |      |      |     |      |       |                                    |       |        |      |       |       |      |  |       |
| 2  | 13.35 | 33.499 | 6.15 | 0.76 | 4   | 5.3  | 279.4 | 0                                  | 13.35 | 33.499 | 6.15 | 25.18 | 279.4 | 0    |  |       |
| 11   | 13.34 | 33.497 | 6.12 | 0.77 | 5   | 5.3  | 279.4 | 10                                 | 13.34 | 33.498 | 6.12 | 25.18 | 279.4 | .028 |  |       |
| 29   | 12.75 | 33.474 | 6.00 | 0.81 | 4   | 6.1  | 269.9 | 20                                 | 13.09 | 33.483 | 6.08 | 25.22 | 275.7 | .056 |  |       |
| 39   | 12.43 | 33.489 | 5.81 | 0.84 | 5   | 6.3  | 262.9 | 30                                 | 12.72 | 33.475 | 5.98 | 25.29 | 269.4 | .083 |  |       |
| 51   | 11.63 | 33.513 | 5.47 | 1.05 | 8   | 9.0  | 246.8 | 50                                 | 11.70 | 33.510 | 5.50 | 25.51 | 248.2 | .135 |  |       |
| 66   | 11.11 | 33.598 | 5.27 | 1.26 | 10  | 11.4 | 231.5 | 75                                 | 10.85 | 33.620 | 5.09 | 25.75 | 225.4 | .195 |  |       |
| 88   | 10.41 | -      | 4.70 | 1.28 | 13  | 12.2 | -     | 100                                | 9.78  | 33.636 | 4.12 | 25.95 | 206.7 | .249 |  |       |
| 106  | 9.48  | 33.653 | 3.84 | 1.62 | 23  | 19.5 | 200.8 | 125                                | 9.12  | 33.781 | 3.50 | 26.17 | 185.8 | .299 |  |       |
| 124  | 9.14  | 33.773 | 3.52 | 1.77 | 27  | 22.2 | 186.7 | 150                                | 8.67  | 33.936 | 3.10 | 26.36 | 167.6 | .343 |  |       |
| 143  | 8.79  | 33.909 | 3.16 | 1.96 | 33  | 24.4 | 171.4 | 200                                | 8.00  | 33.995 | 3.01 | 26.51 | 153.5 | .425 |  |       |
| 170  | 8.35  | 33.976 | 3.04 | 2.05 | 36  | 26.3 | 159.9 | 250                                | 7.28  | 34.016 | 2.58 | 26.63 | 142.1 | .501 |  |       |
| 204  | 7.95  | 33.997 | 3.00 | 2.06 | 39  | 26.4 | 152.7 | 300                                | 6.94  | 34.104 | 1.66 | 26.74 | 131.1 | .571 |  |       |
| 231  | 7.47  | 33.995 | 2.86 | 2.21 | 44  | 28.9 | 146.2 | 400                                | 6.31  | 34.226 | .73  | 26.92 | 113.9 | .699 |  |       |
| 278  | 7.09  | 34.063 | 2.06 | 2.47 | 52  | 31.9 | 136.1 | 500                                | 5.92  | 34.278 | .40  | 27.01 | 105.4 | .815 |  |       |
| 329  | 6.75  | 34.155 | 1.20 | 2.55 | 60  | 33.9 | 124.8 |                                    |       |        |      |       |       |      |  |       |
| 411  | 6.25  | 34.233 | .70  | 3.00 | 70  | 37.9 | 112.7 |                                    |       |        |      |       |       |      |  |       |
| 490  | 5.98  | 34.273 | .42  | 3.16 | 75  | 38.8 | 106.4 |                                    |       |        |      |       |       |      |  |       |
| 572  | 5.34  | 34.311 | .31  | 3.20 | 84  | 40.6 | 96.1  |                                    |       |        |      |       |       |      |  |       |

| OBSERVED LEVELS OF DEPTH   |   |   |     |     |     |     |     | STANDARD LEVELS OF DEPTH |       |       |     |       |       |      |  |       |
|--|---|---|-----|-----|-----|-----|-----|--------------------------|-------|-------|-----|-------|-------|------|--|-------|
| INPUT  |   |   |     |     |     |     |     | COMPUTED                 |       |       |     |       |       |      |  |       |
| Z  | T | S | OXY | PHO | SIL | NIT | D*T | Z                        | T     | S     | OXY | SIG*T | D*T   | DC   |  |       |
| 83.70  |   |   |     |     |     |     |     | CALCOFI CRUISE 6806      |       |       |     |       |       |      |  | 83.70 |
| DAVID STARR JORDAN, JUNE 15 1968, 0012 GMT, 33 14.5N 121 26W, SOUNDING 2100 FM, WIND 310 22 KNOTS, WEATHER CLOUDY, SEA HIGH. |   |   |     |     |     |     |     |                          |       |       |     |       |       |      |  |       |
|  |   |   |     |     |     |     |     | 0                        | 14.87 | 33.25 | -   | 24.67 | 327.8 | 0    |  |       |
|  |   |   |     |     |     |     |     | 10                       | 14.87 | 33.26 | -   | 24.68 | 327.1 | .033 |  |       |
|  |   |   |     |     |     |     |     | 20                       | 14.86 | 33.26 | -   | 24.68 | 326.9 | .066 |  |       |
|  |   |   |     |     |     |     |     | 30                       | 14.85 | 33.26 | -   | 24.68 | 326.7 | .098 |  |       |
|  |   |   |     |     |     |     |     | 50                       | 14.07 | 33.12 | -   | 24.74 | 321.3 | .163 |  |       |
|  |   |   |     |     |     |     |     | 75                       | 10.96 | 33.19 | -   | 25.40 | 259.1 | .236 |  |       |
|  |   |   |     |     |     |     |     | 100                      | 9.93  | 33.55 | -   | 25.85 | 215.5 | .296 |  |       |
|  |   |   |     |     |     |     |     | 125                      | 9.37  | 33.71 | -   | 26.07 | 194.9 | .348 |  |       |
|  |   |   |     |     |     |     |     | 150                      | 9.03  | 33.86 | -   | 26.24 | 178.6 | .395 |  |       |
|  |   |   |     |     |     |     |     | 200                      | 8.40  | 34.03 | -   | 26.47 | 156.6 | .481 |  |       |
|  |   |   |     |     |     |     |     | 250                      | 7.75  | 34.08 | -   | 26.61 | 143.7 | .558 |  |       |
|  |   |   |     |     |     |     |     | 300                      | 7.23  | 34.14 | -   | 26.73 | 132.2 | .629 |  |       |
|  |   |   |     |     |     |     |     | 400                      | 6.42  | 34.19 | -   | 26.88 | 118.0 | .759 |  |       |
|  |   |   |     |     |     |     |     | 500                      | 5.80  | 34.25 | -   | 27.01 | 106.0 | .877 |  |       |
|  |   |   |     |     |     |     |     | 600                      | 5.40  | 34.30 | -   | 27.10 | 97.6  | .986 |  |       |

## OBSERVED LEVELS OF DEPTH                      STANDARD LEVELS OF DEPTH

| OBSERVED LEVELS OF DEPTH   |   |   |     |          |     |     | STANDARD LEVELS OF DEPTH |     |       |       |          |       |       |       |  |
|--|---|---|-----|----------|-----|-----|--------------------------|-----|-------|-------|----------|-------|-------|-------|--|
| INPUT  |   |   |     | COMPUTED |     |     | INPUT                    |     |       |       | COMPUTED |       |       |       |  |
| Z  | T | S | OXY | PHO      | SIL | NIT | D*T                      | Z   | T     | S     | OXY      | SIG*T | D*T   | DD    |  |
| 83.80  |   |   |     |          |     |     | CALCOFI CRUISE 6806      |     |       |       |          |       |       | 83.80 |  |
| DAVID STARR JORDAN, JUNE 15 1968, 0522 GMT, 32 55N 122 07W, SOUNDING 2300 FM, WIND 330 16 KNOTS, WEATHER MISSING, SEA MISSING. |   |   |     |          |     |     |                          |     |       |       |          |       |       |       |  |
|  |   |   |     |          |     |     |                          | 0   | 14.41 | 33.26 | -        | 24.78 | 317.8 | 0     |  |
|  |   |   |     |          |     |     |                          | 10  | 14.41 | 33.26 | -        | 24.78 | 317.8 | .032  |  |
|  |   |   |     |          |     |     |                          | 20  | 14.41 | 33.26 | -        | 24.78 | 317.8 | .064  |  |
|  |   |   |     |          |     |     |                          | 30  | 14.39 | 33.26 | -        | 24.78 | 317.4 | .095  |  |
|  |   |   |     |          |     |     |                          | 50  | 13.74 | 33.30 | -        | 24.95 | 301.6 | .158  |  |
|  |   |   |     |          |     |     |                          | 75  | 12.07 | 33.44 | -        | 25.39 | 260.0 | .228  |  |
|  |   |   |     |          |     |     |                          | 100 | 10.13 | 33.41 | -        | 25.71 | 229.1 | .290  |  |
|  |   |   |     |          |     |     |                          | 125 | 9.39  | 33.71 | -        | 26.07 | 195.2 | .343  |  |
|  |   |   |     |          |     |     |                          | 150 | 9.01  | 33.83 | -        | 26.22 | 180.5 | .391  |  |
|  |   |   |     |          |     |     |                          | 200 | 8.52  | 34.01 | -        | 26.44 | 159.9 | .478  |  |
|  |   |   |     |          |     |     |                          | 250 | 7.81  | 34.06 | -        | 26.58 | 146.0 | .556  |  |
|  |   |   |     |          |     |     |                          | 300 | 7.28  | 34.09 | -        | 26.68 | 136.6 | .629  |  |
|  |   |   |     |          |     |     |                          | 400 | 6.46  | 34.18 | -        | 26.87 | 119.3 | .762  |  |
|  |   |   |     |          |     |     |                          | 500 | 5.63  | 34.22 | -        | 27.00 | 106.3 | .881  |  |
|  |   |   |     |          |     |     |                          | 600 | 5.29  | 34.30 | -        | 27.11 | 96.4  | .989  |  |

83.90    CALCOFI CRUISE 6806    83.90  
 DAVID STARR JORDAN, JUNE 15 1968, 1014 GMT, 32 35N 122 50.5W, SOUNDING 2350 FM, WIND 330 17 KNOTS, WEATHER MISSING, SEA MISSING.

|  |  |  |  |  |  |  |  |     |       |       |   |       |       |       |
|--|--|--|--|--|--|--|--|-----|-------|-------|---|-------|-------|-------|
|  |  |  |  |  |  |  |  | 0   | 15.55 | 33.28 | - | 24.55 | 339.8 | 0     |
|  |  |  |  |  |  |  |  | 10  | 15.53 | 33.28 | - | 24.55 | 339.4 | .034  |
|  |  |  |  |  |  |  |  | 20  | 15.37 | 33.27 | - | 24.58 | 336.7 | .068  |
|  |  |  |  |  |  |  |  | 30  | 15.19 | 33.26 | - | 24.61 | 333.7 | .101  |
|  |  |  |  |  |  |  |  | 50  | 14.88 | 33.26 | - | 24.68 | 327.3 | .168  |
|  |  |  |  |  |  |  |  | 75  | 13.57 | 33.19 | - | 24.90 | 306.3 | .247  |
|  |  |  |  |  |  |  |  | 100 | 11.43 | 33.24 | - | 25.35 | 263.4 | .319  |
|  |  |  |  |  |  |  |  | 125 | 9.93  | 33.53 | - | 25.84 | 217.0 | .380  |
|  |  |  |  |  |  |  |  | 150 | 9.31  | 33.68 | - | 26.06 | 196.2 | .432  |
|  |  |  |  |  |  |  |  | 200 | 8.59  | 33.92 | - | 26.36 | 167.6 | .525  |
|  |  |  |  |  |  |  |  | 250 | 7.80  | 34.00 | - | 26.54 | 150.4 | .606  |
|  |  |  |  |  |  |  |  | 300 | 7.04  | 34.02 | - | 26.66 | 138.6 | .680  |
|  |  |  |  |  |  |  |  | 400 | 6.06  | 34.09 | - | 26.85 | 121.1 | .815  |
|  |  |  |  |  |  |  |  | 500 | 5.60  | 34.23 | - | 27.02 | 105.2 | .934  |
|  |  |  |  |  |  |  |  | 600 | 5.13  | 34.28 | - | 27.11 | 96.1  | 1.041 |

87.35    CALCOFI CRUISE 6806    87.35  
 DAVID STARR JORDAN, JUNE 13 1968, 2120 GMT, 33 50N 118 37.5W, SOUNDING 245 FM, WIND 240 4 KNOTS, WEATHER PARTLY CLOUDY, SEA MODERATE.

|  |  |  |  |  |  |  |  |     |       |       |   |       |       |      |
|--|--|--|--|--|--|--|--|-----|-------|-------|---|-------|-------|------|
|  |  |  |  |  |  |  |  | 0   | 18.83 | 33.62 | - | 24.03 | 389.0 | 0    |
|  |  |  |  |  |  |  |  | 10  | 18.55 | 33.56 | - | 24.06 | 386.7 | .039 |
|  |  |  |  |  |  |  |  | 20  | 13.11 | 33.48 | - | 25.21 | 276.2 | .072 |
|  |  |  |  |  |  |  |  | 30  | 11.25 | 33.55 | - | 25.62 | 237.4 | .098 |
|  |  |  |  |  |  |  |  | 50  | 10.20 | 33.67 | - | 25.90 | 211.0 | .143 |
|  |  |  |  |  |  |  |  | 75  | 9.78  | 33.87 | - | 26.13 | 189.5 | .193 |
|  |  |  |  |  |  |  |  | 100 | 9.50  | 33.98 | - | 26.26 | 176.9 | .239 |
|  |  |  |  |  |  |  |  | 125 | 9.22  | 34.04 | - | 26.35 | 168.1 | .283 |
|  |  |  |  |  |  |  |  | 150 | 9.08  | 34.10 | - | 26.42 | 161.6 | .325 |
|  |  |  |  |  |  |  |  | 200 | 8.93  | 34.21 | - | 26.53 | 151.1 | .405 |
|  |  |  |  |  |  |  |  | 250 | 8.60  | 34.24 | - | 26.61 | 144.0 | .481 |
|  |  |  |  |  |  |  |  | 300 | 8.20  | 34.27 | - | 26.69 | 135.9 | .553 |
|  |  |  |  |  |  |  |  | 400 | 7.50  | 34.29 | - | 26.81 | 124.6 | .689 |

87.40    CALCOFI CRUISE 6806    87.40  
 DAVID STARR JORDAN, JUNE 13 1968, 1834 GMT, 33 40N 118 58W, SOUNDING 435 FM, WIND 210 2 KNOTS, WEATHER CLOUDY, SEA MODERATE.

|  |  |  |  |  |  |  |  |     |       |       |   |       |       |      |
|--|--|--|--|--|--|--|--|-----|-------|-------|---|-------|-------|------|
|  |  |  |  |  |  |  |  | 0   | 15.04 | 33.70 | - | 24.98 | 298.4 | 0    |
|  |  |  |  |  |  |  |  | 10  | 11.05 | 33.41 | - | 25.55 | 244.3 | .027 |
|  |  |  |  |  |  |  |  | 20  | 10.63 | 33.67 | - | 25.83 | 218.1 | .050 |
|  |  |  |  |  |  |  |  | 30  | 10.19 | 33.79 | - | 26.00 | 202.0 | .071 |
|  |  |  |  |  |  |  |  | 50  | 9.90  | 33.86 | - | 26.10 | 192.1 | .111 |
|  |  |  |  |  |  |  |  | 75  | 9.42  | 33.98 | - | 26.27 | 175.7 | .157 |
|  |  |  |  |  |  |  |  | 100 | 8.98  | 34.08 | - | 26.42 | 161.5 | .200 |
|  |  |  |  |  |  |  |  | 125 | 8.73  | 34.12 | - | 26.49 | 154.8 | .240 |
|  |  |  |  |  |  |  |  | 150 | 8.57  | 34.15 | - | 26.54 | 150.2 | .279 |
|  |  |  |  |  |  |  |  | 200 | 8.19  | 34.21 | - | 26.65 | 140.2 | .353 |
|  |  |  |  |  |  |  |  | 250 | 7.89  | 34.25 | - | 26.72 | 133.0 | .423 |
|  |  |  |  |  |  |  |  | 300 | 7.51  | 34.26 | - | 26.79 | 127.0 | .490 |
|  |  |  |  |  |  |  |  | 400 | 6.47  | 34.29 | - | 26.95 | 111.2 | .615 |
|  |  |  |  |  |  |  |  | 500 | 5.99  | 34.33 | - | 27.05 | 102.3 | .728 |
|  |  |  |  |  |  |  |  | 600 | 5.40  | 34.37 | - | 27.15 | 92.4  | .832 |

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

| INPUT   |   |   |     |     |     |     |     | COMPUTER            |       |       |     |       |       |      |  |       |
|---|---|---|-----|-----|-----|-----|-----|---------------------|-------|-------|-----|-------|-------|------|--|-------|
| Z   | T | S | OXY | PHO | SIL | NIT | O*T | Z                   | T     | S     | OXY | SIG*T | O*T   | DD   |  |       |
| 87.45   |   |   |     |     |     |     |     | CALCOFI CRUISE 6806 |       |       |     |       |       |      |  | 87.45 |
| DAVID STARR JORDAN, JUNE 13 1968, 1548 GMT, 33 30N 119 19W, SOUNDING 925 FM, WIND 130 2 KNOTS, WEATHER CLEAR, SEA MODERATE. |   |   |     |     |     |     |     |                     |       |       |     |       |       |      |  |       |
|   |   |   |     |     |     |     |     | 0                   | 14.98 | 33.62 | -   | 24.93 | 303.0 | 0    |  |       |
|   |   |   |     |     |     |     |     | 10                  | 13.31 | 33.60 | -   | 25.27 | 271.2 | .029 |  |       |
|   |   |   |     |     |     |     |     | 20                  | 10.93 | 33.76 | -   | 25.84 | 216.5 | .053 |  |       |
|   |   |   |     |     |     |     |     | 30                  | 10.03 | 33.68 | -   | 25.94 | 207.5 | .074 |  |       |
|   |   |   |     |     |     |     |     | 50                  | 9.48  | 33.90 | -   | 26.20 | 182.5 | .114 |  |       |
|   |   |   |     |     |     |     |     | 75                  | 9.21  | 33.99 | -   | 26.31 | 171.7 | .158 |  |       |
|   |   |   |     |     |     |     |     | 100                 | 8.80  | 34.06 | -   | 26.43 | 160.3 | .200 |  |       |
|   |   |   |     |     |     |     |     | 125                 | 8.63  | 34.10 | -   | 26.49 | 154.8 | .240 |  |       |
|   |   |   |     |     |     |     |     | 150                 | 8.47  | 34.13 | -   | 26.54 | 150.2 | .279 |  |       |
|   |   |   |     |     |     |     |     | 200                 | 8.15  | 34.17 | -   | 26.62 | 142.6 | .354 |  |       |
|   |   |   |     |     |     |     |     | 250                 | 7.74  | 34.20 | -   | 26.71 | 134.6 | .425 |  |       |
|   |   |   |     |     |     |     |     | 300                 | 7.40  | 34.22 | -   | 26.77 | 128.5 | .453 |  |       |
|   |   |   |     |     |     |     |     | 400                 | 6.67  | 34.27 | -   | 26.91 | 115.2 | .620 |  |       |
|   |   |   |     |     |     |     |     | 500                 | 5.89  | 34.32 | -   | 27.05 | 101.8 | .735 |  |       |
|   |   |   |     |     |     |     |     | 600                 | 5.40  | 34.35 | -   | 27.13 | 93.9  | .839 |  |       |

87.50 CALCOFI CRUISE 6806 87.50

DAVID STARR JORDAN, JUNE 13 1968, 1309 GMT, 33 20N 119 39.5W, SOUNDING 40 FM, WIND 310 10 KNOTS, WEATHER CLEAR, SEA MODERATE.

|  |  |  |  |  |  |  |  |    |       |       |   |       |       |      |
|--|--|--|--|--|--|--|--|----|-------|-------|---|-------|-------|------|
|  |  |  |  |  |  |  |  | 0  | 13.09 | 33.70 | - | 25.39 | 259.7 | 0    |
|  |  |  |  |  |  |  |  | 10 | 13.10 | 33.70 | - | 25.39 | 259.9 | .026 |
|  |  |  |  |  |  |  |  | 20 | 13.08 | 33.71 | - | 25.40 | 258.8 | .052 |
|  |  |  |  |  |  |  |  | 30 | 12.13 | 33.76 | - | 25.62 | 237.5 | .077 |
|  |  |  |  |  |  |  |  | 50 | 9.91  | 33.85 | - | 26.09 | 193.0 | .120 |

87.60 CALCOFI CRUISE 6806 87.60

DAVID STARR JORDAN, JUNE 13 1968, 0632 GMT, 33 00N 120 20W, SOUNDING 340 FM, WIND 320 18 KNOTS, WEATHER CLEAR, SEA VERY ROUGH.

|  |  |  |  |  |  |  |  |     |       |       |   |       |       |      |
|--|--|--|--|--|--|--|--|-----|-------|-------|---|-------|-------|------|
|  |  |  |  |  |  |  |  | 0   | 14.87 | 33.36 | - | 24.76 | 319.8 | 0    |
|  |  |  |  |  |  |  |  | 10  | 14.88 | 33.36 | - | 24.75 | 320.0 | .032 |
|  |  |  |  |  |  |  |  | 20  | 14.89 | 33.36 | - | 24.75 | 320.2 | .064 |
|  |  |  |  |  |  |  |  | 30  | 14.87 | 33.36 | - | 24.76 | 319.8 | .096 |
|  |  |  |  |  |  |  |  | 50  | 13.07 | 33.35 | - | 25.12 | 285.0 | .157 |
|  |  |  |  |  |  |  |  | 75  | 11.08 | 33.35 | - | 25.50 | 249.3 | .224 |
|  |  |  |  |  |  |  |  | 100 | 9.27  | 33.73 | - | 26.10 | 191.9 | .280 |
|  |  |  |  |  |  |  |  | 125 | 8.90  | 33.86 | - | 26.26 | 176.6 | .326 |
|  |  |  |  |  |  |  |  | 150 | 8.57  | 33.94 | - | 26.38 | 165.8 | .370 |
|  |  |  |  |  |  |  |  | 200 | 8.25  | 34.08 | - | 26.54 | 150.8 | .450 |
|  |  |  |  |  |  |  |  | 250 | 7.78  | 34.18 | - | 26.68 | 136.7 | .524 |
|  |  |  |  |  |  |  |  | 300 | 7.37  | 34.23 | - | 26.78 | 127.4 | .592 |
|  |  |  |  |  |  |  |  | 400 | 6.46  | 34.27 | - | 26.94 | 112.5 | .718 |
|  |  |  |  |  |  |  |  | 500 | 5.97  | 34.31 | - | 27.03 | 103.5 | .832 |

| INPUT |   |   |     |     |     |     |     | OUTPUT AT STANDARD LEVELS OF DEPTH |   |   |     |       |     |    |  |       |
|-------|---|---|-----|-----|-----|-----|-----|------------------------------------|---|---|-----|-------|-----|----|--|-------|
| Z     | T | S | OXY | PHO | SIL | NIT | O*T | Z                                  | T | S | OXY | SIG*T | O*T | DD |  |       |
| 87.60 |   |   |     |     |     |     |     | CALCOFI CRUISE 6806                |   |   |     |       |     |    |  | 87.60 |

DAVID STARR JORDAN, JUNE 13 1968, 0730 GMT, 33 00N 120 20W, SOUNDING 340 FM, WIND 320 18 KNOTS, WEATHER CLEAR, SEA VERY ROUGH, WIRE ANGLE 10.

|     |        |         |      |      |    |      |       |     |       |        |      |       |       |      |
|-----|--------|---------|------|------|----|------|-------|-----|-------|--------|------|-------|-------|------|
| 1   | 14.91  | 33.352  | 5.99 | 0.38 | 1  | 0.0  | 321.2 | 0   | 14.91 | 33.352 | 5.99 | 24.74 | 321.2 | 0    |
| 11  | 14.93  | 33.354  | 6.00 | 0.29 | 1  | 0.0  | 321.5 | 10  | 14.93 | 33.354 | 6.00 | 24.74 | 321.4 | .032 |
| 20  | 14.93K | 33.354K | -    | -    | -  | -    | 321.5 | 20  | 14.93 | 33.354 | 6.01 | 24.74 | 321.5 | .064 |
| 30  | 14.93  | 33.354  | 6.01 | 0.34 | 1  | 0.1  | 321.5 | 30  | 14.93 | 33.354 | 6.01 | 24.74 | 321.5 | .097 |
| 39  | 14.02  | 33.331  | 6.07 | 0.46 | 2  | 1.1  | 304.8 | 50  | 13.34 | 33.331 | 6.10 | 25.05 | 291.6 | .158 |
| 49  | 13.45  | 33.337  | 6.12 | 0.53 | 2  | 1.6  | 293.2 | 75  | 10.90 | 33.357 | 5.01 | 25.54 | 245.7 | .226 |
| 62  | 11.97  | 33.279  | 5.73 | 0.76 | 7  | 5.3  | 270.0 | 100 | 9.76  | 33.532 | 4.29 | 25.87 | 214.1 | .284 |
| 76  | 10.83  | 33.366  | 4.95 | 1.07 | 11 | 10.4 | 243.9 | 125 | 9.14  | 33.753 | 3.75 | 26.14 | 188.3 | .334 |
| 95  | 9.92   | 33.489  | 4.43 | 1.36 | 17 | 15.4 | 219.9 | 150 | 8.69  | 33.931 | 3.20 | 26.35 | 168.2 | .380 |
| 119 | 9.28   | 33.702  | 3.83 | 1.61 | 25 | 20.6 | 194.1 | 200 | 8.09  | 34.143 | 1.75 | 26.61 | 143.9 | .459 |
| 138 | 8.88   | 33.854  | 3.55 | 1.81 | 30 | 22.7 | 176.8 | 250 | 7.73  | 34.181 | 1.38 | 26.69 | 135.9 | .531 |
| 167 | 8.46   | 34.021  | 2.63 | 2.14 | 40 | 27.1 | 158.2 | 300 | 7.35  | 34.200 | 1.16 | 26.76 | 129.4 | .600 |
| 195 | 8.15   | 34.132  | 1.83 | 2.41 | 47 | 30.4 | 145.5 | 400 | 6.44  | 34.271 | .56  | 26.94 | 112.2 | .726 |
| 224 | 7.86   | 34.172  | 1.49 | 2.59 | 52 | 32.0 | 138.4 | 500 | 5.94  | 34.319 | .39  | 27.04 | 102.6 | .839 |
| 261 | 7.68   | 34.185  | 1.35 | 2.64 | 55 | 33.0 | 134.9 |     |       |        |      |       |       |      |
| 321 | 7.15   | 34.210  | 1.04 | 2.78 | 62 | 34.7 | 125.9 |     |       |        |      |       |       |      |
| 394 | 6.48   | 34.268  | .58  | 2.98 | 73 | 37.2 | 112.9 |     |       |        |      |       |       |      |
| 467 | 6.09   | 34.305  | .43  | 3.08 | 79 | 38.5 | 105.4 |     |       |        |      |       |       |      |
| 544 | 5.77   | 34.334  | .38  | 3.05 | 84 | 40.0 | 99.4  |     |       |        |      |       |       |      |

## OBSERVED LEVELS OF DEPTH STANDARD LEVELS OF DEPTH

| INPUT   |   |   |     |     |     |     | COMPUTED            |     |       |       |     |       |       |       |
|---|---|---|-----|-----|-----|-----|---------------------|-----|-------|-------|-----|-------|-------|-------|
| Z   | T | S | OXY | PHO | SIL | NIT | D*T                 | Z   | T     | S     | OXY | SIG*T | D*T   | DD    |
| 87.70   |   |   |     |     |     |     | CALCOFI CRUISE 6806 |     |       |       |     |       |       | 87.70 |
| DAVID STARR JORDAN, JUNE 13 1968, 0000 GMT, 32 42N 121 01W, SOUNDING 2100 FM, WIND 340 17 KNOTS, WEATHER PARTLY CLOUDY, SEA VERY ROUGH. |   |   |     |     |     |     |                     |     |       |       |     |       |       |       |
|   |   |   |     |     |     |     |                     | 0   | 15.06 | 33.30 | -   | 24.67 | 328.1 | 0     |
|   |   |   |     |     |     |     |                     | 10  | 15.05 | 33.30 | -   | 24.67 | 327.9 | .033  |
|   |   |   |     |     |     |     |                     | 20  | 14.93 | 33.31 | -   | 24.71 | 324.7 | .065  |
|   |   |   |     |     |     |     |                     | 30  | 14.81 | 33.31 | -   | 24.73 | 322.2 | .098  |
|   |   |   |     |     |     |     |                     | 50  | 14.42 | 33.30 | -   | 24.81 | 315.0 | .162  |
|   |   |   |     |     |     |     |                     | 75  | 12.48 | 33.21 | -   | 25.13 | 284.3 | .237  |
|   |   |   |     |     |     |     |                     | 100 | 11.03 | 33.29 | -   | 25.46 | 252.9 | .305  |
|   |   |   |     |     |     |     |                     | 125 | 9.81  | 33.54 | -   | 25.87 | 214.4 | .364  |
|   |   |   |     |     |     |     |                     | 150 | 9.34  | 33.72 | -   | 26.08 | 193.7 | .415  |
|   |   |   |     |     |     |     |                     | 200 | 8.43  | 33.96 | -   | 26.41 | 162.3 | .506  |
|   |   |   |     |     |     |     |                     | 250 | 7.62  | 34.02 | -   | 26.58 | 146.4 | .585  |
|   |   |   |     |     |     |     |                     | 300 | 7.12  | 34.05 | -   | 26.68 | 137.4 | .658  |
|   |   |   |     |     |     |     |                     | 400 | 6.16  | 34.12 | -   | 26.86 | 120.0 | .792  |
|   |   |   |     |     |     |     |                     | 500 | 5.67  | 34.25 | -   | 27.02 | 104.5 | .910  |
|   |   |   |     |     |     |     |                     | 600 | 5.17  | 34.30 | -   | 27.12 | 95.0  | 1.016 |

87.80 CALCOFI CRUISE 6806 87.80  
 DAVID STARR JORDAN, JUNE 12 1968, 1819 GMT, 32 19N 121 44W, SOUNDING 2150 FM, WIND 340 10 KNOTS, WEATHER PARTLY CLOUDY, SEA ROUGH.

|  |  |  |  |  |  |  |  |     |       |       |   |       |       |       |
|--|--|--|--|--|--|--|--|-----|-------|-------|---|-------|-------|-------|
|  |  |  |  |  |  |  |  | 0   | 15.12 | 33.29 | - | 24.65 | 330.1 | 0     |
|  |  |  |  |  |  |  |  | 10  | 15.10 | 33.29 | - | 24.65 | 329.7 | .033  |
|  |  |  |  |  |  |  |  | 20  | 14.69 | 33.29 | - | 24.74 | 321.2 | .066  |
|  |  |  |  |  |  |  |  | 30  | 14.42 | 33.31 | - | 24.81 | 314.3 | .097  |
|  |  |  |  |  |  |  |  | 50  | 13.83 | 33.31 | - | 24.94 | 302.6 | .159  |
|  |  |  |  |  |  |  |  | 75  | 13.63 | 33.34 | - | 25.00 | 296.5 | .235  |
|  |  |  |  |  |  |  |  | 100 | 11.40 | 33.28 | - | 25.39 | 259.9 | .305  |
|  |  |  |  |  |  |  |  | 125 | 9.91  | 33.52 | - | 25.83 | 217.4 | .365  |
|  |  |  |  |  |  |  |  | 150 | 9.21  | 33.77 | - | 26.14 | 188.0 | .416  |
|  |  |  |  |  |  |  |  | 200 | 8.58  | 33.97 | - | 26.40 | 163.7 | .506  |
|  |  |  |  |  |  |  |  | 250 | 7.67  | 34.00 | - | 26.56 | 148.6 | .586  |
|  |  |  |  |  |  |  |  | 300 | 7.02  | 34.05 | - | 26.69 | 136.1 | .659  |
|  |  |  |  |  |  |  |  | 400 | 6.14  | 34.14 | - | 26.88 | 118.3 | .791  |
|  |  |  |  |  |  |  |  | 500 | 5.51  | 34.20 | - | 27.00 | 106.4 | .909  |
|  |  |  |  |  |  |  |  | 600 | 5.26  | 34.30 | - | 27.11 | 96.1  | 1.017 |

87.90 CALCOFI CRUISE 6806 87.90  
 DAVID STARR JORDAN, JUNE 12 1968, 1215 GMT, 31 59N 122 27W, SOUNDING 2200 FM, WIND 320 17 KNOTS, WEATHER PARTLY CLOUDY, SEA ROUGH.

|  |  |  |  |  |  |  |  |     |       |       |   |       |       |       |
|--|--|--|--|--|--|--|--|-----|-------|-------|---|-------|-------|-------|
|  |  |  |  |  |  |  |  | 0   | 15.71 | 33.42 | - | 24.62 | 333.0 | 0     |
|  |  |  |  |  |  |  |  | 10  | 15.72 | 33.43 | - | 24.62 | 332.4 | .033  |
|  |  |  |  |  |  |  |  | 20  | 15.72 | 33.43 | - | 24.62 | 332.4 | .067  |
|  |  |  |  |  |  |  |  | 30  | 15.72 | 33.43 | - | 24.62 | 332.4 | .100  |
|  |  |  |  |  |  |  |  | 50  | 15.09 | 33.41 | - | 24.75 | 320.7 | .165  |
|  |  |  |  |  |  |  |  | 75  | 13.79 | 33.38 | - | 25.00 | 296.7 | .243  |
|  |  |  |  |  |  |  |  | 100 | 11.93 | 33.42 | - | 25.40 | 258.9 | .313  |
|  |  |  |  |  |  |  |  | 125 | 10.38 | 33.53 | - | 25.76 | 224.3 | .374  |
|  |  |  |  |  |  |  |  | 150 | 9.75  | 33.72 | - | 26.02 | 200.1 | .428  |
|  |  |  |  |  |  |  |  | 200 | 8.60  | 33.96 | - | 26.39 | 164.8 | .521  |
|  |  |  |  |  |  |  |  | 250 | 7.86  | 34.03 | - | 26.55 | 149.0 | .601  |
|  |  |  |  |  |  |  |  | 300 | 7.30  | 34.05 | - | 26.65 | 139.8 | .675  |
|  |  |  |  |  |  |  |  | 400 | 6.25  | 34.14 | - | 26.86 | 119.7 | .810  |
|  |  |  |  |  |  |  |  | 500 | 5.80  | 34.27 | - | 27.02 | 104.5 | .928  |
|  |  |  |  |  |  |  |  | 600 | 5.40  | 34.35 | - | 27.13 | 93.9  | 1.034 |





## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

| INPUT   |   |   |     |     |     |     | COMPUTED            |     |       |       |     |                   |                 |       |  |
|---|---|---|-----|-----|-----|-----|---------------------|-----|-------|-------|-----|-------------------|-----------------|-------|--|
| Z   | T | S | OXY | PHO | SIL | NIT | D* <sup>T</sup>     | Z   | T     | S     | OXY | SIG* <sup>T</sup> | D* <sup>T</sup> | DD    |  |
| 90.37   |   |   |     |     |     |     | CALCOP1 CRUISE 6806 |     |       |       |     |                   |                 | 90.37 |  |
| DAVID STARR JORDAN, JUNE 11 1968, 0333 GMT, 33 11N 118 22.5W, SOUNDING 650 FM, WIND 290 10 KNOTS, WEATHER CLEAR, SEA ROUGH. |   |   |     |     |     |     |                     |     |       |       |     |                   |                 |       |  |
|   |   |   |     |     |     |     |                     | 0   | 17.60 | 33.61 | -   | 24.33             | 360.9           | 0     |  |
|   |   |   |     |     |     |     |                     | 10  | 16.81 | 33.56 | -   | 24.47             | 346.7           | .035  |  |
|   |   |   |     |     |     |     |                     | 20  | 12.35 | 33.54 | -   | 25.41             | 257.7           | .066  |  |
|   |   |   |     |     |     |     |                     | 30  | 11.58 | 33.52 | -   | 25.54             | 245.4           | .091  |  |
|   |   |   |     |     |     |     |                     | 50  | 10.25 | 33.61 | -   | 25.85             | 216.3           | .137  |  |
|   |   |   |     |     |     |     |                     | 75  | 9.61  | 33.80 | -   | 26.10             | 192.0           | .189  |  |
|   |   |   |     |     |     |     |                     | 100 | 9.17  | 33.92 | -   | 26.27             | 176.3           | .235  |  |
|   |   |   |     |     |     |     |                     | 125 | 8.81  | 33.96 | -   | 26.35             | 167.9           | .279  |  |
|   |   |   |     |     |     |     |                     | 150 | 8.68  | 34.07 | -   | 26.46             | 157.8           | .320  |  |
|   |   |   |     |     |     |     |                     | 200 | 8.21  | 34.16 | -   | 26.60             | 144.2           | .397  |  |
|   |   |   |     |     |     |     |                     | 250 | 7.62  | 34.17 | -   | 26.70             | 135.2           | .469  |  |
|   |   |   |     |     |     |     |                     | 300 | 7.19  | 34.18 | -   | 26.77             | 128.7           | .537  |  |
|   |   |   |     |     |     |     |                     | 400 | 6.69  | 34.28 | -   | 26.92             | 114.7           | .664  |  |
|   |   |   |     |     |     |     |                     | 500 | 6.04  | 34.33 | -   | 27.04             | 102.9           | .779  |  |
|   |   |   |     |     |     |     |                     | 600 | 5.50  | 34.34 | -   | 27.11             | 95.8            | .885  |  |

## INPUT

## OUTPUT AT STANDARD LEVELS OF DEPTH

| Z  | T     | S      | OXY  | PHO  | SIL | NIT  | D* <sup>T</sup>     | Z   | T     | S      | OXY  | SIG* <sup>T</sup> | D* <sup>T</sup> | DD    |  |
|--|-------|--------|------|------|-----|------|---------------------|-----|-------|--------|------|-------------------|-----------------|-------|--|
| 90.37  |       |        |      |      |     |      | CALCOP1 CRUISE 6806 |     |       |        |      |                   |                 | 90.37 |  |
| DAVID STARR JORDAN, JUNE 11 1968, 0424 GMT, 33 11N 118 22.5W, SOUNDING 650 FM, WIND 290 10 KNOTS, WEATHER CLEAR, SEA ROUGH, WIRE ANGLE 00. |       |        |      |      |     |      |                     |     |       |        |      |                   |                 |       |  |
| 2  | 17.49 | 33.604 | 5.90 | 0.24 | 4   | 0.0  | 358.8               | 0   | 17.49 | 33.604 | 5.90 | 24.35             | 358.8           | 0     |  |
| 12   | 17.05 | 33.594 | 6.05 | 0.19 | 4   | 0.2  | 349.6               | 10  | 17.28 | 33.598 | 6.07 | 24.39             | 354.5           | .036  |  |
| 30   | 11.79 | 33.528 | 4.77 | 0.72 | 13  | 7.0  | 248.5               | 20  | 14.73 | 33.561 | 5.55 | 24.94             | 302.3           | .069  |  |
| 40   | 11.21 | 33.547 | 4.47 | 1.19 | 15  | 12.1 | 237.0               | 30  | 11.79 | 33.528 | 4.77 | 25.51             | 248.5           | .096  |  |
| 54   | 10.27 | 33.606 | 3.87 | 1.48 | 20  | 17.2 | 216.9               | 50  | 10.52 | 33.586 | 4.03 | 25.78             | 222.5           | .143  |  |
| 69   | 9.84  | 33.705 | 3.63 | 1.64 | 23  | 19.2 | 202.6               | 75  | 9.71  | 33.738 | 3.54 | 26.04             | 198.1           | .196  |  |
| 94   | 9.35  | 33.831 | 3.27 | 1.66 | 27  | 19.9 | 185.6               | 100 | 9.23  | 33.863 | 3.22 | 26.21             | 181.4           | .244  |  |
| 113  | 8.99  | -      | -    | -    | -   | -    | -                   | 125 | 8.81  | 33.986 | 2.99 | 26.37             | 166.0           | .288  |  |
| 132  | 8.73  | 34.017 | 2.91 | 1.99 | 35  | 24.5 | 162.5               | 150 | 8.56  | 34.079 | 2.53 | 26.49             | 155.4           | .329  |  |
| 152  | 8.55  | 34.085 | 2.49 | 2.14 | 39  | 26.7 | 154.7               | 200 | 8.25  | 34.158 | 1.91 | 26.60             | 144.9           | .406  |  |
| 182  | 8.39  | 34.144 | 2.09 | 2.35 | 44  | 28.0 | 148.0               | 250 | 7.66  | 34.154 | 1.65 | 26.68             | 137.0           | .478  |  |
| 214  | 8.11  | 34.161 | 1.81 | 2.44 | 48  | 29.4 | 142.7               | 300 | 7.23  | 34.144 | 1.39 | 26.73             | 131.9           | .547  |  |
| 244  | 7.73  | 34.158 | 1.68 | 2.53 | 51  | 31.4 | 137.6               | 400 | 6.76  | 34.275 | .68  | 26.90             | 115.9           | .677  |  |
| 293  | 7.28  | 34.138 | 1.44 | 2.69 | 57  | 32.9 | 133.0               | 500 | 6.09  | 34.333 | .40  | 27.04             | 103.2           | .793  |  |
| 348  | 6.98  | 34.209 | 1.02 | 2.72 | 62  | 33.8 | 123.7               | 600 | 5.54  | 34.357 | .43  | 27.12             | 95.0            | .899  |  |
| 431  | 6.61  | 34.307 | .52  | 2.94 | 70  | 36.2 | 111.7               |     |       |        |      |                   |                 |       |  |
| 513  | 6.00  | 34.337 | .39  | 3.06 | 79  | 38.5 | 101.9               |     |       |        |      |                   |                 |       |  |
| 596  | 5.56  | 34.356 | .42  | 3.06 | 85  | 37.9 | 95.3                |     |       |        |      |                   |                 |       |  |

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

| INPUT  |   |   |     |     |     |     | COMPUTED            |     |       |       |     |                   |                 |       |  |
|--|---|---|-----|-----|-----|-----|---------------------|-----|-------|-------|-----|-------------------|-----------------|-------|--|
| Z  | T | S | OXY | PHO | SIL | NIT | D* <sup>T</sup>     | Z   | T     | S     | OXY | SIG* <sup>T</sup> | D* <sup>T</sup> | DD    |  |
| 90.45  |   |   |     |     |     |     | CALCOP1 CRUISE 6806 |     |       |       |     |                   |                 | 90.45 |  |
| DAVID STARR JORDAN, JUNE 11 1968, 0805 GMT, 32 54.5N 118 55W, SOUNDING 1000 FM, WIND 290 10 KNOTS, WEATHER CLEAR, SEA ROUGH. |   |   |     |     |     |     |                     |     |       |       |     |                   |                 |       |  |
|  |   |   |     |     |     |     |                     | 0   | 15.69 | 33.64 | -   | 24.79             | 316.5           | 0     |  |
|  |   |   |     |     |     |     |                     | 10  | 15.68 | 33.64 | -   | 24.79             | 316.2           | .032  |  |
|  |   |   |     |     |     |     |                     | 20  | 11.91 | 33.38 | -   | 25.37             | 261.5           | .061  |  |
|  |   |   |     |     |     |     |                     | 30  | 10.41 | 33.77 | -   | 25.94             | 207.0           | .084  |  |
|  |   |   |     |     |     |     |                     | 50  | 9.37  | 33.87 | -   | 26.20             | 183.0           | .123  |  |
|  |   |   |     |     |     |     |                     | 75  | 8.97  | 33.94 | -   | 26.31             | 171.8           | .168  |  |
|  |   |   |     |     |     |     |                     | 100 | 8.77  | 34.01 | -   | 26.40             | 163.6           | .210  |  |
|  |   |   |     |     |     |     |                     | 125 | 8.72  | 34.07 | -   | 26.46             | 158.4           | .251  |  |
|  |   |   |     |     |     |     |                     | 150 | 8.59  | 34.15 | -   | 26.54             | 150.5           | .290  |  |
|  |   |   |     |     |     |     |                     | 200 | 8.15  | 34.18 | -   | 26.63             | 141.9           | .365  |  |
|  |   |   |     |     |     |     |                     | 250 | 7.67  | 34.22 | -   | 26.73             | 132.2           | .435  |  |
|  |   |   |     |     |     |     |                     | 300 | 7.21  | 34.24 | -   | 26.81             | 124.5           | .502  |  |
|  |   |   |     |     |     |     |                     | 400 | 6.42  | 34.28 | -   | 26.95             | 111.3           | .625  |  |
|  |   |   |     |     |     |     |                     | 500 | 5.86  | 34.32 | -   | 27.05             | 101.5           | .737  |  |
|  |   |   |     |     |     |     |                     | 600 | 5.37  | 34.36 | -   | 27.15             | 92.8            | .841  |  |

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

| INPUT   |   |   |     |     |     |     | COMPUTED            |     |       |       |     |       |       |       |  |
|---|---|---|-----|-----|-----|-----|---------------------|-----|-------|-------|-----|-------|-------|-------|--|
| Z   | T | S | OUY | PHO | SIL | NIT | DAT                 | Z   | T     | S     | OUY | SIGM  | DAT   | DB    |  |
| 90.53   |   |   |     |     |     |     | CALCOFI CRUISE 6806 |     |       |       |     |       |       | 90.53 |  |
| DAVID STARR JORDAN, JUNE 11 1968, 1200 GMT, 32 38N 119 28W, SOUNDING 625 FM, WIND 320 16 KNOTS, WEATHER DRIZZLE, SEA ROUGH. |   |   |     |     |     |     |                     |     |       |       |     |       |       |       |  |
|   |   |   |     |     |     |     |                     | 0   | 14.37 | 33.40 | -   | 24.89 | 306.7 | 0     |  |
|   |   |   |     |     |     |     |                     | 10  | 14.38 | 33.41 | -   | 24.90 | 306.2 | .031  |  |
|   |   |   |     |     |     |     |                     | 20  | 13.68 | 33.43 | -   | 25.06 | 290.9 | .061  |  |
|   |   |   |     |     |     |     |                     | 30  | 12.02 | 33.49 | -   | 25.43 | 255.4 | .068  |  |
|   |   |   |     |     |     |     |                     | 50  | 11.25 | 33.54 | -   | 25.61 | 238.2 | .137  |  |
|   |   |   |     |     |     |     |                     | 75  | 10.44 | 33.64 | -   | 25.84 | 217.1 | .195  |  |
|   |   |   |     |     |     |     |                     | 100 | 9.44  | 33.84 | -   | 26.16 | 186.4 | .246  |  |
|   |   |   |     |     |     |     |                     | 125 | 8.91  | 33.96 | -   | 26.34 | 169.4 | .291  |  |
|   |   |   |     |     |     |     |                     | 150 | 8.49  | 34.01 | -   | 26.44 | 159.4 | .332  |  |
|   |   |   |     |     |     |     |                     | 200 | 7.94  | 34.08 | -   | 26.58 | 146.4 | .410  |  |
|   |   |   |     |     |     |     |                     | 250 | 7.23  | 34.16 | -   | 26.75 | 130.7 | .481  |  |
|   |   |   |     |     |     |     |                     | 300 | 6.91  | 34.18 | -   | 26.81 | 125.0 | .547  |  |
|   |   |   |     |     |     |     |                     | 400 | 6.63  | 34.28 | -   | 26.92 | 113.9 | .672  |  |
|   |   |   |     |     |     |     |                     | 500 | 5.93  | 34.32 | -   | 27.05 | 102.3 | .786  |  |

90.60

CALCOFI CRUISE 6806

90.60

DAVID STARR JORDAN, JUNE 11 1968, 1626 GMT, 32 25.5N 119 58W, SOUNDING 600 FM, WIND 320 16 KNOTS, WEATHER OVERCAST, SEA ROUGH.

|  |  |  |  |  |  |  |  |     |       |       |   |       |       |      |
|--|--|--|--|--|--|--|--|-----|-------|-------|---|-------|-------|------|
|  |  |  |  |  |  |  |  | 0   | 14.54 | 33.41 | - | 24.87 | 309.4 | 0    |
|  |  |  |  |  |  |  |  | 10  | 14.52 | 33.41 | - | 24.87 | 309.0 | .031 |
|  |  |  |  |  |  |  |  | 20  | 13.79 | 33.41 | - | 25.02 | 294.5 | .061 |
|  |  |  |  |  |  |  |  | 30  | 13.14 | 33.48 | - | 25.21 | 276.8 | .090 |
|  |  |  |  |  |  |  |  | 50  | 12.05 | 33.54 | - | 25.47 | 252.2 | .143 |
|  |  |  |  |  |  |  |  | 75  | 10.10 | 33.55 | - | 25.82 | 218.3 | .202 |
|  |  |  |  |  |  |  |  | 100 | 9.49  | 33.77 | - | 26.10 | 192.3 | .254 |
|  |  |  |  |  |  |  |  | 125 | 9.03  | 33.95 | - | 26.31 | 171.9 | .300 |
|  |  |  |  |  |  |  |  | 150 | 8.51  | 33.99 | - | 26.43 | 161.2 | .342 |
|  |  |  |  |  |  |  |  | 200 | 7.83  | 34.07 | - | 26.59 | 145.6 | .420 |
|  |  |  |  |  |  |  |  | 250 | 7.23  | 34.09 | - | 26.69 | 135.9 | .453 |
|  |  |  |  |  |  |  |  | 300 | 6.81  | 34.14 | - | 26.79 | 126.7 | .560 |
|  |  |  |  |  |  |  |  | 400 | 6.26  | 34.22 | - | 26.92 | 113.8 | .685 |
|  |  |  |  |  |  |  |  | 500 | 5.84  | 34.29 | - | 27.03 | 103.5 | .800 |
|  |  |  |  |  |  |  |  | 600 | 5.39  | 34.34 | - | 27.13 | 94.5  | .906 |

## INPUT

## OUTPUT AT STANDARD LEVELS OF DEPTH

| Z   | T     | S      | OUY  | PHO  | SIL | NIT  | DAT                 | Z   | T     | S      | OUY  | SIGM  | DAT   | DB    |  |
|---|-------|--------|------|------|-----|------|---------------------|-----|-------|--------|------|-------|-------|-------|--|
| 90.60   |       |        |      |      |     |      | CALCOFI CRUISE 6806 |     |       |        |      |       |       | 90.60 |  |
| DAVID STARR JORDAN, JUNE 11 1968, 1721 GMT, 32 25.5N 119 58W, SOUNDING 600 FM, WIND 320 16 KNOTS, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 19. |       |        |      |      |     |      |                     |     |       |        |      |       |       |       |  |
| 2   | 14.52 | 33.407 | 6.06 | 0.42 | 2   | 0.7  | 309.7               | 0   | 14.52 | 33.407 | 6.06 | 24.87 | 309.2 | 0     |  |
| 11  | 14.51 | 33.404 | 6.07 | 0.40 | 2   | 0.7  | 309.2               | 10  | 14.51 | 33.404 | 6.07 | 24.87 | 309.2 | .031  |  |
| 29  | 13.95 | 33.401 | 6.09 | 0.48 | 3   | 1.6  | 298.3               | 20  | 14.36 | 33.402 | 6.09 | 24.90 | 306.3 | .062  |  |
| 39  | 13.05 | 33.360 | 6.00 | 0.51 | 4   | 2.2  | 283.9               | 30  | 13.87 | 33.395 | 6.08 | 25.00 | 297.1 | .052  |  |
| 53  | 12.01 | 33.487 | 5.78 | 0.75 | 6   | 5.9  | 255.4               | 50  | 12.23 | 33.455 | 5.85 | 25.37 | 261.7 | .148  |  |
| 68  | 10.75 | 33.511 | 5.03 | 1.12 | 12  | 11.1 | 231.8               | 75  | 10.34 | 33.543 | 4.70 | 25.78 | 222.7 | .209  |  |
| 92  | 9.68  | 33.651 | 3.97 | 1.45 | 22  | 17.6 | 204.1               | 100 | 9.50  | 33.724 | 3.63 | 26.06 | 195.8 | .262  |  |
| 109   | 9.34  | -      | -    | -    | -   | -    | -                   | 125 | 9.03  | 33.920 | 2.98 | 26.29 | 174.2 | .309  |  |
| 127   | 8.99  | 33.933 | 2.95 | 1.78 | 33  | 24.4 | 172.6               | 150 | 8.53  | 33.974 | 3.05 | 26.41 | 162.7 | .351  |  |
| 145   | 8.61  | 33.963 | 3.09 | 1.99 | 35  | 25.6 | 164.7               | 200 | 7.84  | 34.049 | 2.36 | 26.57 | 147.3 | .430  |  |
| 173   | 8.19  | 34.020 | 2.73 | 2.01 | 40  | 26.3 | 154.4               | 250 | 7.23  | 34.089 | 1.86 | 26.69 | 136.0 | .503  |  |
| 205   | 7.78  | 34.053 | 2.29 | 2.19 | 46  | 29.4 | 146.1               | 300 | 6.94  | 34.134 | 1.42 | 26.77 | 128.9 | .571  |  |
| 231   | 7.39  | 34.075 | 2.03 | 2.48 | 51  | 31.3 | 139.2               | 400 | 6.32  | 34.208 | .79  | 26.91 | 115.5 | .698  |  |
| 278   | 7.08  | 34.111 | 1.62 | 2.64 | 57  | 33.3 | 132.4               | 500 | 5.84  | 34.295 | .42  | 27.04 | 103.1 | .814  |  |
| 326   | 6.78  | 34.16  | 1.20 | 2.73 | 62  | 34.6 | 124.8               |     |       |        |      |       |       |       |  |
| 404   | 6.30  | 34.210 | .77  | 2.73 | 70  | 36.0 | 115.0               |     |       |        |      |       |       |       |  |
| 485   | 5.91  | 34.283 | .46  | 3.08 | 79  | 39.9 | 104.0               |     |       |        |      |       |       |       |  |
| 567   | 5.50  | 34.342 | .35  | 3.12 | 85  | 40.0 | 95.6                |     |       |        |      |       |       |       |  |





## OBSERVED LEVELS OF DEPTH STANDARD LEVELS OF DEPTH

| INPUT  |   |   |     |     |     | COMPUTED |     | INPUT               |       |       |     |       |       | COMPUTED |  |       |  |
|--|---|---|-----|-----|-----|----------|-----|---------------------|-------|-------|-----|-------|-------|----------|--|-------|--|
| Z  | T | S | OXY | PHO | SIL | NIT      | D*1 | Z                   | T     | S     | OXY | SIG*1 | D*1   | DE       |  |       |  |
| 90.90  |   |   |     |     |     |          |     | CALCOFI CRUISE 6806 |       |       |     |       |       |          |  | 90.90 |  |
| DAVID STARR JORDAN, JUNE 12 1968, 0723 GMT, 31 25N 122 00W, SOUNDING 2100 FM, WIND 320 10 KNOTS, WEATHER MISSING, SEA MISSING. |   |   |     |     |     |          |     |                     |       |       |     |       |       |          |  |       |  |
|  |   |   |     |     |     |          |     | 0                   | 16.49 | 33.50 | -   | 24.50 | 344.0 | 0        |  |       |  |
|  |   |   |     |     |     |          |     | 10                  | 16.49 | 33.50 | -   | 24.50 | 344.0 | .034     |  |       |  |
|  |   |   |     |     |     |          |     | 20                  | 16.50 | 33.50 | -   | 24.50 | 344.2 | .069     |  |       |  |
|  |   |   |     |     |     |          |     | 30                  | 16.49 | 33.50 | -   | 24.50 | 344.0 | .103     |  |       |  |
|  |   |   |     |     |     |          |     | 50                  | 13.75 | 33.48 | -   | 25.09 | 288.6 | .167     |  |       |  |
|  |   |   |     |     |     |          |     | 75                  | 11.33 | 33.41 | -   | 25.50 | 249.1 | .234     |  |       |  |
|  |   |   |     |     |     |          |     | 100                 | 10.06 | 33.59 | -   | 25.86 | 214.7 | .293     |  |       |  |
|  |   |   |     |     |     |          |     | 125                 | 9.61  | 33.72 | -   | 26.04 | 197.9 | .345     |  |       |  |
|  |   |   |     |     |     |          |     | 150                 | 9.25  | 33.88 | -   | 26.22 | 180.5 | .393     |  |       |  |
|  |   |   |     |     |     |          |     | 200                 | 8.40  | 34.06 | -   | 26.50 | 154.4 | .478     |  |       |  |
|  |   |   |     |     |     |          |     | 250                 | 7.88  | 34.12 | -   | 26.62 | 142.5 | .554     |  |       |  |
|  |   |   |     |     |     |          |     | 300                 | 7.29  | 34.18 | -   | 26.75 | 130.0 | .625     |  |       |  |
|  |   |   |     |     |     |          |     | 400                 | 6.34  | 34.19 | -   | 26.89 | 117.0 | .754     |  |       |  |
|  |   |   |     |     |     |          |     | 500                 | 5.76  | 34.26 | -   | 27.02 | 104.8 | .870     |  |       |  |
|  |   |   |     |     |     |          |     | 600                 | 5.23  | 34.31 | -   | 27.12 | 95.0  | .977     |  |       |  |

93.28 CALCOFI CRUISE 6806 93.28

DAVID STARR JORDAN, JUNE 10 1968, 1246 GMT, 32 54.5N 117 22W, SOUNDING 325 FM, WIND 020 4 KNOTS, WEATHER CLEAR, SEA SLIGHT.

|  |  |  |  |  |  |  |  |     |       |       |   |       |       |      |
|--|--|--|--|--|--|--|--|-----|-------|-------|---|-------|-------|------|
|  |  |  |  |  |  |  |  | 0   | 17.94 | 33.61 | - | 24.24 | 368.7 | 0    |
|  |  |  |  |  |  |  |  | 10  | 14.49 | 33.46 | - | 24.92 | 304.7 | .034 |
|  |  |  |  |  |  |  |  | 20  | 11.76 | 33.54 | - | 25.52 | 247.1 | .061 |
|  |  |  |  |  |  |  |  | 30  | 10.80 | 33.69 | - | 25.81 | 219.4 | .085 |
|  |  |  |  |  |  |  |  | 50  | 10.09 | 33.77 | - | 26.00 | 201.8 | .127 |
|  |  |  |  |  |  |  |  | 75  | 9.48  | 33.86 | - | 26.17 | 185.5 | .176 |
|  |  |  |  |  |  |  |  | 100 | 9.14  | 33.94 | - | 26.29 | 174.3 | .221 |
|  |  |  |  |  |  |  |  | 125 | 8.93  | 34.03 | - | 26.39 | 164.5 | .264 |
|  |  |  |  |  |  |  |  | 150 | 9.03  | 34.17 | - | 26.48 | 155.6 | .305 |
|  |  |  |  |  |  |  |  | 200 | 8.63  | 34.18 | - | 26.56 | 148.9 | .382 |
|  |  |  |  |  |  |  |  | 250 | 8.38  | 34.26 | - | 26.66 | 139.3 | .457 |
|  |  |  |  |  |  |  |  | 300 | 8.01  | 34.28 | - | 26.73 | 132.5 | .527 |
|  |  |  |  |  |  |  |  | 400 | 7.13  | 34.29 | - | 26.86 | 119.7 | .659 |

93.30 CALCOFI CRUISE 6806 93.30

DAVID STARR JORDAN, JUNE 10 1968, 1112 GMT, 32 50.5N 117 31W, SOUNDING 450 FM, WIND CALM, WEATHER MISSING, SEA SMOOTH.

|  |  |  |  |  |  |  |  |     |       |       |   |       |       |      |
|--|--|--|--|--|--|--|--|-----|-------|-------|---|-------|-------|------|
|  |  |  |  |  |  |  |  | 0   | 18.17 | 33.63 | - | 24.20 | 372.6 | 0    |
|  |  |  |  |  |  |  |  | 10  | 16.26 | 33.63 | - | 24.66 | 329.5 | .035 |
|  |  |  |  |  |  |  |  | 20  | 12.58 | 33.92 | - | 25.35 | 263.4 | .065 |
|  |  |  |  |  |  |  |  | 30  | 11.37 | 33.49 | - | 25.45 | 243.9 | .090 |
|  |  |  |  |  |  |  |  | 50  | 10.20 | 33.62 | - | 25.86 | 214.7 | .136 |
|  |  |  |  |  |  |  |  | 75  | 9.59  | 33.80 | - | 26.10 | 191.7 | .187 |
|  |  |  |  |  |  |  |  | 100 | 9.17  | 33.97 | - | 26.31 | 172.6 | .233 |
|  |  |  |  |  |  |  |  | 125 | 9.08  | 34.08 | - | 26.41 | 163.0 | .276 |
|  |  |  |  |  |  |  |  | 150 | 9.19  | 34.18 | - | 26.47 | 157.3 | .317 |
|  |  |  |  |  |  |  |  | 200 | 8.71  | 34.22 | - | 26.57 | 147.1 | .394 |
|  |  |  |  |  |  |  |  | 250 | 8.51  | 34.28 | - | 26.65 | 139.7 | .468 |
|  |  |  |  |  |  |  |  | 300 | 8.16  | 34.29 | - | 26.71 | 133.9 | .539 |
|  |  |  |  |  |  |  |  | 400 | 7.27  | 34.30 | - | 26.85 | 120.8 | .672 |
|  |  |  |  |  |  |  |  | 500 | 6.38  | 34.32 | - | 26.99 | 107.8 | .793 |
|  |  |  |  |  |  |  |  | 600 | 5.60  | 34.34 | - | 27.10 | 96.9  | .903 |

93.40 CALCOFI CRUISE 6806 93.40

DAVID STARR JORDAN, JUNE 10 1968, 0602 GMT, 32 30N 118 12W, SOUNDING 490 FM, WIND 320 10 KNOTS, WEATHER CLEAR, SEA MODERATE.

|  |  |  |  |  |  |  |  |     |       |       |   |       |       |      |
|--|--|--|--|--|--|--|--|-----|-------|-------|---|-------|-------|------|
|  |  |  |  |  |  |  |  | 0   | 16.56 | 33.60 | - | 24.56 | 338.2 | 0    |
|  |  |  |  |  |  |  |  | 10  | 14.74 | 33.64 | - | 25.00 | 296.6 | .032 |
|  |  |  |  |  |  |  |  | 20  | 13.24 | 33.63 | - | 25.30 | 267.7 | .060 |
|  |  |  |  |  |  |  |  | 30  | 12.21 | 33.60 | - | 25.48 | 250.7 | .086 |
|  |  |  |  |  |  |  |  | 50  | 10.46 | 33.68 | - | 25.86 | 214.5 | .133 |
|  |  |  |  |  |  |  |  | 75  | 9.43  | 33.84 | - | 26.16 | 186.2 | .183 |
|  |  |  |  |  |  |  |  | 100 | 9.16  | 33.91 | - | 26.26 | 176.9 | .229 |
|  |  |  |  |  |  |  |  | 125 | 8.65  | 34.03 | - | 26.43 | 160.3 | .272 |
|  |  |  |  |  |  |  |  | 150 | 8.45  | 34.07 | - | 26.50 | 154.4 | .312 |
|  |  |  |  |  |  |  |  | 200 | 8.05  | 34.11 | - | 26.59 | 145.7 | .388 |
|  |  |  |  |  |  |  |  | 250 | 7.55  | 34.15 | - | 26.69 | 135.8 | .460 |
|  |  |  |  |  |  |  |  | 300 | 7.13  | 34.18 | - | 26.78 | 127.9 | .528 |
|  |  |  |  |  |  |  |  | 400 | 6.55  | 34.28 | - | 26.93 | 112.9 | .654 |
|  |  |  |  |  |  |  |  | 500 | 5.43  | 34.30 | - | 27.03 | 103.8 | .769 |

## OBSERVED LEVELS OF DEPTH STANDARD LEVELS OF DEPTH

| INPUT |   |   |     |     |     |     | COMPUTED |   |   |   |     |       |     | INPUT |   |   |   |     |       |     | COMPUTED |   |   |   |     |       |     |    |
|-------|---|---|-----|-----|-----|-----|----------|---|---|---|-----|-------|-----|-------|---|---|---|-----|-------|-----|----------|---|---|---|-----|-------|-----|----|
| Z     | T | S | OXY | PHO | SIL | NIT | D*T      | Z | T | S | OXY | SIG*T | D*T | DD    | Z | T | S | OXY | SIG*T | D*T | DD       | Z | T | S | OXY | SIG*T | D*T | DD |

93.50 CALCOFI CRUISE 6806 93.50

DAVID STARR JORDAN, JUNE 10 1968, 0105 GMT, 32 11N 118 53W, SOUNDING 600 FM, WIND 300 14 KNOTS, WEATHER OVERCAST, SEA ROUGH.

|     |       |       |   |       |       |      |
|-----|-------|-------|---|-------|-------|------|
| 0   | 14.93 | 33.63 | - | 24.95 | 301.3 | 0    |
| 10  | 14.91 | 33.63 | - | 24.96 | 300.8 | .030 |
| 20  | 14.72 | 33.62 | - | 24.99 | 297.7 | .060 |
| 30  | 14.29 | 33.57 | - | 25.04 | 292.6 | .090 |
| 50  | 11.93 | 33.48 | - | 25.44 | 254.5 | .145 |
| 75  | 10.27 | 33.61 | - | 25.84 | 216.6 | .204 |
| 100 | 9.42  | 33.75 | - | 26.09 | 192.7 | .255 |
| 125 | 8.87  | 33.89 | - | 26.29 | 174.0 | .302 |
| 150 | 8.58  | 34.02 | - | 26.44 | 160.0 | .344 |
| 200 | 8.25  | 34.15 | - | 26.59 | 145.6 | .422 |
| 250 | 7.79  | 34.19 | - | 26.69 | 136.1 | .494 |
| 300 | 7.36  | 34.24 | - | 26.79 | 126.5 | .562 |
| 400 | 6.46  | 34.28 | - | 26.95 | 111.8 | .687 |
| 500 | 5.86  | 34.32 | - | 27.05 | 101.5 | .799 |

93.60 CALCOFI CRUISE 6806 93.60

DAVID STARR JORDAN, JUNE 8 1968, 1804 GMT, 31 55N 119 40W, SOUNDING 1510 FM, WIND 340 6 KNOTS, WEATHER OVERCAST, SEA VERY ROUGH.

|     |       |       |   |       |       |      |
|-----|-------|-------|---|-------|-------|------|
| 0   | 15.20 | 33.47 | - | 24.77 | 318.6 | 0    |
| 10  | 15.20 | 33.47 | - | 24.77 | 318.6 | .032 |
| 20  | 15.19 | 33.47 | - | 24.77 | 318.4 | .064 |
| 30  | 14.83 | 33.40 | - | 24.80 | 316.0 | .096 |
| 50  | 12.98 | 33.38 | - | 25.16 | 281.1 | .155 |
| 75  | 10.83 | 33.44 | - | 25.61 | 238.4 | .221 |
| 100 | 10.22 | 33.65 | - | 25.88 | 212.8 | .278 |
| 125 | 9.61  | 33.78 | - | 26.09 | 193.4 | .329 |
| 150 | 9.13  | 33.95 | - | 26.30 | 173.4 | .376 |
| 200 | 8.23  | 34.05 | - | 26.51 | 152.7 | .459 |
| 250 | 7.73  | 34.08 | - | 26.61 | 143.4 | .535 |
| 300 | 7.31  | 34.14 | - | 26.72 | 133.3 | .606 |
| 400 | 6.51  | 34.26 | - | 26.92 | 113.9 | .735 |
| 500 | 5.95  | 34.30 | - | 27.03 | 104.1 | .850 |
| 600 | 5.48  | 34.35 | - | 27.13 | 94.8  | .956 |

## INPUT

## OUTPUT AT STANDARD LEVELS OF DEPTH

| Z | T | S | OXY | PHO | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |
|---|---|---|-----|-----|-----|-----|-----|---|---|---|-----|-------|-----|----|
|---|---|---|-----|-----|-----|-----|-----|---|---|---|-----|-------|-----|----|

93.60 CALCOFI CRUISE 6806 93.60

DAVID STARR JORDAN, JUNE 8 1968, 1840 GMT, 31 55N 119 40W, SOUNDING 1510 FM, WIND 340 6 KNOTS, WEATHER OVERCAST, SEA VERY ROUGH, WIRE ANGLE 20.

|     |       |        |      |      |    |      |       |     |       |        |      |       |       |      |
|-----|-------|--------|------|------|----|------|-------|-----|-------|--------|------|-------|-------|------|
| 2   | 15.23 | 33.463 | 5.99 | 0.36 | 2  | 0.2  | 319.7 | 0   | 15.23 | 33.463 | 5.99 | 24.76 | 319.7 | 0    |
| 11  | 15.23 | 33.463 | 6.00 | 0.33 | 2  | 0.1  | 319.7 | 10  | 15.23 | 33.463 | 6.00 | 24.76 | 319.7 | .032 |
| 30  | 15.17 | 33.458 | 6.02 | 0.32 | 2  | 0.0  | 318.8 | 20  | 15.21 | 33.461 | 6.01 | 24.76 | 319.4 | .064 |
| 38  | 13.61 | 33.400 | 6.06 | 0.47 | 3  | 1.0  | 291.7 | 30  | 15.17 | 33.458 | 6.02 | 24.77 | 318.8 | .096 |
| 47  | 13.03 | 33.413 | 5.84 | 1.10 | 5  | 2.9  | 279.6 | 50  | 12.73 | 33.403 | 5.72 | 25.23 | 274.8 | .156 |
| 60  | 11.70 | 33.373 | 5.29 | 0.81 | 8  | 6.8  | 258.3 | 75  | 10.72 | 33.440 | 4.74 | 25.63 | 236.5 | .220 |
| 74  | 10.76 | 33.431 | 4.78 | 1.09 | 12 | 11.5 | 237.9 | 100 | 10.02 | 33.651 | 3.92 | 25.92 | 209.5 | .276 |
| 91  | 10.25 | 33.600 | 4.14 | 1.44 | 18 | 16.3 | 217.0 | 125 | 9.52  | 33.829 | 3.48 | 26.14 | 188.4 | .326 |
| 114 | 9.72  | 33.727 | 3.67 | -    | -  | -    | 199.1 | 150 | 9.08  | 33.964 | 3.23 | 26.32 | 171.6 | .372 |
| 133 | 9.38  | 33.899 | 3.36 | 1.80 | 28 | 22.2 | 181.1 | 200 | 8.24  | 34.058 | 2.65 | 26.52 | 152.2 | .455 |
| 161 | 8.89  | 33.984 | 3.16 | 1.98 | 32 | 24.6 | 167.3 | 250 | 7.78  | 34.098 | 2.11 | 26.62 | 142.7 | .530 |
| 188 | 8.44  | 34.043 | 2.82 | 2.06 | 37 | 26.9 | 156.3 | 300 | 7.26  | 34.131 | 1.64 | 26.72 | 133.3 | .601 |
| 214 | 8.03  | 34.071 | 2.46 | 2.29 | 42 | 28.6 | 148.3 | 400 | 6.47  | 34.250 | .66  | 26.92 | 114.2 | .730 |
| 253 | 7.76  | 34.100 | 2.08 | 2.44 | 47 | 30.9 | 142.4 | 500 | 5.97  | 34.304 | .40  | 27.03 | 104.0 | .846 |
| 309 | 7.16  | 34.138 | 1.55 | 2.61 | 55 | 33.8 | 131.4 |     |       |        |      |       |       |      |
| 378 | 6.59  | 34.243 | .72  | 2.97 | 65 | 36.9 | 116.2 |     |       |        |      |       |       |      |
| 449 | 6.22  | 34.272 | .53  | 3.09 | 71 | 38.5 | 109.4 |     |       |        |      |       |       |      |
| 526 | 5.84  | 34.323 | .34  | 3.18 | 78 | 41.1 | 101.0 |     |       |        |      |       |       |      |

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

| OBSERVED LEVELS OF DEPTH  |   |   |     |     |     |     | STANDARD LEVELS OF DEPTH |     |       |       |     |       |       |       |  |
|---|---|---|-----|-----|-----|-----|--------------------------|-----|-------|-------|-----|-------|-------|-------|--|
| INPUT   |   |   |     |     |     |     | COMPUTED                 |     |       |       |     |       |       |       |  |
| Z   | T | S | OXY | PHO | SIL | NIT | D*T                      | Z   | T     | S     | OXY | PHO*  | D*T   | 00    |  |
| 93.70   |   |   |     |     |     |     | CALCOFI CRUISE 6806      |     |       |       |     |       |       | 93.70 |  |
| DAVID STARR JORDAN, JUNE 9 1968, 1155 GMT, 31 29N 120 15W, SOUNDING 2200 FM, WIND 320 20 KNOTS; WEATHER MISSING, SEA MISSING. |   |   |     |     |     |     |                          |     |       |       |     |       |       |       |  |
|   |   |   |     |     |     |     |                          | 0   | 16.03 | 33.49 | -   | 24.60 | 334.7 | 0     |  |
|   |   |   |     |     |     |     |                          | 10  | 16.02 | 33.49 | -   | 24.60 | 334.5 | .033  |  |
|   |   |   |     |     |     |     |                          | 20  | 16.01 | 33.49 | -   | 24.61 | 334.3 | .067  |  |
|   |   |   |     |     |     |     |                          | 30  | 15.69 | 33.46 | -   | 24.65 | 329.6 | .100  |  |
|   |   |   |     |     |     |     |                          | 50  | 13.35 | 33.37 | -   | 25.08 | 288.9 | .162  |  |
|   |   |   |     |     |     |     |                          | 75  | 11.26 | 33.40 | -   | 25.50 | 248.7 | .230  |  |
|   |   |   |     |     |     |     |                          | 100 | 10.20 | 33.56 | -   | 25.82 | 219.1 | .289  |  |
|   |   |   |     |     |     |     |                          | 125 | 9.98  | 33.70 | -   | 26.03 | 198.9 | .342  |  |
|   |   |   |     |     |     |     |                          | 150 | 9.09  | 33.88 | -   | 26.25 | 178.0 | .389  |  |
|   |   |   |     |     |     |     |                          | 200 | 8.50  | 34.04 | -   | 26.47 | 157.4 | .475  |  |
|   |   |   |     |     |     |     |                          | 250 | 7.92  | 34.11 | -   | 26.61 | 143.9 | .552  |  |
|   |   |   |     |     |     |     |                          | 300 | 7.35  | 34.16 | -   | 26.73 | 132.3 | .623  |  |
|   |   |   |     |     |     |     |                          | 400 | 6.50  | 34.23 | -   | 26.90 | 116.0 | .753  |  |
|   |   |   |     |     |     |     |                          | 500 | 5.89  | 34.29 | -   | 27.03 | 104.1 | .869  |  |
|   |   |   |     |     |     |     |                          | 600 | 5.38  | 34.34 | -   | 27.13 | 94.4  | .975  |  |

93.80

CALCOFI CRUISE 6806

93.80

DAVID STARR JORDAN, JUNE 9 1968, 0713 GMT, 31 09N 120 56W, SOUNDING 2000 FM, WIND 340 18 KNOTS, WEATHER MISSING, SEA MISSING.

|  |  |  |  |  |  |  |  |     |       |       |   |       |       |       |
|--|--|--|--|--|--|--|--|-----|-------|-------|---|-------|-------|-------|
|  |  |  |  |  |  |  |  | 0   | 16.91 | 33.56 | - | 24.45 | 348.9 | 0     |
|  |  |  |  |  |  |  |  | 10  | 16.91 | 33.56 | - | 24.45 | 348.9 | .035  |
|  |  |  |  |  |  |  |  | 20  | 16.92 | 33.56 | - | 24.45 | 349.1 | .070  |
|  |  |  |  |  |  |  |  | 30  | 16.92 | 33.56 | - | 24.45 | 349.1 | .105  |
|  |  |  |  |  |  |  |  | 50  | 16.82 | 33.59 | - | 24.50 | 344.7 | .174  |
|  |  |  |  |  |  |  |  | 75  | 12.50 | 33.41 | - | 25.28 | 270.0 | .252  |
|  |  |  |  |  |  |  |  | 100 | 10.93 | 33.43 | - | 25.59 | 240.8 | .316  |
|  |  |  |  |  |  |  |  | 125 | 9.72  | 33.67 | - | 25.98 | 203.3 | .372  |
|  |  |  |  |  |  |  |  | 150 | 9.25  | 33.84 | - | 26.19 | 183.4 | .421  |
|  |  |  |  |  |  |  |  | 200 | 8.43  | 34.00 | - | 26.45 | 159.3 | .508  |
|  |  |  |  |  |  |  |  | 250 | 7.79  | 34.06 | - | 26.54 | 145.8 | .567  |
|  |  |  |  |  |  |  |  | 300 | 7.19  | 34.08 | - | 26.69 | 136.1 | .659  |
|  |  |  |  |  |  |  |  | 400 | 6.30  | 34.16 | - | 26.87 | 118.8 | .792  |
|  |  |  |  |  |  |  |  | 500 | 5.81  | 34.24 | - | 27.00 | 106.9 | .911  |
|  |  |  |  |  |  |  |  | 600 | 5.26  | 34.30 | - | 27.11 | 96.1  | 1.019 |

93.90

CALCOFI CRUISE 6806

93.90

DAVID STARR JORDAN, JUNE 9 1968, 0300 GMT, 30 49.5N 121 35.5W, SOUNDING 2200 FM, WIND 340 14 KNOTS, WEATHER CLOUDY, SEA VERY ROUGH.

|  |  |  |  |  |  |  |  |     |       |       |   |       |       |      |
|--|--|--|--|--|--|--|--|-----|-------|-------|---|-------|-------|------|
|  |  |  |  |  |  |  |  | 0   | 16.31 | 33.51 | - | 24.55 | 339.3 | 0    |
|  |  |  |  |  |  |  |  | 10  | 16.31 | 33.52 | - | 24.56 | 338.6 | .034 |
|  |  |  |  |  |  |  |  | 20  | 16.25 | 33.52 | - | 24.57 | 337.3 | .068 |
|  |  |  |  |  |  |  |  | 30  | 14.98 | 33.42 | - | 24.78 | 317.7 | .101 |
|  |  |  |  |  |  |  |  | 50  | 13.45 | 33.41 | - | 25.09 | 287.9 | .161 |
|  |  |  |  |  |  |  |  | 75  | 11.31 | 33.41 | - | 25.50 | 248.8 | .229 |
|  |  |  |  |  |  |  |  | 100 | 10.29 | 33.56 | - | 25.80 | 220.6 | .288 |
|  |  |  |  |  |  |  |  | 125 | 9.64  | 33.73 | - | 26.04 | 197.6 | .341 |
|  |  |  |  |  |  |  |  | 150 | 9.19  | 33.85 | - | 26.21 | 181.8 | .389 |
|  |  |  |  |  |  |  |  | 200 | 8.59  | 34.02 | - | 26.44 | 160.2 | .476 |
|  |  |  |  |  |  |  |  | 250 | 7.98  | 34.08 | - | 26.58 | 146.9 | .555 |
|  |  |  |  |  |  |  |  | 300 | 7.31  | 34.11 | - | 26.70 | 135.5 | .628 |
|  |  |  |  |  |  |  |  | 400 | 6.49  | 34.21 | - | 26.89 | 117.4 | .759 |
|  |  |  |  |  |  |  |  | 500 | 5.79  | 34.27 | - | 27.02 | 104.4 | .876 |
|  |  |  |  |  |  |  |  | 600 | 5.22  | 34.34 | - | 27.15 | 92.6  | .981 |

94.30

CALCOFI CRUISE 6806

94.30

DAVID STARR JORDAN, MAY 31 1968, 2340 GMT, 32 42.5N 117 27W, SOUNDING MISSING, WIND MISSING, WEATHER MISSING, SEA MISSING. A)

|    |   |   |   |   |   |   |   |     |       |       |   |       |       |      |
|----|---|---|---|---|---|---|---|-----|-------|-------|---|-------|-------|------|
| 0A | - | - | - | - | - | - | - | 0   | 18.86 | 33.58 | - | 23.94 | 192.6 | 0    |
|    |   |   |   |   |   |   |   | 10  | 16.53 | 33.55 | - | 24.53 | 341.2 | .037 |
|    |   |   |   |   |   |   |   | 20  | 11.57 | 33.41 | - | 25.46 | 253.3 | .066 |
|    |   |   |   |   |   |   |   | 30  | 10.49 | 33.72 | - | 25.89 | 212.1 | .090 |
|    |   |   |   |   |   |   |   | 50  | 9.66  | 33.79 | - | 26.09 | 193.5 | .131 |
|    |   |   |   |   |   |   |   | 75  | 9.28  | 33.90 | - | 26.23 | 179.4 | .177 |
|    |   |   |   |   |   |   |   | 100 | 9.10  | 34.05 | - | 26.38 | 165.0 | .221 |
|    |   |   |   |   |   |   |   | 125 | 9.02  | 34.12 | - | 26.45 | 159.2 | .262 |
|    |   |   |   |   |   |   |   | 150 | 8.86  | 34.14 | - | 26.49 | 155.3 | .302 |
|    |   |   |   |   |   |   |   | 200 | 8.68  | 34.24 | - | 26.59 | 145.2 | .379 |
|    |   |   |   |   |   |   |   | 250 | 8.43  | 34.27 | - | 26.66 | 139.3 | .452 |

A) SHAKEDOWN STATION.

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

| OBSERVED LEVELS OF DEPTH |   |   |     |     |     |     | STANDARD LEVELS OF DEPTH |   |   |     |       |     |    |
|--------------------------|---|---|-----|-----|-----|-----|--------------------------|---|---|-----|-------|-----|----|
| INPUT                    |   |   |     |     |     |     | COMPUTED                 |   |   |     |       |     |    |
| Z                        | T | S | PHY | SIL | WIT | D*E | Z                        | T | S | PHY | SIG*E | D*E | DD |

97.35

CALCOFI CRUISE 6806

97.35

DAVID STARR JORDAN, JUNE 7 1968, 1623 GMT, 32 05.5N 117 27.5W, SOUNDING 705 FM, WIND 270 13 KNOTS, WEATHER OVERCAST, SEA ROUGH.

|     |       |       |   |       |       |      |
|-----|-------|-------|---|-------|-------|------|
| 0   | 16.36 | 33.58 | - | 24.59 | 335.3 | 0    |
| 10  | 16.36 | 33.59 | - | 24.60 | 334.6 | .034 |
| 20  | 15.65 | 33.52 | - | 24.71 | 324.4 | .066 |
| 30  | 13.40 | 33.47 | - | 25.15 | 282.5 | .097 |
| 50  | 11.49 | 33.47 | - | 25.52 | 247.5 | .150 |
| 75  | 10.28 | 33.62 | - | 25.85 | 216.0 | .208 |
| 100 | 9.53  | 33.80 | - | 26.11 | 190.7 | .260 |
| 125 | 9.07  | 33.93 | - | 26.29 | 174.0 | .306 |
| 150 | 8.74  | 34.00 | - | 26.40 | 163.9 | .349 |
| 200 | 8.09  | 34.12 | - | 26.59 | 145.5 | .428 |
| 250 | 7.75  | 34.15 | - | 26.66 | 138.5 | .500 |
| 300 | 7.34  | 34.19 | - | 26.75 | 129.9 | .570 |
| 400 | 6.55  | 34.25 | - | 26.91 | 115.2 | .698 |
| 500 | 6.06  | 34.29 | - | 27.01 | 106.1 | .815 |
| 600 | 5.57  | 34.33 | - | 27.10 | 97.3  | .923 |

97.40

CALCOFI CRUISE 6806

97.40

DAVID STARR JORDAN, JUNE 7 1968, 1950 GMT, 31 55N 117 47.5W, SOUNDING 850 FM, WIND 300 12 KNOTS, WEATHER OVERCAST, SEA ROUGH.

|     |       |       |   |       |       |      |
|-----|-------|-------|---|-------|-------|------|
| 0   | 16.13 | 33.54 | - | 24.62 | 333.2 | 0    |
| 10  | 16.13 | 33.54 | - | 24.62 | 333.2 | .033 |
| 20  | 15.72 | 33.48 | - | 24.66 | 328.8 | .066 |
| 30  | 12.98 | 33.41 | - | 25.26 | 271.5 | .097 |
| 50  | 10.77 | 33.54 | - | 25.70 | 230.0 | .147 |
| 75  | 9.81  | 33.86 | - | 26.11 | 190.7 | .200 |
| 100 | 9.83  | 34.15 | - | 26.34 | 169.5 | .245 |
| 125 | 9.78  | 34.19 | - | 26.38 | 165.8 | .288 |
| 150 | 9.61  | 34.22 | - | 26.43 | 160.9 | .329 |
| 200 | 9.26  | 34.26 | - | 26.52 | 152.4 | .409 |
| 250 | 9.13  | 34.31 | - | 26.58 | 146.7 | .486 |
| 300 | 8.66  | 34.33 | - | 26.67 | 138.2 | .560 |
| 400 | 7.32  | 34.27 | - | 26.82 | 123.7 | .697 |
| 500 | 6.37  | 34.32 | - | 26.99 | 107.7 | .820 |
| 600 | 5.56  | 34.34 | - | 27.11 | 96.5  | .929 |

97.50

CALCOFI CRUISE 6806

97.50

DAVID STARR JORDAN, JUNE 8 1968, 0210 GMT, 31 35.5N 118 29W, SOUNDING 1150 FM, WIND 290 17 KNOTS, WEATHER OVERCAST, SEA ROUGH.

|     |       |       |   |       |       |      |
|-----|-------|-------|---|-------|-------|------|
| 0   | 14.96 | 33.58 | - | 24.91 | 305.5 | 0    |
| 10  | 14.96 | 33.58 | - | 24.91 | 305.5 | .031 |
| 20  | 14.96 | 33.58 | - | 24.91 | 305.5 | .061 |
| 30  | 14.92 | 33.58 | - | 24.92 | 304.7 | .092 |
| 50  | 12.53 | 33.38 | - | 25.25 | 272.8 | .150 |
| 75  | 10.74 | 33.48 | - | 25.66 | 233.9 | .213 |
| 100 | 10.07 | 33.66 | - | 25.92 | 209.6 | .269 |
| 125 | 9.32  | 33.86 | - | 26.20 | 183.0 | .319 |
| 150 | 8.89  | 33.95 | - | 26.33 | 169.8 | .364 |
| 200 | 8.26  | 34.07 | - | 26.53 | 151.7 | .446 |
| 250 | 7.65  | 34.14 | - | 26.67 | 137.9 | .520 |
| 300 | 7.49  | 34.20 | - | 26.74 | 131.2 | .589 |
| 400 | 6.74  | 34.25 | - | 26.88 | 117.6 | .719 |
| 500 | 6.06  | 34.29 | - | 27.01 | 106.1 | .837 |



| OBSERVED LEVELS OF DEPTH  |   |   |     |     |     |     | STANDARD LEVELS OF DEPTH |     |       |       |     |                   |                 |       |  |
|---|---|---|-----|-----|-----|-----|--------------------------|-----|-------|-------|-----|-------------------|-----------------|-------|--|
| INPUT   |   |   |     |     |     |     | COMPUTED                 |     |       |       |     |                   |                 |       |  |
| Z   | T | S | OXY | PHO | SIL | NIT | D* <sup>T</sup>          | Z   | T     | S     | OXY | SIG* <sup>T</sup> | D* <sup>T</sup> | DC    |  |
| 97.60   |   |   |     |     |     |     | CALCOFI CRUISE 6806      |     |       |       |     |                   |                 | 97.60 |  |
| DAVID STARR JORDAN, JUNE 8 1968, 0721 GMT, 31 15N 119 09W, SOUNDING 1825 FM, WIND 360 12 KNOTS, WEATHER MISSING, SEA ROUGH. |   |   |     |     |     |     |                          |     |       |       |     |                   |                 |       |  |
|   |   |   |     |     |     |     |                          | 0   | 16.66 | 33.57 | -   | 24.52             | 342.6           | 0     |  |
|   |   |   |     |     |     |     |                          | 10  | 16.65 | 33.57 | -   | 24.52             | 342.4           | .034  |  |
|   |   |   |     |     |     |     |                          | 20  | 16.66 | 33.57 | -   | 24.52             | 342.6           | .069  |  |
|   |   |   |     |     |     |     |                          | 30  | 16.66 | 33.57 | -   | 24.52             | 342.6           | .103  |  |
|   |   |   |     |     |     |     |                          | 50  | 12.33 | 33.41 | -   | 25.31             | 266.9           | .164  |  |
|   |   |   |     |     |     |     |                          | 75  | 10.80 | 33.46 | -   | 25.63             | 236.4           | .227  |  |
|   |   |   |     |     |     |     |                          | 100 | 10.13 | 33.63 | -   | 25.88             | 212.8           | .284  |  |
|   |   |   |     |     |     |     |                          | 125 | 9.39  | 33.83 | -   | 26.16             | 186.3           | .334  |  |
|   |   |   |     |     |     |     |                          | 150 | 9.13  | 33.90 | -   | 26.26             | 177.1           | .380  |  |
|   |   |   |     |     |     |     |                          | 200 | 8.34  | 34.05 | -   | 26.50             | 154.3           | .465  |  |
|   |   |   |     |     |     |     |                          | 250 | 8.03  | 34.09 | -   | 26.58             | 146.9           | .542  |  |
|   |   |   |     |     |     |     |                          | 300 | 7.44  | 34.14 | -   | 26.70             | 135.0           | .615  |  |
|   |   |   |     |     |     |     |                          | 400 | 6.67  | 34.22 | -   | 26.87             | 118.9           | .747  |  |
|   |   |   |     |     |     |     |                          | 500 | 5.92  | 34.27 | -   | 27.01             | 105.9           | .866  |  |
|   |   |   |     |     |     |     |                          | 600 | 5.45  | 34.33 | -   | 27.11             | 96.0            | .974  |  |

| INPUT  |       |         |      |      |     |      | OUTPUT AT STANDARD LEVELS OF DEPTH |     |       |        |      |                   |                 |       |  |
|--|-------|---------|------|------|-----|------|------------------------------------|-----|-------|--------|------|-------------------|-----------------|-------|--|
| Z  | T     | S       | OXY  | PHO  | SIL | NIT  | D* <sup>T</sup>                    | Z   | T     | S      | OXY  | SIG* <sup>T</sup> | D* <sup>T</sup> | DC    |  |
| 97.60  |       |         |      |      |     |      | CALCOFI CRUISE 6806                |     |       |        |      |                   |                 | 97.60 |  |
| DAVID STARR JORDAN, JUNE 8 1968, 0901 GMT, 31 15N 119 09W, SOUNDING 1780 FM, WIND 360 12 KNOTS, WEATHER MISSING, SEA ROUGH, WIRE ANGLE 10. |       |         |      |      |     |      |                                    |     |       |        |      |                   |                 |       |  |
| 1  | 16.63 | 33.563  | 5.78 | 0.26 | 2   | 0.2  | 342.5                              | 0   | 16.63 | 33.563 | 5.78 | 24.52             | 342.5           | 0     |  |
| 11   | 16.62 | 33.567  | 5.76 | 0.24 | 2   | 0.0  | 342.0                              | 10  | 16.62 | 33.567 | 5.76 | 24.52             | 342.0           | .034  |  |
| 30   | 16.64 | 33.560  | 5.83 | 0.30 | 2   | 0.1  | 342.9                              | 20  | 16.64 | 33.564 | 5.80 | 24.52             | 342.5           | .069  |  |
| 39   | 16.60 | 33.559  | 5.76 | 0.25 | 2   | 0.1  | 342.1                              | 30  | 16.64 | 33.560 | 5.83 | 24.51             | 342.9           | .103  |  |
| 49   | 14.27 | 33.489  | 6.02 | 0.30 | 5   | 0.2  | 298.2                              | 50  | 14.02 | 33.481 | 5.97 | 25.03             | 293.9           | .164  |  |
| 62   | 11.57 | 33.416  | 5.08 | 0.89 | 10  | 7.4  | 252.9                              | 75  | 10.87 | 33.485 | 4.47 | 25.64             | 235.8           | .233  |  |
| 77   | 10.78 | 33.502  | 4.40 | 1.08 | 15  | 10.4 | 233.0                              | 100 | 10.00 | 33.678 | 3.73 | 25.94             | 207.1           | .289  |  |
| 95   | 10.13 | 33.625  | 3.84 | 0.98 | 20  | 15.1 | 213.2                              | 125 | 9.48  | 33.909 | 3.36 | 26.21             | 181.8           | .338  |  |
| 119  | 9.59  | 33.871A | 3.43 | 1.33 | 26  | 19.1 | 186.4                              | 150 | 9.10  | 33.967 | 3.12 | 26.31             | 171.7           | .383  |  |
| 138  | 9.26  | 33.965A | 3.22 | 1.91 | 29  | 23.7 | 174.3                              | 200 | 8.42  | 34.047 | 2.59 | 26.48             | 155.6           | .467  |  |
| 167  | 8.88  | 33.969  | 2.98 | 1.88 | 33  | 23.8 | 168.3                              | 250 | 7.99  | 34.118 | 1.98 | 26.60             | 144.3           | .544  |  |
| 195  | 8.49  | 34.039  | 2.65 | 1.85 | 39  | 26.4 | 157.3                              | 300 | 7.52  | 34.154 | 1.50 | 26.70             | 135.0           | .616  |  |
| 223  | 8.12  | 34.078  | 2.32 | 2.31 | 43  | 29.1 | 149.1                              | 400 | 6.70  | 34.231 | .82  | 26.88             | 118.5           | .748  |  |
| 262  | 7.95  | 34.133  | 1.84 | 2.46 | 48  | 31.1 | 142.6                              | 500 | 5.88  | 34.295 | .41  | 27.03             | 103.6           | .865  |  |
| 321  | 7.26  | 34.162  | 1.35 | 2.69 | 56  | 33.3 | 130.9                              |     |       |        |      |                   |                 |       |  |
| 394  | 6.76  | 34.226  | .86  | 2.55 | 63  | 33.5 | 113.6                              |     |       |        |      |                   |                 |       |  |
| 466  | 6.13  | 34.278  | .50  | 3.14 | 75  | 39.9 | 107.9                              |     |       |        |      |                   |                 |       |  |
| 544  | 5.60  | 34.310  | .36  | 3.03 | 83  | 40.2 | 99.2                               |     |       |        |      |                   |                 |       |  |

| OBSERVED LEVELS OF DEPTH   |   |   |     |     |     |     | STANDARD LEVELS OF DEPTH |     |       |       |     |                   |                 |       |  |
|--|---|---|-----|-----|-----|-----|--------------------------|-----|-------|-------|-----|-------------------|-----------------|-------|--|
| INPUT  |   |   |     |     |     |     | COMPUTED                 |     |       |       |     |                   |                 |       |  |
| Z  | T | S | OXY | PHO | SIL | NIT | D* <sup>T</sup>          | Z   | T     | S     | OXY | SIG* <sup>T</sup> | D* <sup>T</sup> | DC    |  |
| 97.70  |   |   |     |     |     |     | CALCOFI CRUISE 6806      |     |       |       |     |                   |                 | 97.70 |  |
| DAVID STARR JORDAN, JUNE 8 1968, 1250 GMT, 30 56N 119 48.5W, SOUNDING 1870 FM, WIND 300 16 KNOTS, WEATHER OVERCAST, SEA ROUGH. |   |   |     |     |     |     |                          |     |       |       |     |                   |                 |       |  |
|  |   |   |     |     |     |     |                          | 0   | 16.33 | 33.46 | -   | 24.51             | 343.4           | 0     |  |
|  |   |   |     |     |     |     |                          | 10  | 16.33 | 33.46 | -   | 24.51             | 343.4           | .034  |  |
|  |   |   |     |     |     |     |                          | 20  | 16.34 | 33.46 | -   | 24.51             | 343.6           | .069  |  |
|  |   |   |     |     |     |     |                          | 30  | 16.34 | 33.46 | -   | 24.51             | 343.6           | .103  |  |
|  |   |   |     |     |     |     |                          | 50  | 14.72 | 33.37 | -   | 24.80             | 316.0           | .169  |  |
|  |   |   |     |     |     |     |                          | 75  | 12.49 | 33.32 | -   | 25.21             | 276.4           | .244  |  |
|  |   |   |     |     |     |     |                          | 100 | 10.91 | 33.36 | -   | 25.54             | 245.7           | .310  |  |
|  |   |   |     |     |     |     |                          | 125 | 10.04 | 33.53 | -   | 25.82             | 218.8           | .368  |  |
|  |   |   |     |     |     |     |                          | 150 | 9.21  | 33.75 | -   | 26.13             | 189.5           | .420  |  |
|  |   |   |     |     |     |     |                          | 200 | 8.49  | 33.98 | -   | 26.42             | 161.7           | .509  |  |
|  |   |   |     |     |     |     |                          | 250 | 7.91  | 34.04 | -   | 26.55             | 148.9           | .589  |  |
|  |   |   |     |     |     |     |                          | 300 | 7.46  | 34.08 | -   | 26.65             | 139.7           | .663  |  |
|  |   |   |     |     |     |     |                          | 400 | 6.38  | 34.15 | -   | 26.85             | 120.5           | .799  |  |
|  |   |   |     |     |     |     |                          | 500 | 5.91  | 34.27 | -   | 27.01             | 105.8           | .916  |  |

A) THE SALINITY SAMPLES AT 119 AND 138 METERS APPEAR TO HAVE BEEN REVERSED. THEY ARE ASSUMED TO BE IN THE CORRECT ORDER.

OBSERVED LEVELS OF DEPTH                      STANDARD LEVELS OF DEPTH

| INPUT |   |   |     |     |     |     | COMPUTED |   |   |   |     |       |     |    |
|-------|---|---|-----|-----|-----|-----|----------|---|---|---|-----|-------|-----|----|
| Z     | T | S | OXY | PHO | SIL | NIT | D*T      | Z | T | S | OXY | SIG*T | D*T | DC |

97.80    CALCOFI CRUISE 6806    97.80  
 DAVID STARR JORDAN, JUNE 8 1968, 1836 GMT, 30 35.5N 120 29W, SOUNDING 2090 FM, WIND 300 14 KNOTS, WEATHER CLOUDY,  
 SEA ROUGH.

|     |       |       |   |       |       |       |
|-----|-------|-------|---|-------|-------|-------|
| 0   | 16.96 | 33.49 | - | 24.39 | 355.1 | 0     |
| 10  | 16.94 | 33.49 | - | 24.39 | 354.7 | .036  |
| 20  | 16.93 | 33.49 | - | 24.39 | 354.5 | .071  |
| 30  | 16.93 | 33.49 | - | 24.39 | 354.5 | .107  |
| 50  | 15.13 | 33.42 | - | 24.75 | 320.8 | .174  |
| 75  | 13.72 | 33.32 | - | 24.97 | 299.7 | .252  |
| 100 | 12.13 | 33.28 | - | 25.25 | 272.8 | .324  |
| 125 | 10.34 | 33.42 | - | 25.68 | 231.8 | .388  |
| 150 | 9.47  | 33.63 | - | 25.99 | 202.4 | .443  |
| 200 | 8.72  | 33.94 | - | 26.35 | 168.0 | .537  |
| 250 | 7.97  | 34.03 | - | 26.54 | 150.5 | .619  |
| 300 | 7.27  | 34.06 | - | 26.66 | 138.7 | .693  |
| 400 | 6.37  | 34.15 | - | 26.86 | 120.4 | .828  |
| 500 | 5.78  | 34.26 | - | 27.02 | 105.0 | .947  |
| 600 | 5.31  | 34.33 | - | 27.13 | 94.4  | 1.053 |

100.30    CALCOFI CRUISE 6806    100.30  
 DAVID STARR JORDAN, JUNE 7 1968, 0632 GMT, 31 40.5N 116 46.5W, SOUNDING 215 FM, WIND 310 8 KNOTS, WEATHER MISSING,  
 SEA MISSING.

|     |       |       |   |       |       |      |
|-----|-------|-------|---|-------|-------|------|
| 0   | 16.79 | 33.67 | - | 24.56 | 338.2 | 0    |
| 10  | 12.84 | 33.64 | - | 25.39 | 259.4 | .030 |
| 20  | 10.68 | 33.66 | - | 25.81 | 219.6 | .054 |
| 30  | 10.44 | 33.71 | - | 25.89 | 212.0 | .076 |
| 50  | 9.89  | 33.84 | - | 26.09 | 193.4 | .116 |
| 75  | 9.48  | 33.98 | - | 26.26 | 176.6 | .163 |
| 100 | 9.40  | 34.02 | - | 26.31 | 172.4 | .207 |
| 125 | 9.34  | 34.08 | - | 26.36 | 167.0 | .250 |
| 150 | 9.13  | 34.19 | - | 26.48 | 155.6 | .291 |
| 200 | 8.90  | 34.30 | - | 26.61 | 144.0 | .367 |
| 250 | 8.57  | 34.31 | - | 26.67 | 138.3 | .440 |
| 300 | 8.32  | 34.34 | - | 26.73 | 132.5 | .510 |

| INPUT |   |   |     |     |     |     | OUTPUT AT STANDARD LEVELS OF DEPTH |   |   |   |     |       |     |    |
|-------|---|---|-----|-----|-----|-----|------------------------------------|---|---|---|-----|-------|-----|----|
| Z     | T | S | OXY | PHO | SIL | NIT | D*T                                | Z | T | S | OXY | SIG*T | D*T | DC |

100.30    CALCOFI CRUISE 6806    100.30  
 DAVID STARR JORDAN, JUNE 7 1968, 0727 GMT, 31 40.5N 116 46.5W, SOUNDING 215 FM, WIND 310 8 KNOTS, WEATHER MISSING,  
 SEA MISSING, WIRE ANGLE 10.

|     |       |        |      |      |    |      |       |     |       |        |      |       |       |      |
|-----|-------|--------|------|------|----|------|-------|-----|-------|--------|------|-------|-------|------|
| 3   | 16.71 | 33.671 | 6.32 | 0.27 | 7  | 0.2  | 336.4 | 0   | 16.71 | 33.671 | 6.32 | 24.58 | 336.4 | 0    |
| 11  | 16.08 | 33.639 | 6.24 | 0.30 | 8  | 0.1  | 324.9 | 10  | 16.21 | 33.641 | 6.28 | 24.68 | 327.4 | .033 |
| 32  | 10.40 | 33.700 | 3.61 | 1.38 | 21 | 14.8 | 212.0 | 20  | 13.61 | 33.652 | 5.13 | 25.25 | 273.1 | .063 |
| 45  | 10.12 | 33.737 | 3.56 | 1.66 | 23 | 19.2 | 204.7 | 30  | 10.93 | 33.690 | 3.87 | 25.79 | 221.6 | .088 |
| 59  | 9.76  | 33.868 | 3.25 | 1.79 | 27 | 21.6 | 189.3 | 50  | 9.99  | 33.780 | 3.46 | 26.02 | 199.4 | .130 |
| 75  | 9.49  | 33.975 | 2.97 | 1.91 | 30 | 22.1 | 177.1 | 75  | 9.49  | 33.975 | 2.97 | 26.26 | 177.1 | .178 |
| 89  | 9.43  | 33.990 | 2.92 | 1.52 | 31 | 21.5 | 175.1 | 100 | 9.37  | 33.997 | 2.89 | 26.29 | 173.6 | .222 |
| 107 | 9.33  | 34.007 | 2.87 | 1.95 | 32 | 24.3 | 172.3 | 125 | 9.31  | 34.090 | 2.38 | 26.38 | 165.8 | .265 |
| 131 | 9.29  | 34.124 | 2.18 | 2.24 | 37 | 27.0 | 163.0 | 150 | 9.05  | 34.205 | 1.80 | 26.51 | 153.3 | .306 |
| 151 | 9.04  | 34.209 | 1.78 | 2.43 | 41 | 28.6 | 152.9 | 200 | 8.78  | 34.291 | 1.21 | 26.62 | 142.9 | .381 |
| 193 | 8.83  | 34.285 | 1.27 | 2.65 | 46 | 30.7 | 144.1 | 250 | 8.42  | 34.308 | .98  | 26.69 | 136.3 | .453 |
| 226 | 8.59  | 34.304 | 1.06 | 2.54 | 49 | 30.8 | 139.1 | 300 | 8.28  | 34.333 | .85  | 26.73 | 132.4 | .523 |
| 258 | 8.38  | 34.310 | .96  | 2.78 | 51 | 33.1 | 135.6 |     |       |        |      |       |       |      |
| 295 | 8.29  | 34.329 | .86  | 2.82 | 53 | 32.8 | 132.8 |     |       |        |      |       |       |      |

OBSERVED LEVELS OF DEPTH                      STANDARD LEVELS OF DEPTH

| INPUT  |   |   |     |     |     |     |     | COMPUTED            |       |       |     |       |       |      |  |        |
|--|---|---|-----|-----|-----|-----|-----|---------------------|-------|-------|-----|-------|-------|------|--|--------|
| Z  | T | S | OXY | PHO | SIL | NIT | D*T | Z                   | T     | S     | OXY | SIG*T | D*T   | DD   |  |        |
| 100.35   |   |   |     |     |     |     |     | CALCOFI CRUISE 6806 |       |       |     |       |       |      |  | 100.35 |
| DAVID STARR JORDAN, JUNE 7 1968, 0340 GMT, 31 30.5N 117 07W, SOUNDING 645 FM, WIND 310 12 KNOTS, WEATHER MISSING, SEA ROUGH. |   |   |     |     |     |     |     |                     |       |       |     |       |       |      |  |        |
|  |   |   |     |     |     |     |     | 0                   | 17.58 | 33.57 | -   | 24.30 | 363.3 | 0    |  |        |
|  |   |   |     |     |     |     |     | 10                  | 17.58 | 33.58 | -   | 24.31 | 362.6 | .036 |  |        |
|  |   |   |     |     |     |     |     | 20                  | 17.02 | 33.56 | -   | 24.43 | 351.4 | .072 |  |        |
|  |   |   |     |     |     |     |     | 30                  | 12.72 | 33.32 | -   | 25.17 | 280.7 | .104 |  |        |
|  |   |   |     |     |     |     |     | 50                  | 10.29 | 33.63 | -   | 25.85 | 215.4 | .154 |  |        |
|  |   |   |     |     |     |     |     | 75                  | 9.78  | 33.87 | -   | 26.13 | 189.5 | .204 |  |        |
|  |   |   |     |     |     |     |     | 100                 | 9.35  | 33.99 | -   | 26.29 | 173.8 | .250 |  |        |
|  |   |   |     |     |     |     |     | 125                 | 9.16  | 34.07 | -   | 26.39 | 165.0 | .293 |  |        |
|  |   |   |     |     |     |     |     | 150                 | 8.76  | 34.12 | -   | 26.49 | 155.3 | .334 |  |        |
|  |   |   |     |     |     |     |     | 200                 | 8.29  | 34.20 | -   | 26.62 | 142.4 | .410 |  |        |
|  |   |   |     |     |     |     |     | 250                 | 8.63  | 34.34 | -   | 26.68 | 137.0 | .482 |  |        |
|  |   |   |     |     |     |     |     | 300                 | 8.33  | 34.33 | -   | 26.72 | 133.3 | .552 |  |        |
|  |   |   |     |     |     |     |     | 400                 | 7.04  | 34.29 | -   | 26.88 | 118.5 | .684 |  |        |
|  |   |   |     |     |     |     |     | 500                 | 6.47  | 34.32 | -   | 26.98 | 108.9 | .804 |  |        |
|  |   |   |     |     |     |     |     | 600                 | 5.65  | 34.34 | -   | 27.10 | 97.5  | .915 |  |        |

100.40    CALCOFI CRUISE 6806    100.40  
 DAVID STARR JORDAN, JUNE 7 1968, 0006 GMT, 31 22.5N 117 26.5W, SOUNDING 940 FM, WIND 320 12 KNOTS, WEATHER OVERCAST, SEA ROUGH.

|  |  |  |  |  |  |  |  |     |       |       |   |       |       |      |
|--|--|--|--|--|--|--|--|-----|-------|-------|---|-------|-------|------|
|  |  |  |  |  |  |  |  | 0   | 17.25 | 33.58 | - | 24.39 | 355.1 | 0    |
|  |  |  |  |  |  |  |  | 10  | 17.22 | 33.57 | - | 24.39 | 355.1 | .036 |
|  |  |  |  |  |  |  |  | 20  | 14.77 | 33.35 | - | 24.77 | 318.5 | .069 |
|  |  |  |  |  |  |  |  | 30  | 14.03 | 33.42 | - | 24.98 | 298.5 | .100 |
|  |  |  |  |  |  |  |  | 50  | 11.75 | 33.40 | - | 25.41 | 257.2 | .156 |
|  |  |  |  |  |  |  |  | 75  | 10.29 | 33.73 | - | 25.93 | 208.0 | .214 |
|  |  |  |  |  |  |  |  | 100 | 9.69  | 33.87 | - | 26.14 | 188.0 | .264 |
|  |  |  |  |  |  |  |  | 125 | 9.30  | 33.98 | - | 26.29 | 173.8 | .310 |
|  |  |  |  |  |  |  |  | 150 | 9.08  | 34.05 | - | 26.38 | 165.3 | .353 |
|  |  |  |  |  |  |  |  | 200 | 8.70  | 34.18 | - | 26.54 | 149.9 | .434 |
|  |  |  |  |  |  |  |  | 250 | 8.25  | 34.22 | - | 26.64 | 140.4 | .508 |
|  |  |  |  |  |  |  |  | 300 | 7.50  | 34.21 | - | 26.75 | 130.6 | .578 |
|  |  |  |  |  |  |  |  | 400 | 6.63  | 34.26 | - | 26.91 | 115.4 | .707 |
|  |  |  |  |  |  |  |  | 500 | 6.19  | 34.34 | - | 27.03 | 104.0 | .823 |
|  |  |  |  |  |  |  |  | 600 | 5.48  | 34.32 | - | 27.10 | 97.0  | .930 |

| INPUT  |       |        |      |      |     |      |       | OUTPUT AT STANDARD LEVELS OF DEPTH |       |        |      |       |       |      |  |        |
|--|-------|--------|------|------|-----|------|-------|------------------------------------|-------|--------|------|-------|-------|------|--|--------|
| Z  | T     | S      | OXY  | PHO  | SIL | NIT  | D*T   | Z                                  | T     | S      | OXY  | SIG*T | D*T   | DD   |  |        |
| 100.40   |       |        |      |      |     |      |       | CALCOFI CRUISE 6806                |       |        |      |       |       |      |  | 100.40 |
| DAVID STARR JORDAN, JUNE 7 1968, 0042 GMT, 31 22.5N 117 26.5W, SOUNDING 940 FM, WIND 320 12 KNOTS, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 05. |       |        |      |      |     |      |       |                                    |       |        |      |       |       |      |  |        |
| 2  | 17.20 | 33.573 | 5.79 | 0.34 | 4   | 0.1  | 354.5 | 0                                  | 17.20 | 33.573 | 5.79 | 24.39 | 354.5 | 0    |  |        |
| 14   | 17.11 | 33.568 | 5.78 | 0.31 | 4   | 0.0  | 352.8 | 10                                 | 17.14 | 33.570 | 5.78 | 24.40 | 353.4 | .035 |  |        |
| 31   | 14.44 | 33.456 | 5.60 | 0.49 | 5   | 1.6  | 304.0 | 20                                 | 16.30 | 33.530 | 5.75 | 24.57 | 337.6 | .070 |  |        |
| 45   | 12.74 | 33.430 | 5.17 | 0.79 | 8   | 5.6  | 273.0 | 30                                 | 14.63 | 33.463 | 5.62 | 24.89 | 307.3 | .102 |  |        |
| 54   | 11.90 | 33.451 | 4.77 | 0.97 | 11  | 9.4  | 256.1 | 50                                 | 12.25 | 33.437 | 4.96 | 25.35 | 263.4 | .160 |  |        |
| 69   | 10.86 | 33.574 | 4.02 | 1.42 | 17  | 15.9 | 229.0 | 75                                 | 10.51 | 33.657 | 3.74 | 25.84 | 217.1 | .220 |  |        |
| 83   | 10.14 | 33.760 | 3.45 | 1.71 | 23  | 21.0 | 203.4 | 100                                | 9.81  | 33.803 | 3.35 | 26.07 | 194.9 | .272 |  |        |
| 103  | 9.78  | 33.812 | 3.38 | 1.79 | 26  | 22.6 | 193.8 | 125                                | 9.36  | 33.940 | 3.13 | 26.25 | 177.8 | .319 |  |        |
| 127  | 9.33  | 33.952 | 3.11 | 1.94 | 30  | 25.7 | 176.4 | 150                                | 9.08  | 34.037 | 2.81 | 26.37 | 166.3 | .363 |  |        |
| 147  | 9.11  | 34.027 | 2.85 | 2.06 | 33  | 27.2 | 167.4 | 200                                | 8.71  | 34.172 | 1.94 | 26.54 | 150.7 | .444 |  |        |
| 175  | 8.90  | 34.111 | 2.40 | 2.24 | 38  | 29.4 | 158.0 | 250                                | 8.15  | 34.196 | 1.57 | 26.64 | 140.8 | .519 |  |        |
| 205  | 8.67  | 34.181 | 1.86 | 2.45 | 43  | 31.0 | 149.4 | 300                                | 7.33  | 34.188 | 1.33 | 26.75 | 129.9 | .589 |  |        |
| 234  | 8.37  | 34.198 | 1.63 | 2.54 | 46  | 32.4 | 143.7 | 400                                | 6.46  | 34.235 | .74  | 26.91 | 115.1 | .716 |  |        |
| 273  | 7.80  | 34.188 | 1.49 | 2.65 | 52  | 33.1 | 136.4 | 500                                | 6.13  | 34.330 | .40  | 27.03 | 104.0 | .832 |  |        |
| 330  | 6.86  | 34.191 | 1.13 | 2.84 | 62  | 37.4 | 123.5 |                                    |       |        |      |       |       |      |  |        |
| 402  | 6.45  | 34.237 | .73  | 3.00 | 68  | 40.6 | 114.9 |                                    |       |        |      |       |       |      |  |        |
| 476  | 6.28  | 34.329 | .41  | 3.14 | 74  | 42.5 | 105.9 |                                    |       |        |      |       |       |      |  |        |
| 553  | 5.64  | 34.333 | .38  | 3.20 | 82  | 43.3 | 97.9  |                                    |       |        |      |       |       |      |  |        |

OBSERVED LEVELS OF DEPTH                      STANDARD LEVELS OF DEPTH

| INPUT |   |   |     |     |     |     |     | COMPUTED |   |   |     |       |     |    |  |
|-------|---|---|-----|-----|-----|-----|-----|----------|---|---|-----|-------|-----|----|--|
| Z     | T | S | OXY | PHU | SIL | NIT | D*1 | Z        | T | S | OXY | SIG*1 | D*1 | DD |  |

100.50    CALCOFI CRUISE 6806    100.50

DAVID STARR JORDAN, JUNE 6 1968, 1744 GMT, 31 00.5N 118 08W, SOUNDING 900 FM, WIND 310 4 KNOTS, WEATHER CLOUDY, SEA ROUGH.

|     |       |       |   |       |       |      |
|-----|-------|-------|---|-------|-------|------|
| 0   | 17.41 | 33.63 | - | 24.39 | 355.1 | 0    |
| 10  | 17.39 | 33.63 | - | 24.39 | 354.6 | .036 |
| 20  | 15.25 | 33.46 | - | 24.75 | 320.3 | .069 |
| 30  | 12.86 | 33.46 | - | 25.25 | 273.0 | .099 |
| 50  | 10.80 | 33.56 | - | 25.71 | 229.0 | .149 |
| 75  | 10.01 | 33.80 | - | 26.03 | 198.3 | .203 |
| 100 | 9.66  | 33.95 | - | 26.21 | 181.6 | .251 |
| 125 | 9.51  | 34.05 | - | 26.31 | 171.9 | .296 |
| 150 | 9.19  | 34.08 | - | 26.39 | 164.7 | .339 |
| 200 | 8.62  | 34.18 | - | 26.56 | 148.7 | .419 |
| 250 | 7.85  | 34.17 | - | 26.67 | 138.4 | .492 |
| 300 | 7.64  | 34.25 | - | 26.76 | 129.5 | .562 |
| 400 | 6.95  | 34.30 | - | 26.90 | 116.6 | .690 |
| 500 | 6.17  | 34.31 | - | 27.01 | 106.0 | .808 |
| 600 | 5.40  | 34.34 | - | 27.13 | 94.6  | .915 |

100.60    CALCOFI CRUISE 6806    100.60

DAVID STARR JORDAN, JUNE 6 1968, 1058 GMT, 30 41N 118 47W, SOUNDING 1480 FM, WIND 360 6 KNOTS, WEATHER MISSING, SEA MODERATE.

|     |       |       |   |       |       |      |
|-----|-------|-------|---|-------|-------|------|
| 0   | 16.98 | 33.47 | - | 24.37 | 357.0 | 0    |
| 10  | 16.98 | 33.48 | - | 24.37 | 356.3 | .036 |
| 20  | 16.99 | 33.48 | - | 24.37 | 356.5 | .071 |
| 30  | 16.29 | 33.46 | - | 24.52 | 342.5 | .106 |
| 50  | 14.40 | 33.37 | - | 24.87 | 309.5 | .172 |
| 75  | 12.57 | 33.34 | - | 25.21 | 276.4 | .245 |
| 100 | 10.82 | 33.50 | - | 25.66 | 233.8 | .310 |
| 125 | 10.27 | 33.75 | - | 25.95 | 206.2 | .365 |
| 150 | 10.16 | 33.88 | - | 26.07 | 194.8 | .416 |
| 200 | 9.43  | 34.09 | - | 26.36 | 167.7 | .509 |
| 250 | 8.91  | 34.15 | - | 26.49 | 155.3 | .591 |
| 300 | 8.52  | 34.22 | - | 26.60 | 144.3 | .669 |
| 400 | 7.39  | 34.23 | - | 26.78 | 127.6 | .811 |
| 500 | 6.50  | 34.27 | - | 26.93 | 113.0 | .938 |

| INPUT |   |   |     |     |     |     |     | OUTPUT AT STANDARD LEVELS OF DEPTH |   |   |     |       |     |    |  |
|-------|---|---|-----|-----|-----|-----|-----|------------------------------------|---|---|-----|-------|-----|----|--|
| Z     | T | S | OXY | PHU | SIL | NIT | D*1 | Z                                  | T | S | OXY | SIG*1 | D*1 | DD |  |

100.60    CALCOFI CRUISE 6806    100.60

DAVID STARR JORDAN, JUNE 6 1968, 1131 GMT, 30 41N 118 47W, SOUNDING 1480 FM, WIND 360 6 KNOTS, WEATHER MISSING, SEA MODERATE, WIRE ANGLE 01.

|     |       |        |      |      |    |      |       |     |       |        |      |       |       |      |
|-----|-------|--------|------|------|----|------|-------|-----|-------|--------|------|-------|-------|------|
| 1   | 16.94 | 33.479 | 5.84 | 0.25 | 2  | 0.1  | 355.5 | 0   | 16.94 | 33.479 | 5.84 | 24.38 | 355.5 | 0    |
| 11  | 16.95 | 33.476 | 5.86 | 0.25 | 2  | 0.1  | 355.9 | 10  | 16.96 | 33.477 | 5.86 | 24.38 | 356.1 | .036 |
| 30  | 16.18 | 33.449 | 6.00 | 0.27 | 2  | 0.0  | 340.9 | 20  | 16.71 | 33.467 | 5.91 | 24.43 | 351.2 | .071 |
| 40  | 15.40 | 33.419 | 6.11 | 0.32 | 2  | 0.0  | 326.5 | 30  | 16.18 | 33.449 | 6.00 | 24.54 | 340.9 | .106 |
| 50  | 14.23 | 33.359 | 6.21 | 0.28 | 2  | 0.2  | 306.9 | 50  | 14.23 | 33.359 | 6.21 | 24.89 | 306.9 | .171 |
| 64  | 13.01 | 33.372 | 6.06 | 0.36 | 4  | 0.5  | 282.3 | 75  | 12.20 | 33.337 | 5.83 | 25.28 | 269.9 | .243 |
| 79  | 11.93 | 33.331 | 5.70 | 0.37 | 6  | 2.7  | 265.5 | 100 | 10.70 | 33.540 | 4.38 | 25.71 | 228.9 | .306 |
| 98  | 10.75 | 33.516 | 4.51 | 1.08 | 15 | 13.1 | 231.4 | 125 | 10.47 | 33.793 | 3.10 | 25.95 | 206.3 | .361 |
| 123 | 10.48 | 33.780 | 3.16 | 1.69 | 26 | 20.3 | 207.5 | 150 | 10.26 | 33.902 | 2.77 | 26.07 | 194.9 | .412 |
| 142 | 10.34 | 33.875 | 2.77 | 1.82 | 28 | 22.5 | 198.1 | 200 | 9.44  | 34.081 | 2.41 | 26.35 | 168.5 | .505 |
| 171 | 10.00 | 33.966 | 2.83 | 2.02 | 30 | 24.7 | 185.9 | 250 | 8.93  | 34.152 | 2.08 | 26.49 | 155.4 | .588 |
| 200 | 9.44  | 34.081 | 2.41 | 1.78 | 34 | 25.2 | 168.5 | 300 | 8.45  | 34.197 | 1.70 | 26.60 | 145.0 | .665 |
| 230 | 9.12  | 34.129 | 2.15 | 2.22 | 38 | 28.9 | 160.0 | 400 | 7.39  | 34.245 | .97  | 26.79 | 126.5 | .807 |
| 269 | 8.75  | 34.170 | 2.02 | 2.32 | 42 | 29.7 | 151.4 | 500 | 6.40  | 34.288 | .48  | 26.96 | 110.5 | .932 |
| 328 | 8.17  | 34.217 | 1.38 | 2.49 | 49 | 33.1 | 139.4 |     |       |        |      |       |       |      |
| 401 | 7.38  | 34.245 | .97  | 2.73 | 59 | 37.2 | 126.4 |     |       |        |      |       |       |      |
| 473 | 6.63  | 34.275 | .57  | 2.97 | 69 | 39.8 | 114.3 |     |       |        |      |       |       |      |
| 551 | 6.05  | 34.314 | .40  | 3.12 | 77 | 43.3 | 104.2 |     |       |        |      |       |       |      |



## OBSERVED LEVELS OF DEPTH

## TWO YEAR D LEVELS OF DEPTH

| INPUT  |   |   |     |     |     |     |                 | COMPUTED            |       |       |     |                   |                 |       |  |        |  |  |  |  |  |  |  |
|--|---|---|-----|-----|-----|-----|-----------------|---------------------|-------|-------|-----|-------------------|-----------------|-------|--|--------|--|--|--|--|--|--|--|
| Z  | T | S | OXY | PHO | SIL | NIT | D* <sub>T</sub> | Z                   | T     | S     | OXY | SIG* <sub>T</sub> | D* <sub>T</sub> | DD    |  |        |  |  |  |  |  |  |  |
| 100.70   |   |   |     |     |     |     |                 | CALCOFI CRUISE 6806 |       |       |     |                   |                 |       |  | 100.70 |  |  |  |  |  |  |  |
| DAVID STARR JORDAN, JUNE 6 1968, 0543 GMT, 30 22N 119 24.5W, SOUNDING 2100 FM, WIND 340 12 KNOTS, WEATHER CLOUDY, SEA ROUGH. |   |   |     |     |     |     |                 |                     |       |       |     |                   |                 |       |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 0                   | 16.82 | 33.56 | -   | 24.47             | 346.9           | 0     |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 10                  | 16.82 | 33.57 | -   | 24.48             | 346.2           | .035  |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 20                  | 16.62 | 33.48 | -   | 24.46             | 348.3           | .069  |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 30                  | 16.54 | 33.46 | -   | 24.46             | 348.0           | .104  |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 50                  | 15.18 | 33.31 | -   | 24.65             | 329.8           | .172  |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 75                  | 12.89 | 33.24 | -   | 25.07             | 289.7           | .250  |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 100                 | 11.54 | 33.36 | -   | 25.42             | 256.5           | .319  |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 125                 | 10.59 | 33.46 | -   | 25.67             | 232.9           | .381  |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 150                 | 9.68  | 33.60 | -   | 25.93             | 207.9           | .437  |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 200                 | 8.85  | 33.94 | -   | 26.33             | 170.0           | .533  |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 250                 | 8.17  | 34.07 | -   | 26.54             | 150.4           | .615  |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 300                 | 7.74  | 34.14 | -   | 26.66             | 139.1           | .689  |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 400                 | 6.60  | 34.20 | -   | 26.86             | 119.5           | .824  |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 500                 | 6.15  | 34.28 | -   | 26.99             | 108.0           | .944  |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 600                 | 5.60  | 34.32 | -   | 27.09             | 98.4            | 1.055 |  |        |  |  |  |  |  |  |  |

100.80

CALCOFI CRUISE 6806

100.80

DAVID STARR JORDAN, JUNE 6 1968, 0017 GMT, 30 00.5N 120 07.5W, SOUNDING 2010 FM, WIND 340 10 KNOTS, WEATHER OVERCAST, SEA MODERATE.

|  |  |  |  |  |  |  |  |     |       |       |   |       |       |       |
|--|--|--|--|--|--|--|--|-----|-------|-------|---|-------|-------|-------|
|  |  |  |  |  |  |  |  | 0   | 17.69 | 33.68 | - | 24.36 | 357.8 | 0     |
|  |  |  |  |  |  |  |  | 10  | 17.70 | 33.68 | - | 24.36 | 358.1 | .036  |
|  |  |  |  |  |  |  |  | 20  | 17.62 | 33.67 | - | 24.37 | 357.0 | .072  |
|  |  |  |  |  |  |  |  | 30  | 17.25 | 33.61 | - | 24.41 | 352.9 | .107  |
|  |  |  |  |  |  |  |  | 50  | 17.19 | 33.58 | - | 24.40 | 353.7 | .178  |
|  |  |  |  |  |  |  |  | 75  | 16.23 | 33.52 | - | 24.58 | 336.8 | .265  |
|  |  |  |  |  |  |  |  | 100 | 13.72 | 33.44 | - | 25.06 | 290.9 | .344  |
|  |  |  |  |  |  |  |  | 125 | 12.02 | 33.38 | - | 25.35 | 263.5 | .414  |
|  |  |  |  |  |  |  |  | 150 | 10.40 | 33.54 | - | 25.77 | 223.9 | .476  |
|  |  |  |  |  |  |  |  | 200 | 9.27  | 33.93 | - | 26.26 | 177.1 | .578  |
|  |  |  |  |  |  |  |  | 250 | 8.47  | 34.03 | - | 26.46 | 157.7 | .663  |
|  |  |  |  |  |  |  |  | 300 | 7.75  | 34.08 | - | 26.61 | 143.7 | .741  |
|  |  |  |  |  |  |  |  | 400 | 6.55  | 34.14 | - | 26.82 | 123.4 | .880  |
|  |  |  |  |  |  |  |  | 500 | 6.00  | 34.27 | - | 27.00 | 106.9 | 1.001 |
|  |  |  |  |  |  |  |  | 600 | 5.45  | 34.32 | - | 27.11 | 96.7  | 1.110 |

| INPUT  |   |   |     |     |     |     |                 | OUTPUT AT STANDARD LEVELS OF DEPTH |       |        |      |                   |                 |       |  |        |  |  |  |  |  |  |  |
|--|---|---|-----|-----|-----|-----|-----------------|------------------------------------|-------|--------|------|-------------------|-----------------|-------|--|--------|--|--|--|--|--|--|--|
| Z  | T | S | OXY | PHO | SIL | NIT | D* <sub>T</sub> | Z                                  | T     | S      | OXY  | SIG* <sub>T</sub> | D* <sub>T</sub> | DD    |  |        |  |  |  |  |  |  |  |
| 100.80   |   |   |     |     |     |     |                 | CALCOFI CRUISE 6806                |       |        |      |                   |                 |       |  | 100.80 |  |  |  |  |  |  |  |
| DAVID STARR JORDAN, JUNE 6 1968, 0059 GMT, 30 00.5N 120 07.5W, SOUNDING 2010 FM, WIND 340 10 KNOTS, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 08. |   |   |     |     |     |     |                 |                                    |       |        |      |                   |                 |       |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 0                                  | 17.66 | 33.665 | 5.48 | 24.35             | 358.2           | 0     |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 11                                 | 17.64 | 33.666 | 5.66 | 24.36             | 357.6           | .036  |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 30                                 | 17.24 | 33.598 | 5.67 | 24.38             | 355.9           | .072  |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 59                                 | 16.99 | 33.566 | 5.74 | 24.40             | 353.5           | .107  |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 67                                 | 16.75 | 33.594 | 5.80 | 24.41             | 353.1           | .178  |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 83                                 | 15.34 | 33.463 | 5.98 | 24.61             | 333.6           | .264  |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 97                                 | 13.85 | 33.419 | 5.93 | 25.06             | 290.5           | .343  |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 111                                | 13.11 | 33.481 | 5.96 | 25.37             | 261.3           | .413  |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 135                                | 11.45 | 33.415 | 5.10 | 25.70             | 229.8           | .475  |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 155                                | 10.40 | 33.553 | 4.4  | 26.20             | 182.9           | .580  |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 184                                | 9.70  | 33.762 | 3.94 | 26.46             | 157.7           | .667  |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 213                                | 9.13  | 33.947 | 3.69 | 26.60             | 144.9           | .745  |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 242                                | 8.54  | 34.009 | 3.62 | 26.82             | 124.0           | .885  |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 291                                | 7.88  | 34.057 | 2.87 | 26.98             | 108.2           | 1.007 |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 344                                | 7.13  | 34.092 | 1.94 | 27.11             | 95.9            | 1.116 |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 427                                | 6.38  | 34.162 | 1.10 |                   |                 |       |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 509                                | 5.97  | 34.265 | .57  |                   |                 |       |  |        |  |  |  |  |  |  |  |
|  |   |   |     |     |     |     |                 | 592                                | 5.49  | 34.326 | .38  |                   |                 |       |  |        |  |  |  |  |  |  |  |

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

| INPUT   |   |   |     |     |     |     | COMPUTED            | INPUT |       |       |     |       |       |        | COMPUTED |  |
|---|---|---|-----|-----|-----|-----|---------------------|-------|-------|-------|-----|-------|-------|--------|----------|--|
| Z   | T | S | QXY | PHO | STL | NIT | D*T                 | Z     | T     | S     | QXY | SIG*T | D*T   | DD     |          |  |
| 103.30  |   |   |     |     |     |     | CALCOFI CRUISE 6806 |       |       |       |     |       |       | 103.30 |          |  |
| DAVID STARR JORDAN, JUNE 4 1968, 1905 GMT, 31 06N 116 24.5W, SOUNDING 35 FM, WIND CALM, WEATHER OVERCAST, SEA MODERATE. |   |   |     |     |     |     |                     |       |       |       |     |       |       |        |          |  |
|   |   |   |     |     |     |     |                     | 0     | 15.86 | 33.70 | -   | 24.80 | 315.7 | 0      |          |  |
|   |   |   |     |     |     |     |                     | 10    | 10.76 | 33.73 | -   | 25.85 | 215.8 | .027   |          |  |
|   |   |   |     |     |     |     |                     | 20    | 10.33 | 33.74 | -   | 25.93 | 207.9 | .048   |          |  |
|   |   |   |     |     |     |     |                     | 30    | 10.21 | 33.76 | -   | 25.97 | 204.5 | .068   |          |  |
|   |   |   |     |     |     |     |                     | 50    | 10.00 | 33.87 | -   | 26.09 | 193.0 | .108   |          |  |

103.35

CALCOFI CRUISE 6806

103.35

DAVID STARR JORDAN, JUNE 4 1968, 2130 GMT, 30 56N 116 44.5W, SOUNDING 920 FM, WIND 240 Z KNOTS, WEATHER OVERCAST, SEA MODERATE.

|  |  |  |  |  |  |  |  |     |       |       |   |       |       |      |
|--|--|--|--|--|--|--|--|-----|-------|-------|---|-------|-------|------|
|  |  |  |  |  |  |  |  | 0   | 18.42 | 33.60 | - | 24.12 | 380.7 | 0    |
|  |  |  |  |  |  |  |  | 10  | 15.90 | 33.44 | - | 24.59 | 335.6 | .036 |
|  |  |  |  |  |  |  |  | 20  | 15.28 | 33.48 | - | 24.76 | 319.5 | .069 |
|  |  |  |  |  |  |  |  | 30  | 15.12 | 33.48 | - | 24.80 | 316.2 | .100 |
|  |  |  |  |  |  |  |  | 50  | 12.37 | 33.44 | - | 25.33 | 265.4 | .159 |
|  |  |  |  |  |  |  |  | 75  | 10.38 | 33.58 | - | 25.80 | 220.6 | .220 |
|  |  |  |  |  |  |  |  | 100 | 9.81  | 33.82 | - | 26.08 | 193.6 | .272 |
|  |  |  |  |  |  |  |  | 125 | 9.32  | 33.96 | - | 26.27 | 175.6 | .319 |
|  |  |  |  |  |  |  |  | 150 | 9.13  | 34.03 | - | 26.36 | 167.5 | .362 |
|  |  |  |  |  |  |  |  | 200 | 8.77  | 34.16 | - | 26.52 | 152.4 | .444 |
|  |  |  |  |  |  |  |  | 250 | 8.03  | 34.16 | - | 26.63 | 141.7 | .520 |
|  |  |  |  |  |  |  |  | 300 | 7.79  | 34.29 | - | 26.77 | 128.6 | .590 |
|  |  |  |  |  |  |  |  | 400 | 7.03  | 34.32 | - | 26.90 | 116.1 | .718 |
|  |  |  |  |  |  |  |  | 500 | 6.25  | 34.35 | - | 27.03 | 104.0 | .834 |

103.40

CALCOFI CRUISE 6806

103.40

DAVID STARR JORDAN, JUNE 5 1968, 0050 GMT, 30 45.5N 117 05.5W, SOUNDING 940 FM, WIND 310 14 KNOTS, WEATHER OVERCAST, SEA MODERATE.

|  |  |  |  |  |  |  |  |     |       |       |   |       |       |      |
|--|--|--|--|--|--|--|--|-----|-------|-------|---|-------|-------|------|
|  |  |  |  |  |  |  |  | 0   | 18.00 | 33.61 | - | 24.23 | 370.1 | 0    |
|  |  |  |  |  |  |  |  | 10  | 17.03 | 33.46 | - | 24.35 | 358.9 | .036 |
|  |  |  |  |  |  |  |  | 20  | 15.41 | 33.44 | - | 24.70 | 325.1 | .071 |
|  |  |  |  |  |  |  |  | 30  | 13.54 | 33.50 | - | 25.14 | 283.0 | .101 |
|  |  |  |  |  |  |  |  | 50  | 10.53 | 33.66 | - | 25.84 | 217.1 | .151 |
|  |  |  |  |  |  |  |  | 75  | 10.05 | 33.82 | - | 26.04 | 197.5 | .204 |
|  |  |  |  |  |  |  |  | 100 | 9.63  | 33.93 | - | 26.20 | 182.7 | .252 |
|  |  |  |  |  |  |  |  | 125 | 9.24  | 34.00 | - | 26.32 | 171.4 | .296 |
|  |  |  |  |  |  |  |  | 150 | 8.95  | 34.09 | - | 26.43 | 160.3 | .338 |
|  |  |  |  |  |  |  |  | 200 | 8.47  | 34.19 | - | 26.59 | 145.8 | .417 |
|  |  |  |  |  |  |  |  | 250 | 7.68  | 34.20 | - | 26.71 | 133.8 | .488 |
|  |  |  |  |  |  |  |  | 300 | 6.82  | 34.16 | - | 26.80 | 125.3 | .555 |
|  |  |  |  |  |  |  |  | 400 | 6.70  | 34.30 | - | 26.93 | 113.3 | .680 |
|  |  |  |  |  |  |  |  | 500 | 6.06  | 34.32 | - | 27.03 | 103.9 | .795 |
|  |  |  |  |  |  |  |  | 600 | 5.35  | 34.36 | - | 27.15 | 92.6  | .900 |

103.50

CALCOFI CRUISE 6806

103.50

DAVID STARR JORDAN, JUNE 5 1968, 0615 GMT, 30 26.5N 117 44.5W, SOUNDING 1300 FM, WIND 320 14 KNOTS, WEATHER CLEAR, SEA ROUGH.

|  |  |  |  |  |  |  |  |     |       |       |   |       |       |      |
|--|--|--|--|--|--|--|--|-----|-------|-------|---|-------|-------|------|
|  |  |  |  |  |  |  |  | 0   | 17.13 | 33.54 | - | 24.38 | 355.3 | 0    |
|  |  |  |  |  |  |  |  | 10  | 17.14 | 33.54 | - | 24.38 | 355.5 | .036 |
|  |  |  |  |  |  |  |  | 20  | 16.91 | 33.55 | - | 24.44 | 349.6 | .071 |
|  |  |  |  |  |  |  |  | 30  | 15.72 | 33.52 | - | 24.69 | 325.9 | .105 |
|  |  |  |  |  |  |  |  | 50  | 11.41 | 33.48 | - | 25.54 | 245.4 | .162 |
|  |  |  |  |  |  |  |  | 75  | 10.31 | 33.73 | - | 25.93 | 208.4 | .219 |
|  |  |  |  |  |  |  |  | 100 | 9.72  | 33.91 | - | 26.17 | 185.6 | .269 |
|  |  |  |  |  |  |  |  | 125 | 9.49  | 33.98 | - | 26.26 | 176.8 | .315 |
|  |  |  |  |  |  |  |  | 150 | 9.14  | 34.05 | - | 26.37 | 166.2 | .358 |
|  |  |  |  |  |  |  |  | 200 | 8.68  | 34.13 | - | 26.51 | 153.3 | .440 |
|  |  |  |  |  |  |  |  | 250 | 8.26  | 34.19 | - | 26.62 | 142.7 | .516 |
|  |  |  |  |  |  |  |  | 300 | 7.76  | 34.25 | - | 26.74 | 131.2 | .587 |
|  |  |  |  |  |  |  |  | 400 | 6.80  | 34.30 | - | 26.92 | 114.6 | .715 |
|  |  |  |  |  |  |  |  | 500 | 5.80  | 34.30 | - | 27.05 | 102.3 | .830 |
|  |  |  |  |  |  |  |  | 600 | 5.40  | 34.35 | - | 27.13 | 93.9  | .935 |

OBSERVED LEVELS OF DEPTH                      STANDARD LEVELS OF DEPTH

| INPUT |   |   |     |     |     |     |     | COMPUTED |   |   |     |       |     |    |  |
|-------|---|---|-----|-----|-----|-----|-----|----------|---|---|-----|-------|-----|----|--|
| Z     | T | S | OXY | PHO | SIL | NIT | D*T | Z        | T | S | OXY | SIG*T | D*T | DD |  |

103.60    CALCOFI CRUISE 6806    103.60

DAVID STARR JORDAN, JUNE 5 1968, 1128 GMT, 30 07N 118 25W, SOUNDING 1830 FM, WIND 300 6 KNOTS, WEATHER MISSING, SEA MISSING.

|     |       |       |   |       |       |      |
|-----|-------|-------|---|-------|-------|------|
| 0   | 16.99 | 33.52 | - | 24.40 | 353.6 | 0    |
| 10  | 16.97 | 33.52 | - | 24.41 | 353.2 | .035 |
| 20  | 16.95 | 33.51 | - | 24.40 | 353.4 | .071 |
| 30  | 16.47 | 33.50 | - | 24.51 | 343.5 | .106 |
| 50  | 15.40 | 33.43 | - | 24.70 | 325.7 | .173 |
| 75  | 13.12 | 33.24 | - | 25.03 | 294.1 | .251 |
| 100 | 11.85 | 33.35 | - | 25.36 | 262.7 | .321 |
| 125 | 10.43 | 33.61 | - | 25.81 | 219.2 | .382 |
| 150 | 9.59  | 33.80 | - | 26.10 | 191.7 | .434 |
| 200 | 8.99  | 34.08 | - | 26.42 | 161.7 | .524 |
| 250 | 8.29  | 34.12 | - | 26.56 | 148.4 | .603 |
| 300 | 8.18  | 34.24 | - | 26.67 | 137.9 | .677 |
| 400 | 6.97  | 34.24 | - | 26.85 | 121.3 | .813 |
| 500 | 6.23  | 34.29 | - | 26.98 | 108.2 | .934 |

INPUT    OUTPUT AT STANDARD LEVELS OF DEPTH

| Z | T | S | OXY | PHO | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |
|---|---|---|-----|-----|-----|-----|-----|---|---|---|-----|-------|-----|----|
|---|---|---|-----|-----|-----|-----|-----|---|---|---|-----|-------|-----|----|

103.60    CALCOFI CRUISE 6806    103.60

DAVID STARR JORDAN, JUNE 5 1968, 1158 GMT, 30 07N 118 25W, SOUNDING 1830 FM, WIND 300 6 KNOTS, WEATHER MISSING, SEA MISSING, WIRE ANGLE 12.

|     |       |        |      |       |    |      |       |     |       |        |      |       |       |      |
|-----|-------|--------|------|-------|----|------|-------|-----|-------|--------|------|-------|-------|------|
| 0   | 16.92 | 33.516 | 5.75 | 0.26  | 2  | 0.1  | 352.3 | 0   | 16.92 | 33.516 | 5.75 | 24.42 | 352.3 | 0    |
| 11  | 16.92 | 33.514 | 5.76 | 0.27  | 2  | 0.2  | 352.5 | 10  | 16.92 | 33.514 | 5.76 | 24.41 | 352.5 | .035 |
| 30  | 16.76 | 33.506 | 5.82 | 0.31  | 2  | 0.0  | 349.5 | 20  | 16.86 | 33.511 | 5.78 | 24.43 | 351.4 | .071 |
| 39  | 16.44 | 33.491 | 5.86 | 0.22  | 2  | 0.5  | 343.5 | 30  | 16.76 | 33.506 | 5.82 | 24.45 | 349.5 | .106 |
| 49  | 15.43 | 33.404 | 5.99 | 0.24  | 3  | 0.1  | 328.2 | 50  | 15.35 | 33.400 | 6.00 | 24.68 | 326.8 | .173 |
| 62  | 14.48 | 33.369 | 6.13 | 0.33  | 3  | 0.0  | 311.2 | 75  | 13.64 | 33.336 | 6.10 | 25.00 | 297.1 | .252 |
| 76  | 13.58 | 33.334 | 6.09 | 0.34  | 4  | 0.1  | 296.0 | 100 | 11.77 | 33.385 | 5.24 | 25.40 | 258.6 | .322 |
| 94  | 12.18 | 33.342 | 5.58 | 0.43  | 6  | 2.2  | 269.2 | 125 | 10.49 | 33.601 | 4.00 | 25.80 | 220.8 | .382 |
| 118 | 10.75 | 33.549 | 4.22 | 0.92  | 18 | 11.8 | 229.0 | 150 | 9.80  | 33.801 | 3.43 | 26.07 | 194.9 | .435 |
| 137 | 10.13 | 33.689 | 3.72 | 1.61  | 24 | 18.5 | 208.5 | 200 | 9.09  | 34.057 | 2.71 | 26.39 | 165.0 | .527 |
| 165 | 9.50  | 33.919 | 3.16 | 1.70  | 31 | 21.1 | 181.4 | 250 | 8.40  | 34.093 | 2.36 | 26.52 | 151.9 | .608 |
| 194 | 9.15  | 34.041 | 2.79 | 2.19  | 36 | 24.6 | 167.0 | 300 | 8.12  | 34.199 | 1.53 | 26.65 | 140.1 | .683 |
| 221 | 8.88  | 34.092 | 2.48 | 2.21  | 40 | 26.9 | 159.1 | 400 | 7.09  | 34.269 | .72  | 26.85 | 120.7 | .820 |
| 260 | 8.24  | 34.094 | 2.31 | 2.34  | 50 | 29.2 | 149.6 | 500 | 6.19  | 34.290 | .44  | 26.99 | 107.7 | .940 |
| 316 | 8.05  | 34.245 | 1.20 | 2.63  | 54 | 30.0 | 135.6 |     |       |        |      |       |       |      |
| 387 | 7.25  | 34.272 | .76  | 2.70  | 64 | 31.0 | 122.6 |     |       |        |      |       |       |      |
| 460 | 6.48  | 34.272 | .55  | 3.06  | 74 | 38.4 | 112.6 |     |       |        |      |       |       |      |
| 536 | 6.00  | 34.316 | .35  | 2.80U | 81 | 36.5 | 103.5 |     |       |        |      |       |       |      |

OBSERVED LEVELS OF DEPTH                      STANDARD LEVELS OF DEPTH

| INPUT |   |   |     |     |     |     |     | COMPUTED |   |   |     |       |     |    |  |
|-------|---|---|-----|-----|-----|-----|-----|----------|---|---|-----|-------|-----|----|--|
| Z     | T | S | OXY | PHO | SIL | NIT | D*T | Z        | T | S | OXY | SIG*T | D*T | DD |  |

107.32    CALCOFI CRUISE 6806    107.32

DAVID STARR JORDAN, JUNE 4 1968, 1305 GMT, 30 26N 116 11W, SOUNDING 170 FM, WIND CALM, WEATHER OVERCAST, SEA MODERATE.

|     |       |       |   |       |       |      |
|-----|-------|-------|---|-------|-------|------|
| 0   | 16.85 | 33.62 | - | 24.51 | 343.2 | 0    |
| 10  | 14.78 | 33.58 | - | 24.95 | 301.8 | .032 |
| 20  | 12.10 | 33.55 | - | 25.47 | 252.4 | .060 |
| 30  | 11.38 | 33.70 | - | 25.72 | 228.6 | .084 |
| 50  | 10.35 | 33.76 | - | 25.95 | 206.8 | .128 |
| 75  | 9.78  | 33.89 | - | 26.14 | 188.0 | .178 |
| 100 | 9.45  | 34.04 | - | 26.31 | 171.7 | .223 |
| 125 | 9.23  | 34.10 | - | 26.40 | 163.8 | .265 |
| 150 | 9.18  | 34.17 | - | 26.46 | 157.9 | .306 |
| 200 | 9.03  | 34.32 | - | 26.60 | 144.5 | .384 |
| 250 | 8.90  | 34.34 | - | 26.64 | 141.0 | .457 |







| OBSERVED LEVELS OF DEPTH   |       |        |      |          |     |      |                 | STANDARD LEVELS OF DEPTH |       |        |      |                   |                 |      |  |        |  |  |  |  |  |  |  |
|--|-------|--------|------|----------|-----|------|-----------------|--------------------------|-------|--------|------|-------------------|-----------------|------|--|--------|--|--|--|--|--|--|--|
| INPUT  |       |        |      | COMPUTED |     |      |                 | INPUT                    |       |        |      | COMPUTED          |                 |      |  |        |  |  |  |  |  |  |  |
| Z  | T     | S      | DXY  | PHO      | SIL | NIT  | D* <sup>T</sup> | Z                        | T     | S      | DXY  | SIG* <sup>T</sup> | D* <sup>T</sup> | DD   |  |        |  |  |  |  |  |  |  |
| 110.35   |       |        |      |          |     |      |                 | CALCOPFI CRUISE 6806     |       |        |      |                   |                 |      |  | 110.35 |  |  |  |  |  |  |  |
| DAVID STARR JORDAN, JUNE 3 1968, 0925 GMT, 29 46N 115-59.5W, SOUNDING 610 FM, WIND 320 6 KNOTS, WEATHER OVERCAST, SEA SLIGHT, WIRE ANGLE 00. |       |        |      |          |     |      |                 |                          |       |        |      |                   |                 |      |  |        |  |  |  |  |  |  |  |
| 0  | 17.94 | 33.557 | 6.15 | 0.33     | 5   | 0.1  | 363.4           | 0                        | 17.54 | 33.557 | 6.15 | 24.30             | 363.4           | 0    |  |        |  |  |  |  |  |  |  |
| 10   | 17.12 | 33.554 | 5.95 | 0.33     | 4   | 0.1  | 354.0           | 10                       | 17.12 | 33.554 | 5.95 | 24.40             | 354.0           | .036 |  |        |  |  |  |  |  |  |  |
| 20   | 15.15 | 33.479 | 5.91 | 0.40     | 3   | 0.2  | 316.9           | 20                       | 16.36 | 33.528 | 5.93 | 24.55             | 339.1           | .071 |  |        |  |  |  |  |  |  |  |
| 30   | 12.68 | 33.375 | 5.57 | 0.68     | 6   | 3.4  | 275.9           | 30                       | 14.92 | 33.466 | 5.90 | 24.83             | 313.0           | .103 |  |        |  |  |  |  |  |  |  |
| 40   | 11.65 | 33.433 | 4.76 | 1.05     | 11  | 9.2  | 253.0           | 40                       | 11.56 | 33.440 | 4.71 | 25.48             | 250.9           | .160 |  |        |  |  |  |  |  |  |  |
| 50   | 10.65 | 33.538 | 4.29 | 1.39     | 16  | 14.8 | 228.2           | 50                       | 10.34 | 33.654 | 3.80 | 25.86             | 214.6           | .218 |  |        |  |  |  |  |  |  |  |
| 60   | 10.31 | 33.693 | 3.65 | 1.69     | 20  | 18.3 | 211.1           | 60                       | 10.11 | 33.858 | 3.24 | 26.06             | 195.6           | .270 |  |        |  |  |  |  |  |  |  |
| 70   | 10.19 | 33.835 | 3.29 | 1.87     | 22  | 19.8 | 198.6           | 70                       | 9.41  | 34.007 | 2.93 | 26.30             | 173.5           | .317 |  |        |  |  |  |  |  |  |  |
| 80   | 9.44  | 34.004 | 2.94 | 2.00     | 30  | 24.2 | 174.5           | 80                       | 9.21  | 34.083 | 2.71 | 26.39             | 164.8           | .360 |  |        |  |  |  |  |  |  |  |
| 90   | 9.27  | 34.054 | 2.86 | 2.10     | 32  | 25.0 | 167.9           | 90                       | 8.99  | 34.247 | 1.56 | 26.55             | 149.3           | .440 |  |        |  |  |  |  |  |  |  |
| 100  | 9.11  | 34.153 | 2.25 | 2.32     | 37  | 27.3 | 158.1           | 100                      | 8.81  | 34.338 | .97  | 26.65             | 139.8           | .514 |  |        |  |  |  |  |  |  |  |
| 120  | 8.99  | 34.25  | 1.54 | 2.55     | 42  | 29.4 | 149.1           | 120                      | 8.46  | 34.379 | .63  | 26.74             | 131.6           | .585 |  |        |  |  |  |  |  |  |  |
| 140  | 8.85  | 34.292 | 1.23 | 2.63     | 45  | 30.4 | 143.8           | 140                      | 7.74  | 34.378 | .42  | 26.85             | 121.3           | .717 |  |        |  |  |  |  |  |  |  |
| 160  | 8.80  | 34.375 | .76  | 2.84     | 48  | 31.5 | 136.9           | 160                      | 6.46  | 34.351 | .40  | 27.00             | 106.5           | .838 |  |        |  |  |  |  |  |  |  |
| 180  | 8.11  | 34.366 | .59  | 2.95     | 54  | 33.4 | 127.8           |                          |       |        |      |                   |                 |      |  |        |  |  |  |  |  |  |  |
| 200  | 7.73  | 34.378 | .42  | 3.04     | 58  | 34.9 | 121.3           |                          |       |        |      |                   |                 |      |  |        |  |  |  |  |  |  |  |
| 220  | 6.73  | 34.351 | .41  | 3.15     | 68  | 36.5 | 109.9           |                          |       |        |      |                   |                 |      |  |        |  |  |  |  |  |  |  |
| 240  | 6.08  | 34.366 | .35  | 3.22     | 75  | 40.9 | 100.7           |                          |       |        |      |                   |                 |      |  |        |  |  |  |  |  |  |  |

| OBSERVED LEVELS OF DEPTH   |   |   |     |          |     |     |                 | STANDARD LEVELS OF DEPTH |       |       |     |                   |                 |      |  |        |  |  |  |  |  |  |  |
|--|---|---|-----|----------|-----|-----|-----------------|--------------------------|-------|-------|-----|-------------------|-----------------|------|--|--------|--|--|--|--|--|--|--|
| INPUT  |   |   |     | COMPUTED |     |     |                 | INPUT                    |       |       |     | COMPUTED          |                 |      |  |        |  |  |  |  |  |  |  |
| Z  | T | S | DXY | PHO      | SIL | NIT | D* <sup>T</sup> | Z                        | T     | S     | DXY | SIG* <sup>T</sup> | D* <sup>T</sup> | DD   |  |        |  |  |  |  |  |  |  |
| 110.40   |   |   |     |          |     |     |                 | CALCOPFI CRUISE 6806     |       |       |     |                   |                 |      |  | 110.40 |  |  |  |  |  |  |  |
| DAVID STARR JORDAN, JUNE 3 1968, 0248 GMT, 29 36.5N 116 19.5W, SOUNDING 1330 FM, WIND 310 6 KNOTS, WEATHER OVERCAST, SEA SLIGHT. |   |   |     |          |     |     |                 |                          |       |       |     |                   |                 |      |  |        |  |  |  |  |  |  |  |
|  |   |   |     |          |     |     |                 | 0                        | 17.47 | 33.56 | -   | 24.32             | 361.5           | 0    |  |        |  |  |  |  |  |  |  |
|  |   |   |     |          |     |     |                 | 10                       | 16.96 | 33.53 | -   | 24.42             | 352.2           | .036 |  |        |  |  |  |  |  |  |  |
|  |   |   |     |          |     |     |                 | 20                       | 16.57 | 33.49 | -   | 24.48             | 346.5           | .071 |  |        |  |  |  |  |  |  |  |
|  |   |   |     |          |     |     |                 | 30                       | 16.21 | 33.46 | -   | 24.54             | 340.8           | .105 |  |        |  |  |  |  |  |  |  |
|  |   |   |     |          |     |     |                 | 40                       | 14.42 | 33.38 | -   | 24.87             | 309.2           | .170 |  |        |  |  |  |  |  |  |  |
|  |   |   |     |          |     |     |                 | 50                       | 12.25 | 33.40 | -   | 25.32             | 266.2           | .243 |  |        |  |  |  |  |  |  |  |
|  |   |   |     |          |     |     |                 | 60                       | 10.80 | 33.48 | -   | 25.65             | 234.9           | .306 |  |        |  |  |  |  |  |  |  |
|  |   |   |     |          |     |     |                 | 70                       | 10.06 | 33.74 | -   | 25.98             | 203.6           | .361 |  |        |  |  |  |  |  |  |  |
|  |   |   |     |          |     |     |                 | 80                       | 9.50  | 33.89 | -   | 26.19             | 183.6           | .410 |  |        |  |  |  |  |  |  |  |
|  |   |   |     |          |     |     |                 | 90                       | 9.17  | 34.10 | -   | 26.41             | 162.9           | .499 |  |        |  |  |  |  |  |  |  |
|  |   |   |     |          |     |     |                 | 100                      | 8.52  | 34.18 | -   | 26.57             | 147.3           | .578 |  |        |  |  |  |  |  |  |  |
|  |   |   |     |          |     |     |                 | 120                      | 8.08  | 34.23 | -   | 26.68             | 137.2           | .652 |  |        |  |  |  |  |  |  |  |
|  |   |   |     |          |     |     |                 | 140                      | 7.17  | 34.28 | -   | 26.85             | 121.0           | .787 |  |        |  |  |  |  |  |  |  |
|  |   |   |     |          |     |     |                 | 160                      | 6.44  | 34.32 | -   | 26.98             | 108.6           | .908 |  |        |  |  |  |  |  |  |  |

| INPUT   |       |        |      |      |     |      |                 | OUTPUT AT STANDARD LEVELS OF DEPTH |       |        |      |                   |                 |      |  |        |  |  |  |  |  |  |  |
|---|-------|--------|------|------|-----|------|-----------------|------------------------------------|-------|--------|------|-------------------|-----------------|------|--|--------|--|--|--|--|--|--|--|
| Z   | T     | S      | DXY  | PHO  | SIL | NIT  | D* <sup>T</sup> | Z                                  | T     | S      | DXY  | SIG* <sup>T</sup> | D* <sup>T</sup> | DD   |  |        |  |  |  |  |  |  |  |
| 110.40  |       |        |      |      |     |      |                 | CALCOPFI CRUISE 6806               |       |        |      |                   |                 |      |  | 110.40 |  |  |  |  |  |  |  |
| DAVID STARR JORDAN, JUNE 3 1968, 0320 GMT, 29 36.5N 116 19.5W, SOUNDING 1330 FM, WIND 310 6 KNOTS, WEATHER OVERCAST, SEA SLIGHT, WIRE ANGLE 05. |       |        |      |      |     |      |                 |                                    |       |        |      |                   |                 |      |  |        |  |  |  |  |  |  |  |
| 1   | 17.40 | 33.573 | 6.16 | 0.26 | 3   | 0.2  | 359.0           | 0                                  | 17.40 | 33.573 | 6.16 | 24.35             | 359.0           | 0    |  |        |  |  |  |  |  |  |  |
| 11  | 16.96 | 33.552 | 6.01 | 0.25 | 3   | 0.1  | 350.6           | 10                                 | 17.01 | 33.554 | 6.02 | 24.42             | 351.5           | .036 |  |        |  |  |  |  |  |  |  |
| 20  | 16.00 | 33.507 | 6.08 | 0.18 | 2   | 0.1  | 332.8           | 20                                 | 16.59 | 33.542 | 6.01 | 24.51             | 343.1           | .070 |  |        |  |  |  |  |  |  |  |
| 30  | 15.01 | 33.415 | 6.12 | 0.24 | 2   | 0.1  | 318.6           | 30                                 | 16.00 | 33.507 | 6.08 | 24.62             | 332.8           | .104 |  |        |  |  |  |  |  |  |  |
| 40  | 14.40 | 33.391 | 6.13 | 0.16 | 2   | 0.1  | 308.0           | 40                                 | 14.29 | 33.389 | 6.12 | 24.90             | 305.9           | .168 |  |        |  |  |  |  |  |  |  |
| 50  | 12.30 | 33.382 | 5.80 | 0.62 | 5   | 2.9  | 277.6           | 50                                 | 12.17 | 33.407 | 5.49 | 25.34             | 264.1           | .240 |  |        |  |  |  |  |  |  |  |
| 60  | 12.03 | 33.417 | 5.39 | 0.74 | 8   | 5.6  | 260.9           | 60                                 | 10.84 | 33.511 | 4.53 | 25.67             | 233.3           | .303 |  |        |  |  |  |  |  |  |  |
| 70  | 10.88 | 33.505 | 4.56 | 0.82 | 12  | 8.3  | 234.4           | 70                                 | 10.07 | 33.703 | 3.84 | 25.95             | 206.4           | .358 |  |        |  |  |  |  |  |  |  |
| 80  | 10.10 | 33.682 | 3.92 | 1.25 | 17  | 14.9 | 208.5           | 80                                 | 9.67  | 33.907 | 3.28 | 26.17             | 185.0           | .408 |  |        |  |  |  |  |  |  |  |
| 90  | 9.84  | 33.870 | 3.29 | 1.65 | 22  | 18.2 | 190.4           | 90                                 | 9.17  | 34.096 | 2.65 | 26.40             | 163.2           | .497 |  |        |  |  |  |  |  |  |  |
| 100   | 9.30  | 33.966 | 3.25 | 1.52 | 25  | 18.8 | 174.9           | 100                                | 8.63  | 34.163 | 2.03 | 26.54             | 150.2           | .577 |  |        |  |  |  |  |  |  |  |
| 120   | 9.17  | 34.096 | 2.65 | 1.54 | 28  | 22.9 | 163.2           | 120                                | 8.10  | 34.225 | 1.36 | 26.67             | 137.9           | .652 |  |        |  |  |  |  |  |  |  |
| 140   | 8.90  | 34.136 | 2.34 | 2.06 | 32  | 24.2 | 156.2           | 140                                | 7.11  | 34.242 | .80  | 26.87             | 119.3           | .786 |  |        |  |  |  |  |  |  |  |
| 160   | 8.37  | 34.187 | 1.73 | 2.30 | 37  | 28.0 | 144.5           | 160                                | 6.42  | 34.336 | .42  | 27.00             | 107.1           | .906 |  |        |  |  |  |  |  |  |  |
| 180   | 7.90  | 34.253 | 1.11 | 2.63 | 43  | 32.6 | 132.9           |                                    |       |        |      |                   |                 |      |  |        |  |  |  |  |  |  |  |
| 200   | 7.12  | 34.291 | .81  | 2.75 | 51  | 35.1 | 119.5           |                                    |       |        |      |                   |                 |      |  |        |  |  |  |  |  |  |  |
| 220   | 6.62  | 34.328 | .43  | 2.98 | 56  | 37.7 | 110.2           |                                    |       |        |      |                   |                 |      |  |        |  |  |  |  |  |  |  |
| 240   | 6.04  | 34.342 | .40  | 3.15 | 63  | 41.4 | 102.0           |                                    |       |        |      |                   |                 |      |  |        |  |  |  |  |  |  |  |

(A) AN ERROR OF +0.02 IN THE CONDUCTIVITY BATHI HAS BEEN ASSUMED FOR THIS VALUE. THE LISTED OBSERVED AND INTERPOLATED VALUES INCORPORATE THE CORRECTION.

| OBSERVED LEVELS OF DEPTH   |   |   |     |     |     |     | STANDARD LEVELS OF DEPTH |     |       |       |     |       |       |        |  |
|--|---|---|-----|-----|-----|-----|--------------------------|-----|-------|-------|-----|-------|-------|--------|--|
| INPUT  |   |   |     |     |     |     | COMPUTED                 |     |       |       |     |       |       |        |  |
| Z  | T | S | DXY | PHU | SIL | NIT | D*T                      | Z   | T     | S     | DXY | SIG*T | D*T   | DD     |  |
| 110.50   |   |   |     |     |     |     | CALCOFI CRUISE 6806      |     |       |       |     |       |       | 110.50 |  |
| DAVID STARR JORDAN, JUNE 3 1968, 0825 GMT, 29 17N 116 59.5W, SOUNDING 2000 FM, WIND 330 3 KNOTS, WEATHER MISSING, SEA MISSING. |   |   |     |     |     |     |                          |     |       |       |     |       |       |        |  |
|  |   |   |     |     |     |     |                          | 0   | 17.88 | 33.64 | -   | 24.28 | 365.1 | 0      |  |
|  |   |   |     |     |     |     |                          | 10  | 17.84 | 33.65 | -   | 24.30 | 363.5 | .036   |  |
|  |   |   |     |     |     |     |                          | 20  | 17.63 | 33.64 | -   | 24.34 | 359.4 | .073   |  |
|  |   |   |     |     |     |     |                          | 30  | 17.56 | 33.64 | -   | 24.36 | 357.8 | .109   |  |
|  |   |   |     |     |     |     |                          | 50  | 17.09 | 33.57 | -   | 24.42 | 352.2 | .180   |  |
|  |   |   |     |     |     |     |                          | 75  | 15.99 | 33.46 | -   | 24.59 | 336.0 | .266   |  |
|  |   |   |     |     |     |     |                          | 100 | 12.89 | 33.26 | -   | 25.09 | 288.3 | .345   |  |
|  |   |   |     |     |     |     |                          | 125 | 11.23 | 33.67 | -   | 25.72 | 228.2 | .410   |  |
|  |   |   |     |     |     |     |                          | 150 | 10.51 | 33.85 | -   | 25.99 | 202.8 | .465   |  |
|  |   |   |     |     |     |     |                          | 200 | 9.93  | 34.17 | -   | 26.34 | 169.7 | .560   |  |
|  |   |   |     |     |     |     |                          | 250 | 9.71  | 34.32 | -   | 26.49 | 155.0 | .643   |  |
|  |   |   |     |     |     |     |                          | 300 | 9.81  | 34.46 | -   | 26.58 | 146.3 | .721   |  |
|  |   |   |     |     |     |     |                          | 400 | 8.45  | 34.40 | -   | 26.76 | 129.9 | .866   |  |
|  |   |   |     |     |     |     |                          | 500 | 7.05  | 34.33 | -   | 26.91 | 115.6 | .957   |  |
|  |   |   |     |     |     |     |                          | 600 | 6.07  | 34.32 | -   | 27.03 | 104.0 | 1.114  |  |

| OBSERVED LEVELS OF DEPTH   |   |   |     |     |     |     | STANDARD LEVELS OF DEPTH |     |       |       |     |       |       |        |  |
|--|---|---|-----|-----|-----|-----|--------------------------|-----|-------|-------|-----|-------|-------|--------|--|
| INPUT  |   |   |     |     |     |     | COMPUTED                 |     |       |       |     |       |       |        |  |
| Z  | T | S | DXY | PHU | SIL | NIT | D*T                      | Z   | T     | S     | DXY | SIG*T | D*T   | DD     |  |
| 110.60   |   |   |     |     |     |     | CALCOFI CRUISE 6806      |     |       |       |     |       |       | 110.60 |  |
| DAVID STARR JORDAN, JUNE 3 1968, 1328 GMT, 28 56.5N 117 38.5W, SOUNDING 1925 FM, WIND 330 6 KNOTS, WEATHER OVERCAST, SEA MODERATE. |   |   |     |     |     |     |                          |     |       |       |     |       |       |        |  |
|  |   |   |     |     |     |     |                          | 0   | 17.57 | 33.58 | -   | 24.31 | 362.4 | 0      |  |
|  |   |   |     |     |     |     |                          | 10  | 17.57 | 33.58 | -   | 24.31 | 362.4 | .036   |  |
|  |   |   |     |     |     |     |                          | 20  | 17.35 | 33.59 | -   | 24.37 | 356.6 | .072   |  |
|  |   |   |     |     |     |     |                          | 30  | 17.10 | 33.56 | -   | 24.41 | 353.2 | .108   |  |
|  |   |   |     |     |     |     |                          | 50  | 16.32 | 33.52 | -   | 24.56 | 338.8 | .177   |  |
|  |   |   |     |     |     |     |                          | 75  | 14.59 | 33.39 | -   | 24.84 | 311.9 | .259   |  |
|  |   |   |     |     |     |     |                          | 100 | 12.55 | 33.45 | -   | 25.30 | 268.0 | .332   |  |
|  |   |   |     |     |     |     |                          | 125 | 11.45 | 33.65 | -   | 25.66 | 233.5 | .395   |  |
|  |   |   |     |     |     |     |                          | 150 | 10.67 | 33.83 | -   | 25.94 | 206.9 | .451   |  |
|  |   |   |     |     |     |     |                          | 200 | 10.24 | 34.21 | -   | 26.31 | 171.7 | .548   |  |
|  |   |   |     |     |     |     |                          | 250 | 9.45  | 34.28 | -   | 26.50 | 153.9 | .631   |  |
|  |   |   |     |     |     |     |                          | 300 | 9.27  | 34.38 | -   | 26.61 | 143.7 | .709   |  |
|  |   |   |     |     |     |     |                          | 400 | 8.41  | 34.44 | -   | 26.79 | 126.3 | .850   |  |
|  |   |   |     |     |     |     |                          | 500 | 7.17  | 34.38 | -   | 26.93 | 113.5 | .978   |  |
|  |   |   |     |     |     |     |                          | 600 | 5.99  | 34.33 | -   | 27.05 | 102.3 | 1.094  |  |

| OBSERVED LEVELS OF DEPTH  |       |        |      |      |     |      | STANDARD LEVELS OF DEPTH           |     |       |        |      |       |       |        |  |
|---|-------|--------|------|------|-----|------|------------------------------------|-----|-------|--------|------|-------|-------|--------|--|
| INPUT   |       |        |      |      |     |      | OUTPUT AT STANDARD LEVELS OF DEPTH |     |       |        |      |       |       |        |  |
| Z   | T     | S      | DXY  | PHU  | SIL | NIT  | D*T                                | Z   | T     | S      | DXY  | SIG*T | D*T   | DD     |  |
| 110.80  |       |        |      |      |     |      | CALCOFI CRUISE 6806                |     |       |        |      |       |       | 110.80 |  |
| DAVID STARR JORDAN, JUNE 3 1968, 1523 GMT, 28 56.5N 117 38.5W, SOUNDING 1925 FM, WIND 330 6 KNOTS, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 07. |       |        |      |      |     |      |                                    |     |       |        |      |       |       |        |  |
| 1   | 17.55 | 33.588 | 5.70 | 0.28 | 2   | 0.2  | 361.3                              | 0   | 17.55 | 33.588 | 5.70 | 24.32 | 361.3 | 0      |  |
| 11  | 17.53 | 33.586 | 5.74 | 0.34 | 2   | 0.2  | 361.0                              | 10  | 17.54 | 33.587 | 5.74 | 24.32 | 361.2 | .036   |  |
| 30  | 17.04 | 33.561 | 5.82 | 0.31 | 2   | 0.2  | 351.7                              | 20  | 17.35 | 33.575 | 5.80 | 24.36 | 357.7 | .072   |  |
| 40  | 16.69 | 33.554 | 5.74 | 0.33 | 2   | 0.1  | 344.4                              | 30  | 17.04 | 33.561 | 5.82 | 24.42 | 351.7 | .108   |  |
| 49  | 16.44 | 33.525 | 5.78 | 0.50 | 2   | 0.2  | 341.1                              | 50  | 16.41 | 33.523 | 5.78 | 24.54 | 340.5 | .177   |  |
| 64  | 15.87 | 33.489 | 5.83 | 0.76 | 2   | 0.2  | 331.3                              | 75  | 14.53 | 33.416 | 5.87 | 24.87 | 308.8 | .259   |  |
| 78  | 14.12 | 33.396 | 5.87 | 0.48 | 3   | 0.5  | 302.0                              | 100 | 12.18 | 33.393 | 5.29 | 25.33 | 265.5 | .331   |  |
| 98  | 12.27 | 33.376 | 5.40 | 0.72 | 6   | 4.8  | 268.3                              | 125 | 11.46 | 33.652 | 3.97 | 25.66 | 233.5 | .394   |  |
| 122   | 11.57 | 33.630 | 4.06 | 1.28 | 13  | 14.1 | 237.1                              | 150 | 10.58 | 33.824 | 3.39 | 25.95 | 205.9 | .450   |  |
| 141   | 10.88 | 33.759 | 3.61 | 1.55 | 16  | 18.0 | 215.7                              | 200 | 10.31 | 34.218 | 1.87 | 26.31 | 172.3 | .546   |  |
| 170   | 10.14 | 33.976 | 2.84 | 1.98 | 23  | 23.2 | 187.4                              | 250 | 9.65  | 34.315 | 1.41 | 26.50 | 154.4 | .620   |  |
| 199   | 10.32 | 34.214 | 1.88 | 2.12 | 27  | 25.9 | 172.7                              | 300 | 9.17  | 34.369 | .92  | 26.62 | 143.0 | .707   |  |
| 229   | 9.87  | 34.274 | 1.69 | 2.44 | 30  | 27.6 | 161.0                              | 400 | 8.39  | 34.440 | .36  | 26.80 | 126.0 | .848   |  |
| 267   | 9.49  | 34.343 | 1.18 | 2.56 | 34  | 30.3 | 149.9                              | 500 | 7.28  | 34.395 | .34  | 26.92 | 113.9 | .976   |  |
| 326   | 8.94  | 34.381 | .78  | 2.75 | 39  | 31.7 | 138.6                              |     |       |        |      |       |       |        |  |
| 398   | 8.41  | 34.441 | .36  | 2.94 | 44  | 31.7 | 126.3                              |     |       |        |      |       |       |        |  |
| 470   | 7.62  | 34.406 | .35  | 3.03 | 50  | 36.1 | 117.7                              |     |       |        |      |       |       |        |  |
| 548   | 6.74  | 34.380 | .33  | 3.11 | 57  | 39.4 | 107.9                              |     |       |        |      |       |       |        |  |

## OBSERVED LEVELS OF DEPTH

## STANDARD LEVELS OF DEPTH

| OBSERVED LEVELS OF DEPTH  |   |   |     |     |     |     | STANDARD LEVELS OF DEPTH |     |       |       |     |       |       |        |  |
|---|---|---|-----|-----|-----|-----|--------------------------|-----|-------|-------|-----|-------|-------|--------|--|
| INPUT   |   |   |     |     |     |     | COMPUTED                 |     |       |       |     |       |       |        |  |
| Z   | T | S | OXY | PHO | SIL | NIT | UPT                      | Z   | T     | S     | OXY | SIGT  | UPT   | DB     |  |
| 113.35  |   |   |     |     |     |     | CALCOFI CRUISE 6806      |     |       |       |     |       |       | 113.35 |  |
| DAVID STARR JORDAN, JUNE 2 1968, 1353 GMT, 29 11.5N 115 38.5W, SOUNDING 740 FM, WIND 320 4 KNOTS, WEATHER OVERCAST, SEA MODERATE. |   |   |     |     |     |     |                          |     |       |       |     |       |       |        |  |
|   |   |   |     |     |     |     |                          | 0   | 16.35 | 33.52 | -   | 24.55 | 339.4 | 0      |  |
|   |   |   |     |     |     |     |                          | 10  | 16.21 | 33.50 | -   | 24.57 | 337.9 | .034   |  |
|   |   |   |     |     |     |     |                          | 20  | 14.53 | 33.49 | -   | 24.93 | 303.3 | .066   |  |
|   |   |   |     |     |     |     |                          | 30  | 13.12 | 33.50 | -   | 25.23 | 275.0 | .095   |  |
|   |   |   |     |     |     |     |                          | 50  | 11.57 | 33.42 | -   | 25.46 | 252.6 | .148   |  |
|   |   |   |     |     |     |     |                          | 75  | 10.46 | 33.64 | -   | 25.83 | 217.5 | .207   |  |
|   |   |   |     |     |     |     |                          | 100 | 9.98  | 33.84 | -   | 26.07 | 194.9 | .259   |  |
|   |   |   |     |     |     |     |                          | 125 | 9.58  | 33.97 | -   | 26.24 | 178.9 | .306   |  |
|   |   |   |     |     |     |     |                          | 150 | 9.45  | 34.02 | -   | 26.30 | 173.2 | .351   |  |
|   |   |   |     |     |     |     |                          | 200 | 8.78  | 34.15 | -   | 26.51 | 153.3 | .434   |  |
|   |   |   |     |     |     |     |                          | 250 | 8.56  | 34.26 | -   | 26.63 | 141.9 | .510   |  |
|   |   |   |     |     |     |     |                          | 300 | 8.10  | 34.30 | -   | 26.73 | 132.3 | .581   |  |
|   |   |   |     |     |     |     |                          | 400 | 7.16  | 34.32 | -   | 26.88 | 117.8 | .712   |  |
|   |   |   |     |     |     |     |                          | 500 | 6.78  | 34.38 | -   | 26.98 | 108.4 | .832   |  |

113.39

CALCOFI CRUISE 6806

113.39

DAVID STARR JORDAN, JUNE 2 1968, 1100 GMT, 29 09.5N 115 59W, SOUNDING 1000 FM, WIND 300 6 KNOTS, WEATHER MISSING, SEA MISSING.

|  |  |  |  |  |  |  |  |     |       |       |   |       |       |      |
|--|--|--|--|--|--|--|--|-----|-------|-------|---|-------|-------|------|
|  |  |  |  |  |  |  |  | 0   | 17.73 | 33.59 | - | 24.28 | 365.3 | 0    |
|  |  |  |  |  |  |  |  | 10  | 17.51 | 33.52 | - | 24.28 | 365.4 | .037 |
|  |  |  |  |  |  |  |  | 20  | 16.66 | 33.55 | - | 24.50 | 344.1 | .072 |
|  |  |  |  |  |  |  |  | 30  | 16.35 | 33.47 | - | 24.51 | 343.1 | .107 |
|  |  |  |  |  |  |  |  | 50  | 13.96 | 33.42 | - | 25.00 | 297.1 | .171 |
|  |  |  |  |  |  |  |  | 75  | 11.91 | 33.40 | - | 25.38 | 260.1 | .241 |
|  |  |  |  |  |  |  |  | 100 | 10.50 | 33.88 | - | 25.86 | 215.2 | .301 |
|  |  |  |  |  |  |  |  | 125 | 9.68  | 33.81 | - | 26.10 | 192.3 | .352 |
|  |  |  |  |  |  |  |  | 150 | 9.29  | 33.95 | - | 26.27 | 175.9 | .399 |
|  |  |  |  |  |  |  |  | 200 | 8.84  | 34.11 | - | 26.47 | 157.2 | .484 |
|  |  |  |  |  |  |  |  | 250 | 8.31  | 34.17 | - | 26.60 | 144.9 | .561 |
|  |  |  |  |  |  |  |  | 300 | 7.85  | 34.21 | - | 26.70 | 135.4 | .634 |
|  |  |  |  |  |  |  |  | 400 | 7.07  | 34.28 | - | 26.86 | 119.6 | .767 |
|  |  |  |  |  |  |  |  | 500 | 6.40  | 34.32 | - | 26.99 | 108.1 | .887 |
|  |  |  |  |  |  |  |  | 600 | 5.67  | 34.35 | - | 27.10 | 97.0  | .957 |

113.50

CALCOFI CRUISE 6806

113.50

DAVID STARR JORDAN, JUNE 2 1968, 0526 GMT, 28 46N 116 37.5W, SOUNDING 1940 FM, WIND 360 6 KNOTS, WEATHER MISSING, SEA MISSING.

|  |  |  |  |  |  |  |  |     |       |       |   |       |       |      |
|--|--|--|--|--|--|--|--|-----|-------|-------|---|-------|-------|------|
|  |  |  |  |  |  |  |  | 0   | 17.58 | 33.60 | - | 24.32 | 361.1 | 0    |
|  |  |  |  |  |  |  |  | 10  | 17.58 | 33.62 | - | 24.34 | 359.7 | .036 |
|  |  |  |  |  |  |  |  | 20  | 17.54 | 33.63 | - | 24.36 | 358.0 | .072 |
|  |  |  |  |  |  |  |  | 30  | 16.80 | 33.54 | - | 24.46 | 347.9 | .107 |
|  |  |  |  |  |  |  |  | 50  | 16.09 | 33.39 | - | 24.51 | 343.3 | .177 |
|  |  |  |  |  |  |  |  | 75  | 14.40 | 33.34 | - | 24.84 | 311.7 | .259 |
|  |  |  |  |  |  |  |  | 100 | 12.44 | 33.35 | - | 25.25 | 273.3 | .333 |
|  |  |  |  |  |  |  |  | 125 | 11.28 | 33.75 | - | 25.77 | 223.2 | .395 |
|  |  |  |  |  |  |  |  | 150 | 10.72 | 33.88 | - | 25.97 | 204.1 | .450 |
|  |  |  |  |  |  |  |  | 200 | 9.75  | 34.15 | - | 26.35 | 168.3 | .545 |
|  |  |  |  |  |  |  |  | 250 | 9.23  | 34.24 | - | 26.51 | 153.5 | .627 |
|  |  |  |  |  |  |  |  | 300 | 8.96  | 34.29 | - | 26.59 | 145.6 | .705 |
|  |  |  |  |  |  |  |  | 400 | 7.82  | 34.31 | - | 26.78 | 127.6 | .847 |
|  |  |  |  |  |  |  |  | 500 | 6.63  | 34.28 | - | 26.92 | 113.9 | .975 |





NITRITE DATA FOR CALCOFI CRUISE 6806

SIO  
CalCOFI  
6806

| Z | NO <sub>2</sub> -N |
|---|--------------------|
| m | µg at/L            |

Station 60.52.

|    |      |
|----|------|
| 0  | 0.05 |
| 10 | 0.09 |
| 19 | 0.09 |
| 29 | 0.09 |
| 50 | 0.12 |

| Z | NO <sub>2</sub> -N |
|---|--------------------|
| m | µg at/L            |

Station 60.60.

|     |      |
|-----|------|
| 1   | 0.05 |
| 12  | 0.03 |
| 30  | 0.06 |
| 40  | 0.10 |
| 54  | 0.10 |
| 69  | 0.11 |
| 94  | 0.09 |
| 112 | 0.08 |
| 132 | 0.07 |
| 151 | 0.12 |
| 180 | 0.02 |
| 213 | 0.02 |
| 243 | 0.01 |
| 291 | 0.01 |
| 344 | 0.00 |
| 426 | 0.02 |
| 509 | 0.01 |
| 590 | 0.00 |

| Z | NO <sub>2</sub> -N |
|---|--------------------|
| m | µg at/L            |

Station 60.80.

|     |      |
|-----|------|
| 1   | 0.06 |
| 12  | 0.05 |
| 31  | 0.05 |
| 40  | 0.05 |
| 54  | 0.05 |
| 69  | 0.07 |
| 93  | 0.01 |
| 113 | 0.03 |
| 132 | 0.02 |
| 152 | 0.03 |
| 181 | 0.03 |
| 215 | 0.02 |
| 245 | 0.01 |
| 294 | 0.04 |
| 348 | 0.03 |
| 430 | 0.03 |
| 513 | 0.02 |
| 594 | 0.02 |

| Z | NO <sub>2</sub> -N |
|---|--------------------|
| m | µg at/L            |

Station 63.52.

|    |      |
|----|------|
| 0  | -    |
| 4  | 0.01 |
| 12 | 0.07 |
| 23 | 0.09 |
| 32 | 0.09 |
| 51 | 0.08 |

Station 63.60.

|     |      |
|-----|------|
| 1   | 0.04 |
| 11  | 0.04 |
| 30  | 0.07 |
| 39  | 0.03 |
| 53  | 0.01 |
| 67  | 0.11 |
| 91  | 0.12 |
| 111 | 0.03 |
| 129 | 0.03 |
| 149 | 0.00 |
| 178 | 0.07 |
| 213 | 0.03 |
| 244 | 0.02 |
| 292 | 0.01 |
| 347 | 0.01 |
| 428 | 0.01 |
| 510 | 0.02 |
| 591 | 0.00 |

Station 67.50.

|    |      |
|----|------|
| 2  | 0.05 |
| 11 | 0.07 |
| 27 | 0.06 |
| 36 | 0.05 |
| 46 | 0.09 |
| 59 | 0.07 |
| 75 | 0.06 |
| 98 | 0.07 |

Station 67.60.

|     |      |
|-----|------|
| 1   | 0.04 |
| 11  | 0.02 |
| 30  | 0.02 |
| 39  | 0.03 |
| 53  | 0.01 |
| 67  | 0.02 |
| 92  | 0.00 |
| 110 | 0.03 |
| 129 | 0.01 |
| 148 | 0.01 |
| 176 | 0.03 |
| 210 | 0.01 |
| 238 | 0.02 |
| 285 | 0.04 |
| 338 | 0.02 |
| 422 | 0.02 |
| 505 | 0.01 |
| 587 | 0.01 |

Station 70.53.

|     |      |
|-----|------|
| 0   | 0.07 |
| 11  | 0.07 |
| 28  | 0.07 |
| 39  | 0.05 |
| 49  | 0.04 |
| 63  | 0.03 |
| 78  | 0.04 |
| 95  | 0.05 |
| 121 | 0.03 |
| 141 | 0.03 |
| 169 | 0.03 |
| 198 | 0.01 |
| 228 | 0.03 |
| 267 | 0.05 |
| 326 | 0.03 |
| 399 | 0.03 |
| 471 | 0.04 |
| 549 | 0.01 |

| Z | NO <sub>2</sub> -N |
|---|--------------------|
| m | μg at/L            |

Station 70.60.

|     |      |
|-----|------|
| 0   | 0.01 |
| 11  | 0.03 |
| 30  | 0.05 |
| 40  | 0.05 |
| 49  | 0.05 |
| 64  | 0.03 |
| 78  | 0.16 |
| 97  | 0.02 |
| 121 | 0.01 |
| 141 | 0.01 |
| 170 | 0.01 |
| 200 | 0.02 |
| 228 | 0.01 |
| 267 | 0.02 |
| 325 | 0.01 |
| 398 | 0.02 |
| 471 | 0.02 |
| 548 | 0.01 |

Station 77.51.

|     |      |
|-----|------|
| 1   | 0.15 |
| 10  | 0.15 |
| 30  | 0.15 |
| 44  | 0.15 |
| 53  | 0.17 |
| 67  | 0.15 |
| 81  | 0.22 |
| 100 | 0.23 |
| 124 | 0.18 |
| 142 | 0.20 |
| 175 | 0.15 |
| 203 | 0.11 |
| 239 | 0.14 |

| Z | NO <sub>2</sub> -N |
|---|--------------------|
| m | μg at/L            |

Station 70.80.

|     |      |
|-----|------|
| 1   | 0.02 |
| 11  | 0.02 |
| 30  | 0.03 |
| 40  | 0.05 |
| 50  | 0.06 |
| 64  | 0.09 |
| 79  | 0.10 |
| 98  | 0.08 |
| 122 | 0.05 |
| 141 | 0.01 |
| 171 | 0.03 |
| 201 | 0.01 |
| 229 | 0.01 |
| 268 | 0.02 |
| 327 | 0.02 |
| 399 | 0.02 |
| 472 | 0.02 |
| 549 | 0.01 |

Station 77.60.

|     |      |
|-----|------|
| 1   | 0.12 |
| 11  | 0.13 |
| 30  | 0.18 |
| 40  | 0.19 |
| 50  | 0.20 |
| 64  | 0.19 |
| 79  | 0.14 |
| 98  | 0.11 |
| 124 | 0.07 |
| 141 | 0.13 |
| 170 | 0.14 |
| 201 | 0.07 |
| 229 | 0.02 |
| 268 | 0.03 |
| 326 | 0.02 |
| 399 | 0.03 |
| 472 | 0.03 |
| 551 | 0.01 |

| Z | NO <sub>2</sub> -N |
|---|--------------------|
| m | μg at/L            |

Station 73.53.

|     |      |
|-----|------|
| 1   | 0.05 |
| 10  | 0.06 |
| 29  | 0.07 |
| 39  | 0.07 |
| 53  | 0.03 |
| 68  | 0.05 |
| 92  | 0.01 |
| 111 | 0.04 |
| 131 | 0.03 |
| 150 | 0.01 |
| 179 | 0.01 |
| 213 | 0.02 |
| 243 | 0.02 |
| 292 | 0.01 |
| 346 | 0.01 |
| 429 | 0.01 |
| 511 | 0.01 |
| 593 | 0.04 |

Station 80.52.

|     |      |
|-----|------|
| 3   | 0.06 |
| 13  | 0.07 |
| 32  | 0.07 |
| 47  | 0.07 |
| 55  | 0.07 |
| 70  | 0.09 |
| 85  | 0.05 |
| 106 | 0.05 |
| 129 | 0.05 |
| 149 | 0.05 |
| 181 | 0.05 |
| 210 | 0.03 |
| 245 | 0.01 |

| Z | NO <sub>2</sub> -N |
|---|--------------------|
| m | μg at/L            |

Station 73.60.

|     |      |
|-----|------|
| 1   | 0.07 |
| 10  | 0.07 |
| 29  | 0.05 |
| 38  | 0.03 |
| 48  | 0.07 |
| 61  | 0.02 |
| 75  | 0.01 |
| 92  | 0.02 |
| 115 | 0.02 |
| 135 | 0.01 |
| 161 | 0.01 |
| 189 | 0.01 |
| 217 | 0.01 |
| 254 | 0.05 |
| 310 | 0.01 |
| 379 | 0.02 |
| 449 | 0.02 |
| 526 | 0.02 |

Station 80.60.

|     |      |
|-----|------|
| 0   | 0.15 |
| 8   | 0.15 |
| 27  | 0.13 |
| 37  | 0.16 |
| 46  | 0.18 |
| 61  | 0.19 |
| 76  | 0.17 |
| 95  | 0.22 |
| 119 | 0.07 |
| 139 | 0.05 |
| 169 | 0.03 |
| 198 | 0.01 |
| 227 | 0.01 |
| 266 | 0.01 |
| 323 | 0.02 |
| 397 | 0.01 |
| 470 | 0.00 |
| 546 | 0.01 |

S10  
CalCOFI  
6806

SIO  
 CalCOFI  
 6806

| Z | NO <sub>2</sub> -N |
|---|--------------------|
| m | µg at/L            |

Station 80.80.

|     |      |
|-----|------|
| 1   | 0.01 |
| 11  | 0.01 |
| 30  | 0.02 |
| 56  | 0.06 |
| 66  | 0.19 |
| 80  | 0.21 |
| 93  | 0.05 |
| 107 | 0.03 |
| 130 | 0.04 |
| 149 | 0.00 |
| 177 | 0.02 |
| 205 | 0.02 |
| 234 | 0.00 |
| 280 | 0.01 |
| 332 | 0.01 |
| 413 | 0.00 |
| 495 | 0.00 |
| 576 | 0.02 |

Station 87.60.

|     |      |
|-----|------|
| 1   | 0.02 |
| 11  | 0.02 |
| 30  | 0.03 |
| 39  | 0.09 |
| 49  | 0.10 |
| 62  | 0.28 |
| 76  | 0.05 |
| 95  | 0.03 |
| 119 | 0.01 |
| 138 | 0.03 |
| 167 | 0.02 |
| 195 | 0.03 |
| 224 | 0.01 |
| 261 | 0.01 |
| 321 | 0.01 |
| 394 | 0.04 |
| 467 | 0.08 |
| 544 | 0.03 |

| Z | NO <sub>2</sub> -N |
|---|--------------------|
| m | µg at/L            |

Station 82.47.

|     |      |
|-----|------|
| 0   | 0.00 |
| 10  | 0.12 |
| 29  | 0.19 |
| 43  | 0.26 |
| 52  | 0.26 |
| 66  | 0.27 |
| 81  | 0.21 |
| 95  | 0.26 |
| 119 | 0.12 |
| 139 | 0.05 |
| 166 | 0.06 |
| 195 | 0.01 |
| 224 | 0.00 |
| 263 | 0.00 |
| 321 | 0.03 |
| 373 | 0.03 |
| 433 | 0.01 |
| 490 | 0.01 |

Station 90.28.

|     |      |
|-----|------|
| 1   | 0.02 |
| 11  | 0.05 |
| 31  | 0.15 |
| 45  | 0.13 |
| 56  | 0.09 |
| 70  | 0.04 |
| 85  | 0.11 |
| 105 | 0.09 |
| 129 | 0.11 |
| 148 | 0.06 |
| 182 | 0.05 |
| 211 | 0.04 |
| 249 | 0.04 |

| Z | NO <sub>2</sub> -N |
|---|--------------------|
| m | µg at/L            |

Station 83.43.

|     |      |
|-----|------|
| 2   | 0.15 |
| 12  | 0.16 |
| 31  | 0.16 |
| 46  | 0.17 |
| 56  | 0.18 |
| 70  | 0.18 |
| 85  | 0.15 |
| 105 | 0.13 |
| 128 | 0.18 |
| 148 | 0.14 |
| 177 | 0.18 |
| 202 | 0.20 |

Station 90.37

|     |      |
|-----|------|
| 2   | 0.00 |
| 12  | 0.01 |
| 30  | 0.39 |
| 40  | 0.17 |
| 54  | 0.07 |
| 69  | 0.03 |
| 94  | 0.03 |
| 113 | -    |
| 132 | 0.05 |
| 152 | 0.01 |
| 182 | 0.01 |
| 214 | 0.01 |
| 244 | 0.01 |
| 293 | 0.05 |
| 348 | 0.04 |
| 431 | 0.11 |
| 513 | 0.08 |
| 596 | 0.05 |

| Z | NO <sub>2</sub> -N |
|---|--------------------|
| m | µg at/L            |

Station 83.60

|     |      |
|-----|------|
| 2   | 0.12 |
| 11  | 0.11 |
| 29  | 0.15 |
| 39  | 0.18 |
| 51  | 0.24 |
| 66  | 0.25 |
| 88  | 0.13 |
| 106 | 0.07 |
| 124 | 0.05 |
| 143 | 0.05 |
| 170 | 0.02 |
| 204 | 0.05 |
| 231 | 0.00 |
| 278 | 0.00 |
| 329 | 0.00 |
| 411 | 0.03 |
| 490 | 0.00 |
| 572 | 0.00 |

Station 90.60.

|     |      |
|-----|------|
| 2   | 0.05 |
| 11  | 0.05 |
| 29  | 0.07 |
| 39  | 0.11 |
| 53  | 0.17 |
| 68  | 0.14 |
| 92  | 0.11 |
| 109 | -    |
| 127 | 0.03 |
| 145 | 0.03 |
| 173 | 0.06 |
| 205 | 0.01 |
| 231 | 0.03 |
| 278 | 0.01 |
| 326 | 0.02 |
| 404 | 0.03 |
| 485 | 0.01 |
| 567 | 0.01 |

| Z | NO <sub>2</sub> -N |
|---|--------------------|
| m | µg at/L            |

Station 90.80.

|     |      |
|-----|------|
| 0   | 0.02 |
| 11  | 0.01 |
| 29  | 0.01 |
| 39  | 0.02 |
| 52  | 0.05 |
| 66  | 0.05 |
| 90  | 0.09 |
| 109 | 0.07 |
| 127 | 0.05 |
| 146 | 0.08 |
| 174 | 0.03 |
| 208 | 0.03 |
| 236 | 0.02 |
| 283 | 0.00 |
| 334 | 0.01 |
| 415 | 0.04 |
| 496 | 0.09 |
| 579 | 0.04 |

Station 100.40.

|     |      |
|-----|------|
| 2   | 0.01 |
| 14  | 0.03 |
| 31  | 0.18 |
| 45  | 0.08 |
| 54  | 0.04 |
| 69  | 0.01 |
| 83  | 0.03 |
| 103 | 0.02 |
| 127 | 0.01 |
| 147 | 0.01 |
| 175 | 0.02 |
| 205 | 0.02 |
| 234 | 0.02 |
| 273 | 0.03 |
| 330 | 0.02 |
| 402 | 0.00 |
| 476 | 0.01 |
| 553 | 0.00 |

| Z | NO <sub>2</sub> -N |
|---|--------------------|
| m | µg at/L            |

Station 93.60.

|     |      |
|-----|------|
| 2   | 0.01 |
| 11  | 0.01 |
| 30  | 0.00 |
| 38  | 0.09 |
| 47  | 0.15 |
| 60  | 0.28 |
| 74  | 0.08 |
| 91  | 0.05 |
| 114 | -    |
| 133 | 0.03 |
| 161 | 0.02 |
| 188 | 0.03 |
| 214 | 0.03 |
| 253 | 0.03 |
| 309 | 0.03 |
| 378 | 0.03 |
| 449 | 0.00 |
| 526 | 0.03 |

Station 100.60.

|     |      |
|-----|------|
| 1   | 0.02 |
| 11  | 0.04 |
| 30  | 0.01 |
| 40  | 0.03 |
| 50  | 0.02 |
| 64  | 0.03 |
| 79  | 0.08 |
| 98  | 0.04 |
| 123 | 0.03 |
| 142 | 0.03 |
| 171 | 0.03 |
| 200 | 0.03 |
| 230 | 0.00 |
| 269 | 0.04 |
| 328 | 0.05 |
| 401 | 0.05 |
| 473 | 0.02 |
| 551 | 0.04 |

| Z | NO <sub>2</sub> -N |
|---|--------------------|
| m | µg at/L            |

Station 97.60.

|     |      |
|-----|------|
| 1   | 0.01 |
| 11  | 0.01 |
| 30  | 0.02 |
| 39  | 0.00 |
| 49  | 0.05 |
| 62  | 0.15 |
| 77  | 0.14 |
| 95  | 0.05 |
| 119 | 0.05 |
| 138 | 0.01 |
| 167 | 0.03 |
| 195 | 0.01 |
| 223 | 0.00 |
| 262 | 0.02 |
| 321 | 0.02 |
| 394 | 0.02 |
| 466 | 0.03 |
| 544 | 0.05 |

Station 100.80.

|     |      |
|-----|------|
| 0   | 0.02 |
| 11  | 0.01 |
| 30  | 0.01 |
| 59  | 0.01 |
| 67  | 0.00 |
| 83  | 0.01 |
| 97  | 0.01 |
| 111 | 0.01 |
| 135 | 0.04 |
| 155 | 0.02 |
| 184 | 0.02 |
| 213 | 0.00 |
| 242 | 0.01 |
| 291 | 0.05 |
| 344 | 0.01 |
| 427 | 0.01 |
| 509 | 0.00 |
| 592 | 0.01 |

| Z | NO <sub>2</sub> -N |
|---|--------------------|
| m | µg at/L            |

Station 100.30.

|     |      |
|-----|------|
| 3   | 0.05 |
| 11  | 0.03 |
| 32  | 0.05 |
| 45  | 0.03 |
| 59  | 0.05 |
| 75  | 0.03 |
| 89  | 0.03 |
| 107 | 0.04 |
| 131 | 0.01 |
| 151 | 0.05 |
| 193 | 0.03 |
| 226 | 0.03 |
| 258 | 0.01 |
| 295 | 0.03 |

Station 103.60.

|     |      |
|-----|------|
| 0   | 0.00 |
| 11  | 0.02 |
| 30  | 0.02 |
| 39  | 0.01 |
| 49  | 0.02 |
| 62  | 0.01 |
| 76  | 0.02 |
| 94  | 0.16 |
| 118 | 0.06 |
| 137 | 0.02 |
| 165 | 0.04 |
| 194 | 0.04 |
| 221 | 0.02 |
| 260 | 0.01 |
| 316 | 0.03 |
| 387 | 0.04 |
| 460 | 0.01 |
| 536 | 0.03 |

SIO  
CaICOFI  
6806



SIO  
CalCOFI  
6806

| Z | NO <sub>2</sub> -N |
|---|--------------------|
| m | µg at/L            |

Station 107.60.

|     |      |
|-----|------|
| 1   | 0.01 |
| 11  | 0.01 |
| 30  | 0.01 |
| 40  | 0.02 |
| 49  | 0.02 |
| 64  | 0.02 |
| 78  | 0.05 |
| 98  | 0.16 |
| 122 | 0.03 |
| 142 | 0.02 |
| 170 | 0.02 |
| 200 | 0.02 |
| 230 | 0.03 |
| 268 | 0.03 |
| 327 | 0.03 |
| 399 | 0.02 |
| 471 | 0.01 |
| 549 | 0.02 |

Station 113.60.

|     |      |
|-----|------|
| 3   | 0.03 |
| 12  | -    |
| 33  | 0.02 |
| 42  | 0.03 |
| 51  | 0.05 |
| 65  | 0.14 |
| 79  | 0.28 |
| 97  | 0.05 |
| 121 | 0.03 |
| 141 | 0.03 |
| 169 | 0.02 |
| 196 | 0.01 |
| 226 | 0.02 |
| 263 | 0.02 |
| 323 | 0.01 |
| 395 | 0.03 |
| 468 | 0.03 |
| 545 | 0.03 |

| Z | NO <sub>2</sub> -N |
|---|--------------------|
| m | µg at/L            |

Station 110.35.

|     |      |
|-----|------|
| 0   | 0.09 |
| 10  | 0.04 |
| 29  | 0.02 |
| 40  | 0.03 |
| 49  | 0.32 |
| 63  | 0.03 |
| 79  | 0.02 |
| 97  | 0.08 |
| 123 | 0.12 |
| 141 | 0.02 |
| 171 | 0.02 |
| 201 | 0.03 |
| 229 | 0.01 |
| 269 | 0.02 |
| 328 | 0.01 |
| 401 | 0.03 |
| 473 | 0.04 |
| 553 | 0.01 |

| Z | NO <sub>2</sub> -N |
|---|--------------------|
| m | µg at/L            |

Station 110.40.

|     |      |
|-----|------|
| 1   | 0.04 |
| 11  | 0.03 |
| 30  | 0.00 |
| 40  | 0.02 |
| 49  | 0.04 |
| 64  | 0.18 |
| 78  | 0.41 |
| 99  | 0.10 |
| 123 | 0.05 |
| 142 | 0.05 |
| 170 | 0.03 |
| 200 | 0.03 |
| 230 | 0.03 |
| 269 | 0.05 |
| 327 | 0.01 |
| 399 | 0.00 |
| 472 | 0.01 |
| 550 | 0.03 |

| Z | NO <sub>2</sub> -N |
|---|--------------------|
| m | µg at/L            |

Station 110.60.

|     |      |
|-----|------|
| 1   | 0.01 |
| 11  | 0.03 |
| 30  | 0.00 |
| 40  | 0.01 |
| 49  | 0.00 |
| 64  | 0.03 |
| 78  | 0.05 |
| 98  | 0.24 |
| 122 | 0.07 |
| 141 | 0.05 |
| 170 | 0.04 |
| 199 | 0.01 |
| 229 | 0.03 |
| 267 | 0.01 |
| 326 | 0.01 |
| 398 | 0.02 |
| 470 | 0.03 |
| 548 | 0.01 |

| Station | Date  | Time<br>GMT | DATA AT NET TOW STATIONS |                   |                |                   |          |            |         | 10 METERS |                        |                               |                                 |                               |                               |                          |
|---------|-------|-------------|--------------------------|-------------------|----------------|-------------------|----------|------------|---------|-----------|------------------------|-------------------------------|---------------------------------|-------------------------------|-------------------------------|--------------------------|
|         |       |             | Latitude<br>North        | Longitude<br>West | Sounding<br>fm | Wind<br>Dir Force | Weather  | Sea        | T<br>°C | S<br>‰    | O <sub>2</sub><br>ml/L | PO <sub>4</sub> -P<br>µg at/L | SiO <sub>3</sub> -Si<br>µg at/L | NO <sub>3</sub> -N<br>µg at/L | NO <sub>2</sub> -N<br>µg at/L | δ <sub>T</sub><br>cl/ton |
| 60.55-J | VI-19 | 2215        | 37°47.5'                 | 123°14.5'         | 57             | 350° 12           | overcast | moderate   | 9.98    | 33.734    | 5.46                   | 1.68                          | 27                              | 21.2                          | 0.11                          | 203                      |
| 60.70-J | 19    | 1455        | 37°17.0'                 | 124°21.0'         | 2150           | 330° 12           | overcast | rough      | 13.50   | 32.907    | 6.34                   | 0.53                          | 5                               | 1.6                           | 0.03                          | 326                      |
| 60.90-J | 19    | 0505        | 36°37.0'                 | 125°47.0'         | 2400           | 340° 20           | cloudy   | rough      | 14.93   | 32.922    | 6.03                   | 0.35                          | 1                               | 1.3                           | 0.01                          | 353                      |
| 63.55-J | 20    | 2146        | 37°12.5'                 | 122°49.5'         | 140            | 350° 6            | clear    | moderate   | 10.56   | 33.624    | 6.15                   | 1.28                          | 17                              | 14.8                          | 0.07                          | 220                      |
| 63.90-J | 19    | 0025        | 36°02.0'                 | 125°22.0'         | 2500           | 340° 18           | overcast | rough      | 14.52   | 32.877    | 6.13                   | 0.44                          | 2                               | 1.1                           | 0.02                          | 348                      |
| 67.55-J | 21    | 0850        | 36°39.0'                 | 122°26.0'         | 1200           | 330° 16           | clear    | moderate   | 14.10   | 33.436    | 6.32                   | 0.52                          | 2                               | 2.3                           | 0.04                          | 299                      |
| 67.90-J | 18    | 1925        | 35°28.0'                 | 124°55.0'         | 2400           | 340° 13           | overcast | rough      | 15.81   | 33.121    | 5.88                   | 0.43                          | 2                               | 1.5                           | 0.01                          | 357                      |
| 70.51-J | 17    | 1700        | 36°11.5'                 | 121°44.0'         | 125            | calm              | fog      | moderate   | 10.98   | 33.860    | 6.09                   | 1.55                          | 22                              | 17.2                          | 0.08                          | 210                      |
| 70.70-J | 18    | 0448        | 35°33.0'                 | 123°05.0'         | 2100           | 320° 10           | missing  | missing    | 13.48   | 33.303    | 6.26                   | 0.69                          | 3                               | 2.4                           | 0.03                          | 296                      |
| 70.90-J | 18    | 1420        | 34°53.0'                 | 124°28.0'         | 2350           | 010° 12           | overcast | rough      | 15.40   | 33.120    | 5.94                   | 0.35                          | 2                               | 1.3                           | 0.01                          | 348                      |
| 73.50-J | 18    | 1300        | 35°37.0'                 | 121°17.0'         | 53             | 320° 4            | cloudy   | moderate   | 11.06   | 33.836    | 6.59                   | 0.91                          | 4                               | 9.2                           | 0.07                          | 213                      |
| 77.48-J | 16    | 1825        | 35°08.5'                 | 120°43.5'         | 15             | 220° 6            | fog      | slight     | 10.58   | 33.918    | 6.11                   | 1.26                          | 11                              | 13.4                          | 0.09                          | 199                      |
| 77.55-J | 16    | 2245        | 34°54.0'                 | 121°12.0'         | 305            | 300° 5            | overcast | rough      | 13.68   | 33.449    | 6.42                   | 0.55                          | 1                               | 2.7                           | 0.11                          | 290                      |
| 80.51-J | 22    | 0315        | 34°26.0'                 | 120°32.5'         | 54             | 310° 28           | clear    | rough      | 11.01   | 33.858    | 4.80                   | 1.64                          | 20                              | 18.9                          | 0.04                          | 211                      |
| 80.55-J | 16    | 1305        | 34°19.0'                 | 120°48.0'         | 415            | 140° 6            | fog      | very rough | 12.21   | 33.860    | 6.17                   | 0.78                          | 13                              | 9.0                           | 0.15                          | 232                      |
| 80.65-J | 16    | 0705        | 33°59.0'                 | 121°30.0'         | 1850           | 260° 2            | missing  | missing    | 15.28   | 33.275    | 6.07                   | 0.37                          | 3                               | 0.1                           | 0.00                          | 334                      |
| 80.70-J | 16    | 0420        | 33°48.0'                 | 121°52.0'         | 2000           | 340° 10           | overcast | rough      | -       | 33.256    | 6.10                   | 0.40                          | 2                               | 0.1                           | 0.02                          | -                        |
| 80.90-J | 15    | 1710        | 33°14.0'                 | 123°13.0'         | 2375           | 330° 18           | overcast | very rough | 15.11   | 33.269    | 5.97                   | 0.38                          | 2                               | 0.2                           | 0.02                          | 331                      |
| 83.40-J | 14    | 0330        | 34°14.0'                 | 119°22.0'         | 12             | 320° 1            | clear    | slight     | 13.38   | 33.657    | 6.07                   | 0.57                          | 7                               | 2.9                           | 0.07                          | 268                      |

| Station | Date  | Time<br>GMT | DATA AT NET TOW STATIONS |                   |                |                      |         |               | 10 METERS  |        |                        |                               |                                 |                               |                               |                          |     |
|---------|-------|-------------|--------------------------|-------------------|----------------|----------------------|---------|---------------|------------|--------|------------------------|-------------------------------|---------------------------------|-------------------------------|-------------------------------|--------------------------|-----|
|         |       |             | Latitude<br>North        | Longitude<br>West | Sounding<br>fm | Wind<br>Dir<br>Force | Weather | Sea           | T<br>°C    | S<br>‰ | O <sub>2</sub><br>ml/L | PO <sub>4</sub> -P<br>µg at/L | SiO <sub>3</sub> -Si<br>µg at/L | NO <sub>3</sub> -N<br>µg at/L | NO <sub>2</sub> -N<br>µg at/L | δ <sub>T</sub><br>cl/ton |     |
| 83.51-J | VI-14 | 1245        | 33°52.0'                 | 120°08.5'         | 60             | 300°                 | 4       | clear         | rough      | 12.51  | 33.624                 | 5.27                          | 0.91                            | 11                            | 8.0                           | 0.09                     | 254 |
| 83.55-J | 14    | 1522        | 33°45.0'                 | 120°22.5'         | 675            | 320°                 | 14      | clear         | rough      | 12.66  | 33.714                 | 5.68                          | 0.74                            | 11                            | 4.1                           | 0.11                     | 251 |
| 83.65-J | 14    | 2115        | 33°24.0'                 | 121°06.0'         | 1950           | 320°                 | 18      | clear         | very rough | 13.81  | 33.473                 | 6.16                          | 0.65                            | 2                             | 3.4                           | 0.05                     | 290 |
| 83.70-J | 15    | 0025        | 33°14.5'                 | 121°26.0'         | 2100           | 310°                 | 22      | cloudy        | high       | 14.86  | 33.263                 | 6.01                          | 0.40                            | 2                             | 0.1                           | 0.00                     | 327 |
| 83.80-J | 15    | 0553        | 32°55.0'                 | 122°07.0'         | 2300           | 330°                 | 16      | missing       | missing    | 14.33  | 33.279                 | 6.11                          | 0.40                            | 2                             | 0.3                           | 0.03                     | 315 |
| 83.90-J | 15    | 1035        | 32°35.0'                 | 122°50.5'         | 2350           | 330°                 | 17      | missing       | missing    | 15.55  | 33.292                 | 5.92                          | 0.36                            | 3                             | 0.2                           | 0.03                     | 339 |
| 87.33-J | 13    | 2245        | 33°54.0'                 | 118°29.5'         | 25             | 270°                 | 1       | partly cloudy | slight     | 17.24  | 33.598                 | 6.43                          | 0.28                            | 6                             | 0.1                           | 0.02                     | 354 |
| 87.35-J | 13    | 2140        | 33°50.0'                 | 118°37.5'         | 245            | 240°                 | 4       | partly cloudy | moderate   | 18.04  | 33.594                 | 6.06                          | 0.28                            | 5                             | 0.2                           | 0.03                     | 372 |
| 87.40-J | 13    | 1900        | 33°40.0'                 | 118°58.0'         | 435            | 210°                 | 2       | cloudy        | moderate   | 10.88  | 33.687                 | 3.97                          | 1.27                            | 21                            | 15.8                          | 0.11                     | 221 |
| 87.45-J | 13    | 1623        | 33°30.0'                 | 119°19.0'         | 925            | 130°                 | 2       | clear         | moderate   | 13.39  | 33.658                 | 5.54                          | 0.79                            | 13                            | 5.9                           | 0.13                     | 268 |
| 87.50-J | 13    | 1315        | 33°20.0'                 | 119°39.5'         | 40             | 310°                 | 10      | clear         | moderate   | 13.05  | 33.694                 | 5.50                          | 1.02                            | 15                            | 9.1                           | 0.12                     | 259 |
| 87.55-J | 13    | 1030        | 33°09.5'                 | 120°00.0'         | 650            | 320°                 | 18      | clear         | very rough | 13.38  | 33.656                 | 5.95                          | 0.53                            | 10                            | 1.1                           | 0.06                     | 268 |
| 87.65-J | 13    | 0337        | 32°51.0'                 | 120°41.0'         | 2150           | 320°                 | 18      | partly cloudy | very rough | 15.29  | 33.356                 | 5.92                          | 0.38                            | 2                             | 0.1                           | 0.00                     | 329 |
| 87.70-J | 13    | 0018        | 32°42.0'                 | 121°01.0'         | 2100           | 340°                 | 17      | partly cloudy | very rough | 15.08  | 33.299                 | 6.00                          | 0.34                            | 2                             | 0.2                           | 0.01                     | 329 |
| 87.80-J | 12    | 1850        | 32°19.0'                 | 121°44.0'         | 2150           | 340°                 | 10      | partly cloudy | rough      | 15.46  | 33.317                 | 5.90                          | 0.40                            | 2                             | 0.0                           | 0.00                     | 335 |
| 87.90-J | 12    | 1235        | 31°59.0'                 | 122°27.0'         | 2200           | 320°                 | 17      | partly cloudy | rough      | 15.68  | 33.421                 | 5.86                          | 0.32                            | 2                             | 0.2                           | 0.02                     | 332 |
| 90.32-J | 11    | 0120        | 33°20.0'                 | 118°02.0'         | 410            | 310°                 | 14      | clear         | moderate   | 13.56  | 33.472                 | 5.95                          | 0.55                            | 7                             | 1.3                           | 0.05                     | 285 |
| 90.45-J | 11    | 0825        | 32°54.5'                 | 118°55.0'         | 1000           | 290°                 | 10      | clear         | rough      | 15.77  | 33.636                 | 6.10                          | 0.22                            | 4                             | 0.9                           | 0.02                     | 318 |
| 90.53-J | 11    | 1210        | 32°38.0'                 | 119°28.0'         | 625            | 320°                 | 16      | drizzle       | rough      | 14.35  | 33.403                 | 6.12                          | 0.33                            | 2                             | 0.5                           | 0.02                     | 306 |

| Station | Date  | Time<br>GMT | DATA AT NET TOW STATIONS |                   |                |             |       |          |            | 10 METERS |        |                        |                               |                                 |                               |                               |                          |
|---------|-------|-------------|--------------------------|-------------------|----------------|-------------|-------|----------|------------|-----------|--------|------------------------|-------------------------------|---------------------------------|-------------------------------|-------------------------------|--------------------------|
|         |       |             | Latitude<br>North        | Longitude<br>West | Sounding<br>fm | Wind<br>Dir | Force | Weather  | Sea        | T<br>°C   | S<br>‰ | O <sub>2</sub><br>ml/L | PO <sub>4</sub> -P<br>µg at/L | SiO <sub>3</sub> -Si<br>µg at/L | NO <sub>3</sub> -N<br>µg at/L | NO <sub>2</sub> -N<br>µg at/L | δ <sub>T</sub><br>cl/ton |
| 90.65-J | VI-11 | 1955        | 32°14.5'                 | 120°18.0'         | 2100           | 320°        | 16    | overcast | rough      | 14.58     | 33.351 | 5.99                   | 0.39                          | 3                               | 0.7                           | 0.03                          | 314                      |
| 90.70-J | 11    | 2240        | 32°05.0'                 | 120°40.0'         | 2050           | 320°        | 16    | overcast | rough      | 15.00     | 33.324 | 5.96                   | 0.37                          | 2                               | 0.0                           | 0.01                          | 325                      |
| 90.90-J | 12    | 0755        | 31°25.0'                 | 122°00.0'         | 2100           | 320°        | 10    | missing  | missing    | 16.66     | 33.496 | 5.76                   | 0.25                          | 2                               | 0.0                           | 0.00                          | 348                      |
| 93.27-J | 10    | 1350        | 32°56.0'                 | 117°19.0'         | 50             | calm        |       | clear    | slight     | 14.62     | 33.533 | 5.79                   | 0.43                          | 7                               | 0.2                           | 0.02                          | 302                      |
| 93.28-J | 10    | 1305        | 32°54.5'                 | 117°22.0'         | 325            | 020°        | 4     | clear    | slight     | 14.90a)   | 33.527 | 6.00                   | 0.42                          | 7                               | 0.1                           | 0.03                          | 308                      |
| 93.30-J | 10    | 1125        | 32°50.5'                 | 117°31.0'         | 450            | calm        |       | missing  | missing    | 16.10     | 33.531 | 6.06                   | 0.21                          | 3                               | 0.1                           | 0.03                          | 333                      |
| 93.35-J | 10    | 0850        | 32°42.0'                 | 117°50.5'         | 350            | 320°        | 4     | clear    | moderate   | 16.62     | 33.570 | 5.91                   | 0.32                          | 3                               | 0.0                           | 0.03                          | 342                      |
| 93.40-J | 10    | 0625        | 32°30.0'                 | 118°12.0'         | 950            | 320°        | 10    | clear    | moderate   | 15.05     | 33.592 | 6.08                   | 0.31                          | 4                               | 1.3                           | 0.06                          | 306                      |
| 93.45-J | 10    | 0345        | 32°20.0'                 | 118°33.0'         | 650            | 300°        | 8     | cloudy   | rough      | 15.94     | 33.584 | 5.95                   | 0.29                          | 3                               | 0.1                           | 0.06                          | 326                      |
| 93.50-J | 10    | 0120        | 32°11.0'                 | 118°53.0'         | 600            | 300°        | 14    | overcast | rough      | 14.96     | 33.631 | 6.09                   | 0.38                          | 4                               | 1.3                           | 0.04                          | 302                      |
| 93.55-J | 9     | 2202        | 31°59.0'                 | 119°16.0'         | 850            | 300°        | 12    | cloudy   | rough      | 15.56     | 33.479 | 5.93                   | 0.39                          | 2                               | 0.2                           | -                             | 326                      |
| 93.65-J | 9     | 1515        | 31°40.0'                 | 119°53.0'         | 2050           | 310°        | 16    | overcast | very rough | 15.99     | 33.497 | 5.83                   | 0.36                          | 2                               | 0.1                           | 0.01                          | 333                      |
| 93.70-J | 9     | 1215        | 31°29.0'                 | 120°15.0'         | 2200           | 320°        | 20    | missing  | missing    | 15.94     | 33.491 | 5.84                   | 0.34                          | 2                               | 0.2                           | 0.02                          | 333                      |
| 93.80-J | 9     | 0745        | 31°09.0'                 | 120°56.0'         | 2000           | 340°        | 18    | missing  | missing    | 16.89     | 33.558 | 5.70                   | 0.33                          | 2                               | 0.2                           | 0.03                          | 349                      |
| 93.90-J | 9     | 0315        | 30°49.5'                 | 121°35.5'         | 2200           | 340°        | 14    | cloudy   | very rough | 16.32     | 33.505 | 5.81                   | 0.46                          | 2                               | 0.4                           | 0.01                          | 340                      |
| 97.29-J | 7     | 1255        | 32°17.5'                 | 117°04.5'         | 28             | 270°        | 12    | overcast | rough      | 12.20     | 33.671 | 4.52                   | 0.98                          | 14                              | 5.6                           | 0.22                          | 245                      |
| 97.30-J | 7     | 1325        | 32°16.0'                 | 117°07.0'         | 32             | 270°        | 12    | overcast | rough      | 11.88     | 33.568 | 4.58                   | 0.97                          | 14                              | 6.0                           | 0.32                          | 247                      |

a) Mean value of 14.85 and 14.96°C.



| Station  | Date | Time<br>GMT | DATA AT NET TOW STATIONS |           |          |      |         |               |            | 10 METERS |                |                    |                      |                    |                    |                |     |
|----------|------|-------------|--------------------------|-----------|----------|------|---------|---------------|------------|-----------|----------------|--------------------|----------------------|--------------------|--------------------|----------------|-----|
|          |      |             | Latitude                 | Longitude | Sounding | Wind | Weather | Sea           | T          | S         | O <sub>2</sub> | PO <sub>4</sub> -P | SiO <sub>3</sub> -Si | NO <sub>3</sub> -N | NO <sub>2</sub> -N | δ <sub>T</sub> |     |
|          |      |             | North                    | West      | fm       | Dir  | Force   |               | °C         | ‰         | ml/L           | µg at/L            | µg at/L              | µg at/L            | µg at/L            | cl/ton         |     |
| 97.32-J  | VI-7 | 1440        | 32°12.0'                 | 117°15.0' | 750      | 270° | 12      | partly cloudy | rough      | 17.30     | 33.572         | 5.81               | 0.29                 | 4                  | 0.2                | 0.05           | 357 |
| 97.35-J  | 7    | 1645        | 32°05.5'                 | 117°27.5' | 705      | 270° | 13      | overcast      | rough      | 16.33     | 33.590         | 5.91               | 0.31                 | 4                  | 0.2                | 0.00           | 334 |
| 97.40-J  | 7    | 2010        | 31°55.0'                 | 117°47.5' | 850      | 300° | 12      | overcast      | rough      | 16.13     | 33.538         | 5.86               | 0.34                 | 3                  | 0.2                | 0.03           | 333 |
| 97.45-J  | 7    | 2310        | 31°46.0'                 | 118°08.0' | 940      | 300° | 14      | overcast      | very rough | 16.50     | 33.545         | 5.88               | 0.21                 | 2                  | 0.2                | 0.02           | 341 |
| 97.50-J  | 8    | 0225        | 31°35.5'                 | 118°29.0' | 1150     | 290° | 17      | overcast      | very rough | 14.94     | 33.578         | 6.13               | 0.47                 | 4                  | 1.6                | 0.08           | 305 |
| 97.55-J  | 8    | 0455        | 31°25.5'                 | 118°49.0' | 420      | 320° | 12      | overcast      | rough      | -         | 33.503         | 5.80               | 0.28                 | 2                  | 0.1                | 0.02           | -   |
| 97.65-J  | 8    | 1040        | 31°05.0'                 | 119°28.5' | 1940     | 300° | 20      | missing       | very rough | 16.54     | 33.550         | 5.75               | 0.32                 | 2                  | 0.1                | 0.01           | 341 |
| 97.70-J  | 8    | 1315        | 30°56.0'                 | 119°48.5' | 1870     | 300° | 16      | overcast      | rough      | 16.33     | 33.460         | 5.77               | 0.34                 | 3                  | 0.0                | 0.01           | 343 |
| 97.80-J  | 8    | 1900        | 30°35.5'                 | 120°29.0' | 2090     | 300° | 14      | cloudy        | very rough | 16.95     | 33.481         | 5.73               | 0.33                 | 2                  | 0.1                | 0.01           | 356 |
| 100.29-J | 7    | 0825        | 31°42.0'                 | 116°43.5' | 55       | 310° | 3       | missing       | missing    | 14.14     | 33.575         | 5.82               | 0.67                 | 10                 | 0.5                | 0.09           | 289 |
| 100.35-J | 7    | 0405        | 31°30.5'                 | 117°07.0' | 645      | 310° | 12      | missing       | rough      | 17.16     | 33.571         | 5.96               | 0.22                 | 4                  | 0.2                | 0.01           | 354 |
| 100.45-J | 6    | 2103        | 31°12.0'                 | 117°46.5' | 900      | 320° | 12      | overcast      | rough      | 17.19     | 33.592         | 5.91               | 0.29                 | 5                  | 0.2                | 0.04           | 353 |
| 100.50-J | 6    | 1808        | 31°00.5'                 | 118°08.0' | 900      | 310° | 4       | cloudy        | rough      | 17.30     | 33.618         | 5.67               | 0.33                 | 6                  | 0.1                | 0.04           | 354 |
| 100.55-J | 6    | 1455        | 30°51.0'                 | 118°26.5' | 1445     | 300° | 10      | overcast      | rough      | 16.82     | 33.558         | 5.77               | 0.29                 | 2                  | 0.0                | 0.05           | 347 |
| 100.65-J | 6    | 0830        | 30°31.5'                 | 119°05.5' | 1800     | 340° | 12      | partly cloudy | rough      | 16.97     | 33.528         | 5.76               | 0.35                 | 2                  | 0.0                | 0.00           | 353 |
| 100.70-J | 6    | 0610        | 30°22.0'                 | 119°24.5' | 2100     | 340° | 12      | cloudy        | rough      | 16.77     | 33.479         | 5.75               | 0.34                 | 2                  | 0.0                | 0.03           | 352 |
| 103.29-J | 4    | 1825        | 31°07.5'                 | 116°21.0' | 16       | calm |         | overcast      | slight     | 12.98     | 33.654         | 6.52               | 0.60                 | 9                  | 0.9                | 0.08           | 261 |
| 103.30-J | 4    | 1915        | 31°06.0'                 | 116°24.5' | 35       | calm |         | overcast      | moderate   | 10.93     | 33.682         | 4.28               | 1.22                 | 13                 | 12.5               | 0.11           | 222 |
| 103.35-J | 4    | 2139        | 30°56.0'                 | 116°44.5' | 920      | 240° | 2       | overcast      | moderate   | 17.98     | 33.588         | 6.15               | 0.29                 | 5                  | 0.0                | 0.03           | 371 |



| Station  | Date | Time<br>GMT | DATA AT NET TOW STATIONS |                   |                |                   |          |          |         | 10 METERS |                        |                               |                                 |                               |                               |                          |
|----------|------|-------------|--------------------------|-------------------|----------------|-------------------|----------|----------|---------|-----------|------------------------|-------------------------------|---------------------------------|-------------------------------|-------------------------------|--------------------------|
|          |      |             | Latitude<br>North        | Longitude<br>West | Sounding<br>fm | Wind<br>Dir Force | Weather  | Sea      | T<br>°C | S<br>‰    | O <sub>2</sub><br>ml/L | PO <sub>4</sub> -P<br>µg at/L | SiO <sub>3</sub> -Si<br>µg at/L | NO <sub>3</sub> -N<br>µg at/L | NO <sub>2</sub> -N<br>µg at/L | δ <sub>T</sub><br>cl/ton |
| 103.40-J | VI-5 | 0110        | 30°45.5'                 | 117°05.5'         | 940            | 310° 14           | overcast | moderate | 17.82   | 33.608    | 6.27                   | 0.32                          | 6                               | 2.3                           | 0.05                          | 366                      |
| 103.45-J | 5    | 0355        | 30°36.0'                 | 117°24.0'         | 1185           | 320° 12           | missing  | missing  | 17.91   | 33.623    | 5.92                   | 0.20                          | 6                               | 1.5                           | 0.05                          | 367                      |
| 103.50-J | 5    | 0640        | 30°26.5'                 | 117°44.5'         | 1300           | 320° 14           | clear    | rough    | 17.15   | 33.542    | 5.87                   | 0.30                          | 3                               | 2.3                           | 0.03                          | 356                      |
| 103.55-J | 5    | 0910        | 30°16.5'                 | 118°05.0'         | 1360           | 290° 10           | clear    | rough    | 16.80   | 33.559    | 6.00                   | 0.30                          | 3                               | 3.1                           | 0.04                          | 346                      |
| 107.31-J | 4    | 1410        | 30°28.0'                 | 116°07.0'         | 25             | calm              | overcast | rough    | 12.38   | 33.678    | 6.09                   | 0.56                          | 5                               | 0.0                           | 0.09                          | 248                      |
| 107.32-J | 4    | 1320        | 30°26.0'                 | 116°11.0'         | 170            | calm              | overcast | moderate | 15.67   | 33.562    | 5.93                   | 0.40                          | 7                               | 0.0                           | 0.05                          | 322                      |
| 107.35-J | 4    | 1130        | 30°21.5'                 | 116°22.0'         | 950            | calm              | missing  | missing  | 16.99   | 33.568    | 5.78                   | 0.21                          | 4                               | 0.2                           | 0.02                          | 350                      |
| 107.40-J | 4    | 0910        | 30°13.5'                 | 116°39.5'         | 1010           | 320° 6            | missing  | missing  | 16.96   | 33.541    | 5.81                   | 0.35                          | 3                               | 0.0                           | 0.03                          | 351                      |
| 107.45-J | 4    | 0630        | 30°03.0'                 | 117°00.0'         | 1520           | 320° 6            | missing  | missing  | 16.64   | 33.503    | 5.85                   | 0.31                          | 2                               | 0.1                           | 0.10                          | 347                      |
| 107.50-J | 4    | 0400        | 29°52.0'                 | 117°21.0'         | 1380           | 300° 6            | missing  | missing  | 16.26   | 33.496    | 5.84                   | 0.23                          | 2                               | 0.0                           | 0.01                          | 339                      |
| 107.55-J | 4    | 0045        | 29°41.5'                 | 117°41.5'         | 1740           | 320° 10           | overcast | rough    | 17.12   | 33.522    | 5.72                   | 0.30                          | 2                               | 0.0                           | 0.02                          | 356                      |
| 110.32-J | 2    | 2230        | 29°51.0'                 | 115°48.5'         | 14             | 280° 3            | overcast | slight   | 12.15   | 33.688    | 5.66                   | 0.94                          | 8                               | 5.6                           | 0.43                          | 243                      |
| 110.45-J | 3    | 0550        | 29°27.0'                 | 116°39.5'         | 580            | 320° 6            | missing  | missing  | 17.18   | 33.559    | 5.74                   | 0.21                          | 1                               | 0.0                           | 0.02                          | 355                      |
| 110.50-J | 3    | 0845        | 29°17.0'                 | 116°59.5'         | 2000           | 330° 3            | missing  | missing  | 17.79   | 33.652    | 5.64                   | 0.19                          | 1                               | 0.0                           | 0.01                          | 362                      |
| 110.55-J | 3    | 1100        | 29°07.0'                 | 117°19.5'         | 1810           | 320° 6            | missing  | missing  | 17.68   | 33.644    | 5.68                   | 0.21                          | 2                               | 0.0                           | 0.02                          | 360                      |
| 113.29-J | 2    | 1750        | 29°24.0'                 | 115°13.0'         | 27             | calm              | overcast | slight   | 12.17   | 33.768    | 4.31                   | 1.32                          | 17                              | 11.9                          | 0.04                          | 238                      |
| 113.30-J | 2    | 1640        | 29°22.0'                 | 115°18.5'         | 35             | 090° 2            | overcast | slight   | 13.08   | 33.684    | 6.40                   | 0.69                          | 8                               | 2.9                           | 0.16                          | 261                      |
| 113.35-J | 2    | 1410        | 29°11.5'                 | 115°38.5'         | 740            | 320° 4            | overcast | moderate | 16.08   | 33.531    | 5.91                   | 0.38                          | 5                               | 0.1                           | 0.03                          | 333                      |
| 113.39-J | 2    | 1120        | 29°09.5'                 | 115°59.0'         | 1000           | 300° 6            | missing  | missing  | 17.59   | 33.590    | 5.93                   | 0.30                          | 4                               | 0.0                           | 0.03                          | 362                      |

| Station  | Date | Time<br>GMT | Latitude |           | Longitude |      | Sounding |         | Wind    |                        | Weather | Sea  | 10 METERS                     |                                 |                               |                               |                          |  |
|----------|------|-------------|----------|-----------|-----------|------|----------|---------|---------|------------------------|---------|------|-------------------------------|---------------------------------|-------------------------------|-------------------------------|--------------------------|--|
|          |      |             | North    | West      | fm        | Dir  | Force    | T<br>°C | S<br>‰  | O <sub>2</sub><br>ml/L |         |      | PO <sub>4</sub> -P<br>µg at/L | SiO <sub>3</sub> -Si<br>µg at/L | NO <sub>3</sub> -N<br>µg at/L | NO <sub>2</sub> -N<br>µg at/L | σ <sub>T</sub><br>cl/ton |  |
| 113.45-J | VI-2 | 0815        | 28°57.5' | 116°18.5' | 1640      | 320° | 6        | missing | missing | 17.36                  | 33.596  | 5.67 | 0.30                          | 2                               | 0.2                           | 0.03                          | 356                      |  |
| 113.50-J | 2    | 0600        | 28°46.0' | 116°37.5' | 1940      | 360° | 6        | missing | missing | 17.58                  | 33.623  | 5.68 | 0.30                          | 2                               | 0.2                           | 0.01                          | 360                      |  |

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