Irene Reid

UNIVERSITY OF CALIFORNIA SCRIPPS INSTITUTION OF OCEANOGRAPHY

# data report

PHYSICAL AND CHEMICAL DATA

CCOFI Cruise 6404
10 April - 1 May 1964

and

CCOFI Cruise 6407
15 June - 4 August 1964

SIO Reference 66-20
September 1, 1966

UNIVERSITY OF CALIFORNIA

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# PHYSICAL AND CHEMICAL DATA

CCOFI Cruise 6404
10 April - 1 May 1964

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CCOFI Cruise 6407
15 June - 4 August 1964

Sponsored by

Marine Research Committee

SIO Reference 66-20
September 1, 1966

Approved for distribution:

W. A. Nierenberg

W. A. Nierenberg, Director

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## INTRODUCTION

The data presented in this report were collected by the RV Black Douglas of the Bureau of Commercial Fisheries and by the RV Alexander Agassiz of the Scripps Institution of Oceanography on Cruises 6404 and 6407 of the California Cooperative Oceanic Fisheries Investigations program.

On Cruise 6404 the RV Alexander Agassiz made three-bottle casts in the mixed layer for temperature, salinity, and inorganic phosphate-phosphorus at each net haul station. These data are reported with the net haul information.

The close grid stations near Point Arguello on Cruise 6407 were occupied as part of an environmental study which was supported in part by AEC Contract AT (11-1)-34, Project 111. The first two figures in this cruise numbering system represent the year of the cruise; the last two figures, the month. The cruises preceding these in the series are 6401 (Scripps Institution report, SIO Ref. 65-7) and 6410 (SIO Ref. 65-18).

The data are tabulated at observed depths; the interpolated and computed values are tabulated at standard depths and are accompanied by charts of horizontal distribution. The presentation of data in this report does not constitute publication; however, the data contained in this report have been carefully edited and no modifications should be necessary before final publication.

## STANDARD PROCEDURES

Processing of the data was carried out using the method described by Klein.[1/] The 125-meter level was introduced into the integration to obtain greater accuracy in the determination of $\Delta D$.

To indicate degree of accuracy, temperatures are recorded in tenths of a degree when obtained by bucket thermometer, thermograph, or bathythermograph, while temperatures from reversing thermometers 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 ±0.04‰ salinity at the 95 per cent probability level, and a probable

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[1/] Klein, Hans T. A new technique for processing physical oceanographic data. MS.

accuracy of ±0.01‰ salinity or better at the same level of probability."[2] The values are recorded to two decimal places ~~when obtained by chlorinity titration, or by salinometer~~ where 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.

Tabulated Data

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 | Nitrite | μg at/L |
| D*T | $\delta_T$ | cl/ton |
| SIG*T | $\sigma_t$ | g/L |
| DD | $\Delta D$ | dyn m |

Extrapolated values and values 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 is the time of messenger release. When more than one cast was made on a 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 footnote letter following all observed depths of each cast except the cast originating at the surface.

On stations where more than one cast is lowered, the various property curves may not agree perfectly. This discrepancy may be caused by changes in geographical position, real property changes with time, slight error in measurement, or a combination of these factors. Stations with overlapping casts have the following footnote: Overlapping casts; reconciliation of property curves when necessary.

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[2] Quotation from Department of Oceanography, University of Washington, Tech. Rep. No. 66, UW Ref. 60-18, October 1960.

## FOOTNOTES

Laboratory personnel note any possible imperfections in the sealing of the bottles as follows:

| | |
|---|---|
| Loose bottle cap: | The cap is definitely loose so that it could be moved with very little applied pressure. The salinity values obtained from these samples may be usable depending on time and/or conditions of storage. |
| Possible evaporation: | Either the cap was sealed with less than usual pressure, the bottle edge chipped, the rubber washer cracked, or the bale broke on opening, etc. |

Use of the above values in interpolation depends upon consistency with other values of salinity and other properties, and these footnotes are supplemented with "falls on property curve" or "does not fall on property curve," depending upon whether the property curve was drawn through the value or not.

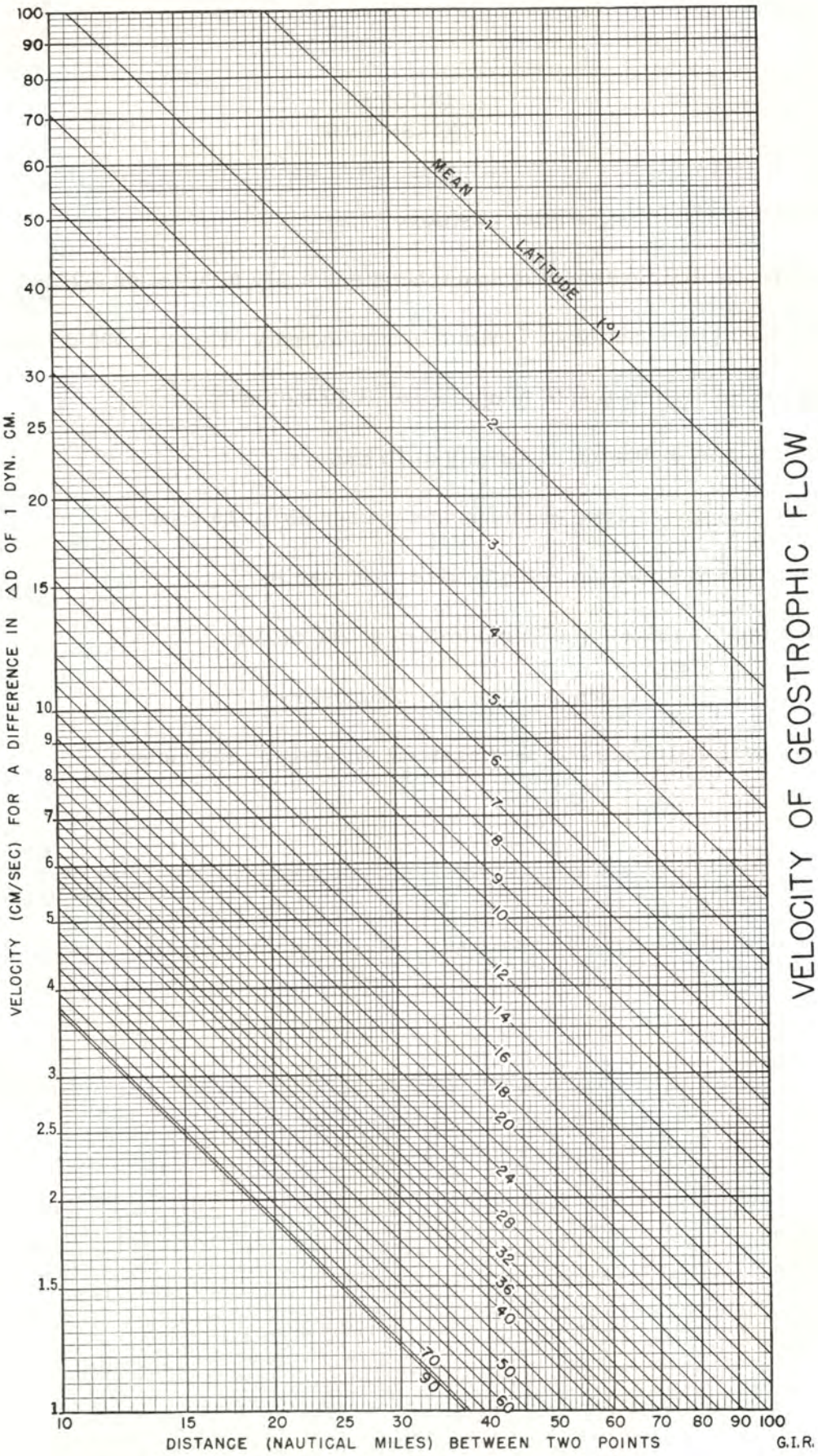
In addition to footnotes, a special notation is used without a footnote because its meaning is always the same.

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

u: uncertain value (value may be correct; occasionally it can influence the drawing of the property curve).

## FORMAT

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


VELOCITY OF GEOSTROPHIC FLOW
VELOCITY (CM/SEC) FOR A DIFFERENCE IN ΔD OF 1 DYN. CM.
DISTANCE (NAUTICAL MILES) BETWEEN TWO POINTS
MEAN LATITUDE (°)
1
2
3
4
5
6
7
8
9
10
12
14
16
18
20
24
28
32
36
40
50
60
70
90
100
90
80
70
60
50
40
30
25
20
15
10
9
8
7
6
5
4
3
2.5
2
1.5
1
10
15
20
25
30
40
50
60
70
80
90
100
G.I.R.

## FIGURES
## CRUISE 6407


1. CCOFI Cruise 6407, 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 phosphate-phosphorus at 10 meters
8. Horizontal distribution of silicate-silicon at 10 meters
9. Horizontal distribution of temperature at 200 meters
10. Horizontal distribution of salinity at 200 meters
11. Horizontal distribution of thermosteric anomaly at 200 meters


## FIGURES FOR CLOSE GRID AREA


1a. CCOFI Cruise 6407, station positions
2a. Horizontal distribution of dynamic height anomaly (0 over 500 d-bar)
3a. Horizontal distribution of dynamic height anomaly (200 over 500 d-bar)
4a. Horizontal distribution of temperature at 10 meters
5a. Horizontal distribution of salinity at 10 meters
6a. Horizontal distribution of thermosteric anomaly at 10 meters
7a. Horizontal distribution of phosphate-phosphorus at 10 meters
8a. Horizontal distribution of silicate-silicon at 10 meters
9a. Horizontal distribution of temperature at 200 meters
10a. Horizontal distribution of salinity at 200 meters
11a. Horizontal distribution of thermosteric anomaly at 200 meters

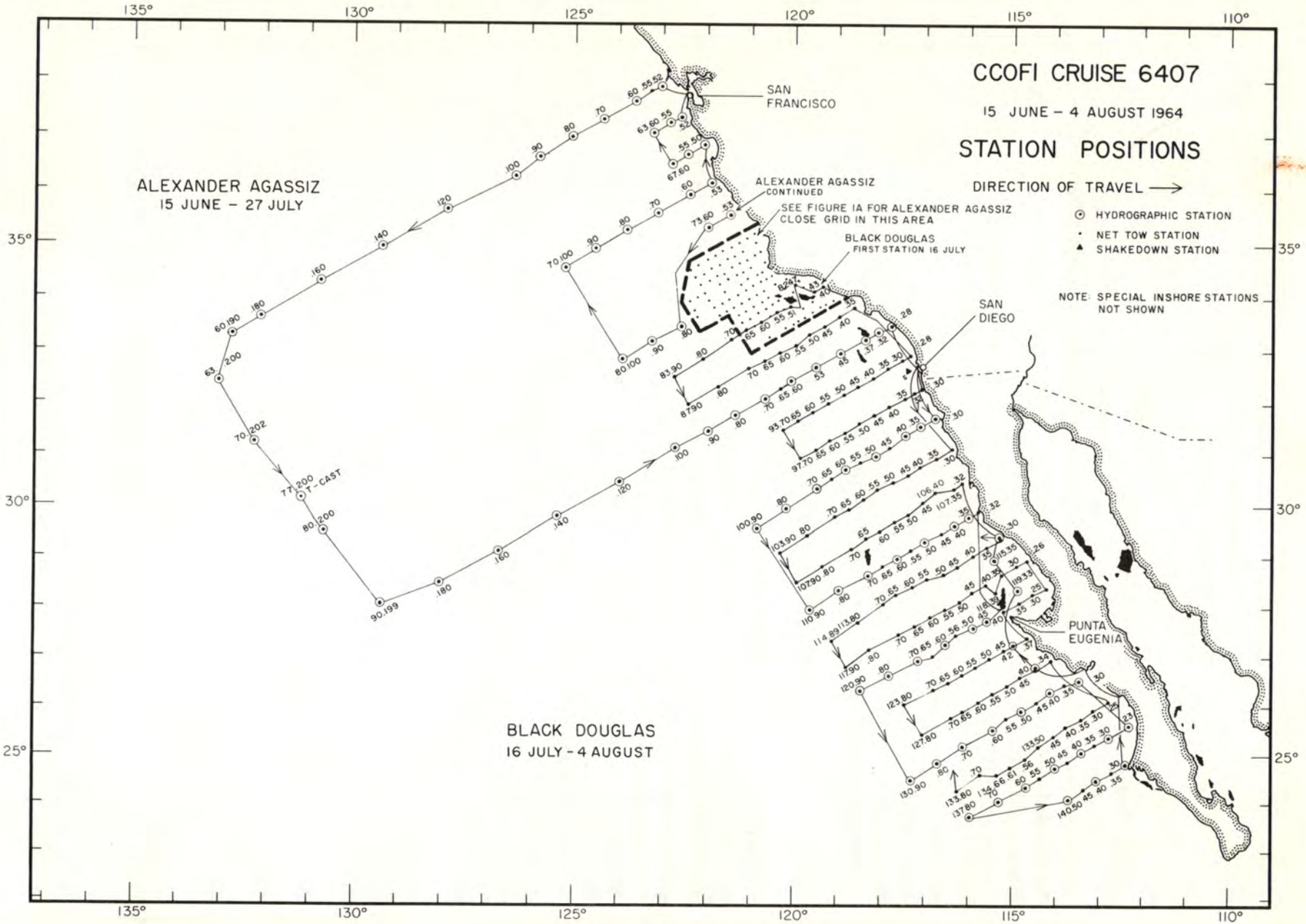

CCOFI CRUISE 6407
15 JUNE – 4 AUGUST 1964
STATION POSITIONS
DIRECTION OF TRAVEL
HYDROGRAPHIC STATION
NET TOW STATION
SHAKEDOWN STATION
NOTE: SPECIAL INSHORE STATIONS NOT SHOWN
ALEXANDER AGASSIZ
15 JUNE – 27 JULY
ALEXANDER AGASSIZ CONTINUED
SEE FIGURE IA FOR ALEXANDER AGASSIZ CLOSE GRID IN THIS AREA
BLACK DOUGLAS
FIRST STATION 16 JULY
BLACK DOUGLAS
16 JULY - 4 AUGUST
SAN FRANCISCO
SAN DIEGO
PUNTA EUGENIA
T-CAST
135°
130°
125°
120°
115°
110°
35°
30°
25°

FIGURE 1

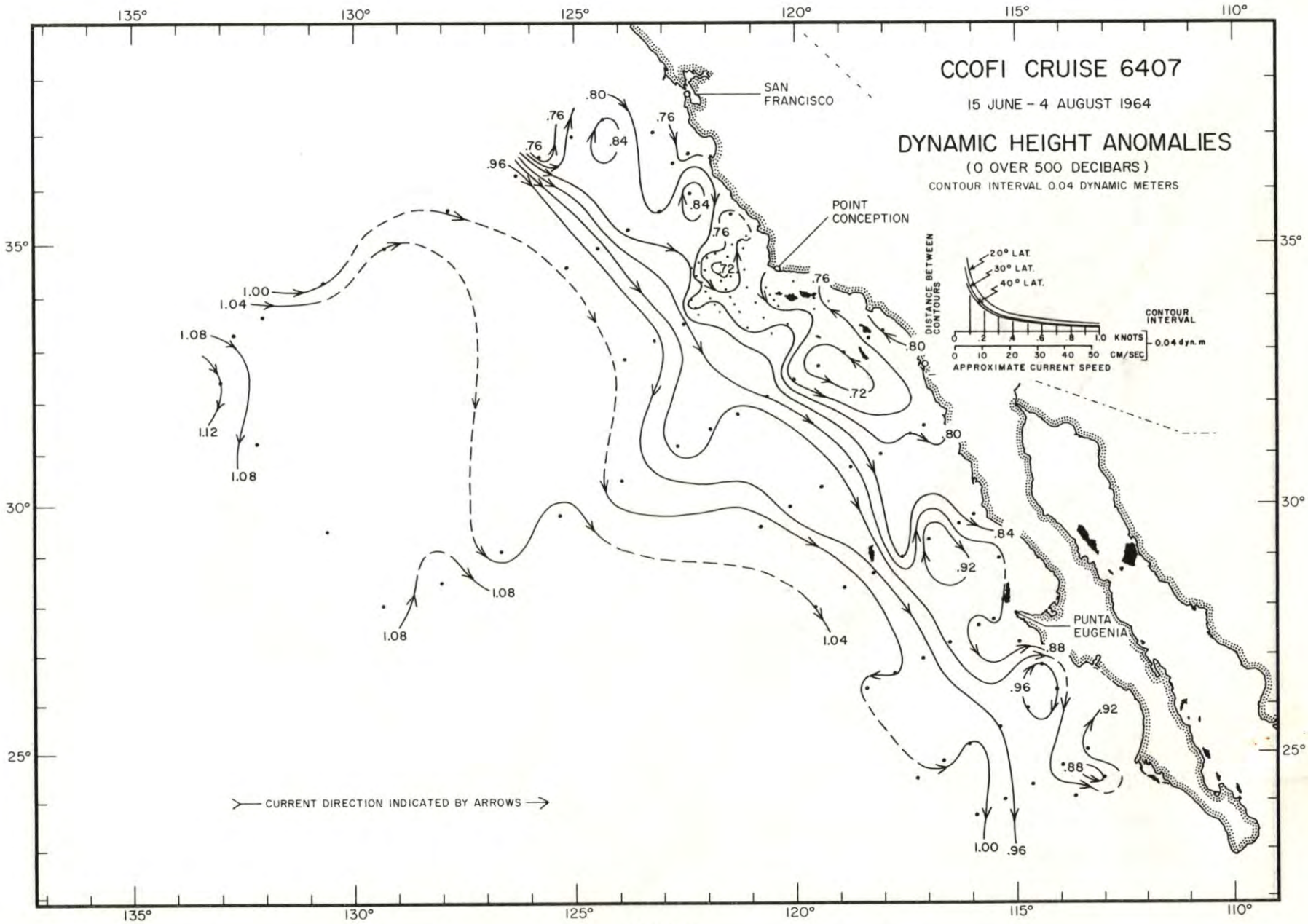

CCOFI CRUISE 6407
15 JUNE - 4 AUGUST 1964
DYNAMIC HEIGHT ANOMALIES
(0 OVER 500 DECIBARS)
CONTOUR INTERVAL 0.04 DYNAMIC METERS
SAN FRANCISCO
POINT CONCEPTION
PUNTA EUGENIA
DISTANCE BETWEEN CONTOURS
20° LAT.
30° LAT.
40° LAT.
0 .2 .4 .6 .8 1.0 KNOTS
0 10 20 30 40 50 CM/SEC
APPROXIMATE CURRENT SPEED
CONTOUR INTERVAL
0.04 dyn. m
CURRENT DIRECTION INDICATED BY ARROWS
135° 130° 125° 120° 115° 110°
35° 30° 25°
.80
.76
.84
.96
.72
1.00
1.04
1.08
1.12
.92
.88

FIGURE 2

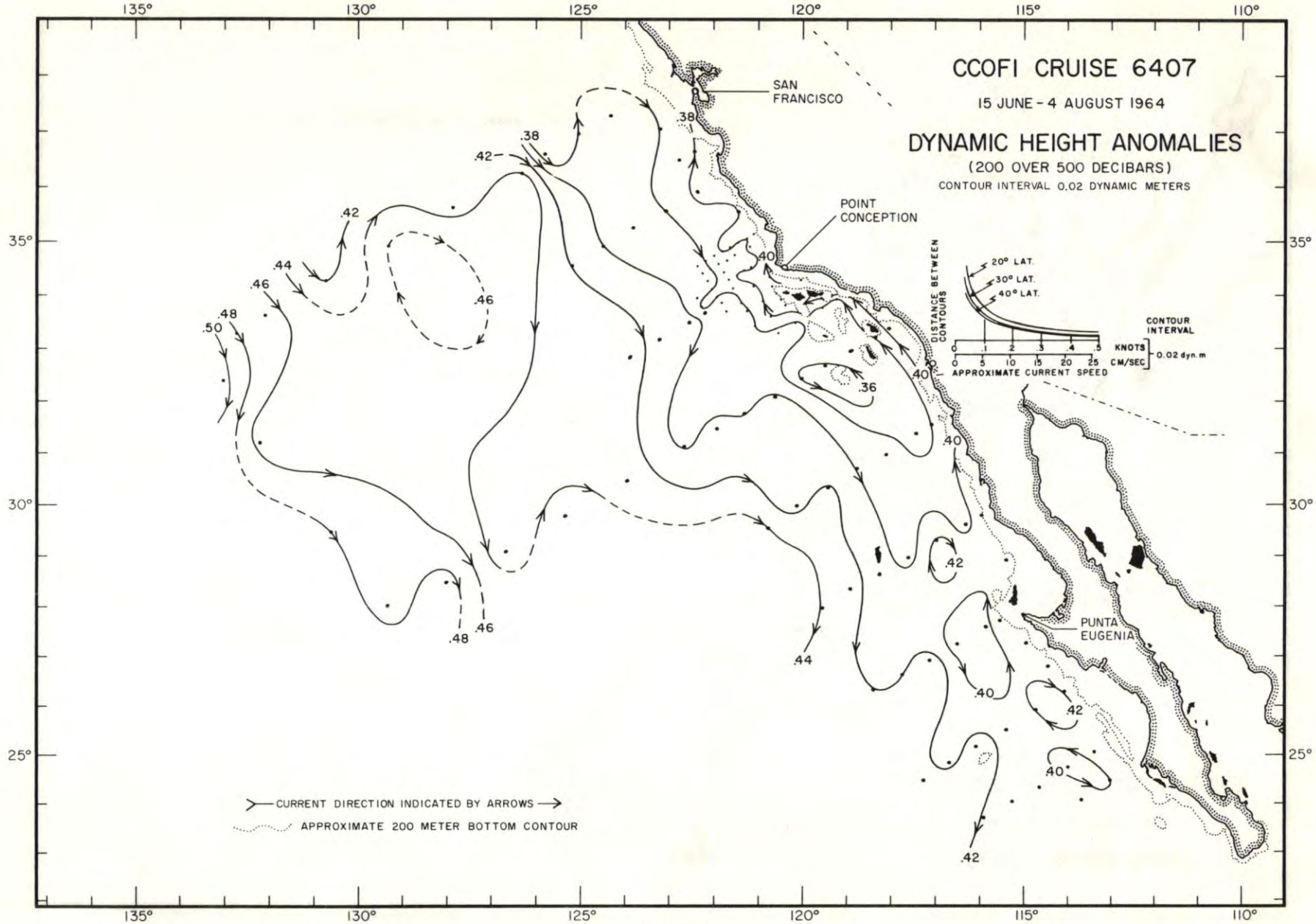

CCOFI CRUISE 6407
15 JUNE - 4 AUGUST 1964
DYNAMIC HEIGHT ANOMALIES
(200 OVER 500 DECIBARS)
CONTOUR INTERVAL 0.02 DYNAMIC METERS
SAN FRANCISCO
POINT CONCEPTION
PUNTA EUGENIA
DISTANCE BETWEEN CONTOURS
20° LAT.
30° LAT.
40° LAT.
KNOTS
CM/SEC
APPROXIMATE CURRENT SPEED
CONTOUR INTERVAL
0.02 dyn. m
CURRENT DIRECTION INDICATED BY ARROWS
APPROXIMATE 200 METER BOTTOM CONTOUR
135°
130°
125°
120°
115°
110°
35°
30°
25°

FIGURE 3

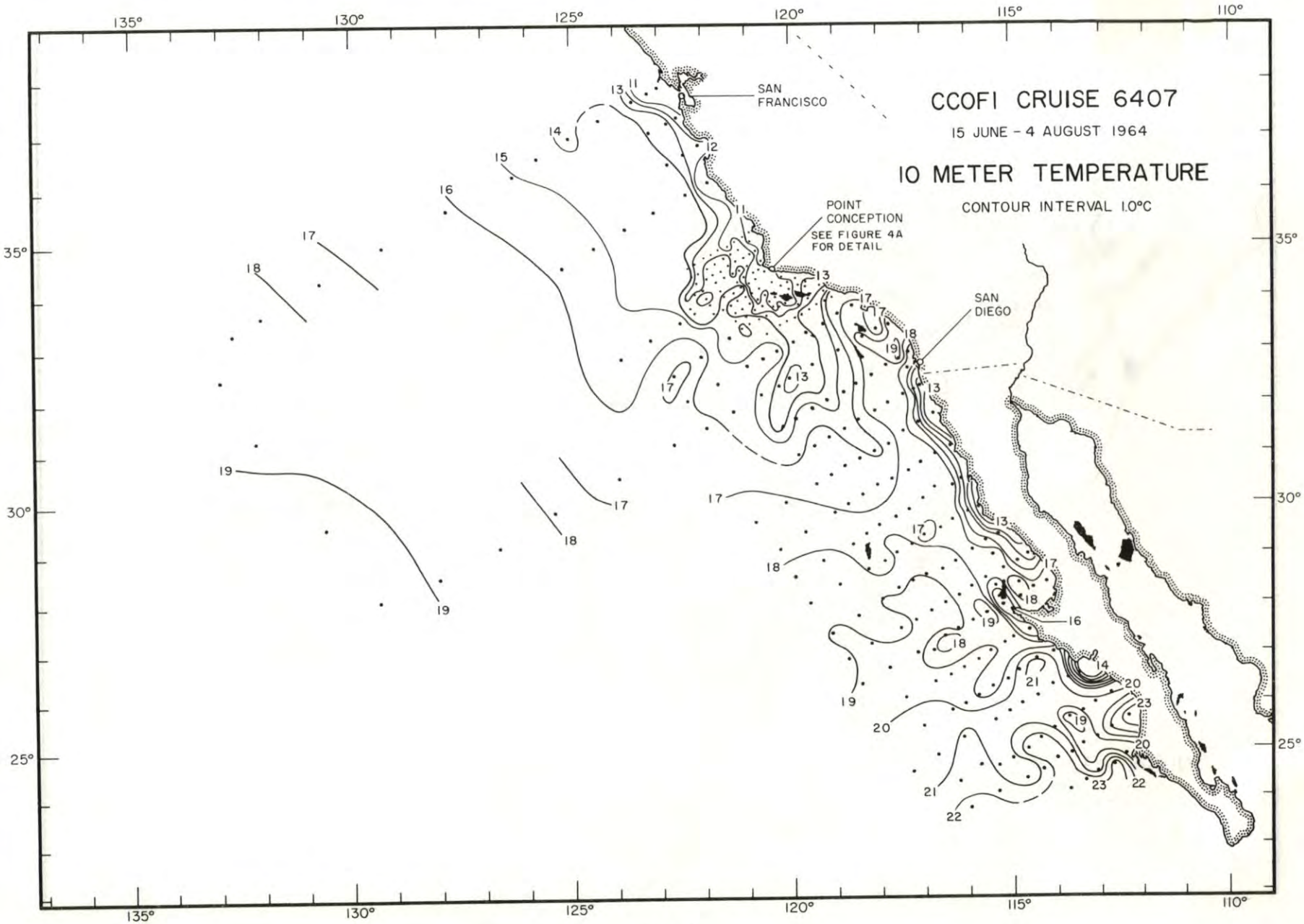

CCOFI CRUISE 6407
15 JUNE - 4 AUGUST 1964
10 METER TEMPERATURE
CONTOUR INTERVAL 1.0°C
SAN FRANCISCO
POINT CONCEPTION
SEE FIGURE 4A FOR DETAIL
SAN DIEGO
135°
130°
125°
120°
115°
110°
35°
30°
25°

FIGURE 4

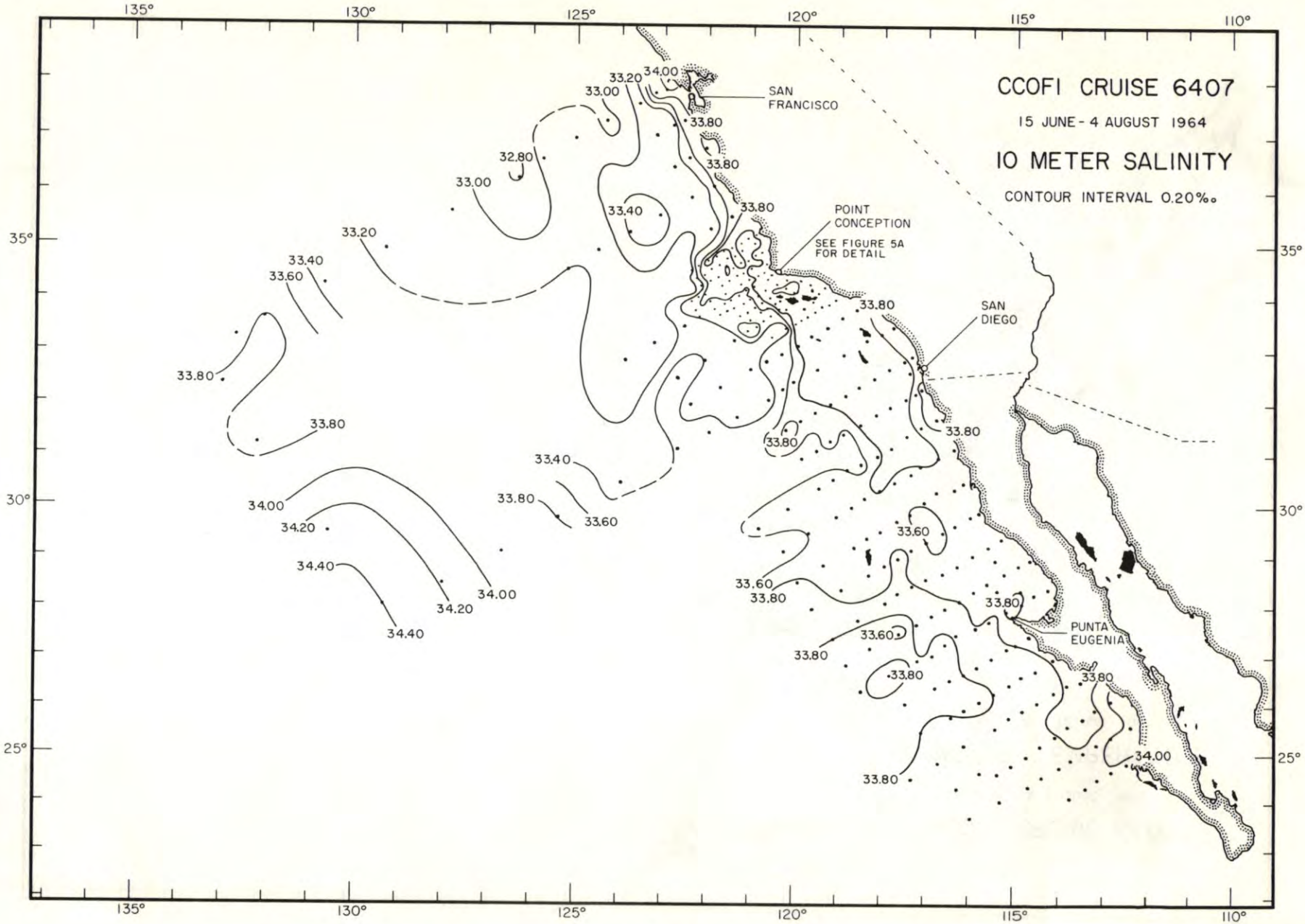

CCOFI CRUISE 6407
15 JUNE - 4 AUGUST 1964
10 METER SALINITY
CONTOUR INTERVAL 0.20‰
SAN FRANCISCO
POINT CONCEPTION
SEE FIGURE 5A FOR DETAIL
SAN DIEGO
PUNTA EUGENIA
135°
130°
125°
120°
115°
110°
35°
30°
25°
32.80
33.00
33.20
33.40
33.60
33.80
34.00
34.20
34.40

FIGURE 5

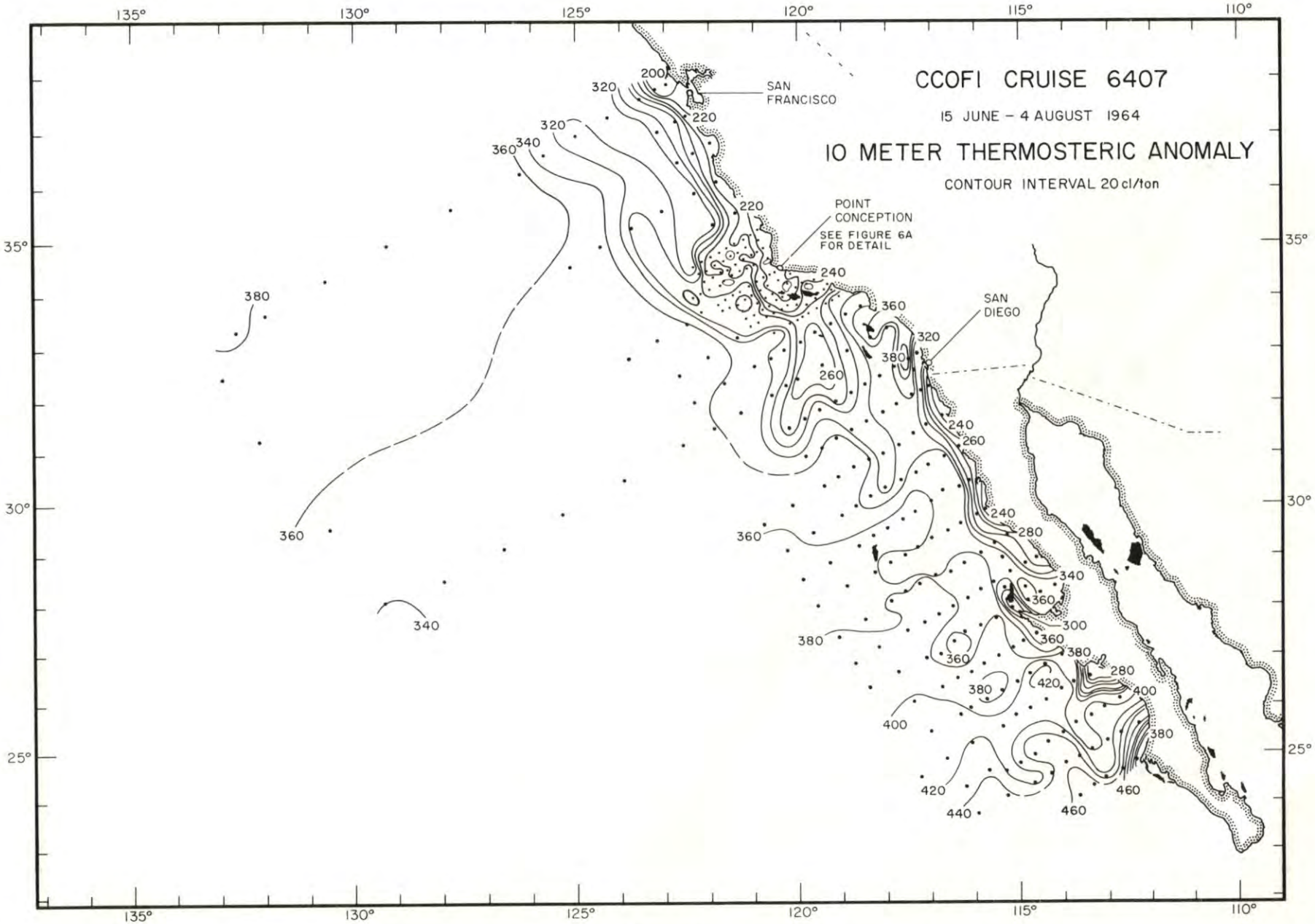

CCOFI CRUISE 6407
15 JUNE – 4 AUGUST 1964
10 METER THERMOSTERIC ANOMALY
CONTOUR INTERVAL 20 cl/ton
SAN FRANCISCO
POINT CONCEPTION
SEE FIGURE 6A FOR DETAIL
SAN DIEGO
135°
130°
125°
120°
115°
110°
35°
30°
25°
200
220
240
260
280
300
320
340
360
380
400
420
440
460

FIGURE 6

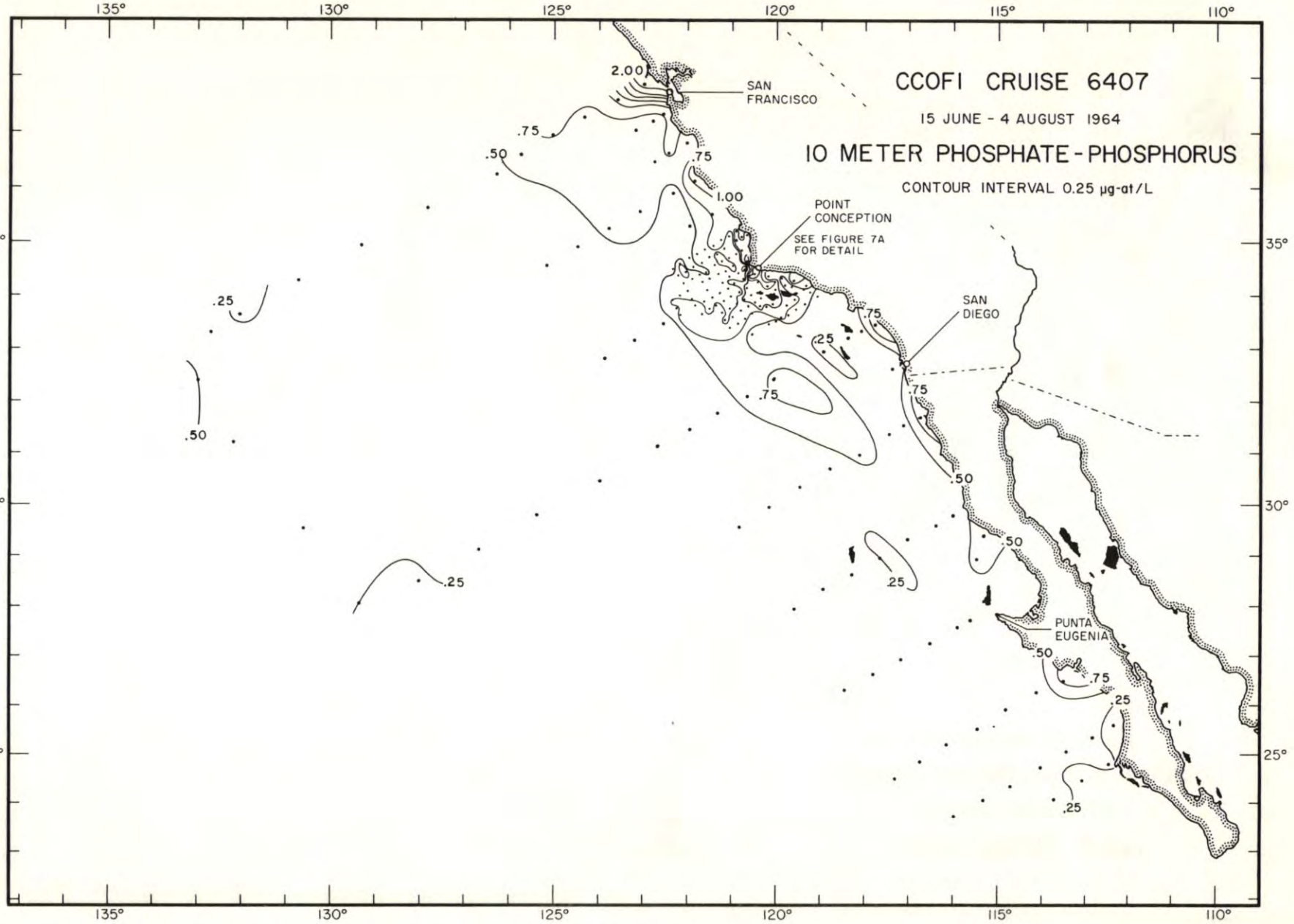

CCOFI CRUISE 6407
15 JUNE - 4 AUGUST 1964
10 METER PHOSPHATE-PHOSPHORUS
CONTOUR INTERVAL 0.25 µg-at/L
SAN FRANCISCO
POINT CONCEPTION
SEE FIGURE 7A FOR DETAIL
SAN DIEGO
PUNTA EUGENIA
135°
130°
125°
120°
115°
110°
35°
30°
25°
2.00
1.00
.75
.50
.25

FIGURE 7

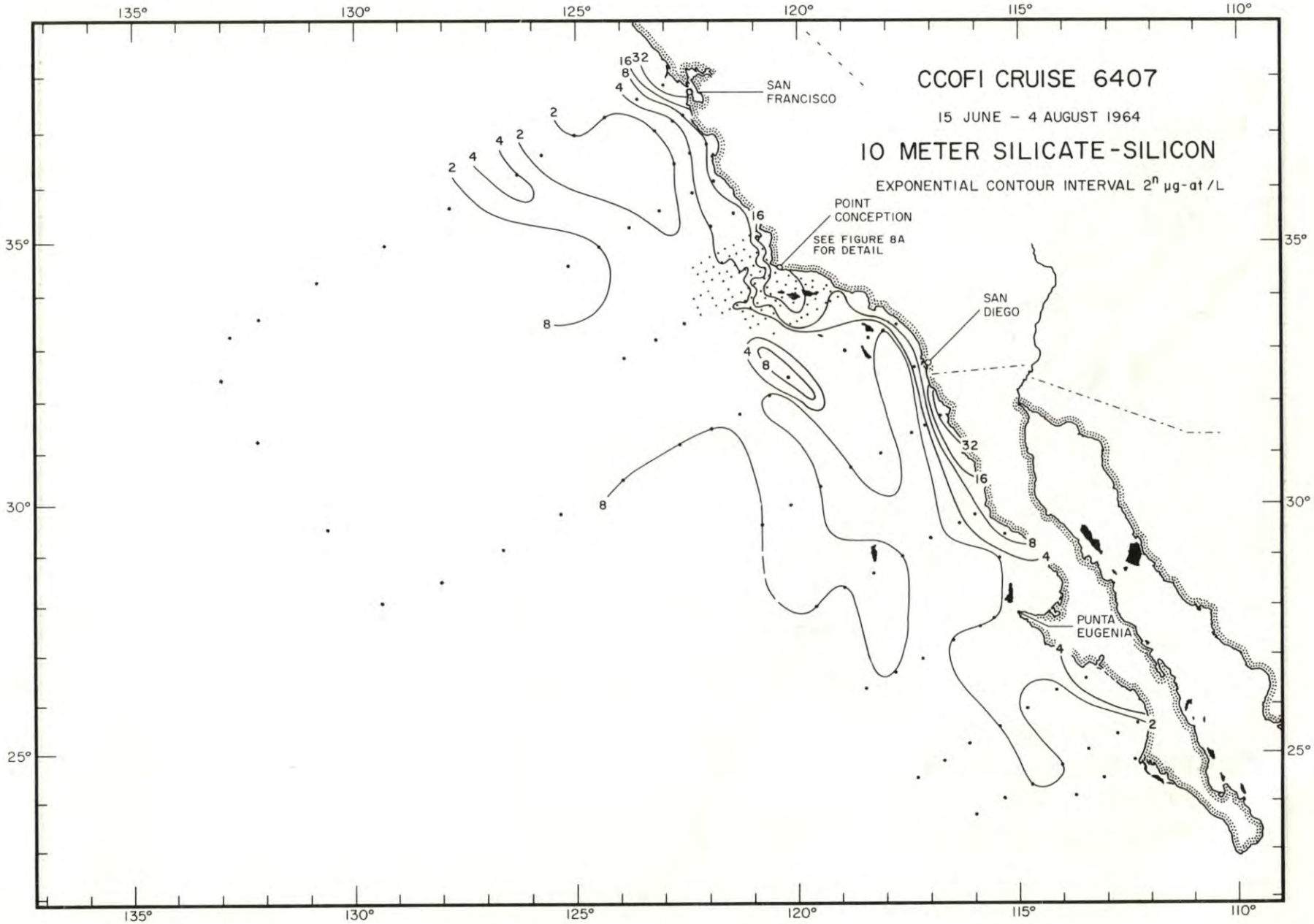

CCOFI CRUISE 6407
15 JUNE – 4 AUGUST 1964
10 METER SILICATE-SILICON
EXPONENTIAL CONTOUR INTERVAL 2^n µg-at/L
SAN FRANCISCO
POINT CONCEPTION
SEE FIGURE 8A FOR DETAIL
SAN DIEGO
PUNTA EUGENIA
135°
130°
125°
120°
115°
110°
35°
30°
25°

FIGURE 8

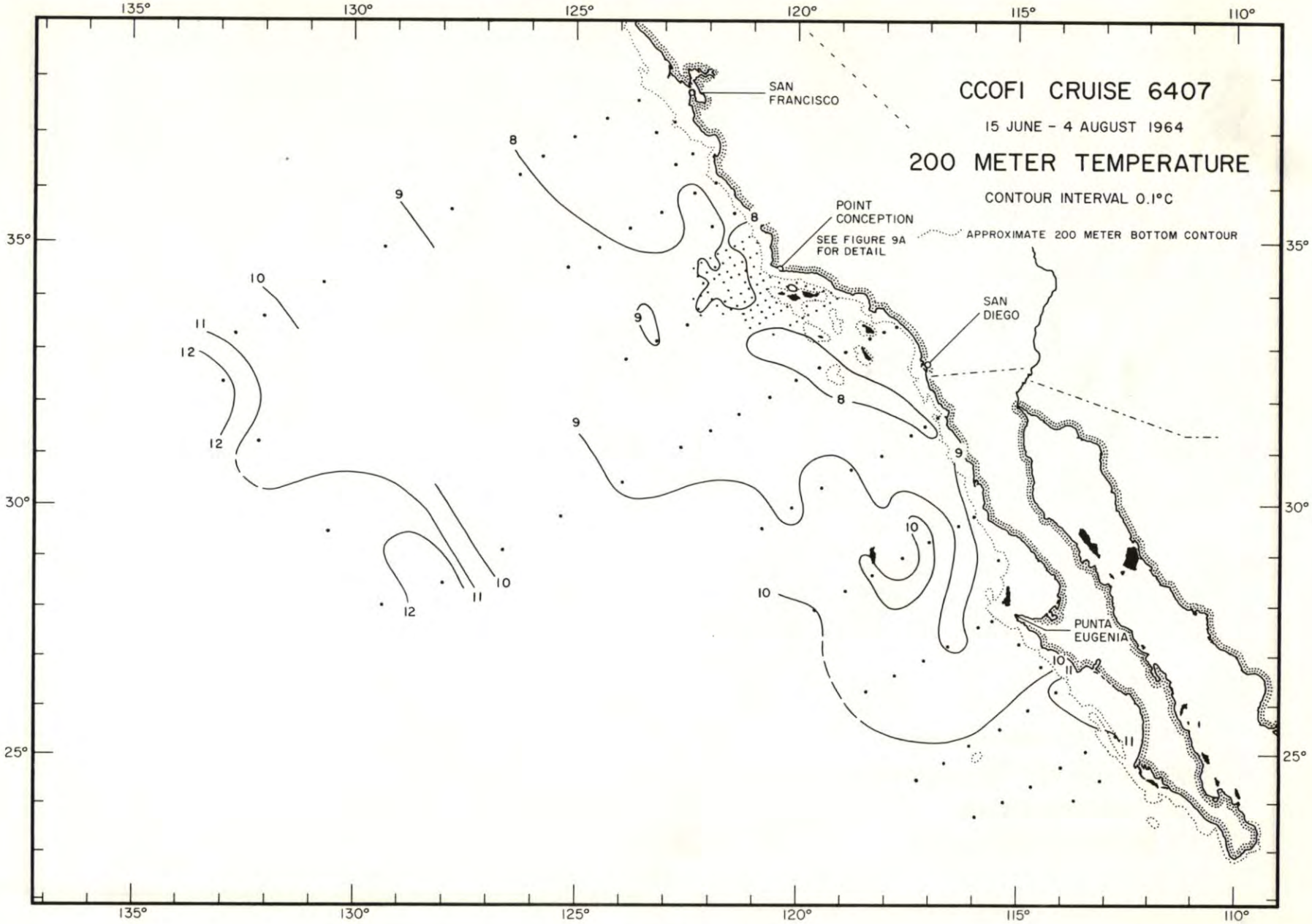

CCOFI CRUISE 6407
15 JUNE - 4 AUGUST 1964
200 METER TEMPERATURE
CONTOUR INTERVAL 0.1°C
APPROXIMATE 200 METER BOTTOM CONTOUR
SAN FRANCISCO
POINT CONCEPTION
SEE FIGURE 9A FOR DETAIL
SAN DIEGO
PUNTA EUGENIA
135°
130°
125°
120°
115°
110°
35°
30°
25°
8
9
10
11
12

FIGURE 9

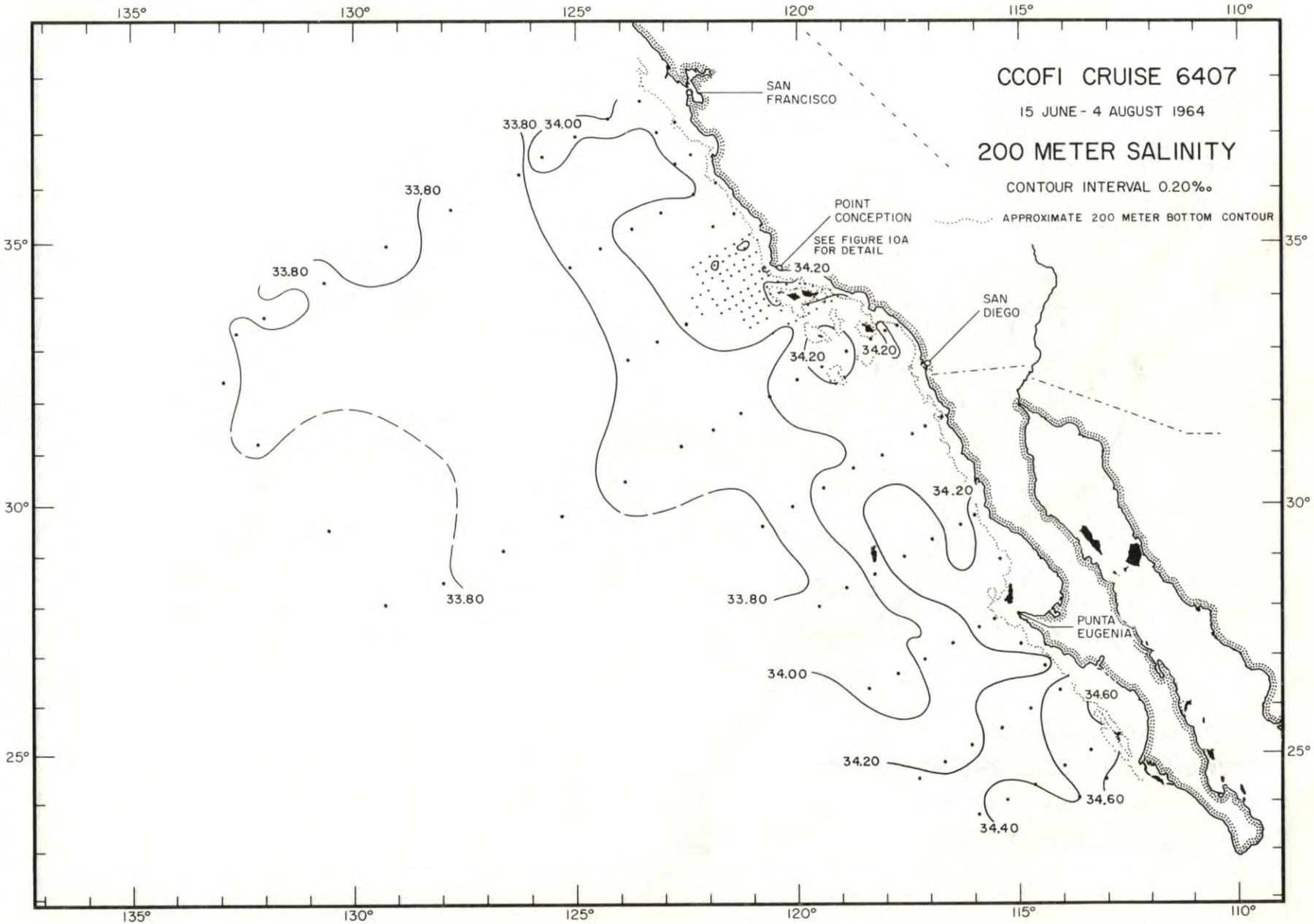

CCOFI CRUISE 6407
15 JUNE - 4 AUGUST 1964
200 METER SALINITY
CONTOUR INTERVAL 0.20‰
APPROXIMATE 200 METER BOTTOM CONTOUR
SAN FRANCISCO
POINT CONCEPTION
SEE FIGURE 10A FOR DETAIL
SAN DIEGO
PUNTA EUGENIA
33.80
34.00
34.20
34.40
34.60
135°
130°
125°
120°
115°
110°
35°
30°
25°

FIGURE 10

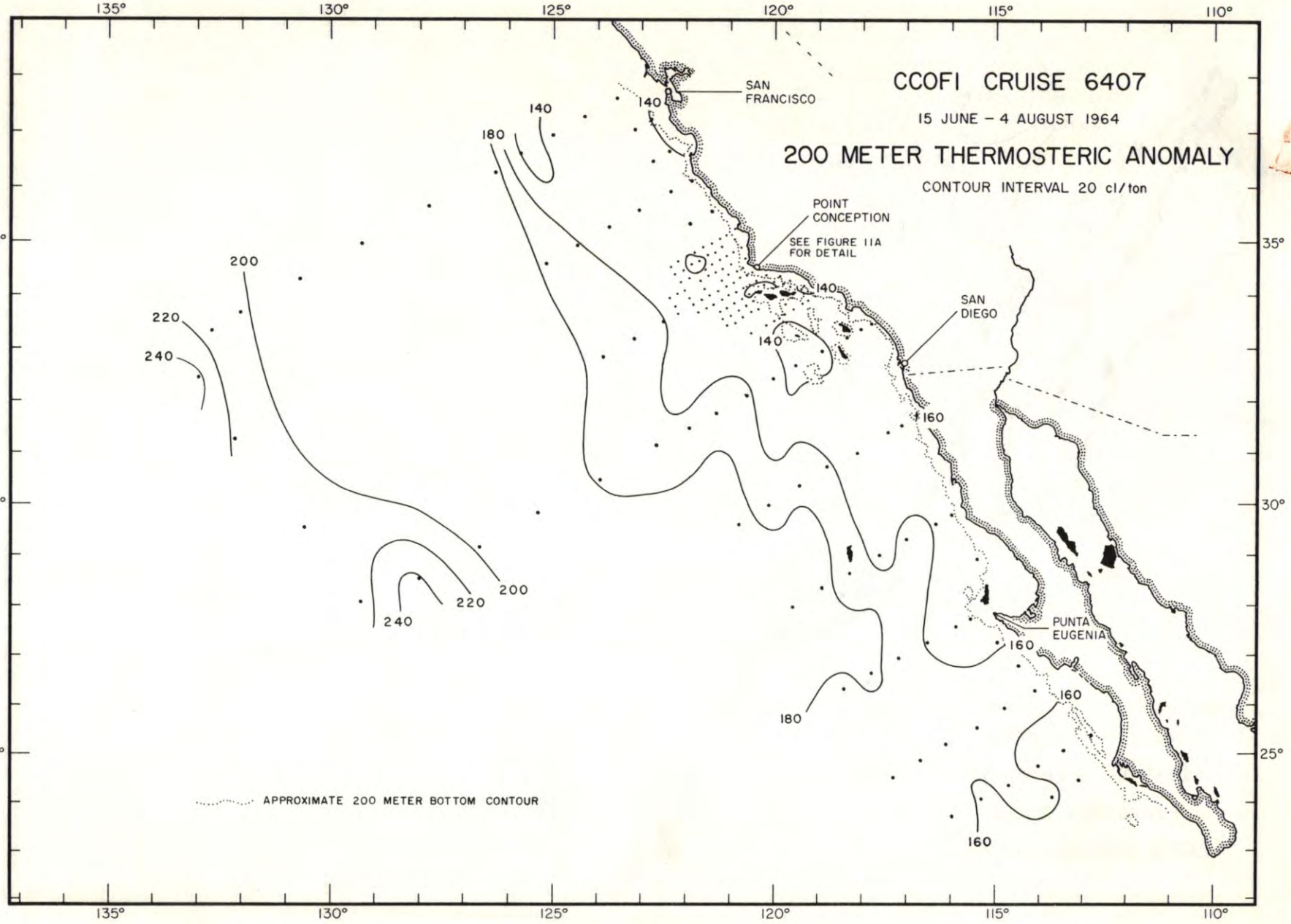

CCOFI CRUISE 6407
15 JUNE – 4 AUGUST 1964
200 METER THERMOSTERIC ANOMALY
CONTOUR INTERVAL 20 cl/ton
SAN FRANCISCO
POINT CONCEPTION
SEE FIGURE 11A FOR DETAIL
SAN DIEGO
PUNTA EUGENIA
APPROXIMATE 200 METER BOTTOM CONTOUR
135°
130°
125°
120°
115°
110°
35°
30°
25°
140
180
200
220
240
160

FIGURE 11

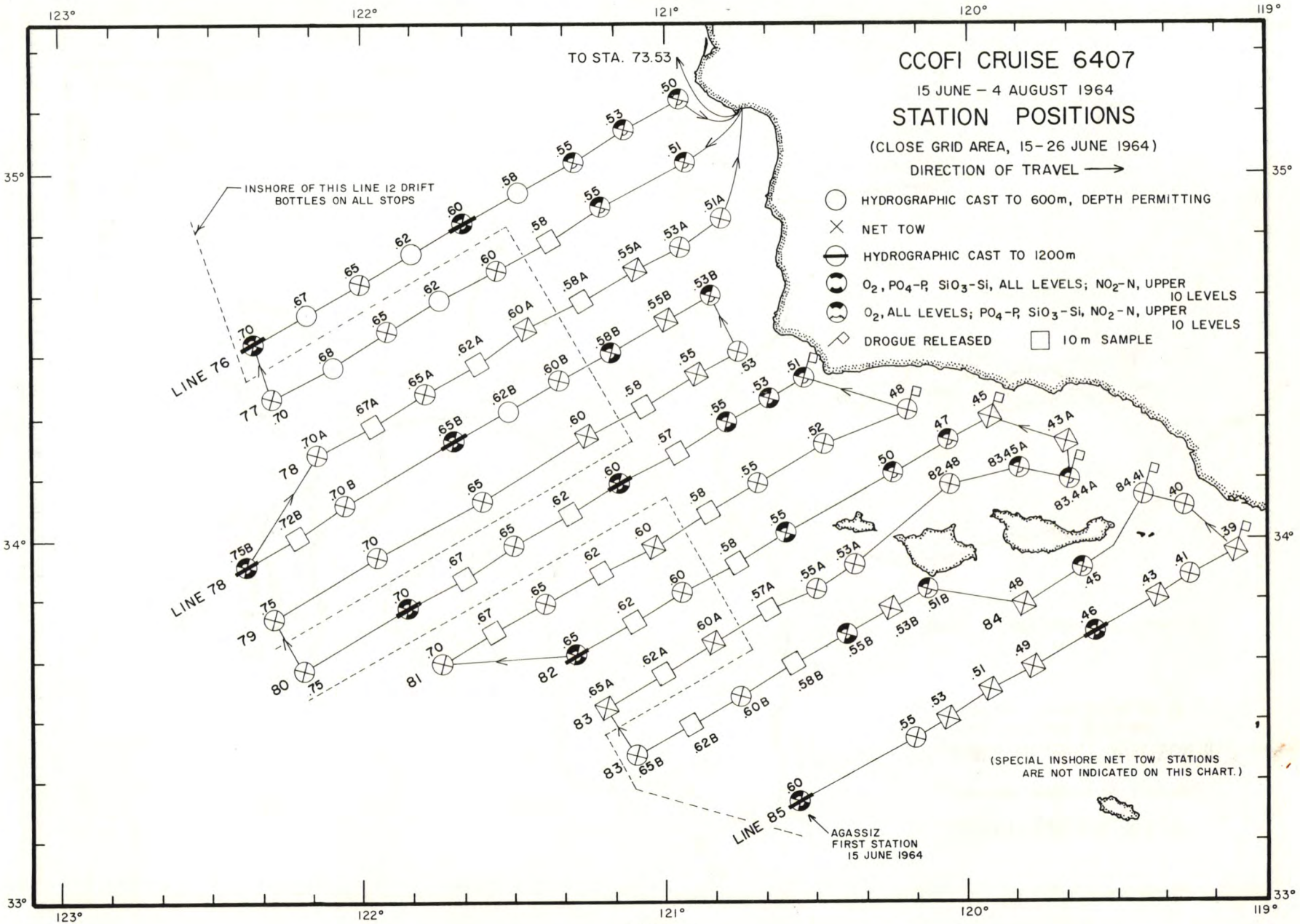

CCOFI CRUISE 6407
15 JUNE – 4 AUGUST 1964
STATION POSITIONS
(CLOSE GRID AREA, 15–26 JUNE 1964)
DIRECTION OF TRAVEL
HYDROGRAPHIC CAST TO 600m, DEPTH PERMITTING
NET TOW
HYDROGRAPHIC CAST TO 1200m
O2, PO4-P, SiO3-Si, ALL LEVELS; NO2-N, UPPER 10 LEVELS
O2, ALL LEVELS; PO4-P, SiO3-Si, NO2-N, UPPER 10 LEVELS
DROGUE RELEASED
10 m SAMPLE
TO STA. 73.53
INSHORE OF THIS LINE 12 DRIFT BOTTLES ON ALL STOPS
LINE 76
LINE 78
LINE 85
AGASSIZ FIRST STATION 15 JUNE 1964
(SPECIAL INSHORE NET TOW STATIONS ARE NOT INDICATED ON THIS CHART.)
123°
122°
121°
120°
119°
35°
34°
33°

FIGURE 1A

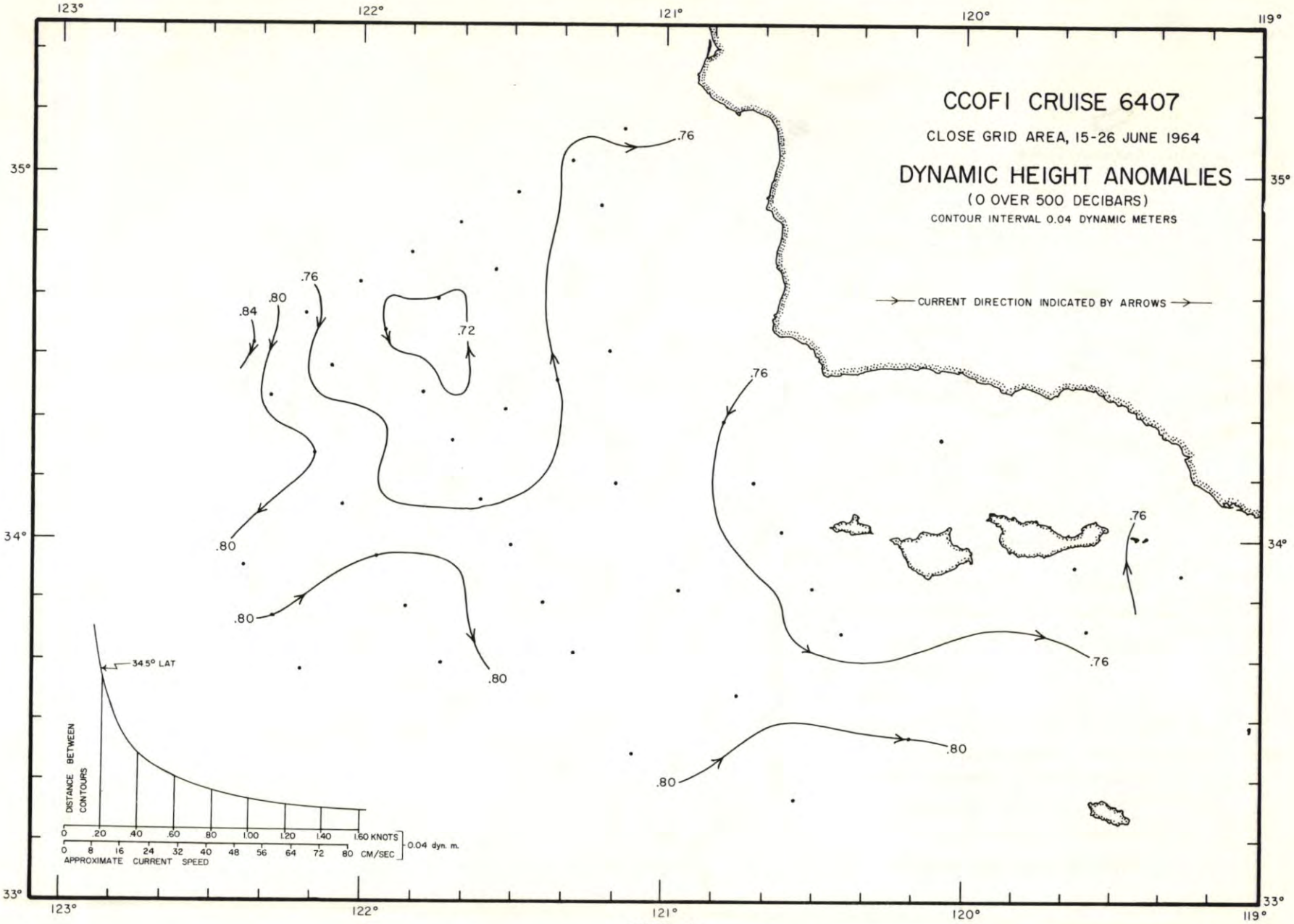

CCOFI CRUISE 6407
CLOSE GRID AREA, 15-26 JUNE 1964
DYNAMIC HEIGHT ANOMALIES
(0 OVER 500 DECIBARS)
CONTOUR INTERVAL 0.04 DYNAMIC METERS
CURRENT DIRECTION INDICATED BY ARROWS
123°
122°
121°
120°
119°
35°
34°
33°
.84
.80
.76
.72
.76
.76
.76
.80
.80
.80
.80
.80
34.5° LAT
DISTANCE BETWEEN CONTOURS
0 .20 .40 .60 .80 1.00 1.20 1.40 1.60 KNOTS
0 8 16 24 32 40 48 56 64 72 80 CM/SEC
0.04 dyn. m.
APPROXIMATE CURRENT SPEED

FIGURE 2A

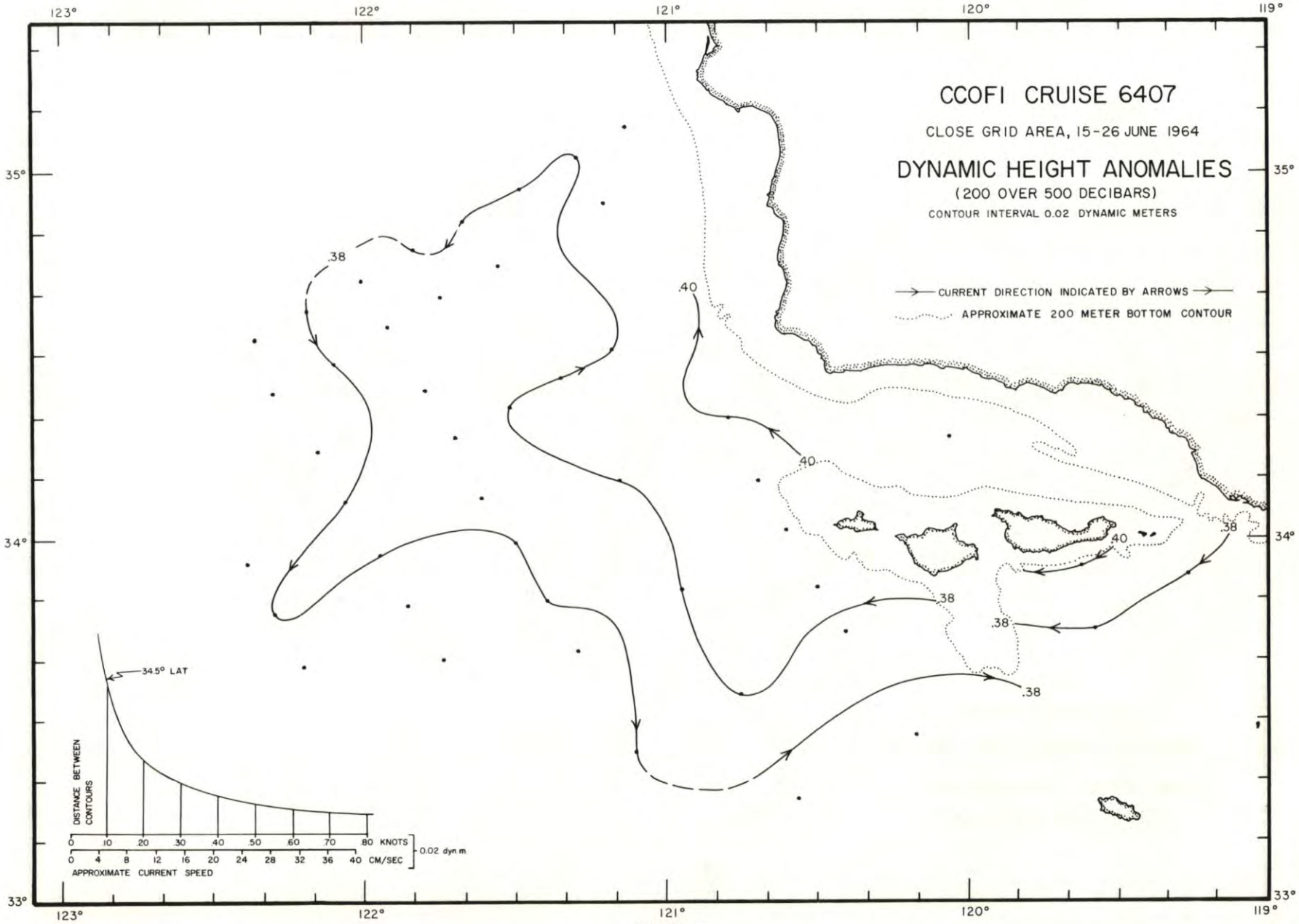

CCOFI CRUISE 6407
CLOSE GRID AREA, 15-26 JUNE 1964
DYNAMIC HEIGHT ANOMALIES
(200 OVER 500 DECIBARS)
CONTOUR INTERVAL 0.02 DYNAMIC METERS
CURRENT DIRECTION INDICATED BY ARROWS
APPROXIMATE 200 METER BOTTOM CONTOUR
123°
122°
121°
120°
119°
35°
34°
33°
.38
.40
34.5° LAT
DISTANCE BETWEEN CONTOURS
0 .10 .20 .30 .40 .50 .60 .70 .80 KNOTS
0 4 8 12 16 20 24 28 32 36 40 CM/SEC
0.02 dyn m.
APPROXIMATE CURRENT SPEED

FIGURE 3A

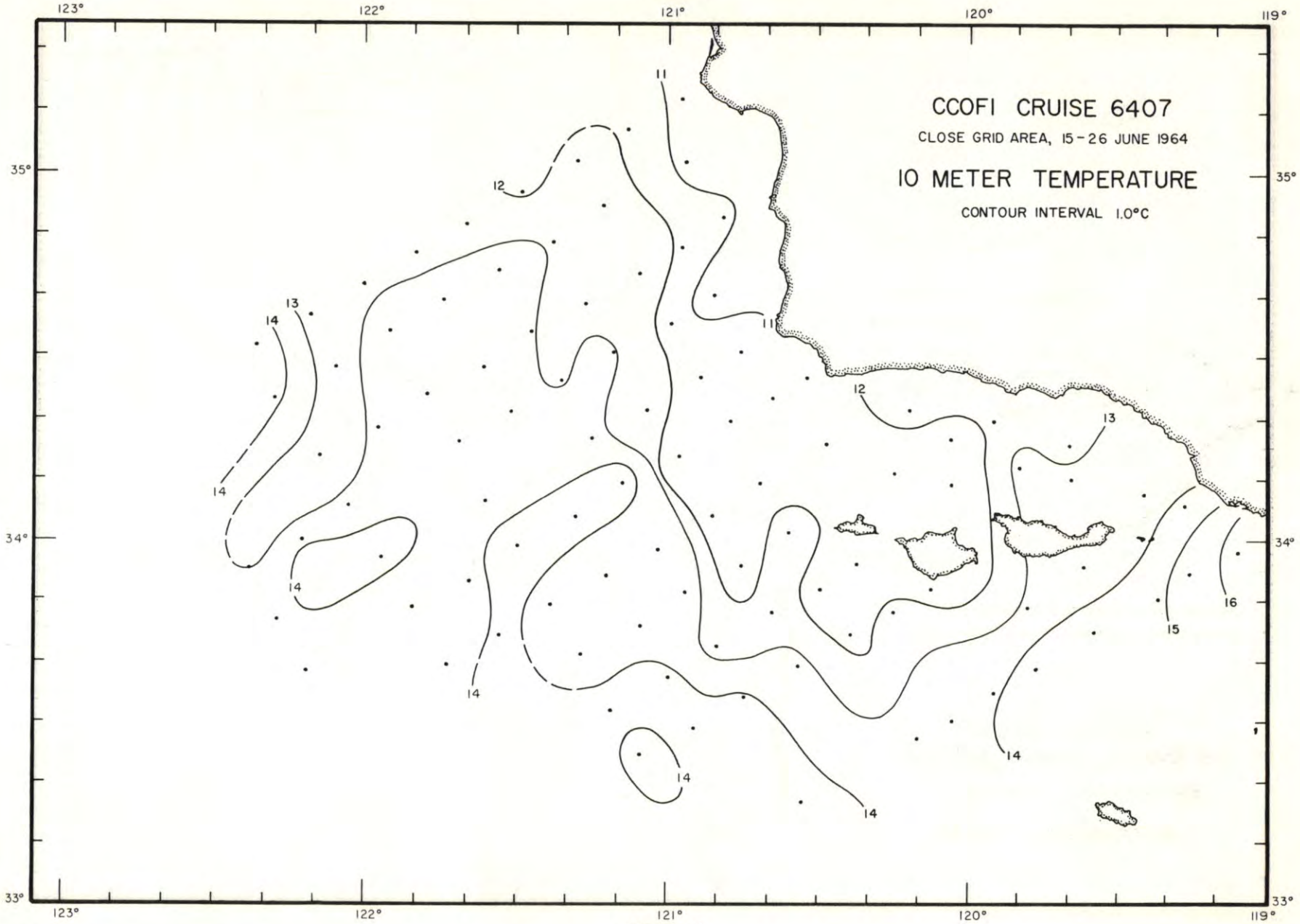

CCOFI CRUISE 6407
CLOSE GRID AREA, 15-26 JUNE 1964
10 METER TEMPERATURE
CONTOUR INTERVAL 1.0°C
123°
122°
121°
120°
119°
35°
34°
33°
11
12
13
14
15
16

FIGURE 4A

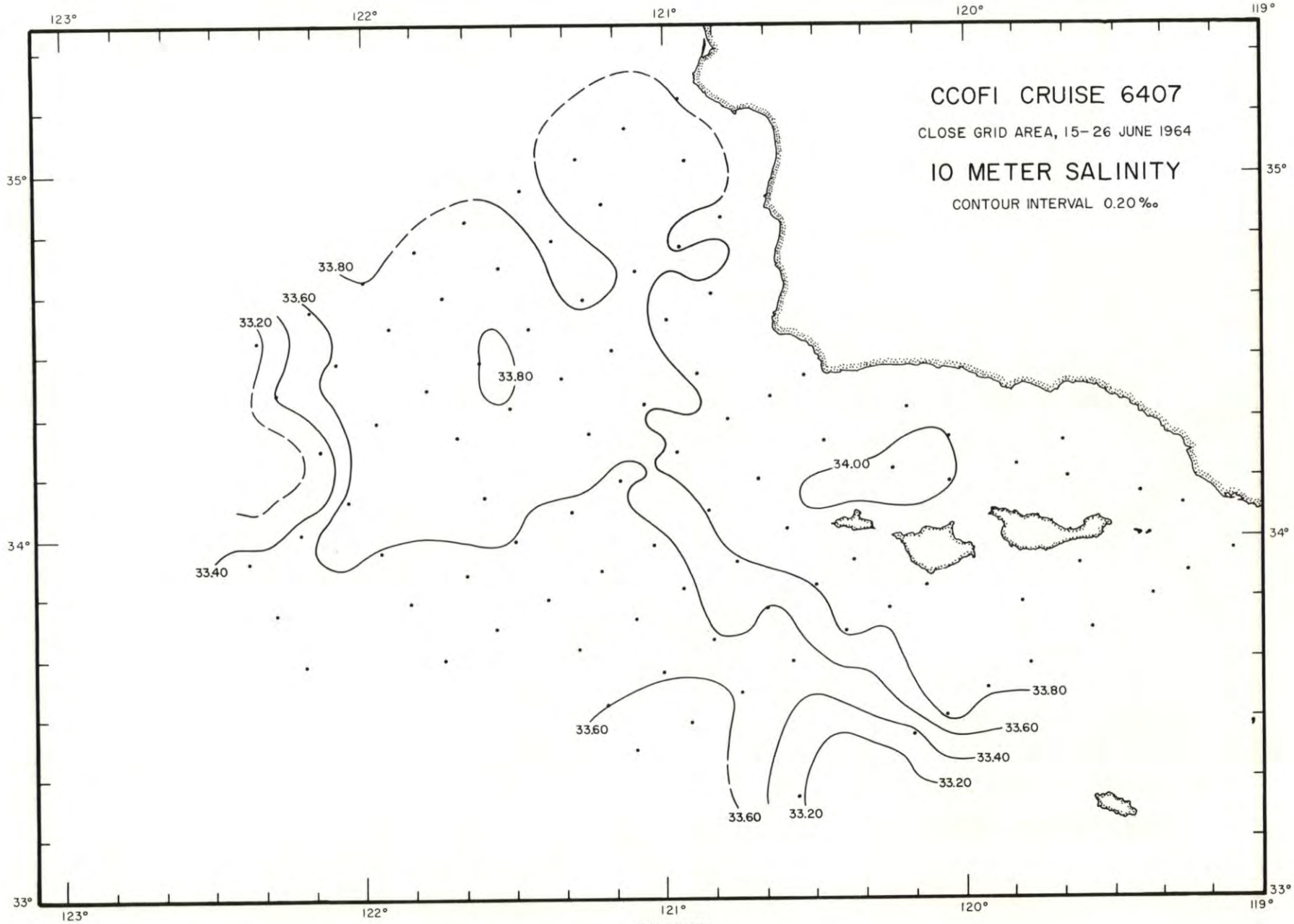

CCOFI CRUISE 6407
CLOSE GRID AREA, 15-26 JUNE 1964
10 METER SALINITY
CONTOUR INTERVAL 0.20‰
123°
122°
121°
120°
119°
35°
34°
33°
33.80
33.60
33.20
33.80
33.40
34.00
33.80
33.60
33.40
33.20
33.60
33.60
33.20

FIGURE 5A

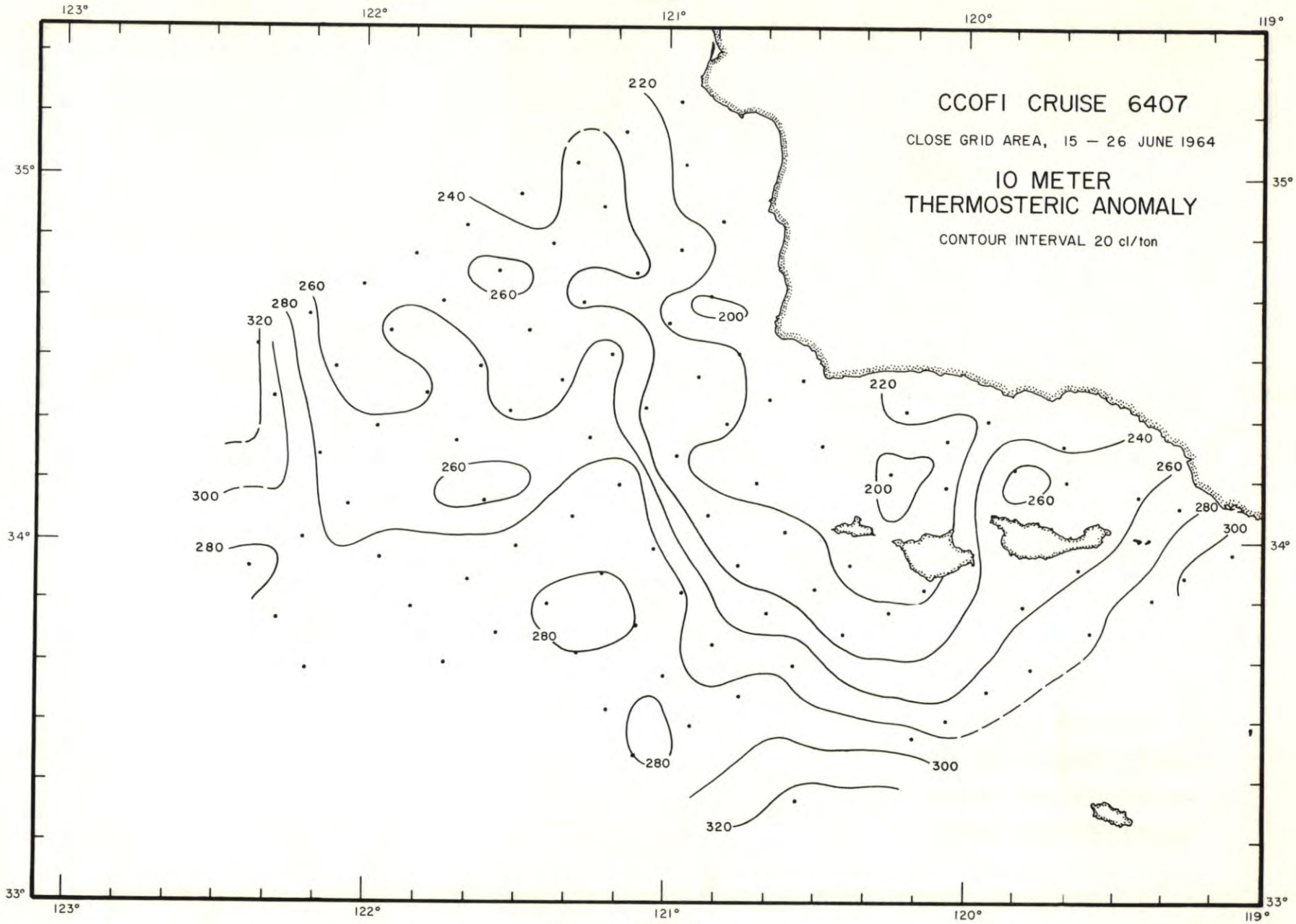

CCOFI CRUISE 6407
CLOSE GRID AREA, 15 — 26 JUNE 1964
10 METER
THERMOSTERIC ANOMALY
CONTOUR INTERVAL 20 cl/ton
123°
122°
121°
120°
119°
35°
34°
33°
220
240
260
280
320
200
300

FIGURE 6A

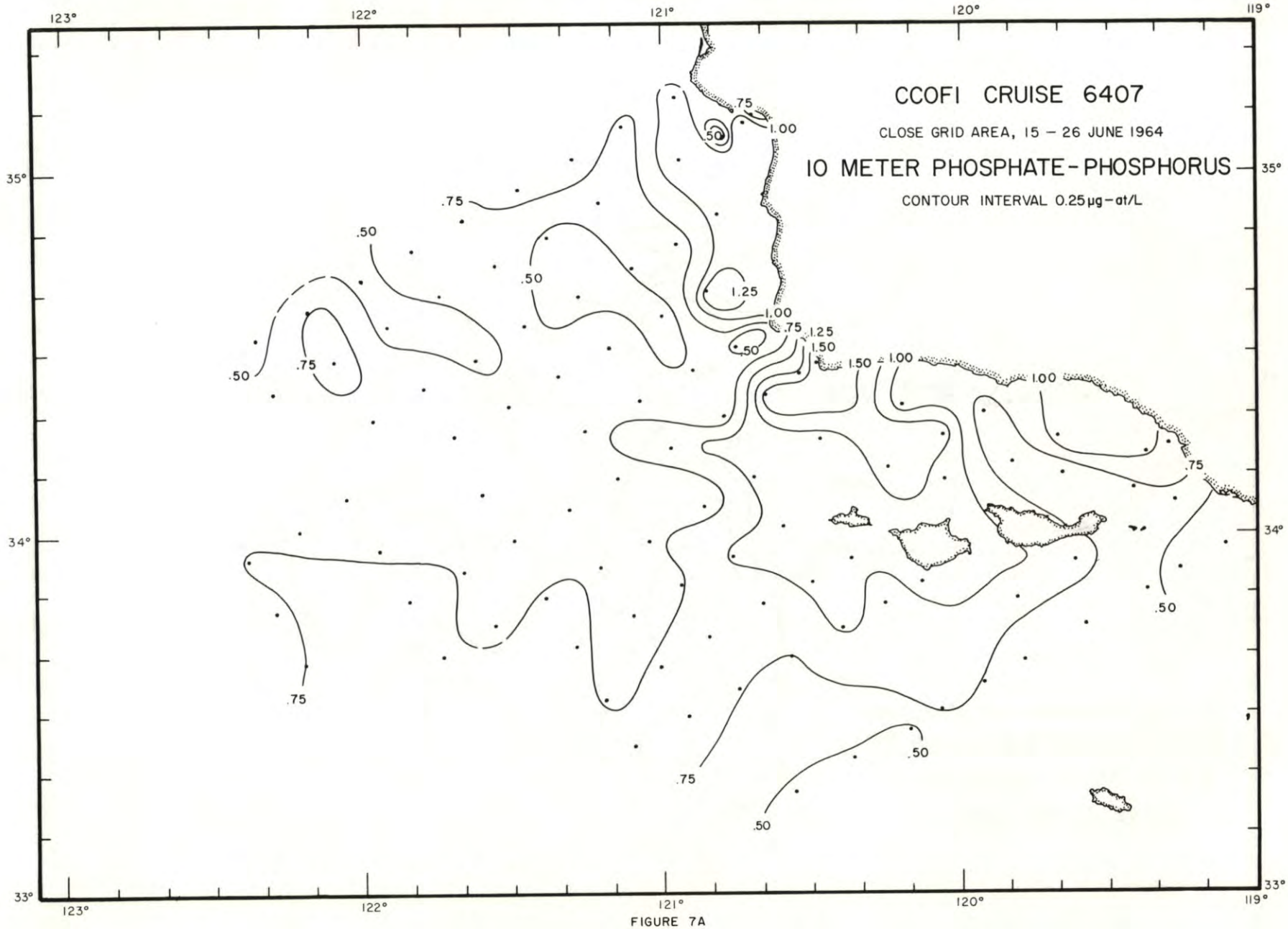

CCOFI CRUISE 6407
CLOSE GRID AREA, 15 – 26 JUNE 1964
10 METER PHOSPHATE-PHOSPHORUS
CONTOUR INTERVAL 0.25 µg-at/L
123°
122°
121°
120°
119°
35°
34°
33°
.75
1.00
.50
.75
.50
.50
1.25
1.00
.75
1.25
.50
1.50
1.50
1.00
1.00
.50
.75
.75
.75
.50
.50
.75
.50

FIGURE 7A

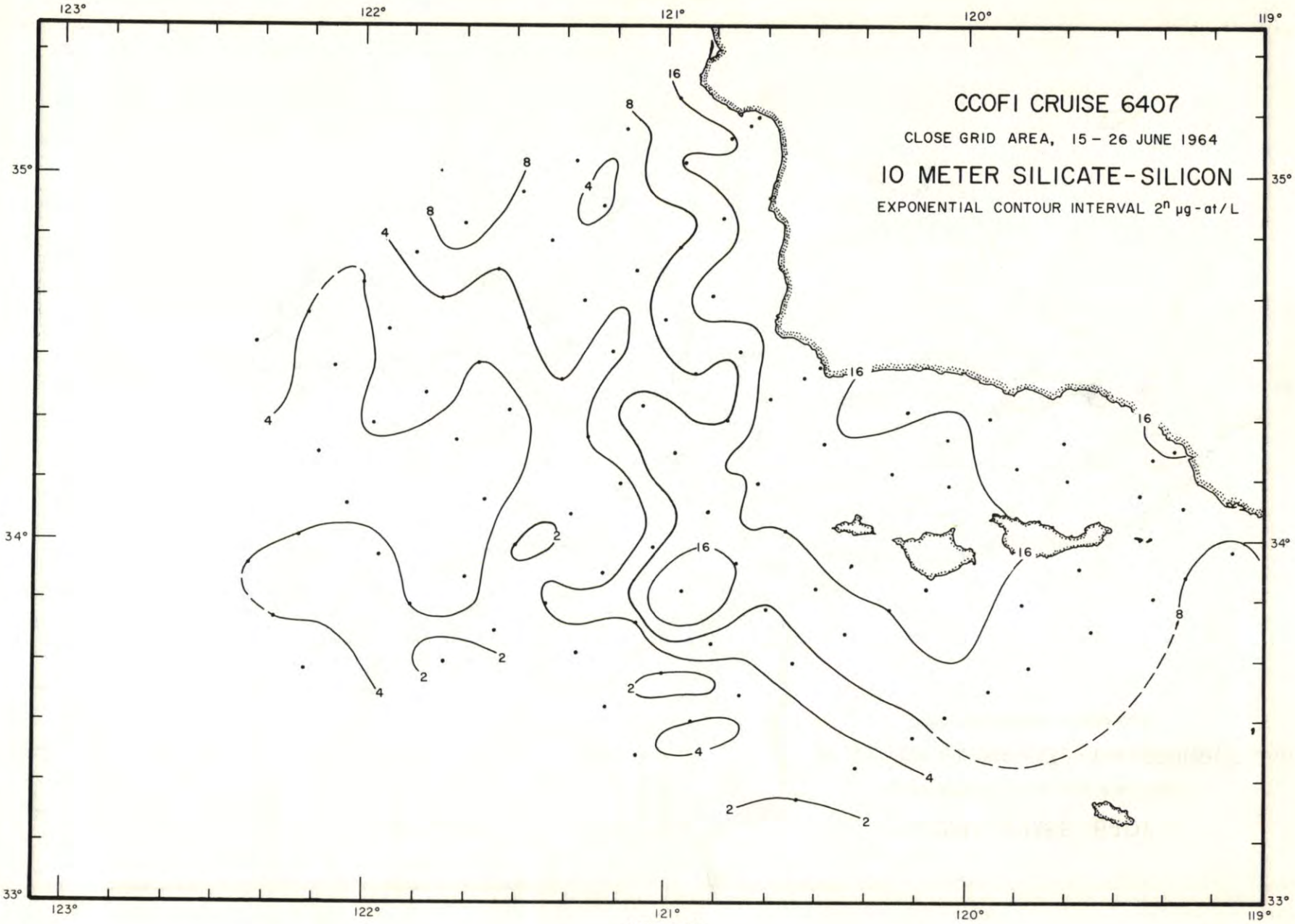

CCOFI CRUISE 6407
CLOSE GRID AREA, 15 – 26 JUNE 1964
10 METER SILICATE-SILICON
EXPONENTIAL CONTOUR INTERVAL $2^n$ µg-at/L
123°
122°
121°
120°
119°
35°
34°
33°

FIGURE 8A

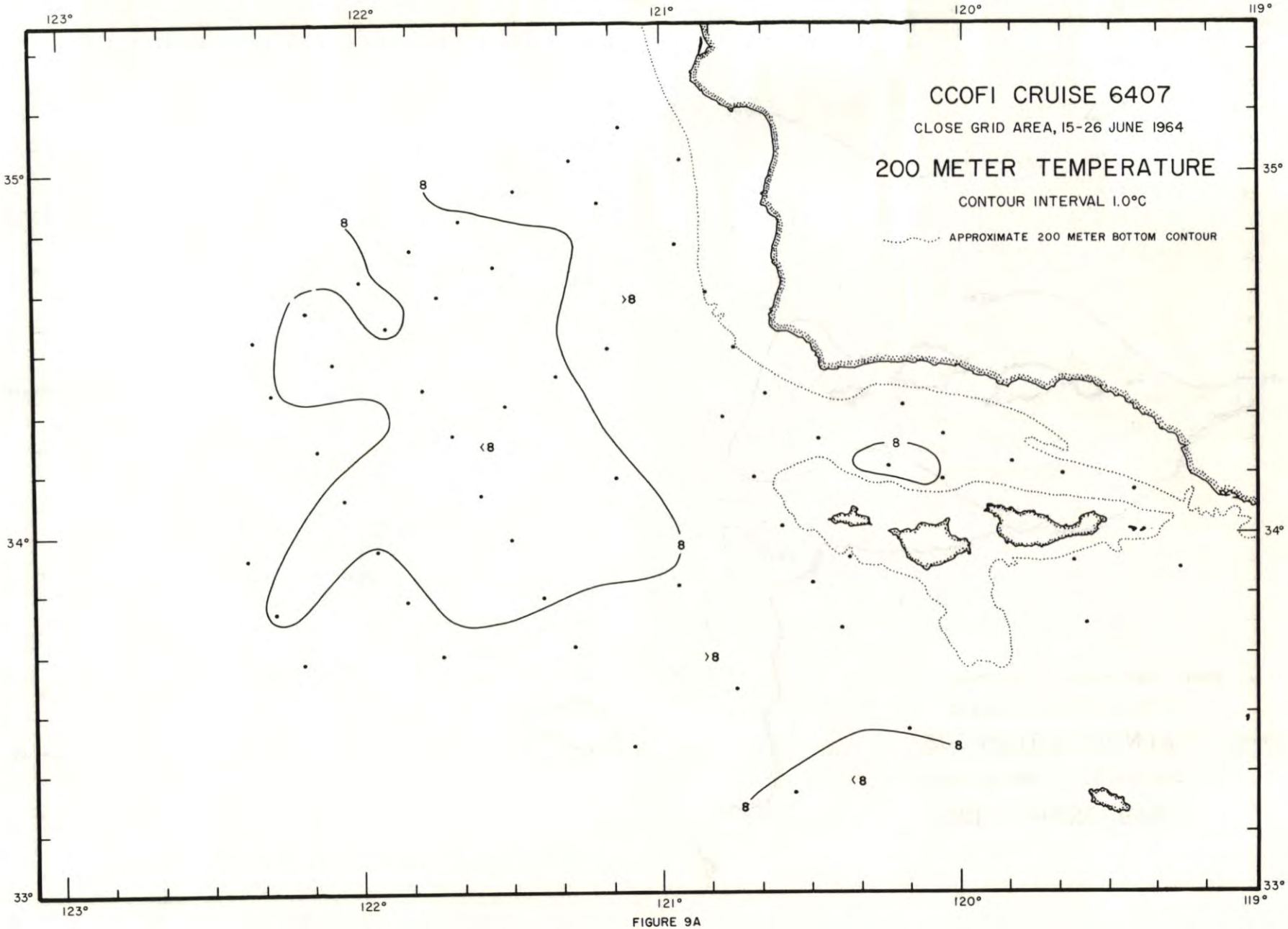

CCOFI CRUISE 6407
CLOSE GRID AREA, 15-26 JUNE 1964
200 METER TEMPERATURE
CONTOUR INTERVAL 1.0°C
APPROXIMATE 200 METER BOTTOM CONTOUR
123°
122°
121°
120°
119°
35°
34°
33°
8
>8
<8

FIGURE 9A

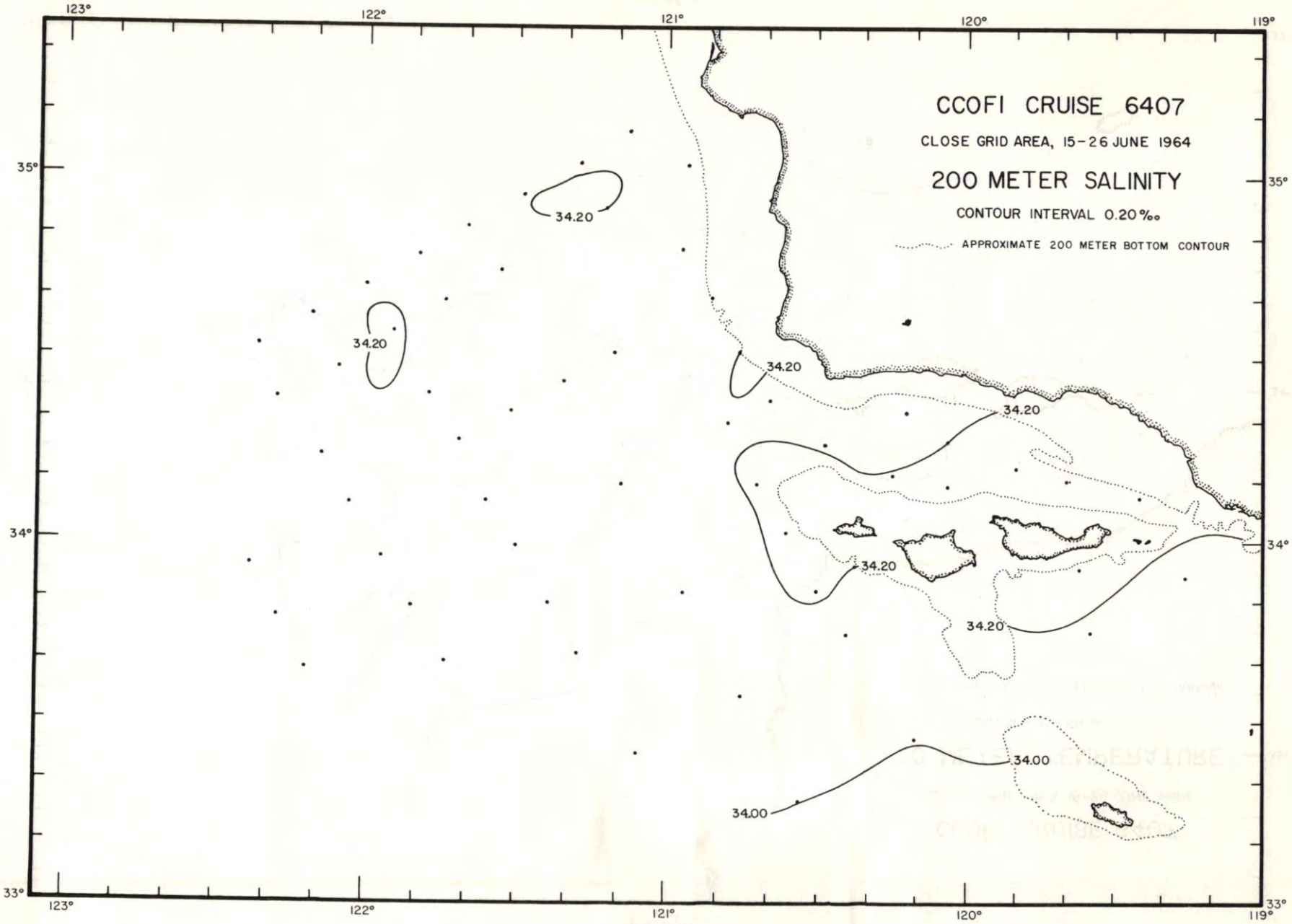

CCOFI CRUISE 6407
CLOSE GRID AREA, 15-26 JUNE 1964
200 METER SALINITY
CONTOUR INTERVAL 0.20‰
APPROXIMATE 200 METER BOTTOM CONTOUR
123°
122°
121°
120°
119°
35°
34°
33°
34.20
34.00

FIGURE 10A

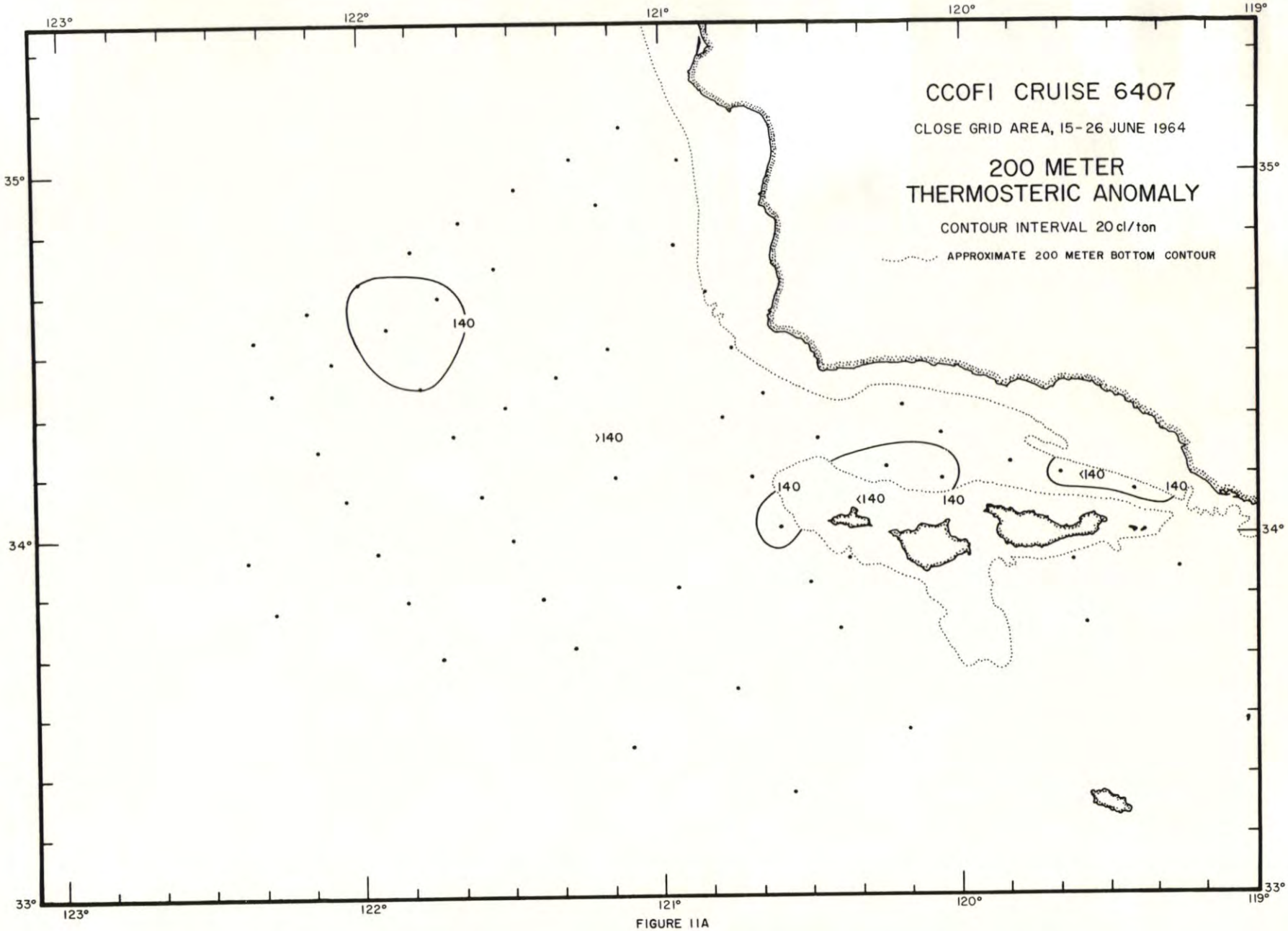

CCOFI CRUISE 6407
CLOSE GRID AREA, 15-26 JUNE 1964
200 METER
THERMOSTERIC ANOMALY
CONTOUR INTERVAL 20 cl/ton
APPROXIMATE 200 METER BOTTOM CONTOUR
123°
122°
121°
120°
119°
35°
34°
33°
140
>140
<140
140
140
<140
140

FIGURE 11A

PERSONNEL
CRUISE 6407

SHIPS' CAPTAINS

Leed, Bjarne, RV Black Douglas
Miller, Frank, RV Alexander Agassiz

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

RV Alexander Agassiz

*Mantyla, Arnold W., Senior Marine Technician (in charge of northern half)
**#Mead, Richard V., Principal Marine Technician (in charge of southern half)
*Alquist, C. Norman, Research Assistant
Born, Barbara M., Senior Engineering Aid
**Bryan, Walter R., Senior Marine Technician
Crowe, Fred J., Laboratory Assistant
Daniel, Dick A., Laboratory Helper
**Davoll, Peter J., Marine Technician
*Ferreira, Simon M., Marine Technician
*Kimura, Makoto, Fishery Biologist (General), Bureau of Commercial Fisheries
Muus, David A., Marine Technician
Netzley, Ronald L., Marine Technician
*##Rosendahl, Donald V., Electronics Technician
Snideman, R. Lawrence II, Marine Technician

**Wagner, Vaughn M., Biological Technician (Fisheries), Bureau of Commercial Fisheries
Wilson, Warren E., Marine Technician
*Wirth, David, Marine Technician

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*Northern half of cruise.
**Southern half of cruise.
#From San Francisco to San Diego.
##From San Diego to San Francisco.

RV Black Douglas

Farrar, Lloyd J., Biological Technician (Fisheries), Bureau of Commercial Fisheries

Perkins, Herbert C., Biological Technician (Fisheries), Bureau of Commercial Fisheries

| 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 | OD |
| 60.52 | | | | | | | CCOFI CRUISE 6407 | | | | | | 60.52 | |

ALEXANDER AGASSIZ, JULY 3 1964, 2347 GCT, 37 53.5N 123 01.5W, SOUNDING 43 FM, WIND 280 FORCE 4, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 10.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 10.84 | 33.995 | 6.27 | 2.11 | 39 | 0.61 | 197.6 | 0 | 10.84 | 34.00 | 6.27 | 26.05 | 197.2 | 0 |
| 10 | 10.70 | 33.996 | 6.31 | 2.18 | 39 | 0.61 | 195.2 | 10 | 10.70 | 34.00 | 6.31 | 26.07 | 194.9 | .020 |
| 20 | 10.62 | 33.997 | 6.01 | 2.19 | 38 | 0.62 | 193.7 | 20 | 10.62 | 34.00 | 6.01 | 26.08 | 193.5 | .039 |
| 30 | 10.54 | 33.992 | 5.97 | 2.22 | 38 | 0.65 | 192.8 | 30 | 10.54 | 33.99 | 5.97 | 26.09 | 192.9 | .058 |
| 49 | 8.50 | 33.977 | 3.36 | 2.75 | 45 | 0.59 | 162.0 | 50 | 8.49 | 33.98 | 3.32 | 26.42 | 161.7 | .094 |
| 74 | 8.14 | 34.037 | 1.70 | 2.98 | 53 | 0.22 | 152.4 | 75 | 8.12 | 34.04 | 1.68 | 26.52 | 151.9 | .134 |

60.60 CCOFI CRUISE 6407 60.60

ALEXANDER AGASSIZ, JULY 4 1964, 0410 GCT, 37 37.5N 123 37W, SOUNDING 1740 FM, WIND 320 FORCE 6, WEATHER OVERCAST, SEA HIGH, WIRE ANGLE 55.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 12.84 | 33.320 | 6.52 | 1.00 | 5 | 0.19 | 282.9 | 0 | 12.84 | 33.32 | 6.52 | 25.14 | 282.9 | 0 |
| 8 | 12.82 | 33.316 | 6.70 | 1.03 | 5 | 0.17 | 282.8 | 10 | 12.80 | 33.31 | 6.69 | 25.14 | 282.9 | .028 |
| 22 | 11.78 | 33.369 | 6.44 | 1.24 | 9 | 0.23 | 260.0 | 20 | 12.05 | 33.35 | 6.58 | 25.32 | 266.2 | .056 |
| 27 | 11.38 | 33.391 | 5.98 | 1.24 | 10 | 0.27 | 251.4 | 30 | 11.40 | 33.43 | 6.10 | 25.50 | 248.9 | .082 |
| 36 | 11.51 | 33.510 | 6.41 | 1.36 | 11 | 0.26 | 244.9 | 50 | 10.15 | 33.48 | 5.75 | 25.76 | 224.2 | .129 |
| 45 | 10.72 | 33.480 | 6.08 | 1.45 | 13 | 0.33 | 233.6 | 75 | 9.46 | 33.80 | 4.18 | 26.13 | 189.6 | .181 |
| 60 | 9.46 | 33.552 | 5.03 | 1.79 | 22 | 0.39 | 208.0 | 100 | 8.86 | 33.87 | 3.42 | 26.28 | 175.3 | .227 |
| 71 | 9.46 | 33.762 | 4.30 | 1.96 | 25 | 0.21 | 192.4 | 125 | 8.37 | 33.94 | 3.23 | 26.41 | 162.9 | .270 |
| 82 | 9.44 | 33.856 | 3.97 | 2.11 | 27 | 0.30 | 185.2 | 150 | 8.12 | 34.00 | 2.96 | 26.49 | 154.9 | .310 |
| 98 | 8.92 | 33.874 | 3.43 | 2.13 | 31 | 0.16 | 175.9 | 200 | 7.49 | 34.04 | 2.45 | 26.62 | 143.1 | .386 |
| 113 | 8.52 | 33.882 | 3.40 | - | - | - | 169.4 | 250 | 7.13 | 34.09 | 1.96 | 26.71 | 134.6 | .457 |
| 134 | 8.28 | 33.972 | 3.09 | - | - | - | 159.2 | 300 | 6.60 | 34.10 | 1.68 | 26.79 | 127.0 | .525 |
| 148 | 8.14 | 33.997 | 2.97 | - | - | - | 155.4 | | | | | | | |
| 173 | 7.82 | 34.026 | 2.77 | - | - | - | 148.7 | | | | | | | |
| 205 | 7.42 | 34.046 | 2.39 | - | - | - | 141.7 | | | | | | | |
| 263 | 7.04 | 34.095 | 1.88 | - | - | - | 133.0 | | | | | | | |
| 320 | 6.40 | 34.097 | 1.58 | - | - | - | 124.7 | | | | | | | |
| 374 | 6.21 | 34.167 | 1.06 | - | - | - | 117.1 | | | | | | | |

60.70 CCOFI CRUISE 6407 60.70

ALEXANDER AGASSIZ, JULY 4 1964, 0945 GCT, 37 17N 124 21W, SOUNDING 2140 FM, WIND 320 FORCE 4, WEATHER OVERCAST, SEA HIGH, WIRE ANGLE 38.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.34 | 32.984 | 6.44 | 0.56 | 2 | 0.06 | 336.6 | 0 | 14.34 | 32.98 | 6.44 | 24.58 | 336.9 | 0 |
| 9 | 14.32 | 32.982 | 6.55 | 0.63 | 2 | 0.05 | 336.3 | 10 | 14.32 | 32.98 | 6.55 | 24.58 | 336.5 | .034 |
| 29 | 14.22 | 33.034 | 6.47 | 0.70 | 2 | 0.06 | 330.5 | 20 | 14.28 | 33.00 | 6.53 | 24.61 | 334.2 | .067 |
| 37 | 13.07 | 33.089 | 6.17 | 0.80 | 5 | 0.13 | 304.2 | 30 | 14.21 | 33.04 | 6.47 | 24.65 | 329.9 | .101 |
| 48 | 10.85 | 33.051 | 6.22 | 0.93 | 7 | 0.25 | 267.5 | 50 | 10.76 | 33.05 | 6.21 | 25.32 | 266.0 | .160 |
| 61 | 9.92 | 33.039 | 5.94 | 1.15 | 11 | 0.21 | 253.2 | 75 | 9.78 | 33.30 | 5.70 | 25.68 | 231.7 | .223 |
| 80 | 9.94 | 33.420 | 5.59 | 1.63 | 18 | 0.28 | 225.3 | 100 | 9.07 | 33.50 | 4.74 | 25.95 | 205.9 | .278 |
| 95 | 9.20 | 33.471 | 4.84 | 1.79 | 23 | 0.29 | 210.0 | 125 | 8.74 | 33.72 | 4.12 | 26.18 | 184.6 | .327 |
| 110 | 8.92 | 33.600 | 4.59 | 1.91 | 26 | 0.12 | 196.2 | 150 | 8.45 | 33.88 | 3.60 | 26.35 | 168.5 | .372 |
| 132 | 8.66 | 33.771 | 3.95 | 2.08 | 31 | 0.00 | 179.7 | 200 | 7.90 | 34.00 | 2.90 | 26.52 | 151.8 | .454 |
| 155 | 8.38 | 33.903 | 3.50 | - | - | - | 165.8 | 250 | 7.14 | 34.04 | 2.47 | 26.66 | 138.4 | .528 |
| 185 | 8.12 | 33.977 | - | - | - | - | 156.6 | 300 | 6.55 | 34.06 | 2.00 | 26.76 | 129.4 | .597 |
| 206 | 7.79 | 34.015 | 2.82 | - | - | - | 149.1 | 400 | 5.80 | 34.14 | 1.05 | 26.92 | 114.2 | .723 |
| 242 | 7.26 | 34.038 | 2.54 | - | - | - | 140.2 | 500 | 5.32 | 34.21 | .81 | 27.03 | 103.5 | .838 |
| 290 | 6.64 | 34.055 | 2.13 | - | - | - | 130.9 | | | | | | | |
| 367 | 6.02 | 34.114 | 1.25 | - | - | - | 118.8 | | | | | | | |
| 440 | 5.58 | 34.173 | .92 | - | - | - | 109.2 | | | | | | | |
| 506 | 5.30 | 34.215 | .80 | - | - | - | 102.9 | | | | | | | |

60.80 CCOFI CRUISE 6407 60.80

ALEXANDER AGASSIZ, JULY 4 1964, 1507 GCT, 36 58N 125 04W, SOUNDING 2290 FM, WIND 320 FORCE 4, WEATHER OVERCAST, SEA HIGH, WIRE ANGLE 08.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.94 | 33.182 | 6.41 | 0.75 | 3 | 0.15 | 314.1 | 0 | 13.94 | 33.18 | 6.41 | 24.81 | 314.3 | 0 |
| 11 | 13.94 | 33.181 | 6.57 | 0.75 | 2 | 0.13 | 314.2 | 10 | 13.94 | 33.18 | 6.56 | 24.81 | 314.3 | .031 |
| 36 | 12.16 | 33.098 | 6.63 | 0.84 | 2 | 0.29 | 286.8 | 20 | 13.94 | 33.18 | 6.57 | 24.81 | 314.3 | .063 |
| 46 | 11.25 | 33.179 | 6.08 | 1.06 | 6 | 0.25 | 264.8 | 30 | 13.50 | 33.16 | 6.59 | 24.89 | 307.2 | .094 |
| 61 | 10.25 | 33.330 | 5.59 | 1.40 | 15 | 0.22 | 237.0 | 50 | 11.15 | 33.21 | 5.98 | 25.38 | 260.8 | .151 |
| 76 | 9.22 | 33.356 | 4.76 | 1.60 | 21 | 0.10 | 218.9 | 75 | 9.21 | 33.35 | 4.77 | 25.82 | 219.1 | .211 |
| 100 | 9.40 | 33.750 | 4.90 | 2.01 | 30 | 0.55 | 192.4 | 100 | 9.40 | 33.75 | 4.90 | 26.10 | 192.4 | .263 |
| 120 | 8.87 | 33.888 | 4.43 | 2.12 | 33 | 0.03 | 174.1 | 125 | 8.72 | 33.90 | 4.18 | 26.32 | 171.0 | .309 |
| 139 | 8.41 | 33.918 | 3.66 | 2.31 | 38 | 0.02 | 165.1 | 150 | 8.22 | 33.93 | 3.73 | 26.42 | 161.5 | .351 |
| 169 | 7.94 | 33.968 | 4.02 | 1.92 | 36 | 0.03 | 154.7 | 200 | 7.58 | 34.01 | 2.5 | 26.58 | 146.6 | .430 |
| 197 | 7.62 | 34.012 | 2.5 | - | - | - | 147.0 | 250 | 6.80 | 34.02 | 2.24 | 26.70 | 135.5 | .502 |
| 236 | 7.01 | 34.016 | 2.37 | - | - | - | 138.5 | 300 | 6.58 | 34.11 | 1.50 | 26.80 | 126.0 | .569 |
| 265 | 6.62 | 34.034 | 2.03 | - | - | - | 132.2 | 400 | 5.80 | 34.16 | .96 | 26.94 | 112.7 | .693 |
| 314 | 6.56 | 34.141 | 1.30 | - | - | - | 123.4 | 500 | 5.28 | 34.23 | .56 | 27.05 | 101.5 | .806 |
| 377 | 5.94 | 34.153 | 1.04 | - | - | - | 114.9 | 600 | 4.68 | 34.28 | - | 27.16 | 91.2 | .908 |
| 477 | 5.44 | 34.215 | .60 | - | - | - | 104.5 | | | | | | | |
| 566 | 4.82 | 34.253 | .55 | - | - | - | 94.8 | | | | | | | |
| 640 | 4.58 | 34.318 | - | - | - | - | 87.3 | | | | | | | |

| 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 |

60.90 CCOFI CRUISE 6407 60.90

ALEXANDER AGASSIZ, JULY 4 1964, 1951 GCT, 36 37N 125 47W, SOUNDING 2450 FM, WIND 320 FORCE 4, WEATHER CLOUDY, SEA VERY ROUGH, WIRE ANGLE 26.

| Z | T | S | OXY | PHO | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 14.48 | 33.101 | 6.49 | 0.63 | 2 | 0.13 | 330.8 | 0 | 14.48 | 33.10 | 6.49 | 24.64 | 330.9 | 0 |
| 11 | 14.42 | 33.096 | 6.80 | 0.64 | 1 | 0.11 | 330.0 | 10 | 14.43 | 33.10 | 6.78 | 24.65 | 329.9 | .033 |
| 34 | 10.55 | 33.563 | 6.17 | 1.50 | 16 | 0.27 | 224.6 | 20 | 14.40 | 33.10 | 6.80 | 24.66 | 329.3 | .066 |
| 62 | 8.95 | 33.855 | 4.25 | 2.08 | 32 | 0.36 | 177.8 | 30 | 12.20 | 33.32 | 6.62 | 25.27 | 271.2 | .096 |
| 70 | 8.76 | 33.887 | 4.17 | 2.16 | 36 | 0.02 | 172.5 | 50 | 9.43 | 33.77 | 4.77 | 26.11 | 191.4 | .143 |
| 89 | 8.41 | 33.940 | 3.24 | 2.22 | 37 | 0.02 | 163.5 | 75 | 8.64 | 33.91 | 3.97 | 26.34 | 169.1 | .188 |
| 102 | 8.29 | 33.948 | 2.91 | 2.25 | 39 | 0.02 | 161.2 | 100 | 8.31 | 33.95 | 2.92 | 26.42 | 161.3 | .230 |
| 117 | 8.02 | 33.975 | 2.89 | 2.29 | 41 | 0.01 | 155.3 | 125 | 7.93 | 33.99 | 2.76 | 26.51 | 152.9 | .269 |
| 144 | 7.74 | 34.006 | 2.52 | 2.37 | 45 | 0.01 | 149.1 | 150 | 7.67 | 34.01 | 2.50 | 26.57 | 147.8 | .308 |
| 162 | 7.54 | 34.017 | 2.48 | 2.43 | 46 | 0.01 | 145.5 | 200 | 7.33 | 34.07 | 1.90 | 26.66 | 138.7 | .381 |
| 189 | 7.44 | 34.057 | 2.06 | - | - | - | 141.2 | 250 | 6.88 | 34.10 | 1.62 | 26.75 | 130.6 | .450 |
| 221 | 7.12 | 34.082 | 1.76 | - | - | - | 135.1 | 300 | 6.50 | 34.13 | 1.29 | 26.82 | 123.5 | .515 |
| 248 | 6.90 | 34.095 | 1.63 | - | - | - | 131.2 | 400 | 5.77 | 34.19 | .74 | 26.96 | 110.1 | .637 |
| 293 | 6.57 | 34.128 | 1.32 | - | - | - | 124.5 | 500 | 5.28 | 34.25 | .56 | 27.07 | 100.0 | .747 |
| 353 | 6.11 | 34.166 | 1.00 | - | - | - | 116.0 | 600 | 4.87 | 34.31 | .46 | 27.17 | 91.0 | .849 |
| 445 | 5.52 | 34.213 | .60 | - | - | - | 105.5 | | | | | | | |
| 531 | 5.16 | 34.271 | .54 | - | - | - | 97.1 | | | | | | | |
| 603 | 4.86 | 34.311 | .45 | - | - | - | 90.8 | | | | | | | |

60.100 CCOFI CRUISE 6407 60.100

ALEXANDER AGASSIZ, JULY 5 1964, 0029 GCT, 36 15N 126 29W, SOUNDING 2478 FM, WIND 320 FORCE 4, WEATHER CLOUDY SEA ROUGH, WIRE ANGLE 27.

| Z | T | S | OXY | PHO | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.10 | 32.795 | 6.37 | 0.41 | 3 | 0.00 | 365.9 | 0 | 15.10 | 32.80 | 6.37 | 24.28 | 365.5 | 0 |
| 9 | 15.04 | 32.800 | 6.39 | 0.46 | 4 | 0.00 | 364.3 | 10 | 15.03 | 32.80 | 6.39 | 24.29 | 364.1 | .036 |
| 32 | 14.86 | 32.857 | 6.29 | 0.43 | 3 | - | 356.4 | 20 | 14.80 | 32.82 | 6.30 | 24.36 | 357.9 | .073 |
| 60 | 11.02 | 32.992 | 6.09 | 0.79 | 00 | 0.73 | 274.7 | 30 | 14.84 | 32.85 | 6.29 | 24.37 | 356.5 | .108 |
| 68 | 10.98 | 33.016 | 6.16 | 0.86 | 7 | 0.68 | 272.2 | 50 | 11.40 | 32.95 | 6.09 | 25.13 | 284.3 | .173 |
| 86 | 10.57 | 33.063 | 6.14 | 1.01 | 9 | 0.04 | 261.9 | 75 | 10.94 | 33.03 | 6.16 | 25.27 | 270.5 | .242 |
| 98 | 10.35 | 33.143 | 5.96 | 1.16 | 11 | 0.04 | 252.4 | 100 | 10.30 | 33.16 | 5.89 | 25.49 | 250.3 | .308 |
| 111 | 10.10 | 33.221 | 5.65 | 1.31 | 14 | 0.01 | 242.6 | 125 | 9.93 | 33.28 | 5.79 | 25.64 | 235.5 | .369 |
| 137 | 9.82 | 33.334 | 5.90 | 1.50 | 18 | 0.01 | 229.8 | 150 | 9.69 | 33.41 | 5.44 | 25.78 | 222.1 | .427 |
| 153 | 9.66 | 33.431 | 5.32 | 1.59 | 20 | 0.01 | 220.1 | 200 | 8.84 | 33.69 | 4.50 | 26.14 | 188.4 | .531 |
| 178 | 9.29 | 33.592 | 4.88 | - | - | - | 202.4 | 250 | 8.24 | 33.91 | 3.48 | 26.40 | 163.3 | .621 |
| 208 | 8.72 | 33.731 | 4.33 | - | - | - | 183.5 | 300 | 7.58 | 34.00 | 2.85 | 26.57 | 147.3 | .701 |
| 233 | 8.42 | 33.851 | 3.79 | - | - | - | 170.2 | 400 | 6.32 | 34.07 | 1.58 | 26.80 | 125.7 | .843 |
| 276 | 7.96 | 33.978 | 3.05 | - | - | - | 154.2 | 500 | 5.64 | 34.14 | 1.00 | 26.94 | 112.4 | .968 |
| 332 | 7.08 | 34.015 | 2.53 | - | - | - | 139.5 | | | | | | | |
| 419 | 6.17 | 34.082 | 1.42 | - | - | - | 123.0 | | | | | | | |
| 499 | 5.65 | 34.137 | 1.01 | - | - | - | 112.7 | | | | | | | |
| 569 | 5.16 | 34.180 | - | - | - | - | 103.9 | | | | | | | |

60.120 CCOFI CRUISE 6407 60.120

ALEXANDER AGASSIZ, JULY 5 1964, 0839 GCT, 35 37N 127 51W, SOUNDING 2470 FM, WIND 320 FORCE 5, WEATHER CLOUDY, SEA MODERATE, WIRE ANGLE 20.

| Z | T | S | OXY | PHO | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.15 | 33.114 | 6.06 | 0.35 | 2 | 0.00 | 364.7 | 0 | 16.15 | 33.11 | 6.06 | 24.28 | 365.0 | 0 |
| 9 | 16.16 | 33.121 | 6.20 | 0.40 | 1 | 0.00 | 364.5 | 10 | 16.16 | 33.12 | 6.20 | 24.29 | 364.5 | .036 |
| 32 | 15.49 | 33.136 | 6.16 | 0.37 | 2 | 0.00 | 349.1 | 20 | 16.10 | 33.13 | 6.20 | 24.31 | 362.5 | .073 |
| 61 | 12.78 | 33.146 | 6.16 | 0.38 | 3 | 0.00 | 294.6 | 30 | 15.52 | 33.14 | 6.16 | 24.45 | 349.4 | .109 |
| 71 | 12.43 | 33.119 | 6.53 | 0.38 | 3 | 0.00 | 290.1 | 50 | 13.40 | 33.15 | 6.16 | 24.90 | 306.0 | .174 |
| 90 | 12.84 | 33.301 | 6.37 | 0.37 | 2 | 0.00 | 284.3 | 75 | 12.45 | 33.14 | 6.52 | 25.08 | 288.9 | .249 |
| 104 | 12.76 | 33.309 | 6.25 | 0.35 | 2 | 0.07 | 282.2 | 100 | 12.80 | 33.31 | 6.30 | 25.14 | 282.9 | .321 |
| 117 | 12.39 | 33.282 | 6.15 | 0.44 | 3 | 0.24 | 277.4 | 125 | 12.00 | 33.30 | 5.94 | 25.29 | 269.0 | .391 |
| 145 | 10.86 | 33.405 | 5.28 | 0.99 | 10 | 0.01 | 241.5 | 150 | 10.56 | 33.44 | 5.11 | 25.66 | 233.9 | .454 |
| 163 | 9.81 | 33.504 | 4.82 | 1.38 | 16 | 0.00 | 217.0 | 200 | 8.81 | 33.75 | 4.34 | 26.19 | 183.5 | .560 |
| 191 | 8.96 | 33.686 | 4.65 | - | - | - | 190.4 | 250 | 8.21 | 33.97 | 3.09 | 26.46 | 158.4 | .648 |
| 223 | 8.53 | 33.885 | 3.37 | - | - | - | 169.3 | 300 | 7.49 | 34.03 | 2.44 | 26.61 | 143.9 | .726 |
| 250 | 8.21 | 33.972 | 3.09 | - | - | - | 158.2 | 400 | 6.37 | 34.10 | 1.42 | 26.82 | 124.1 | .865 |
| 296 | 7.56 | 34.033 | 2.48 | - | - | - | 144.6 | 500 | 5.59 | 34.17 | .83 | 26.97 | 109.5 | .987 |
| 356 | 6.78 | 34.064 | 1.86 | - | - | - | 132.0 | 600 | 5.19 | 34.27 | .57 | 27.10 | 97.5 | 1.098 |
| 451 | 5.97 | 34.138 | 1.00 | - | - | - | 116.4 | | | | | | | |
| 536 | 5.34 | 34.189 | .73 | - | - | - | 105.3 | | | | | | | |
| 609 | 5.18 | 34.283 | .53 | - | - | - | 96.4 | | | | | | | |

| OBSERVED LEVELS OF DEPTH | | | | | | | | STANDARD LEVELS OF DEPTH | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | INPUT | | | | COMPUTED | | | INPUT | | | COMPUTED | |
| Z | T | S | CXY | PHO | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |

60.140 CCOFI CRUISE 6407 60.140

ALEXANDER AGASSIZ, JULY 5 1964, 1712 GCT, 34 56N 129 19W, SOUNDING 2590 FM, WIND 350 FORCE 4, WEATHER CLOUDY, SEA MODERATE, WIRE ANGLE 22.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.96 | 33.187 | 6.00 | 0.35 | 1 | 0.00 | 377.2 | 0 | 16.96 | 33.19 | 6.00 | 24.16 | 377.0 | 0 |
| 10 | 16.95 | 33.187 | 6.16 | 0.37 | 1 | 0.00 | 377.0 | 10 | 16.95 | 33.19 | 6.16 | 24.16 | 376.8 | .038 |
| 33 | 15.94 | 33.165 | 6.19 | 0.35 | 1 | 0.00 | 356.5 | 20 | 16.10 | 33.17 | 6.19 | 24.34 | 359.6 | .075 |
| 62 | 13.32 | 33.145 | 6.09 | 0.41 | 1 | 0.00 | 304.8 | 30 | 16.00 | 33.17 | 6.19 | 24.36 | 357.4 | .110 |
| 71 | 13.03 | 33.134 | 6.47 | 0.35 | 1 | 0.00 | 300.2 | 50 | 13.94 | 33.15 | 6.10 | 24.79 | 316.5 | .178 |
| 89 | 12.58 | 33.114 | 6.44 | 0.38 | 2 | 0.00 | 293.2 | 75 | 12.94 | 33.13 | 6.47 | 24.98 | 298.8 | .255 |
| 103 | 12.29 | 33.084 | 6.30 | 0.41 | 2 | 0.05 | 290.2 | 100 | 12.36 | 33.09 | 6.32 | 25.06 | 291.0 | .330 |
| 117 | 12.02 | 33.068 | 6.34 | 0.48 | 2 | 0.42 | 286.5 | 125 | 11.84 | 33.08 | 6.27 | 25.15 | 282.4 | .402 |
| 144 | 11.29 | 33.159 | 5.74 | 0.82 | 7 | 0.02 | 267.0 | 150 | 10.93 | 33.24 | 5.36 | 25.44 | 254.9 | .470 |
| 162 | 10.16 | 33.516 | 4.31 | 1.63 | 17 | 0.00 | 221.7 | 200 | 9.48 | 33.90 | 2.65 | 26.20 | 182.5 | .581 |
| 189 | 9.67 | 33.856 | 3.01 | - | - | - | 188.8 | 250 | 8.93 | 34.03 | 1.99 | 26.39 | 164.5 | .670 |
| 220 | 9.19 | 33.961 | 2.23 | - | - | - | 173.5 | 300 | 8.53 | 34.09 | 1.87 | 26.50 | 154.1 | .752 |
| 247 | 8.96 | 34.019 | 2.00 | - | - | - | 165.7 | 400 | 7.59 | 34.13 | 1.49 | 26.67 | 137.8 | .904 |
| 293 | 8.59 | 34.084 | 1.90 | - | - | - | 155.4 | 500 | 6.84 | 34.19 | .98 | 26.82 | 123.3 | 1.041 |
| 353 | 8.08 | 34.113 | 1.67 | - | - | - | 145.9 | 600 | 5.87 | 34.23 | .69 | 26.98 | 108.3 | 1.165 |
| 446 | 7.17 | 34.145 | 1.29 | - | - | - | 131.0 | | | | | | | |
| 528 | 6.67 | 34.209 | .87 | - | - | - | 119.7 | | | | | | | |
| 599 | 5.88 | 34.227 | .69 | - | - | - | 108.7 | | | | | | | |

60.160 CCOFI CRUISE 6407 60.160

ALEXANDER AGASSIZ, JULY 6 1964, 0051 GCT, 34 16N 130 42W, SOUNDING 2700 FM, WIND 360 FORCE 3, WEATHER PARTLY CLOUDY, SEA ROUGH, WIRE ANGLE 13.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.54 | 33.420 | 5.82 | 0.28 | 2 | 0.00 | 396.6 | 0 | 18.54 | 33.42 | 5.82 | 23.95 | 396.6 | 0 |
| 10 | 17.06 | 33.347 | 6.11 | 0.32 | 2 | 0.00 | 367.8 | 10 | 17.06 | 33.35 | 6.11 | 24.26 | 367.6 | .038 |
| 29 | 16.53 | 33.358 | 6.05 | 0.29 | 1 | 0.00 | 355.2 | 20 | 16.77 | 33.35 | 6.08 | 24.32 | 361.1 | .075 |
| 59 | 15.23 | 33.710 | 5.85 | 0.22 | 2 | 0.00 | 301.6 | 30 | 16.50 | 33.36 | 6.04 | 24.39 | 354.4 | .111 |
| 68 | 14.84 | 33.657 | 6.27 | 0.22 | 2 | 0.00 | 297.4 | 50 | 14.91 | 33.56 | 5.86 | 24.90 | 306.0 | .177 |
| 83 | 14.43 | 33.605 | 6.25 | 0.25 | - | - | 292.9 | 75 | 14.50 | 33.62 | 6.26 | 25.04 | 293.2 | .252 |
| 98 | 14.00 | 33.545 | 6.17 | 0.26 | 2 | 0.00 | 288.7 | 100 | 13.90 | 33.53 | 6.17 | 25.09 | 287.8 | .325 |
| 112 | 13.49 | 33.465 | 6.19 | 0.32 | 2 | - | 284.6 | 125 | 13.30 | 33.55 | 6.00 | 25.23 | 274.7 | .396 |
| 136 | 12.64 | 33.629 | 5.61 | 0.60 | 5 | 0.08 | 256.5 | 150 | 11.23 | 33.61 | 5.40 | 25.67 | 232.7 | .461 |
| 156 | 10.83 | 33.608 | 5.35 | 0.92 | 9 | 0.02 | 226.0 | 200 | 9.05 | 33.78 | 4.84 | 26.18 | 184.8 | .567 |
| 186 | 9.58 | 33.725 | 5.16 | - | - | - | 197.1 | 250 | 8.09 | 33.96 | 3.63 | 26.47 | 157.4 | .654 |
| 214 | 8.61 | 33.851 | 4.32 | - | - | - | 173.0 | 300 | 7.27 | 33.99 | 3.46 | 26.61 | 143.9 | .732 |
| 242 | 8.21 | 33.952 | 3.66 | - | - | - | 159.7 | 400 | 6.08 | 34.06 | 1.9 | 26.82 | 123.6 | .871 |
| 291 | 7.40 | 33.990 | 3.55 | - | - | - | 145.6 | 500 | 5.21 | 34.14 | 1.04 | 26.99 | 107.5 | .992 |
| 344 | 6.69 | 34.012 | 2.47 | - | - | - | 134.7 | 600 | 4.82 | 34.21 | .67 | 27.09 | 98.0 | 1.100 |
| 426 | 5.82 | 34.083 | 1.6 | - | - | - | 118.7 | | | | | | | |
| 511 | 5.12 | 34.146 | .98 | - | - | - | 106.0 | | | | | | | |
| 594 | 4.84 | 34.208 | .68 | - | - | - | 98.3 | | | | | | | |

60.180 CCOFI CRUISE 6407 60.180

ALEXANDER AGASSIZ, JULY 6 1964, 0854 GCT, 33 36N 132 04W, SOUNDING 2710 FM, WIND 330 FORCE 4, WEATHER MISSING, SEA SLIGHT, WIRE ANGLE 05.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.83 | 33.799 | 5.80 | 0.22 | 3 | 0.00 | 376.0 | 0 | 18.83 | 33.80 | 5.80 | 24.17 | 375.9 | 0 |
| 10 | 18.82 | 33.801 | 5.97 | 0.24 | 2 | 0.00 | 375.6 | 10 | 18.82 | 33.80 | 5.97 | 24.17 | 375.7 | .038 |
| 30 | 17.78 | 33.807 | 5.91 | 0.22 | 2 | 0.00 | 350.7 | 20 | 18.80 | 33.80 | 5.97 | 24.18 | 375.2 | .075 |
| 61 | 15.72 | 33.794 | 5.78 | 0.22 | 2 | 0.00 | 305.8 | 30 | 17.78 | 33.81 | 5.91 | 24.44 | 350.5 | .112 |
| 71 | 15.82 | 33.928 | 6.13 | 0.20 | 2 | 0.00 | 298.2 | 50 | 16.40 | 33.76 | 5.83 | 24.72 | 323.0 | .179 |
| 85 | 15.90 | 34.024 | 6.06 | 0.17 | 2 | 0.00 | 292.9 | 75 | 15.86 | 33.94 | 6.13 | 24.98 | 298.2 | .257 |
| 100 | 15.82 | 34.068 | 5.98 | 0.16 | 2 | 0.00 | 288.0 | 100 | 15.82 | 34.07 | 5.98 | 25.09 | 287.8 | .331 |
| 116 | 15.75 | 34.112 | 6.00 | 0.17 | 3 | 0.00 | 283.3 | 125 | 15.68 | 34.11 | 5.97 | 25.16 | 281.9 | .403 |
| 141 | 14.90 | 34.115 | 5.64 | 0.30 | 4 | 0.13 | 265.2 | 150 | 14.06 | 34.02 | 5.53 | 25.44 | 255.1 | .471 |
| 160 | 13.09 | 33.893 | 5.45 | 0.58 | 6 | 0.02 | 245.5 | 200 | 10.44 | 33.82 | 5.26 | 25.98 | 203.8 | .588 |
| 190 | 10.86 | 33.790 | 5.25 | - | - | - | 213.1 | 250 | 9.58 | 34.00 | 5.27 | 26.26 | 176.7 | .686 |
| 220 | 9.88 | 33.933 | 5.27 | - | - | - | 186.4 | 300 | 8.76 | 34.03 | 4.73 | 26.42 | 161.9 | .773 |
| 250 | 9.58 | 34.001 | 5.27 | - | - | - | 176.6 | 400 | 6.84 | 33.99 | 3.33 | 26.67 | 138.3 | .929 |
| 300 | 8.76 | 34.027 | 4.73 | - | - | - | 162.2 | 500 | 5.45 | 34.02 | 2.06 | 26.87 | 119.2 | 1.063 |
| 355 | 7.66 | 34.008 | 3.93 | - | - | - | 147.8 | 600 | 4.86 | 34.13 | .98 | 27.02 | 104.4 | 1.181 |
| 439 | 6.20 | 33.983 | 2.84 | - | - | - | 130.8 | | | | | | | |
| 523 | 5.24 | 34.044 | 1.76 | - | - | - | 115.0 | | | | | | | |
| 609 | 4.82 | 34.137 | .89 | - | - | - | 103.5 | | | | | | | |

| 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 |
| 60.190 | | | | | | | CCOFI CRUISE 6407 | | | | | | 60.190 | |

ALEXANDER AGASSIZ, JULY 6 1964, 1335 1530 GCT, 33 17N 132 42.5W, SOUNDING 2670 FM, WIND 010 FORCE 3, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 07 13.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.80 | 33.695 | 5.75 | 0.34 | 2 | 0.00 | 382.8 | 0 | 18.80 | 33.70 | 5.75 | 24.10 | 382.4 | 0 |
| 10 | 18.78 | 33.689 | 5.88 | 0.30 | 2 | 0.00 | 382.8 | 10 | 18.78 | 33.69 | 5.88 | 24.10 | 382.7 | .038 |
| 30 | 17.34 | 33.698 | 5.90 | 0.30 | 2 | 0.00 | 348.5 | 20 | 17.73 | 33.70 | 5.90 | 24.36 | 357.3 | .075 |
| 60 | 15.06 | 33.658 | 5.75 | 0.27 | 2 | 0.00 | 301.9 | 30 | 17.34 | 33.70 | 5.90 | 24.46 | 348.4 | .111 |
| 80 | 14.98 | 33.725 | 6.09 | 0.21 | 2 | 0.00 | 295.3 | 50 | 15.65 | 33.67 | 5.80 | 24.82 | 313.4 | .177 |
| 94 | 15.32 | 33.892 | 6.02 | 0.23 | 2 | 0.00 | 290.2 | 75 | 14.98 | 33.70 | 6.04 | 24.99 | 297.2 | .254 |
| 108 | 15.66 | 34.075 | 5.92 | 0.20 | 2 | 0.00 | 284.0 | 100 | 15.50 | 33.98 | 5.98 | 25.10 | 287.6 | .328 |
| 132 | 16.04 | 34.317 | 5.85 | 0.17 | 2 | 0.00 | 274.5 | 125 | 15.83 | 34.22 | 5.88 | 25.21 | 277.1 | .399 |
| 152 | 16.27 | 34.426 | 5.70 | 0.18 | 3 | 0.07 | 271.6 | 150 | 16.27 | 34.43 | 5.72 | 25.27 | 271.3 | .469 |
| 176 | 12.47 | 33.803 | 5.45 | 0.65 | 6 | 0.02 | 240.5 | 200 | 10.84 | 33.79 | 5.32 | 25.88 | 212.7 | .592 |
| 205 | 10.61 | 33.794 | 5.29 | 1.00 | 11 | - | 208.6 | 250 | 9.34 | 33.93 | 5.02 | 26.25 | 178.1 | .692 |
| 268 | 8.98 | 33.966 | 4.88 | 1.44 | 21 | - | 170.0 | 300 | 8.50 | 33.99 | 4.50 | 26.43 | 161.1 | .779 |
| 340 | 7.96 | 33.992 | 4.07 | 1.79 | 32 | - | 153.2 | 400 | 6.92 | 33.99 | 3.37 | 26.66 | 139.3 | .935 |
| 436 | 6.38 | 33.986 | 2.93 | 2.45 | 51 | - | 132.8 | 500 | 5.76 | 34.03 | 2.00 | 26.84 | 122.0 | 1.072 |
| 532 | 5.44 | 34.066 | 1.57 | 2.94 | 72 | - | 115.6 | 600 | 4.80 | 34.12 | 1.19 | 27.02 | 104.5 | 1.191 |
| 628 | 4.58 | 34.137 | 1.05 | 3.17 | 90 | - | 100.9 | 700 | 4.30 | 34.21 | .66 | 27.15 | 92.6 | 1.296 |
| 748 | 4.19 | 34.259 | .55 | 3.39 | 104 | - | 87.8 | 800 | 4.09 | 34.31 | .56 | 27.25 | 83.0 | 1.391 |
| 871 | 3.98 | 34.363 | .56 | 3.43 | 113 | - | 77.9 | 1000 | 3.64 | 34.43 | .58 | 27.39 | 69.6 | 1.559 |
| 1018 | 3.60 | 34.439 | .58 | 3.46 | 122 | - | 68.5 | 1200 | 3.20 | 34.50 | .96 | 27.49 | 60.3 | 1.705 |
| 1161A | 3.28 | 34.490 | .90 | 3.33 | 127 | - | 61.7 | 1500 | 2.65 | 34.56 | 1.30 | 27.59 | 51.0 | 1.898 |
| 1167 | 3.29 | 34.492 | .85 | 3.37 | 130 | - | 61.7 | 2000 | 1.99 | 34.62 | 2.00 | 27.69 | 41.3 | 2.173 |
| 1369A | 2.88 | 34.535 | 1.14 | 3.24 | 132 | - | 54.8 | 2500 | 1.71 | 34.65 | 2.52 | 27.74 | 37.0 | 2.413 |
| 1610A | 2.46 | 34.579 | 1.45 | 3.05 | 146 | - | 48.1 | 3000 | 1.59 | 34.67 | 2.97 | 27.76 | 34.6 | 2.640 |
| 1859A | 2.13 | 34.577U | 1.47U | 3.19U | 147U | - | 45.6 | 4000 | 1.51 | 34.69 | 3.49 | 27.78 | 32.6 | 3.088 |
| 2106A | 1.89 | 34.633 | 2.12 | 3.00 | 157 | - | 39.6 | | | | | | | |
| 2353A | 1.79 | 34.651 | 2.41 | 2.95 | 157 | - | 37.5 | | | | | | | |
| 2599A | 1.68 | 34.649 | 2.58 | 2.88 | 159 | - | 36.9 | | | | | | | |
| 2797A | 1.64 | 34.666 | 2.73 | 2.73 | 160 | - | 35.3 | | | | | | | |
| 2994A | 1.59 | 34.673 | 2.96 | 2.80 | 159 | - | 34.4 | | | | | | | |
| 3191A | 1.55 | 34.687 | 3.18 | 2.80 | 159 | - | 33.1 | | | | | | | |
| 3388A | 1.52 | 34.680 | 3.27 | 2.75 | 156 | - | 33.4 | | | | | | | |
| 3586A | 1.49 | 34.680 | 3.36 | 2.76 | 153 | - | 33.2 | | | | | | | |
| 3782A | 1.50 | 34.684 | 3.42 | 2.74 | 150 | - | 32.9 | | | | | | | |
| 3929A | 1.52 | 34.684 | 3.46 | 2.73 | 152 | - | 33.1 | | | | | | | |
| 4076A | 1.51 | 34.687 | 3.52 | 2.72 | 149 | - | 32.8 | | | | | | | |
| 4272A | 1.52 | 34.687 | 3.60 | 2.70 | 147 | - | 32.9 | | | | | | | |
| 4469A | 1.53 | 34.690 | 3.66 | 2.68 | 144 | - | 32.7 | | | | | | | |
| 4665A | 1.56 | 34.691 | 3.66 | 2.71 | 142 | - | 32.8 | | | | | | | |
| 4864A | 1.58 | 34.690 | 3.71 | 2.70 | 143 | - | 33.0 | | | | | | | |
| 4963A | 1.60 | 34.689 | 3.75 | 2.67 | 144 | - | 33.3 | | | | | | | |

63.52 CCOFI CRUISE 6407 63.52

ALEXANDER AGASSIZ, JUNE 30 1964, 2150 GCT, 37 18.5N 122 36.5W, SOUNDING 48 FM, WIND 320 FORCE 3, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 13.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 11.58 | 33.769 | 6.72 | 0.84 | 7 | 0.26 | 227.0 | 0 | 11.58 | 33.77 | 6.72 | 25.73 | 226.9 | 0 |
| 10 | 11.48 | 33.775 | 6.92 | 0.81 | 8 | 0.25 | 224.8 | 10 | 11.48 | 33.78 | 6.92 | 25.76 | 224.5 | .023 |
| 20 | 11.21 | 33.874 | 7.02 | 0.73 | 9 | 0.20 | 212.8 | 20 | 11.21 | 33.87 | 7.02 | 25.88 | 213.1 | .044 |
| 29 | 10.60 | 33.897 | 5.46 | 1.33 | 15 | 0.21 | 200.8 | 30 | 10.54 | 33.90 | 5.29 | 26.02 | 199.6 | .065 |
| 49 | 8.90 | 33.992 | 1.77 | 2.97 | 37 | 0.28 | 166.8 | 50 | 8.86 | 33.99 | 1.67 | 26.37 | 166.4 | .102 |
| 73 | 8.37 | 34.012 | .60 | 3.54 | 58 | 0.59 | 157.5 | 75 | 8.35 | 34.01 | .58 | 26.47 | 157.4 | .143 |

63.55 CCOFI CRUISE 6407 63.55

ALEXANDER AGASSIZ, JUNE 30 1964, 2131 GCT, 37 12.5N 122 49.5W, SOUNDING 145 FM, WIND 310 FORCE 3, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 23.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.97 | 33.362 | 6.41 | 0.56 | 2 | 0.07 | 301.5 | 0 | 13.97 | 33.36 | 6.41 | 24.95 | 301.7 | 0 |
| 10 | 13.71 | 33.359 | 6.63 | 0.57 | 3 | 0.08 | 296.7 | 10 | 13.71 | 33.36 | 6.63 | 25.00 | 296.6 | .030 |
| 28 | 11.02 | 33.474 | 6.35 | 1.06 | 9 | 0.26 | 239.1 | 20 | 13.00 | 33.42 | 6.60 | 25.19 | 278.6 | .059 |
| 42 | 9.64 | 33.509 | 4.74 | 1.49 | 17 | 0.37 | 214.0 | 30 | 11.00 | 33.48 | 6.32 | 25.61 | 238.3 | .085 |
| 50 | 9.45 | 33.602 | 4.56 | 1.67 | 21 | 0.06 | 204.1 | 50 | 9.45 | 33.60 | 4.56 | 25.97 | 204.3 | .129 |
| 64 | 9.86 | 33.763 | 4.72 | 1.88 | 23 | 0.36 | 198.7 | 75 | 9.59 | 33.80 | 4.40 | 26.10 | 191.7 | .179 |
| 77 | 9.54 | 33.810 | 4.34 | 1.94 | 26 | 0.35 | 190.1 | 100 | 9.03 | 33.90 | 3.70 | 26.27 | 175.6 | .225 |
| 96 | 9.15 | 33.888 | 3.80 | 2.14 | 29 | 0.39 | 178.3 | 125 | 8.27 | 33.96 | 2.93 | 26.44 | 160.0 | .268 |
| 118 | 8.41 | 33.936 | 3.10 | 2.20 | 33 | 0.02 | 163.8 | 150 | 7.90 | 34.04 | 2.49 | 26.56 | 148.8 | .307 |
| 138 | 8.06 | 34.015 | 2.66 | 2.31 | 39 | 0.02 | 152.9 | 200 | 7.43 | 34.07 | 2.10 | 26.65 | 140.1 | .380 |
| 169 | 7.70 | 34.053 | 2.32 | - | - | - | 145.0 | | | | | | | |
| 197 | 7.44 | 34.065 | 2.14 | - | - | - | 140.6 | | | | | | | |
| 238 | 7.40 | 34.113 | 1.56 | - | - | - | 136.5 | | | | | | | |

A) OVERLAPPING CASTS, RECONCILIATION OF PROPERTY CURVES WHEN NECESSARY.

| 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 |

63.60 CCOFI CRUISE 6407 63.60

ALEXANDER AGASSIZ, JUNE 30 1964, 1834 GCT, 37 02.5N 123 11.5W, SOUNDING 1385 FM, WIND 320 FORCE 5, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 23.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.02 | 33.320 | 6.36 | 0.60 | 2 | 0.08 | 305.6 | 0 | 14.02 | 33.32 | 6.36 | 24.91 | 305.6 | 0 |
| 10 | 13.96 | 33.311 | 6.70 | 0.61 | 2 | 0.09 | 305.1 | 10 | 13.96 | 33.31 | 6.70 | 24.91 | 305.1 | .031 |
| 33 | 12.66 | 33.468 | 6.48 | 0.87 | 4 | 0.20 | 268.7 | 20 | 13.90 | 33.31 | 6.70 | 24.92 | 304.0 | .061 |
| 42 | 11.38 | 33.491 | 5.58 | 1.14 | 9 | 0.34 | 244.0 | 30 | 13.05 | 33.42 | 6.58 | 25.18 | 279.5 | .090 |
| 56 | 10.20 | 33.547 | 5.33 | 1.47 | 14 | 0.50 | 220.1 | 50 | 10.64 | 33.52 | 5.44 | 25.71 | 229.3 | .141 |
| 70 | 9.78 | 33.656 | 4.78 | 1.68 | 19 | 0.51 | 205.3 | 75 | 9.50 | 33.72 | 4.42 | 26.06 | 196.2 | .195 |
| 92 | 9.34 | 33.859 | 3.81 | 2.11 | 30 | 0.38 | 180.4 | 100 | 9.14 | 33.92 | 3.53 | 26.27 | 175.8 | .242 |
| 110 | 8.93 | 33.929 | 3.29 | 2.21 | 32 | 0.34 | 172.0 | 125 | 8.60 | 33.93 | 3.03 | 26.36 | 167.0 | .285 |
| 128 | 8.54 | 33.932 | 3.00 | 2.21 | 35 | 0.10 | 166.0 | 150 | 8.19 | 33.96 | 2.91 | 26.45 | 158.8 | .326 |
| 155 | 8.12 | 33.963 | 2.90 | 2.22 | 37 | 0.03 | 157.6 | 200 | 7.56 | 34.01 | 2.68 | 26.58 | 146.3 | .404 |
| 183 | 7.75 | 34.000 | 2.84 | - | - | - | 149.7 | 250 | 7.10 | 34.05 | 2.04 | 26.68 | 137.2 | .477 |
| 219 | 7.38 | 34.026 | 2.45 | - | - | - | 142.7 | 300 | 6.67 | 34.10 | 1.52 | 26.78 | 127.9 | .545 |
| 246 | 7.12 | 34.048 | 2.09 | - | - | - | 137.6 | 400 | 5.90 | 34.17 | .86 | 26.93 | 113.2 | .670 |
| 292 | 6.75 | 34.090 | 1.60 | - | - | - | 129.7 | 500 | 5.41 | 34.24 | .54 | 27.05 | 102.2 | .784 |
| 353 | 6.18 | 34.128 | 1.12 | - | - | - | 119.7 | 600 | 4.86 | 34.28 | .43 | 27.14 | 93.2 | .888 |
| 449 | 5.66 | 34.204 | .62 | - | - | - | 107.8 | | | | | | | |
| 535 | 5.22 | 34.260 | .50 | - | - | - | 98.6 | | | | | | | |
| 607 | 4.81 | 34.282 | .41 | - | - | - | 92.5 | | | | | | | |

63.200 CCOFI CRUISE 6407 63.200

ALEXANDER AGASSIZ, JULY 7 1964, 0127 0333 GCT, 32 21.5N 133 00W, SOUNDING 2560 FM, WIND 320 FORCE 3, WEATHER CLOUDY, SEA MODERATE, WIRE ANGLE 24 11.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.20 | 33.845 | 5.74 | 0.57 | 2 | 0.00 | 381.6 | 0 | 19.20 | 33.84 | 5.74 | 24.11 | 381.9 | 0 |
| 9 | 18.90 | 33.834 | 5.87 | 0.50 | 2 | 0.00 | 375.1 | 10 | 18.88 | 33.83 | 5.87 | 24.18 | 374.9 | .038 |
| 28 | 17.71 | 33.852 | 5.86 | 0.46 | 2 | 0.00 | 345.8 | 20 | 18.02 | 33.85 | 5.87 | 24.41 | 353.1 | .074 |
| 56 | 16.02 | 33.794 | 5.70 | 0.42 | 2 | 0.00 | 312.3 | 30 | 17.68 | 33.85 | 5.86 | 24.49 | 345.2 | .109 |
| 73 | 15.78 | 33.845 | 6.03 | 0.41 | 2 | 0.00 | 303.4 | 50 | 16.50 | 33.80 | 5.74 | 24.73 | 322.3 | .176 |
| 86 | 15.76 | 33.860 | 6.00 | 0.35 | 2 | 0.00 | 301.9 | 75 | 15.77 | 33.85 | 6.02 | 24.94 | 302.8 | .255 |
| 100 | 15.74 | 33.883 | 5.93 | 0.30 | 2 | 0.00 | 299.8 | 100 | 15.74 | 33.88 | 5.93 | 24.97 | 300.0 | .331 |
| 124 | 15.84 | 34.024 | 5.84 | 0.35 | 2 | 0.01 | 291.6 | 125 | 15.83 | 34.03 | 5.84 | 25.06 | 291.0 | .406 |
| 141 | 15.50 | 34.039 | 5.70 | 0.37 | 3 | 0.11 | 283.3 | 150 | 15.65 | 34.13 | 5.67 | 25.18 | 279.8 | .478 |
| 162 | 15.99 | 34.298 | 5.66 | 0.35 | 3 | 0.13 | 274.8 | 200 | 12.90 | 33.91 | 5.34 | 25.59 | 240.7 | .610 |
| 189 | 13.92 | 33.995 | 5.46 | 0.51 | 5 | 0.02 | 254.1 | 250 | 9.72 | 33.82 | 4.84 | 26.10 | 192.2 | .721 |
| 247 | 9.80 | 33.818 | 4.87 | 1.39 | 15 | 0.00 | 193.6 | 300 | 9.09 | 33.95 | 4.47 | 26.30 | 172.8 | .815 |
| 313 | 8.92 | 33.982 | 4.33 | 1.66 | 23 | - | 167.9 | 400 | 7.33 | 34.02 | 3.10 | 26.62 | 142.5 | .979 |
| 399 | 7.34 | 34.015 | 3.11 | 2.29 | 41 | - | 143.0 | 500 | 6.08 | 34.07 | 1.56 | 26.83 | 122.8 | 1.118 |
| 490 | 6.18 | 34.070 | 1.65 | 2.91 | 60 | - | 124.0 | 600 | 5.28 | 34.15 | .93 | 26.99 | 107.5 | 1.240 |
| 578 | 5.40 | 34.124 | 1.01 | 3.68U | 73 | - | 110.8 | 700 | 4.88 | 34.25 | .55 | 27.12 | 95.6 | 1.348 |
| 690 | 4.91 | 34.243 | .56 | 3.36 | 87 | - | 96.5 | 800 | 4.48 | 34.33 | .43 | 27.22 | 85.4 | 1.447 |
| 803 | 4.46 | 34.331 | .43 | 3.41 | 97 | - | 85.1 | 1000 | 3.84 | 34.44 | .62 | 27.38 | 70.7 | 1.619 |
| 943 | 3.95 | 34.407 | .52 | 3.45 | 110 | - | 74.3 | 1200 | 3.31 | 34.51 | .97 | 27.49 | 60.5 | 1.768 |
| 1087 | 3.67 | 34.480 | .82 | 3.41 | 115 | - | 66.1 | 1500 | 2.76 | 34.56 | 1.35 | 27.58 | 51.9 | 1.964 |
| 1175A | 3.38 | 34.503 | .96 | 3.71U | 121 | - | 61.7 | 2000 | 2.06 | 34.62 | 1.91 | 27.68 | 41.8 | 2.244 |
| 1373A | 2.96 | 34.546 | 1.18 | 3.33 | 132 | - | 54.7 | 2500 | 1.75 | 34.64 | 2.20 | 27.72 | 38.0 | 2.489 |
| 1622A | 2.56 | 34.577 | 1.48 | 3.10 | 141 | - | 49.0 | 3000 | 1.62 | 34.67 | 2.80 | 27.76 | 34.8 | 2.720 |
| 1869A | 2.19 | 34.523U | 1.06U | 3.26U | 125U | - | 50.2 | 4000 | 1.51 | 34.69 | 3.46 | 27.78 | 32.6 | 3.170 |
| 2116A | 1.96 | 34.626 | 2.00 | 3.01 | 156 | - | 40.6 | | | | | | | |
| 2314A | 1.86 | 34.640 | 2.14 | 2.93 | 162 | - | 38.8 | | | | | | | |
| 2510A | 1.74 | 34.640 | 2.28 | 2.99 | 156 | - | 38.0 | | | | | | | |
| 2707A | 1.67 | 34.657 | 2.56 | 2.84 | 162 | - | 36.2 | | | | | | | |
| 2903A | 1.65 | 34.666 | 2.73 | 2.78 | 160 | - | 35.4 | | | | | | | |
| 3100A | 1.58 | 34.673 | 2.92 | 2.76 | 162 | - | 34.3 | | | | | | | |
| 3297A | 1.54 | 34.676 | 3.09 | 2.75 | 159 | - | 33.8 | | | | | | | |
| 3492A | 1.50 | 34.676 | 3.24 | 2.71 | 154 | - | 33.6 | | | | | | | |
| 3688A | 1.51 | 34.687 | 3.29 | 2.72 | 156 | - | 32.8 | | | | | | | |
| 3883A | 1.51 | 34.685 | 3.44 | 2.75 | 152 | - | 32.9 | | | | | | | |
| 4029A | 1.52 | 34.690 | 3.47 | 2.76 | 149 | - | 32.6 | | | | | | | |
| 4175A | 1.52 | 34.689 | 3.42 | 2.68 | 150 | - | 32.7 | | | | | | | |
| 4370A | 1.55 | 34.689 | 3.50 | 2.68 | 149 | - | 32.9 | | | | | | | |
| 4564A | 1.58 | 34.689 | 3.59 | 2.68 | 147 | - | 33.1 | | | | | | | |
| 4757A | 1.60 | 34.690 | 3.54 | 2.69 | 147 | - | 33.2 | | | | | | | |
| 4854A | 1.60 | - | 3.47 | 3.28 | 188 | - | - | | | | | | | |

67.50 CCOFI CRUISE 6407 67.50

ALEXANDER AGASSIZ, JUNE 30 1964, 0757 GCT, 36 49N 122 04.5W, SOUNDING 55 FM, WIND 320 FORCE 5, WEATHER MISSING, SEA SLIGHT, WIRE ANGLE 10.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.31 | 33.872 | 7.55 | - | 7 | 0.15 | 232.5 | 0 | 12.31 | 33.87 | 7.55 | 25.67 | 232.7 | 0 |
| 10 | 12.14 | 33.861 | 7.57 | 0.62 | 8 | 0.16 | 230.2 | 10 | 12.14 | 33.86 | 7.57 | 25.70 | 230.3 | .023 |
| 20 | 11.54 | 33.848 | 6.96 | 0.90 | 11 | 0.22 | 220.5 | 20 | 11.54 | 33.85 | 6.96 | 25.80 | 220.3 | .046 |
| 30 | 9.66 | 33.859 | 4.30 | 1.91 | 27 | 0.31 | 188.4 | 30 | 9.66 | 33.86 | 4.30 | 26.14 | 188.3 | .066 |
| 49 | 9.28 | 33.899 | 3.79 | 2.66U | 30 | 0.33 | 179.5 | 50 | 9.27 | 33.90 | 3.78 | 26.23 | 179.3 | .103 |
| 74 | 9.10 | 33.926 | 3.44 | 2.17U | 33 | 0.36 | 174.8 | 75 | 9.09 | 33.93 | 3.42 | 26.29 | 174.3 | .148 |

A) MULTIPLE CAST, RECONCILIATION OF PROPERTY CURVES WHEN NECESSARY.

| 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 |

67.55 CCOFI CRUISE 6407 67.55

ALEXANDER AGASSIZ, JUNE 30 1964, 1032 GCT, 36 39N 122 26W, SOUNDING 1110 FM, WIND 330 FORCE 4, WEATHER MISSING, SEA ROUGH, WIRE ANGLE 35.

| Z | T | S | OXY | PHO | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.06 | 33.578 | 6.83 | 0.75 | 3 | 0.15 | 268.1 | 0 | 13.06 | 33.58 | 6.83 | 25.30 | 267.9 | 0 |
| 9 | 13.04 | 33.569 | 6.96 | 0.76 | 4 | 0.15 | 268.4 | 10 | 13.04 | 33.57 | 6.96 | 25.30 | 268.3 | .027 |
| 30 | 10.71 | 33.549 | 6.36 | 1.31 | 3 | 0.47 | 228.3 | 20 | 12.50 | 33.56 | 6.89 | 25.40 | 259.0 | .053 |
| 37 | 10.10 | 33.594 | 5.26 | 1.59 | 5 | 0.65 | 215.0 | 30 | 10.71 | 33.55 | 6.36 | 25.72 | 228.3 | .078 |
| 49 | 9.70 | 33.689 | 4.88 | 1.77 | 7 | 0.04 | 201.6 | 50 | 9.69 | 33.69 | 4.87 | 26.00 | 201.4 | .121 |
| 61 | 9.12 | 33.696 | 4.46 | 1.89 | 8 | 0.03 | 192.1 | 75 | 9.00 | 33.75 | 4.08 | 26.16 | 186.3 | .170 |
| 80 | 9.14 | 33.813 | 3.91 | 1.97 | 9 | 0.17 | 183.7 | 100 | 9.00 | 33.94 | 3.22 | 26.31 | 172.2 | .215 |
| 94 | 9.08 | 33.914 | 3.41 | 2.17 | 10 | 0.46 | 175.3 | 125 | 8.49 | 34.01 | 2.37 | 26.44 | 159.4 | .257 |
| 110 | 8.81 | 33.966 | 2.90 | 2.30 | 11 | 0.08 | 167.4 | 150 | 8.25 | 34.06 | 1.93 | 26.52 | 152.3 | .296 |
| 132 | 8.39 | 34.037 | 2.15 | 2.44 | 13 | 0.02 | 156.0 | 200 | 7.78 | 34.11 | 1.60 | 26.63 | 141.9 | .371 |
| 153 | 8.23 | 34.064 | 1.91 | - | - | - | 151.7 | 250 | 7.33 | 34.15 | 1.35 | 26.72 | 132.8 | .442 |
| 183 | 8.00 | 34.097 | 1.84 | - | - | - | 145.9 | 300 | 7.12 | 34.18 | 1.16 | 26.78 | 127.7 | .509 |
| 206 | 7.71 | 34.119 | 1.57 | - | - | - | 140.3 | 400 | 6.49 | 34.22 | .77 | 26.89 | 116.7 | .636 |
| 245 | 7.37 | 34.151 | 1.37 | - | - | - | 133.2 | 500 | 5.80 | 34.26 | .57 | 27.01 | 105.3 | .753 |
| 297 | 7.14 | 34.182 | 1.18 | - | - | - | 127.9 | | | | | | | |
| 379 | 6.64 | 34.215 | .84 | - | - | - | 118.9 | | | | | | | |
| 456 | 6.10 | 34.250 | .67 | - | - | - | 109.6 | | | | | | | |
| 522 | 5.68 | 34.264 | .53 | - | - | - | 103.6 | | | | | | | |

67.60 CCOFI CRUISE 6407 67.60

ALEXANDER AGASSIZ, JUNE 30 1964, 1323 GCT, 36 29N 122 47.5W, SOUNDING 1560 FM, WIND 330 FORCE 5, WEATHER CLOUDY, SEA ROUGH, WIRE ANGLE 14.

| Z | T | S | OXY | PHO | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.63 | 33.326 | 6.31 | 0.51 | 2 | 0.05 | 317.4 | 0 | 14.63 | 33.33 | 6.31 | 24.79 | 317.1 | 0 |
| 10 | 14.63 | 33.330 | 6.52 | 0.51 | 2 | 0.05 | 317.1 | 10 | 14.63 | 33.33 | 6.52 | 24.79 | 317.1 | .032 |
| 36 | 11.54 | 33.500 | 6.75 | 1.02 | 6 | 0.23 | 246.2 | 20 | 14.63 | 33.33 | 6.52 | 24.79 | 317.1 | .063 |
| 45 | 11.10 | 33.683 | 6.10 | 1.25 | 5 | 0.28 | 225.0 | 30 | 14.63 | 33.33 | 6.52 | 24.79 | 317.1 | .095 |
| 60 | 9.90 | 33.725 | 5.42 | 1.74 | 16 | 0.67 | 202.1 | 50 | 10.20 | 33.72 | 5.64 | 25.94 | 207.3 | .148 |
| 75 | 9.12 | 33.745 | 4.43 | 1.85 | 25 | 0.02 | 188.5 | 75 | 9.12 | 33.74 | 4.43 | 26.13 | 188.9 | .198 |
| 99 | 8.54 | 33.816 | 3.90 | 1.90 | 30 | 0.02 | 174.6 | 100 | 8.52 | 33.82 | 3.86 | 26.29 | 174.0 | .243 |
| 118 | 8.35 | 33.900 | 3.63 | 1.98 | 32 | 0.00 | 165.6 | 125 | 8.31 | 33.93 | 3.34 | 26.41 | 162.8 | .286 |
| 137 | 8.26 | 33.967 | 2.91 | 2.19 | 37 | 0.01 | 159.3 | 150 | 8.18 | 34.00 | 2.72 | 26.48 | 155.7 | .326 |
| 167 | 8.06 | 34.033 | 2.66 | 2.30 | 42 | 0.01 | 151.6 | 200 | 7.34 | 34.01 | 2.79 | 26.61 | 143.3 | .403 |
| 197 | 7.40 | 34.012 | 2.81 | - | - | - | 144.0 | 250 | 6.71 | 34.03 | 2.16 | 26.72 | 133.6 | .474 |
| 236 | 6.85 | 34.024 | 2.39 | - | - | - | 135.9 | 300 | 6.30 | 34.06 | 1.76 | 26.79 | 126.2 | .541 |
| 265 | 6.57 | 34.044 | 1.97 | - | - | - | 130.8 | 400 | 5.51 | 34.15 | .98 | 26.96 | 110.1 | .663 |
| 314 | 6.18 | 34.073 | 1.64 | - | - | - | 123.8 | 500 | 5.28 | 34.25 | .55 | 27.07 | 100.0 | .774 |
| 378 | 5.60 | 34.124 | 1.11 | - | - | - | 113.1 | 600 | 4.89 | 34.35 | .46 | 27.19 | 88.2 | .874 |
| 477 | 5.38 | 34.216 | .62 | - | - | - | 103.7 | | | | | | | |
| 565 | 5.00 | 34.329 | .47 | - | - | - | 91.0 | | | | | | | |
| 639 | 4.82 | 34.365 | .46 | - | - | - | 86.3 | | | | | | | |

70.53 CCOFI CRUISE 6407 70.53

ALEXANDER AGASSIZ, JUNE 29 1964, 2101 GCT, 36 06.5N 121 54W, SOUNDING 566 FM, WIND 310 FORCE 5, WEATHER PARTLY CLOUDY, SEA MODERATE, WIRE ANGLE 42.

| Z | T | S | OXY | PHO | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 11.44 | 33.619 | 6.43 | 1.07 | 10 | 0.30 | 235.6 | 0 | 11.44 | 33.62 | 6.43 | 25.64 | 235.6 | 0 |
| 9 | 11.30 | 33.600 | 6.32 | 1.06 | 11 | 0.29 | 234.6 | 10 | 11.29 | 33.60 | 6.31 | 25.65 | 234.4 | .024 |
| 26 | 11.09 | 33.593 | 6.24 | 1.11 | 11 | 0.27 | 231.5 | 20 | 11.18 | 33.59 | 6.28 | 25.67 | 233.3 | .047 |
| 33 | 10.60 | 33.593 | 5.79 | 1.29 | 12 | 0.34 | 223.3 | 30 | 10.89 | 33.59 | 6.07 | 25.72 | 228.3 | .070 |
| 42 | 10.26 | 33.667 | 5.51 | 1.52 | 16 | 0.32 | 212.2 | 50 | 10.24 | 33.70 | 5.40 | 25.92 | 209.4 | .114 |
| 53 | 10.21 | 33.711 | 5.28 | 1.56 | 19 | 0.28 | 208.1 | 75 | 9.40 | 33.79 | 4.21 | 26.13 | 189.4 | .164 |
| 69 | 9.55 | 33.713 | 4.67 | 1.74 | 22 | 0.21 | 197.5 | 100 | 8.85 | 33.96 | 2.67 | 26.35 | 168.5 | .209 |
| 82 | 9.24 | 33.921 | 3.61 | 2.14 | 31 | 0.27 | 177.3 | 125 | 8.47 | 34.00 | 2.61 | 26.44 | 159.9 | .251 |
| 95 | 8.98 | 33.959 | 2.63 | 2.32 | 35 | 0.29 | 170.5 | 150 | 8.28 | 34.03 | 2.44 | 26.49 | 154.9 | .291 |
| 114 | 8.58 | 33.957 | 2.91 | 2.18 | 33 | 0.03 | 164.7 | 200 | 7.74 | 34.07 | 2.14 | 26.60 | 144.3 | .367 |
| 128 | 8.44 | 34.012 | 2.56 | - | - | - | 158.6 | 250 | 7.26 | 34.10 | 1.84 | 26.70 | 135.6 | .439 |
| 150 | 8.28 | 34.026 | 2.44 | - | - | - | 155.2 | 300 | 7.04 | 34.15 | 1.28 | 26.77 | 128.9 | .507 |
| 167 | 8.09 | 34.046 | 2.32 | - | - | - | 151.0 | 400 | 6.52 | 34.22 | .80 | 26.89 | 117.0 | .635 |
| 192 | 7.86 | 34.070 | 2.16 | - | - | - | 146.0 | | | | | | | |
| 228 | 7.39 | 34.067 | 2.07 | - | - | - | 139.8 | | | | | | | |
| 286 | 7.12 | 34.145 | 1.34 | - | - | - | 130.4 | | | | | | | |
| 348 | 6.74 | 34.173 | 1.08 | - | - | - | 123.3 | | | | | | | |
| 405 | 6.50 | 34.220 | .78 | - | - | - | 116.8 | | | | | | | |

| 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 |

70.60 CCOFI CRUISE 6407 70.60

ALEXANDER AGASSIZ, JUNE 29 1964, 1737 GCT, 35 53.5N 122 22.5W, SOUNDING 1600 FM, WIND 320 FORCE 4, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 17.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.00 | 33.332 | 6.25 | 0.38 | 2 | 0.01 | 324.5 | 0 | 15.00 | 33.33 | 6.25 | 24.71 | 324.7 | 0 |
| 10 | 14.98 | 33.326 | 6.22 | 0.39 | 3 | 0.01 | 324.5 | 10 | 14.98 | 33.33 | 6.22 | 24.71 | 324.2 | .032 |
| 34 | 14.92 | 33.321 | 6.20 | 0.42 | 2 | 0.01 | 323.7 | 20 | 14.95 | 33.32 | 6.21 | 24.71 | 324.4 | .065 |
| 44 | 12.26 | 33.131 | 6.45 | 0.55 | 4 | 0.16 | 286.2 | 30 | 14.93 | 33.32 | 6.20 | 24.71 | 323.9 | .097 |
| 57 | 11.43 | 33.295 | 5.96 | 0.89 | 7 | 0.19 | 259.4 | 50 | 11.47 | 33.22 | 6.09 | 25.33 | 265.6 | .157 |
| 72 | 10.93 | 33.392 | 5.56 | 1.10 | 11 | 0.03 | 243.6 | 75 | 10.92 | 33.41 | 5.53 | 25.57 | 242.1 | .220 |
| 96 | 10.42 | 33.567 | 4.94 | 1.44 | 14 | 0.15 | 222.2 | 100 | 10.34 | 33.59 | 4.96 | 25.81 | 219.2 | .279 |
| 114 | 9.70 | 33.644 | 5.14 | 1.70 | 19 | 0.01 | 204.9 | 125 | 9.27 | 33.70 | 4.54 | 26.08 | 194.1 | .331 |
| 132 | 9.05 | 33.736 | 4.19 | 1.90 | 25 | 0.00 | 188.1 | 150 | 8.75 | 33.87 | 3.32 | 26.29 | 173.7 | .377 |
| 159 | 8.64 | 33.902 | 3.16 | 2.09 | 33 | 0.00 | 169.7 | 200 | 8.13 | 34.00 | 2.91 | 26.49 | 155.0 | .461 |
| 187 | 8.33 | 33.981 | 3.03 | - | - | - | 159.3 | 250 | 7.33 | 34.04 | 2.33 | 26.64 | 141.0 | .537 |
| 223 | 7.72 | 34.021 | 2.61 | - | - | - | 147.7 | 300 | 6.80 | 34.06 | 2.01 | 26.73 | 132.5 | .607 |
| 251 | 7.32 | 34.037 | 2.32 | - | - | - | 141.1 | 400 | 5.92 | 34.12 | 1.30 | 26.89 | 117.2 | .737 |
| 297 | 6.84 | 34.058 | 2.03 | - | - | - | 133.2 | 500 | 5.47 | 34.21 | .68 | 27.02 | 105.2 | .854 |
| 358 | 6.15 | 34.067 | 1.77 | - | - | - | 123.9 | 600 | 4.89 | 34.29 | .46 | 27.15 | 92.7 | .959 |
| 451 | 5.74 | 34.179 | .80 | - | - | - | 110.6 | | | | | | | |
| 537 | 5.22 | 34.237 | .61 | - | - | - | 100.3 | | | | | | | |
| 609 | 4.86 | 34.291 | .45 | - | - | - | 92.3 | | | | | | | |

70.70 CCOFI CRUISE 6407 70.70

ALEXANDER AGASSIZ, JUNE 29 1964, 1302 GCT, 35 33.5N 123 05.5W, SOUNDING 2040 FM, WIND 330 FORCE 5, WEATHER OVERCAST, SEA VERY ROUGH, WIRE ANGLE 30.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.54 | 33.458 | 6.44 | 0.69 | - | - | 305.9 | 0 | 14.54 | 33.46 | 6.44 | 24.90 | 305.7 | 0 |
| 9 | 14.52 | 33.451 | 6.30 | 0.71 | 1 | 0.11 | 306.0 | 10 | 14.52 | 33.45 | 6.31 | 24.90 | 306.1 | .031 |
| 31 | 14.52 | 33.440 | 6.39 | 0.72 | 2 | 0.12 | 306.8 | 20 | 14.52 | 33.45 | 6.34 | 24.90 | 306.1 | .061 |
| 40 | 12.32 | 33.358 | 6.55 | 0.96 | 6 | 0.18 | 270.5 | 30 | 14.52 | 33.44 | 6.38 | 24.89 | 306.8 | .092 |
| 52 | 10.70 | 33.461 | 6.28 | 1.31 | 9 | 0.32 | 234.7 | 50 | 10.73 | 33.45 | 6.29 | 25.64 | 236.0 | .146 |
| 66 | 9.94 | 33.562 | 5.64 | 1.45 | 12 | 0.48 | 214.8 | 75 | 9.79 | 33.67 | 5.23 | 25.97 | 204.4 | .202 |
| 86 | 9.65 | 33.765 | 4.88 | 1.82 | 19 | 0.29 | 195.2 | 100 | 9.42 | 33.81 | 4.61 | 26.14 | 188.3 | .251 |
| 103 | 9.38 | 33.818 | 4.51 | 1.92 | 21 | 0.01 | 187.1 | 125 | 8.93 | 33.87 | 3.65 | 26.27 | 176.3 | .297 |
| 119 | 9.04 | 33.849 | 3.86 | 2.04 | 27 | 0.00 | 179.6 | 150 | 8.51 | 33.93 | 3.07 | 26.38 | 165.7 | .341 |
| 144 | 8.58 | 33.919 | 3.17 | 2.20 | 31 | 0.00 | 167.5 | 200 | 7.86 | 34.02 | 2.59 | 26.55 | 149.7 | .421 |
| 168 | 8.30 | 34.001 | 2.51 | - | - | - | 157.4 | 250 | 7.03 | 34.03 | 2.39 | 26.67 | 137.7 | .495 |
| 200 | 7.86 | 34.018 | 2.59 | - | - | - | 149.9 | 300 | 6.56 | 34.07 | 1.72 | 26.77 | 128.7 | .563 |
| 225 | 7.42 | 34.012 | 2.64 | - | - | - | 144.3 | 400 | 5.79 | 34.14 | .98 | 26.92 | 114.1 | .690 |
| 265 | 6.83 | 34.044 | 2.16 | - | - | - | 134.1 | 500 | 5.29 | 34.24 | .59 | 27.06 | 100.9 | .803 |
| 321 | 6.40 | 34.082 | 1.59 | - | - | - | 125.8 | | | | | | | |
| 409 | 5.72 | 34.146 | .93 | - | - | - | 112.9 | | | | | | | |
| 489 | 5.32 | 34.233 | .60 | - | - | - | 101.7 | | | | | | | |
| 558 | 5.04 | 34.275 | .55 | - | - | - | 95.5 | | | | | | | |

70.80 CCOFI CRUISE 6407 70.80

ALEXANDER AGASSIZ, JUNE 29 1964, 0742 GCT, 35 13.5N 123 47.5W, SOUNDING 2175 FM, WIND 340 FORCE 5, WEATHER PARTLY CLOUDY, SEA VERY ROUGH, WIRE ANGLE 36.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.19 | 33.454 | 6.34 | 0.72 | 2 | 0.14 | 299.1 | 0 | 14.19 | 33.45 | 6.34 | 24.97 | 299.4 | 0 |
| 10 | 14.14 | 33.445 | 6.39 | 0.71 | 3 | 0.11 | 298.8 | 10 | 14.14 | 33.44 | 6.39 | 24.97 | 299.2 | .030 |
| 30 | 12.85 | 33.314 | 6.46 | 0.85 | 4 | 0.17 | 283.5 | 20 | 14.08 | 33.44 | 6.40 | 24.99 | 298.0 | .060 |
| 37 | 11.90 | 33.230 | 6.40 | 0.90 | 6 | 0.26 | 272.4 | 30 | 12.85 | 33.31 | 6.46 | 25.13 | 283.8 | .089 |
| 49 | 10.74 | 33.143 | 5.99 | 0.97 | 8 | 0.14 | 258.8 | 50 | 10.73 | 33.15 | 5.99 | 25.40 | 258.2 | .143 |
| 62 | 11.06 | 33.418 | 6.42 | 1.18 | 8 | 0.26 | 243.9 | 75 | 9.73 | 33.52 | 5.12 | 25.86 | 214.6 | .203 |
| 81 | 9.52 | 33.547 | 4.93 | 1.70 | 19 | 0.26 | 209.3 | 100 | 9.14 | 33.73 | 4.46 | 26.12 | 189.9 | .254 |
| 96 | 9.16 | 33.701 | 4.54 | 1.89 | 23 | 0.03 | 192.4 | 125 | 9.10 | 33.87 | - | 26.24 | 178.9 | .300 |
| 111 | 9.10 | 33.792 | 4.24 | 2.00 | 26 | 0.01 | 184.7 | 150 | 8.56 | 33.93 | 3.28 | 26.37 | 166.4 | .344 |
| 133 | 8.84 | 33.892 | 4.820 | 2.09 | 29 | 0.00 | 173.4 | 200 | 7.88 | 34.03 | 2.45 | 26.55 | 149.2 | .425 |
| 152 | 8.52 | 33.934 | 3.24 | - | - | - | 165.5 | 250 | 7.20 | 34.04 | 2.30 | 26.66 | 139.2 | .499 |
| 181 | 8.10 | 34.009 | 2.58 | - | - | - | 153.9 | 300 | 6.80 | 34.09 | 1.59 | 26.75 | 130.3 | .568 |
| 202 | 7.85 | 34.030 | 2.44 | - | - | - | 148.8 | 400 | 6.10 | 34.16 | .98 | 26.90 | 116.3 | .696 |
| 239 | 7.30 | 34.034 | 2.38 | - | - | - | 141.0 | 500 | 5.45 | 34.25 | .47 | 27.05 | 101.9 | .811 |
| 288 | 6.89 | 34.084 | 1.67 | - | - | - | 131.9 | | | | | | | |
| 365 | 6.28 | 34.126 | 1.17 | - | - | - | 121.1 | | | | | | | |
| 439 | 5.92 | 34.204 | .76 | - | - | - | 110.9 | | | | | | | |
| 502 | 5.43 | 34.249 | .47 | - | - | - | 101.8 | | | | | | | |

| 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 |

70.90 CCOFI CRUISE 6407 70.90

ALEXANDER AGASSIZ, JUNE 29 1964, 0153 GCT, 34 53.5N 124 29W, SOUNDING 2313 FM, WIND 330 FORCE 5, WEATHER PARTLY CLOUDY, SEA VERY ROUGH, WIRE ANGLE 34.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 15.68 | 33.114 | 6.13 | 0.35 | 3 | 0.00 | 354.7 | 0 | 15.68 | 33.11 | 6.13 | 24.39 | 355.0 | 0 |
| 10 | 15.66 | 33.107 | 6.10 | 0.36 | 2 | 0.00 | 354.8 | 10 | 15.66 | 33.11 | 6.10 | 24.39 | 354.6 | .035 |
| 31 | 15.61 | 33.103 | 6.10 | 0.35 | 2 | 0.00 | 354.0 | 20 | 15.64 | 33.11 | 6.10 | 24.40 | 354.1 | .071 |
| 55 | 13.06 | 33.058 | 6.68 | 0.37 | 3 | 0.00 | 306.3 | 30 | 15.62 | 33.11 | 6.10 | 24.40 | 353.7 | .106 |
| 64 | 12.88 | 33.073 | 6.70 | 0.37 | 5 | 0.00 | 301.8 | 50 | 13.20 | 33.06 | 6.66 | 24.87 | 308.8 | .173 |
| 80 | 11.98 | 33.020 | 6.56 | 0.45 | 2 | 0.01 | 289.3 | 75 | 12.17 | 33.03 | 6.62 | 25.05 | 292.0 | .248 |
| 93 | 11.48 | 33.020 | 6.26 | 0.59 | 4 | 0.38 | 280.5 | 100 | 11.45 | 33.07 | 6.13 | 25.21 | 276.3 | .320 |
| 104 | 11.44 | 33.110 | 6.08 | 0.74 | 5 | 0.11 | 273.2 | 125 | 10.85 | 33.41 | 5.46 | 25.59 | 241.0 | .385 |
| 128 | 10.43 | 33.444 | 5.24 | 1.33 | 12 | 0.01 | 231.5 | 150 | 9.13 | 33.59 | 4.50 | 26.02 | 200.1 | .441 |
| 142 | 9.42 | 33.536 | 4.64 | 1.52 | 18 | 0.00 | 208.6 | 200 | 8.29 | 33.93 | 3.54 | 26.41 | 162.5 | .533 |
| 167 | 8.74 | 33.723 | 4.25 | - | - | - | 184.4 | 250 | 7.49 | 34.00 | 2.87 | 26.58 | 146.1 | .612 |
| 194 | 8.36 | 33.903 | 3.67 | - | - | - | 165.5 | 300 | 6.97 | 34.04 | 2.13 | 26.69 | 136.2 | .685 |
| 217 | 8.06 | 33.983 | 3.21 | - | - | - | 155.3 | 400 | 6.01 | 34.11 | 1.24 | 26.87 | 119.0 | .817 |
| 257 | 7.40 | 34.006 | 2.78 | - | - | - | 144.4 | 500 | 5.34 | 34.19 | .83 | 27.02 | 105.2 | .935 |
| 312 | 6.84 | 34.055 | 1.99 | - | - | - | 133.4 | | | | | | | |
| 395 | 6.06 | 34.102 | 1.26 | - | - | - | 120.2 | | | | | | | |
| 472 | 5.46 | 34.155 | .96 | - | - | - | 109.2 | | | | | | | |
| 540 | 5.27 | 34.231 | .61 | - | - | - | 101.3 | | | | | | | |

70.100 CCOFI CRUISE 6407 70.100

ALEXANDER AGASSIZ, JUNE 28 1964, 2048 GCT, 34 33.5N 125 10W, SOUNDING 2420 FM, WIND 340 FORCE 4, WEATHER CLOUDY, SEA VERY ROUGH, WIRE ANGLE 25.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.98 | 33.211 | 6.11 | 0.35 | 2 | 0.00 | 354.0 | 0 | 15.98 | 33.21 | 6.11 | 24.40 | 354.1 | 0 |
| 10 | 15.94 | 33.202 | 5.98 | 0.35 | 1 | 0.00 | 353.8 | 10 | 15.94 | 33.20 | 5.98 | 24.40 | 353.9 | .035 |
| 33 | 15.82 | 33.192 | 6.01 | 0.35 | 1 | 0.00 | 352.0 | 20 | 15.90 | 33.20 | 5.99 | 24.41 | 353.1 | .071 |
| 61 | 14.12 | 33.217 | 6.30 | 0.33 | 2 | 0.00 | 315.1 | 30 | 15.85 | 33.20 | 6.00 | 24.42 | 352.0 | .106 |
| 69 | 13.98 | 33.256 | 6.41 | 0.35 | 2 | 0.00 | 309.5 | 50 | 15.40 | 33.19 | 6.11 | 24.51 | 343.2 | .176 |
| 86 | 13.24 | 33.194 | 6.44 | 0.38 | 2 | 0.00 | 299.7 | 75 | 14.20 | 33.34 | 6.43 | 24.88 | 307.7 | .258 |
| 101 | 13.20 | 33.286 | 6.20 | 0.44 | 2 | 0.07 | 292.2 | 100 | 13.19 | 33.28 | 6.22 | 25.04 | 292.4 | .333 |
| 114 | 12.47 | 33.280 | 6.05 | 0.60 | 4 | 0.20 | 279.0 | 125 | 11.98 | 33.36 | 5.76 | 25.34 | 264.3 | .404 |
| 140 | 11.16 | 33.473 | 5.25 | 1.05 | 11 | 0.02 | 241.6 | 150 | 10.60 | 33.50 | 5.02 | 25.70 | 230.1 | .466 |
| 158 | 10.18 | 33.525 | 4.83 | 1.33 | 14 | 0.00 | 221.4 | 200 | 8.74 | 33.81 | 4.19 | 26.25 | 178.0 | .570 |
| 184 | 9.08 | 33.714 | 4.34 | - | - | - | 190.2 | 250 | 8.02 | 33.99 | 3.00 | 26.50 | 154.2 | .655 |
| 215 | 8.48 | 33.908 | 4.06 | - | - | - | 166.9 | 300 | 7.25 | 34.03 | 2.33 | 26.64 | 140.7 | .731 |
| 242 | 8.13 | 33.979 | 3.18 | - | - | - | 156.6 | 400 | 6.07 | 34.08 | 1.60 | 26.84 | 121.9 | .867 |
| 287 | 7.44 | 34.028 | 2.39 | - | - | - | 143.3 | 500 | 5.48 | 34.18 | .84 | 26.99 | 107.5 | .987 |
| 344 | 6.60 | 34.039 | 2.23 | - | - | - | 131.6 | 600 | 4.80 | 34.21 | - | 27.09 | 97.8 | 1.096 |
| 435 | 5.82 | 34.117 | 1.16 | - | - | - | 116.2 | | | | | | | |
| 518 | 5.40 | 34.195 | .79 | - | - | - | 105.5 | | | | | | | |
| 589 | 4.90 | 34.204 | .72 | - | - | - | 99.3 | | | | | | | |

70.202 CCOFI CRUISE 6407 70.202

ALEXANDER AGASSIZ, JULY 7 1964, 1557 GCT, 31 11N 132 11.5W, SOUNDING 2495 FM, WIND 330 FORCE 2, WEATHER CLOUDY, SEA ROUGH, WIRE ANGLE 02.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.98 | 33.763 | 5.78 | 0.36 | 2 | 0.00 | 382.2 | 0 | 18.98 | 33.76 | 5.78 | 24.10 | 382.4 | 0 |
| 10 | 18.80 | 33.756 | 5.92 | 0.37 | 2 | 0.00 | 378.4 | 10 | 18.80 | 33.76 | 5.92 | 24.15 | 378.1 | .038 |
| 30 | 17.68 | 33.727 | 5.96 | 0.33 | 2 | 0.00 | 354.2 | 20 | 18.17 | 33.74 | 5.95 | 24.29 | 364.6 | .075 |
| 40 | 16.48 | 33.742 | 5.74 | 0.29 | 3 | 0.01 | 326.1 | 30 | 17.68 | 33.73 | 5.96 | 24.40 | 354.0 | .111 |
| 55 | 15.92 | 33.781 | 6.13 | 0.31 | 2 | 0.00 | 311.1 | 50 | 16.03 | 33.77 | 6.06 | 24.82 | 314.2 | .178 |
| 71 | 15.71 | 33.821 | 6.13 | 0.28 | 2 | 0.00 | 303.7 | 75 | 15.71 | 33.85 | 6.10 | 24.95 | 301.5 | .256 |
| 96 | 15.78 | 33.937 | 6.01 | 0.23 | 3 | 0.00 | 296.7 | 100 | 15.82 | 33.98 | 5.98 | 25.02 | 294.4 | .331 |
| 116 | 15.96 | 34.127 | 5.94 | 0.23 | 3 | 0.00 | 286.7 | 125 | 16.04 | 34.20 | 5.86 | 25.14 | 283.1 | .404 |
| 136 | 16.14 | 34.262 | 5.80 | 0.21 | 3 | 0.03 | 280.7 | 150 | 14.86 | 34.08 | 5.65 | 25.31 | 266.9 | .474 |
| 155 | 14.22 | 33.983 | 5.58 | 0.47 | 5 | 0.07 | 261.0 | 200 | 10.88 | 33.76 | 5.09 | 25.85 | 215.6 | .596 |
| 185 | 11.76 | 33.754 | 5.18 | - | - | - | 231.3 | 250 | 9.02 | 33.92 | 4.13 | 26.29 | 174.0 | .696 |
| 220 | 9.88 | 33.791 | 4.93 | - | - | - | 196.9 | 300 | 8.18 | 34.01 | 3.31 | 26.49 | 155.0 | .781 |
| 249 | 9.04 | 33.910 | 4.14 | - | - | - | 175.0 | 400 | 6.39 | 34.04 | 2.12 | 26.77 | 128.9 | .928 |
| 299 | 8.20 | 34.006 | 3.32 | - | - | - | 155.6 | 500 | 5.63 | 34.14 | 1.08 | 26.94 | 112.3 | 1.054 |
| 354 | 7.09 | 34.021 | 2.68 | - | - | - | 139.2 | 600 | 5.28 | 34.26 | .59 | 27.08 | 99.3 | 1.167 |
| 439 | 5.98 | 34.062 | 1.67 | - | - | - | 122.2 | | | | | | | |
| 523 | 5.56 | 34.166 | .93 | - | - | - | 109.5 | | | | | | | |
| 609 | 5.24 | 34.266 | .58 | - | - | - | 98.4 | | | | | | | |

| 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 |

73.53 CCOFI CRUISE 6407 73.53

ALEXANDER AGASSIZ, JUNE 26 1964, 0113 GCT, 35 31.5N 121 28.5W, SOUNDING 395 FM, WIND 080 FORCE 6, WEATHER CLEAR
SEA VERY ROUGH, WIRE ANGLE 40.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 12.34 | 33.696 | 7.51 | 0.76 | 7 | 0.28 | 246.0 | 0 | 12.34 | 33.70 | 7.51 | 25.54 | 245.7 | 0 |
| 8 | 12.32 | 33.692 | 7.48 | 0.76 | 8 | 0.26 | 246.0 | 10 | 12.30 | 33.69 | 7.47 | 25.54 | 245.7 | .025 |
| 28 | 10.44 | 33.731 | 5.68 | 1.43 | 19 | 0.23 | 210.4 | 20 | 11.20 | 33.71 | 6.50 | 25.76 | 224.8 | .048 |
| 35 | 10.08 | 33.716 | 5.14 | 1.59 | 21 | 0.21 | 205.7 | 30 | 10.35 | 33.73 | 5.53 | 25.92 | 209.0 | .070 |
| 46 | 9.58 | 33.707 | 4.49 | 1.77 | 25 | 0.14 | 198.4 | 50 | 9.53 | 33.74 | 4.42 | 26.07 | 195.2 | .110 |
| 59 | 9.46 | 33.830 | 4.30 | 1.93 | 29 | 0.20 | 187.4 | 75 | 9.13 | 33.87 | 3.64 | 26.23 | 179.4 | .158 |
| 77 | 9.08 | 33.869 | 3.60 | 2.05 | 32 | 0.15 | 178.7 | 100 | 8.76 | 33.90 | 3.25 | 26.32 | 171.6 | .202 |
| 92 | 8.82 | 33.890 | 3.35 | 2.11 | 32 | 0.11 | 173.2 | 125 | 8.65 | 33.96 | 2.83 | 26.38 | 165.5 | .245 |
| 106 | 8.73 | 33.910 | 3.15 | 2.13 | 33 | 0.08 | 170.4 | 150 | 8.31 | 34.01 | 2.61 | 26.47 | 156.8 | .285 |
| 129 | 8.60 | 33.976 | 2.74 | 2.24 | 37 | 0.02 | 163.6 | 200 | 7.83 | 34.07 | 2.11 | 26.59 | 145.6 | .363 |
| 149 | 8.32 | 34.012 | 2.61 | - | - | - | 156.8 | 250 | 7.28 | 34.11 | 1.87 | 26.70 | 135.1 | .435 |
| 177 | 7.98 | 34.038 | 2.41 | - | - | - | 150.1 | 300 | 6.89 | 34.12 | 1.54 | 26.76 | 129.2 | .503 |
| 199 | 7.84 | 34.069 | 2.12 | - | - | - | 145.8 | 400 | 6.22 | 34.23 | .84 | 26.94 | 112.6 | .629 |
| 233 | 7.42 | 34.102 | 1.93 | - | - | - | 137.6 | 500 | 5.71 | 34.28 | .64 | 27.04 | 102.7 | .742 |
| 280 | 7.06 | 34.111 | 1.70 | - | - | - | 132.1 | | | | | | | |
| 357 | 6.44 | 34.181 | 1.06 | - | - | - | 118.9 | | | | | | | |
| 431 | 6.08 | 34.249 | .72 | - | - | - | 109.4 | | | | | | | |
| 494 | 5.74 | 34.277 | .64 | - | - | - | 103.3 | | | | | | | |

73.60 CCOFI CRUISE 6407 73.60

ALEXANDER AGASSIZ, JUNE 27 1964, 0511 GCT, 35 18N 121 57.5W, SOUNDING 1520 FM, WIND 080 FORCE 6, WEATHER CLEAR,
SEA VERY ROUGH, WIRE ANGLE 55.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.50 | 33.226 | 6.55 | 0.51 | 4 | 0.05 | 322.1 | 0 | 14.50 | 33.23 | 6.55 | 24.74 | 321.8 | 0 |
| 8 | 14.48 | 33.224 | 6.31 | 0.48 | 4 | 0.04 | 321.8 | 10 | 14.48 | 33.22 | 6.31 | 24.73 | 322.1 | .032 |
| 22 | 14.34 | 33.211 | 6.35 | 0.50 | 4 | 0.05 | 320.0 | 20 | 14.40 | 33.22 | 6.33 | 24.75 | 320.5 | .064 |
| 27 | 13.99 | 33.180 | 6.29 | 0.53 | 4 | 0.06 | 315.3 | 30 | 13.80 | 33.17 | 6.36 | 24.84 | 312.3 | .096 |
| 37 | 13.52 | 33.149 | 6.47 | 0.56 | 4 | 0.07 | 308.4 | 50 | 12.26 | 33.09 | 6.43 | 25.08 | 289.2 | .156 |
| 45 | 12.42 | 33.095 | 6.44 | 0.56 | 4 | 0.10 | 291.7 | 75 | 11.03 | 33.38 | 5.87 | 25.53 | 246.2 | .224 |
| 60 | 11.52 | 33.063 | 6.35 | 0.67 | 6 | 0.34 | 278.0 | 100 | 9.85 | 33.53 | 4.36 | 25.85 | 215.7 | .282 |
| 71 | 11.15 | 33.231 | 6.09 | 1.01 | 7 | 0.25 | 259.3 | 125 | 9.57 | 33.76 | 4.63 | 26.08 | 194.3 | .334 |
| 82 | 11.15 | 33.547 | 5.68 | 1.24 | 8 | 0.31 | 235.9 | 150 | 9.19 | 33.85 | 3.73 | 26.21 | 181.8 | .381 |
| 100 | 9.85 | 33.526 | 4.36 | 1.61 | 18 | 0.03 | 216.0 | 200 | 8.15 | 34.01 | 2.61 | 26.50 | 154.5 | .467 |
| 113 | 9.42 | 33.585 | 4.73 | - | - | - | 204.9 | 250 | 7.81 | 34.10 | 1.85 | 26.62 | 143.1 | .543 |
| 132 | 9.64 | 33.848 | 4.41 | - | - | - | 188.9 | 300 | 7.19 | 34.13 | 1.65 | 26.73 | 132.4 | .614 |
| 146 | 9.28 | 33.841 | 3.82 | - | - | - | 183.8 | | | | | | | |
| 168 | 8.69 | 33.929 | 3.16 | - | - | - | 168.4 | | | | | | | |
| 199 | 8.16 | 34.011 | 2.62 | - | - | - | 154.6 | | | | | | | |
| 249 | 7.82 | 34.059 | 1.86 | - | - | - | 143.3 | | | | | | | |
| 305 | 7.12 | 34.131 | 1.62 | - | - | - | 131.4 | | | | | | | |
| 358 | 6.75 | 34.180 | 1.09 | - | - | - | 122.9 | | | | | | | |

76.50 CCOFI CRUISE 6407 76.50

ALEXANDER AGASSIZ, JUNE 26 1964, 0314 GCT, 35 12N 120 57.5W, SOUNDING 97 FM, WIND 240 FORCE 1, WEATHER OVERCAST,
SEA MODERATE, WIRE ANGLE 06.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 11.32 | 33.801 | 7.44 | 0.80 | 13 | - | 220.1 | 0 | 11.32 | 33.80 | 7.44 | 25.80 | 220.2 | 0 |
| 10 | 10.90 | 33.806 | 6.36 | 1.17 | 16 | 0.29 | 212.6 | 10 | 10.90 | 33.81 | 6.36 | 25.89 | 212.3 | .022 |
| 30 | 10.50 | 33.840 | 5.32 | 1.50 | 18 | 0.33 | 203.3 | 20 | 10.69 | 33.82 | 5.80 | 25.93 | 208.0 | .043 |
| 40 | 10.30 | 33.854 | 4.86 | 1.64 | 21 | 0.34 | 199.0 | 30 | 10.50 | 33.84 | 5.32 | 25.98 | 203.3 | .063 |
| 55 | 10.18 | 33.868 | 4.55 | 1.76 | 22 | 0.35 | 196.0 | 50 | 10.22 | 33.86 | 4.65 | 26.05 | 197.3 | .104 |
| 70 | 9.84 | 33.899 | 3.79 | 2.04 | 25 | 0.39 | 188.3 | 75 | 9.75 | 33.92 | 3.48 | 26.17 | 185.3 | .152 |
| 85 | 9.65 | 33.961 | 3.19 | 2.25 | 28 | 0.35 | 180.7 | 100 | 9.57 | 33.98 | 2.98 | 26.25 | 178.0 | .198 |
| 105 | 9.53 | 33.985 | 2.90 | 2.41 | 31 | 0.32 | 177.0 | 125 | 9.33 | 34.00 | 2.62 | 26.30 | 172.8 | .242 |
| 129 | 9.28 | 34.006 | 2.59 | 2.48 | 34 | 0.29 | 171.6 | 150 | 8.92 | 34.05 | 2.15 | 26.41 | 162.8 | .285 |
| 154 | 8.83 | 34.058 | 2.04 | 2.61 | 39 | 0.19 | 160.9 | | | | | | | |

76.53 CCOFI CRUISE 6407 76.53

ALEXANDER AGASSIZ, JUNE 26 1964, 0120 GCT, 35 07N 121 08W, SOUNDING 300 FM, WIND 240 FORCE 2, WEATHER OVERCAST,
SEA ROUGH, WIRE ANGLE 04.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.80 | 33.674 | 8.30 | 0.54 | 6 | 0.20 | 256.1 | 0 | 12.80 | 33.67 | 8.30 | 25.42 | 256.4 | 0 |
| 10 | 11.66 | 33.668 | 7.75 | 0.69 | 6 | 0.19 | 235.9 | 10 | 11.66 | 33.67 | 7.75 | 25.64 | 235.7 | .025 |
| 30 | 10.57 | 33.774 | 5.76 | 1.30 | 15 | 0.24 | 209.4 | 20 | 11.05 | 33.73 | 6.71 | 25.80 | 220.7 | .047 |
| 45 | 9.44 | 33.704 | 3.94 | 1.85 | 21 | 0.07 | 196.4 | 30 | 10.57 | 33.77 | 5.76 | 25.91 | 209.7 | .069 |
| 55 | 9.34 | 33.761 | 3.80 | 1.93 | 25 | 0.04 | 190.7 | 50 | 9.38 | 33.73 | 3.87 | 26.08 | 193.6 | .110 |
| 70 | 9.28 | 33.843 | 3.53 | 2.07 | 26 | 0.17 | 183.7 | 75 | 9.28 | 33.88 | 3.29 | 26.22 | 180.9 | .157 |
| 85 | 9.28 | 33.948 | 2.87 | 2.28 | 30 | 0.28 | 175.9 | 100 | 9.16 | 33.99 | 2.55 | 26.32 | 170.9 | .201 |
| 100 | 9.16 | 33.990 | 2.55 | 2.45 | 34 | 0.00 | 170.9 | 125 | 8.68 | 34.04 | 2.37 | 26.44 | 160.0 | .243 |
| 125 | 8.68 | 34.035 | 2.37 | 2.41 | 37 | 0.00 | 160.4 | 150 | 8.64 | 34.10 | 1.85 | 26.49 | 155.0 | .283 |
| 145 | 8.65 | 34.086 | 1.95 | 2.57 | 38 | 0.00 | 156.1 | 200 | 8.45 | 34.17 | 1.48 | 26.58 | 147.0 | .360 |
| 175 | 8.52 | 34.142 | 1.62 | - | - | - | 150.1 | 250 | 8.05 | 34.20 | 1.27 | 26.66 | 139.0 | .434 |
| 204 | 8.44 | 34.171 | 1.47 | - | - | - | 146.8 | 300 | 7.65 | 34.22 | 1.18 | 26.73 | 131.9 | .504 |
| 234 | 8.23 | 34.190 | 1.28 | - | - | - | 142.3 | 400 | 6.62 | 34.23 | .85 | 26.89 | 117.5 | .634 |
| 274 | 7.80 | 34.210 | 1.27 | - | - | - | 134.7 | 500 | 5.95 | 34.26 | .82 | 27.00 | 107.0 | .752 |
| 335 | 7.45 | 34.244 | 1.02 | - | - | - | 127.4 | | | | | | | |
| 389 | 6.72 | 34.227 | .87 | - | - | - | 119.0 | | | | | | | |
| 448 | 6.25 | 34.240 | .79 | - | - | - | 112.2 | | | | | | | |
| 507 | 5.92 | 34.261 | .83 | - | - | - | 106.6 | | | | | | | |

| 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 |

76.55 CCOFI CRUISE 6407 76.55

ALEXANDER AGASSIZ, JUNE 25 1964, 2254 GCT, 35 02N 121 18W, SOUNDING 318 FM, WIND 250 FORCE 2, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 12.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.04 | 33.638 | 7.19 | 0.65 | 3 | 0.18 | 282.7 | 0 | 14.04 | 33.64 | 7.19 | 25.15 | 282.5 | 0 |
| 11 | 12.42 | 33.629 | 6.58 | 0.92 | 6 | 0.17 | 252.4 | 10 | 12.65 | 33.63 | 6.68 | 25.42 | 256.6 | .027 |
| 31 | 11.52 | 33.649 | 6.03 | 1.24 | 10 | 0.24 | 234.8 | 20 | 11.67 | 33.64 | 6.12 | 25.62 | 238.1 | .052 |
| 40 | 11.83 | 33.781 | 5.97 | 1.11 | 8 | 0.26 | 230.6 | 30 | 11.52 | 33.65 | 6.03 | 25.65 | 234.7 | .075 |
| 50 | 11.42 | 33.787 | 5.58 | 1.31 | 11 | 0.28 | 222.9 | 50 | 11.42 | 33.79 | 5.58 | 25.78 | 222.7 | .121 |
| 65 | 10.28 | 33.781 | 4.31 | 1.77 | 19 | 0.17 | 204.1 | 75 | 9.88 | 33.87 | 3.82 | 26.11 | 191.1 | .173 |
| 79 | 9.76 | 33.883 | 3.67 | 2.02 | 25 | 0.24 | 188.2 | 100 | 9.17 | 33.89 | 3.10 | 26.24 | 178.5 | .220 |
| 99 | 9.20 | 33.885 | 3.12 | 2.11 | 28 | 0.00 | 179.3 | 125 | 8.88 | 33.96 | 2.90 | 26.34 | 168.9 | .264 |
| 123 | 8.88 | 33.946 | 2.93 | 2.14 | 30 | 0.01 | 170.0 | 150 | 8.90 | 34.09 | 2.31 | 26.44 | 159.6 | .306 |
| 142 | 8.93 | 34.060 | 2.48 | 2.36 | 34 | 0.00 | 162.2 | 200 | 8.61 | 34.17 | 1.55 | 26.55 | 149.3 | .385 |
| 173 | 8.77 | 34.138 | 1.96 | - | - | - | 154.1 | 250 | 7.97 | 34.19 | 1.50 | 26.66 | 138.6 | .459 |
| 201 | 8.60 | 34.174 | 1.54 | - | - | - | 148.9 | 300 | 7.41 | 34.21 | 1.29 | 26.76 | 129.4 | .528 |
| 230 | 8.33 | 34.215 | 1.31 | - | - | - | 141.9 | 400 | 6.62 | 34.26 | .72 | 26.91 | 115.3 | .655 |
| 270 | 7.61 | 34.160 | 1.65 | - | - | - | 135.8 | 500 | 5.69 | 34.29 | .51 | 27.05 | 101.7 | .770 |
| 329 | 7.26 | 34.264 | .97 | - | - | - | 123.3 | | | | | | | |
| 402 | 6.60 | 34.256 | .70 | - | - | - | 115.4 | | | | | | | |
| 477 | 5.82 | 34.278 | .54 | - | - | - | 104.2 | | | | | | | |
| 556 | 5.52 | 34.319 | .49 | - | - | - | 97.6 | | | | | | | |

76.58 CCOFI CRUISE 6407 76.58

ALEXANDER AGASSIZ, JUNE 25 1964, 2107 GCT, 34 56.5N 121 28.5W, SOUNDING 400 FM, WIND 060 FORCE 3, WEATHER OVERCAST, SEA VERY ROUGH, WIRE ANGLE 13.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.54 | 33.845 | - | - | - | - | 257.7 | 0 | 13.54 | 33.84 | - | 25.41 | 258.1 | 0 |
| 10 | 11.86 | 33.830 | - | - | - | - | 227.5 | 10 | 11.86 | 33.83 | - | 25.73 | 227.5 | .024 |
| 29 | 10.01 | 33.736 | - | - | - | - | 203.1 | 20 | 10.58 | 33.76 | - | 25.91 | 210.6 | .046 |
| 39 | 9.81 | 33.763 | - | - | - | - | 197.9 | 30 | 10.00 | 33.74 | - | 25.99 | 202.6 | .067 |
| 48 | 9.48 | 33.807 | - | - | - | - | 189.4 | 50 | 9.47 | 33.82 | - | 26.14 | 188.3 | .106 |
| 63 | 9.24 | 33.858 | - | - | - | - | 181.9 | 75 | 9.24 | 33.92 | - | 26.26 | 177.3 | .152 |
| 78 | 9.24 | 33.938 | - | - | - | - | 176.0 | 100 | 9.35 | 34.06 | - | 26.35 | 168.7 | .196 |
| 98 | 9.36 | 34.053 | - | - | - | - | 169.3 | 125 | 8.91 | 34.13 | - | 26.47 | 156.8 | .237 |
| 121 | 8.93 | 34.121 | - | - | - | - | 157.7 | 150 | 8.69 | 34.15 | - | 26.52 | 152.0 | .276 |
| 141 | 8.77 | 34.142 | - | - | - | - | 153.8 | 200 | 8.50 | 34.19 | - | 26.58 | 146.2 | .352 |
| 170 | 8.57 | 34.175 | - | - | - | - | 148.4 | 250 | 7.89 | 34.17 | - | 26.66 | 139.0 | .426 |
| 199 | 8.50 | 34.187 | - | - | - | - | 146.4 | 300 | 7.16 | 34.20 | - | 26.79 | 126.8 | .494 |
| 228 | 8.36 | 34.198 | - | - | - | - | 143.6 | 400 | 6.34 | 34.26 | - | 26.95 | 111.8 | .619 |
| 269 | 7.51 | 34.140 | - | - | - | - | 136.0 | 500 | 5.87 | 34.28 | - | 27.02 | 104.6 | .733 |
| 326 | 6.90 | 34.240 | - | - | - | - | 120.4 | | | | | | | |
| 400 | 6.34 | 34.258 | - | - | - | - | 111.9 | | | | | | | |
| 474 | 6.00 | 34.275 | - | - | - | - | 106.5 | | | | | | | |
| 555 | 5.57 | 34.298 | - | - | - | - | 99.7 | | | | | | | |

76.60 CCOFI CRUISE 6407 76.60

ALEXANDER AGASSIZ, JUNE 25 1964, 1907 GCT, 34 52N 121 40W, SOUNDING 760 FM, WIND 030 FORCE 3, WEATHER FOG, SEA VERY ROUGH, WIRE ANGLE 13.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.70 | 33.723 | 7.22 | 0.46 | 7 | 0.24 | 269.8 | 0 | 13.70 | 33.72 | 7.22 | 25.28 | 270.0 | 0 |
| 9 | 12.75 | 33.751 | 6.82 | 0.65 | 12 | 0.27 | 249.6 | 10 | 12.65 | 33.76 | 6.80 | 25.52 | 247.0 | .026 |
| 29 | 11.98 | 33.845 | 6.62 | 0.86 | 5 | 0.27 | 228.5 | 20 | 12.10 | 33.83 | 6.70 | 25.68 | 231.8 | .050 |
| 53 | 10.72 | 33.853 | 4.60 | 1.62 | 18 | 0.27 | 206.1 | 30 | 11.97 | 33.85 | 6.60 | 25.72 | 228.0 | .073 |
| 68 | 9.75 | 33.790 | 3.99 | 1.79 | 23 | 0.17 | 194.9 | 50 | 10.85 | 33.85 | 4.80 | 25.93 | 208.5 | .117 |
| 83 | 9.40 | 33.803 | 3.84 | 1.81 | 24 | 0.07 | 188.5 | 75 | 9.53 | 33.79 | 3.92 | 26.11 | 191.5 | .167 |
| 98 | 9.24 | 33.859 | 3.49 | 1.93 | 27 | 0.04 | 181.9 | 100 | 9.22 | 33.86 | 3.47 | 26.21 | 181.5 | .214 |
| 127 | 8.88 | 33.950 | 3.19 | 2.04 | 31 | 0.03 | 169.7 | 125 | 8.91 | 33.94 | 3.20 | 26.32 | 170.9 | .259 |
| 151 | 8.46 | 34.014 | 3.05 | 2.08 | 35 | 0.02 | 158.7 | 150 | 8.48 | 34.01 | 3.06 | 26.45 | 159.3 | .301 |
| 176 | 8.08 | 34.016 | 3.01 | 2.21 | 38 | 0.01 | 153.1 | 200 | 7.64 | 34.02 | 2.88 | 26.58 | 146.7 | .379 |
| 210 | 7.44 | 34.030 | 2.78 | 2.33 | 45 | - | 143.2 | 250 | 6.80 | 34.03 | 2.43 | 26.70 | 134.8 | .451 |
| 273 | 6.55 | 34.035 | 2.27 | 2.64 | 56 | - | 131.2 | 300 | 6.41 | 34.08 | 1.91 | 26.80 | 126.1 | .518 |
| 370 | 6.26 | 34.204 | .87 | 3.09 | 69 | - | 115.0 | 400 | 6.21 | 34.24 | .76 | 26.95 | 111.7 | .642 |
| 466 | 6.02 | 34.289 | .65 | 3.26 | 77 | - | 105.7 | 500 | 5.87 | 34.30 | .62 | 27.04 | 103.1 | .755 |
| 598 | 5.34 | 34.348 | .56 | 3.41 | 90 | - | 93.4 | 600 | 5.33 | 34.35 | .55 | 27.14 | 93.1 | .860 |
| 749 | 4.76 | 34.394 | .46 | 3.43 | 102 | - | 83.5 | 700 | 4.93 | 34.38 | .48 | 27.21 | 86.4 | .957 |
| 897 | 4.30 | 34.442 | .57 | 3.48 | 112 | - | 75.1 | 800 | 4.61 | 34.41 | .49 | 27.27 | 80.7 | 1.049 |
| 1106 | 3.75 | 34.489 | .81 | 3.40 | 124 | - | 66.2 | 1000 | 4.01 | 34.46 | .66 | 27.38 | 70.9 | 1.217 |

| 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 |

76.62 CCOFI CRUISE 6407 76.62

ALEXANDER AGASSIZ, JUNE 25 1964, 1657 GCT, 34 47N 121 50W, SOUNDING 1040 FM, WIND 320 FORCE 2, WEATHER FOG, SEA MODERATE, WIRE ANGLE 07.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.68 | 33.730 | - | - | - | - | 268.8 | 0 | 13.68 | 33.73 | - | 25.29 | 268.8 | 0 |
| 11 | 12.71 | 33.714 | - | - | - | - | 251.5 | 10 | 12.80 | 33.72 | - | 25.46 | 252.8 | .026 |
| 31 | 10.89 | 33.694 | - | - | - | - | 220.7 | 20 | 12.10 | 33.70 | - | 25.58 | 241.4 | .051 |
| 41 | 10.47 | 33.730 | - | - | - | - | 211.0 | 30 | 11.10 | 33.69 | - | 25.76 | 224.5 | .074 |
| 50 | 10.28 | 33.745 | - | - | - | - | 206.8 | 50 | 10.28 | 33.74 | - | 25.94 | 207.1 | .118 |
| 65 | 9.93 | 33.787 | - | - | - | - | 198.0 | 75 | 9.72 | 33.82 | - | 26.10 | 192.2 | .168 |
| 81 | 9.61 | 33.860 | - | - | - | - | 187.5 | 100 | 9.44 | 33.94 | - | 26.24 | 178.9 | .215 |
| 101 | 9.43 | 33.948 | - | - | - | - | 178.2 | 125 | 9.02 | 33.98 | - | 26.34 | 169.5 | .259 |
| 125 | 9.02 | 33.985 | - | - | - | - | 169.2 | 150 | 8.47 | 34.01 | - | 26.45 | 159.1 | .300 |
| 145 | 8.57 | 34.005 | - | - | - | - | 161.0 | 200 | 7.37 | 34.02 | - | 26.62 | 143.0 | .377 |
| 175 | 7.99 | 34.019 | - | - | - | - | 151.6 | 250 | 6.97 | 34.03 | - | 26.68 | 137.0 | .449 |
| 204 | 7.31 | 34.020 | - | - | - | - | 142.2 | 300 | 6.53 | 34.11 | - | 26.80 | 125.4 | .517 |
| 235 | 7.12 | 34.021 | - | - | - | - | 139.6 | 400 | 6.23 | 34.25 | - | 26.95 | 111.2 | .640 |
| 275 | 6.68 | 34.077 | - | - | - | - | 129.7 | 500 | 5.74 | 34.30 | - | 27.05 | 101.6 | .752 |
| 335 | 6.41 | 34.151 | - | - | - | - | 120.8 | | | | | | | |
| 409 | 6.20 | 34.256 | - | - | - | - | 110.4 | | | | | | | |
| 484 | 5.82 | 34.289 | - | - | - | - | 103.3 | | | | | | | |
| 563 | 5.44 | 34.340 | - | - | - | - | 95.1 | | | | | | | |

76.65 CCOFI CRUISE 6407 76.65

ALEXANDER AGASSIZ, JUNE 25 1964, 1457 GCT, 34 42N 122 00W, SOUNDING 2145 FM, WIND 210 FORCE 2, WEATHER MISSING, SEA ROUGH, WIRE ANGLE 14.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.62 | 33.722 | - | - | - | - | 288.2 | 0 | 14.62 | 33.72 | - | 25.09 | 288.3 | 0 |
| 9 | 12.84 | 33.796 | - | - | - | - | 247.9 | 10 | 12.81 | 33.80 | - | 25.52 | 247.1 | .027 |
| 29 | 10.90 | 33.793 | - | - | - | - | 213.5 | 20 | 12.00 | 33.80 | - | 25.68 | 232.2 | .051 |
| 39 | 10.09 | 33.737 | - | - | - | - | 204.3 | 30 | 10.89 | 33.79 | - | 25.87 | 213.6 | .073 |
| 53 | 9.88 | 33.834 | - | - | - | - | 193.7 | 50 | 9.96 | 33.79 | - | 26.03 | 198.3 | .114 |
| 68 | 9.80 | 33.950 | - | - | - | - | 183.9 | 75 | 9.73 | 33.96 | - | 26.21 | 182.0 | .162 |
| 91 | 8.95 | 33.971 | - | - | - | - | 169.2 | 100 | 8.83 | 33.98 | - | 26.37 | 166.7 | .206 |
| 111 | 8.62 | 34.001 | - | - | - | - | 162.0 | 125 | 8.30 | 34.01 | - | 26.47 | 156.7 | .247 |
| 130 | 8.26 | 34.012 | - | - | - | - | 156.0 | 150 | 8.34 | 34.09 | - | 26.53 | 151.3 | .286 |
| 149 | 8.34 | 34.080 | - | - | - | - | 152.1 | 200 | 8.04 | 34.19 | - | 26.65 | 139.6 | .361 |
| 177 | 8.34 | 34.193 | - | - | - | - | 143.7 | 250 | 7.61 | 34.23 | - | 26.75 | 130.6 | .430 |
| 210 | 7.90 | 34.198 | - | - | - | - | 137.0 | 300 | 6.99 | 34.22 | - | 26.83 | 123.1 | .496 |
| 238 | 7.75 | 34.234 | - | - | - | - | 132.3 | 400 | 6.30 | 34.26 | - | 26.95 | 111.3 | .618 |
| 286 | 7.09 | 34.215 | - | - | - | - | 124.7 | 500 | 5.81 | 34.32 | - | 27.06 | 100.9 | .730 |
| 338 | 6.76 | 34.245 | - | - | - | - | 118.2 | 600 | 5.02 | 34.33 | - | 27.16 | 91.1 | .833 |
| 420 | 6.16 | 34.262 | - | - | - | - | 109.4 | | | | | | | |
| 501 | 5.80 | 34.320 | - | - | - | - | 100.8 | | | | | | | |
| 585 | 5.15 | 34.325 | - | - | - | - | 93.0 | | | | | | | |

76.67 CCOFI CRUISE 6407 76.67

ALEXANDER AGASSIZ, JUNE 25 1964, 1255 GCT, 34 37N 122 11W, SOUNDING 2090 FM, WIND 300 FORCE 2, WEATHER MISSING, SEA MODERATE, WIRE ANGLE 25.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.22 | 33.688 | - | - | - | - | 282.6 | 0 | 14.22 | 33.69 | - | 25.15 | 282.4 | 0 |
| 10 | 12.84 | 33.588 | - | - | - | - | 263.2 | 10 | 12.84 | 33.59 | - | 25.35 | 263.1 | .027 |
| 29 | 12.30 | 33.727 | - | - | - | - | 243.0 | 20 | 12.25 | 33.60 | - | 25.48 | 251.4 | .053 |
| 38 | 11.72 | 33.701 | - | - | - | - | 234.5 | 30 | 12.30 | 33.73 | - | 25.57 | 242.8 | .078 |
| 53 | 10.57 | 33.823 | - | - | - | - | 205.8 | 50 | 11.00 | 33.79 | - | 25.85 | 215.4 | .124 |
| 67 | 10.17 | 33.836 | - | - | - | - | 198.2 | 75 | 10.08 | 33.83 | - | 26.05 | 197.2 | .176 |
| 92 | 9.14 | 33.802 | - | - | - | - | 184.6 | 100 | 9.04 | 33.82 | - | 26.21 | 181.7 | .224 |
| 111 | 8.92 | 33.875 | - | - | - | - | 175.8 | 125 | 8.70 | 33.93 | - | 26.35 | 168.5 | .268 |
| 130 | 8.62 | 33.950 | - | - | - | - | 165.8 | 150 | 8.38 | 33.99 | - | 26.44 | 159.3 | .309 |
| 150 | 8.38 | 33.988 | - | - | - | - | 159.5 | 200 | 7.93 | 34.07 | - | 26.58 | 147.0 | .388 |
| 178 | 8.12 | 34.033 | - | - | - | - | 152.4 | 250 | 7.46 | 34.10 | - | 26.67 | 138.3 | .461 |
| 212 | 7.83 | 34.084 | - | - | - | - | 144.5 | 300 | 7.04 | 34.14 | - | 26.76 | 129.7 | .530 |
| 241 | 7.54 | 34.098 | - | - | - | - | 139.5 | 400 | 5.93 | 34.16 | - | 26.92 | 114.3 | .657 |
| 289 | 7.17 | 34.136 | - | - | - | - | 131.7 | 500 | 5.48 | 34.24 | - | 27.04 | 103.0 | .771 |
| 342 | 6.52 | 34.157 | - | - | - | - | 121.7 | 600 | 4.95 | 34.32 | - | 27.16 | 91.1 | .874 |
| 425 | 5.77 | 34.174 | - | - | - | - | 111.3 | | | | | | | |
| 508 | 5.44 | 34.250 | - | - | - | - | 101.8 | | | | | | | |
| 591 | 5.00 | 34.311 | - | - | - | - | 92.3 | | | | | | | |

| 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 |

76.70 CCOFI CRUISE 6407 76.70

ALEXANDER AGASSIZ, JUNE 25 1964, 1019 GCT, 34 32N 122 21.5W, SOUNDING 2060 FM, WIND 270 FORCE 3, WEATHER MISSING, SEA MISSING, WIRE ANGLE 33.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 15.26 | 33.137 | 6.23 | 0.37 | 2 | 0.00 | 344.2 | 0 | 15.26 | 33.14 | 6.23 | 24.50 | 344.0 | 0 |
| 9 | 14.60 | 33.147 | 6.21 | 0.41 | 3 | 0.00 | 329.9 | 10 | 14.55 | 33.15 | 6.22 | 24.66 | 328.6 | .034 |
| 26 | 14.14 | 33.172 | 6.29 | 0.46 | 2 | 0.00 | 318.8 | 20 | 14.30 | 33.17 | 6.28 | 24.73 | 322.2 | .066 |
| 49 | 11.84 | 33.385 | 6.06 | 0.85 | 5 | 0.27 | 259.9 | 30 | 13.90 | 33.18 | 6.28 | 24.82 | 313.5 | .098 |
| 64 | 10.27 | 33.356 | 5.38 | 1.30 | 14 | 0.01 | 235.4 | 50 | 11.82 | 33.38 | 6.05 | 25.39 | 259.9 | .156 |
| 75 | 10.16 | 33.374 | 5.30 | 1.34 | 14 | 0.01 | 232.3 | 75 | 10.16 | 33.37 | 5.30 | 25.67 | 232.5 | .218 |
| 86 | 10.00 | 33.543 | 5.04 | 1.57 | 17 | 0.14 | 217.2 | 100 | 10.30 | 33.76 | 5.09 | 25.95 | 206.0 | .273 |
| 106 | 10.26 | 33.783 | 5.09 | 1.73 | 20 | 0.24 | 203.6 | 125 | 9.31 | 33.76 | 3.65 | 26.12 | 190.3 | .323 |
| 120 | 9.40 | 33.714 | 3.82 | 1.91 | 24 | 0.03 | 195.1 | 150 | 8.84 | 33.92 | 3.13 | 26.32 | 171.3 | .369 |
| 137 | 9.14 | 33.879 | 3.38 | 2.12 | 29 | 0.23 | 178.9 | 200 | 8.12 | 34.02 | 2.78 | 26.51 | 153.4 | .451 |
| 159 | 8.66 | 33.942 | 3.01 | 2.17 | 32 | - | 167.0 | 250 | 7.43 | 34.06 | 2.30 | 26.64 | 140.8 | .527 |
| 194 | 8.20 | 34.012 | 2.81 | 2.29 | 42 | - | 155.1 | 300 | 7.08 | 34.12 | 1.58 | 26.74 | 131.7 | .597 |
| 237 | 7.56 | 34.043 | 2.48 | 2.47 | 42 | - | 143.9 | 400 | 6.22 | 34.18 | .96 | 26.90 | 116.3 | .726 |
| 300 | 7.08 | 34.123 | 1.58 | 2.84 | 52 | - | 131.5 | 500 | 5.51 | 34.25 | .50 | 27.04 | 102.6 | .841 |
| 375 | 6.42 | 34.162 | 1.13 | 3.08 | 62 | - | 120.1 | 600 | 4.97 | 34.32 | .44 | 27.16 | 91.3 | .945 |
| 451 | 5.85 | 34.220 | .65 | 3.21 | 75 | - | 108.8 | 700 | 4.59 | 34.37 | .44 | 27.24 | 83.5 | 1.039 |
| 559 | 5.17 | 34.291 | .44 | 3.38 | 86 | - | 95.7 | 800 | 4.27 | 34.40 | .45 | 27.30 | 78.0 | 1.127 |
| 682 | 4.66 | 34.362 | .44 | 3.44 | 96 | - | 84.9 | 1000 | 3.90 | 34.48 | - | 27.40 | 68.3 | 1.290 |
| 812 | 4.24 | 34.408 | .46 | 3.47 | 107 | - | 77.1 | | | | | | | |
| 882 | 4.11 | 34.437 | .58 | 3.44 | 110 | - | 73.6 | | | | | | | |

77.51 CCOFI CRUISE 6407 77.51

ALEXANDER AGASSIZ, JUNE 24 1964, 1434 GCT, 35 02N 120 56.5W, SOUNDING 174 FM, WIND 120 FORCE 1, WEATHER MISSING, SEA SLIGHT, WIRE ANGLE 02.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 11.84 | 33.732 | 7.31 | 0.74 | 9 | 0.21 | 234.3 | 0 | 11.84 | 33.73 | 7.31 | 25.65 | 234.5 | 0 |
| 10 | 10.77 | 33.783 | 6.13 | 1.29 | 17 | 0.25 | 212.1 | 10 | 10.77 | 33.78 | 6.13 | 25.89 | 212.3 | .022 |
| 30 | 10.24 | 33.787 | 5.30 | 1.53 | 21 | 0.28 | 203.0 | 20 | 10.28 | 33.79 | 5.32 | 25.98 | 203.4 | .043 |
| 45 | 9.31 | 33.754 | 3.77 | 1.97 | 26 | 0.06 | 190.7 | 30 | 10.24 | 33.79 | 5.30 | 25.99 | 202.8 | .064 |
| 55 | 9.24 | 33.836 | 3.66 | 2.06 | 27 | 0.09 | 183.6 | 50 | 9.26 | 33.80 | 3.70 | 26.16 | 186.5 | .103 |
| 70 | 9.40 | 33.944 | 3.17 | 2.22 | 29 | 0.30 | 178.0 | 75 | 9.33 | 33.96 | 3.05 | 26.27 | 175.8 | .148 |
| 85 | 9.01 | 33.975 | 2.78 | 2.26 | 35 | 0.02 | 169.8 | 100 | 8.96 | 34.04 | 2.27 | 26.39 | 164.2 | .191 |
| 106 | 8.94 | 34.062 | 2.13 | 2.44 | 38 | 0.10 | 162.3 | 125 | 8.86 | 34.10 | 1.74 | 26.46 | 158.2 | .232 |
| 130 | 8.85 | 34.108 | 1.73 | 2.70 | 41 | 0.02 | 157.5 | 150 | 8.79 | 34.12 | 1.74 | 26.48 | 155.7 | .272 |
| 150 | 8.79 | 34.124 | 1.74 | 2.59 | 42 | 0.00 | 155.4 | 200 | 8.23 | 34.15 | 1.54 | 26.59 | 145.3 | .349 |
| 184 | 8.43 | 34.144 | 1.54 | - | - | - | 148.6 | 250 | 7.95 | 34.19 | 1.35 | 26.67 | 138.3 | .422 |
| 214 | 8.07 | 34.155 | 1.55 | - | - | - | 142.6 | | | | | | | |
| 254 | 7.93 | 34.195 | 1.31 | - | - | - | 137.7 | | | | | | | |

77.55 CCOFI CRUISE 6407 77.55

ALEXANDER AGASSIZ, JUNE 24 1964, 1839 GCT, 34 54.5N 121 13W, SOUNDING 305 FM, WIND 150 FORCE 2, WEATHER MISSING, SEA SLIGHT, WIRE ANGLE 01.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.54 | 33.716 | 7.36 | 0.47 | 2 | 0.25 | 267.2 | 0 | 13.54 | 33.72 | 7.36 | 25.31 | 266.9 | 0 |
| 10 | 12.84 | 33.714 | 6.91 | 0.68 | 3 | 0.25 | 254.0 | 10 | 12.84 | 33.71 | 6.91 | 25.45 | 254.2 | .026 |
| 30 | 12.02 | 33.772 | 6.15 | 0.99 | 7 | 0.33 | 234.6 | 20 | 12.44 | 33.74 | 6.61 | 25.55 | 244.6 | .051 |
| 40 | 11.56 | 33.724 | 5.67 | 1.23 | 9 | 0.34 | 230.0 | 30 | 12.02 | 33.77 | 6.15 | 25.65 | 234.8 | .075 |
| 50 | 11.05 | 33.720 | 5.23 | 1.43 | 12 | 0.39 | 221.5 | 50 | 11.05 | 33.72 | 5.23 | 25.79 | 221.5 | .121 |
| 65 | 10.80 | 33.919 | 4.76 | 1.70 | 18 | 0.31 | 202.5 | 75 | 10.18 | 33.92 | 3.73 | 26.10 | 192.2 | .173 |
| 80 | 10.24 | 33.955 | 3.66 | 1.97 | 22 | 0.31 | 190.6 | 100 | 9.80 | 33.94 | 3.29 | 26.18 | 184.6 | .220 |
| 100 | 9.80 | 33.940 | 3.29 | 2.09 | 23 | 0.32 | 184.6 | 125 | 9.32 | 34.06 | 2.12 | 26.35 | 168.2 | .265 |
| 125 | 9.32 | 34.060 | 2.12 | 2.41 | 28 | 0.22 | 168.2 | 150 | 8.88 | 34.12 | 1.87 | 26.47 | 157.0 | .306 |
| 145 | 8.94 | 34.111 | 1.90 | 2.53 | 34 | 0.06 | 158.6 | 200 | 8.49 | 34.20 | 1.43 | 26.59 | 145.3 | .384 |
| 175 | 8.64 | 34.167 | 1.58 | - | - | - | 150.0 | 250 | 8.02 | 34.19 | 1.53 | 26.66 | 139.3 | .457 |
| 205 | 8.47 | 34.204 | 1.43 | - | - | - | 144.7 | 300 | 7.33 | 34.15 | 1.63 | 26.72 | 132.8 | .527 |
| 235 | 8.34 | 34.209 | 1.44 | - | - | - | 142.5 | 400 | 6.74 | 34.26 | .82 | 26.89 | 116.8 | .657 |
| 275 | 7.44 | 34.135 | 1.84 | - | - | - | 135.4 | 500 | 5.99 | 34.27 | - | 27.00 | 106.8 | .775 |
| 335 | 7.20 | 34.198 | 1.22 | - | - | - | 127.5 | | | | | | | |
| 410 | 6.66 | 34.260 | .79 | - | - | - | 115.8 | | | | | | | |
| 479 | 6.14 | 34.264 | .75 | - | - | - | 109.0 | | | | | | | |
| 554 | 5.66 | - | - | - | - | - | - | | | | | | | |

77.60 CCOFI CRUISE 6407 77.60

ALEXANDER AGASSIZ, JUNE 24 1964, 2259 GCT, 34 44N 121 33.5W, SOUNDING 448 FM, WIND 110 FORCE 2, WEATHER OVERCAST, SEA VERY ROUGH, WIRE ANGLE 12.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.40 | 33.691 | - | - | - | - | 286.0 | 0 | 14.40 | 33.69 | - | 25.11 | 286.1 | 0 |
| 10 | 13.34 | 33.702 | - | - | - | - | 264.3 | 10 | 13.34 | 33.70 | - | 25.34 | 264.5 | .028 |
| 29 | 12.50 | 33.722 | - | - | - | - | 247.0 | 20 | 13.13 | 33.71 | - | 25.39 | 259.7 | .054 |
| 39 | 11.02 | 33.665 | - | - | - | - | 225.0 | 30 | 12.35 | 33.72 | - | 25.55 | 244.4 | .079 |
| 54 | 10.36 | 33.725 | - | - | - | - | 209.5 | 50 | 10.54 | 33.70 | - | 25.87 | 214.4 | .125 |
| 68 | 9.76 | 33.809 | - | - | - | - | 193.7 | 75 | 9.78 | 33.83 | - | 26.10 | 192.4 | .176 |
| 94 | 9.40 | 33.957 | - | - | - | - | 177.1 | 100 | 9.16 | 33.99 | - | 26.32 | 170.9 | .222 |
| 113 | 8.69 | 34.015 | - | - | - | - | 162.0 | 125 | 8.37 | 34.02 | - | 26.47 | 157.0 | .264 |
| 132 | 8.22 | 34.015 | - | - | - | - | 155.2 | 150 | 7.99 | 34.02 | - | 26.53 | 151.5 | .303 |
| 153 | 7.96 | 34.020 | - | - | - | - | 151.1 | 200 | 7.38 | 34.02 | - | 26.62 | 143.1 | .378 |
| 181 | 7.73 | 34.019 | - | - | - | - | 148.0 | 250 | 6.68 | 34.05 | - | 26.74 | 131.7 | .448 |
| 216 | 7.10 | 34.028 | - | - | - | - | 138.8 | 300 | 6.07 | 34.07 | - | 26.83 | 122.7 | .514 |
| 246 | 6.72 | 34.044 | - | - | - | - | 132.7 | 400 | 5.78 | 34.19 | - | 26.96 | 110.3 | .635 |
| 295 | 6.12 | 34.068 | - | - | - | - | 123.5 | 500 | 5.71 | 34.32 | - | 27.07 | 99.7 | .746 |
| 349 | 5.65 | 34.097 | - | - | - | - | 115.7 | 600 | 5.15 | 34.37 | - | 27.18 | 89.6 | .847 |
| 433 | 5.88 | 34.264 | - | - | - | - | 105.9 | | | | | | | |
| 517 | 5.64 | 34.327 | - | - | - | - | 98.4 | | | | | | | |
| 602 | 5.14 | 34.367 | - | - | - | - | 89.7 | | | | | | | |



108 lines

| 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 |

77.62 CCOFI CRUISE 6407 77.62

ALEXANDER AGASSIZ, JUNE 25 1964, 0119 GCT, 34 38.5N 121 44.5W, SOUNDING 1630 FM, WIND 050 FORCE 2, WEATHER FOG, SEA VERY ROUGH, WIRE ANGLE 08.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C | 15.06 | 33.779 | - | - | - | - | 293.0 | 0 | 15.06 | 33.78 | - | 25.04 | 293.0 | 0 |
| 10 | 13.26 | 33.767 | - | - | - | - | 258.0 | 10 | 13.26 | 33.77 | - | 25.41 | 257.8 | .028 |
| 30 | 11.92 | 33.862 | - | - | - | - | 226.2 | 20 | 12.52 | 33.81 | - | 25.59 | 240.9 | .053 |
| 40 | 11.04 | 33.959 | - | - | - | - | 203.6 | 30 | 11.92 | 33.86 | - | 25.74 | 226.3 | .076 |
| 55 | 9.68 | 33.959 | - | - | - | - | 181.3 | 50 | 9.92 | 33.96 | - | 26.17 | 185.0 | .117 |
| 70 | 9.28 | 33.959 | - | - | - | - | 175.1 | 75 | 9.17 | 33.96 | - | 26.30 | 173.3 | .162 |
| 95 | 8.80 | 34.008 | - | - | - | - | 164.2 | 100 | 8.75 | 34.02 | - | 26.41 | 162.5 | .205 |
| 114 | 8.59 | 34.060 | - | - | - | - | 157.2 | 125 | 8.39 | 34.07 | - | 26.51 | 153.5 | .245 |
| 134 | 8.25 | 34.069 | - | - | - | - | 151.6 | 150 | 8.11 | 34.06 | - | 26.54 | 150.3 | .283 |
| 154 | 8.08 | 34.059 | - | - | - | - | 149.9 | 200 | 7.75 | 34.14 | - | 26.66 | 139.3 | .357 |
| 184 | 7.84 | 34.107 | - | - | - | - | 143.0 | 250 | 6.68 | 34.08 | - | 26.76 | 129.5 | .426 |
| 218 | 7.62 | 34.164 | - | - | - | - | 135.7 | 300 | 6.34 | 34.11 | - | 26.83 | 123.0 | .491 |
| 248 | 6.71 | 34.076 | - | - | - | - | 130.2 | 400 | 6.17 | 34.22 | - | 26.94 | 112.7 | .614 |
| 296 | 6.34 | 34.105 | - | - | - | - | 123.4 | 500 | 5.57 | 34.31 | - | 27.08 | 98.8 | .725 |
| 350 | 6.37 | 34.183 | - | - | - | - | 117.9 | 600 | 5.16 | 34.36 | - | 27.17 | 90.4 | .827 |
| 434 | 5.98 | 34.256 | - | - | - | - | 107.7 | | | | | | | |
| 517 | 5.49 | 34.321 | - | - | - | - | 97.1 | | | | | | | |
| 601 | 5.16 | 34.360 | - | - | - | - | 90.4 | | | | | | | |

77.65 CCOFI CRUISE 6407 77.65

ALEXANDER AGASSIZ, JUNE 25 1964, 0301 GCT, 34 34N 121 55W, SOUNDING 2013 FM, WIND 340 FORCE 2, WEATHER MISSING, SEA VERY ROUGH, WIRE ANGLE 07.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C | 14.88 | 33.711 | - | - | - | - | 294.3 | 0 | 14.88 | 33.71 | - | 25.02 | 294.4 | 0 |
| 10 | 13.31 | 33.727 | - | - | - | - | 261.9 | 10 | 13.31 | 33.73 | - | 25.37 | 261.7 | .028 |
| 30 | 10.24 | 33.834 | - | - | - | - | 199.5 | 20 | 10.70 | 33.79 | - | 25.91 | 210.4 | .051 |
| 40 | 9.90 | 33.912 | - | - | - | - | 188.3 | 30 | 10.24 | 33.83 | - | 26.02 | 199.8 | .072 |
| 54 | 9.36 | 33.946 | - | - | - | - | 177.3 | 50 | 9.50 | 33.94 | - | 26.23 | 179.9 | .110 |
| 70 | 9.08 | 33.972 | - | - | - | - | 171.0 | 75 | 8.92 | 33.97 | - | 26.35 | 168.8 | .154 |
| 85 | 8.58 | 33.987 | - | - | - | - | 162.5 | 100 | 8.50 | 34.00 | - | 26.43 | 160.3 | .196 |
| 113 | 8.29 | 34.012 | - | - | - | - | 156.4 | 125 | 8.32 | 34.07 | - | 26.52 | 152.5 | .235 |
| 133 | 8.35 | 34.084 | - | - | - | - | 151.9 | 150 | 8.24 | 34.09 | - | 26.54 | 149.9 | .274 |
| 152 | 8.22 | 34.093 | - | - | - | - | 149.4 | 200 | 8.04 | 34.21 | - | 26.67 | 138.1 | .347 |
| 183 | 8.14 | 34.186 | - | - | - | - | 141.3 | 250 | 7.68 | 34.24 | - | 26.75 | 130.8 | .416 |
| 216 | 7.92 | 34.225 | - | - | - | - | 135.3 | 300 | 7.07 | 34.25 | - | 26.84 | 121.9 | .482 |
| 245 | 7.72 | 34.243 | - | - | - | - | 131.2 | 400 | 6.31 | 34.27 | - | 26.96 | 110.7 | .603 |
| 293 | 7.16 | 34.253 | - | - | - | - | 122.8 | 500 | 5.79 | 34.30 | - | 27.05 | 102.2 | .715 |
| 345 | 6.62 | 34.240 | - | - | - | - | 116.8 | 600 | 5.13 | 34.33 | - | 27.15 | 92.4 | .819 |
| 427 | 6.18 | 34.282 | - | - | - | - | 108.2 | | | | | | | |
| 508 | 5.74 | 34.305 | - | - | - | - | 101.2 | | | | | | | |
| 585 | 5.20 | 34.330 | - | - | - | - | 93.1 | | | | | | | |

77.68 CCOFI CRUISE 6407 77.68

ALEXANDER AGASSIZ, JUNE 25 1964, 0547 GCT, 34 28N 122 05.5W, SOUNDING 2000 FM, WIND 330 FORCE 2, WEATHER MISSING, SEA MISSING, WIRE ANGLE 08.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.98 | 33.582 | - | - | - | - | 285.6 | 0 | 13.98 | 33.58 | - | 25.11 | 285.7 | 0 |
| 11 | 12.66 | 33.652 | - | - | - | - | 255.2 | 10 | 12.70 | 33.65 | - | 25.43 | 256.0 | .027 |
| 31 | 10.44 | 33.723 | - | - | - | - | 211.0 | 20 | 10.90 | 33.72 | - | 25.82 | 218.9 | .051 |
| 41 | 9.44 | 33.663 | - | - | - | - | 199.5 | 30 | 10.50 | 33.72 | - | 25.89 | 212.2 | .072 |
| 55 | 9.79 | 33.843 | - | - | - | - | 191.6 | 50 | 9.40 | 33.73 | - | 26.08 | 193.9 | .113 |
| 70 | 9.58 | 33.850 | - | - | - | - | 187.8 | 75 | 9.49 | 33.88 | - | 26.18 | 184.2 | .161 |
| 85 | 9.20 | 33.972 | - | - | - | - | 172.9 | 100 | 8.97 | 33.99 | - | 26.35 | 168.0 | .205 |
| 114 | 8.77 | 33.983 | - | - | - | - | 165.6 | 125 | 8.53 | 33.99 | - | 26.42 | 161.5 | .247 |
| 134 | 8.36 | 33.997 | - | - | - | - | 158.5 | 150 | 8.12 | 34.01 | - | 26.50 | 154.1 | .287 |
| 154 | 8.07 | 34.017 | - | - | - | - | 152.9 | 200 | 7.60 | 34.07 | - | 26.62 | 142.4 | .363 |
| 183 | 7.72 | 34.055 | - | - | - | - | 145.2 | 250 | 7.19 | 34.11 | - | 26.71 | 133.9 | .434 |
| 218 | 7.50 | 34.084 | - | - | - | - | 140.0 | 300 | 6.74 | 34.15 | - | 26.81 | 125.0 | .500 |
| 247 | 7.23 | 34.112 | - | - | - | - | 134.3 | 400 | 6.24 | 34.23 | - | 26.94 | 112.8 | .624 |
| 296 | 6.76 | 34.140 | - | - | - | - | 126.0 | 500 | 5.53 | 34.25 | - | 27.04 | 102.9 | .738 |
| 350 | 6.66 | 34.224 | - | - | - | - | 118.5 | 600 | 5.10 | 34.32 | - | 27.15 | 92.8 | .842 |
| 434 | 5.94 | 34.231 | - | - | - | - | 109.1 | | | | | | | |
| 519 | 5.44 | 34.267 | - | - | - | - | 100.6 | | | | | | | |
| 604 | 5.08 | 34.325 | - | - | - | - | 92.2 | | | | | | | |

| OBSERVED LEVELS OF DEPTH | | | | | | | | STANDARD LEVELS OF DEPTH | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | INPU | | | | | COMPUTED | | | INPUT | | | COMPUTED | |
| Z | T | S | OXY | PHO | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |

77.70 CCOFI CRUISE 6407 77.70

ALEXANDER AGASSIZ, JUNE 25 1964, 0748 GCT, 34 23.5N 122 17.5W, SOUNDING 2000 FM, WIND 260 FORCE 2, WEATHER MISSING, SEA MISSING, WIRE ANGLE 30.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 15.60 | 33.320 | - | - | - | - | 337.9 | 0 | 15.60 | 33.32 | - | 24.57 | 337.9 | 0 |
| 10 | 14.43 | 33.403 | - | - | - | - | 307.7 | 10 | 14.43 | 33.40 | - | 24.88 | 307.9 | .032 |
| 27 | 11.80 | 33.382 | - | - | - | - | 259.4 | 20 | 13.00 | 33.39 | - | 25.17 | 280.8 | .062 |
| 36 | 12.12 | 33.585 | - | - | - | - | 250.2 | 30 | 11.80 | 33.43 | - | 25.43 | 255.9 | .089 |
| 48 | 10.93 | 33.616 | - | - | - | - | 227.1 | 50 | 10.70 | 33.61 | - | 25.77 | 223.7 | .137 |
| 61 | 10.94 | 33.731 | - | - | - | - | 218.8 | 75 | 9.99 | 33.81 | - | 26.05 | 197.3 | .190 |
| 73 | 10.05 | 33.800 | - | - | - | - | 199.0 | 100 | 9.25 | 33.86 | - | 26.21 | 181.9 | .238 |
| 98 | 9.34 | 33.859 | - | - | - | - | 183.4 | 125 | 8.71 | 33.89 | - | 26.32 | 171.6 | .282 |
| 113 | 8.85 | 33.838 | - | - | - | - | 177.5 | 150 | 8.39 | 33.97 | - | 26.43 | 161.0 | .324 |
| 128 | 8.68 | 33.901 | - | - | - | - | 170.3 | 200 | 8.01 | 34.07 | - | 26.56 | 148.1 | .403 |
| 149 | 8.40 | 33.966 | - | - | - | - | 161.4 | 250 | 7.55 | 34.12 | - | 26.67 | 138.0 | .477 |
| 174 | 8.16 | 34.024 | - | - | - | - | 153.6 | 300 | 7.03 | 34.14 | - | 26.76 | 129.5 | .546 |
| 195 | 8.04 | 34.065 | - | - | - | - | 148.9 | 400 | 6.19 | 34.18 | - | 26.90 | 115.9 | .673 |
| 231 | 7.72 | 34.101 | - | - | - | - | 141.7 | 500 | 5.54 | 34.23 | - | 27.02 | 104.5 | .789 |
| 271 | 7.36 | 34.128 | - | - | - | - | 134.8 | | | | | | | |
| 337 | 6.64 | 34.155 | - | - | - | - | 123.4 | | | | | | | |
| 407 | 6.15 | 34.184 | - | - | - | - | 115.1 | | | | | | | |
| 483 | 5.65 | 34.224 | - | - | - | - | 106.2 | | | | | | | |

77.200 CCOFI CRUISE 6407 77.200

ALEXANDER AGASSIZ, JULY 8 1964, 0057 GCT, 30 07N 131 10W, SOUNDING 2400 FM, WIND 020 FORCE 3, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 17.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 484A | 5.82 | 34.165 | .88 | - | - | - | 112.6 |
| 486 | 5.78 | 34.162 | .84 | - | - | - | 112.4 |
| 490 | 5.79 | 34.170 | .84 | - | - | - | 111.9 |
| 504 | 5.40 | 34.133 | .94 | - | - | - | 110.1 |
| 507 | 5.44 | 34.143 | .95 | - | - | - | 109.9 |
| 510 | 5.41 | 34.147 | .92 | - | - | - | 109.2 |
| 524 | 5.20 | 34.146 | .89 | - | - | - | 106.9 |
| 527 | 5.20 | 34.153 | .91 | - | - | - | 106.4 |
| 530 | 5.23 | 34.164 | .83 | - | - | - | 105.9 |
| 543 | 5.24 | 34.176 | .76 | - | - | - | 105.1 |
| 546 | 5.24 | 34.186 | .77 | - | - | - | 104.4 |
| 549 | 5.24 | 34.190 | .73 | - | - | - | 104.1 |
| 563 | 5.16 | 34.208 | .65 | - | - | - | 101.8 |
| 566 | 5.17 | 34.216 | .65 | - | - | - | 101.3 |
| 569 | 5.16 | 34.211 | .63 | - | - | - | 101.6 |
| 583 | 5.11 | 34.218 | .55 | - | - | - | 100.5 |
| 586 | 5.08 | 34.220 | .58 | - | - | - | 100.1 |
| 589 | 5.02 | 34.220 | .59 | - | - | - | 99.4 |

78.51A CCOFI CRUISE 6407 78.51A

ALEXANDER AGASSIZ, JUNE 23 1964, 2057 GCT, 34 52.5N 120 49W, SOUNDING 68 FM, WIND 230 FORCE 1, WEATHER MISSING, SEA SLIGHT, WIRE ANGLE 05.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.44 | 33.763 | - | - | - | - | 242.9 | 0 | 12.44 | 33.76 | - | 25.56 | 243.1 | 0 |
| 10 | 11.26 | 33.806 | - | - | - | - | 218.7 | 10 | 11.26 | 33.81 | - | 25.82 | 218.4 | .023 |
| 25 | 10.60 | 33.877 | - | - | - | - | 202.3 | 20 | 10.83 | 33.85 | - | 25.93 | 208.1 | .044 |
| 35 | 10.06 | 33.905 | - | - | - | - | 191.4 | 30 | 10.28 | 33.89 | - | 26.06 | 196.0 | .065 |
| 45 | 9.83 | 33.946 | - | - | - | - | 184.6 | 50 | 9.68 | 33.96 | - | 26.21 | 181.2 | .103 |
| 60 | 9.46 | 33.986 | - | - | - | - | 175.8 | 75 | 9.44 | 33.99 | - | 26.28 | 175.2 | .147 |
| 75 | 9.44 | 33.992 | - | - | - | - | 175.1 | 100 | 9.27 | 34.02 | - | 26.33 | 170.4 | .191 |
| 101 | 9.26 | 34.026 | - | - | - | - | 169.8 | | | | | | | |

78.53A CCOFI CRUISE 6407 78.53A

ALEXANDER AGASSIZ, JUNE 23 1964, 1920 GCT, 34 47.5N 120 57.5W, SOUNDING 180 FM, WIND 190 FORCE 2, WEATHER FOG, SEA SLIGHT, WIRE ANGLE 17.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.56 | 33.787 | - | - | - | - | 243.4 | 0 | 12.56 | 33.79 | - | 25.56 | 243.2 | 0 |
| 9 | 11.66 | 33.816 | - | - | - | - | 225.0 | 10 | 11.63 | 33.82 | - | 25.76 | 224.1 | .023 |
| 28 | 10.66 | 33.730 | - | - | - | - | 214.1 | 20 | 11.40 | 33.80 | - | 25.79 | 221.6 | .046 |
| 43 | 9.97 | 33.734 | - | - | - | - | 202.6 | 30 | 10.53 | 33.73 | - | 25.89 | 212.0 | .067 |
| 57 | 10.26 | 33.960 | - | - | - | - | 190.5 | 50 | 9.90 | 33.85 | - | 26.09 | 192.9 | .108 |
| 71 | 10.05 | - | - | - | - | - | - | 75 | 9.99 | 33.98 | - | 26.18 | 184.7 | .156 |
| 85 | 9.83 | 33.985 | - | - | - | - | 181.7 | 100 | 9.44 | 34.03 | - | 26.31 | 172.3 | .201 |
| 104 | 9.38 | 34.037 | - | - | - | - | 170.8 | 125 | 9.15 | 34.07 | - | 26.39 | 164.8 | .243 |
| 127 | 9.13 | 34.076 | - | - | - | - | 164.1 | 150 | 8.94 | 34.11 | - | 26.45 | 158.7 | .284 |
| 145 | 8.98 | 34.099 | - | - | - | - | 160.1 | 200 | 8.77 | 34.15 | - | 26.51 | 153.2 | .364 |
| 187 | 8.86 | 34.123 | - | - | - | - | 156.5 | 250 | 8.55 | 34.19 | - | 26.58 | 147.0 | .441 |
| 221 | 8.62 | 34.171 | - | - | - | - | 149.4 | 300 | 8.10 | 34.23 | - | 26.68 | 137.5 | .515 |
| 255 | 8.53 | 34.190 | - | - | - | - | 146.7 | | | | | | | |
| 295 | 8.16 | 34.222 | - | - | - | - | 138.9 | | | | | | | |

A) TEST CAST.

| OBSERVED LEVELS OF DEPTH | | | | | | | | STANDARD LEVELS OF DEPTH | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | INPUT | | | | | | COMPUTED | | INPUT | | | | COMPUTED | |
| Z | T | S | CXY | PHO | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |

78.65A — CCOFI CRUISE 6407 — 78.65A

ALEXANDER AGASSIZ, JUNE 23 1964, 0918 GCT, 34 24N 121 47.5W, SOUNDING 2002 FM, WIND 260 FORCE 3, WEATHER CLOUDY, SEA MODERATE, WIRE ANGLE 17.

| Z | T | S | CXY | PHO | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.56 | 33.726 | - | - | - | - | 266.8 | 0 | 13.56 | 33.73 | - | 25.32 | 266.5 | 0 |
| 10 | 13.10 | 33.716 | - | - | - | - | 258.7 | 10 | 13.10 | 33.72 | - | 25.40 | 258.4 | .026 |
| 30 | 11.46 | 33.856 | - | - | - | - | 218.5 | 20 | 12.25 | 33.78 | - | 25.61 | 238.2 | .051 |
| 39 | 10.46 | 33.884 | - | - | - | - | 199.4 | 30 | 11.46 | 33.86 | - | 25.82 | 218.2 | .074 |
| 53 | 10.23 | 33.975 | - | - | - | - | 188.9 | 50 | 10.27 | 33.97 | - | 26.12 | 190.0 | .115 |
| 67 | 9.44 | - | - | - | - | - | - | 75 | 9.25 | 33.95 | - | 26.28 | 175.3 | .161 |
| 90 | 8.91 | 33.960 | - | - | - | - | 169.4 | 100 | 8.80 | 33.99 | - | 26.38 | 165.5 | .204 |
| 109 | 8.70 | 34.044 | - | - | - | - | 160.0 | 125 | 8.51 | 34.07 | - | 26.49 | 155.3 | .245 |
| 127 | 8.48 | 34.072 | - | - | - | - | 154.7 | 150 | 8.12 | 34.08 | - | 26.55 | 148.9 | .283 |
| 145 | 8.15 | 34.073 | - | - | - | - | 149.9 | 200 | 7.87 | 34.15 | - | 26.65 | 140.2 | .357 |
| 172 | 8.04 | 34.125 | - | - | - | - | 144.4 | 250 | 7.50 | 34.18 | - | 26.72 | 132.8 | .427 |
| 204 | 7.84 | 34.153 | - | - | - | - | 139.5 | 300 | 7.24 | 34.22 | - | 26.79 | 126.4 | .494 |
| 233 | 7.60 | 34.166 | - | - | - | - | 135.2 | 400 | 6.33 | 34.27 | - | 26.96 | 110.9 | .618 |
| 278 | 7.37 | 34.202 | - | - | - | - | 129.4 | 500 | 5.73 | 34.29 | - | 27.05 | 102.2 | .730 |
| 330 | 7.03 | 34.245 | - | - | - | - | 121.7 | | | | | | | |
| 409 | 6.25 | 34.273 | - | - | - | - | 109.7 | | | | | | | |
| 491 | 5.78 | 34.289 | - | - | - | - | 102.9 | | | | | | | |
| 573 | 5.29 | 34.312 | - | - | - | - | 95.5 | | | | | | | |

78.70A — CCOFI CRUISE 6407 — 78.70A

ALEXANDER AGASSIZ, JUNE 23 1964, 0514 GCT, 34 14N 122 09W, SOUNDING 2050 FM, WIND 290 FORCE 3, WEATHER CLOUDY, SEA MODERATE, WIRE ANGLE 14.

| Z | T | S | CXY | PHO | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.14 | 33.365 | - | - | - | - | 285.3 | 0 | 13.14 | 33.36 | - | 25.12 | 285.6 | 0 |
| 10 | 12.28 | 33.292 | - | - | - | - | 274.7 | 10 | 12.28 | 33.29 | - | 25.23 | 274.8 | .028 |
| 29 | 11.66 | 33.354 | - | - | - | - | 259.0 | 20 | 11.75 | 33.32 | - | 25.35 | 263.1 | .055 |
| 39 | 10.98 | 33.440 | - | - | - | - | 240.9 | 30 | 11.64 | 33.36 | - | 25.40 | 258.2 | .081 |
| 50 | 10.94 | 33.481 | - | - | - | - | 237.2 | 50 | 10.94 | 33.48 | - | 25.62 | 237.3 | .131 |
| 63 | 10.60 | 33.555 | - | - | - | - | 226.1 | 75 | 10.38 | 33.64 | - | 25.85 | 216.2 | .188 |
| 78 | 10.31 | 33.645 | - | - | - | - | 214.6 | 100 | 9.43 | 33.68 | - | 26.04 | 198.1 | .240 |
| 97 | 9.49 | 33.673 | - | - | - | - | 199.5 | 125 | 9.06 | 33.85 | - | 26.23 | 179.8 | .288 |
| 120 | 9.14 | 33.818 | - | - | - | - | 183.4 | 150 | 8.66 | 33.95 | - | 26.37 | 166.4 | .332 |
| 139 | 8.79 | 33.912 | - | - | - | - | 171.1 | 200 | 8.25 | 34.09 | - | 26.54 | 150.0 | .412 |
| 168 | 8.50 | 34.009 | - | - | - | - | 159.7 | 250 | 7.60 | 34.13 | - | 26.67 | 137.9 | .486 |
| 196 | 8.30 | 34.083 | - | - | - | - | 151.3 | 300 | 7.12 | 34.15 | - | 26.75 | 130.0 | .555 |
| 225 | 7.92 | 34.101 | - | - | - | - | 144.5 | 400 | 6.14 | 34.18 | - | 26.91 | 115.3 | .683 |
| 263 | 7.46 | 34.140 | - | - | - | - | 135.3 | 500 | 5.57 | 34.24 | - | 27.03 | 104.1 | .799 |
| 321 | 6.93 | 34.159 | - | - | - | - | 126.8 | | | | | | | |
| 392 | 6.21 | 34.177 | - | - | - | - | 116.4 | | | | | | | |
| 467 | 5.72 | 34.209 | - | - | - | - | 108.1 | | | | | | | |
| 546 | 5.42 | 34.282 | - | - | - | - | 99.2 | | | | | | | |

78.53B — CCOFI CRUISE 6407 — 78.53B

ALEXANDER AGASSIZ, JUNE 22 1964, 0823 GCT, 34 40N 120 51.5W, SOUNDING 112 FM, WIND 010 FORCE 2, WEATHER FOG, SEA SLIGHT, WIRE ANGLE 05.

| Z | T | S | CXY | PHO | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 11.26 | 33.882 | 7.67 | 0.67 | 11 | 0.16 | 213.1 | 0 | 11.26 | 33.88 | 7.67 | 25.88 | 213.3 | 0 |
| 10 | 10.50 | 33.877 | 5.44 | 1.40 | 19 | 0.28 | 200.6 | 10 | 10.50 | 33.88 | 5.44 | 26.01 | 200.4 | .021 |
| 30 | 10.10 | 33.928 | 4.22 | 1.83 | 24 | 0.28 | 190.3 | 20 | 10.32 | 33.89 | 4.84 | 26.05 | 196.7 | .041 |
| 40 | 9.85 | 33.949 | 3.57 | 2.03 | 27 | 0.29 | 184.7 | 30 | 10.10 | 33.93 | 4.22 | 26.12 | 190.1 | .060 |
| 55 | 9.57 | 33.961 | 3.21 | 2.10 | 30 | 0.28 | 179.4 | 50 | 9.64 | 33.96 | 3.29 | 26.22 | 180.6 | .097 |
| 70 | 9.44 | 33.963 | 2.99 | 2.06 | 30 | 0.27 | 177.2 | 75 | 9.39 | 33.97 | 2.84 | 26.27 | 175.9 | .142 |
| 85 | 9.28 | 33.986 | 2.58 | 2.29 | 34 | 0.25 | 173.1 | 100 | 9.24 | 34.00 | 2.45 | 26.32 | 171.4 | .186 |
| 104 | 9.23 | 34.005 | 2.42 | 2.35 | 34 | 0.27 | 170.9 | 125 | 9.17 | 34.01 | 2.27 | 26.34 | 169.6 | .229 |
| 129 | 9.15 | 34.020 | 2.23 | 2.44 | 36 | 0.25 | 168.5 | 150 | 9.05 | 34.05 | 2.08 | 26.39 | 164.8 | .272 |
| 153 | 9.03 | 34.062 | 2.04 | 2.49 | 39 | 0.23 | 163.6 | 200 | 8.67 | 34.13 | - | 26.51 | 153.2 | .353 |
| 184 | 8.80 | 34.117 | 1.79 | - | - | - | 156.1 | | | | | | | |

78.58B — CCOFI CRUISE 6407 — 78.58B

ALEXANDER AGASSIZ, JUNE 22 1964, 1216 GCT, 34 30.5N 121 11W, SOUNDING 645 FM, WIND 300 FORCE 2, WEATHER DRIZZLE, SEA SLIGHT, WIRE ANGLE 00.

| Z | T | S | CXY | PHO | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.18 | 33.658 | 6.78 | 0.72 | 3 | 0.19 | 264.5 | 0 | 13.18 | 33.66 | 6.78 | 25.34 | 264.3 | 0 |
| 10 | 13.08 | 33.666 | 6.62 | 0.69 | 3 | 0.20 | 262.0 | 10 | 13.08 | 33.67 | 6.62 | 25.37 | 261.7 | .026 |
| 30 | 11.76 | 33.802 | 6.64 | 0.85 | 7 | 0.26 | 227.8 | 20 | 11.90 | 33.72 | 6.64 | 25.63 | 236.3 | .051 |
| 40 | 10.66 | 33.701 | 5.08 | 1.40 | 13 | 0.35 | 216.3 | 30 | 11.76 | 33.80 | 6.64 | 25.72 | 227.9 | .075 |
| 55 | 10.04 | 33.750 | 4.12 | 1.77 | 19 | 0.27 | 202.5 | 50 | 10.19 | 33.74 | 4.26 | 25.96 | 205.7 | .118 |
| 70 | 9.78 | 33.785 | 3.80 | 1.85 | 21 | - | 195.8 | 75 | 9.71 | 33.80 | 3.70 | 26.08 | 193.5 | .168 |
| 96 | 9.57 | 33.926 | 3.22 | 2.02 | 27 | 0.20 | 182.0 | 100 | 9.56 | 33.95 | 3.10 | 26.23 | 180.1 | .215 |
| 115 | 9.54 | 34.006 | 2.64 | 2.23 | 30 | 0.02 | 175.6 | 125 | 9.41 | 34.03 | 2.46 | 26.31 | 171.8 | .260 |
| 135 | 9.24 | 34.048 | 2.28 | 2.34 | 33 | 0.03 | 167.9 | 150 | 9.02 | 34.08 | 2.00 | 26.42 | 162.1 | .302 |
| 155 | 8.98 | 34.095 | 1.93 | 2.44 | 36 | 0.00 | 160.4 | 200 | 8.67 | 34.16 | 1.81 | 26.53 | 150.9 | .382 |
| 185 | 8.78 | 34.146 | 1.95 | 2.60 | 39 | - | 153.6 | 250 | 8.24 | 34.21 | 1.30 | 26.64 | 141.0 | .457 |
| 220 | 8.50 | 34.170 | 1.56 | 2.63 | 41 | - | 147.7 | 300 | 7.10 | 34.16 | 1.40 | 26.76 | 129.0 | .527 |
| 249 | 8.25 | 34.209 | 1.29 | 2.74 | 45 | - | 141.2 | 400 | 6.06 | 34.19 | .88 | 26.93 | 113.6 | .653 |
| 299 | 7.11 | 34.162 | 1.41 | 2.82 | 54 | - | 129.0 | 500 | 5.57 | 34.26 | .57 | 27.04 | 102.6 | .767 |
| 355 | 6.62 | 34.195 | 1.04 | 3.02 | 62 | - | 120.2 | 600 | 5.22 | 34.35 | .46 | 27.16 | 91.9 | .871 |
| 439 | 5.63 | 34.189 | .74 | 3.20 | 76 | - | 108.6 | | | | | | | |
| 523 | 5.54 | 34.288 | .51 | 3.33 | 81 | - | 100.1 | | | | | | | |
| 608 | 5.19 | 34.356 | .46 | 3.36 | 89 | - | 91.1 | | | | | | | |

| OBSERVED LEVELS OF DEPTH | | | | | | | | STANDARD LEVELS OF DEPTH | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | INPUT | | | | | COMPUTED | | | INPUT | | | COMPUTED | |
| Z | T | S | OXY | PHC | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |

78.608 CCOFI CRUISE 6407 78.608

ALEXANDER AGASSIZ, JUNE 22 1964, 1427 GCT, 34 26N 121 21.5W, SOUNDING 1580 FM, WIND 290 FORCE 2, WEATHER FOG, SEA VERY ROUGH, WIRE ANGLE 05.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.00 | 33.725 | - | - | - | - | 256.2 | 0 | 13.00 | 33.72 | - | 25.42 | 256.5 | 0 |
| 10 | 12.98 | 33.731 | - | - | - | - | 255.3 | 10 | 12.98 | 33.73 | - | 25.43 | 255.4 | .026 |
| 30 | 10.68 | 33.618 | - | - | - | - | 222.7 | 20 | 12.65 | 33.72 | - | 25.49 | 250.0 | .051 |
| 41 | 10.32 | 33.725 | - | - | - | - | 208.9 | 30 | 10.68 | 33.62 | - | 25.78 | 222.6 | .075 |
| 51 | 9.98 | 33.795 | - | - | - | - | 198.2 | 50 | 9.99 | 33.78 | - | 26.02 | 199.5 | .117 |
| 66 | 9.80 | 33.839 | - | - | - | - | 192.1 | 75 | 9.71 | 33.85 | - | 26.12 | 189.8 | .166 |
| 81 | 9.62 | 33.862 | - | - | - | - | 187.5 | 100 | 9.24 | 33.97 | - | 26.29 | 173.6 | .212 |
| 100 | 9.24 | 33.970 | - | - | - | - | 173.6 | 125 | 8.85 | 34.01 | - | 26.39 | 164.8 | .255 |
| 125 | 8.85 | 34.006 | - | - | - | - | 165.1 | 150 | 8.40 | 34.02 | - | 26.47 | 157.4 | .296 |
| 145 | 8.49 | 34.015 | - | - | - | - | 159.1 | 200 | 7.73 | 34.01 | - | 26.56 | 148.6 | .374 |
| 174 | 8.06 | 34.020 | - | - | - | - | 152.5 | 250 | 6.99 | 34.04 | - | 26.69 | 136.5 | .447 |
| 204 | 7.67 | 34.010 | - | - | - | - | 147.8 | 300 | 6.58 | 34.06 | - | 26.76 | 129.7 | .515 |
| 233 | 7.10 | 34.028 | - | - | - | - | 138.8 | 400 | 5.53 | 34.09 | - | 26.91 | 114.8 | .642 |
| 273 | 6.88 | 34.051 | - | - | - | - | 134.2 | 500 | 5.20 | 34.23 | - | 27.06 | 100.6 | .755 |
| 331 | 6.18 | 34.060 | - | - | - | - | 124.8 | | | | | | | |
| 405 | 5.50 | 34.095 | - | - | - | - | 114.1 | | | | | | | |
| 479 | 5.24 | 34.202 | - | - | - | - | 103.2 | | | | | | | |
| 558 | 5.17 | 34.305 | - | - | - | - | 94.7 | | | | | | | |

78.628 CCOFI CRUISE 6407 78.628

ALEXANDER AGASSIZ, JUNE 22 1964, 1648 GCT, 34 21N 121 31.5W, SOUNDING 1970 FM, WIND 120 FORCE 2, WEATHER OVERCAST, SEA VERY ROUGH, WIRE ANGLE 09.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.32 | 33.780 | - | - | - | - | 258.2 | 0 | 13.32 | 33.78 | - | 25.40 | 258.2 | 0 |
| 11 | 13.12 | 33.780 | - | - | - | - | 254.4 | 10 | 13.14 | 33.78 | - | 25.44 | 254.8 | .026 |
| 30 | 11.47 | 33.810 | - | - | - | - | 222.1 | 20 | 12.60 | 33.79 | - | 25.55 | 243.9 | .051 |
| 40 | 10.48 | 33.816 | - | - | - | - | 204.8 | 30 | 11.47 | 33.81 | - | 25.78 | 222.1 | .074 |
| 55 | 9.74 | 33.812 | - | - | - | - | 193.1 | 50 | 10.00 | 33.81 | - | 26.04 | 197.4 | .116 |
| 70 | 9.36 | 33.870 | - | - | - | - | 182.9 | 75 | 9.27 | 33.90 | - | 26.23 | 179.3 | .164 |
| 94 | 9.02 | 33.990 | - | - | - | - | 168.8 | 100 | 8.95 | 34.00 | - | 26.36 | 167.0 | .207 |
| 115 | 8.76 | 34.015 | - | - | - | - | 163.0 | 125 | 8.70 | 34.05 | - | 26.44 | 159.6 | .249 |
| 134 | 8.68 | 34.075 | - | - | - | - | 157.4 | 150 | 8.56 | 34.09 | - | 26.50 | 154.5 | .288 |
| 154 | 8.52 | 34.089 | - | - | - | - | 154.0 | 200 | 7.85 | 34.10 | - | 26.61 | 143.6 | .365 |
| 183 | 8.16 | 34.093 | - | - | - | - | 148.5 | 250 | 7.38 | 34.13 | - | 26.70 | 134.9 | .436 |
| 217 | 7.62 | 34.119 | - | - | - | - | 139.0 | 300 | 6.51 | 34.09 | - | 26.79 | 126.6 | .503 |
| 246 | 7.42 | 34.131 | - | - | - | - | 135.4 | 400 | 6.06 | 34.20 | - | 26.93 | 112.9 | .628 |
| 294 | 6.53 | 34.083 | - | - | - | - | 127.4 | 500 | 5.36 | 34.25 | - | 27.06 | 100.9 | .740 |
| 348 | 6.47 | 34.175 | - | - | - | - | 119.8 | 600 | 5.14 | 34.34 | - | 27.16 | 91.7 | .843 |
| 430 | 5.82 | 34.211 | - | - | - | - | 109.2 | | | | | | | |
| 513 | 5.30 | 34.258 | - | - | - | - | 99.6 | | | | | | | |
| 596 | 5.15 | 34.341 | - | - | - | - | 91.8 | | | | | | | |

78.658 CCOFI CRUISE 6407 78.658

ALEXANDER AGASSIZ, JUNE 22 1964, 1837 GCT, 34 16N 121 42W, SOUNDING 2000 FM, WIND 100 FORCE 1, WEATHER OVERCAST, SEA VERY ROUGH, WIRE ANGLE 07.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.69 | 33.713 | 6.84 | 0.57 | 6 | 0.23 | 270.3 | 0 | 13.69 | 33.71 | 6.84 | 25.27 | 270.5 | 0 |
| 11 | - | 33.715 | 6.73 | 0.57 | 5 | 0.22 | - | 10 | 13.61 | 33.71 | 6.77 | 25.29 | 269.0 | .027 |
| 31 | 11.04 | 33.836 | 5.11 | 1.50 | 18 | 0.36 | 212.7 | 20 | 13.50 | 33.72 | 6.69 | 25.32 | 266.1 | .054 |
| 62 | 9.90 | 33.961 | 3.76 | 2.14 | 32 | 0.35 | 184.6 | 30 | 11.15 | 33.83 | 5.17 | 25.86 | 215.1 | .078 |
| 81 | 9.10 | 33.936 | 2.98 | 2.18 | 36 | 0.17 | 174.0 | 50 | 10.00 | 33.94 | 3.94 | 26.15 | 187.8 | .118 |
| 96 | 8.70 | 33.972 | 2.93 | 2.19 | 39 | 0.06 | 165.3 | 75 | 9.10 | 33.94 | 2.98 | 26.29 | 173.7 | .164 |
| 111 | 8.66 | 33.998 | 2.64 | 2.28 | 40 | 0.05 | 162.8 | 100 | 8.69 | 33.98 | 2.81 | 26.39 | 164.6 | .207 |
| 135 | 8.55 | 34.070 | 1.99 | 2.55 | 46 | 0.02 | 155.9 | 125 | 8.61 | 34.05 | 2.15 | 26.46 | 158.2 | .247 |
| 155 | 8.40 | 34.079 | 1.89 | 2.59 | 48 | 0.03 | 153.0 | 150 | 8.45 | 34.08 | 1.92 | 26.50 | 153.7 | .287 |
| 180 | 8.18 | 34.102 | 1.89 | 2.60 | 50 | 0.03 | 148.1 | 200 | 7.82 | 34.09 | 1.96 | 26.61 | 143.9 | .363 |
| 210 | 7.65 | 34.089 | 1.99 | 2.58 | 54 | - | 141.7 | 250 | 7.33 | 34.14 | 1.50 | 26.72 | 133.5 | .434 |
| 260 | 7.25 | 34.156 | 1.39 | 2.84 | 61 | - | 131.3 | 300 | 6.87 | 34.19 | 1.04 | 26.82 | 123.7 | .501 |
| 319 | 6.68 | 34.200 | .91 | 3.04 | 65 | - | 120.5 | 400 | 6.13 | 34.26 | .62 | 26.97 | 109.2 | .622 |
| 408 | 6.09 | 34.268 | .61 | 3.20 | 78 | - | 108.1 | 500 | 5.72 | 34.32 | .56 | 27.07 | 99.8 | .732 |
| 517 | 5.64 | 34.327 | .54 | 3.32 | 87 | - | 98.4 | 600 | 5.28 | 34.35 | - | 27.15 | 92.5 | .835 |
| 625 | 5.17 | 34.363 | - | 3.34 | 97 | - | 90.3 | 700 | 4.84 | 34.39 | - | 27.23 | 84.7 | .931 |
| 784 | 4.52 | 34.422 | .50 | 3.44 | 110 | - | 78.9 | 800 | 4.47 | 34.42 | .51 | 27.30 | 78.5 | 1.021 |
| 952 | 4.02 | 34.466 | .69 | 3.42 | 121 | - | 70.5 | 1000 | 3.88 | 34.48 | .73 | 27.41 | 68.1 | 1.184 |
| 1111 | 3.56 | 34.506 | .84 | 3.41 | 131 | - | 63.1 | 1200 | 3.32 | 34.52 | .97 | 27.49 | 59.8 | 1.330 |
| 1190 | 3.34 | 34.522 | .95 | 3.33 | 134 | - | 59.9 | | | | | | | |

| 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 |

78.708 CCOFI CRUISE 6407 78.708

ALEXANDER AGASSIZ, JUNE 22 1964, 2159 GCT, 34 05.5N 122 03W, SOUNDING 2018 FM, WIND 220 FORCE 2, WEATHER CLOUDY, SEA ROUGH, WIRE ANGLE 05.

| Z | T | S | OXY | PHO | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.19 | 33.542 | - | - | - | - | 273.2 | 0 | 13.19 | 33.54 | - | 25.25 | 273.4 | 0 |
| 11 | 13.17 | 33.705 | - | - | - | - | 260.9 | 10 | 13.17 | 33.70 | - | 25.37 | 261.2 | .027 |
| 31 | 10.84 | 33.546 | - | - | - | - | 230.7 | 20 | 11.90 | 33.62 | - | 25.56 | 243.7 | .052 |
| 41 | 10.60 | 33.600 | - | - | - | - | 222.7 | 30 | 10.87 | 33.55 | - | 25.69 | 231.0 | .076 |
| 56 | 9.85 | 33.625 | - | - | - | - | 208.7 | 50 | 10.10 | 33.62 | - | 25.88 | 213.1 | .120 |
| 71 | 9.54 | 33.669 | - | - | - | - | 200.6 | 75 | 9.51 | 33.70 | - | 26.04 | 197.8 | .172 |
| 86 | 9.46 | 33.856 | - | - | - | - | 185.5 | 100 | 9.23 | 33.91 | - | 26.25 | 177.9 | .219 |
| 114 | 9.00 | 33.928 | - | - | - | - | 173.1 | 125 | 8.86 | 33.94 | - | 26.33 | 170.1 | .263 |
| 134 | 8.74 | 33.943 | - | - | - | - | 168.1 | 150 | 8.40 | 33.98 | - | 26.43 | 160.4 | .305 |
| 153 | 8.36 | 33.990 | - | - | - | - | 159.0 | 200 | 7.83 | 34.02 | - | 26.55 | 149.3 | .384 |
| 182 | 8.02 | 34.014 | - | - | - | - | 152.4 | 250 | 7.07 | 34.02 | - | 26.66 | 139.0 | .458 |
| 216 | 7.62 | 34.019 | - | - | - | - | 146.5 | 300 | 6.60 | 34.07 | - | 26.76 | 129.2 | .527 |
| 244 | 7.16 | 34.02 | - | - | - | - | 140.2 | 400 | 6.21 | 34.20 | - | 26.92 | 114.7 | .654 |
| 293 | 6.63 | 34.058 | - | - | - | - | 130.5 | 500 | 5.50 | 34.25 | - | 27.04 | 102.5 | .768 |
| 347 | 6.46 | 34.142 | - | - | - | - | 122.1 | 600 | 5.07 | 34.33 | - | 27.16 | 91.7 | .872 |
| 430 | 6.02 | 34.220 | - | - | - | - | 110.9 | | | | | | | |
| 514 | 5.42 | 34.259 | - | - | - | - | 100.9 | | | | | | | |
| 598 | 5.08 | 34.327 | - | - | - | - | 92.0 | | | | | | | |

78.758 CCOFI CRUISE 6407 78.758

ALEXANDER AGASSIZ, JUNE 23 1964, 0151 GCT, 33 55.5N 122 22.5W, SOUNDING 2000+ FM, WIND 320 FORCE 3, WEATHER CLOUDY, SEA ROUGH, WIRE ANGLE 15.

| Z | T | S | OXY | PHO | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.48 | 33.529 | 6.66 | 0.76 | 3 | 0.17 | 279.7 | 0 | 13.48 | 33.53 | 6.66 | 25.18 | 279.6 | 0 |
| 11 | 13.00 | 33.519 | 6.63 | 0.76 | 4 | 0.19 | 271.3 | 10 | 13.00 | 33.52 | 6.63 | 25.27 | 271.2 | .028 |
| 30 | 12.22 | 33.567 | 6.27 | 1.00 | 6 | 0.23 | 253.3 | 20 | 12.87 | 33.52 | 6.60 | 25.29 | 268.8 | .055 |
| 59 | 10.52 | 33.628 | 5.04 | 1.47 | 13 | 0.32 | 219.3 | 30 | 12.22 | 33.57 | 6.27 | 25.46 | 253.1 | .081 |
| 79 | 10.16 | 33.696 | 4.73 | 1.64 | 18 | 0.17 | 208.4 | 50 | 10.86 | 33.61 | 5.27 | 25.74 | 226.4 | .129 |
| 94 | 9.77 | 33.796 | 4.05 | 1.85 | 22 | 0.20 | 194.8 | 75 | 10.24 | 33.67 | 4.84 | 25.89 | 211.7 | .184 |
| 108 | 9.34 | 33.836 | 3.72 | 2.03 | 27 | 0.23 | 185.1 | 100 | 9.58 | 33.81 | 3.91 | 26.11 | 190.8 | .235 |
| 132 | 8.84 | 33.928 | 2.90 | 2.21 | 33 | 0.01 | 170.7 | 125 | 8.96 | 33.91 | 3.09 | 26.29 | 173.8 | .281 |
| 151 | 8.65 | 33.977 | 2.56 | 2.30 | 36 | 0.01 | 164.2 | 150 | 8.66 | 33.97 | 2.57 | 26.39 | 164.9 | .324 |
| 176 | 8.38 | 34.015 | 2.42 | 2.32 | 38 | 0.01 | 157.5 | 200 | 8.13 | 34.05 | 2.37 | 26.53 | 151.3 | .404 |
| 204 | 8.09 | 34.049 | 2.37 | 2.42 | 40 | - | 150.8 | 250 | 7.42 | 34.05 | 2.34 | 26.63 | 141.4 | .479 |
| 252 | 7.38 | 34.046 | 2.34 | 2.50 | 45 | - | 141.2 | 300 | 6.58 | 34.04 | 2.09 | 26.74 | 131.2 | .550 |
| 310 | 6.46 | 34.039 | 2.02 | 2.68 | 54 | - | 129.8 | 400 | 6.04 | 34.15 | 1.02 | 26.90 | 116.4 | .678 |
| 396 | 6.05 | 34.148 | 1.08 | 3.02 | 67 | - | 116.6 | 500 | 5.66 | 34.25 | .59 | 27.02 | 104.4 | .794 |
| 500 | 5.66 | 34.251 | .59 | 3.29 | 77 | - | 104.3 | 600 | 5.08 | 34.33 | .40 | 27.16 | 91.8 | .899 |
| 606 | 5.06 | 34.328 | .39 | 3.34 | 89 | - | 91.7 | 700 | 4.71 | 34.37 | .41 | 27.23 | 84.8 | .994 |
| 758 | 4.52 | 34.398 | .44 | 3.41 | 99 | - | 80.7 | 800 | 4.39 | 34.41 | .51 | 27.30 | 78.5 | 1.084 |
| 920 | 3.96 | 34.458 | .75 | 3.38 | 112 | - | 70.5 | 1000 | 3.73 | 34.48 | .76 | 27.42 | 66.7 | 1.245 |
| 1076 | 3.56 | 34.501 | .78 | 3.37 | 120 | - | 63.5 | | | | | | | |
| 1157 | 3.37 | 34.519 | .92 | 3.31 | 122 | - | 60.4 | | | | | | | |

79.53 CCOFI CRUISE 6407 79.53

ALEXANDER AGASSIZ, JUNE 22 1964, 0603 GCT, 34 30.5N 120 45.5W, SOUNDING 200 FM, WIND 010 FORCE 4, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 10. A)

| Z | T | S | OXY | PHO | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 12.68 | 33.939 | - | - | - | - | 234.4 | 0 | 12.68 | 33.94 | - | 25.66 | 234.4 | 0 |
| 11 | 11.78 | 33.923 | - | - | - | - | 219.2 | 10 | 11.87 | 33.93 | - | 25.80 | 220.3 | .023 |
| 31 | 10.88 | 33.872 | - | - | - | - | 207.3 | 20 | 11.36 | 33.90 | - | 25.87 | 213.5 | .044 |
| 45 | 10.01 | 33.839 | - | - | - | - | 195.4 | 30 | 10.93 | 33.87 | - | 25.93 | 208.3 | .066 |
| 55 | 10.04 | 33.872 | - | - | - | - | 193.5 | 50 | 10.02 | 33.85 | - | 26.07 | 194.8 | .106 |
| 70 | 10.09 | 33.970 | - | - | - | - | 187.0 | 75 | 10.01 | 33.98 | - | 26.17 | 185.0 | .154 |
| 84 | 9.78 | 33.997 | - | - | - | - | 180.1 | 100 | 9.40 | 34.04 | - | 26.32 | 170.9 | .199 |
| 102 | 9.36 | 34.048 | - | - | - | - | 169.7 | 125 | 9.01 | 34.09 | - | 26.42 | 161.2 | .241 |
| 126 | 9.00 | 34.095 | - | - | - | - | 160.7 | 150 | 8.72 | 34.15 | - | 26.52 | 152.4 | .281 |
| 145 | 8.78 | 34.137 | - | - | - | - | 154.3 | 200 | 8.22 | 34.20 | - | 26.63 | 141.4 | .356 |
| 179 | 8.39 | 34.192 | - | - | - | - | 144.5 | 250 | 7.85 | 34.24 | - | 26.72 | 133.2 | .426 |
| 208 | 8.17 | 34.206 | - | - | - | - | 140.3 | | | | | | | |
| 248 | 7.88 | 34.235 | - | - | - | - | 134.0 | | | | | | | |

A) AN ESTIMATED WIRE ANGLE OF 10 DEGREES WAS USED FOR DEPTH DETERMINATION ON THIS STATION.

| 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 |

79.65 CCOFI CRUISE 6407 79.65

ALEXANDER AGASSIZ, JUNE 21 1964, 2156 GCT, 37 07N 121 36W, SOUNDING 1895 FM, WIND 320 FORCE 3, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 17.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.90 | 33.592 | - | - | - | - | 283.3 | 0 | 13.90 | 33.59 | - | 25.14 | 283.4 | 0 |
| 10 | 13.16 | 33.727 | - | - | - | - | 259.0 | 10 | 13.16 | 33.73 | - | 25.40 | 258.8 | .027 |
| 30 | 12.37 | 33.801 | - | - | - | - | 238.8 | 20 | 13.07 | 33.74 | - | 25.42 | 256.4 | .053 |
| 39 | 10.80 | 33.734 | - | - | - | - | 216.2 | 30 | 12.37 | 33.80 | - | 25.61 | 238.9 | .078 |
| 54 | 10.08 | 33.754 | - | - | - | - | 202.8 | 50 | 10.50 | 33.74 | - | 25.90 | 210.7 | .123 |
| 68 | 9.57 | 33.802 | - | - | - | - | 191.2 | 75 | 9.49 | 33.84 | - | 26.15 | 187.1 | .173 |
| 91 | 9.32 | 33.914 | - | - | - | - | 179.0 | 100 | 9.22 | 33.95 | - | 26.28 | 174.8 | .219 |
| 111 | 9.08 | 33.985 | - | - | - | - | 170.1 | 125 | 8.90 | 34.04 | - | 26.40 | 163.3 | .261 |
| 130 | 8.84 | 34.045 | - | - | - | - | 162.0 | 150 | 8.59 | 34.06 | - | 26.47 | 157.2 | .302 |
| 148 | 8.62 | 34.057 | - | - | - | - | 157.9 | 200 | 7.58 | 34.05 | - | 26.61 | 143.6 | .379 |
| 176 | 8.24 | 34.089 | - | - | - | - | 150.0 | 250 | 6.88 | 34.07 | - | 26.72 | 132.8 | .450 |
| 208 | 7.38 | 34.037 | - | - | - | - | 141.9 | 300 | 6.52 | 34.09 | - | 26.79 | 126.7 | .517 |
| 237 | 7.04 | 34.069 | - | - | - | - | 135.0 | 400 | 6.46 | 34.28 | - | 26.95 | 111.8 | .641 |
| 285 | 6.50 | 34.056 | - | - | - | - | 129.0 | 500 | 5.56 | 34.27 | - | 27.05 | 101.7 | .753 |
| 337 | 6.62 | 34.202 | - | - | - | - | 119.6 | 600 | 5.10 | 34.35 | - | 27.17 | 90.5 | .856 |
| 419 | 6.35 | 34.291 | - | - | - | - | 109.6 | | | | | | | |
| 500 | 5.56 | 34.270 | - | - | - | - | 101.7 | | | | | | | |
| 583 | 5.16 | 34.327 | - | - | - | - | 92.9 | | | | | | | |

79.70 CCOFI CRUISE 6407 79.70

ALEXANDER AGASSIZ, JUNE 21 1964, 1901 GCT, 33 57N 121 57W, SOUNDING 2018 FM, WIND 320 FORCE 4, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 10.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.35 | 33.569 | - | - | - | - | 293.9 | 0 | 14.35 | 33.57 | - | 25.03 | 293.8 | 0 |
| 10 | 14.28 | 33.569 | - | - | - | - | 292.5 | 10 | 14.28 | 33.57 | - | 25.04 | 292.4 | .029 |
| 30 | 13.34 | 33.521 | - | - | - | - | 277.6 | 20 | 14.14 | 33.57 | - | 25.07 | 289.6 | .058 |
| 40 | 11.61 | 33.435 | - | - | - | - | 252.2 | 30 | 13.34 | 33.52 | - | 25.20 | 277.7 | .087 |
| 54 | 11.48 | 33.632 | - | - | - | - | 239.4 | 50 | 11.46 | 33.57 | - | 25.60 | 239.6 | .139 |
| 70 | 10.21 | 33.738 | - | - | - | - | 206.1 | 75 | 10.00 | 33.75 | - | 26.00 | 201.9 | .194 |
| 94 | 9.71 | 33.779 | - | - | - | - | 195.1 | 100 | 9.60 | 33.79 | - | 26.10 | 192.6 | .244 |
| 114 | 9.29 | 33.829 | - | - | - | - | 184.9 | 125 | 9.02 | 33.88 | - | 26.26 | 177.0 | .291 |
| 134 | 8.88 | 33.921 | - | - | - | - | 171.8 | 150 | 8.72 | 33.96 | - | 26.37 | 166.5 | .334 |
| 154 | 8.68 | 33.968 | - | - | - | - | 165.3 | 200 | 8.01 | 34.04 | - | 26.54 | 150.3 | .415 |
| 183 | 8.28 | 34.030 | - | - | - | - | 154.9 | 250 | 7.26 | 34.08 | - | 26.68 | 137.1 | .489 |
| 217 | 7.76 | 34.048 | - | - | - | - | 146.2 | 300 | 7.23 | 34.19 | - | 26.77 | 128.5 | .557 |
| 246 | 7.26 | 34.059 | - | - | - | - | 138.6 | 400 | 6.18 | 34.21 | - | 26.93 | 113.6 | .683 |
| 294 | 7.26 | 34.191 | - | - | - | - | 128.8 | 500 | 5.72 | 34.31 | - | 27.06 | 100.6 | .796 |
| 348 | 6.55 | 34.186 | - | - | - | - | 119.9 | 600 | 5.05 | 34.34 | - | 27.17 | 90.7 | .899 |
| 431 | 6.02 | 34.235 | - | - | - | - | 109.8 | | | | | | | |
| 514 | 5.64 | 34.314 | - | - | - | - | 99.3 | | | | | | | |
| 597 | 5.08 | 34.338 | - | - | - | - | 91.2 | | | | | | | |

79.75 CCOFI CRUISE 6407 79.75

ALEXANDER AGASSIZ, JUNE 21 1964, 1543 GCT, 33 47N 122 17.5W, SOUNDING 2128 FM, WIND 320 FORCE 4, WEATHER CLOUDY, SEA ROUGH, WIRE ANGLE 20.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.96 | 33.529 | - | - | - | - | 289.1 | 0 | 13.96 | 33.53 | - | 25.08 | 289.0 | 0 |
| 10 | 13.92 | 33.529 | - | - | - | - | 288.3 | 10 | 13.92 | 33.53 | - | 25.09 | 288.2 | .029 |
| 34 | 13.10 | 33.525 | - | - | - | - | 272.7 | 20 | 13.92 | 33.53 | - | 25.09 | 288.2 | .058 |
| 43 | 12.06 | 33.515 | - | - | - | - | 254.3 | 30 | 13.91 | 33.53 | - | 25.09 | 288.0 | .087 |
| 58 | 11.12 | 33.618 | - | - | - | - | 230.2 | 50 | 11.57 | 33.56 | - | 25.57 | 242.3 | .140 |
| 72 | 10.56 | 33.666 | - | - | - | - | 217.2 | 75 | 10.53 | 33.67 | - | 25.84 | 216.4 | .198 |
| 94 | 9.64 | 33.761 | - | - | - | - | 195.3 | 100 | 9.54 | 33.78 | - | 26.10 | 192.4 | .249 |
| 111 | 9.34 | 33.811 | - | - | - | - | 187.0 | 125 | 9.01 | 33.88 | - | 26.26 | 176.8 | .296 |
| 128 | 8.93 | 33.901 | - | - | - | - | 174.0 | 150 | 8.60 | 33.95 | - | 26.38 | 165.5 | .339 |
| 154 | 8.53 | 33.961 | - | - | - | - | 163.7 | 200 | 7.98 | 34.03 | - | 26.54 | 150.6 | .420 |
| 179 | 8.26 | 34.012 | - | - | - | - | 156.0 | 250 | 7.47 | 34.08 | - | 26.65 | 139.9 | .494 |
| 213 | 7.81 | 34.041 | - | - | - | - | 147.5 | 300 | 6.93 | 34.13 | - | 26.76 | 129.0 | .564 |
| 240 | 7.60 | 34.070 | - | - | - | - | 142.4 | 400 | 6.27 | 34.21 | - | 26.92 | 114.7 | .690 |
| 283 | 7.05 | 34.113 | - | - | - | - | 131.8 | 500 | 5.90 | 34.30 | - | 27.03 | 103.5 | .805 |
| 342 | 6.66 | 34.164 | - | - | - | - | 123.0 | 600 | 5.37 | 34.35 | - | 27.14 | 93.5 | .911 |
| 432 | 6.12 | 34.232 | - | - | - | - | 111.2 | | | | | | | |
| 515 | 5.84 | 34.311 | - | - | - | - | 101.9 | | | | | | | |
| 589 | 5.43 | 34.345 | - | - | - | - | 94.6 | | | | | | | |

80.51 CCOFI CRUISE 6407 80.51

ALEXANDER AGASSIZ, JUNE 20 1964, 0853 GCT, 34 26.5N 120 32.5W, SOUNDING 52 FM, WIND 090 FORCE 3, WEATHER CLOUDY, SEA VERY ROUGH, WIRE ANGLE 00.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 11.80 | 33.946 | 6.00 | 1.11 | 16 | 0.25 | 217.9 | 0 | 11.80 | 33.95 | 6.00 | 25.83 | 217.6 | 0 |
| 11 | 11.63 | 33.946 | 5.54 | 1.25 | 18 | 0.25 | 214.9 | 10 | 11.67 | 33.95 | 5.62 | 25.86 | 215.3 | .022 |
| 21 | 11.05 | 33.934 | 4.91 | 1.64 | 21 | 0.30 | 205.7 | 20 | 11.12 | 33.93 | 4.95 | 25.94 | 207.2 | .043 |
| 41 | 10.23 | 33.963 | 3.51 | 2.01 | 27 | 0.32 | 189.8 | 30 | 10.60 | 33.95 | 4.10 | 26.05 | 196.9 | .063 |
| 61 | 9.84 | 33.979 | 3.29 | 2.14 | 29 | 0.35 | 182.3 | 50 | 10.04 | 33.97 | 3.35 | 26.16 | 186.2 | .102 |
| 81 | 9.57 | 34.001 | 3.26 | 2.21 | 30 | 0.31 | 176.5 | 75 | 9.66 | 33.99 | 3.27 | 26.24 | 178.7 | .147 |

| 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 |

80.53 CCOFI CRUISE 6407 80.53

ALEXANDER AGASSIZ, JUNE 20 1964, 1836 GCT, 34 23N 120 39.5W, SOUNDING 242 FM, WIND 330 FORCE 4, WEATHER CLEAR, SEA VERY ROUGH, WIRE ANGLE 13.

| Z | T | S | OXY | PHO | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 11.12 | 33.928 | 5.53 | 1.56 | 21 | 0.32 | 207.3 | 0 | 11.12 | 33.93 | 5.53 | 25.94 | 207.2 | 0 |
| 11 | 11.08 | 33.928 | 5.69 | 1.53 | 21 | 0.30 | 206.6 | 10 | 11.09 | 33.93 | 5.65 | 25.95 | 206.6 | .021 |
| 30 | 10.76 | 33.910 | 4.80 | 1.73 | 21 | 0.32 | 202.5 | 20 | 10.97 | 33.92 | 5.40 | 25.96 | 205.3 | .041 |
| 45 | 9.98 | 33.981 | 3.39 | 2.12 | 27 | 0.39 | 184.4 | 30 | 10.76 | 33.91 | 4.80 | 25.99 | 202.5 | .062 |
| 55 | 9.54 | 34.005 | 2.74 | 2.38 | 32 | 0.38 | 175.7 | 50 | 9.79 | 34.00 | 3.10 | 26.23 | 180.0 | .100 |
| 69 | 9.31 | 34.030 | 2.37 | 2.47 | 34 | 0.38 | 170.3 | 75 | 9.30 | 34.03 | 2.35 | 26.33 | 170.1 | .144 |
| 88 | 9.29 | - | - | 2.46 | 33 | 0.36 | - | 100 | 9.17 | 34.07 | 2.00 | 26.38 | 165.1 | .187 |
| 99 | 9.18 | 34.062 | 2.04 | 2.75 | 36 | 0.35 | 165.9 | 125 | 9.01 | 34.08 | 1.91 | 26.42 | 162.0 | .228 |
| 123 | 9.02 | 34.075 | 1.89 | 2.56 | 37 | 0.26 | 162.5 | 150 | 8.87 | 34.11 | 2.15 | 26.46 | 157.6 | .269 |
| 143 | 8.90 | 34.104 | 2.19 | 2.63 | 38 | 0.04 | 158.5 | 200 | 8.55 | 34.15 | 1.58 | 26.54 | 149.9 | .347 |
| 174 | 8.72 | 34.143 | 1.72 | 2.65 | 40 | - | 153.0 | 250 | 8.09 | 34.20 | 1.13 | 26.65 | 139.6 | .422 |
| 203 | 8.53 | 34.157 | 1.54 | 2.71 | 44 | - | 149.1 | 300 | 7.67 | 34.23 | 1.00 | 26.74 | 131.4 | .492 |
| 238 | 8.22 | 34.195 | 1.21 | 2.86 | 47 | - | 141.8 | 400 | 7.00 | 34.26 | .72 | 26.86 | 120.2 | .623 |
| 292 | 7.72 | 34.224 | 1.01 | 3.01 | 54 | - | 132.6 | | | | | | | |
| 346 | 7.44 | 34.249 | .90 | 3.59 | 57 | - | 126.9 | | | | | | | |
| 406 | 6.96 | 34.260 | .69 | 3.20 | 66 | - | 119.7 | | | | | | | |

80.55 CCOFI CRUISE 6407 80.55

ALEXANDER AGASSIZ, JUNE 20 1964, 2053 GCT, 34 19N 120 48W, SOUNDING 412 FM, WIND 330 FORCE 4, WEATHER CLEAR, SEA VERY ROUGH, WIRE ANGLE 22.

| Z | T | S | OXY | PHO | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 12.34 | 33.881 | - | 0.55 | 8 | 0.14 | 232.4 | 0 | 12.34 | 33.88 | - | 25.67 | 232.5 | 0 |
| 10 | 11.92 | 33.874 | 7.58 | 0.61 | 8 | 0.13 | 225.3 | 10 | 11.92 | 33.87 | 7.58 | 25.75 | 225.6 | .023 |
| 29 | 10.60 | 33.888 | 4.17 | 1.70 | 21 | 0.27 | 201.5 | 20 | 10.93 | 33.88 | 5.00 | 25.94 | 207.6 | .045 |
| 38 | 10.42 | 33.941 | 3.50 | 1.92 | 25 | 0.29 | 194.6 | 30 | 10.59 | 33.89 | 4.10 | 26.00 | 201.1 | .065 |
| 52 | 9.98 | 33.953 | 2.80 | 2.18 | 29 | 0.24 | 186.5 | 50 | 10.01 | 33.95 | 2.90 | 26.15 | 187.2 | .104 |
| 66 | 9.86 | 33.956 | 2.62 | 2.26 | 30 | 0.16 | 184.4 | 75 | 9.82 | 33.96 | 2.57 | 26.19 | 183.4 | .151 |
| 87 | 9.74 | 33.979 | 2.47 | 2.30 | 31 | 0.09 | 180.8 | 100 | 9.49 | 34.02 | 2.29 | 26.29 | 173.8 | .196 |
| 107 | 9.38 | 34.036 | 2.20 | 2.31 | 34 | 0.11 | 170.9 | 125 | 9.14 | 34.08 | 1.93 | 26.40 | 163.9 | .239 |
| 125 | 9.14 | 34.084 | 1.93 | 2.43 | 37 | 0.06 | 163.7 | 150 | 8.89 | 34.12 | 1.79 | 26.47 | 157.2 | .279 |
| 143 | 8.97 | 34.115 | 1.83 | 2.48 | 38 | 0.07 | 158.8 | 200 | 8.45 | 34.18 | 1.32 | 26.58 | 146.2 | .357 |
| 170 | 8.62 | 34.157 | 1.56 | 2.65 | 43 | - | 150.4 | 250 | 8.24 | 34.21 | 1.22 | 26.64 | 141.0 | .431 |
| 202 | 8.44 | 34.180 | 1.31 | 2.75 | 45 | - | 146.1 | 300 | 7.92 | 34.25 | 1.11 | 26.72 | 133.4 | .502 |
| 229 | 8.38 | 34.193 | 1.26 | 2.76 | 45 | - | 144.2 | 400 | 7.08 | 34.24 | .86 | 26.83 | 122.7 | .635 |
| 275 | 8.06 | 34.235 | 1.18 | 2.85 | 50 | - | 136.5 | 500 | 6.47 | 34.30 | .63 | 26.96 | 110.4 | .759 |
| 326 | 7.76 | 34.253 | 1.03 | 2.95 | 53 | - | 131.0 | | | | | | | |
| 406 | 7.04 | 34.235 | .84 | 3.01 | 61 | - | 122.6 | | | | | | | |
| 486 | 6.60 | 34.296 | .66 | 3.23 | 70 | - | 112.4 | | | | | | | |
| 565 | 5.70 | 34.311 | .52 | 3.38 | 82 | - | 100.3 | | | | | | | |

80.60 CCOFI CRUISE 6407 80.60

ALEXANDER AGASSIZ, JUNE 21 1964, 0120 GCT, 34 09N 121 09.5W, SOUNDING 1400 FM, WIND 320 FORCE 4, WEATHER PARTLY CLOUDY, SEA ROUGH, WIRE ANGLE 31.

| Z | T | S | OXY | PHO | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.26 | 33.547 | 6.32 | 0.64 | 2 | 0.08 | 293.7 | 0 | 14.26 | 33.55 | 6.32 | 25.03 | 293.5 | 0 |
| 10 | 14.18 | 33.543 | 6.26 | 0.63 | 3 | 0.09 | 292.4 | 10 | 14.18 | 33.54 | 6.26 | 25.04 | 292.6 | .029 |
| 31 | 13.32 | 33.566 | 6.30 | 0.77 | 2 | 0.14 | 273.9 | 20 | 13.68 | 33.54 | 6.28 | 25.15 | 282.8 | .058 |
| 57 | 10.22 | 33.654 | 4.51 | 1.53 | 14 | 0.30 | 212.5 | 30 | 13.50 | 33.57 | 6.30 | 25.21 | 277.1 | .086 |
| 78 | 9.52 | 33.697 | 4.17 | 1.80 | 22 | 0.02 | 198.2 | 50 | 11.05 | 33.64 | 4.90 | 25.73 | 227.4 | .137 |
| 90 | 9.51 | 33.832 | 3.61 | 1.98 | 23 | 0.00 | 188.0 | 75 | 9.56 | 33.68 | 4.22 | 26.02 | 200.1 | .191 |
| 102 | 9.26 | 33.883 | 3.03 | 2.10 | 27 | 0.00 | 180.4 | 100 | 9.31 | 33.88 | 3.07 | 26.21 | 181.4 | .239 |
| 126 | 8.81 | 33.961 | 3.45 | 1.98 | 28 | 0.01 | 167.8 | 125 | 8.82 | 33.96 | 3.43 | 26.35 | 168.0 | .283 |
| 142 | 8.66 | 33.982 | 3.55 | 1.95 | 29 | 0.01 | 164.0 | 150 | 8.56 | 33.99 | 3.55 | 26.42 | 161.9 | .325 |
| 164 | 8.34 | 34.007 | 3.51 | 2.00 | 32 | 0.01 | 157.5 | 200 | 7.94 | 34.04 | 2.56 | 26.55 | 149.3 | .404 |
| 191 | 8.04 | 34.035 | 2.69 | 2.30 | 38 | - | 151.1 | 250 | 7.27 | 34.06 | 2.13 | 26.66 | 138.7 | .478 |
| 240 | 7.43 | 34.059 | 2.21 | 2.52 | 44 | - | 140.9 | 300 | 6.58 | 34.06 | 1.88 | 26.76 | 129.7 | .547 |
| 289 | 6.68 | 34.056 | 1.94 | 2.67 | 53 | - | 131.3 | 400 | 5.99 | 34.16 | - | 26.91 | 115.0 | .674 |
| 363 | 6.22 | 34.135 | 3.150 | 3.04 | 64 | - | 119.7 | 500 | 5.38 | 34.22 | .66 | 27.03 | 103.4 | .789 |
| 473 | 5.52 | 34.191 | .73 | 3.21 | 78 | - | 107.2 | 600 | 4.98 | 34.33 | .50 | 27.17 | 90.7 | .892 |
| 572 | 5.08 | 34.298 | .52 | 3.34 | 90 | - | 94.2 | 700 | 4.67 | 34.40 | .45 | 27.26 | 82.1 | .986 |
| 719 | 4.61 | 34.414 | .45 | 3.42 | 100 | - | 80.4 | 800 | 4.40 | 34.44 | .54 | 27.32 | 76.3 | 1.073 |
| 874 | 4.22 | 34.454 | .62 | 3.40 | 107 | - | 73.4 | 1000 | 3.91 | 34.48 | .69 | 27.40 | 68.4 | 1.234 |
| 1071 | 3.76 | 34.492 | .72 | 3.50 | 116 | - | 66.0 | | | | | | | |
| 1149 | 3.52 | 34.507 | .85 | 3.87 | 123 | - | 62.7 | | | | | | | |

| 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 |

80.65 CCOFI CRUISE 6407 80.65

ALEXANDER AGASSIZ, JUNE 21 1964, 0524 GCT, 33 59N 121 30W, SOUNDING 1800 FM, WIND 330 FORCE 4, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 23.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.54 | 33.565 | - | - | - | - | 298.0 | 0 | 14.54 | 33.56 | - | 24.98 | 298.4 | 0 |
| 10 | 14.51 | 33.572 | - | - | - | - | 296.9 | 10 | 14.51 | 33.57 | - | 25.00 | 297.1 | .030 |
| 33 | 13.38 | 33.597 | - | - | - | - | 272.8 | 20 | 14.24 | 33.58 | - | 25.06 | 290.9 | .059 |
| 42 | 12.66 | 33.638 | - | - | - | - | 256.2 | 30 | 13.58 | 33.59 | - | 25.20 | 277.2 | .088 |
| 56 | 11.62 | 33.674 | - | - | - | - | 234.7 | 50 | 12.07 | 33.66 | - | 25.56 | 243.8 | .140 |
| 70 | 10.52 | 33.696 | - | - | - | - | 214.3 | 75 | 10.14 | 33.71 | - | 25.94 | 207.1 | .197 |
| 92 | 9.39 | 33.754 | - | - | - | - | 192.0 | 100 | 9.36 | 33.84 | - | 26.17 | 185.1 | .246 |
| 111 | 9.32 | 33.923 | - | - | - | - | 178.3 | 125 | 9.07 | 33.96 | - | 26.31 | 171.8 | .291 |
| 128 | 9.00 | 33.971 | - | - | - | - | 169.9 | 150 | 8.59 | 34.05 | - | 26.46 | 157.9 | .333 |
| 155 | 8.50 | 34.055 | - | - | - | - | 156.2 | 200 | 7.72 | 34.02 | - | 26.57 | 147.8 | .411 |
| 181 | 8.01 | 34.026 | - | - | - | - | 151.4 | 250 | 6.89 | 34.02 | - | 26.68 | 136.7 | .484 |
| 217 | 7.46 | 34.019 | - | - | - | - | 144.3 | 300 | 6.18 | 34.06 | - | 26.81 | 124.8 | .551 |
| 244 | 7.00 | 34.022 | - | - | - | - | 138.0 | 400 | 5.78 | 34.14 | - | 26.92 | 114.0 | .675 |
| 290 | 6.24 | 34.044 | - | - | - | - | 126.7 | 500 | 5.15 | 34.19 | - | 27.04 | 103.1 | .789 |
| 350 | 6.08 | 34.113 | - | - | - | - | 119.6 | 600 | 4.94 | 34.33 | - | 27.17 | 90.3 | .892 |
| 442 | 5.50 | 34.153 | - | - | - | - | 109.8 | | | | | | | |
| 527 | 5.04 | 34.218 | - | - | - | - | 99.8 | | | | | | | |
| 598 | 4.94 | 34.321 | - | - | - | - | 90.9 | | | | | | | |

80.70 CCOFI CRUISE 6407 80.70

ALEXANDER AGASSIZ, JUNE 21 1964, 0914 GCT, 33 48.5N 121 51W, SOUNDING 1940 FM, WIND 110 FORCE 4, WEATHER FOG, SEA MISSING, WIRE ANGLE 23.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.72 | 33.536 | 6.34 | 0.77 | 5 | 0.14 | 283.9 | 0 | 13.72 | 33.54 | 6.34 | 25.14 | 283.6 | 0 |
| 10 | 13.67 | 33.540 | 6.31 | 0.80 | 4 | 0.14 | 282.6 | 10 | 13.67 | 33.54 | 6.31 | 25.15 | 282.6 | .028 |
| 29 | 13.36 | 33.540 | 6.33 | 0.82 | 3 | 0.14 | 276.6 | 20 | 13.57 | 33.54 | 6.32 | 25.17 | 280.7 | .057 |
| 56 | 11.60 | 33.672 | 5.80 | 1.24 | 9 | 0.31 | 234.5 | 30 | 13.32 | 33.54 | 6.33 | 25.22 | 275.8 | .084 |
| 74 | 10.65 | 33.718 | 5.18 | 1.54 | 15 | 0.26 | 214.9 | 50 | 11.99 | 33.64 | 5.97 | 25.56 | 243.8 | .137 |
| 88 | 9.98 | 33.732 | 4.76 | 1.75 | 17 | 0.25 | 202.9 | 75 | 10.60 | 33.72 | 5.13 | 25.87 | 213.9 | .194 |
| 101 | 9.74 | 33.861 | 3.47 | 2.05 | 34 | 0.00 | 189.5 | 100 | 9.75 | 33.85 | 3.53 | 26.12 | 190.5 | .245 |
| 123 | 9.34 | 33.947 | 2.80 | 2.24 | 31 | 0.00 | 176.9 | 125 | 9.32 | 33.95 | 2.78 | 26.27 | 176.3 | .292 |
| 140 | 9.12 | 33.976 | 2.64 | 2.34 | 35 | 0.00 | 171.4 | 150 | 8.89 | 33.99 | 2.68 | 26.37 | 166.8 | .335 |
| 162 | 8.60 | 34.008 | 2.73 | 2.28 | 37 | 0.00 | 161.2 | 200 | 8.32 | 34.09 | 2.32 | 26.53 | 151.0 | .416 |
| 189 | 8.36 | 34.049 | 2.56 | 2.37 | 40 | - | 154.7 | 250 | 7.99 | 34.15 | 1.58 | 26.63 | 141.9 | .491 |
| 232 | 8.25 | 34.169 | 1.58 | 2.66 | 46 | - | 144.2 | 300 | 7.10 | 34.12 | 1.62 | 26.73 | 132.0 | .562 |
| 285 | 7.30 | 34.117 | 1.69 | 2.77 | 53 | - | 134.8 | 400 | 6.17 | 34.17 | 1.00 | 26.90 | 116.4 | .691 |
| 363 | 6.48 | 34.146 | 1.24 | 3.01 | 68 | - | 122.1 | 500 | 5.73 | 34.26 | .53 | 27.02 | 104.4 | .807 |
| 458 | 5.82 | 34.224 | .69 | 3.24 | 78 | - | 108.2 | 600 | 5.34 | 34.34 | .41 | 27.13 | 94.0 | .913 |
| 555 | 5.61 | 34.318 | .41 | 3.36 | 88 | - | 98.7 | 700 | 4.73 | 34.37 | .42 | 27.23 | 85.0 | 1.010 |
| 698 | 4.74 | 34.372 | .42 | 3.44 | 103 | - | 85.0 | 800 | 4.40 | 34.42 | .50 | 27.30 | 77.8 | 1.099 |
| 853 | 4.23 | 34.436 | .56 | 3.45 | 114 | - | 74.9 | 1000 | 3.80 | 34.49 | .78 | 27.42 | 66.6 | 1.260 |
| 1002 | 3.79 | 34.487 | .78 | 3.42 | 123 | - | 66.7 | | | | | | | |
| 1078 | 3.62 | 34.504 | .81 | 3.43 | 130 | - | 63.8 | | | | | | | |

80.75 CCOFI CRUISE 6407 80.75

ALEXANDER AGASSIZ, JUNE 21 1964, 1233 GCT, 33 38.5N 122 12W, SOUNDING 2160 FM, WIND 300 FORCE 3, WEATHER CLOUDY, SEA ROUGH, WIRE ANGLE 28.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.86 | 33.486 | - | - | - | - | 290.3 | 0 | 13.86 | 33.49 | - | 25.07 | 290.0 | 0 |
| 10 | 13.84 | 33.489 | - | - | - | - | 289.7 | 10 | 13.84 | 33.49 | - | 25.07 | 289.6 | .029 |
| 32 | 12.84 | 33.451 | - | - | - | - | 273.3 | 20 | 13.80 | 33.49 | - | 25.08 | 288.8 | .058 |
| 40 | 12.40 | 33.487 | - | - | - | - | 262.5 | 30 | 13.00 | 33.45 | - | 25.21 | 276.4 | .086 |
| 53 | 12.03 | 33.619 | - | - | - | - | 246.1 | 50 | 12.08 | 33.61 | - | 25.52 | 247.6 | .139 |
| 67 | 11.16 | 33.698 | - | - | - | - | 225.0 | 75 | 10.80 | 33.74 | - | 25.85 | 215.7 | .197 |
| 88 | 10.42 | 33.779 | - | - | - | - | 206.5 | 100 | 9.98 | 33.83 | - | 26.06 | 195.6 | .249 |
| 104 | 9.82 | 33.850 | - | - | - | - | 191.6 | 125 | 9.33 | 33.96 | - | 26.27 | 175.8 | .296 |
| 121 | 9.40 | 33.939 | - | - | - | - | 178.4 | 150 | 8.95 | 34.05 | - | 26.40 | 163.3 | .339 |
| 144 | 9.04 | 34.024 | - | - | - | - | 166.6 | 200 | 8.53 | 34.15 | - | 26.55 | 149.6 | .419 |
| 166 | 8.77 | 34.093 | - | - | - | - | 157.4 | 250 | 8.08 | 34.21 | - | 26.66 | 138.7 | .493 |
| 197 | 8.56 | 34.142 | - | - | - | - | 150.7 | 300 | 7.59 | 34.22 | - | 26.74 | 131.1 | .563 |
| 220 | 8.36 | 34.180 | - | - | - | - | 144.9 | 400 | 6.71 | 34.25 | - | 26.89 | 117.2 | .692 |
| 258 | 8.00 | 34.218 | - | - | - | - | 136.9 | 500 | 5.80 | 34.29 | - | 27.04 | 103.0 | .809 |
| 311 | 7.48 | 34.221 | - | - | - | - | 129.5 | | | | | | | |
| 396 | 6.76 | 34.254 | - | - | - | - | 117.5 | | | | | | | |
| 470 | 6.01 | 34.269 | - | - | - | - | 107.1 | | | | | | | |
| 550 | 5.56 | 34.327 | - | - | - | - | 97.4 | | | | | | | |

| 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 |

80.80 CCOFI CRUISE 6407 80.80

ALEXANDER AGASSIZ, JUNE 27 1964, 1551 GCT, 33 28.5N 122 31.5W, SOUNDING 2135 FM, WIND 340 FORCE 5, WEATHER CLEAR, SEA VERY ROUGH, WIRE ANGLE 38.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.49 | 33.242 | 6.18 | 0.38 | 2 | 0.01 | 341.3 | 0 | 15.49 | 33.24 | 6.18 | 24.53 | 341.5 | 0 |
| 9 | 15.46 | 33.239 | 6.13 | 0.37 | 3 | 0.00 | 340.9 | 10 | 15.45 | 33.24 | 6.13 | 24.54 | 340.6 | .034 |
| 29 | 14.36 | 33.168 | 6.41 | 0.44 | 3 | 0.02 | 323.5 | 20 | 15.42 | 33.24 | 6.13 | 24.55 | 340.0 | .068 |
| 36 | 13.03 | 33.059 | 6.50 | 0.37 | 3 | 0.00 | 305.7 | 30 | 14.17 | 33.15 | 6.43 | 24.74 | 321.0 | .101 |
| 47 | 12.62 | 33.093 | 6.45 | 0.41 | 3 | 0.01 | 295.5 | 50 | 12.30 | 33.11 | 6.33 | 25.09 | 288.4 | .162 |
| 58 | 12.06 | 33.129 | 6.24 | 0.62 | 4 | 0.27 | 282.7 | 75 | 11.44 | 33.24 | 6.34 | 25.35 | 263.6 | .232 |
| 73 | 11.46 | 33.227 | 6.36 | 0.89 | 6 | 0.32 | 264.9 | 100 | 10.04 | 33.39 | 5.33 | 25.71 | 229.1 | .294 |
| 86 | 11.05 | 33.400 | 5.44 | 1.14 | 10 | 0.06 | 245.1 | 125 | 9.52 | 33.65 | 4.38 | 26.00 | 201.7 | .348 |
| 100 | 10.04 | 33.389 | 5.33 | 1.42 | 17 | 0.02 | 229.2 | 150 | 9.02 | 33.79 | 3.90 | 26.19 | 183.6 | .397 |
| 118 | 9.70 | 33.603 | 4.42 | 1.68 | 20 | 0.02 | 208.0 | 200 | 8.63 | 34.02 | 2.54 | 26.43 | 160.8 | .485 |
| 137 | 9.20 | 33.714 | 4.36 | - | - | - | 192.0 | 250 | 8.08 | 34.09 | 2.03 | 26.57 | 147.6 | .564 |
| 162 | 8.95 | 33.871 | 3.35 | - | - | - | 176.6 | 300 | 7.36 | 34.12 | 1.58 | 26.70 | 135.4 | .637 |
| 181 | 8.92 | 33.990 | 2.55 | - | - | - | 167.3 | 400 | 6.54 | 34.23 | .86 | 26.90 | 116.5 | .768 |
| 212 | 8.46 | 34.036 | 2.53 | - | - | - | 157.1 | 500 | 6.28 | 34.30 | .49 | 26.99 | 108.1 | .887 |
| 253 | 8.04 | 34.09 A | 2.01 | - | - | - | 147.0 | | | | | | | |
| 321 | 7.08 | 34.137 | 1.42 | - | - | - | 130.4 | | | | | | | |
| 387 | 6.60 | 34.215 | .94 | - | - | - | 118.4 | | | | | | | |
| 451 | 6.39 | 34.273 | .68 | - | - | - | 111.4 | | | | | | | |

80.90 CCOFI CRUISE 6407 80.90

ALEXANDER AGASSIZ, JUNE 27 1964, 2049 GCT, 33 09N 123 12W, SOUNDING 2245 FM, WIND 330 FORCE 5, WEATHER PARTLY CLOUDY, SEA VERY ROUGH, WIRE ANGLE 28.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.76 | 33.145 | 6.14 | 0.36 | 4 | 0.02 | 354.1 | 0 | 15.76 | 33.14 | 6.14 | 24.39 | 354.5 | 0 |
| 10 | 15.75 | 33.138 | 6.03 | 0.36 | 3 | 0.02 | 354.4 | 10 | 15.75 | 33.14 | 6.03 | 24.40 | 354.3 | .035 |
| 33 | 15.51 | 33.131 | 6.11 | 0.34 | 5 | 0.00 | 349.8 | 20 | 15.74 | 33.14 | 6.03 | 24.40 | 354.1 | .071 |
| 42 | 14.02 | 33.181 | 6.47 | 0.34 | 3 | 0.01 | 315.8 | 30 | 15.70 | 33.13 | 6.04 | 24.40 | 353.9 | .106 |
| 55 | 13.31 | 33.141 | 6.59 | 0.36 | 2 | 0.02 | 304.9 | 50 | 13.57 | 33.15 | 6.55 | 24.87 | 309.3 | .173 |
| 67 | 12.87 | 33.138 | 6.50 | 0.39 | 2 | 0.04 | 296.9 | 75 | 12.73 | 33.14 | 6.42 | 25.03 | 294.1 | .249 |
| 89 | 12.34 | 33.143 | 6.20 | 0.59 | 3 | 0.07 | 286.7 | 100 | 12.20 | 33.19 | 6.10 | 25.17 | 280.7 | .321 |
| 105 | 12.10 | 33.208 | 6.06 | 0.72 | 3 | 0.04 | 277.6 | 125 | 11.44 | 33.30 | 5.83 | 25.39 | 259.2 | .389 |
| 122 | 11.53 | 33.285 | 5.85 | 0.94 | 6 | 0.07 | 261.8 | 150 | 10.57 | 33.44 | 5.30 | 25.66 | 234.1 | .452 |
| 148 | 10.64 | 33.425 | 5.38 | 1.26 | 11 | 0.04 | 236.3 | 200 | 9.01 | 33.86 | 3.32 | 26.25 | 178.3 | .556 |
| 174 | 9.57 | 33.598 | 4.53 | - | - | - | 206.3 | 250 | 8.23 | 34.03 | 2.66 | 26.50 | 154.2 | .642 |
| 209 | 8.84 | 33.919 | 3.08 | - | - | - | 171.4 | 300 | 7.37 | 34.04 | 2.40 | 26.63 | 141.5 | .718 |
| 234 | 8.46 | 34.000 | 2.89 | - | - | - | 159.7 | 400 | 6.02 | 34.07 | 1.59 | 26.84 | 122.1 | .855 |
| 279 | 7.80 | 34.058 | 2.37 | - | - | - | 146.0 | 500 | 5.31 | 34.16 | .88 | 27.00 | 107.1 | .975 |
| 337 | 6.62 | 34.012 | 2.50 | - | - | - | 133.8 | 600 | 4.76 | 34.26 | - | 27.14 | 93.6 | 1.081 |
| 427 | 5.80 | 34.103 | 1.25 | - | - | - | 117.0 | | | | | | | |
| 511 | 5.24 | 34.164 | .84 | - | - | - | 106.0 | | | | | | | |
| 582 | 4.86 | 34.235 | .51 | - | - | - | 96.5 | | | | | | | |

80.100 CCOFI CRUISE 6407 80.100

ALEXANDER AGASSIZ, JUNE 28 1964, 0211 GCT, 32 49N 123 53W, SOUNDING 2400 FM, WIND 080 FORCE 4, WEATHER PARTLY CLOUDY, SEA HIGH, WIRE ANGLE 35.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.42 | 33.069 | 6.32 | 0.38 | 3 | 0.00 | 352.5 | 0 | 15.42 | 33.07 | 6.32 | 24.41 | 352.4 | 0 |
| 9 | 15.42 | 33.067 | 6.30 | 0.42 | 3 | 0.00 | 352.6 | 10 | 15.42 | 33.07 | 6.29 | 24.41 | 352.4 | .035 |
| 30 | 15.40 | 33.065 | 6.12 | 0.38 | 2 | 0.00 | 352.4 | 20 | 15.41 | 33.07 | 6.20 | 24.42 | 352.2 | .071 |
| 37 | 14.50 | 33.171 | 6.38 | 0.36 | 2 | 0.00 | 326.1 | 30 | 15.40 | 33.06 | 6.12 | 24.41 | 352.7 | .106 |
| 50 | 13.82 | 33.205 | 6.40 | 0.35 | 3 | 0.00 | 310.1 | 50 | 13.82 | 33.20 | 6.40 | 24.86 | 310.5 | .172 |
| 62 | 13.42 | 33.191 | 6.44 | 0.42 | 3 | - | 303.4 | 75 | 12.86 | 33.13 | 6.43 | 24.99 | 297.3 | .249 |
| 83 | 12.40 | 33.089 | 6.42 | 0.46 | 3 | 0.03 | 291.8 | 100 | 12.04 | 33.18 | 6.20 | 25.19 | 278.6 | .321 |
| 100 | 12.04 | 33.180 | 6.20 | 0.71 | 3 | 0.09 | 278.6 | 125 | 11.30 | 33.32 | 5.97 | 25.44 | 255.3 | .389 |
| 117 | 11.40 | 33.291 | 6.05 | 0.97 | 7 | 0.00 | 259.1 | 150 | 10.01 | 33.46 | 4.91 | 25.77 | 223.5 | .449 |
| 142 | 10.40 | 33.411 | 5.23 | 1.29 | 12 | 0.00 | 233.4 | 200 | 8.89 | 33.86 | 3.78 | 26.26 | 176.5 | .551 |
| 167 | 9.44 | 33.606 | 4.30 | - | - | - | 203.7 | 250 | 8.29 | 33.97 | 3.24 | 26.44 | 159.5 | .637 |
| 202 | 8.85 | 33.869 | 3.73 | - | - | - | 175.2 | 300 | 7.69 | 34.05 | 2.64 | 26.59 | 145.1 | .715 |
| 227 | 8.56 | 33.920 | 3.41 | - | - | - | 167.1 | 400 | 6.45 | 34.10 | 1.55 | 26.81 | 125.1 | .856 |
| 270 | 8.03 | 34.012 | 3.06 | - | - | - | 152.7 | 500 | 5.86 | 34.21 | 1.05 | 26.97 | 109.7 | .979 |
| 327 | 7.34 | 34.073 | 2.25 | - | - | - | 138.6 | | | | | | | |
| 414 | 6.34 | 34.113 | 1.41 | - | - | - | 122.8 | | | | | | | |
| 495 | 5.89 | 34.201 | 1.07 | - | - | - | 110.7 | | | | | | | |
| 563 | 5.42 | 34.235 | .71 | - | - | - | 102.7 | | | | | | | |

A) ALTERNATE VALUE, 34.05, NOT USED IN INTERPOLATION.

| OBSERVED LEVELS OF DEPTH | | | | | | | | STANDARD LEVELS OF DEPTH | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | INPUT | | | | | COMPUTED | | | INPUT | | | COMPUTED | |
| Z | T | S | OXY | PHC | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |

80.200 CCOFI CRUISE 6407 80.200

ALEXANDER AGASSIZ, JULY 8 1964, 0534 GCT, 29 29N 130 36W, SOUNDING 2342 FM, WIND 020 FORCE 4, WEATHER MISSING, SEA ROUGH, WIRE ANGLE 19.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 19.59 | 34.381 | 5.62 | 0.38 | 2 | 0.00 | 352.2 | 0 | 19.59 | 34.38 | 5.62 | 24.42 | 352.3 | 0 |
| 10 | 19.59 | 34.383 | 5.75 | 0.35 | 2 | 0.00 | 352.1 | 10 | 19.59 | 34.38 | 5.75 | 24.42 | 352.3 | .035 |
| 29 | 19.42 | 34.487 | 5.67 | 0.37 | 2 | 0.00 | 340.3 | 20 | 19.45 | 34.47 | 5.70 | 24.52 | 342.3 | .070 |
| 38 | 19.00 | 34.508 | 5.40 | 0.33 | 2 | 0.03 | 328.6 | 30 | 19.42 | 34.49 | 5.66 | 24.54 | 340.1 | .104 |
| 53 | 16.68 | 34.017 | 6.09 | 0.37 | 3 | 0.00 | 310.5 | 50 | 16.85 | 34.04 | 6.02 | 24.83 | 312.6 | .170 |
| 66 | 17.44 | 34.407 | 5.93 | 0.32 | 2 | 0.00 | 299.2 | 75 | 17.50 | 34.44 | 5.93 | 24.98 | 298.2 | .247 |
| 90 | 17.00 | 34.425 | 5.83 | 0.33 | 2 | 0.00 | 287.9 | 100 | 17.00 | 34.48 | 5.81 | 25.13 | 283.9 | .320 |
| 109 | 17.23 | 34.574 | 5.80 | 0.30 | 3 | 0.00 | 282.2 | 125 | 17.18 | 34.59 | 5.72 | 25.18 | 279.9 | .391 |
| 128 | 17.16 | 34.593 | 5.69 | 0.30 | 3 | 0.02 | 279.3 | 150 | 15.64 | 34.31 | 5.60 | 25.32 | 266.4 | .461 |
| 147 | 15.98 | 34.363 | 5.62 | 0.43 | 4 | 0.13 | 269.9 | 200 | 11.48 | 33.91 | 5.27 | 25.86 | 214.9 | .583 |
| 175 | 13.14 | 33.977 | 5.41 | - | - | - | 240.3 | 250 | 9.52 | 33.97 | 5.06 | 26.25 | 178.0 | .684 |
| 207 | 11.08 | 33.907 | 5.26 | - | - | - | 208.2 | 300 | 8.63 | 34.03 | 4.53 | 26.44 | 160.0 | .771 |
| 235 | 9.84 | 33.927 | 5.18 | - | - | - | 186.2 | 400 | 6.80 | 34.00 | 3.08 | 26.68 | 137.0 | .925 |
| 281 | 8.93 | 34.026 | 4.71 | - | - | - | 164.8 | 500 | 5.70 | 34.10 | 1.44 | 26.90 | 116.1 | 1.058 |
| 333 | 8.03 | 34.015 | 4.14 | - | - | - | 152.5 | | | | | | | |
| 412 | 6.62 | 33.999 | 2.89 | - | - | - | 134.8 | | | | | | | |
| 492 | 5.78 | 34.087 | 1.52 | - | - | - | 118.0 | | | | | | | |
| 574 | 5.16 | 34.166 | .92 | - | - | - | 105.0 | | | | | | | |

81.48 CCOFI CRUISE 6407 81.48

ALEXANDER AGASSIZ, JUNE 20 1964, 1310 GCT, 34 21.5N 120 12W, SOUNDING 220 FM, WIND 140 FORCE 3, WEATHER PARTLY CLOUDY, SEA MODERATE, WIRE ANGLE 00.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.52 | 33.928 | - | - | - | - | 251.2 | 0 | 13.52 | 33.93 | - | 25.48 | 251.1 | 0 |
| 10 | 12.62 | 33.885 | - | - | - | - | 237.3 | 10 | 12.62 | 33.88 | - | 25.62 | 237.6 | .024 |
| 30 | 10.44 | 33.967 | - | - | - | - | 193.0 | 20 | 10.85 | 33.92 | - | 25.98 | 203.3 | .047 |
| 45 | 9.65 | 34.016 | - | - | - | - | 176.6 | 30 | 10.44 | 33.97 | - | 26.09 | 192.8 | .066 |
| 60 | 9.46 | 34.025 | - | - | - | - | 173.0 | 50 | 9.57 | 34.02 | - | 26.28 | 175.0 | .103 |
| 75 | 9.18 | 34.070 | - | - | - | - | 165.3 | 75 | 9.18 | 34.07 | - | 26.38 | 165.3 | .146 |
| 90 | 9.09 | - | - | - | - | - | - | 100 | 8.96 | 34.11 | - | 26.45 | 159.0 | .187 |
| 109 | 8.86 | 34.126 | - | - | - | - | 156.3 | 125 | 8.80 | 34.14 | - | 26.50 | 154.4 | .227 |
| 134 | 8.78 | 34.142 | - | - | - | - | 153.9 | 150 | 8.72 | 34.15 | - | 26.52 | 152.4 | .266 |
| 164 | 8.68 | 34.160 | - | - | - | - | 151.1 | 200 | 8.40 | 34.18 | - | 26.59 | 145.5 | .342 |
| 200 | 8.40 | 34.183 | - | - | - | - | 145.3 | 250 | 7.82 | 34.21 | - | 26.70 | 135.0 | .414 |
| 235 | 7.93 | 34.205 | - | - | - | - | 136.9 | 300 | 7.55 | 34.21 | - | 26.74 | 131.3 | .483 |
| 274 | 7.68 | 34.211 | - | - | - | - | 133.0 | | | | | | | |
| 319 | 7.46 | 34.215 | - | - | - | - | 129.7 | | | | | | | |
| 359 | 7.25 | 34.221 | - | - | - | - | 126.4 | | | | | | | |

81.52 CCOFI CRUISE 6407 81.52

ALEXANDER AGASSIZ, JUNE 20 1964, 1040 GCT, 34 16N 120 28.5W, SOUNDING 242 FM, WIND 360 FORCE 6, WEATHER MISSING, SEA ROUGH, WIRE ANGLE 25.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 11.70 | 33.950 | - | - | - | - | 215.8 | 0 | 11.70 | 33.95 | - | 25.85 | 215.8 | 0 |
| 10 | 11.69 | 33.950 | - | - | - | - | 215.6 | 10 | 11.69 | 33.95 | - | 25.85 | 215.6 | .022 |
| 28 | 11.56 | 33.955 | - | - | - | - | 213.0 | 20 | 11.67 | 33.95 | - | 25.86 | 215.3 | .043 |
| 42 | 10.06 | 33.997 | - | - | - | - | 184.5 | 30 | 11.53 | 33.96 | - | 25.89 | 212.1 | .065 |
| 51 | 9.52 | 34.021 | - | - | - | - | 174.2 | 50 | 9.55 | 34.02 | - | 26.28 | 174.7 | .103 |
| 66 | 9.28 | 34.050 | - | - | - | - | 168.3 | 75 | 9.23 | 34.06 | - | 26.37 | 166.8 | .146 |
| 78 | 9.21 | 34.059 | - | - | - | - | 166.6 | 100 | 9.02 | 34.10 | - | 26.43 | 160.6 | .188 |
| 91 | 9.08 | 34.089 | - | - | - | - | 162.4 | 125 | 8.83 | 34.12 | - | 26.48 | 156.3 | .228 |
| 110 | 8.98 | 34.104 | - | - | - | - | 159.7 | 150 | 8.67 | 34.15 | - | 26.53 | 151.7 | .267 |
| 129 | 8.79 | 34.132 | - | - | - | - | 154.8 | 200 | 8.48 | 34.19 | - | 26.59 | 145.9 | .343 |
| 154 | 8.65 | 34.154 | - | - | - | - | 151.1 | 250 | 8.04 | 34.21 | - | 26.67 | 138.1 | .416 |
| 181 | 8.56 | 34.180 | - | - | - | - | 147.8 | 300 | 7.54 | 34.21 | - | 26.74 | 131.2 | .486 |
| 211 | 8.42 | 34.195 | - | - | - | - | 144.7 | 400 | 6.87 | 34.24 | - | 26.86 | 120.0 | .617 |
| 253 | 8.00 | 34.211 | - | - | - | - | 137.5 | | | | | | | |
| 293 | 7.61 | 34.206 | - | - | - | - | 132.4 | | | | | | | |
| 337 | 7.20 | 34.224 | - | - | - | - | 125.5 | | | | | | | |
| 394 | 6.88 | 34.235 | - | - | - | - | 120.5 | | | | | | | |

81.55 CCOFI CRUISE 6407 81.55

ALEXANDER AGASSIZ, JUNE 20 1964, 0803 GCT, 34 09N 120 42W, SOUNDING 390 FM, WIND 330 FORCE 6, WEATHER CLOUDY, SEA VERY ROUGH, WIRE ANGLE 18.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 11.85 | 33.952 | - | - | - | - | 218.3 | 0 | 11.85 | 33.95 | - | 25.82 | 218.5 | 0 |
| 10 | 11.82 | 33.952 | - | - | - | - | 217.8 | 10 | 11.82 | 33.95 | - | 25.83 | 217.9 | .022 |
| 35 | 10.30 | 33.966 | - | - | - | - | 190.7 | 20 | 11.47 | 33.95 | - | 25.89 | 211.7 | .043 |
| 45 | 10.07 | 33.983 | - | - | - | - | 185.7 | 30 | 10.52 | 33.96 | - | 26.07 | 194.8 | .064 |
| 60 | 9.77 | 33.999 | - | - | - | - | 179.8 | 50 | 9.99 | 33.99 | - | 26.19 | 183.9 | .102 |
| 73 | 9.48 | 34.027 | - | - | - | - | 173.1 | 75 | 9.46 | 34.03 | - | 26.31 | 172.6 | .147 |
| 98 | 9.18 | 34.053 | - | - | - | - | 166.6 | 100 | 9.17 | 34.06 | - | 26.38 | 165.9 | .189 |
| 118 | 9.13 | 34.076 | - | - | - | - | 164.1 | 125 | 9.02 | 34.10 | - | 26.43 | 160.6 | .231 |
| 137 | 8.81 | 34.128 | - | - | - | - | 155.4 | 150 | 8.65 | 34.15 | - | 26.53 | 151.4 | .270 |
| 167 | 8.50 | 34.177 | - | - | - | - | 147.2 | 200 | 8.26 | 34.22 | - | 26.64 | 140.5 | .345 |
| 196 | 8.28 | 34.218 | - | - | - | - | 140.9 | 250 | 7.99 | 34.25 | - | 26.71 | 134.4 | .416 |
| 236 | 8.08 | 34.235 | - | - | - | - | 136.8 | 300 | 7.69 | 34.26 | - | 26.76 | 129.5 | .484 |
| 266 | 7.86 | 34.251 | - | - | - | - | 132.5 | 400 | 7.21 | 34.28 | - | 26.84 | 121.5 | .615 |
| 315 | 7.61 | 34.264 | - | - | - | - | 128.1 | 500 | 6.06 | 34.29 | - | 27.01 | 106.1 | .735 |
| 380 | 7.39 | 34.269 | - | - | - | - | 124.7 | 600 | 5.47 | 34.33 | - | 27.11 | 96.2 | .844 |
| 479 | 6.24 | 34.287 | - | - | - | - | 108.5 | | | | | | | |
| 568 | 5.61 | 34.320 | - | - | - | - | 98.5 | | | | | | | |
| 643 | 5.28 | 34.356 | - | - | - | - | 92.1 | | | | | | | |

| OBSERVED LEVELS OF DEPTH | | | | | | | | STANDARD LEVELS OF DEPTH | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | INPUT | | | | | | COMPUTED | INPUT | | | | COMPUTED | | |
| Z | T | S | OXY | PHC | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |

81.65 CCOFI CRUISE 6407 81.65

ALEXANDER AGASSIZ, JUNE 20 1964, 0031 GCT, 33 48.5N 121 23.5W SOUNDING 1846 FM, WIND 320 FORCE 6, WEATHER CLOUDY, SEA ROUGH, WIRE ANGLE 40.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.40 | 33.562 | - | - | - | - | 275.8 | 0 | 13.40 | 33.56 | - | 25.22 | 275.9 | 0 |
| 8 | 13.36 | 33.556 | - | - | - | - | 275.4 | 10 | 13.35 | 33.55 | - | 25.22 | 275.7 | .028 |
| 27 | 13.27 | 33.553 | - | - | - | - | 273.9 | 20 | 13.33 | 33.55 | - | 25.22 | 275.3 | .055 |
| 35 | 13.03 | 33.558 | - | - | - | - | 269.0 | 30 | 13.23 | 33.55 | - | 25.24 | 273.4 | .083 |
| 46 | 11.44 | 33.662 | - | - | - | - | 232.5 | 50 | 11.29 | 33.67 | - | 25.71 | 229.3 | .133 |
| 58 | 11.04 | 33.687 | - | - | - | - | 223.7 | 75 | 9.98 | 33.78 | - | 26.02 | 199.3 | .187 |
| 77 | 9.91 | 33.787 | - | - | - | - | 197.7 | 100 | 9.39 | 33.87 | - | 26.19 | 183.4 | .235 |
| 92 | 9.56 | 33.843 | - | - | - | - | 188.0 | 125 | 8.92 | 33.94 | - | 26.32 | 171.0 | .280 |
| 106 | 9.28 | 33.883 | - | - | - | - | 180.7 | 150 | 8.66 | 34.04 | - | 26.44 | 159.7 | .322 |
| 129 | 8.86 | 33.952 | - | - | - | - | 169.2 | 200 | 7.97 | 34.08 | - | 26.58 | 146.8 | .400 |
| 150 | 8.66 | 34.044 | - | - | - | - | 159.4 | 250 | 7.13 | 34.06 | - | 26.68 | 136.8 | .473 |
| 180 | 8.38 | 34.095 | - | - | - | - | 151.5 | 300 | 6.85 | 34.11 | - | 26.76 | 129.4 | .542 |
| 203 | 7.88 | 34.082 | - | - | - | - | 145.4 | 400 | 5.67 | 34.15 | - | 26.94 | 112.0 | .667 |
| 239 | 7.19 | 34.047 | - | - | - | - | 138.6 | 500 | 5.60 | 34.30 | - | 27.07 | 99.9 | .779 |
| 287 | 7.03 | 34.115 | - | - | - | - | 131.4 | | | | | | | |
| 364 | 5.76 | 34.104 | - | - | - | - | 116.5 | | | | | | | |
| 439 | 5.64 | 34.209 | - | - | - | - | 107.2 | | | | | | | |
| 507 | 5.60 | 34.304 | - | - | - | - | 99.6 | | | | | | | |

81.70 CCOFI CRUISE 6407 81.70

ALEXANDER AGASSIZ, JUNE 19 1964, 2051 GCT, 33 39.5N 121 44.5W, SOUNDING 1940 FM, WIND 100 FORCE 4, WEATHER CLOUDY, SEA ROUGH, WIRE ANGLE 22.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.84 | 33.54 | - | - | - | - | 285.9 | 0 | 13.84 | 33.54 | - | 25.11 | 285.9 | 0 |
| 10 | 13.75 | 33.55 | - | - | - | - | 283.4 | 10 | 13.75 | 33.55 | - | 25.14 | 283.4 | .028 |
| 33 | 12.96 | 33.54 | - | - | - | - | 269.0 | 20 | 13.67 | 33.55 | - | 25.16 | 281.9 | .057 |
| 43 | 11.65 | 33.54 | - | - | - | - | 245.1 | 30 | 13.33 | 33.54 | - | 25.22 | 276.0 | .085 |
| 56 | 10.98 | 33.54 | - | - | - | - | 233.6 | 50 | 11.31 | 33.54 | - | 25.60 | 239.2 | .136 |
| 71 | 10.13 | 33.56 | - | - | - | - | 218.0 | 75 | 10.10 | 33.58 | - | 25.85 | 216.0 | .194 |
| 94 | 10.02 | 33.72 | - | - | - | - | 204.4 | 100 | 9.92 | 33.74 | - | 26.00 | 201.3 | .246 |
| 112 | 9.35 | 33.80 | - | - | - | - | 187.9 | 125 | 8.98 | 33.86 | - | 26.25 | 177.8 | .294 |
| 130 | 8.90 | 33.89 | - | - | - | - | 174.4 | 150 | 8.73 | 33.96 | - | 26.37 | 166.7 | .338 |
| 157 | 8.68 | 33.98 | - | - | - | - | 164.5 | 200 | 8.15 | 34.01 | - | 26.50 | 154.5 | .420 |
| 183 | 8.37 | 34.01 | - | - | - | - | 157.7 | 250 | 7.44 | 34.01 | - | 26.60 | 144.7 | .496 |
| 219 | 7.88 | 34.01 | - | - | - | - | 150.7 | 300 | 7.35 | 34.15 | - | 26.72 | 133.0 | .568 |
| 246 | 7.47 | 34.01 | - | - | - | - | 145.1 | 400 | 6.52 | 34.22 | - | 26.89 | 117.0 | .698 |
| 289 | 7.37 | 34.12 | - | - | - | - | 135.6 | 500 | 5.63 | 34.27 | - | 27.04 | 102.5 | .814 |
| 346 | 7.25 | 34.23 | - | - | - | - | 125.7 | 600 | 5.30 | 34.36 | - | 27.15 | 92.0 | .918 |
| 438 | 6.02 | 34.22 | - | - | - | - | 110.9 | | | | | | | |
| 520 | 5.54 | 34.28 | - | - | - | - | 100.7 | | | | | | | |
| 594 | 5.32 | 34.35 | - | - | - | - | 93.0 | | | | | | | |

82.47 CCOFI CRUISE 6407 82.47

ALEXANDER AGASSIZ, JUNE 19 1964, 0250 GCT, 34 16.5N 120 04W, SOUNDING 310 FM, WIND 290 FORCE 6, WEATHER CLEAR, SEA MODERATE, WIRE ANGLE 13.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 11.84 | 33.988 | 6.73 | 1.12 | 17 | 0.23 | 215.5 | 0 | 11.84 | 33.99 | 6.73 | 25.86 | 215.3 | 0 |
| 10 | 11.18 | 33.995 | 5.62 | 1.35 | 19 | 0.22 | 203.4 | 10 | 11.18 | 34.00 | 5.62 | 25.98 | 203.0 | .021 |
| 29 | 10.56 | 33.988 | 4.32 | 1.78 | 23 | 0.26 | 193.4 | 20 | 10.83 | 33.99 | 4.93 | 26.04 | 197.8 | .041 |
| 44 | 9.64 | 34.010 | 2.94 | 2.26 | 30 | 0.31 | 176.9 | 30 | 10.51 | 33.99 | 4.22 | 26.10 | 192.4 | .061 |
| 54 | 9.55 | 34.033 | 2.82 | 2.33 | 34 | 0.30 | 173.8 | 50 | 9.60 | 34.02 | 2.88 | 26.27 | 175.5 | .098 |
| 68 | 9.28 | 34.064 | 2.45 | 2.48 | 35 | 0.30 | 167.3 | 75 | 9.07 | 34.09 | 2.06 | 26.42 | 162.1 | .140 |
| 83 | 8.88 | 34.119 | 1.73 | 2.60 | 38 | 0.23 | 157.1 | 100 | 8.77 | 34.14 | 1.80 | 26.50 | 153.9 | .180 |
| 98 | 8.78 | 34.137 | 1.81 | 2.64 | 39 | 0.17 | 154.3 | 125 | 8.61 | 34.17 | 1.41 | 26.55 | 149.3 | .218 |
| 123 | 8.62 | 34.167 | 1.44 | 2.73 | 41 | 0.02 | 149.7 | 150 | 8.41 | 34.18 | 1.33 | 26.59 | 145.6 | .256 |
| 141 | 8.49 | 34.177 | 1.37 | 2.78 | 43 | 0.00 | 147.0 | 200 | 8.20 | 34.20 | 1.09 | 26.64 | 141.1 | .329 |
| 171 | 8.26 | 34.193 | 1.18 | - | - | - | 142.5 | 250 | 7.95 | 34.21 | 1.16 | 26.68 | 136.8 | .401 |
| 200 | 8.20 | 34.205 | 1.09 | - | - | - | 140.8 | 300 | 7.51 | 34.21 | 1.03 | 26.75 | 130.7 | .470 |
| 229 | 8.08 | 34.209 | 1.03 | - | - | - | 138.7 | 400 | 6.72 | 34.25 | .52 | 26.89 | 117.3 | .599 |
| 268 | 7.82 | 34.209 | 1.24 | - | - | - | 135.1 | 500 | 6.40 | 34.27 | .56 | 26.95 | 111.8 | .720 |
| 328 | 7.24 | 34.222 | .81 | - | - | - | 126.2 | | | | | | | |
| 382 | 6.82 | 34.244 | .57 | - | - | - | 119.1 | | | | | | | |
| 441 | 6.56 | 34.257 | .51 | - | - | - | 114.8 | | | | | | | |
| 500 | 6.40 | 34.271 | .56 | - | - | - | 111.7 | | | | | | | |

| OBSERVED LEVELS OF DEPTH | | | | | | | | STANDARD LEVELS OF DEPTH | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | INPUT | | | | | COMPUTED | | | INPUT | | | COMPUTED | |
| Z | T | S | OXY | PHC | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |

82.48 CCCFI CRUISE 6407 82.48

ALEXANDER AGASSIZ, JUNE 18 1964, 1631 GCT, 34 09N 120 04.5W, SOUNDING 255 FM, WIND 260 FORCE 3, WEATHER CLEAR, SEA ROUGH, WIRE ANGLE 25.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 11.51 | 34.022 | - | - | - | - | 207.1 | 0 | 11.51 | 34.02 | - | 25.94 | 207.3 | 0 |
| 10 | 11.40 | 34.020 | - | - | - | - | 205.4 | 10 | 11.40 | 34.02 | - | 25.96 | 205.4 | .021 |
| 29 | 9.98 | 33.988 | - | - | - | - | 183.9 | 20 | 10.69 | 34.00 | - | 26.07 | 194.7 | .041 |
| 42 | 9.62 | 34.012 | - | - | - | - | 176.4 | 30 | 9.93 | 33.99 | - | 26.20 | 183.0 | .060 |
| 51 | 9.57 | 34.026 | - | - | - | - | 174.6 | 50 | 9.57 | 34.02 | - | 26.28 | 175.0 | .096 |
| 65 | 9.43 | 34.044 | - | - | - | - | 171.1 | 75 | 9.18 | 34.08 | - | 26.39 | 164.6 | .138 |
| 77 | 9.16 | 34.084 | - | - | - | - | 164.0 | 100 | 8.90 | 34.13 | - | 26.47 | 156.6 | .179 |
| 91 | 9.03 | 34.103 | - | - | - | - | 160.6 | 125 | 8.61 | 34.16 | - | 26.54 | 150.1 | .218 |
| 114 | 8.68 | 34.162 | - | - | - | - | 150.9 | 150 | 8.49 | 34.18 | - | 26.58 | 146.8 | .256 |
| 132 | 8.58 | 34.166 | - | - | - | - | 149.2 | 200 | 8.08 | 34.21 | - | 26.66 | 138.7 | .328 |
| 158 | 8.44 | 34.191 | - | - | - | - | 145.3 | 250 | 7.83 | 34.21 | - | 26.70 | 135.2 | .399 |
| 185 | 8.19 | 34.202 | - | - | - | - | 140.8 | 300 | 7.47 | 34.22 | - | 26.76 | 129.5 | .467 |
| 217 | 7.99 | 34.210 | - | - | - | - | 137.4 | 400 | 7.09 | 34.23 | - | 26.82 | 123.6 | .599 |
| 268 | 7.73 | 34.215 | - | - | - | - | 133.4 | | | | | | | |
| 320 | 7.32 | 34.223 | - | - | - | - | 127.2 | | | | | | | |
| 379 | 7.14 | 34.230 | - | - | - | - | 124.3 | | | | | | | |

82.50 CCCFI CRUISE 6407 82.50

ALEXANDER AGASSIZ, JUNE 19 1964, 0520 GCT, 34 11N 120 15W, SOUNDING 260 FM, WIND 300 FORCE 6, WEATHER CLEAR, SEA MISSING, WIRE ANGLE 32.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 11.19 | 34.066 | 5.66 | 1.30 | 22 | 0.25 | 198.3 | 0 | 11.19 | 34.07 | 5.66 | 26.04 | 198.0 | 0 |
| 10 | 11.12 | 34.068 | 5.60 | 1.34 | 22 | 0.23 | 197.0 | 10 | 11.12 | 34.07 | 5.60 | 26.05 | 196.8 | .020 |
| 27 | 8.85 | 34.135 | 2.11 | 2.52 | 37 | 0.10 | 155.5 | 20 | 9.60 | 34.11 | 3.43 | 26.34 | 168.9 | .038 |
| 40 | 8.76 | 34.136 | 1.61 | 2.63 | 40 | 0.06 | 154.1 | 30 | 8.82 | 34.14 | 2.00 | 26.49 | 154.7 | .054 |
| 48 | 8.68 | 34.135 | 1.65 | 2.69 | 40 | 0.04 | 153.0 | 50 | 8.67 | 34.14 | 1.65 | 26.52 | 152.4 | .085 |
| 60 | 8.63 | 34.138 | 1.64 | 2.65 | 39 | 0.06 | 152.0 | 75 | 8.64 | 34.17 | - | 26.55 | 149.8 | .123 |
| 72 | 8.65 | 34.164 | 1.53 | 2.69 | 41 | 0.08 | 150.4 | 100 | 8.38 | 34.19 | - | 26.60 | 144.5 | .160 |
| 84 | 8.58 | 34.184 | - | 2.73 | 42 | 0.07 | 147.8 | 125 | 8.20 | 34.20 | - | 26.64 | 141.1 | .197 |
| 104 | 8.34 | 34.191 | 1.090 | 2.87 | 47 | 0.05 | 143.8 | 150 | 8.03 | 34.21 | 1.09 | 26.67 | 138.0 | .232 |
| 118 | 8.26 | 34.195 | 1.580 | 2.90 | 49 | 0.04 | 142.4 | 200 | 7.81 | 34.21 | .84 | 26.70 | 134.9 | .302 |
| 142 | 8.08 | 34.203 | 1.14 | - | - | - | 139.2 | 250 | 7.58 | 34.21 | .84 | 26.74 | 131.7 | .370 |
| 165 | 7.99 | 34.206 | 1.03 | - | - | - | 137.7 | 300 | 7.24 | 34.23 | .83 | 26.80 | 125.6 | .437 |
| 191 | 7.86 | 34.213 | .86 | - | - | - | 135.4 | | | | | | | |
| 235 | 7.69 | 34.206 | .82 | - | - | - | 133.5 | | | | | | | |
| 281 | 7.34 | 34.222 | .84 | - | - | - | 127.5 | | | | | | | |
| 333 | 7.12 | 34.231 | .78 | - | - | - | 123.9 | | | | | | | |

82.55 CCCFI CRUISE 6407 82.55

ALEXANDER AGASSIZ, JUNE 19 1964, 0926 GCT, 34 01N 120 36.5W, SOUNDING 500 FM, WIND 330 FORCE 5, WEATHER CLEAR, SEA ROUGH, WIRE ANGLE 28.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 12.24 | 33.93 | 6.46 | 1.01 | 17 | 0.26 | 227.0 | 0 | 12.24 | 33.93 | 6.46 | 25.73 | 227.0 | 0 |
| 11 | 12.20 | 33.93 | 6.47 | 1.08 | 16 | 0.23 | 226.3 | 10 | 12.21 | 33.93 | 6.47 | 25.74 | 226.4 | .023 |
| 33 | 11.54 | 33.91 | 5.68 | 1.31 | 17 | 0.27 | 215.9 | 20 | 12.07 | 33.93 | 6.30 | 25.77 | 223.9 | .045 |
| 59 | 9.86 | 33.82 | 3.80 | 1.94 | 24 | 0.25 | 194.4 | 30 | 11.72 | 33.92 | 5.90 | 25.82 | 218.4 | .067 |
| 68 | 9.80 | 33.93 | 3.39 | 2.07 | 26 | 0.25 | 185.3 | 50 | 10.17 | 33.83 | 4.12 | 26.03 | 198.7 | .109 |
| 87 | 9.22 | 34.06 | 2.33 | 2.56 | 37 | 0.08 | 166.7 | 75 | 9.61 | 33.99 | 3.00 | 26.25 | 177.9 | .157 |
| 99 | 9.05 | 34.10 | 2.02 | 2.47 | 37 | 0.04 | 161.1 | 100 | 9.04 | 34.10 | 2.00 | 26.43 | 160.9 | .199 |
| 112 | 8.75 | 34.15 | 1.90 | 2.61 | 40 | 0.04 | 152.9 | 125 | 8.70 | 34.16 | 1.80 | 26.53 | 151.4 | .239 |
| 139 | 8.68 | 34.17 | 1.52 | 2.66 | 38 | 0.06 | 150.4 | 150 | 8.61 | 34.18 | 1.56 | 26.56 | 148.6 | .277 |
| 157 | 8.56 | 34.18 | 1.61 | 2.67 | 41 | 0.08 | 147.8 | 200 | 8.24 | 34.23 | 1.32 | 26.65 | 139.5 | .351 |
| 181 | 8.37 | 34.21 | 1.41 | 2.78 | 44 | 0.04 | 142.8 | 250 | 7.98 | 34.25 | 1.02 | 26.71 | 134.3 | .421 |
| 212 | 8.18 | 34.24 | 1.25 | 2.91 | 47 | 0.02 | 137.9 | 300 | 7.71 | 34.26 | .99 | 26.76 | 129.8 | .490 |
| 238 | 8.04 | 34.24 | 1.04 | 3.01 | 51 | 0.01 | 135.9 | 400 | 7.08 | 34.29 | .88 | 26.87 | 119.0 | .620 |
| 281 | 7.80 | 34.26 | 1.00 | 3.00 | 52 | 0.01 | 131.0 | 500 | 6.15 | 34.30 | .59 | 27.00 | 106.5 | .739 |
| 338 | 7.52 | 34.27 | .96 | 3.03 | 54 | 0.02 | 126.4 | 600 | 5.43 | 34.35 | - | 27.13 | 94.2 | .846 |
| 429 | 6.82 | 34.29 | .80 | 3.17 | 68 | 0.01 | 115.6 | | | | | | | |
| 512 | 6.04 | 34.31 | .57 | 3.27 | 78 | 0.02 | 104.4 | | | | | | | |
| 583 | 5.52 | 34.34 | .60 | 3.40 | 85 | - | 96.0 | | | | | | | |

82.60 CCCFI CRUISE 6407 82.60

ALEXANDER AGASSIZ, JUNE 19 1964, 1305 GCT, 33 51N 120 57W, SOUNDING 1220 FM, WIND 310 FORCE 5, WEATHER PARTLY CLOUDY, SEA VERY ROUGH, WIRE ANGLE 42.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.57 | 33.52 | - | - | - | - | 282.1 | 0 | 13.57 | 33.52 | - | 25.15 | 282.1 | 0 |
| 9 | 13.56 | 33.51 | - | - | - | - | 282.7 | 10 | 13.55 | 33.51 | - | 25.15 | 282.5 | .028 |
| 27 | 13.20 | 33.52 | - | - | - | - | 275.0 | 20 | 13.46 | 33.52 | - | 25.18 | 280.0 | .056 |
| 34 | 12.16 | 33.49 | - | - | - | - | 257.9 | 30 | 12.85 | 33.52 | - | 25.30 | 268.4 | .084 |
| 44 | 11.76 | 33.55 | - | - | - | - | 246.3 | 50 | 11.70 | 33.59 | - | 25.57 | 242.3 | .135 |
| 55 | 11.56 | 33.69 | - | - | - | - | 232.5 | 75 | 10.51 | 33.76 | - | 25.92 | 209.4 | .192 |
| 72 | 10.62 | 33.76 | - | - | - | - | 211.3 | 100 | 9.49 | 33.88 | - | 26.18 | 184.2 | .242 |
| 85 | 10.20 | 33.76 | - | - | - | - | 204.3 | 125 | 9.21 | 33.91 | - | 26.25 | 177.6 | .287 |
| 99 | 9.50 | 33.88 | - | - | - | - | 184.3 | 150 | 8.75 | 33.95 | - | 26.36 | 167.7 | .331 |
| 122 | 9.25 | 33.91 | - | - | - | - | 178.2 | 200 | 8.18 | 34.04 | - | 26.51 | 152.7 | .413 |
| 140 | 8.94 | 33.93 | - | - | - | - | 172.0 | 250 | 7.28 | 34.05 | - | 26.65 | 139.6 | .488 |
| 163 | 8.51 | 33.98 | - | - | - | - | 162.0 | 300 | 6.44 | 34.06 | - | 26.78 | 128.0 | .557 |
| 180 | 8.28 | 34.01 | - | - | - | - | 156.4 | 400 | 5.63 | 34.12 | - | 26.93 | 113.8 | .682 |
| 210 | 8.12 | 34.06 | - | - | - | - | 150.4 | 500 | 4.95 | 34.20 | - | 27.07 | 100.1 | .794 |
| 250 | 7.28 | 34.05 | - | - | - | - | 139.6 | | | | | | | |
| 315 | 6.29 | 34.07 | - | - | - | - | 125.4 | | | | | | | |
| 384 | 5.74 | 34.10 | - | - | - | - | 116.5 | | | | | | | |
| 448 | 5.30 | 34.16 | - | - | - | - | 107.0 | | | | | | | |



106 Line

| OBSERVED LEVELS OF DEPTH | | | | | | | | STANDARD LEVELS OF DEPTH | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | INPUT | | | | | COMPUTED | | | INPUT | | | COMPUTED | |
| Z | T | S | OXY | PHC | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |

82.65 CCOFI CRUISE 6407 82.65

ALEXANDER AGASSIZ, JUNE 19 1964, 1637 GCT, 33 41N 121 17.5W, SOUNDING 1870 FM, WIND 030 FORCE 6, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 32.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 13.58 | 33.55 | 6.55 | 0.74 | 3 | 0.17 | 280.1 | 0 | 13.58 | 33.55 | 6.55 | 25.17 | 280.1 | 0 |
| 10 | 13.55 | 33.55 | 6.47 | 0.76 | 3 | 0.16 | 279.5 | 10 | 13.55 | 33.55 | 6.47 | 25.18 | 279.5 | .028 |
| 31 | 11.60 | 33.50 | 6.18 | 1.16 | 8 | 0.33 | 247.2 | 20 | 13.40 | 33.55 | 6.42 | 25.21 | 276.6 | .056 |
| 57 | 10.12 | 33.57 | 4.81 | 1.55 | 15 | 0.21 | 217.1 | 30 | 11.80 | 33.50 | 6.23 | 25.48 | 250.7 | .082 |
| 79 | 10.24 | 33.78 | 4.66 | 1.75 | 17 | 0.43 | 203.5 | 50 | 10.31 | 33.54 | 4.96 | 25.78 | 222.4 | .130 |
| 91 | 10.06 | 33.80 | 4.32 | 1.87 | 20 | 0.29 | 199.1 | 75 | 10.19 | 33.75 | 4.69 | 25.96 | 204.9 | .184 |
| 103 | 9.56 | 33.86 | 3.56 | 2.04 | 25 | 0.02 | 186.7 | 100 | 9.65 | 33.84 | 3.72 | 26.13 | 189.6 | .233 |
| 128 | 9.13 | 33.93 | 2.99 | 2.32 | 30 | 0.01 | 174.9 | 125 | 9.18 | 33.92 | 3.04 | 26.26 | 176.4 | .280 |
| 145 | 8.92 | 33.98 | 2.75 | 2.30 | 32 | 0.02 | 168.0 | 150 | 8.87 | 33.99 | 2.74 | 26.37 | 166.5 | .323 |
| 166 | 8.68 | 34.02 | 2.70 | 2.33 | 36 | 0.01 | 161.5 | 200 | 8.31 | 34.07 | 2.25 | 26.52 | 152.4 | .404 |
| 195 | 8.36 | 34.07 | 2.28 | 2.47 | 38 | - | 153.1 | 250 | 7.77 | 34.11 | 1.97 | 26.63 | 141.8 | .480 |
| 243 | 7.84 | 34.10 | 2.01 | 2.68 | 44 | - | 143.5 | 300 | 7.13 | 34.13 | 1.66 | 26.74 | 131.6 | .550 |
| 292 | 7.26 | 34.13 | 1.70 | 2.84 | 52 | - | 133.3 | 400 | 5.89 | 34.13 | 1.32 | 26.90 | 116.1 | .679 |
| 366 | 6.08 | 34.09 | 1.58 | 2.97 | 64 | - | 121.3 | 500 | 5.57 | 34.28 | .57 | 27.06 | 101.1 | .793 |
| 474 | 5.62 | 34.24 | .71 | 3.29 | 76 | - | 104.7 | 600 | 5.18 | 34.35 | .47 | 27.16 | 91.4 | .896 |
| 569 | 5.38 | 34.34 | .44 | 3.38 | 85 | - | 94.4 | 700 | 4.59 | 34.37 | .62 | 27.24 | 83.5 | .991 |
| 710 | 4.54 | 34.37 | .62 | 3.44 | 102 | - | 83.0 | 800 | 4.30 | 34.42 | .68 | 27.32 | 76.8 | 1.078 |
| 863 | 4.12 | 34.45 | .72 | 3.43 | 112 | - | 72.7 | 1000 | 3.76 | 34.50 | .82 | 27.44 | 65.4 | 1.237 |
| 1058 | 3.60 | 34.51 | .88 | 3.38 | 125 | - | 63.2 | | | | | | | |
| 1133 | 3.44 | 34.52 | 1.10 | 3.33 | 130 | - | 60.9 | | | | | | | |

83.44A CCOFI CRUISE 6407 83.44A

ALEXANDER AGASSIZ, JUNE 18 1964, 2104 GCT, 34 10N 119 40W, SOUNDING 156 FM, WIND 100 FORCE 2, WEATHER CLEAR, SEA MODERATE, WIRE ANGLE 12.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.92 | 33.867 | 7.34 | 0.40 | 9 | 0.06 | 283.7 | 0 | 14.92 | 33.87 | 7.34 | 25.14 | 283.5 | 0 |
| 10 | 13.68 | 33.879 | 7.19 | 0.56 | 10 | 0.10 | 257.9 | 10 | 13.68 | 33.88 | 7.19 | 25.41 | 257.8 | .027 |
| 30 | 10.87 | 33.842 | 3.56 | 1.84 | 20 | 0.51 | 209.4 | 20 | 11.74 | 33.85 | 4.62 | 25.77 | 223.9 | .051 |
| 39 | 10.68 | 33.871 | 3.48 | 1.94 | 21 | 0.50 | 204.1 | 30 | 10.87 | 33.84 | 3.56 | 25.92 | 209.5 | .073 |
| 54 | 10.26 | 33.888 | 3.14 | 2.02 | 23 | 0.34 | 195.9 | 50 | 10.36 | 33.88 | 3.21 | 26.04 | 198.1 | .114 |
| 70 | 9.96 | 33.917 | 2.95 | 2.09 | 26 | 0.18 | 188.9 | 75 | 9.83 | 33.93 | 2.86 | 26.17 | 185.8 | .162 |
| 83 | 9.61 | 33.969 | 2.59 | 2.17 | 28 | 0.07 | 179.4 | 100 | 9.33 | 34.04 | 2.32 | 26.33 | 169.8 | .207 |
| 103 | 9.26 | 34.055 | 2.25 | 2.38 | 33 | 0.14 | 167.6 | 125 | 8.62 | 34.16 | 1.58 | 26.54 | 150.2 | .248 |
| 122 | 8.67 | 34.155 | 1.64 | 2.64 | 38 | 0.08 | 151.3 | 150 | 8.44 | 34.20 | 1.29 | 26.60 | 144.6 | .285 |
| 142 | 8.48 | 34.195 | 1.37 | 2.75 | 43 | 0.09 | 145.6 | 200 | 8.11 | 34.22 | .96 | 26.67 | 138.4 | .357 |
| 176 | 8.33 | 34.214 | 1.09 | - | - | - | 142.0 | 250 | 7.61 | 34.22 | .91 | 26.74 | 131.4 | .427 |
| 206 | 8.04 | 34.223 | .94 | - | - | - | 137.1 | | | | | | | |
| 246 | 7.64 | 34.215 | .91 | - | - | - | 132.1 | | | | | | | |
| 275 | 7.44 | 34.215 | .86 | - | - | - | 129.4 | | | | | | | |

83.45A CCOFI CRUISE 6407 83.45A

ALEXANDER AGASSIZ, JUNE 18 1964, 1908 GCT, 34 12N 119 50W, SOUNDING 230 FM, WIND 080 FORCE 4, WEATHER CLEAR, SEA MODERATE, WIRE ANGLE 13.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.09 | 33.851 | 7.13 | 0.43 | 10 | 0.08 | 268.1 | 0 | 14.09 | 33.85 | 7.13 | 25.30 | 268.1 | 0 |
| 11 | 13.70 | 33.854 | 7.05 | 0.51 | 9 | 0.09 | 260.1 | 10 | 13.76 | 33.85 | 7.07 | 25.37 | 261.6 | .027 |
| 30 | 10.70 | 33.832 | 3.50 | 1.79 | 20 | 0.23 | 207.3 | 20 | 12.50 | 33.84 | 5.60 | 25.61 | 238.4 | .052 |
| 45 | 9.96 | 33.914 | 2.81 | 2.06 | 27 | 0.33 | 189.1 | 30 | 10.70 | 33.83 | 3.50 | 25.94 | 207.4 | .074 |
| 55 | 9.82 | 33.957 | 2.85 | 2.12 | 28 | 0.15 | 183.7 | 50 | 9.90 | 33.93 | 2.83 | 26.15 | 186.9 | .113 |
| 69 | 9.46 | 33.990 | 2.62 | 2.75 | 31 | 0.05 | 175.5 | 75 | 9.40 | 34.02 | 2.40 | 26.31 | 172.4 | .159 |
| 84 | 9.36 | 34.038 | 2.25 | 2.32 | 33 | 0.03 | 170.4 | 100 | 9.22 | 34.06 | 2.45 | 26.37 | 166.7 | .202 |
| 98 | 9.23 | 34.062 | 2.45 | 2.33 | 35 | 0.02 | 166.7 | 125 | 8.90 | 34.12 | 1.85 | 26.47 | 157.3 | .243 |
| 123 | 8.91 | 34.116 | 1.85 | 2.48 | 38 | 0.09 | 157.8 | 150 | 8.80 | 34.14 | 1.72 | 26.50 | 154.4 | .282 |
| 142 | 8.84 | 34.137 | 1.78 | 2.58 | 39 | 0.04 | 155.2 | 200 | 8.42 | 34.21 | 1.36 | 26.61 | 143.6 | .358 |
| 171 | 8.66 | 34.164 | 1.58 | - | - | - | 150.5 | 250 | 8.12 | 34.22 | .94 | 26.66 | 138.5 | .431 |
| 201 | 8.41 | 34.213 | 1.34 | - | - | - | 143.2 | 300 | 7.35 | 34.22 | .74 | 26.78 | 127.8 | .500 |
| 235 | 8.22 | 34.222 | 1.07 | - | - | - | 139.8 | 400 | 6.68 | 34.25 | .40 | 26.89 | 116.8 | .627 |
| 290 | 7.46 | 34.222 | .74 | - | - | - | 129.2 | | | | | | | |
| 344 | 7.08 | 34.233 | .72 | - | - | - | 123.3 | | | | | | | |
| 404 | 6.66 | 34.253 | .37 | - | - | - | 116.3 | | | | | | | |

83.53A CCOFI CRUISE 6407 83.53A

ALEXANDER AGASSIZ, JUNE 18 1964, 1309 GCT, 33 55.5N 120 23W, SOUNDING 250 FM, WIND 320 FORCE 7, WEATHER CLOUDY, SEA VERY ROUGH, WIRE ANGLE 40.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 11.78 | 33.933 | - | - | - | - | 218.5 | 0 | 11.78 | 33.93 | - | 25.82 | 218.7 | 0 |
| 8 | 11.78 | 33.937 | - | - | - | - | 218.2 | 10 | 11.77 | 33.94 | - | 25.83 | 217.8 | .022 |
| 24 | 11.46 | 33.924 | - | - | - | - | 213.5 | 20 | 11.54 | 33.93 | - | 25.86 | 214.5 | .043 |
| 35 | 11.32 | 33.919 | - | - | - | - | 211.4 | 30 | 11.39 | 33.92 | - | 25.88 | 212.6 | .065 |
| 42 | 11.14 | 33.928 | - | - | - | - | 207.6 | 50 | 11.08 | 33.93 | - | 25.95 | 206.5 | .107 |
| 54 | 11.05 | 33.937 | - | - | - | - | 205.4 | 75 | 9.40 | 34.05 | - | 26.33 | 170.2 | .154 |
| 66 | 9.74 | 34.007 | - | - | - | - | 178.7 | 100 | 8.93 | 34.12 | - | 26.46 | 157.8 | .196 |
| 77 | 9.26 | 34.060 | - | - | - | - | 167.3 | 125 | 8.74 | 34.16 | - | 26.52 | 152.0 | .235 |
| 97 | 8.95 | 34.117 | - | - | - | - | 158.3 | 150 | 8.64 | 34.17 | - | 26.55 | 149.8 | .273 |
| 112 | 8.86 | 34.137 | - | - | - | - | 155.5 | 200 | 8.45 | 34.20 | - | 26.60 | 144.7 | .349 |
| 135 | 8.68 | 34.166 | - | - | - | - | 150.7 | 250 | 8.13 | 34.23 | - | 26.67 | 137.9 | .421 |
| 158 | 8.62 | 34.171 | - | - | - | - | 149.4 | 300 | 7.78 | 34.25 | - | 26.74 | 131.5 | .491 |
| 185 | 8.53 | 34.186 | - | - | - | - | 147.0 | | | | | | | |
| 230 | 8.23 | 34.218 | - | - | - | - | 140.2 | | | | | | | |
| 277 | 7.98 | 34.237 | - | - | - | - | 135.3 | | | | | | | |
| 331 | 7.48 | 34.267 | - | - | - | - | 126.1 | | | | | | | |

| 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 |

83.55A — CCOFI CRUISE 6407 — 83.55A

ALEXANDER AGASSIZ, JUNE 18 1964, 1038 GCT, 33 52N 120 30W, SOUNDING 772 FM, WIND 320 FORCE 7, WEATHER CLEAR, SEA HIGH, WIRE ANGLE 47.

| Z | T | S | OXY | PHO | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 11.55 | 33.821 | - | - | - | - | 222.7 | 0 | 11.55 | 33.82 | - | 25.78 | 222.7 | 0 |
| 8 | 11.52 | 33.820 | - | - | - | - | 222.2 | 10 | 11.52 | 33.82 | - | 25.78 | 222.2 | .022 |
| 24 | 11.55 | 33.832 | - | - | - | - | 221.9 | 20 | 11.54 | 33.83 | - | 25.79 | 221.8 | .044 |
| 31 | 11.54 | 33.834 | - | - | - | - | 221.5 | 30 | 11.54 | 33.83 | - | 25.79 | 221.8 | .067 |
| 42 | 11.52 | 33.840 | - | - | - | - | 220.7 | 50 | 11.17 | 33.82 | - | 25.85 | 216.1 | .111 |
| 51 | 11.04 | 33.807 | - | - | - | - | 214.9 | 75 | 10.28 | 33.96 | - | 26.11 | 190.9 | .162 |
| 68 | 10.34 | 33.953 | - | - | - | - | 192.4 | 100 | 9.62 | 34.02 | - | 26.27 | 175.8 | .208 |
| 81 | 10.22 | 33.962 | - | - | - | - | 189.7 | 125 | 8.98 | 34.09 | - | 26.43 | 160.8 | .251 |
| 94 | 9.90 | 34.001 | - | - | - | - | 181.7 | 150 | 8.64 | 34.16 | - | 26.54 | 150.5 | .290 |
| 112 | 9.16 | 34.055 | - | - | - | - | 166.1 | 200 | 8.35 | 34.21 | - | 26.62 | 142.5 | .365 |
| 130 | 8.83 | 34.124 | - | - | - | - | 156.0 | 250 | 8.12 | 34.24 | - | 26.68 | 137.0 | .437 |
| 152 | 8.62 | 34.166 | - | - | - | - | 149.8 | 300 | 7.69 | 34.26 | - | 26.76 | 129.5 | .506 |
| 170 | 8.50 | 34.193 | - | - | - | - | 146.0 | 400 | 6.99 | 34.30 | - | 26.89 | 117.1 | .635 |
| 198 | 8.36 | 34.210 | - | - | - | - | 142.7 | 500 | 6.14 | 34.32 | - | 27.02 | 104.9 | .752 |
| 235 | 8.22 | 34.233 | - | - | - | - | 139.0 | | | | | | | |
| 301 | 7.68 | 34.262 | - | - | - | - | 129.2 | | | | | | | |
| 370 | 7.20 | 34.287 | - | - | - | - | 120.8 | | | | | | | |
| 433 | 6.71 | 34.302 | - | - | - | - | 113.3 | | | | | | | |

83.51B — CCOFI CRUISE 6407 — 83.51B

ALEXANDER AGASSIZ, JUNE 17 1964, 1314 GCT, 33 52N 120 08.5W, SOUNDING 86 FM, WIND 320 FORCE 7, WEATHER PARTLY CLOUDY, SEA MODERATE, WIRE ANGLE 33.

| Z | T | S | OXY | PHO | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 11.19 | 33.879 | 4.80 | 1.16 | 19 | 0.20 | 212.1 | 0 | 11.19 | 33.88 | 4.80 | 25.89 | 212.1 | 0 |
| 9 | 11.14 | 33.883 | 4.50 | 1.18 | 21 | 0.21 | 211.0 | 10 | 11.13 | 33.88 | 4.40 | 25.90 | 211.0 | .021 |
| 26 | 11.02 | 33.880 | 4.20 | 1.23 | 21 | 0.20 | 209.1 | 20 | 11.08 | 33.88 | 4.30 | 25.91 | 210.2 | .042 |
| 35 | 10.80 | 33.877 | 3.80 | 1.30 | 20 | 0.19 | 205.6 | 30 | 10.97 | 33.88 | 4.00 | 25.93 | 208.3 | .063 |
| 48 | 10.26 | 33.900 | 3.30 | 1.45 | 23 | 0.16 | 195.0 | 50 | 10.23 | 33.91 | 3.30 | 26.08 | 193.7 | .104 |
| 60 | 9.98 | 33.952 | 3.20 | 1.58 | 27 | 0.12 | 186.6 | 75 | 9.49 | 34.02 | 2.70 | 26.29 | 173.8 | .150 |
| 72 | 9.52 | 34.016 | 2.70 | 1.67 | 31 | 0.10 | 174.6 | 100 | 9.25 | 34.08 | 2.50 | 26.38 | 165.6 | .193 |
| 89 | 9.35 | 34.055 | 2.70 | 1.73 | 32 | 0.11 | 169.0 | 125 | 9.12 | 34.09 | 2.20 | 26.41 | 162.9 | .234 |
| 110 | 9.18 | 34.088 | 2.20 | 1.80 | 35 | 0.11 | 164.0 | | | | | | | |
| 132 | 9.12 | 34.088 | 2.20 | 1.81 | 35 | 0.10 | 163.0 | | | | | | | |

83.55B — CCOFI CRUISE 6407 — 83.55B

ALEXANDER AGASSIZ, JUNE 17 1964, 1640 GCT, 33 44N 120 24.5W, SOUNDING 475 FM, WIND 340 FORCE 5, WEATHER PARTLY CLOUDY, SEA ROUGH, WIRE ANGLE 36.

| Z | T | S | OXY | PHO | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 12.02 | 33.851 | 6.39 | 0.97 | 12 | 0.28 | 228.8 | 0 | 12.02 | 33.85 | 6.39 | 25.71 | 228.9 | 0 |
| 9 | 11.95 | 33.843 | 6.38 | 1.01 | 12 | 0.27 | 228.1 | 10 | 11.94 | 33.84 | 6.38 | 25.72 | 228.2 | .023 |
| 30 | 11.88 | 33.834 | 6.30 | 1.05 | 12 | 0.27 | 227.5 | 20 | 11.90 | 33.83 | 6.34 | 25.72 | 228.2 | .046 |
| 54 | 11.01 | 33.836 | 5.41 | 1.41 | 14 | 0.32 | 212.2 | 30 | 11.88 | 33.83 | 6.30 | 25.72 | 227.8 | .069 |
| 62 | 9.50 | 33.794 | 4.18 | 1.77 | 21 | 0.09 | 190.7 | 50 | 11.55 | 33.83 | 5.93 | 25.79 | 222.0 | .114 |
| 78 | 9.37 | 33.814 | 3.92 | 1.87 | 23 | 0.05 | 187.2 | 75 | 9.39 | 33.80 | 4.00 | 26.14 | 188.5 | .165 |
| 90 | 9.28 | 33.850 | 3.59 | 1.94 | 25 | 0.03 | 183.1 | 100 | 9.35 | 33.97 | 2.95 | 26.28 | 175.3 | .211 |
| 102 | 9.36 | 33.987 | 2.84 | 2.18 | 29 | 0.04 | 174.2 | 125 | 9.17 | 34.06 | 2.20 | 26.38 | 165.9 | .255 |
| 127 | 9.16 | 34.068 | 2.19 | 2.41 | 33 | 0.02 | 165.1 | 150 | 8.99 | 34.12 | 2.09 | 26.45 | 158.7 | .296 |
| 145 | 9.02 | 34.108 | 2.17 | 2.43 | 35 | 0.03 | 160.0 | 200 | 8.21 | 34.17 | 2.15 | 26.61 | 143.5 | .373 |
| 168 | 8.80 | 34.142 | 1.89 | 2.58 | 38 | - | 154.2 | 250 | 7.15 | 34.10 | 2.00 | 26.71 | 134.1 | .444 |
| 196 | 8.29 | 34.171 | 2.16 | 2.71 | 43 | - | 144.6 | 300 | 6.37 | 34.12 | 1.71 | 26.83 | 122.6 | .510 |
| 221 | 7.75 | 34.142 | 1.80 | 2.75 | 46 | - | 139.1 | 400 | 5.92 | 34.22 | 1.01 | 26.97 | 109.7 | .631 |
| 260 | 6.94 | 34.090 | 2.06 | 2.77 | 52 | - | 132.1 | 500 | 5.80 | 34.30 | .73 | 27.05 | 102.3 | .743 |
| 314 | 6.26 | 34.123 | 1.62 | 3.04 | 62 | - | 121.0 | | | | | | | |
| 397 | 5.92 | 34.213 | 1.03 | 3.20 | 71 | - | 110.2 | | | | | | | |
| 475 | 5.84 | 34.276 | .70 | 3.30 | 74 | - | 104.5 | | | | | | | |
| 549 | 5.66 | 34.334 | .79 | 3.42 | 81 | - | 98.1 | | | | | | | |

83.60B — CCOFI CRUISE 6407 — 83.60B

ALEXANDER AGASSIZ, JUNE 17 1964, 2047 GCT, 33 33.5N 120 45W, SOUNDING 812 FM, WIND 320 FORCE 5, WEATHER CLOUDY, SEA ROUGH, WIRE ANGLE 35.

| Z | T | S | OXY | PHO | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.08 | 33.588 | - | - | - | - | 287.1 | 0 | 14.08 | 33.59 | - | 25.10 | 287.0 | 0 |
| 9 | 14.02 | 33.589 | - | - | - | - | 285.9 | 10 | 14.02 | 33.59 | - | 25.11 | 285.8 | .029 |
| 30 | 13.72 | 33.607 | - | - | - | - | 278.7 | 20 | 14.01 | 33.59 | - | 25.12 | 285.6 | .057 |
| 54 | 10.06 | 33.538 | - | - | - | - | 218.5 | 30 | 13.72 | 33.61 | - | 25.19 | 278.4 | .086 |
| 62 | 10.10 | 33.681 | - | - | - | - | 208.6 | 50 | 10.32 | 33.54 | - | 25.78 | 222.6 | .136 |
| 78 | 9.96 | 33.801 | - | - | - | - | 197.4 | 75 | 10.10 | 33.80 | - | 26.02 | 199.8 | .189 |
| 91 | 9.42 | 33.742 | - | - | - | - | 193.3 | 100 | 9.30 | 33.77 | - | 26.13 | 189.4 | .238 |
| 103 | 9.28 | 33.793 | - | - | - | - | 187.4 | 125 | 9.07 | 33.88 | - | 26.25 | 177.7 | .284 |
| 126 | 9.07 | 33.879 | - | - | - | - | 177.8 | 150 | 8.88 | 33.98 | - | 26.36 | 167.4 | .328 |
| 141 | 8.99 | 33.941 | - | - | - | - | 172.0 | 200 | 8.23 | 34.07 | - | 26.53 | 151.2 | .409 |
| 163 | 8.70 | 34.019 | - | - | - | - | 161.9 | 250 | 7.34 | 34.10 | - | 26.68 | 136.6 | .483 |
| 188 | 8.44 | 34.048 | - | - | - | - | 155.9 | 300 | 6.86 | 34.13 | - | 26.77 | 128.1 | .552 |
| 211 | 8.00 | 34.079 | - | - | - | - | 147.3 | 400 | 5.61 | 34.13 | - | 26.94 | 112.8 | .677 |
| 248 | 7.38 | 34.099 | - | - | - | - | 137.3 | 500 | 5.14 | 34.24 | - | 27.08 | 99.2 | .788 |
| 301 | 6.85 | 34.135 | - | - | - | - | 127.6 | | | | | | | |
| 385 | 5.78 | 34.127 | - | - | - | - | 115.0 | | | | | | | |
| 464 | 5.12 | 34.172 | - | - | - | - | 104.1 | | | | | | | |
| 534 | 5.18 | 34.296 | - | - | - | - | 95.5 | | | | | | | |

| 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 |

83.65B — CCOFI CRUISE 6407 — 83.65B

ALEXANDER AGASSIZ, JUNE 18 1964, 0037 GCT, 33 24N 121 06W, SOUNDING 1905 FM, WIND 100 FORCE 5, WEATHER PARTLY CLOUDY, SEA VERY ROUGH, WIRE ANGLE 35.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.02 | 33.665 | - | - | - | - | 280.3 | 0 | 14.02 | 33.66 | - | 25.17 | 280.7 | 0 |
| 8 | 14.00 | 33.663 | - | - | - | - | 280.1 | 10 | 13.98 | 33.66 | - | 25.18 | 279.9 | .028 |
| 30 | 12.10 | 33.588 | - | - | - | - | 249.6 | 20 | 13.66 | 33.65 | - | 25.23 | 274.3 | .056 |
| 38 | 11.33 | 33.559 | - | - | - | - | 238.1 | 30 | 12.10 | 33.59 | - | 25.50 | 249.5 | .082 |
| 50 | 11.30 | 33.687 | - | - | - | - | 228.2 | 50 | 11.30 | 33.69 | - | 25.72 | 228.0 | .130 |
| 62 | 10.96 | 33.715 | - | - | - | - | 220.3 | 75 | 10.53 | 33.80 | - | 25.94 | 206.8 | .185 |
| 81 | 10.12 | 33.822 | - | - | - | - | 198.5 | 100 | 9.52 | 33.88 | - | 26.18 | 184.6 | .234 |
| 97 | 9.60 | 33.874 | - | - | - | - | 186.3 | 125 | 9.03 | 33.94 | - | 26.30 | 172.7 | .279 |
| 113 | 9.26 | 33.916 | - | - | - | - | 177.9 | 150 | 8.62 | 33.99 | - | 26.41 | 162.8 | .322 |
| 138 | 8.81 | 33.963 | - | - | - | - | 167.6 | 200 | 8.30 | 34.08 | - | 26.53 | 151.5 | .402 |
| 160 | 8.50 | 34.008 | - | - | - | - | 159.7 | 250 | 7.54 | 34.12 | - | 26.67 | 137.9 | .476 |
| 190 | 8.32 | 34.057 | - | - | - | - | 153.5 | 300 | 6.67 | 34.09 | - | 26.77 | 128.6 | .545 |
| 213 | 8.27 | 34.116 | - | - | - | - | 148.4 | 400 | 6.03 | 34.16 | - | 26.91 | 115.5 | .672 |
| 250 | 7.54 | 34.119 | - | - | - | - | 137.9 | 500 | 5.61 | 34.25 | - | 27.03 | 103.8 | .787 |
| 301 | 6.66 | 34.090 | - | - | - | - | 128.5 | | | | | | | |
| 381 | 6.16 | 34.148 | - | - | - | - | 118.0 | | | | | | | |
| 459 | 5.71 | 34.200 | - | - | - | - | 108.7 | | | | | | | |
| 529 | 5.58 | 34.301 | - | - | - | - | 99.6 | | | | | | | |

84.40 — CCOFI CRUISE 6407 — 84.40

ALEXANDER AGASSIZ, JUNE 17 1964, 0144 GCT, 34 05.5N 119 17W, SOUNDING 106 FM, WIND 100 FORCE 4, WEATHER PARTLY CLOUDY, SEA MODERATE, WIRE ANGLE 23.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.34 | 33.814 | - | - | - | - | 275.8 | 0 | 14.34 | 33.81 | - | 25.22 | 276.1 | 0 |
| 9 | 14.18 | 33.816 | - | - | - | - | 272.4 | 10 | 14.16 | 33.82 | - | 25.26 | 271.7 | .027 |
| 28 | 11.36 | 33.787 | - | - | - | - | 221.9 | 20 | 13.00 | 33.80 | - | 25.48 | 250.6 | .054 |
| 37 | 10.50 | 33.815 | - | - | - | - | 205.2 | 30 | 11.08 | 33.79 | - | 25.84 | 216.8 | .077 |
| 52 | 10.00 | 33.858 | - | - | - | - | 193.9 | 50 | 10.04 | 33.85 | - | 26.07 | 195.1 | .118 |
| 65 | 9.76 | 33.899 | - | - | - | - | 187.0 | 75 | 9.58 | 33.93 | - | 26.21 | 181.9 | .166 |
| 79 | 9.52 | 33.948 | - | - | - | - | 179.6 | 100 | 9.35 | 34.05 | - | 26.34 | 169.4 | .210 |
| 98 | 9.36 | 34.044 | - | - | - | - | 170.0 | 125 | 9.14 | 34.10 | - | 26.41 | 162.5 | .252 |
| 116 | 9.28 | 34.063 | - | - | - | - | 167.4 | 150 | 8.77 | 34.16 | - | 26.52 | 152.4 | .292 |
| 134 | 8.95 | 34.128 | - | - | - | - | 157.5 | | | | | | | |
| 153 | 8.74 | 34.167 | - | - | - | - | 151.5 | | | | | | | |
| 176 | 8.60 | 34.192 | - | - | - | - | 147.5 | | | | | | | |

84.41 — CCOFI CRUISE 6407 — 84.41

ALEXANDER AGASSIZ, JUNE 17 1964, 0547 GCT, 34 07N 119 25W, SOUNDING 125 FM, WIND 140 FORCE 5, WEATHER PARTLY CLOUDY, SEA SLIGHT, WIRE ANGLE 33.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.56 | 33.839 | - | - | - | - | 258.5 | 0 | 13.56 | 33.84 | - | 25.40 | 258.4 | 0 |
| 9 | 13.52 | 33.843 | - | - | - | - | 257.4 | 10 | 13.52 | 33.84 | - | 25.41 | 257.7 | .026 |
| 26 | 13.12 | 33.839 | - | - | - | - | 250.1 | 20 | 13.23 | 33.84 | - | 25.47 | 252.1 | .051 |
| 34 | 12.90 | 33.848 | - | - | - | - | 245.2 | 30 | 13.04 | 33.84 | - | 25.51 | 248.5 | .076 |
| 47 | 10.85 | 33.880 | - | - | - | - | 206.2 | 50 | 10.60 | 33.88 | - | 25.99 | 202.1 | .122 |
| 60 | 10.16 | 33.868 | - | - | - | - | 195.7 | 75 | 9.77 | 33.89 | - | 26.14 | 187.8 | .171 |
| 72 | 9.90 | 33.878 | - | - | - | - | 190.8 | 100 | 9.50 | 33.99 | - | 26.27 | 176.2 | .217 |
| 89 | 9.51 | 33.972 | - | - | - | - | 177.7 | 125 | 9.17 | 34.08 | - | 26.39 | 164.4 | .260 |
| 106 | 9.32 | 34.028 | - | - | - | - | 170.6 | 150 | 8.60 | 34.18 | - | 26.56 | 148.4 | .300 |
| 123 | 9.20 | 34.073 | - | - | - | - | 165.4 | 200 | 8.13 | 34.23 | - | 26.67 | 137.9 | .373 |
| 148 | 8.64 | 34.164 | - | - | - | - | 150.2 | | | | | | | |
| 169 | 8.36 | 34.214 | - | - | - | - | 142.4 | | | | | | | |
| 195 | 8.16 | 34.230 | - | - | - | - | 138.3 | | | | | | | |

84.45 — CCOFI CRUISE 6407 — 84.45

ALEXANDER AGASSIZ, JUNE 17 1964, 0827 GCT, 33 55.5N 119 37.5W, SOUNDING 400 FM, WIND 100 FORCE 4, WEATHER MISSING, SEA MISSING, WIRE ANGLE 24.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.76 | 33.849 | 5.87 | 0.94 | 12 | 0.21 | 261.7 | 0 | 13.76 | 33.85 | 5.87 | 25.37 | 261.6 | 0 |
| 10 | 13.64 | 33.848 | 5.83 | 0.93 | 13 | 0.21 | 259.4 | 10 | 13.64 | 33.85 | 5.83 | 25.39 | 259.3 | .026 |
| 29 | 10.60 | 33.861 | 3.42 | 1.87 | 23 | 0.26 | 203.5 | 20 | 11.43 | 33.85 | 4.23 | 25.82 | 218.4 | .050 |
| 38 | 10.28 | 33.871 | 3.05 | 1.97 | 25 | 0.20 | 197.4 | 30 | 10.56 | 33.86 | 3.35 | 25.99 | 202.9 | .071 |
| 51 | 9.97 | 33.890 | 3.17 | 2.04 | 27 | 0.12 | 191.0 | 50 | 9.99 | 33.89 | 3.17 | 26.11 | 191.3 | .111 |
| 65 | 9.50 | 33.966 | 2.70 | 2.16 | 29 | 0.04 | 178.0 | 75 | 9.28 | 34.03 | 2.39 | 26.33 | 169.8 | .156 |
| 87 | 9.12 | 34.068 | 2.22 | 2.36 | 35 | 0.02 | 164.5 | 100 | 9.03 | 34.08 | 2.16 | 26.41 | 162.3 | .198 |
| 105 | 8.98 | 34.095 | 2.10 | 2.45 | 35 | 0.01 | 160.4 | 125 | 8.75 | 34.14 | 1.85 | 26.51 | 153.6 | .238 |
| 123 | 8.77 | 34.141 | 1.85 | 2.53 | 40 | 0.04 | 153.8 | 150 | 8.67 | 34.16 | 1.84 | 26.53 | 150.9 | .277 |
| 141 | 8.70 | 34.154 | 1.87 | 2.46 | 42 | 0.04 | 151.8 | 200 | 8.32 | 34.22 | 1.48 | 26.63 | 141.4 | .351 |
| 168 | 8.60 | 34.171 | 1.71 | - | - | - | 149.1 | 250 | 8.14 | 34.24 | 1.22 | 26.68 | 137.3 | .423 |
| 200 | 8.32 | 34.216 | 1.48 | - | - | - | 141.7 | 300 | 7.90 | 34.27 | 1.03 | 26.74 | 131.7 | .493 |
| 227 | 8.23 | 34.225 | 1.37 | - | - | - | 139.7 | 400 | 7.47 | 34.29 | .77 | 26.81 | 124.2 | .627 |
| 272 | 8.04 | 34.251 | 1.11 | - | - | - | 135.1 | 500 | 6.87 | 34.31 | .64 | 26.91 | 114.8 | .753 |
| 323 | 7.78 | 34.277 | .98 | - | - | - | 129.5 | | | | | | | |
| 402 | 7.46 | 34.296 | .77 | - | - | - | 123.7 | | | | | | | |
| 484 | 7.00 | 34.305 | .67 | - | - | - | 116.8 | | | | | | | |
| 568 | 6.16 | 34.345 | .46 | - | - | - | 103.2 | | | | | | | |

| 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 |

85.41 CCOFI CRUISE 6407 85.41

ALEXANDER AGASSIZ, JUNE 16 1964, 2109 GCT, 33 53.5N 119 16.5W, SOUNDING 432 FM, WIND 250 FORCE 3, WEATHER CLOUDY, SEA MODERATE, WIRE ANGLE 07.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.96 | 33.832 | - | - | - | - | 330.2 | 0 | 16.96 | 33.83 | - | 24.65 | 330.3 | 0 |
| 10 | 15.80 | 33.825 | - | - | - | - | 305.3 | 10 | 15.80 | 33.82 | - | 24.91 | 305.7 | .032 |
| 30 | 12.24 | 33.765 | - | - | - | - | 239.1 | 20 | 13.47 | 33.78 | - | 25.37 | 261.1 | .060 |
| 60 | 10.20 | 33.826 | - | - | - | - | 199.5 | 30 | 12.24 | 33.76 | - | 25.60 | 239.5 | .085 |
| 70 | 9.80 | 33.868 | - | - | - | - | 189.9 | 50 | 10.40 | 33.82 | - | 25.98 | 203.2 | .130 |
| 84 | 9.56 | 33.911 | - | - | - | - | 183.0 | 75 | 9.71 | 33.88 | - | 26.15 | 187.6 | .179 |
| 99 | 9.26 | 34.008 | - | - | - | - | 171.1 | 100 | 9.25 | 34.02 | - | 26.33 | 170.1 | .224 |
| 114 | 9.19 | 34.068 | - | - | - | - | 165.6 | 125 | 9.04 | 34.09 | - | 26.42 | 161.7 | .266 |
| 140 | 8.89 | 34.126 | - | - | - | - | 156.8 | 150 | 8.89 | 34.15 | - | 26.49 | 155.0 | .306 |
| 160 | 8.89 | 34.173 | - | - | - | - | 153.3 | 200 | 8.51 | 34.19 | - | 26.58 | 146.4 | .383 |
| 190 | 8.60 | 34.183 | - | - | - | - | 148.2 | 250 | 8.10 | 34.25 | - | 26.69 | 136.0 | .456 |
| 219 | 8.34 | 34.220 | - | - | - | - | 141.7 | 300 | 7.71 | 34.26 | - | 26.76 | 129.8 | .525 |
| 249 | 8.11 | 34.244 | - | - | - | - | 136.6 | 400 | 6.84 | 34.30 | - | 26.91 | 115.1 | .653 |
| 299 | 7.72 | 34.263 | - | - | - | - | 129.7 | 500 | 6.18 | 34.34 | - | 27.03 | 103.8 | .769 |
| 353 | 7.22 | 34.285 | - | - | - | - | 121.2 | 600 | 5.60 | 34.38 | - | 27.13 | 93.9 | .875 |
| 438 | 6.58 | 34.316 | - | - | - | - | 110.6 | | | | | | | |
| 522 | 6.05 | 34.351 | - | - | - | - | 101.4 | | | | | | | |
| 608 | 5.56 | 34.378 | - | - | - | - | 93.6 | | | | | | | |

85.46 CCOFI CRUISE 6407 85.46

ALEXANDER AGASSIZ, JUNE 16 1964, 1416 1618 GCT, 33 44.5N 119 35W, SOUNDING 1020 FM, WIND 320 FORCE 3, WEATHER CLOUDY, SEA SLIGHT, WIRE ANGLE 15 02.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.58 | 33.812 | 6.3 | 0.61 | 11 | 0.00 | 280.8 | 0 | 14.58 | 33.81 | 6.3 | 25.17 | 280.9 | 0 |
| 10 | 14.38 | 33.807 | 6.1 | 0.55 | 10 | 0.00 | 277.1 | 10 | 14.38 | 33.81 | 6.1 | 25.21 | 276.9 | .028 |
| 29 | 11.65 | 33.825 | 4.9 | 1.29 | 17 | 0.32 | 224.1 | 20 | 12.00 | 33.82 | 5.0 | 25.69 | 230.7 | .053 |
| 59 | 9.90 | 33.893 | 3.3 | 1.83 | 27 | 0.04 | 189.7 | 30 | 11.60 | 33.83 | 4.8 | 25.78 | 222.9 | .076 |
| 78 | 9.28 | 34.001 | 2.8 | 2.14 | 32 | 0.02 | 171.9 | 50 | 10.26 | 33.87 | 3.6 | 26.05 | 197.2 | .118 |
| 93 | 9.18 | 34.016 | 2.6 | 2.19 | 33 | 0.02 | 169.3 | 75 | 9.36 | 33.99 | 2.9 | 26.29 | 174.0 | .165 |
| 107 | 9.18 | 34.030 | 2.6 | 2.23 | 33 | 0.03 | 168.3 | 100 | 9.18 | 34.02 | 2.6 | 26.34 | 169.0 | .208 |
| 131 | 9.16 | 34.047 | 2.6 | 2.20 | 35 | 0.02 | 166.7 | 125 | 9.17 | 34.04 | 2.6 | 26.36 | 167.4 | .251 |
| 150 | 8.86 | 34.124 | 2.0 | 2.42 | 39 | 0.06 | 156.4 | 150 | 8.86 | 34.12 | 2.0 | 26.47 | 156.7 | .292 |
| 175 | 8.68 | 34.155 | 2.1 | 2.44 | 40 | - | 151.5 | 200 | 8.57 | 34.19 | 1.7 | 26.57 | 147.2 | .370 |
| 203 | 8.55 | 34.189 | 1.7 | 2.58 | 43 | - | 147.0 | 250 | 8.09 | 34.23 | 1.4 | 26.68 | 137.3 | .443 |
| 251 | 8.08 | 34.231 | 1.3 | 2.73 | 48 | - | 137.1 | 300 | 7.53 | 34.26 | 1.0 | 26.78 | 127.3 | .511 |
| 309 | 7.44 | 34.272 | 1.0 | 2.95 | 57 | - | 125.2 | 400 | 6.82 | 34.30 | 1.0 | 26.91 | 114.9 | .638 |
| 406 | 6.78 | 34.302 | 1.0 | 3.09 | 67 | - | 114.2 | 500 | 6.13 | 34.34 | .7 | 27.04 | 103.2 | .753 |
| 502 | 6.12 | 34.341 | .7 A | 3.77U | 78 | - | 103.0 | 600 | 5.58 | 34.38 | - | 27.14 | 93.7 | .859 |
| 608 | 5.54 | 34.379 | .6 | 3.43 | 90 | - | 93.3 | 700 | 4.99 | 34.42 | - | 27.24 | 84.1 | .955 |
| 765 | 4.64 | 34.439 | .9 | 3.53 | 107 | - | 78.9 | 800 | 4.53 | 34.45 | - | 27.31 | 76.9 | 1.044 |
| 875B | 4.36 | 34.459 | .6 | 3.41 | 112 | - | 74.5 | 1000 | 4.26 | 34.47 | - | 27.36 | 72.6 | 1.211 |
| 924B | 4.33 | 34.462 | .4 | 3.36 | 117 | - | 73.9 | 1200 | 4.20 | 34.47 | - | 27.37 | 72.0 | 1.377 |
| 931 | 4.32 | 34.461 | 1.0 | 3.56 | 116 | - | 73.9 | 1500 | 4.19 | 34.47 | - | 27.37 | 71.9 | 1.630 |
| 973B | 4.24 | 34.470 | .7 | 3.48 | 117 | - | 72.4 | | | | | | | |
| 1023B | 4.24 | 34.472 | .4 | 3.46 | 118 | - | 72.3 | | | | | | | |
| 1072B | 4.22 | 34.469 | .4 | 3.48 | 118 | - | 72.3 | | | | | | | |
| 1090 | 4.22 | 34.468 | .5 | 3.55 | 118 | - | 72.4 | | | | | | | |
| 1168 | 4.20 | 34.474 | .5 | 3.56 | 120 | - | 71.7 | | | | | | | |
| 1170B | 4.20 | 34.470 | .4 | 3.48 | 121 | - | 72.0 | | | | | | | |
| 1270B | 4.20 | 34.474 | .4 | 3.51 | 121 | - | 71.7 | | | | | | | |
| 1368B | 4.19 | 34.477 | .6 | 3.48 | 117 | - | 71.4 | | | | | | | |
| 1467B | 4.19 | 34.474 | .5 | 3.50 | 121 | - | 71.6 | | | | | | | |
| 1566B | 4.18 | 34.474 | .5 | 3.51 | 123 | - | 71.5 | | | | | | | |
| 1664B | 4.20 | 34.473 | .5 | 3.45 | 125 | - | 71.8 | | | | | | | |
| 1714B | 4.20 | 34.479 | .6 | 3.48 | 120 | - | 71.3 | | | | | | | |
| 1764B | 4.20 | 34.478 | .6 | 3.49 | 122 | - | 71.4 | | | | | | | |
| 1804B | 4.20 | 34.478 | .6 | 3.54 | 122 | - | 71.4 | | | | | | | |
| 1863B | 4.19 | 34.474 | .5 | 3.53 | 123 | - | 71.6 | | | | | | | |

85.55 CCOFI CRUISE 6407 85.55

ALEXANDER AGASSIZ, JUNE 16 1964, 0513 GCT, 33 27N 120 11W, SOUNDING 602 FM, WIND 030 FORCE 6, WEATHER MISSING, SEA MISSING, WIRE ANGLE 43.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.65 | 33.389 | - | - | - | - | 293.3 | 0 | 13.65 | 33.39 | - | 25.04 | 293.2 | 0 |
| 9 | 13.63 | 33.391 | - | - | - | - | 292.7 | 10 | 13.63 | 33.39 | - | 25.04 | 292.8 | .029 |
| 23 | 13.04 | 33.455 | - | - | - | - | 276.8 | 20 | 13.08 | 33.45 | - | 25.20 | 277.9 | .058 |
| 30 | 12.22 | 33.456 | - | - | - | - | 261.5 | 30 | 12.22 | 33.46 | - | 25.37 | 261.2 | .085 |
| 42 | 11.71 | 33.440 | - | - | - | - | 253.6 | 50 | 10.75 | 33.44 | - | 25.63 | 237.1 | .135 |
| 52 | 10.64 | 33.439 | - | - | - | - | 235.3 | 75 | 10.03 | 33.60 | - | 25.88 | 213.4 | .192 |
| 70 | 10.21 | 33.552 | - | - | - | - | 219.9 | 100 | 9.74 | 33.81 | - | 26.09 | 193.3 | .243 |
| 84 | 10.00 | 33.710 | - | - | - | - | 204.8 | 125 | 8.94 | 33.87 | - | 26.26 | 176.5 | .290 |
| 98 | 9.77 | 33.811 | - | - | - | - | 193.7 | 150 | 8.56 | 33.97 | - | 26.40 | 163.4 | .333 |
| 112 | 9.17 | 33.813 | - | - | - | - | 184.2 | 200 | 8.03 | 34.01 | - | 26.51 | 152.8 | .413 |
| 133 | 8.82 | 33.911 | - | - | - | - | 171.7 | 250 | 7.16 | 34.02 | - | 26.65 | 140.2 | .488 |
| 155 | 8.52 | 33.977 | - | - | - | - | 162.3 | 300 | 6.67 | 34.09 | - | 26.77 | 128.6 | .558 |
| 175 | 8.40 | 33.981 | - | - | - | - | 160.3 | 400 | 6.22 | 34.20 | - | 26.91 | 114.8 | .684 |
| 206 | 7.92 | 34.007 | - | - | - | - | 151.5 | 500 | 5.85 | 34.29 | - | 27.03 | 103.6 | .799 |
| 241 | 7.28 | 34.008 | - | - | - | - | 142.7 | | | | | | | |
| 299 | 6.68 | 34.088 | - | - | - | - | 128.9 | | | | | | | |
| 365 | 6.35 | 34.160 | - | - | - | - | 119.4 | | | | | | | |
| 440 | 6.08 | 34.238 | - | - | - | - | 110.3 | | | | | | | |

A) THE OXYGEN VALUES WERE TOO UNCERTAIN FOR INTERPOLATION BELOW 500 METERS.
B) OVERLAPPING CASTS, RECONCILIATION OF PROPERTY CURVES WHEN NECESSARY.



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| 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 |

85.60 CCOFI CRUISE 6407 85.60

ALEXANDER AGASSIZ, JUNE 15 1964, 1956 GCT, 33 17N 120 33.5W, SOUNDING 640 FM, WIND 340 FORCE 4, WEATHER OVERCAST, SEA ROLGH, WIRE ANGLE 16.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 14.63 | 33.202 | 6.12 | 0.46 | 2 | 0.02 | 326.5 | 0 | 14.63 | 33.20 | 6.12 | 24.69 | 326.6 | 0 |
| 11 | 14.58 | 33.208 | 6.11 | 0.42 | 2 | 0.01 | 325.0 | 10 | 14.58 | 33.21 | 6.11 | 24.70 | 324.9 | .033 |
| 31 | 12.66 | 33.325 | 6.26 | 0.69 | 3 | 0.14 | 279.2 | 20 | 13.80 | 33.26 | 6.18 | 24.91 | 305.7 | .064 |
| 60 | 11.60 | 33.558 | 5.18 | 0.90 | 9 | 0.10 | 242.9 | 30 | 12.85 | 33.32 | 6.26 | 25.14 | 283.1 | .094 |
| 79 | 10.12 | 33.527 | 5.05 | 1.50 | 16 | 0.02 | 220.3 | 50 | 11.01 | 33.38 | 5.23 | 25.53 | 245.9 | .147 |
| 94 | 9.74 | 33.598 | 4.21 | 1.67 | 20 | 0.02 | 209.0 | 75 | 10.42 | 33.53 | 5.11 | 25.75 | 224.9 | .206 |
| 108 | 9.34 | 33.751 | 3.96 | 1.79 | 23 | 0.02 | 191.4 | 100 | 9.56 | 33.66 | 4.03 | 26.00 | 201.6 | .260 |
| 132 | 9.00 | 33.901 | 3.92 | 1.78 | 25 | 0.01 | 175.1 | 125 | 9.07 | 33.88 | 3.92 | 26.25 | 177.7 | .308 |
| 152 | 8.80 | 33.948 | 4.22 | 1.72 | 26 | 0.03 | 168.6 | 150 | 8.82 | 33.95 | 4.22 | 26.35 | 168.8 | .352 |
| 175 | 8.48 | 33.979 | 4.01 | 1.73 | 30 | 0.01 | 161.6 | 200 | 7.94 | 34.00 | 3.80 | 26.52 | 152.3 | .433 |
| 205 | 7.86 | 33.999 | 3.76 | 2.21 | 37 | - | 151.3 | 250 | 7.36 | 34.05 | 2.68 | 26.64 | 140.6 | .508 |
| 253 | 7.32 | 34.055 | 2.64 | 2.55 | 46 | - | 139.7 | 300 | 6.48 | 34.04 | 2.32 | 26.75 | 130.0 | .578 |
| 309 | 6.38 | 34.037 | 2.25 | 2.75 | 57 | - | 129.0 | 400 | 5.75 | 34.11 | 1.39 | 26.90 | 115.9 | .706 |
| 396 | 5.78 | 34.101 | 1.42 | 2.97 | 69 | - | 116.9 | 500 | 5.33 | 34.23 | .74 | 27.05 | 102.1 | .820 |
| 502 | 5.32 | 34.235 | .72 | 3.26 | 83 | - | 101.6 | 600 | 5.08 | 34.37 | .91 | 27.19 | 88.8 | .922 |
| 607 | 5.06 | 34.369 | .92 | 3.34 | 91 | - | 88.7 | 700 | 4.77 | 34.40 | 1.11 | 27.25 | 83.2 | 1.015 |
| 759 | 4.58 | 34.416 | 1.18 | 3.37 | 100 | - | 80.0 | 800 | 4.43 | 34.43 | 1.15 | 27.31 | 77.4 | 1.103 |
| 921 | 4.04 | 34.470 | 1.01 | 3.40 | 113 | - | 70.4 | 1000 | 3.79 | 34.50 | 1.08 | 27.43 | 65.7 | 1.263 |
| 1076 | 3.58 | 34.511 | 1.22 | 3.43 | 126 | - | 62.9 | | | | | | | |
| 1158 | 3.43 | 34.517 | 1.49 | 3.31 | 128 | - | 61.1 | | | | | | | |

90.28 CCOFI CRUISE 6407 90.28

ALEXANDER AGASSIZ, JULY 12 1964, 0728 0649 GCT, 33 28.5N 117 47W, SOUNDING 200 FM, WIND 300 FORCE 4, WEATHER PARTLY CLOUDY, SEA MODERATE, WIRE ANGLE 01 01.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.10 | 33.830 | 6.94 | 0.38 | 5 | 0.03 | 380.2 | 0 | 19.10 | 33.83 | 6.94 | 24.12 | 380.2 | 0 |
| 10 | 18.72 | 33.733 | 5.67 | 0.91 | 10 | 0.16 | 378.1 | 10 | 18.72 | 33.73 | 5.67 | 24.14 | 378.4 | .038 |
| 30 | 11.20 | 33.741 | 4.28 | 1.18 | 13 | 0.14 | 222.5 | 20 | 13.20 | 33.74 | 4.64 | 25.40 | 258.9 | .070 |
| 45 | 10.40 | 33.812 | 3.24 | 1.90 | 29 | 0.10 | 203.8 | 30 | 11.20 | 33.74 | 4.28 | 25.78 | 222.6 | .094 |
| 60 | 10.01 | 33.887 | 2.75 | 2.13 | 26 | 0.03 | 191.9 | 50 | 10.26 | 33.85 | 2.98 | 26.03 | 198.7 | .136 |
| 75 | 9.56 | 33.910 | 2.95 | 2.07 | 27 | 0.01 | 183.0 | 75 | 9.56 | 33.91 | 2.95 | 26.20 | 183.0 | .184 |
| 90 | 9.58 | 33.975 | 2.41 | 2.30 | 31 | 0.03 | 178.5 | 100 | 9.53 | 33.98 | 2.33 | 26.25 | 177.4 | .230 |
| 110A | 9.48 | 33.986 | 2.32 | 2.28 | 31 | 0.03 | 176.2 | 125 | 9.37 | 34.01 | 2.39 | 26.30 | 172.7 | .274 |
| 135A | 9.28 | 34.027 | 2.41 | - | - | - | 170.0 | 150 | 9.09 | 34.09 | 2.25 | 26.41 | 162.4 | .317 |
| 166A | 8.90 | 34.128 | 2.00 | - | - | - | 156.8 | 200 | 8.72 | 34.16 | 1.66 | 26.53 | 151.7 | .397 |
| 200A | 8.72 | 34.157 | 1.66 | - | - | - | 151.9 | 250 | 8.46 | 34.22 | 1.44 | 26.61 | 143.4 | .473 |
| 235A | 8.55 | 34.215 | 1.45 | - | - | - | 145.1 | 300 | 8.27 | 34.25 | 1.23 | 26.67 | 138.4 | .546 |
| 275A | 8.34 | 34.224 | 1.39 | - | - | - | 141.4 | | | | | | | |
| 320A | 8.20 | 34.269 | 1.12 | - | - | - | 136.0 | | | | | | | |
| 360A | 7.88 | 34.278 | .93 | - | - | - | 130.8 | | | | | | | |

90.32 CCOFI CRUISE 6407 90.32

ALEXANDER AGASSIZ, JULY 12 1964, 0400 0444 GCT, 33 21N 118 01.5W, SOUNDING 385 FM, WIND 300 FORCE 4, WEATHER PARTLY CLOUDY, SEA MODERATE, WIRE ANGLE 06 09.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.90 | 33.841 | 6.08 | 0.32 | 2 | 0.01 | 374.6 | 0 | 18.90 | 33.84 | 6.08 | 24.18 | 374.7 | 0 |
| 10 | 16.60 | 33.759 | 7.05 | 0.35 | 2 | 0.02 | 324.6 | 10 | 16.60 | 33.80 | 7.05 | 24.71 | 324.5 | .035 |
| 35 | 11.36 | 33.703 | 5.03 | 1.33 | 13 | 0.26 | 228.0 | 20 | 14.35 | 33.75 | 6.56 | 25.17 | 280.7 | .065 |
| 54 | 10.26 | 33.807 | 3.28 | 1.84 | 22 | 0.09 | 201.8 | 30 | 12.25 | 33.71 | 5.61 | 25.56 | 243.4 | .092 |
| 74 | 9.47 | 33.971 | 2.72 | 2.17 | 29 | 0.02 | 177.1 | 50 | 10.32 | 33.79 | 3.39 | 25.97 | 204.1 | .136 |
| 93 | 9.34 | 34.025 | 2.37 | 2.32 | 32 | 0.01 | 171.1 | 75 | 9.46 | 33.97 | 2.71 | 26.26 | 177.0 | .184 |
| 126 | 9.13 | 34.104 | 2.01 | 2.52 | 37 | 0.01 | 162.0 | 100 | 9.30 | 34.04 | 2.28 | 26.34 | 169.4 | .228 |
| 150 | 8.97 | 34.136 | 1.88 | 2.53 | 35 | 0.01 | 157.2 | 125 | 9.14 | 34.10 | 2.02 | 26.41 | 162.5 | .270 |
| 172A | 8.78 | 34.173 | 1.61 | - | - | - | 151.6 | 150 | 8.97 | 34.14 | 1.88 | 26.47 | 156.9 | .311 |
| 219A | 8.75 | 34.235 | 1.28 | - | - | - | 146.6 | 200 | 8.75 | 34.22 | 1.37 | 26.57 | 147.7 | .389 |
| 247A | 8.70 | 34.249 | 1.15 | - | - | - | 144.8 | 250 | 8.69 | 34.25 | 1.14 | 26.60 | 144.6 | .464 |
| 285A | 8.54 | 34.264 | 1.04 | - | - | - | 141.3 | 300 | 8.47 | 34.26 | 1.04 | 26.64 | 140.6 | .538 |
| 333A | 8.28 | 34.264 | 1.07 | - | - | - | 137.5 | 400 | 7.68 | 34.29 | .80 | 26.78 | 127.1 | .677 |
| 380A | 7.87 | 34.283 | .87 | - | - | - | 130.3 | 500 | 6.60 | 34.31 | .47 | 26.95 | 111.3 | .804 |
| 438A | 7.30 | 34.293 | .68 | - | - | - | 121.7 | | | | | | | |
| 501A | 6.59 | 34.316 | .47 | - | - | - | 110.7 | | | | | | | |

A) CAST II.

| 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 |

90.37 CCOFI CRUISE 6407 90.37

ALEXANDER AGASSIZ, JULY 12 1964, 0101 0141 GCT, 33 11N 118 22.5W, SOUNDING 630 FM, WIND 300 FORCE 4, WEATHER CLEAR, SEA MODERATE, WIRE ANGLE 21 39.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.82 | 33.863 | 5.86 | 0.41 | 3 | 0.00 | 371.1 | 0 | 18.82 | 33.86 | 5.86 | 24.22 | 371.3 | 0 |
| 9 | 18.51 | 33.862 | 6.28 | 0.43 | 3 | 0.00 | 363.8 | 10 | 18.42 | 33.86 | 6.28 | 24.32 | 361.8 | .037 |
| 33 | 10.95 | 33.743 | 4.15 | 1.64 | 17 | 0.19 | 218.1 | 20 | 13.00 | 33.77 | 4.83 | 25.46 | 252.9 | .067 |
| 51 | 10.14 | 33.794 | 3.37 | 1.82 | 22 | 0.05 | 200.9 | 30 | 11.50 | 33.75 | 4.35 | 25.73 | 227.0 | .091 |
| 70 | 9.71 | 33.914 | 2.88 | 2.11 | 28 | 0.03 | 185.1 | 50 | 10.19 | 33.78 | 3.42 | 25.99 | 202.7 | .135 |
| 89 | 9.26 | 33.972 | 2.82 | 2.19 | 30 | 0.01 | 173.8 | 75 | 9.59 | 33.93 | 2.87 | 26.21 | 182.0 | .183 |
| 123 | 8.86 | 34.026 | 2.60 | 2.32 | 33 | 0.01 | 163.7 | 100 | 9.12 | 33.99 | 2.75 | 26.33 | 170.3 | .228 |
| 147 | 8.62 | 34.073 | 2.35 | 2.44 | 36 | 0.00 | 156.7 | 125 | 8.83 | 34.03 | 2.55 | 26.41 | 163.0 | .270 |
| 156A | 8.53 | 34.073 | 2.34 | - | - | - | 155.3 | 150 | 8.59 | 34.07 | 2.35 | 26.48 | 156.4 | .310 |
| 201A | 8.11 | 34.124 | 2.00 | - | - | - | 145.5 | 200 | 8.12 | 34.12 | 2.01 | 26.59 | 145.9 | .387 |
| 228A | 7.66 | 34.124 | 1.82 | - | - | - | 139.2 | 250 | 7.52 | 34.14 | 1.74 | 26.69 | 136.1 | .460 |
| 264A | 7.49 | 34.162 | 1.68 | - | - | - | 134.0 | 300 | 7.45 | 34.23 | 1.12 | 26.77 | 128.4 | .528 |
| 311A | 7.42 | 34.248 | .98 | - | - | - | 126.7 | 400 | 6.76 | 34.31 | .56 | 26.93 | 113.4 | .654 |
| 358A | 7.00 | 34.252 | .81 | - | - | - | 120.8 | 500 | 6.20 | 34.34 | - | 27.03 | 104.1 | .770 |
| 414A | 6.68 | 34.318 | .52 | - | - | - | 111.7 | | | | | | | |
| 475A | 6.32 | 34.333 | .36 | - | - | - | 106.1 | | | | | | | |

90.45 CCOFI CRUISE 6407 90.45

ALEXANDER AGASSIZ, JULY 11 1964, 2111 2147 GCT, 32 54.5N 118 55.5W, SOUNDING 918 FM, WIND 290 FORCE 3, WEATHER CLEAR, SEA MODERATE, WIRE ANGLE 09 27.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.30 | 33.893 | 6.91 | 0.09 | 2 | 0.02 | 333.4 | 0 | 17.30 | 33.89 | 6.91 | 24.61 | 333.6 | 0 |
| 11 | 14.76 | 33.872 | 7.39 | 0.19 | 3 | 0.07 | 280.1 | 10 | 15.20 | 33.87 | 7.33 | 25.08 | 289.3 | .031 |
| 35 | 10.06 | 33.905 | 3.31 | 1.92 | 25 | 0.06 | 191.4 | 20 | 11.33 | 33.89 | 4.52 | 25.87 | 213.7 | .056 |
| 55 | 9.45 | 33.963 | 2.53 | 2.15 | 31 | 0.02 | 177.4 | 30 | 10.34 | 33.90 | 3.54 | 26.06 | 196.3 | .077 |
| 74 | 9.21 | 34.056 | 2.29 | 2.21 | 34 | 0.02 | 166.8 | 50 | 9.55 | 33.95 | 2.62 | 26.23 | 179.9 | .115 |
| 94 | 8.92 | 34.093 | 2.10 | 2.41 | 37 | 0.01 | 159.7 | 75 | 9.19 | 34.06 | 2.26 | 26.37 | 166.2 | .158 |
| 128 | 8.69 | 34.174 | 1.59 | 2.58 | 40 | 0.03 | 150.2 | 100 | 8.86 | 34.11 | 2.00 | 26.46 | 157.5 | .199 |
| 154 | 8.50 | 34.204 | 1.41 | 2.64 | 44 | 0.04 | 145.2 | 125 | 8.71 | 34.16 | 1.62 | 26.53 | 151.5 | .238 |
| 160A | 8.48 | 34.202 | 1.50 | - | - | - | 145.0 | 150 | 8.54 | 34.20 | 1.47 | 26.58 | 146.1 | .276 |
| 205A | 8.09 | 34.238 | 1.12 | - | - | - | 136.7 | 200 | 8.13 | 34.24 | 1.17 | 26.68 | 137.2 | .349 |
| 232A | 7.83 | 34.242 | 1.04 | - | - | - | 132.8 | 250 | 7.67 | 34.25 | 1.04 | 26.75 | 130.0 | .417 |
| 267A | 7.53 | 34.252 | 1.04 | - | - | - | 127.9 | 300 | 7.26 | 34.27 | .83 | 26.83 | 122.9 | .483 |
| 313A | 7.17 | 34.280 | .72 | - | - | - | 121.0 | 400 | 6.54 | 34.31 | .50 | 26.96 | 110.6 | .605 |
| 357A | 6.85 | 34.300 | .55 | - | - | - | 115.3 | 500 | 5.89 | 34.35 | - | 27.07 | 99.6 | .716 |
| 411A | 6.48 | 34.318 | .49 | - | - | - | 109.2 | | | | | | | |
| 469A | 6.10 | 34.339 | .44 | - | - | - | 102.9 | | | | | | | |

90.53 CCOFI CRUISE 6407 90.53

ALEXANDER AGASSIZ, JULY 11 1964, 1715 1801 GCT, 32 39.5N 119 28.5W, SOUNDING 680 FM, WIND 310 FORCE 3, WEATHER CLEAR, SEA VERY ROUGH, WIRE ANGLE 03 12.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.49 | 33.919 | 6.25 | - | - | 0.14 | 271.1 | 0 | 14.49 | 33.92 | 6.25 | 25.27 | 271.0 | 0 |
| 20 | 13.20 | 33.910 | 6.16 | - | - | 0.19 | 246.4 | 10 | 13.70 | 33.92 | 6.23 | 25.43 | 255.3 | .026 |
| 35 | 12.95 | 33.903 | 5.76 | - | - | 0.23 | 242.1 | 20 | 13.20 | 33.91 | 6.16 | 25.53 | 246.4 | .051 |
| 55 | 9.80 | 33.950 | 2.86 | - | - | 0.04 | 183.9 | 30 | 13.00 | 33.91 | 5.83 | 25.57 | 242.6 | .076 |
| 75 | 9.08 | 34.037 | 2.48 | - | - | 0.02 | 166.2 | 50 | 10.30 | 33.93 | 3.18 | 26.09 | 193.4 | .120 |
| 94 | 8.86 | 34.095 | 2.2 | - | - | 0.02 | 158.6 | 75 | 9.08 | 34.04 | 2.48 | 26.37 | 166.0 | .165 |
| 129 | 8.46 | 34.146 | 1.61 | - | - | 0.03 | 148.9 | 100 | 8.80 | 34.11 | 2.1 | 26.47 | 156.6 | .206 |
| 154 | 8.35 | 34.195 | 1.48 | - | - | 0.03 | 143.7 | 125 | 8.50 | 34.14 | 1.67 | 26.54 | 149.9 | .245 |
| 171A | 8.05 | 34.233 | 1.15 | - | - | - | 136.5 | 150 | 8.37 | 34.19 | 1.50 | 26.60 | 144.3 | .282 |
| 219A | 7.73 | 34.264 | .89 | - | - | - | 129.7 | 200 | 7.86 | 34.26 | .98 | 26.73 | 131.9 | .353 |
| 248A | 7.52 | 34.260 | .82 | - | - | - | 127.2 | 250 | 7.50 | 34.26 | .80 | 26.79 | 126.9 | .419 |
| 287A | 7.03 | 34.262 | .75 | - | - | - | 120.4 | 300 | 6.91 | 34.27 | .72 | 26.88 | 118.3 | .483 |
| 334A | 6.64 | 34.295 | .62 | - | - | - | 112.9 | 400 | 6.30 | 34.33 | .43 | 27.01 | 106.1 | .600 |
| 382A | 6.39 | 34.319 | .43 | - | - | - | 108.0 | 500 | 5.80 | 34.35 | .38 | 27.09 | 98.5 | .708 |
| 440A | 6.08 | 34.336 | .43 | - | - | - | 102.9 | | | | | | | |
| 504A | 5.77 | 34.356 | .38 | - | - | - | 97.7 | | | | | | | |

A) CAST II.

| 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 |

90.60 CCOFI CRUISE 6407 90.60

ALEXANDER AGASSIZ, JULY 11 1964, 1212 GCT, 3~~4~~2 25N 120 02.5W, SOUNDING 750 FM, WIND 270 FORCE 3, WEATHER CLOUDY, SEA VERY ROUGH, WIRE ANGLE C5.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C | 13.31 | 33.683 | - | 0.75 | 10 | 0.20 | 265.1 | 0 | 13.31 | 33.68 | - | 25.33 | 265.4 | 0 |
| 10 | 12.40 | 33.753 | - | 0.77 | 11 | 0.21 | 242.9 | 10 | 12.40 | 33.75 | - | 25.56 | 243.1 | .025 |
| 30 | 11.92 | 33.721 | - | 0.97 | 11 | 0.23 | 236.6 | 20 | 12.17 | 33.74 | - | 25.60 | 239.7 | .050 |
| 55 | 10.81 | 33.656 | - | 1.18 | 15 | 0.15 | 222.1 | 30 | 11.92 | 33.72 | - | 25.63 | 236.7 | .073 |
| 65 | 11.06 | 33.732 | - | 1.30 | 16 | 0.17 | 220.7 | 50 | 10.92 | 33.66 | - | 25.77 | 223.7 | .120 |
| 75 | 10.80 | 33.806 | - | 1.54 | 20 | 0.22 | 210.9 | 75 | 10.80 | 33.81 | - | 25.91 | 210.6 | .174 |
| 89 | 10.07 | 33.861 | - | 1.85 | 25 | 0.22 | 194.8 | 100 | 9.75 | 33.92 | - | 26.17 | 185.3 | .224 |
| 104 | 9.65 | 33.934 | - | 2.04 | 29 | 0.07 | 182.7 | 125 | 9.17 | 34.02 | - | 26.34 | 168.9 | .269 |
| 128 | 9.12 | 34.028 | - | 2.31 | 35 | 0.04 | 167.5 | 150 | 8.79 | 34.10 | - | 26.47 | 157.2 | .311 |
| 147 | 8.82 | 34.095 | - | 2.41 | 39 | 0.07 | 158.0 | 200 | 8.20 | 34.17 | - | 26.61 | 143.4 | .387 |
| 171 | 8.62 | 34.133 | - | - | - | - | 152.2 | 250 | 7.38 | 34.17 | - | 26.73 | 132.0 | .458 |
| 200 | 8.20 | 34.172 | - | - | - | - | 143.2 | 300 | 6.98 | 34.23 | - | 26.84 | 122.2 | .524 |
| 230 | 7.52 | 34.128 | - | - | - | - | 137.0 | 400 | 6.37 | 34.32 | - | 26.99 | 107.7 | .644 |
| 269 | 7.24 | 34.216 | - | - | - | - | 126.7 | 500 | 5.78 | 34.36 | - | 27.10 | 97.5 | .752 |
| 329 | 6.75 | 34.253 | - | - | - | - | 117.5 | | | | | | | |
| 403 | 6.36 | 34.321 | - | - | - | - | 107.5 | | | | | | | |
| 478 | 5.86 | 34.354 | - | - | - | - | 98.9 | | | | | | | |
| 558 | 5.67 | 34.368 | - | - | - | - | 95.7 | | | | | | | |

90.70 CCOFI CRUISE 6407 90.70

ALEXANDER AGASSIZ, JULY 11 1964, 0647 GCT, 32 04.5N 120 38W, SOUNDING 2038 FM, WIND 300 FORCE 3, WEATHER MISSING, SEA ROUGH, WIRE ANGLE 07.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C | 15.27 | 33.320 | 6.11 | 0.48 | 0 | 0.03 | 331.0 | 0 | 15.27 | 33.32 | 6.11 | 24.64 | 331.0 | 0 |
| 10 | 14.40 | 33.324 | 6.48 | 0.57 | 2 | 0.08 | 312.9 | 10 | 14.40 | 33.32 | 6.48 | 24.83 | 313.2 | .032 |
| 30 | 14.24 | 33.478 | 6.37 | 0.70 | 0 | 0.13 | 298.4 | 20 | 14.05 | 33.37 | 6.44 | 24.94 | 302.5 | .063 |
| 40 | 14.20 | 33.510 | 5.88 | 0.73 | 1 | 0.13 | 295.2 | 30 | 14.24 | 33.48 | 6.37 | 24.98 | 298.2 | .093 |
| 55 | 12.90 | 33.309 | 6.22 | 0.74 | 1 | 0.17 | 284.8 | 50 | 13.25 | 33.36 | 6.13 | 25.09 | 287.7 | .152 |
| 70 | 11.78 | 33.284 | 6.05 | 0.87 | 4 | 0.14 | 266.3 | 75 | 11.77 | 33.29 | 6.04 | 25.33 | 265.7 | .222 |
| 94 | 11.32 | 33.525 | 5.18 | 1.19 | 10 | 0.05 | 240.5 | 100 | 11.15 | 33.54 | 5.09 | 25.63 | 236.5 | .285 |
| 114 | 10.63 | 33.590 | 4.91 | 1.33 | 11 | 0.02 | 224.0 | 125 | 9.99 | 33.62 | 4.36 | 25.90 | 211.3 | .341 |
| 134 | 9.79 | 33.658 | 4.19 | 1.69 | 19 | 0.02 | 205.3 | 150 | 9.47 | 33.77 | 4.27 | 26.10 | 192.0 | .392 |
| 153 | 9.39 | 33.805 | 4.27 | 1.66 | 22 | 0.02 | 188.2 | 200 | 8.67 | 34.00 | 2.80 | 26.41 | 162.8 | .483 |
| 181 | 8.91 | 33.930 | 3.56 | - | - | - | 171.6 | 250 | 7.99 | 34.07 | 2.31 | 26.57 | 147.8 | .562 |
| 215 | 8.50 | 34.041 | 2.43 | - | - | - | 157.3 | 300 | 7.34 | 34.11 | 1.94 | 26.69 | 135.9 | .636 |
| 244 | 8.08 | 34.067 | 2.34 | - | - | - | 149.3 | 400 | 6.43 | 34.19 | .85 | 26.88 | 118.1 | .768 |
| 292 | 7.42 | 34.097 | 2.07 | - | - | - | 137.9 | 500 | 5.84 | 34.31 | .52 | 27.05 | 102.0 | .884 |
| 345 | 6.93 | 34.146 | 1.36 | - | - | - | 127.8 | 600 | 5.39 | 34.37 | .32 | 27.15 | 92.3 | .988 |
| 428 | 6.22 | 34.214 | .70 | - | - | - | 113.8 | | | | | | | |
| 511 | 5.80 | 34.318 | .50 | - | - | - | 100.9 | | | | | | | |
| 595 | 5.41 | 34.364 | .33 | - | - | - | 93.0 | | | | | | | |

90.80 CCOFI CRUISE 6407 90.80

ALEXANDER AGASSIZ, JULY 11 1964, 0150 GCT, 31 45N 121 19.5W, SOUNDING 2040 FM, WIND 320 FORCE 4, WEATHER OVERCAST, SEA VERY ROUGH, WIRE ANGLE 22.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C | 15.60 | 33.354 | 6.04 | 0.34 | 3 | 0.01 | 335.4 | 0 | 15.60 | 33.35 | 6.04 | 24.59 | 335.7 | 0 |
| 9 | 15.56 | 33.358 | 6.29 | 0.38 | 3 | 0.00 | 334.3 | 10 | 15.55 | 33.36 | 6.29 | 24.61 | 333.9 | .033 |
| 28 | 15.46 | 33.359 | 6.19 | 0.36 | 2 | 0.01 | 332.1 | 20 | 15.50 | 33.36 | 6.25 | 24.62 | 332.9 | .067 |
| 37 | 14.76 | 33.370 | 5.88 | 0.45 | 2 | 0.04 | 316.8 | 30 | 15.44 | 33.36 | 6.17 | 24.63 | 331.6 | .100 |
| 51 | 14.42 | 33.427 | 6.23 | 0.55 | 3 | 0.07 | 305.7 | 50 | 14.43 | 33.43 | 6.21 | 24.90 | 305.7 | .164 |
| 65 | 13.84 | 33.403 | 6.36 | 0.60 | 3 | 0.10 | 296.0 | 75 | 13.30 | 33.42 | 6.15 | 25.13 | 284.3 | .238 |
| 89 | 13.58 | 33.547 | 6.09 | 0.80 | 4 | 0.19 | 280.3 | 100 | 13.15 | 33.51 | 6.08 | 25.23 | 274.8 | .309 |
| 108 | 12.50 | 33.456 | 6.08 | 0.91 | 4 | 0.28 | 266.6 | 125 | 11.10 | 33.52 | 5.29 | 25.63 | 237.1 | .373 |
| 127 | 10.98 | 33.538 | 5.15 | 1.13 | 11 | 0.06 | 233.7 | 150 | 9.97 | 33.70 | 4.05 | 25.96 | 205.1 | .429 |
| 146 | 10.08 | 33.675 | 4.17 | 1.60 | 19 | 0.02 | 208.7 | 200 | 8.96 | 33.92 | 3.92 | 26.30 | 173.1 | .526 |
| 174 | 9.42 | 33.816 | 3.71 | - | - | - | 187.8 | 250 | 7.98 | 34.05 | 2.63 | 26.55 | 149.2 | .608 |
| 207 | 8.80 | 33.943 | 3.96 | - | - | - | 169.0 | 300 | 7.46 | 34.09 | 2.20 | 26.66 | 139.0 | .682 |
| 236 | 8.12 | 34.033 | 2.80 | - | - | - | 152.4 | 400 | 6.32 | 34.17 | .93 | 26.88 | 118.3 | .816 |
| 283 | 7.68 | 34.080 | 2.39 | - | - | - | 142.7 | 500 | 5.74 | 34.24 | .60 | 27.01 | 106.1 | .934 |
| 337 | 6.92 | 34.104 | 1.65 | - | - | - | 130.8 | 600 | 5.33 | 34.32 | - | 27.12 | 95.3 | 1.042 |
| 418 | 6.18 | 34.186 | .81 | - | - | - | 115.4 | | | | | | | |
| 500 | 5.74 | 34.244 | .60 | - | - | - | 105.8 | | | | | | | |
| 582 | 5.40 | 34.311 | .48 | - | - | - | 96.8 | | | | | | | |

| 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 |

90.90 CCOFI CRUISE 6407 90.90

ALEXANDER AGASSIZ, JULY 10 1964, 2106 GCT, 31 26N 121 58.5W, SOUNDING 2020 FM, WIND 340 FORCE 4, WEATHER OVERCAST, SEA VERY ROUGH, WIRE ANGLE 19.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.50 | 33.476 | 5.94 | 0.35 | 2 | 0.01 | 345.9 | 0 | 16.50 | 33.48 | 5.94 | 24.49 | 345.7 | 0 |
| 11 | 16.42 | 33.478 | 6.33 | 0.34 | 2 | 0.01 | 344.0 | 10 | 16.43 | 33.48 | 6.32 | 24.50 | 344.1 | .035 |
| 29 | 16.10 | 33.469 | 6.24 | 0.36 | 2 | 0.01 | 337.7 | 20 | 16.35 | 33.48 | 6.33 | 24.52 | 342.4 | .069 |
| 38 | 15.50 | 33.437 | 5.92 | 0.35 | 3 | 0.02 | 327.3 | 30 | 16.05 | 33.47 | 6.21 | 24.58 | 336.6 | .103 |
| 52 | 13.93 | 33.455 | 6.38 | 0.44 | 3 | 0.06 | 293.9 | 50 | 14.06 | 33.45 | 6.36 | 25.00 | 296.9 | .166 |
| 67 | 12.98 | 33.478 | 6.14 | 0.67 | 5 | 0.20 | 273.9 | 75 | 12.57 | 33.48 | 6.00 | 25.32 | 266.1 | .237 |
| 90 | 12.02 | 33.514 | 5.40 | 0.89 | 7 | 0.05 | 253.6 | 100 | 11.39 | 33.53 | 5.05 | 25.58 | 241.3 | .301 |
| 107 | 10.84 | 33.545 | 4.81 | 1.25 | 13 | 0.03 | 230.8 | 125 | 10.15 | 33.58 | 4.50 | 25.84 | 216.8 | .359 |
| 125 | 10.15 | 33.582 | 4.50 | 1.41 | 17 | 0.02 | 216.7 | 150 | 9.38 | 33.79 | 3.79 | 26.13 | 189.1 | .410 |
| 142 | 9.59 | 33.716 | 4.03 | 1.67 | 22 | 0.01 | 197.9 | 200 | 8.61 | 33.97 | 3.19 | 26.39 | 164.2 | .500 |
| 169 | 9.07 | 33.870 | 3.49 | - | - | - | 178.5 | 250 | 7.92 | 34.06 | 2.39 | 26.57 | 147.6 | .580 |
| 199 | 8.62 | 33.966 | 3.20 | - | - | - | 164.6 | 300 | 7.23 | 34.08 | 1.85 | 26.68 | 136.7 | .654 |
| 226 | 8.34 | 34.027 | 2.51 | - | - | - | 156.0 | 400 | 6.43 | 34.14 | 1.09 | 26.84 | 121.9 | .788 |
| 270 | 7.56 | 34.066 | 2.23 | - | - | - | 142.1 | 500 | 5.80 | 34.22 | .66 | 26.98 | 108.3 | .909 |
| 320 | 7.05 | 34.086 | 1.64 | - | - | - | 133.8 | | | | | | | |
| 397 | 6.45 | 34.137 | 1.11 | - | - | - | 122.4 | | | | | | | |
| 475 | 5.92 | 34.202 | .71 | - | - | - | 111.0 | | | | | | | |
| 555 | 5.52 | 34.251 | .56 | - | - | - | 102.7 | | | | | | | |

90.100 CCOFI CRUISE 6407 90.100

ALEXANDER AGASSIZ, JULY 10 1964, 1619 GCT, 31 06N 122 40W, SOUNDING 2145 FM, WIND 340 FORCE 5, WEATHER OVERCAST, SEA VERY ROUGH, WIRE ANGLE 19.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.78 | 33.44 | 5.99 | 0.38 | 2 | 0.01 | 354.8 | 0 | 16.78 | 33.44 | 5.99 | 24.39 | 354.8 | 0 |
| 10 | 16.77 | 33.44 | 6.25 | 0.41 | 2 | 0.00 | 354.5 | 10 | 16.77 | 33.44 | 6.25 | 24.39 | 354.5 | .035 |
| 34 | 16.79 | 33.44 | 6.18 | 0.36 | 2 | 0.00 | 355.0 | 20 | 16.78 | 33.44 | 6.22 | 24.39 | 354.8 | .071 |
| 44 | 14.53 | 33.39 | 6.23 | 0.35 | 3 | 0.01 | 310.7 | 30 | 16.79 | 33.44 | 6.19 | 24.39 | 355.0 | .107 |
| 58 | 13.94 | 33.43 | 6.54 | 0.36 | 3 | 0.02 | 296.0 | 50 | 14.10 | 33.41 | 6.46 | 24.96 | 300.6 | .172 |
| 72 | 13.02 | 33.55 | 6.36 | 0.67 | 5 | 0.34 | 269.4 | 75 | 13.02 | 33.57 | 6.33 | 25.30 | 267.9 | .244 |
| 97 | 11.72 | 33.594 | 5.59 | 1.02 | 9 | 0.02 | 242.4 | 100 | 11.55 | 33.60 | 5.47 | 25.61 | 239.0 | .308 |
| 116 | 10.59 | 33.645 | 4.81 | 1.34 | 15 | 0.02 | 219.3 | 125 | 10.16 | 33.68 | 4.67 | 25.92 | 209.6 | .364 |
| 135 | 9.78 | 33.734 | 4.55 | 1.44 | 20 | 0.02 | 199.5 | 150 | 9.48 | 33.81 | 4.36 | 26.13 | 189.2 | .415 |
| 163 | 9.24 | 33.870 | 4.13 | 1.64 | 25 | 0.01 | 181.0 | 200 | 8.62 | 33.93 | 3.74 | 26.36 | 167.3 | .506 |
| 191 | 8.79 | 33.912 | 3.81 | - | - | - | 171.1 | 250 | 7.77 | 33.99 | 3.27 | 26.54 | 150.7 | .587 |
| 229 | 8.05 | 33.986 | 3.47 | - | - | - | 154.9 | 300 | 7.02 | 34.04 | 2.45 | 26.68 | 136.9 | .661 |
| 258 | 7.66 | 33.996 | 3.20 | - | - | - | 148.7 | 400 | 6.52 | 34.18 | 1.11 | 26.86 | 120.0 | .795 |
| 305 | 6.98 | 34.050 | 2.32 | - | - | - | 135.6 | 500 | 5.79 | 34.25 | .65 | 27.01 | 105.9 | .914 |
| 367 | 6.72 | 34.144 | 1.36 | - | - | - | 125.2 | 600 | 5.23 | 34.30 | .60 | 27.12 | 95.7 | 1.021 |
| 462 | 6.06 | 34.234 | .80 | - | - | - | 110.3 | | | | | | | |
| 548 | 5.48 | 34.269 | .56 | - | - | - | 100.9 | | | | | | | |
| 622 | 5.14 | 34.331 | .64 | - | - | - | 92.4 | | | | | | | |

90.120 CCOFI CRUISE 6407 90.120

ALEXANDER AGASSIZ, JULY 10 1964, 0545 GCT, 30 25.5N 123 57.5W, SOUNDING 2250 FM, WIND 010 FORCE 6, WEATHER MISSING SEA ROUGH, WIRE ANGLE 30.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.71 | 33.37 | 5.93 | 0.27 | 3 | 0.01 | 358.3 | 0 | 16.71 | 33.37 | 5.93 | 24.35 | 358.3 | 0 |
| 9 | 16.72 | 33.37 | 6.17 | 0.32 | 2 | 0.00 | 358.5 | 10 | 16.72 | 33.37 | 6.16 | 24.35 | 358.5 | .036 |
| 31 | 16.71 | 33.37 | 6.08 | 0.33 | 3 | 0.01 | 358.3 | 20 | 16.71 | 33.37 | 6.13 | 24.35 | 358.3 | .072 |
| 58 | 14.22 | 33.33 | 6.02 | 0.40 | 3 | 0.06 | 308.8 | 30 | 16.71 | 33.37 | 6.09 | 24.35 | 358.3 | .108 |
| 67 | 13.65 | 33.34 | 6.19 | 0.46 | 4 | 0.09 | 296.9 | 50 | 14.80 | 33.33 | 6.03 | 24.75 | 320.5 | .176 |
| 83 | 13.00 | 33.43 | 6.21 | 0.70 | 4 | 0.24 | 277.8 | 75 | 13.10 | 33.40 | 6.21 | 25.15 | 281.9 | .251 |
| 96 | 12.33 | 33.43 | 5.73 | 0.82 | 7 | 0.26 | 265.4 | 100 | 12.10 | 33.45 | 5.51 | 25.39 | 259.8 | .320 |
| 109 | 11.60 | 33.50 | 5.20 | 0.98 | 10 | 0.02 | 247.2 | 125 | 11.00 | 33.53 | 5.00 | 25.65 | 234.6 | .382 |
| 134 | 10.66 | 33.55 | 4.89 | 1.17 | 14 | 0.02 | 227.4 | 150 | 9.78 | 33.64 | 4.34 | 25.95 | 206.5 | .438 |
| 151 | 9.76 | 33.65 | 4.33 | 1.49 | 20 | 0.01 | 205.4 | 200 | 8.92 | 33.87 | 3.84 | 26.27 | 176.2 | .535 |
| 176 | 9.20 | 33.75 | 4.49 | - | - | - | 189.3 | 250 | 8.18 | 33.97 | 2.63 | 26.46 | 157.9 | .621 |
| 205 | 8.83 | 33.89 | 3.70 | - | - | - | 173.4 | 300 | 7.59 | 34.00 | 2.18 | 26.57 | 147.5 | .700 |
| 231 | 8.41 | 33.95 | 2.83 | - | - | - | 162.7 | 400 | 6.39 | 34.06 | 1.35 | 26.78 | 127.4 | .842 |
| 274 | 7.90 | 33.99 | 2.43 | - | - | - | 152.5 | 500 | 5.65 | 34.16 | .60 | 26.95 | 111.0 | .967 |
| 331 | 7.21 | 34.02 | 1.90 | - | - | - | 140.9 | | | | | | | |
| 420 | 6.20 | 34.08 | 1.18 | - | - | - | 123.5 | | | | | | | |
| 504 | 5.62 | 34.16 | .59 | - | - | - | 110.6 | | | | | | | |
| 577 | 5.22 | 34.22 | .55 | - | - | - | 101.6 | | | | | | | |

| 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 |

90.140 CCCFI CRUISE 6407 90.140

ALEXANDER AGASSIZ, JULY 9 1964, 2029 GCT, 29 46N 125 22.5W, SOUNDING 2340 FM, WIND 350 FORCE 6, WEATHER CLOUDY, SEA VERY ROUGH, WIRE ANGLE 35.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 17.98 | 33.794 | 5.71 | 0.30 | 3 | 0.01 | 356.3 | 0 | 17.98 | 33.79 | 5.71 | 24.37 | 356.5 | 0 |
| 10 | 17.96 | 33.794 | 5.96 | 0.28 | 3 | 0.01 | 355.8 | 10 | 17.96 | 33.79 | 5.96 | 24.38 | 356.1 | .036 |
| 26 | 18.12 | 33.883 | 5.85 | 0.27 | 2 | 0.01 | 353.0 | 20 | 18.03 | 33.85 | 5.89 | 24.40 | 353.3 | .071 |
| 50 | 16.48 | 33.683 | 5.74 | 0.27 | 2 | 0.01 | 330.4 | 30 | 18.19 | 33.91 | 5.84 | 24.41 | 352.7 | .107 |
| 58 | 16.44 | 33.714 | 6.08 | 0.27 | 2 | 0.01 | 327.3 | 50 | 16.48 | 33.68 | 5.74 | 24.64 | 330.6 | .175 |
| 70 | 16.08 | 33.714 | 6.19 | 0.27 | 3 | 0.01 | 319.4 | 75 | 16.10 | 33.72 | 6.19 | 24.76 | 319.4 | .257 |
| 82 | 15.82 | 33.689 | 6.04 | 0.25 | 3 | 0.00 | 315.6 | 100 | 15.60 | 33.73 | 6.07 | 24.88 | 308.0 | .336 |
| 93 | 15.62 | 33.706 | 6.09 | 0.25 | 2 | 0.00 | 310.1 | 125 | 15.41 | 33.85 | 5.83 | 25.02 | 295.2 | .412 |
| 111 | 15.54 | 33.784 | 5.99 | 0.24 | 2 | 0.00 | 302.7 | 150 | 12.25 | 33.54 | 5.23 | 25.43 | 255.9 | .482 |
| 126 | 15.40 | 33.856 | 5.82 | 0.33 | 3 | 0.10 | 294.5 | 200 | 9.60 | 33.71 | 4.41 | 26.03 | 198.5 | .597 |
| 149 | 12.34 | 33.538 | 5.25 | - | - | - | 257.6 | 250 | 8.70 | 33.92 | 4.24 | 26.34 | 169.2 | .691 |
| 170 | 10.80 | 33.580 | 4.95 | - | - | - | 227.6 | 300 | 7.97 | 33.97 | 3.36 | 26.49 | 155.0 | .775 |
| 194 | 9.77 | 33.676 | 4.42 | - | - | - | 203.7 | 400 | 6.96 | 34.11 | 1.47 | 26.74 | 130.9 | .923 |
| 233 | 8.97 | 33.885 | 4.38 | - | - | - | 175.8 | 500 | 5.88 | 34.15 | .93 | 26.92 | 114.4 | 1.052 |
| 276 | 8.31 | 33.948 | 3.80 | - | - | - | 161.4 | | | | | | | |
| 346 | 7.36 | 34.021 | 2.47 | - | - | - | 142.8 | | | | | | | |
| 417 | 6.82 | 34.123 | 1.29 | - | - | - | 128.1 | | | | | | | |
| 490 | 5.99 | 34.148 | .94 | - | - | - | 115.9 | | | | | | | |

90.160 CCCFI CRUISE 6407 90.160

ALEXANDER AGASSIZ, JULY 9 1964, 1132 GCT, 29 04.5N 126 39.5W, SOUNDING 2325 FM, WIND 360 FORCE 5, WEATHER CLOUDY, SEA ROUGH, WIRE ANGLE 15.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 18.42 | 33.904 | 5.69 | 0.29 | 3 | 0.01 | 358.6 | 0 | 18.42 | 33.90 | 5.69 | 24.35 | 358.9 | 0 |
| 10 | 18.42 | 33.897 | 5.89 | 0.31 | 2 | 0.00 | 359.1 | 10 | 18.42 | 33.90 | 5.89 | 24.35 | 358.9 | .036 |
| 35 | 18.36 | 33.882 | 5.82 | 0.30 | 2 | 0.02 | 358.8 | 20 | 18.42 | 33.90 | 5.89 | 24.35 | 358.9 | .072 |
| 45 | 16.18 | 33.580 | 5.79 | 0.35 | 2 | 0.01 | 331.4 | 30 | 18.38 | 33.89 | 5.84 | 24.35 | 358.7 | .108 |
| 59 | 15.67 | 33.555 | 6.18 | 0.30 | 2 | 0.00 | 322.2 | 50 | 16.00 | 33.57 | 5.87 | 24.67 | 328.2 | .177 |
| 74 | 15.48 | 33.565 | 6.27 | 0.29 | 2 | 0.00 | 317.5 | 75 | 15.46 | 33.57 | 6.27 | 24.79 | 316.7 | .258 |
| 98 | 15.27 | 33.605 | 6.04 | 0.29 | 2 | 0.00 | 310.1 | 100 | 15.24 | 33.61 | 6.03 | 24.87 | 309.2 | .337 |
| 117 | 14.98 | 33.708 | 5.87 | 0.33 | 3 | 0.12 | 296.6 | 125 | 14.65 | 33.74 | 5.74 | 25.10 | 287.5 | .412 |
| 136 | 14.03 | 33.754 | 5.57 | 0.49 | 4 | 0.16 | 274.0 | 150 | 13.03 | 33.74 | 5.35 | 25.43 | 255.6 | .481 |
| 165 | 11.86 | 33.721 | 5.17 | 0.87 | - | 0.01 | 235.5 | 200 | 9.76 | 33.77 | 4.38 | 26.05 | 196.5 | .596 |
| 192 | 10.06 | 33.732 | 4.59 | - | - | - | 204.2 | 250 | 8.68 | 33.98 | 3.61 | 26.39 | 164.5 | .688 |
| 229 | 9.06 | 33.934 | 3.71 | - | - | - | 173.6 | 300 | 7.54 | 34.01 | 3.16 | 26.58 | 146.0 | .768 |
| 257 | 8.55 | 33.988 | 3.60 | - | - | - | 162.0 | 400 | 6.62 | 34.13 | 1.50 | 26.81 | 125.0 | .909 |
| 305 | 7.46 | 34.020 | 3.02 | - | - | - | 144.2 | 500 | 5.75 | 34.21 | .73 | 26.98 | 108.4 | 1.032 |
| 366 | 6.98 | 34.104 | 1.78 | - | - | - | 131.6 | 600 | 5.43 | 34.31 | .5 | 27.10 | 97.2 | 1.141 |
| 461 | 5.88 | 34.151 | 1.06 | - | - | - | 114.4 | | | | | | | |
| 547 | 5.72 | 34.281 | .44 | - | - | - | 102.8 | | | | | | | |
| 620 | 5.26 | 34.320 | .5 | - | - | - | 94.6 | | | | | | | |

90.180 CCCFI CRUISE 6407 90.180

ALEXANDER AGASSIZ, JULY 9 1964, 0158 GCT, 28 26N 128 00W, SOUNDING 2455 FM, WIND 010 FORCE 4, WEATHER CLOUDY, SEA ROUGH, WIRE ANGLE 16.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.94 | 34.186 | 5.59 | 0.26 | 2 | 0.01 | 350.5 | 0 | 18.94 | 34.19 | 5.59 | 24.44 | 350.2 | 0 |
| 9 | 18.92 | 34.184 | 5.84 | 0.23 | 2 | 0.01 | 350.2 | 10 | 18.92 | 34.19 | 5.84 | 24.44 | 349.7 | .035 |
| 27 | 18.78 | 34.204 | 5.76 | 0.24 | 1 | 0.01 | 345.4 | 20 | 18.86 | 34.19 | 5.82 | 24.46 | 348.3 | .070 |
| 36 | 18.30 | 34.215 | 5.52 | 0.26 | 2 | 0.01 | 333.1 | 30 | 18.70 | 34.21 | 5.70 | 24.51 | 343.0 | .105 |
| 50 | 18.30 | 34.429 | 5.71 | 0.21 | 2 | 0.00 | 317.6 | 50 | 18.30 | 34.43 | 5.71 | 24.78 | 317.5 | .171 |
| 63 | 18.24 | 34.483 | 5.97 | 0.22 | 2 | 0.00 | 312.2 | 75 | 17.80 | 34.42 | 5.83 | 24.90 | 306.5 | .249 |
| 85 | 17.67 | 34.401 | 5.79 | 0.21 | 2 | 0.00 | 304.9 | 100 | 17.64 | 34.44 | 5.81 | 24.95 | 301.4 | .326 |
| 103 | 17.64 | 34.442 | 5.81 | 0.19 | 2 | 0.00 | 301.2 | 125 | 17.43 | 34.46 | 5.76 | 25.02 | 295.1 | .402 |
| 122 | 17.44 | 34.447 | 5.76 | 0.22 | 2 | 0.00 | 296.3 | 150 | 17.26 | 34.50 | 5.71 | 25.09 | 288.3 | .476 |
| 139 | 17.39 | 34.510 | 5.75 | 0.20 | 2 | 0.01 | 290.5 | 200 | 12.80 | 33.88 | 5.17 | 25.59 | 241.0 | .610 |
| 165 | 16.77 | 34.425 | 5.59 | - | - | 0.19 | 282.7 | 250 | 9.73 | 33.85 | 4.42 | 26.12 | 190.2 | .721 |
| 196 | 13.58 | 33.958 | 5.22 | - | - | 0.01 | 250.2 | 300 | 8.71 | 34.00 | 3.47 | 26.40 | 163.4 | .812 |
| 222 | 10.68 | 33.765 | 5.00 | - | - | - | 211.9 | 400 | 6.87 | 34.05 | 2.36 | 26.71 | 134.2 | .966 |
| 265 | 9.39 | 33.913 | 4.08 | - | - | - | 180.2 | 500 | 5.80 | 34.10 | 1.28 | 26.89 | 117.2 | 1.098 |
| 314 | 8.45 | 34.019 | 3.27 | - | - | - | 158.2 | | | | | | | |
| 391 | 7.00 | 34.044 | 2.45 | - | - | - | 136.3 | | | | | | | |
| 471 | 6.06 | 34.072 | 1.56 | - | - | - | 122.4 | | | | | | | |
| 554 | 5.34 | 34.162 | .94 | - | - | - | 107.3 | | | | | | | |

| 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 |

90.199 CCOFI CRUISE 6407 90.199

ALEXANDER AGASSIZ, JULY 8 1964, 1703 GCT, 28 CON 129 20W, SOUNDING 2362 FM, WIND 050 FORCE 4, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 12.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.20 | 34.395 | 5.69 | 0.22 | 2 | 0.00 | 341.6 | 0 | 19.20 | 34.40 | 5.69 | 24.53 | 341.3 | 0 |
| 10 | 19.16 | 34.395 | 5.84 | 0.25 | 2 | 0.00 | 340.7 | 10 | 19.16 | 34.40 | 5.84 | 24.54 | 340.3 | .034 |
| 29 | 19.18 | 34.398 | 5.74 | 0.20 | 2 | 0.00 | 340.9 | 20 | 19.17 | 34.40 | 5.80 | 24.54 | 340.5 | .068 |
| 39 | 19.12 | 34.441 | 5.36 | 0.22 | 2 | 0.00 | 336.3 | 30 | 19.18 | 34.40 | 5.73 | 24.54 | 340.8 | .102 |
| 53 | 18.06 | 34.418 | 5.90 | 0.21 | 2 | 0.00 | 312.7 | 50 | 18.40 | 34.43 | 5.77 | 24.76 | 319.9 | .169 |
| 68 | 17.85 | 34.440 | 5.92 | 0.17 | 2 | 0.00 | 306.2 | 75 | 17.78 | 34.45 | 5.89 | 24.92 | 303.9 | .247 |
| 92 | 17.66 | 34.475 | 5.81 | 0.16 | 2 | 0.00 | 299.3 | 100 | 17.60 | 34.51 | 5.74 | 25.01 | 295.4 | .323 |
| 112 | 17.53 | 34.552 | 5.68 | 0.17 | 2 | 0.03 | 290.7 | 125 | 17.28 | 34.52 | 5.64 | 25.10 | 287.3 | .397 |
| 131 | 16.82 | 34.447 | 5.61 | 0.22 | 3 | 0.17 | 282.2 | 150 | 15.54 | 34.27 | 5.57 | 25.31 | 267.2 | .467 |
| 150 | 15.54 | 34.267 | 5.57 | 0.33 | 4 | 0.08 | 267.5 | 200 | 11.05 | 33.83 | 5.20 | 25.88 | 213.3 | .589 |
| 178 | 12.82 | 33.920 | 5.40 | - | - | 0.01 | 238.4 | 250 | 9.45 | 33.92 | 4.95 | 26.22 | 180.6 | .690 |
| 212 | 10.36 | 33.818 | 5.12 | - | - | 0.00 | 202.7 | 300 | 8.51 | 34.00 | 4.12 | 26.43 | 160.5 | .778 |
| 240 | 9.63 | 33.898 | 5.03 | - | - | - | 185.0 | 400 | 6.62 | 34.03 | 1.82 | 26.73 | 132.5 | .930 |
| 288 | 8.76 | 33.988 | 4.35 | - | - | - | 165.0 | 500 | 5.67 | 34.12 | - | 26.92 | 114.2 | 1.059 |
| 342 | 7.66 | 34.012 | 3.34 | - | - | - | 147.5 | 600 | 5.07 | 34.23 | - | 27.08 | 99.2 | 1.172 |
| 424 | 6.30 | 34.043 | 1.34 | - | - | - | 127.5 | | | | | | | |
| 508 | 5.64 | 34.127 | 2.030 | - | - | - | 113.3 | | | | | | | |
| 594 | 5.11 | 34.220 | .73 | - | - | - | 100.4 | | | | | | | |

95.30 CCOFI CRUISE 6407 95.30

ALEXANDER AGASSIZ, JUNE 15 1964, 0305 GCT, 32 37N 117 22W, SOUNDING 125 FM, WIND 160 FORCE 2, WEATHER CLOUDY, SEA MODERATE, WIRE ANGLE 02. A)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0 | 16.62 | 33.818 | 6.40 | 0.38 | 4 | 0.04 | 323.6 |
| 5 | 16.59 | 33.818 | 6.54 | 0.38 | 4 | 0.00 | 323.0 |
| 10 | 16.50 | 33.812 | 6.40 | 0.42 | 4 | 0.00 | 321.4 |
| 15 | 16.08 | 33.806 | 6.51 | 0.41 | 4 | 0.00 | 312.7 |
| 20 | 13.00 | 33.783 | 6.33 | 0.74 | 11 | 0.07 | 251.9 |
| 25 | 11.58 | 33.761 | 4.71 | 1.28 | 20 | 0.23 | 227.6 |
| 30 | 11.05 | 33.754 | 4.15 | 1.54 | 16 | 0.26 | 218.9 |
| 35 | 10.76 | 33.790 | 3.71 | 1.71 | 18 | 0.18 | 211.4 |
| 40 | 10.48 | 33.816 | 3.46 | 1.80 | 20 | 0.13 | 204.8 |
| 45 | 10.28 | 33.885 | 2.96 | 1.88 | 22 | 0.04 | 196.4 |
| 50 | 10.02 | 33.928 | 2.94 | 2.03 | - | - | 189.0 |
| 55 | 9.81 | 33.957 | 2.97 | 2.21 | - | - | 183.5 |
| 60 | 9.70 | 33.982 | 2.52 | 2.21 | - | - | 179.9 |
| 65 | 9.62 | 33.991 | 2.65 | 2.11 | - | - | 178.0 |
| 70 | 9.53 | 33.999 | 2.91 | 2.18 | - | - | 176.0 |
| 75 | 9.46 | 34.000 | 2.73 | 2.19 | - | - | 174.8 |
| 80 | 9.33 | 34.016 | 2.80 | 2.22 | - | - | 171.6 |
| 85 | 9.33 | 34.028 | 2.78 | 2.27 | - | - | 170.7 |

100.30 CCOFI CRUISE 6407 100.30

ALEXANDER AGASSIZ, JULY 14 1964, 0609 GCT, 31 40.5N 116 46.5W, SOUNDING 213 FM, WIND CALM, WEATHER FOG, SEA SMOOTH, WIRE ANGLE 03.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.37 | 33.839 | 7.53 | 0.62 | 17 | 0.17 | 254.8 | 0 | 13.37 | 33.84 | 7.53 | 25.44 | 254.8 | 0 |
| 10 | 12.25 | 33.854 | 6.00 | 0.81 | 33 | 0.19 | 232.8 | 10 | 12.25 | 33.85 | 6.00 | 25.67 | 233.0 | .024 |
| 30 | 10.58 | 33.841 | 3.74 | 0.87 | 51 | 0.25 | 204.6 | 20 | 10.84 | 33.84 | 4.15 | 25.92 | 209.0 | .047 |
| 45 | 10.19 | 33.883 | 2.87 | 1.11 | 57 | 0.29 | 195.1 | 30 | 10.58 | 33.84 | 3.74 | 25.97 | 204.7 | .067 |
| 60 | 10.02 | 33.901 | 3.36 | 1.09 | 55 | 0.25 | 191.0 | 50 | 10.12 | 33.89 | 3.00 | 26.09 | 193.4 | .107 |
| 75 | 9.85 | 33.904 | 2.91 | 1.11 | 58 | 0.17 | 188.1 | 75 | 9.85 | 33.90 | 2.91 | 26.14 | 188.4 | .155 |
| 90 | 9.81 | 33.918 | 2.66 | 1.15 | 61 | 0.17 | 186.4 | 100 | 9.71 | 33.93 | 2.60 | 26.19 | 183.9 | .202 |
| 110 | 9.63 | 33.934 | 2.54 | 1.16 | 59 | 0.07 | 182.4 | 125 | 9.60 | 33.94 | 2.46 | 26.21 | 181.4 | .249 |
| 136 | 9.58 | 33.950 | 2.42 | 1.22 | 59 | 0.06 | 180.4 | 150 | 9.47 | 33.96 | 2.47 | 26.25 | 177.9 | .294 |
| 165 | 9.34 | 33.988 | 2.58 | 1.17 | 59 | 0.03 | 173.8 | 200 | 9.05 | 34.11 | 2.20 | 26.43 | 160.4 | .380 |
| 200 | 9.05 | 34.112 | 2.20 | - | - | - | 160.2 | 250 | 8.77 | 34.22 | 1.54 | 26.56 | 148.0 | .460 |
| 235 | 8.86 | 34.189 | 1.65 | - | - | - | 151.6 | 300 | 8.41 | 34.27 | 1.25 | 26.66 | 139.0 | .534 |
| 275 | 8.60 | 34.251 | 1.40 | - | - | - | 143.2 | | | | | | | |
| 320 | 8.22 | 34.288 | 1.11 | - | - | - | 134.9 | | | | | | | |
| 360 | 7.78 | 34.307 | .86 | - | - | - | 127.2 | | | | | | | |

A) SHAKEDOWN STATION.

| 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 |

100.35 CCOFI CRUISE 6407 100.35

ALEXANDER AGASSIZ, JULY 14 1964, 0953 GCT, 31 31N 117 07W, SOUNDING 600 FM, WIND 070 FORCE 2, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 08.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.17 | 33.771 | 7.76 | 0.33 | 2 | 0.00 | 317.2 | 0 | 16.17 | 33.77 | 7.76 | 24.78 | 317.3 | 0 |
| 10 | 15.80 | 33.771 | 8.64 | 0.36 | 3 | 0.01 | 309.2 | 10 | 15.80 | 33.77 | 8.64 | 24.87 | 309.3 | .031 |
| 30 | 11.66 | 33.793 | 5.15 | 1.55 | 20 | 0.16 | 226.7 | 20 | 13.00 | 33.78 | 6.60 | 25.47 | 252.1 | .059 |
| 40 | 10.88 | 33.805 | 3.67 | 1.87 | 21 | 0.22 | 212.3 | 30 | 11.66 | 33.79 | 5.15 | 25.73 | 226.9 | .083 |
| 51 | 10.40 | 33.809 | 3.33 | 1.91 | 22 | 0.08 | 204.0 | 50 | 10.44 | 33.81 | 3.34 | 25.97 | 204.6 | .127 |
| 65 | 10.19 | 33.805 | 3.32 | 1.93 | 23 | 0.08 | 200.9 | 75 | 9.91 | 33.81 | 3.37 | 26.06 | 196.0 | .177 |
| 80 | 9.73 | 33.823 | 3.41 | 1.96 | 25 | 0.07 | 192.2 | 100 | 9.41 | 33.94 | 2.78 | 26.24 | 178.5 | .224 |
| 101 | 9.40 | 33.952 | 2.72 | 2.17 | 29 | 0.02 | 177.4 | 125 | 9.08 | 34.01 | 2.63 | 26.35 | 168.2 | .268 |
| 125 | 9.08 | 34.008 | 2.63 | 2.22 | 31 | 0.01 | 168.4 | 150 | 8.66 | 34.06 | 2.53 | 26.46 | 158.2 | .310 |
| 145 | 8.76 | 34.059 | 2.51 | 2.37 | 34 | 0.02 | 159.8 | 200 | 7.72 | 34.07 | 2.35 | 26.61 | 144.0 | .387 |
| 175 | 8.16 | 34.048 | 2.74 | - | - | - | 151.9 | 250 | 8.22 | 34.29 | - | 26.70 | 134.7 | .458 |
| 205 | 7.68 | 34.075 | 2.30 | - | - | - | 143.1 | 300 | 7.81 | 34.32 | .80 | 26.79 | 126.7 | .526 |
| 235 | 8.26 | - | - | - | - | - | - | 400 | 6.88 | 34.34 | .53 | 26.94 | 112.7 | .651 |
| 274 | 8.04 | 34.305 | .96 | - | - | - | 131.0 | 500 | 6.42 | 34.35 | .51 | 27.01 | 106.1 | .767 |
| 333 | 7.50 | 34.331 | .69 | - | - | - | 121.6 | | | | | | | |
| 408 | 6.81 | 34.336 | .52 | - | - | - | 112.1 | | | | | | | |
| 484 | 6.48 | 34.347 | .50 | - | - | - | 107.0 | | | | | | | |
| 564 | 6.14 | 34.356 | .51 | - | - | - | 102.2 | | | | | | | |

100.40 CCOFI CRUISE 6407 100.40

ALEXANDER AGASSIZ, JULY 14 1964, 1244 GCT 31 21N 117 27W, SOUNDING 1060 FM, WIND 340 FORCE 3, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 20.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 17.08 | 33.840 | 5.83 | 0.32 | 1 | 0.00 | 332.3 | 0 | 17.08 | 33.84 | 5.83 | 24.63 | 332.3 | 0 |
| 10 | 17.08 | 33.839 | 6.11 | 0.32 | 1 | 0.00 | 332.4 | 10 | 17.08 | 33.84 | 6.11 | 24.63 | 332.3 | .033 |
| 29 | 15.33 | 33.812 | 6.46 | 0.43 | 1 | 0.01 | 296.3 | 20 | 16.20 | 33.83 | 6.34 | 24.82 | 313.6 | .066 |
| 38 | 12.34 | 33.714 | 5.32 | 1.16 | 6 | 0.62 | 244.7 | 30 | 15.33 | 33.81 | 6.46 | 25.00 | 296.4 | .096 |
| 49 | 11.67 | 33.683 | 5.24 | 1.33 | 8 | 0.59 | 234.9 | 50 | 11.58 | 33.68 | 5.18 | 25.66 | 233.6 | .149 |
| 62 | 10.98 | 33.674 | 4.64 | 1.45 | 13 | 0.13 | 223.7 | 75 | 10.67 | 33.70 | 4.32 | 25.84 | 216.5 | .206 |
| 76 | 10.64 | 33.700 | 4.30 | 1.57 | 17 | 0.04 | 216.0 | 100 | 9.49 | 33.81 | 3.43 | 26.13 | 189.4 | .257 |
| 94 | 9.67 | 33.784 | 3.52 | 1.82 | 22 | 0.02 | 194.1 | 125 | 9.12 | 33.91 | 3.07 | 26.27 | 176.2 | .303 |
| 117 | 9.21 | 33.868 | 3.26 | 1.95 | 26 | 0.02 | 180.7 | 150 | 8.95 | 34.02 | 2.53 | 26.38 | 165.5 | .347 |
| 135 | 9.02 | 33.968 | 2.82 | 2.14 | 31 | 0.01 | 170.4 | 200 | 8.40 | 34.15 | 1.86 | 26.57 | 147.7 | .427 |
| 162 | 8.88 | 34.044 | 2.36 | - | - | - | 162.7 | 250 | 7.99 | 34.22 | 1.27 | 26.68 | 136.7 | .500 |
| 189 | 8.48 | 34.128 | 2.02 | - | - | - | 150.5 | 300 | 7.15 | 34.20 | 1.11 | 26.79 | 126.7 | .568 |
| 216 | 8.30 | 34.175 | 1.66 | - | - | - | 144.4 | 400 | 6.53 | 34.31 | .6 | 26.96 | 110.4 | .692 |
| 252 | 7.96 | 34.225 | 1.25 | - | - | - | 135.9 | 500 | 6.04 | 34.36 | .47 | 27.06 | 100.6 | .803 |
| 307 | 7.07 | 34.202 | 1.09 | - | - | - | 125.4 | | | | | | | |
| 376 | 6.62 | 34.283 | .61 | - | - | - | 113.6 | | | | | | | |
| 445 | 6.36 | 34.349 | .5 | - | - | - | 105.4 | | | | | | | |
| 521 | 5.92 | 34.367 | .43 | - | - | - | 98.7 | | | | | | | |

100.50 CCOFI CRUISE 6407 100.50

ALEXANDER AGASSIZ, JULY 14 1964, 1816 GCT, 30 57.5N 118 07W, SOUNDING 920 FM, WIND 320 FORCE 4, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 24.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.85 | 33.761 | 6.04 | 0.50 | 1 | 0.10 | 311.0 | 0 | 15.85 | 33.76 | 6.04 | 24.85 | 311.1 | 0 |
| 10 | 15.68 | 33.748 | 6.34 | 0.53 | 3 | 0.09 | 308.3 | 10 | 15.68 | 33.75 | 6.34 | 24.88 | 308.2 | .031 |
| 28 | 12.72 | 33.572 | 6.00 | 0.87 | 7 | 0.20 | 262.2 | 20 | 14.33 | 33.67 | 6.26 | 25.11 | 286.1 | .061 |
| 37 | 12.41 | 33.538 | 5.42 | 0.95 | 8 | 0.23 | 258.9 | 30 | 12.65 | 33.56 | 5.96 | 25.37 | 261.7 | .088 |
| 51 | 11.77 | 33.533 | 5.51 | 1.14 | 10 | 0.27 | 247.8 | 50 | 11.78 | 33.53 | 5.51 | 25.51 | 248.2 | .139 |
| 65 | 11.29 | 33.579 | 4.86 | 1.28 | 11 | 0.16 | 236.0 | 75 | 10.72 | 33.67 | 4.35 | 25.81 | 219.6 | .198 |
| 87 | 10.29 | 33.731 | 4.15 | 1.68 | 20 | 0.03 | 208.0 | 100 | 10.00 | 33.84 | 3.93 | 26.07 | 195.2 | .250 |
| 106 | 9.99 | 33.859 | 3.88 | 1.95 | 24 | 0.02 | 193.6 | 125 | 9.45 | 33.89 | 3.05 | 26.20 | 182.8 | .298 |
| 124 | 9.48 | 33.888 | 3.05 | 2.07 | 29 | 0.02 | 183.4 | 150 | 8.90 | 34.00 | 2.87 | 26.37 | 166.2 | .343 |
| 143 | 8.89 | 33.953 | 3.03 | 2.14 | 32 | 0.01 | 169.6 | 200 | 8.51 | 34.15 | 1.88 | 26.55 | 149.3 | .423 |
| 169 | 8.92 | 34.116 | 2.20 | - | - | - | 157.9 | 250 | 8.00 | 34.19 | 1.49 | 26.66 | 139.0 | .497 |
| 201 | 8.50 | 34.153 | 1.87 | - | - | - | 149.0 | 300 | 7.46 | 34.23 | 1.13 | 26.77 | 128.6 | .566 |
| 228 | 8.34 | 34.177 | 1.71 | - | - | - | 144.9 | 400 | 6.68 | 34.28 | .68 | 26.92 | 114.6 | .693 |
| 274 | 7.68 | 34.209 | 1.31 | - | - | - | 133.1 | 500 | 5.98 | 34.30 | .56 | 27.02 | 104.4 | .809 |
| 324 | 7.28 | 34.244 | .98 | - | - | - | 125.1 | | | | | | | |
| 404 | 6.66 | 34.282 | .67 | - | - | - | 114.2 | | | | | | | |
| 485 | 6.08 | 34.286 | .58 | - | - | - | 106.7 | | | | | | | |
| 568 | 5.64 | 34.358 | .45 | - | - | - | 96.1 | | | | | | | |

| 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 |

100.60 CCOFI CRUISE 6407 100.60

ALEXANDER AGASSIZ, JULY 14 1964, 2344 GCT, 30 41N 118 47W, SOUNDING 1660 FM, WIND 060 FORCE 4, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 30.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.97 | 33.599 | 5.84 | 0.41 | 1 | 0.00 | 347.4 | 0 | 16.97 | 33.60 | 5.84 | 24.47 | 347.3 | 0 |
| 9 | 16.96 | 33.600 | 6.10 | 0.42 | 2 | 0.00 | 347.1 | 10 | 16.95 | 33.60 | 6.10 | 24.47 | 346.9 | .035 |
| 26 | 16.86 | 33.598 | 6.02 | 0.43 | 2 | 0.00 | 345.0 | 20 | 16.91 | 33.60 | 6.08 | 24.48 | 346.0 | .069 |
| 36 | 16.48 | 33.587 | 5.68 | 0.41 | 2 | 0.00 | 337.4 | 30 | 16.78 | 33.60 | 5.94 | 24.51 | 343.1 | .104 |
| 48 | 15.48 | 33.526 | 6.35 | 0.35 | 2 | 0.00 | 320.3 | 50 | 15.17 | 33.51 | 6.41 | 24.81 | 315.0 | .170 |
| 61 | - | 33.496 | 6.46 | 0.47 | 3 | 0.01 | - | 75 | 13.11 | 33.50 | 5.97 | 25.23 | 274.8 | .244 |
| 81 | 12.83 | 33.498 | 5.85 | 0.74 | 6 | 0.19 | 269.6 | 100 | 11.83 | 33.54 | 5.31 | 25.51 | 248.3 | .310 |
| 98 | 11.91 | 33.527 | 5.34 | 1.02 | 9 | 0.08 | 250.7 | 125 | 10.55 | 33.68 | 4.23 | 25.85 | 216.0 | .369 |
| 113 | 10.50 | 33.596 | 4.68 | 1.31 | 13 | 0.02 | 221.4 | 150 | 9.77 | 33.88 | 3.27 | 26.14 | 188.6 | .420 |
| 129 | 10.41 | 33.707 | 4.04 | 1.65 | 19 | 0.01 | 211.7 | 200 | 9.04 | 34.07 | 2.42 | 26.40 | 163.2 | .510 |
| 151 | 9.74 | 33.881 | 3.26 | - | - | - | 188.0 | 250 | 8.45 | 34.13 | 2.06 | 26.54 | 149.9 | .590 |
| 178 | 9.14 | 33.970 | 3.12 | - | - | - | 172.1 | 300 | 7.20 | 34.09 | 1.99 | 26.70 | 135.5 | .664 |
| 202 | 9.03 | 34.076 | 2.39 | - | - | - | 162.6 | 400 | 6.33 | 34.20 | .88 | 26.90 | 116.2 | .795 |
| 243 | 8.60 | 34.133 | 2.05 | - | - | - | 151.9 | 500 | 5.91 | 34.30 | .57 | 27.03 | 103.6 | .910 |
| 287 | 7.43 | 34.084 | 2.12 | - | - | - | 139.0 | | | | | | | |
| 360 | 6.59 | 34.156 | 1.20 | - | - | - | 122.7 | | | | | | | |
| 433 | 6.18 | 34.235 | .74 | - | - | - | 111.7 | | | | | | | |
| 513 | 5.84 | 34.316 | .54 | - | - | - | 101.5 | | | | | | | |

100.70 CCOFI CRUISE 6407 100.70

ALEXANDER AGASSIZ, JULY 15 1964, 0503 GCT, 30 19N 119 28W, SOUNDING 2100 FM, WIND 060 FORCE 4, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 26.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.97 | 33.604 | 5.54 | 0.36 | 2 | 0.00 | 347.0 | 0 | 16.97 | 33.60 | 5.54 | 24.47 | 347.3 | 0 |
| 10 | 16.97 | 33.614 | 5.86 | 0.38 | 2 | 0.00 | 346.3 | 10 | 16.97 | 33.61 | 5.86 | 24.48 | 346.6 | .035 |
| 32 | 16.40 | 33.579 | 5.86 | 0.40 | 1 | 0.00 | 336.2 | 20 | 16.97 | 33.61 | 5.86 | 24.48 | 346.6 | .069 |
| 42 | 16.16 | 33.568 | 5.50 | 0.40 | 2 | 0.00 | 331.8 | 30 | 16.43 | 33.58 | 5.86 | 24.58 | 336.8 | .104 |
| 54 | 15.18 | 33.531 | 6.12 | 0.40 | 2 | 0.00 | 313.7 | 50 | 15.64 | 33.55 | 5.81 | 24.73 | 322.0 | .170 |
| 69 | - | 33.489 | 6.14 | 0.45 | 2 | 0.00 | - | 75 | 13.11 | 33.51 | 5.75 | 25.24 | 274.0 | .245 |
| 82 | 12.76 | 33.523 | 5.40 | 0.80 | 6 | 0.30 | 266.5 | 100 | 12.00 | 33.55 | 4.89 | 25.48 | 250.6 | .311 |
| 109 | 11.75 | 33.580 | 4.71 | 1.15 | 10 | 0.06 | 243.9 | 125 | 10.88 | 33.69 | 3.97 | 25.80 | 220.8 | .370 |
| 126 | 10.84 | 33.696 | 3.94 | 1.57 | 17 | 0.01 | 219.7 | 150 | 10.13 | 33.87 | 3.04 | 26.07 | 195.1 | .423 |
| 154 | 10.06 | 33.891 | 2.99 | 1.96 | 25 | 0.01 | 192.4 | 200 | 9.74 | 34.06 | 2.42 | 26.28 | 174.8 | .517 |
| 181 | 9.94 | 34.000 | 2.77 | - | - | - | 182.4 | 250 | 9.13 | 34.12 | 2.05 | 26.43 | 160.8 | .603 |
| 217 | 9.54 | 34.095 | 2.19 | - | - | - | 169.0 | 300 | 8.34 | 34.20 | 1.50 | 26.62 | 143.1 | .682 |
| 245 | 9.20 | 34.117 | 2.11 | - | - | - | 162.1 | 400 | 7.16 | 34.25 | .86 | 26.83 | 123.1 | .821 |
| 289 | 8.49 | 34.189 | 1.60 | - | - | - | 146.1 | 500 | 6.33 | 34.31 | .53 | 26.99 | 107.9 | .943 |
| 349 | 7.78 | 34.244 | 1.15 | - | - | - | 131.9 | 600 | 5.61 | 34.36 | .45 | 27.12 | 95.6 | 1.052 |
| 441 | 6.76 | 34.264 | .68 | - | - | - | 116.8 | | | | | | | |
| 528 | 6.16 | 34.334 | .50 | - | - | - | 104.1 | | | | | | | |
| 602 | 5.59 | 34.364 | .45 | - | - | - | 95.0 | | | | | | | |

100.80 CCOFI CRUISE 6407 100.80

ALEXANDER AGASSIZ, JULY 15 1964, 0946 GCT, 29 56N 120 09W, SOUNDING 2020 FM, WIND 350 FORCE 4, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 25.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 17.11 | 33.616 | 5.51 | 0.36 | 2 | 0.00 | 349.3 | 0 | 17.11 | 33.62 | 5.51 | 24.45 | 349.0 | 0 |
| 9 | 17.11 | 33.612 | 5.85 | 0.36 | 3 | 0.01 | 349.6 | 10 | 17.11 | 33.61 | 5.85 | 24.44 | 349.7 | .035 |
| 32 | 16.44 | 33.567 | 5.84 | 0.36 | 2 | 0.00 | 338.0 | 20 | 17.11 | 33.61 | 5.85 | 24.44 | 349.7 | .070 |
| 41 | 16.24 | 33.558 | 5.50 | 0.38 | 2 | 0.01 | 334.3 | 30 | 16.48 | 33.57 | 5.84 | 24.56 | 338.6 | .104 |
| 54 | 14.76 | 33.395 | 6.21 | 0.38 | 3 | 0.00 | 315.0 | 50 | 15.27 | 33.45 | 6.02 | 24.74 | 321.5 | .171 |
| 68 | 13.94 | 33.418 | 6.13 | 0.45 | 3 | 0.06 | 296.8 | 75 | 13.64 | 33.44 | 6.06 | 25.08 | 289.3 | .247 |
| 90 | 13.06 | 33.474 | 5.74 | 0.66 | 5 | 0.23 | 275.7 | 100 | 12.63 | 33.49 | 5.49 | 25.32 | 266.5 | .318 |
| 108 | 12.22 | 33.501 | 5.30 | 0.89 | 7 | 0.16 | 258.2 | 125 | 11.26 | 33.56 | 4.86 | 25.63 | 236.9 | .381 |
| 125 | 11.26 | 33.565 | 4.86 | 1.20 | 10 | 0.03 | 236.5 | 150 | 9.74 | 33.68 | 4.13 | 25.99 | 202.9 | .437 |
| 150 | 9.74 | 33.677 | 4.13 | 1.62 | 19 | 0.02 | 203.1 | 200 | 8.67 | 33.93 | 3.85 | 26.35 | 168.0 | .531 |
| 175 | 9.05 | 33.854 | 3.86 | - | - | - | 179.3 | 250 | 8.01 | 34.03 | - | 26.53 | 151.1 | .613 |
| 209 | 8.54 | 33.957 | 3.85 | - | - | - | 164.1 | 300 | 7.56 | 34.10 | 1.98 | 26.65 | 139.6 | .688 |
| 235 | 8.18 | - | - | - | - | - | - | 400 | 6.57 | 34.19 | .97 | 26.86 | 119.9 | .823 |
| 277 | 7.74 | 34.066 | 2.37 | - | - | - | 144.6 | 500 | 5.82 | 34.25 | .58 | 27.00 | 106.2 | .942 |
| 334 | 7.28 | 34.136 | 1.59 | - | - | - | 133.2 | 600 | 5.28 | 34.32 | - | 27.13 | 94.8 | 1.049 |
| 424 | 6.32 | 34.202 | .81 | - | - | - | 115.9 | | | | | | | |
| 509 | 5.78 | 34.256 | .57 | - | - | - | 105.3 | | | | | | | |
| 583 | 5.39 | 34.309 | .48 | - | - | - | 96.8 | | | | | | | |

| 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 |

100.90 CCOFI CRUISE 6407 100.90

ALEXANDER AGASSIZ, JULY 15 1964, 1448 GCT, 29 33N 120 49W, SOUNDING 2070 FM, WIND 360 FORCE 4, WEATHER CLOUDY, SEA ROUGH, WIRE ANGLE 15.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.50 | 33.616 | 5.62 | 0.31 | 3 | 0.01 | 358.1 | 0 | 17.50 | 33.62 | 5.62 | 24.36 | 357.9 | 0 |
| 10 | 17.49 | 33.614 | 5.92 | 0.31 | 2 | 0.00 | 358.1 | 10 | 17.49 | 33.61 | 5.92 | 24.35 | 358.4 | .036 |
| 34 | 17.39 | 33.594 | 5.60 | 0.28 | 2 | 0.00 | 357.2 | 20 | 17.48 | 33.61 | 5.80 | 24.35 | 358.1 | .072 |
| 64 | 15.66 | 33.483 | 5.77 | 0.31 | 3 | 0.00 | 327.3 | 30 | 17.44 | 33.60 | 5.65 | 24.36 | 357.9 | .108 |
| 73 | 15.60 | 33.563 | 6.17 | 0.31 | 3 | 0.00 | 320.2 | 50 | 17.00 | 33.56 | 5.61 | 24.43 | 350.9 | .179 |
| 91 | 15.34 | 33.649 | 6.02 | 0.31 | 3 | 0.00 | 308.4 | 75 | 15.68 | 33.59 | 6.17 | 24.76 | 319.9 | .263 |
| 106 | 14.77 | 33.606 | 5.96 | 0.36 | 3 | 0.03 | 299.7 | 100 | 15.10 | 33.66 | 5.96 | 24.94 | 302.6 | .341 |
| 119 | 14.30 | 33.633 | 5.88 | 0.44 | 4 | 0.20 | 288.2 | 125 | 14.10 | 33.63 | 5.84 | 25.13 | 284.5 | .416 |
| 146 | 12.07 | 33.629 | 5.30 | 0.91 | 10 | 0.04 | 246.1 | 150 | 11.78 | 33.63 | 5.11 | 25.59 | 240.8 | .482 |
| 164 | 11.10 | 33.628 | 4.75 | 1.17 | 14 | 0.01 | 229.1 | 200 | 9.72 | 33.77 | 4.22 | 26.06 | 195.9 | .593 |
| 192 | 9.90 | 33.718 | 4.37 | - | - | - | 202.6 | 250 | 8.56 | 33.99 | 3.37 | 26.42 | 161.9 | .685 |
| 223 | 9.25 | 33.910 | 3.81 | - | - | - | 178.2 | 300 | 7.90 | 34.06 | 2.57 | 26.57 | 147.3 | .764 |
| 250 | 8.56 | 33.990 | 3.37 | - | - | - | 161.9 | 400 | 6.88 | 34.16 | 1.32 | 26.80 | 126.1 | .907 |
| 296 | 7.95 | 34.055 | 2.61 | - | - | - | 148.4 | 500 | 5.99 | 34.24 | .69 | 26.98 | 109.0 | 1.030 |
| 356 | 7.30 | 34.105 | 1.88 | - | - | - | 135.7 | 600 | 5.37 | 34.31 | .53 | 27.11 | 96.5 | 1.140 |
| 454 | 6.38 | 34.211 | .87 | - | - | - | 116.0 | | | | | | | |
| 540 | 5.70 | 34.262 | .61 | - | - | - | 103.9 | | | | | | | |
| 615 | 5.31 | 34.321 | .50 | - | - | - | 95.0 | | | | | | | |

110.35 CCOFI CRUISE 6407 110.35

ALEXANDER AGASSIZ, JULY 17 1964, 0749 GCT, 29 46N 116 00W, SOUNDING 625 FM, WIND 320 FORCE 4, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 25.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.00 | 33.752 | 7.02 | 0.26 | 3 | 0.00 | 314.9 | 0 | 16.00 | 33.75 | 7.02 | 24.81 | 315.1 | 0 |
| 9 | 15.16 | 33.763 | 8.07 | 0.30 | 5 | 0.01 | 296.3 | 10 | 15.05 | 33.76 | 8.06 | 25.03 | 294.2 | .030 |
| 27 | 12.66 | 33.632 | 5.66 | 0.99 | 10 | 0.21 | 256.6 | 20 | 13.80 | 33.71 | 6.50 | 25.25 | 272.7 | .059 |
| 36 | 12.08 | 33.560 | 4.66 | 1.05 | 9 | 0.16 | 251.3 | 30 | 12.45 | 33.61 | 4.94 | 25.44 | 254.4 | .085 |
| 50 | 11.28 | 33.570 | 4.60 | 1.23 | 12 | 0.08 | 236.5 | 50 | 11.28 | 33.57 | 4.60 | 25.63 | 236.5 | .135 |
| 63 | 10.86 | 33.687 | 3.99 | 1.52 | 16 | 0.04 | 220.7 | 75 | 10.44 | 33.74 | 3.90 | 25.91 | 209.7 | .191 |
| 85 | 9.98 | 33.785 | 3.82 | 1.62 | 20 | 0.02 | 198.9 | 100 | 9.76 | 33.91 | 3.01 | 26.16 | 186.2 | .241 |
| 101 | 9.75 | 33.916 | 3.00 | 2.03 | 26 | 0.10 | 185.6 | 125 | 9.57 | 34.04 | 2.49 | 26.29 | 173.6 | .286 |
| 119 | 9.56 | 33.997 | 2.72 | 2.08 | 28 | 0.05 | 176.6 | 150 | 9.33 | 34.07 | 2.63 | 26.36 | 167.6 | .329 |
| 136 | 9.64 | 34.093 | 2.26 | 2.26 | 31 | 0.04 | 170.7 | 200 | 9.25 | 34.28 | 1.35 | 26.53 | 150.8 | .411 |
| 161 | 9.06 | 34.048 | 2.83 | - | - | - | 165.1 | 250 | 8.82 | 34.28 | 1.27 | 26.60 | 144.3 | .487 |
| 191 | 9.30 | 34.247 | 1.56 | - | - | - | 154.0 | 300 | 8.57 | 34.33 | .93 | 26.68 | 136.9 | .560 |
| 218 | 9.08 | 34.302 | 1.23 | - | - | - | 146.6 | 400 | 7.02 | 34.24 | .84 | 26.84 | 122.0 | .695 |
| 261 | 8.74 | 34.276 | 1.28 | - | - | - | 143.4 | 500 | 6.49 | 34.34 | .45 | 26.99 | 107.7 | .816 |
| 311 | 8.49 | 34.336 | .87 | - | - | - | 135.2 | | | | | | | |
| 391 | 7.09 | 34.238 | .87 | - | - | - | 123.0 | | | | | | | |
| 474 | 6.69 | 34.326 | .50 | - | - | - | 111.3 | | | | | | | |
| 558 | 5.92 | 34.363 | .42 | - | - | - | 99.0 | | | | | | | |

110.40 CCOFI CRUISE 6407 110.40

ALEXANDER AGASSIZ, JULY 17 1964, 0450 GCT, 29 36N 116 20W, SOUNDING 1356 FM, WIND 060 FORCE 4, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 30.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.60 | 33.702 | 5.79 | 0.35 | 3 | 0.00 | 354.2 | 0 | 17.60 | 33.70 | 5.79 | 24.39 | 354.3 | 0 |
| 9 | 17.62 | 33.710 | 5.96 | 0.38 | 3 | 0.00 | 354.1 | 10 | 17.62 | 33.71 | 5.96 | 24.40 | 354.1 | .035 |
| 26 | 16.42 | 33.741 | 6.21 | 0.39 | 3 | 0.00 | 324.9 | 20 | 16.60 | 33.74 | 6.20 | 24.66 | 328.9 | .070 |
| 35 | 15.90 | 33.718 | 5.78 | 0.43 | 2 | 0.01 | 315.2 | 30 | 16.33 | 33.74 | 6.15 | 24.72 | 323.0 | .102 |
| 47 | 14.65 | 33.614 | - | 0.58 | 3 | 0.06 | 296.7 | 50 | 14.33 | 33.61 | - | 25.06 | 290.5 | .164 |
| 60 | 13.55 | 33.603 | 6.10 | 0.70 | 4 | 0.15 | 275.6 | 75 | 12.31 | 33.60 | 5.05 | 25.46 | 252.5 | .232 |
| 80 | 11.93 | 33.603 | 4.76 | 1.16 | 10 | 0.06 | 245.5 | 100 | 10.68 | 33.62 | 4.37 | 25.78 | 222.6 | .292 |
| 96 | 10.94 | 33.607 | 4.44 | 1.39 | 13 | 0.03 | 227.9 | 125 | 9.71 | 33.79 | 4.06 | 26.08 | 194.3 | .345 |
| 112 | 9.99 | 33.693 | 4.17 | 1.58 | 17 | 0.01 | 205.9 | 150 | 9.18 | 33.89 | 3.48 | 26.24 | 178.6 | .392 |
| 129 | 9.64 | 33.809 | 4.02 | 1.63 | 20 | 0.01 | 191.8 | 200 | 8.80 | 34.11 | 2.18 | 26.47 | 156.6 | .477 |
| 153 | 9.16 | 33.907 | 3.37 | - | - | - | 177.1 | 250 | 7.67 | 34.09 | 2.25 | 26.63 | 141.9 | .554 |
| 182 | 9.08 | 34.087 | 2.22 | - | - | - | 162.5 | 300 | 7.49 | 34.19 | 1.35 | 26.73 | 132.0 | .625 |
| 206 | 8.65 | 34.115 | 2.18 | - | - | - | 154.0 | 400 | 6.78 | 34.28 | .66 | 26.90 | 115.9 | .754 |
| 247 | 7.68 | 34.082 | 2.32 | - | - | - | 142.6 | 500 | 6.31 | 34.35 | .46 | 27.02 | 104.7 | .871 |
| 293 | 7.53 | 34.175 | 1.49 | - | - | - | 133.6 | | | | | | | |
| 366 | 6.99 | 34.248 | .80 | - | - | - | 121.0 | | | | | | | |
| 441 | 6.56 | 34.314 | .56 | - | - | - | 110.5 | | | | | | | |
| 520 | 6.22 | 34.367 | .42 | - | - | - | 102.3 | | | | | | | |

| 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 |

110.50 CCOFI CRUISE 6407 110.50

ALEXANDER AGASSIZ, JULY 16 1964, 2320 GCT, 29 16N 116 59.5W, SOUNDING 1660 FM, WIND 080 FORCE 4, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 13.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.06 | 33.587 | 6.00 | 0.36 | 1 | 0.00 | 350.3 | 0 | 17.06 | 33.59 | 6.00 | 24.44 | 350.1 | 0 |
| 10 | 16.97 | 33.597 | 6.33 | 0.48 | 1 | 0.00 | 347.5 | 10 | 16.97 | 33.60 | 6.33 | 24.47 | 347.3 | .035 |
| 28 | 16.60 | 33.576 | 6.32 | 0.37 | 1 | 0.00 | 340.9 | 20 | 16.84 | 33.59 | 6.33 | 24.49 | 345.2 | .070 |
| 39 | 15.67 | 33.503 | 5.86 | 0.36 | 2 | 0.00 | 326.0 | 30 | 16.20 | 33.54 | 6.14 | 24.60 | 334.7 | .104 |
| 53 | 15.04 | 33.484 | 6.28 | 0.37 | 2 | 0.00 | 314.2 | 50 | 15.18 | 33.49 | 6.23 | 24.79 | 316.7 | .169 |
| 68 | 14.36 | 33.513 | 6.12 | 0.43 | 2 | 0.00 | 298.2 | 75 | 14.12 | 33.51 | 6.06 | 25.03 | 293.6 | .246 |
| 92 | 12.66 | 33.496 | 5.50 | 0.79 | 5 | 0.11 | 266.6 | 100 | 12.40 | 33.53 | 5.25 | 25.39 | 259.3 | .315 |
| 113 | 12.06 | 33.741 | 4.33 | 1.41 | 14 | 0.37 | 237.6 | 125 | 11.50 | 33.75 | 4.03 | 25.73 | 227.0 | .377 |
| 132 | 11.10 | 33.758 | 3.81 | 1.68 | 17 | 0.14 | 219.5 | 150 | 10.37 | 33.94 | 2.87 | 26.08 | 193.8 | .430 |
| 151 | 10.35 | 33.949 | 2.84 | 2.04 | 24 | 0.04 | 192.8 | 200 | 10.03 | 34.25 | 1.59 | 26.38 | 165.3 | .522 |
| 180 | 9.98 | 34.112 | 2.19 | - | - | - | 174.7 | 250 | 9.41 | 34.34 | 1.15 | 26.56 | 148.8 | .603 |
| 214 | 10.08 | 34.338 | 1.25 | - | - | - | 159.6 | 300 | 9.07 | 34.38 | .97 | 26.64 | 140.6 | .678 |
| 244 | 9.48 | 34.335 | 1.17 | - | - | - | 150.3 | 400 | 7.72 | 34.38 | .55 | 26.85 | 121.0 | .815 |
| 293 | 9.15 | 34.378 | .99 | - | - | - | 142.0 | 500 | 6.73 | 34.38 | .53 | 26.99 | 107.8 | .936 |
| 348 | 8.22 | 34.345 | .85 | - | - | - | 130.6 | 600 | 5.87 | 34.40 | .46 | 27.12 | 95.6 | 1.046 |
| 433 | 7.42 | 34.391 | .45 | - | - | - | 116.0 | | | | | | | |
| 518 | 6.55 | 34.373 | .54 | - | - | - | 106.0 | | | | | | | |
| 602 | 5.86 | 34.401 | .46 | - | - | - | 95.4 | | | | | | | |

110.60 CCOFI CRUISE 6407 110.60

ALEXANDER AGASSIZ, JULY 16 1964, 1753 GCT, 28 56.5N 117 38.5W, SOUNDING 1910 FM, WIND 350 FORCE 4, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 20.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.10 | 33.802 | 5.84 | 0.28 | 1 | 0.01 | 358.5 | 0 | 18.10 | 33.80 | 5.84 | 24.35 | 358.6 | 0 |
| 9 | 18.08 | 33.819 | 5.93 | 0.25 | 2 | 0.00 | 356.8 | 10 | 18.08 | 33.82 | 5.93 | 24.37 | 356.7 | .036 |
| 33 | 14.86 | 33.736 | 6.38 | 0.46 | 4 | 0.04 | 292.1 | 20 | 18.00 | 33.82 | 5.98 | 24.39 | 354.8 | .071 |
| 42 | 13.84 | 33.701 | 5.24 | 0.72 | 8 | 0.33 | 274.1 | 30 | 15.40 | 33.75 | 6.37 | 24.94 | 302.3 | .104 |
| 56 | 12.58 | 33.712 | 4.53 | 1.20 | 12 | 0.51 | 249.3 | 50 | 13.07 | 33.70 | 4.81 | 25.39 | 259.3 | .161 |
| 70 | 11.50 | 33.765 | 3.88 | 2.06U | 18 | 0.36 | 225.9 | 75 | 10.80 | 33.82 | 3.41 | 25.91 | 209.8 | .220 |
| 95 | 10.38 | 33.884 | 3.03 | 1.85U | 24 | 0.06 | 198.1 | 100 | 10.34 | 33.92 | 2.90 | 26.07 | 194.8 | .271 |
| 113 | 10.25 | 34.024 | 2.53 | 2.16 | 27 | 0.06 | 185.6 | 125 | 10.19 | 34.06 | 2.32 | 26.21 | 182.0 | .318 |
| 131 | 10.16 | 34.082 | 2.23 | 2.22 | 30 | 0.03 | 179.9 | 150 | 9.81 | 34.15 | 2.11 | 26.34 | 169.2 | .363 |
| 158 | 9.68 | 34.183 | 2.04 | 2.42 | 35 | 0.02 | 164.7 | 200 | 9.33 | 34.28 | - | 26.52 | 152.0 | .445 |
| 186 | 9.49 | 34.247 | 3.67U | - | - | - | 157.0 | 250 | 8.85 | 34.33 | 1.10 | 26.64 | 141.0 | .521 |
| 223 | 9.08 | 34.318 | 1.16 | - | - | - | 145.4 | 300 | 8.43 | 34.36 | .79 | 26.73 | 132.6 | .592 |
| 250 | 8.85 | 34.331 | 1.10 | - | - | - | 140.9 | 400 | 7.45 | 34.37 | .53 | 26.88 | 118.0 | .723 |
| 296 | 8.46 | 34.356 | .81 | - | - | - | 133.3 | 500 | 6.41 | 34.36 | .46 | 27.02 | 105.2 | .841 |
| 357 | 8.07 | 34.392 | .57 | - | - | - | 125.0 | 600 | 5.78 | 34.41 | .37 | 27.14 | 93.8 | .948 |
| 451 | 6.69 | 34.329 | .52 | - | - | - | 111.0 | | | | | | | |
| 537 | 6.22 | 34.389 | .41 | - | - | - | 100.7 | | | | | | | |
| 610 | 5.70 | 34.412 | .36 | - | - | - | 92.7 | | | | | | | |

110.70 CCOFI CRUISE 6407 110.70

ALEXANDER AGASSIZ, JULY 16 1964, 1155 GCT, 28 36.5N 118 18W, SOUNDING 2050 FM, WIND 340 FORCE 2, WEATHER CLEAR, SEA MODERATE, WIRE ANGLE 20.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 17.92 | 33.712 | 5.67 | 0.31 | 2 | 0.00 | 360.8 | 0 | 17.92 | 33.71 | 5.67 | 24.32 | 361.0 | 0 |
| 10 | 17.93 | 33.712 | 5.90 | 0.33 | 3 | 0.00 | 361.1 | 10 | 17.93 | 33.71 | 5.90 | 24.32 | 361.2 | .036 |
| 43 | 17.73 | 33.745 | 5.80 | 0.33 | 2 | 0.01 | 354.0 | 20 | 17.92 | 33.72 | 5.90 | 24.33 | 360.2 | .072 |
| 71 | 16.51 | 33.732 | 5.53 | 0.35 | 2 | 0.01 | 327.5 | 30 | 17.89 | 33.73 | 5.89 | 24.35 | 358.8 | .108 |
| 89 | 15.20 | 33.534 | 6.10 | 0.34 | 3 | 0.00 | 313.9 | 50 | 17.50 | 33.75 | 5.72 | 24.46 | 348.4 | .179 |
| 102 | 14.69 | 33.534 | 6.01 | 0.38 | 3 | 0.01 | 303.4 | 75 | 16.41 | 33.72 | 5.56 | 24.69 | 326.2 | .264 |
| 117 | 13.10 | 33.556 | 5.34 | 0.74 | 6 | 0.00 | 270.5 | 100 | 14.71 | 33.53 | 6.02 | 24.92 | 304.1 | .343 |
| 134 | 12.13 | 33.636 | 4.93 | 0.97 | 9 | 0.05 | 246.6 | 125 | 12.63 | 33.59 | 5.13 | 25.39 | 259.2 | .415 |
| 152 | 10.94 | 33.683 | 4.65 | 1.17 | 13 | 0.02 | 222.3 | 150 | 11.10 | 33.68 | 4.72 | 25.75 | 225.3 | .476 |
| 179 | 9.90 | 33.892 | 3.25 | 1.84 | 25 | 0.00 | 189.7 | 200 | 10.18 | 34.12 | 2.16 | 26.25 | 177.4 | .578 |
| 201 | 10.18 | 34.131 | 2.11 | - | - | - | 176.6 | 250 | 8.30 | 34.15 | - | 26.58 | 146.3 | .662 |
| 223 | 9.64 | 34.223 | 1.92 | - | - | - | 161.1 | 300 | 7.77 | 34.15 | 1.71 | 26.66 | 138.8 | .735 |
| 253 | 8.21 | - | - | - | - | - | - | 400 | 6.89 | 34.25 | .81 | 26.86 | 119.5 | .870 |
| 288 | 7.86 | 34.146 | 1.83 | - | - | - | 140.3 | 500 | 6.20 | 34.30 | .60 | 27.00 | 107.1 | .990 |
| 334 | 7.50 | 34.175 | 1.44 | - | - | - | 133.2 | | | | | | | |
| 396 | 6.91 | 34.250 | .83 | - | - | - | 119.8 | | | | | | | |
| 474 | 6.42 | 34.293 | .65 | - | - | - | 110.3 | | | | | | | |
| 555 | 5.62 | 34.308 | .55 | - | - | - | 99.6 | | | | | | | |

| 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 |
| 110.80 | | | | | | | CCOFI-CRUISE 6407 | | | | | | 110.80 | |

ALEXANDER AGASSIZ, JULY 16 1964, 0700 GCT, 28 19N 118 57W, SOUNDING 2050 FM, WIND 080 FORCE 4, WEATHER PARTLY CLOUDY, SEA MODERATE, WIRE ANGLE 17.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 18.33 | 33.761 | 5.54 | 0.35 | 2 | 0.00 | 366.9 | 0 | 18.33 | 33.76 | 5.54 | 24.26 | 366.9 | 0 |
| 10 | 18.34 | 33.761 | 5.80 | 0.37 | 2 | 0.00 | 367.1 | 10 | 18.34 | 33.76 | 5.80 | 24.26 | 367.2 | .037 |
| 29 | 18.08 | 33.758 | 5.74 | 0.33 | 2 | 0.00 | 361.2 | 20 | 18.10 | 33.76 | 5.76 | 24.32 | 361.5 | .073 |
| 39 | 17.86 | 33.760 | 5.36 | 0.32 | 2 | 0.00 | 355.9 | 30 | 18.08 | 33.76 | 5.73 | 24.32 | 361.1 | .109 |
| 53 | 16.71 | 33.730 | 6.01 | 0.35 | 2 | 0.00 | 332.1 | 50 | 17.70 | 33.76 | 5.44 | 24.42 | 352.2 | .181 |
| 68 | 15.90 | 33.623 | 6.04 | 0.34 | 1 | 0.00 | 322.2 | 75 | 15.42 | 33.58 | 6.03 | 24.81 | 315.1 | .265 |
| 92 | 15.07 | 33.556 | 6.01 | 0.35 | 2 | 0.00 | 309.6 | 100 | 15.00 | 33.55 | 6.01 | 24.88 | 308.6 | .343 |
| 110 | 14.56 | 33.537 | 6.01 | 0.38 | 2 | 0.00 | 300.5 | 125 | 13.85 | 33.53 | 5.76 | 25.10 | 286.8 | .419 |
| 128 | 13.54 | 33.525 | 5.60 | 0.61 | 4 | 0.11 | 281.2 | 150 | 11.68 | 33.65 | 4.57 | 25.62 | 237.6 | .485 |
| 146 | 11.95 | 33.634 | 4.68 | 1.07 | 10 | 0.02 | 243.5 | 200 | 9.53 | 33.89 | 3.60 | 26.18 | 184.0 | .592 |
| 174 | 10.39 | 33.734 | 4.08 | - | - | - | 209.4 | 250 | 8.49 | 34.01 | 3.36 | 26.44 | 159.4 | .680 |
| 206 | 9.40 | 33.914 | 3.55 | - | - | - | 180.2 | 300 | 7.79 | 34.08 | 2.42 | 26.60 | 144.3 | .759 |
| 234 | 8.88 | 33.986 | 3.46 | - | - | - | 167.0 | 400 | 7.13 | 34.26 | .82 | 26.84 | 121.9 | .897 |
| 278 | 7.91 | 34.041 | 2.96 | - | - | - | 148.8 | 500 | 6.51 | 34.32 | .56 | 26.97 | 109.4 | 1.020 |
| 329 | 7.66 | 34.131 | 1.86 | - | - | - | 138.7 | | | | | | | |
| 408 | 7.08 | 34.268 | .77 | - | - | - | 120.7 | | | | | | | |
| 489 | 6.59 | 34.316 | .58 | - | - | - | 110.7 | | | | | | | |
| 573 | 5.89 | 34.368 | .47 | - | - | - | 98.2 | | | | | | | |

110.90 CCOFI CRUISE 6407 110.90

ALEXANDER AGASSIZ, JULY 16 1964, 0213 GCT, 27 57N 119 36W, SOUNDING 2090 FM, WIND 090 FORCE 3, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 17.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.69 | 33.844 | 5.59 | 0.37 | 2 | 0.00 | 369.4 | 0 | 18.69 | 33.84 | 5.59 | 24.23 | 369.6 | 0 |
| 10 | 18.67 | 33.851 | 5.84 | 0.37 | 2 | 0.00 | 368.4 | 10 | 18.67 | 33.85 | 5.84 | 24.25 | 368.4 | .037 |
| 29 | 18.17 | - | - | - | - | - | - | 20 | 18.40 | 33.84 | - | 24.31 | 362.8 | .074 |
| 38 | 18.04 | 33.815 | 5.52 | 0.38 | 2 | 0.00 | 356.1 | 30 | 18.16 | 33.82 | - | 24.35 | 358.6 | .110 |
| 53 | 17.53 | 33.878 | 5.99 | 0.32 | 2 | 0.00 | 339.8 | 50 | 17.56 | 33.88 | 5.98 | 24.54 | 340.3 | .180 |
| 67 | 16.91 | 33.881 | 5.95 | 0.33 | 2 | 0.00 | 325.5 | 75 | 16.40 | 33.88 | 5.86 | 24.82 | 314.3 | .262 |
| 92 | 16.44 | 33.908 | 5.85 | 0.32 | 2 | 0.00 | 313.1 | 100 | 16.24 | 33.93 | 5.84 | 24.89 | 307.1 | .340 |
| 110 | 16.08 | 33.930 | 5.83 | 0.35 | 2 | 0.00 | 303.6 | 125 | 16.00 | 33.93 | 5.82 | 24.94 | 301.9 | .417 |
| 129 | 14.92 | 33.850 | 5.54 | 0.48 | 3 | 0.17 | 285.0 | 150 | 12.76 | 33.79 | 4.94 | 25.52 | 246.9 | .487 |
| 148 | 12.94 | 33.796 | 4.99 | 0.82 | 8 | 0.02 | 249.8 | 200 | 10.00 | 33.88 | 3.90 | 26.10 | 192.2 | .599 |
| 176 | 10.93 | 33.767 | 4.32 | - | - | - | 215.9 | 250 | 8.93 | 34.01 | 3.39 | 26.38 | 166.0 | .690 |
| 209 | 9.74 | 33.912 | 3.84 | - | - | - | 185.7 | 300 | 8.34 | 34.11 | 2.31 | 26.54 | 149.8 | .772 |
| 236 | 9.05 | 33.961 | 3.76 | - | - | - | 171.4 | 400 | 6.91 | 34.16 | - | 26.79 | 126.5 | .916 |
| 281 | 8.70 | 34.097 | 2.51 | - | - | - | 156.1 | 500 | 5.99 | 34.23 | .80 | 26.97 | 109.8 | 1.040 |
| 333 | 7.70 | 34.123 | 2.02 | - | - | - | 139.8 | | | | | | | |
| 413 | 6.78 | 34.173 | - | - | - | - | 123.8 | | | | | | | |
| 493 | 6.03 | 34.220 | .82 | - | - | - | 111.0 | | | | | | | |
| 577 | 5.45 | 34.291 | .76 | - | - | - | 98.9 | | | | | | | |

113.30 CCOFI CRUISE 6407 113.30

ALEXANDER AGASSIZ, JULY 27 1964, 0810 GCT, 29 22N 115 18W, SOUNDING 33 FM, WIND 320 FORCE 3, WEATHER CLEAR, SEA SLIGHT, WIRE ANGLE 05.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.31 | 33.747 | 7.45 | 0.44 | 15 | 0.07 | 300.6 | 0 | 15.31 | 33.75 | 7.45 | 24.96 | 300.4 | 0 |
| 10 | 13.84 | 33.666 | 6.43 | 0.62 | 9 | 0.11 | 276.7 | 10 | 13.84 | 33.67 | 6.43 | 25.21 | 276.4 | .029 |
| 20 | 12.07 | 33.697 | 4.50 | 1.38 | 15 | 0.29 | 241.0 | 20 | 12.07 | 33.70 | 4.50 | 25.59 | 240.8 | .055 |
| 30 | 11.65 | 33.746 | 3.65 | 1.65 | 18 | 0.38 | 229.9 | 30 | 11.65 | 33.75 | 3.65 | 25.70 | 229.7 | .078 |
| 50 | 10.65 | 33.818 | 2.85 | 2.07 | 25 | 0.15 | 207.5 | 50 | 10.65 | 33.82 | 2.85 | 25.94 | 207.3 | .122 |

115.35 CCOFI CRUISE 6407 115.35

ALEXANDER AGASSIZ, JULY 27 1964, 0429 GCT, 28 54N 115 26.5W, SOUNDING 512 FM, WIND 330 FORCE 4, WEATHER PARTLY CLOUDY, SEA ROUGH, WIRE ANGLE 22.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 17.84 | 33.734 | 5.73 | 0.31 | 2 | - | 357.4 | 0 | 17.84 | 33.73 | 5.73 | 24.36 | 357.7 | 0 |
| 10 | 17.75 | 33.734 | 5.67 | 0.58 | 2 | 0.00 | 355.3 | 10 | 17.75 | 33.73 | 5.67 | 24.38 | 355.6 | .036 |
| 29 | 16.74 | 33.689 | 5.84 | 0.35 | 1 | 0.00 | 335.7 | 20 | 17.23 | 33.72 | 5.70 | 24.50 | 344.4 | .071 |
| 38 | 16.04 | 33.644 | 6.03 | 0.30 | 2 | 0.00 | 323.7 | 30 | 16.65 | 33.68 | 5.86 | 24.60 | 334.4 | .105 |
| 52 | 14.63 | 33.587 | 5.99 | 0.42 | 2 | 0.04 | 298.3 | 50 | 14.72 | 33.59 | 5.99 | 24.97 | 299.9 | .168 |
| 66 | 13.88 | 33.572 | 5.86 | 0.57 | 3 | 0.11 | 284.4 | 75 | 12.78 | 33.56 | 5.36 | 25.34 | 264.2 | .239 |
| 89 | 11.66 | 33.556 | 4.81 | 1.08 | 9 | 0.15 | 244.1 | 100 | 10.50 | 33.60 | 4.37 | 25.79 | 221.1 | .300 |
| 107 | 10.30 | 33.645 | 4.16 | 1.35 | 15 | 0.04 | 214.5 | 125 | 10.42 | 33.94 | 2.57 | 26.07 | 194.6 | .353 |
| 125 | 10.42 | 33.943 | 2.57 | 2.02 | 25 | 0.02 | 194.4 | 150 | 10.13 | 34.08 | 2.22 | 26.23 | 179.5 | .401 |
| 143 | 10.21 | 34.041 | 2.31 | 2.11 | 27 | 0.03 | 183.7 | 200 | 9.45 | 34.21 | 1.73 | 26.45 | 159.1 | .487 |
| 169 | 9.89 | 34.147 | 2.00 | - | - | - | 170.7 | 250 | 9.43 | 34.36 | .96 | 26.57 | 147.7 | .566 |
| 201 | 9.45 | 34.213 | 1.72 | - | - | - | 158.9 | 300 | 8.95 | 34.39 | .68 | 26.67 | 138.1 | .640 |
| 228 | 9.50 | 34.324 | 1.11 | - | - | - | 151.4 | 400 | 8.19 | 34.42 | .43 | 26.81 | 124.6 | .778 |
| 273 | 9.26 | 34.383 | .83 | - | - | - | 143.3 | 500 | 7.05 | 34.40 | .35 | 26.96 | 110.4 | .903 |
| 324 | 8.68 | 34.396 | .59 | - | - | - | 133.6 | | | | | | | |
| 402 | 8.17 | 34.423 | .42 | - | - | - | 124.1 | | | | | | | |
| 483 | 7.26 | 34.405 | .35 | - | - | - | 112.8 | | | | | | | |
| 566 | 6.29 | 34.372 | .36 | - | - | - | 102.8 | | | | | | | |

| 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 |

119.33 CCOFI CRUISE 6407 119.33

ALEXANDER AGASSIZ, JULY 26 1964, 2300 GCT, 28 19N 114 53.5W, SOUNDING 55 FM, WIND 320 FORCE 3, WEATHER CLEAR, SEA MODERATE, WIRE ANGLE 13.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.04 | 33.801 | 5.88 | - | - | - | 380.9 | 0 | 19.04 | 33.80 | 5.88 | 24.12 | 381.0 | 0 |
| 10 | 18.46 | 33.800 | 6.03 | - | - | - | 367.1 | 10 | 18.46 | 33.80 | 6.03 | 24.26 | 367.1 | .037 |
| 19 | 18.04 | 33.776 | 6.14 | - | - | - | 359.0 | 20 | 18.00 | 33.77 | 6.15 | 24.35 | 358.5 | .074 |
| 29 | 17.56 | 33.753 | 6.22 | - | - | - | 349.5 | 30 | 17.49 | 33.75 | 6.22 | 24.46 | 348.2 | .109 |
| 48 | 15.68 | 33.747 | 5.50 | - | - | - | 308.4 | 50 | 15.15 | 33.75 | 5.25 | 25.00 | 297.0 | .174 |
| 73 | 10.96 | 33.787 | 3.11 | - | - | - | 215.0 | 75 | 10.82 | 33.79 | 3.05 | 25.89 | 212.4 | .238 |

120.45 CCOFI CRUISE 6407 120.45

ALEXANDER AGASSIZ, JULY 18 1964, 1525 GCT, 27 42.5N 115 33W, SOUNDING 1265 FM, WIND 310 FORCE 4, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 18.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.30 | 33.854 | 5.47 | 0.40 | 2 | 0.01 | 383.3 | 0 | 19.30 | 33.85 | 5.47 | 24.09 | 383.6 | 0 |
| 10 | 19.32 | 33.859 | 5.69 | 0.43 | 2 | 0.00 | 383.5 | 10 | 19.32 | 33.86 | 5.69 | 24.09 | 383.4 | .038 |
| 29 | 15.66 | 33.647 | 6.20 | 0.42 | 2 | 0.00 | 315.3 | 20 | 18.00 | 33.77 | 5.91 | 24.35 | 358.5 | .076 |
| 38 | 15.25 | 33.720 | 5.76 | 0.52 | 3 | 0.01 | 301.3 | 30 | 15.60 | 33.65 | 6.17 | 24.82 | 313.8 | .109 |
| 48 | 14.10 | 33.643 | 5.85 | 0.63 | 3 | 0.15 | 283.5 | 50 | 13.90 | 33.62 | 5.83 | 25.16 | 281.2 | .169 |
| 67 | 12.76 | 33.592 | 5.27 | 1.01 | 7 | 0.38 | 261.4 | 75 | 12.30 | 33.60 | 5.00 | 25.47 | 252.4 | .236 |
| 91 | 11.20 | 33.770 | 4.00 | 1.55 | 14 | 0.02 | 220.3 | 100 | 11.36 | 33.89 | 3.69 | 25.87 | 214.3 | .295 |
| 110 | 10.94 | 33.941 | 3.09 | 1.90 | 19 | 0.02 | 203.3 | 125 | 10.54 | 34.02 | 2.60 | 26.11 | 190.7 | .346 |
| 130 | 10.46 | 34.050 | 2.51 | 2.14 | 24 | 0.01 | 187.2 | 150 | 10.27 | 34.14 | 2.24 | 26.25 | 177.4 | .393 |
| 148 | 10.28 | 34.124 | 2.27 | 2.21 | 27 | 0.01 | 178.7 | 200 | 9.85 | 34.31 | 1.39 | 26.46 | 158.0 | .479 |
| 177 | 10.08 | 34.262 | 1.73 | - | - | - | 165.3 | 250 | 9.48 | 34.37 | 1.06 | 26.57 | 147.7 | .557 |
| 210 | 9.77 | 34.333 | 1.25 | - | - | - | 155.0 | 300 | 8.75 | 34.36 | .88 | 26.68 | 137.3 | .631 |
| 239 | 9.60 | 34.369 | 1.09 | - | - | - | 149.7 | 400 | 7.75 | 34.37 | .66 | 26.84 | 122.1 | .767 |
| 286 | 8.96 | 34.358 | .93 | - | - | - | 140.6 | 500 | 6.83 | 34.39 | .40 | 26.98 | 108.3 | .889 |
| 339 | 8.30 | 34.360 | .74 | - | - | - | 130.7 | 600 | 6.15 | 34.42 | - | 27.10 | 97.5 | 1.000 |
| 421 | 7.57 | 34.381 | .62 | - | - | - | 118.8 | | | | | | | |
| 502 | 6.81 | 34.395 | .40 | - | - | - | 107.7 | | | | | | | |
| 588 | 6.20 | 34.416 | .39 | - | - | - | 98.4 | | | | | | | |

120.50 CCOFI CRUISE 6407 120.50

ALEXANDER AGASSIZ, JULY 18 1964, 1818 GCT, 27 33N 115 54W, SOUNDING 2380 FM, WIND 040 FORCE 4, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 05.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.95 | 33.846 | 5.81 | 0.40 | 1 | 0.00 | 375.4 | 0 | 18.95 | 33.85 | 5.81 | 24.18 | 375.2 | 0 |
| 10 | 18.91 | 33.848 | 5.72 | 0.35 | 2 | 0.01 | 374.3 | 10 | 18.91 | 33.85 | 5.72 | 24.19 | 374.2 | .037 |
| 35 | 15.76 | 33.734 | 6.32 | 0.44 | 2 | 0.01 | 311.1 | 20 | 18.80 | 33.85 | 5.73 | 24.21 | 371.6 | .075 |
| 45 | 14.66 | 33.687 | 6.28 | 0.66 | 4 | 0.04 | 291.6 | 30 | 17.22 | 33.79 | 6.07 | 24.55 | 339.1 | .110 |
| 60 | 12.76 | 33.617 | 5.40 | 0.95 | 7 | 0.03 | 259.6 | 50 | 14.50 | 33.68 | 6.25 | 25.08 | 288.8 | .173 |
| 75 | 11.72 | 33.689 | 4.27 | 1.43 | 13 | 0.04 | 235.4 | 75 | 11.72 | 33.69 | 4.27 | 25.64 | 235.3 | .239 |
| 100 | 10.21 | 33.763 | 3.90 | 1.67 | 19 | 0.03 | 204.3 | 100 | 10.21 | 33.76 | 3.90 | 25.97 | 204.5 | .295 |
| 120 | 9.57 | 33.875 | 3.76 | 1.80 | 23 | 0.03 | 185.8 | 125 | 9.61 | 33.94 | 3.38 | 26.21 | 181.6 | .344 |
| 140 | 10.04 | 34.148 | 2.18 | 2.32 | 29 | 0.02 | 173.1 | 150 | 9.93 | 34.17 | 2.17 | 26.34 | 169.7 | .388 |
| 170 | 9.50 | 34.186 | 2.15 | 2.41 | 33 | 0.01 | 161.7 | 200 | 9.49 | 34.32 | 1.22 | 26.53 | 151.6 | .470 |
| 200 | 9.49 | 34.322 | 1.22 | - | - | - | 151.4 | 250 | 8.84 | 34.36 | .96 | 26.66 | 138.6 | .545 |
| 240 | 8.92 | 34.356 | 1.00 | - | - | - | 140.1 | 300 | 8.49 | 34.39 | .80 | 26.74 | 131.2 | .615 |
| 270 | 8.70 | 34.363 | .89 | - | - | - | 136.3 | 400 | 7.29 | 34.36 | .64 | 26.90 | 116.6 | .745 |
| 320 | 8.29 | 34.396 | .74 | - | - | - | 127.9 | 500 | 6.51 | 34.38 | .49 | 27.02 | 105.0 | .863 |
| 384 | 7.45 | 34.364 | .66 | - | - | - | 118.5 | 600 | 5.87 | 34.43 | .48 | 27.14 | 93.4 | .969 |
| 484 | 6.62 | 34.372 | .52 | - | - | - | 106.9 | | | | | | | |
| 573 | 6.06 | 34.432 | .42 | - | - | - | 95.5 | | | | | | | |
| 648 | 5.56 | 34.431 | .60 | - | - | - | 89.7 | | | | | | | |

120.60 CCOFI CRUISE 6407 120.60

ALEXANDER AGASSIZ, JULY 18 1964, 2335 GCT, 27 13N 116 30.5W, SOUNDING 1980 FM, WIND 060 FORCE 4, WEATHER PARTLY CLOUDY, SEA ROUGH, WIRE ANGLE 24.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.38 | 33.751 | 5.74 | 0.38 | - | - | 368.8 | 0 | 18.38 | 33.75 | 5.74 | 24.24 | 368.8 | 0 |
| 9 | 17.94 | 33.737 | 5.78 | 0.40 | 2 | 0.00 | 359.5 | 10 | 17.88 | 33.73 | 5.79 | 24.35 | 358.6 | .036 |
| 28 | 16.79 | 33.599 | 5.93 | 0.40 | 1 | - | 343.4 | 20 | 17.00 | 33.61 | 5.90 | 24.47 | 347.3 | .072 |
| 37 | 16.27 | 33.685 | 5.99 | 0.37 | 1 | 0.00 | 325.7 | 30 | 16.72 | 33.60 | 5.95 | 24.53 | 341.8 | .106 |
| 50 | 14.93 | 33.509 | 6.16 | 0.41 | 2 | 0.00 | 310.1 | 50 | 14.93 | 33.51 | 6.16 | 24.86 | 310.0 | .172 |
| 64 | 14.19 | 33.605 | 5.72 | 0.54 | 3 | 0.15 | 288.1 | 75 | 13.40 | 33.64 | 5.55 | 25.28 | 270.0 | .245 |
| 85 | 13.50 | 33.705 | 5.54 | 0.87 | 6 | 0.40 | 267.2 | 100 | 12.00 | 33.63 | 5.54 | 25.55 | 244.7 | .309 |
| 103 | 11.74 | 33.625 | 5.54 | 1.18 | 10 | 0.06 | 240.5 | 125 | 10.60 | 33.73 | 4.26 | 25.88 | 213.1 | .367 |
| 119 | 10.91 | 33.703 | 4.42 | 1.34 | 13 | 0.02 | 220.3 | 150 | 9.54 | 33.88 | 3.69 | 26.18 | 184.9 | .418 |
| 136 | 10.00 | 33.783 | 4.02 | 1.63 | 18 | 0.02 | 199.4 | 200 | 8.68 | 34.06 | 2.93 | 26.45 | 158.5 | .505 |
| 162 | 9.28 | 33.942 | 3.45 | - | - | - | 176.3 | 250 | 8.11 | 34.15 | 1.96 | 26.61 | 143.6 | .583 |
| 191 | 8.80 | 34.041 | 3.01 | - | - | - | 161.7 | 300 | 7.75 | 34.22 | 1.23 | 26.72 | 133.3 | .654 |
| 216 | 8.42 | 34.077 | 2.70 | - | - | - | 153.4 | 400 | 6.93 | 34.33 | .67 | 26.92 | 114.1 | .784 |
| 258 | 8.05 | 34.161 | 1.83 | - | - | - | 141.9 | 500 | 6.30 | 34.37 | .46 | 27.04 | 103.1 | .899 |
| 306 | 7.70 | 34.222 | 1.19 | - | - | - | 132.5 | | | | | | | |
| 381 | 7.04 | 34.316 | .76 | - | - | - | 116.6 | | | | | | | |
| 469 | 6.50 | 34.354 | .49 | - | - | - | 106.8 | | | | | | | |
| 549 | 5.90 | 34.403 | .42 | - | - | - | 95.8 | | | | | | | |

| 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 |

120.70 CCOFI CRUISE 6407 120.70

ALEXANDER AGASSIZ, JULY 19 1964, 0431 GCT, 26 52N 117 10W, SOUNDING 2025 FM, WIND 320 FORCE 4, WEATHER PARTLY CLOUDY, SEA ROUGH, WIRE ANGLE 17.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.24 | 33.763 | 5.52 | 0.31 | 3 | 0.00 | 388.5 | 0 | 19.24 | 33.76 | 5.52 | 24.03 | 388.7 | 0 |
| 9 | 19.23 | 33.761 | 5.54 | 0.34 | 1 | 0.00 | 388.4 | 10 | 19.23 | 33.76 | 5.54 | 24.04 | 388.5 | .039 |
| 29 | 17.90 | 33.644 | 5.72 | 0.37 | 5 | 0.00 | 365.3 | 20 | 18.60 | 33.70 | 5.65 | 24.15 | 377.7 | .077 |
| 38 | 17.24 | 33.672 | 5.88 | 0.38 | 1 | 0.00 | 348.2 | 30 | 17.83 | 33.65 | 5.74 | 24.30 | 363.3 | .114 |
| 52 | 16.41 | 33.656 | 5.82 | 0.36 | 1 | 0.00 | 330.8 | 50 | 16.50 | 33.65 | 5.83 | 24.62 | 333.3 | .184 |
| 67 | 16.10 | 33.714 | 6.12 | 0.36 | 1 | 0.00 | 319.9 | 75 | 15.90 | 33.71 | 6.17 | 24.80 | 315.8 | .266 |
| 91 | 14.34 | 33.564 | 6.26 | 0.42 | 1 | 0.04 | 294.1 | 100 | 13.50 | 33.56 | 5.52 | 25.20 | 277.8 | .341 |
| 110 | 13.24 | 33.574 | 5.30 | 0.70 | 5 | 0.19 | 271.8 | 125 | 11.80 | 33.59 | 4.78 | 25.55 | 244.1 | .407 |
| 129 | 11.54 | 33.598 | 4.71 | 1.18 | 10 | 0.02 | 238.9 | 150 | 10.75 | 33.70 | 4.30 | 25.83 | 217.9 | .465 |
| 148 | 10.82 | 33.683 | 4.34 | 1.48 | 14 | 0.01 | 220.3 | 200 | 9.63 | 34.07 | 2.63 | 26.31 | 172.3 | .564 |
| 177 | 9.80 | 33.863 | 3.61 | - | - | - | 190.3 | 250 | 9.50 | 34.30 | 1.35 | 26.51 | 153.2 | .648 |
| 210 | 9.62 | 34.144 | 2.26 | - | - | - | 166.6 | 300 | 8.90 | 34.35 | .99 | 26.65 | 140.3 | .724 |
| 239 | 9.60 | 34.287 | 1.46 | - | - | - | 155.7 | 400 | 8.01 | 34.38 | .58 | 26.81 | 125.0 | .863 |
| 286 | 9.00 | 34.329 | 1.09 | - | - | - | 143.4 | 500 | 6.91 | 34.36 | .51 | 26.95 | 111.6 | .989 |
| 338 | 8.64 | 34.378 | .73 | - | - | - | 134.3 | 600 | 6.01 | 34.40 | - | 27.10 | 97.3 | 1.101 |
| 418 | 7.80 | 34.376 | .56 | - | - | - | 122.4 | | | | | | | |
| 500 | 6.91 | 34.365 | .51 | - | - | - | 111.2 | | | | | | | |
| 582 | 6.12 | 34.386 | .39 | - | - | - | 99.7 | | | | | | | |

120.80 CCOFI CRUISE 6407 120.80

ALEXANDER AGASSIZ, JULY 19 1964, 0920 GCT, 26 35N 117 48.5W, SOUNDING 2085 FM, WIND 310 FORCE 5, WEATHER PARTLY CLOUDY, SEA ROUGH, WIRE ANGLE 12.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.66 | 33.892 | 5.47 | 0.27 | 1 | 0.02 | 389.4 | 0 | 19.66 | 33.89 | 5.47 | 24.02 | 389.6 | 0 |
| 11 | 19.65 | 33.885 | 5.43 | 0.31 | 2 | 0.01 | 389.7 | 10 | 19.65 | 33.89 | 5.44 | 24.03 | 389.3 | .039 |
| 30 | 18.60 | 33.816 | 5.53 | 0.30 | 1 | 0.00 | 369.2 | 20 | 19.64 | 33.88 | 5.43 | 24.02 | 389.8 | .078 |
| 40 | 17.16 | 33.661 | 5.78 | 0.31 | 1 | 0.00 | 347.2 | 30 | 18.60 | 33.82 | 5.53 | 24.24 | 369.0 | .116 |
| 55 | 16.71 | 33.723 | 5.79 | 0.31 | 1 | 0.01 | 332.6 | 50 | 16.85 | 33.71 | 5.79 | 24.58 | 336.6 | .187 |
| 69 | 16.18 | 33.723 | 5.93 | 0.30 | 1 | 0.00 | 320.9 | 75 | 15.97 | 33.72 | 5.93 | 24.79 | 316.6 | .269 |
| 94 | 15.08 | 33.676 | 5.82 | 0.38 | 1 | 0.01 | 301.0 | 100 | 14.55 | 33.68 | 5.63 | 25.07 | 289.8 | .345 |
| 115 | 13.95 | 33.848 | 5.12 | 0.56 | 3 | 0.07 | 265.5 | 125 | 13.35 | 33.83 | 5.03 | 25.44 | 255.1 | .414 |
| 134 | 12.38 | 33.791 | 4.90 | 0.79 | 9 | 0.03 | 239.8 | 150 | 11.10 | 33.75 | 4.58 | 25.81 | 220.1 | .474 |
| 153 | 10.96 | 33.745 | 4.52 | 1.16 | 14 | 0.00 | 218.1 | 200 | 9.55 | 33.90 | 3.87 | 26.19 | 183.6 | .577 |
| 182 | 10.16 | 33.850 | 4.07 | - | - | - | 197.0 | 250 | 9.74 | 34.32 | 1.28 | 26.49 | 155.5 | .664 |
| 216 | 9.14 | 33.953 | 3.64 | - | - | - | 173.4 | 300 | 9.27 | 34.40 | .76 | 26.63 | 142.2 | .741 |
| 244 | 9.76 | 34.291 | 1.47 | - | - | - | 158.0 | 400 | 7.81 | 34.36 | .60 | 26.82 | 123.7 | .881 |
| 294 | 9.34 | 34.402 | .79 | - | - | - | 143.2 | 500 | 6.74 | 34.36 | .46 | 26.97 | 109.4 | 1.004 |
| 348 | 8.52 | 34.392 | .64 | - | - | - | 131.5 | 600 | 6.02 | 34.40 | .35 | 27.10 | 97.4 | 1.116 |
| 450 | 7.23 | 34.347 | .56 | - | - | - | 116.8 | | | | | | | |
| 535 | 6.47 | 34.368 | .41 | - | - | - | 105.3 | | | | | | | |
| 622 | 5.88 | 34.402 | .34 | - | - | - | 95.6 | | | | | | | |

120.90 CCOFI CRUISE 6407 120.90

ALEXANDER AGASSIZ, JULY 19 1964, 1403 GCT, 26 18.5N 118 26.5W, SOUNDING 2050 FM, WIND 060 FORCE 4, WEATHER CLOUDY, SEA ROUGH, WIRE ANGLE 19.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.20 | 33.770 | 5.62 | 0.33 | 1 | 0.00 | 387.0 | 0 | 19.20 | 33.77 | 5.62 | 24.05 | 387.0 | 0 |
| 9 | 19.18 | 33.770 | 5.85 | 0.34 | 1 | 0.00 | 386.5 | 10 | 19.17 | 33.77 | 5.85 | 24.06 | 386.3 | .039 |
| 33 | 17.90 | 33.678 | 5.74 | 0.32 | 1 | 0.00 | 362.8 | 20 | 18.40 | 33.71 | 5.78 | 24.21 | 372.2 | .077 |
| 42 | 17.28 | 33.691 | 5.94 | 0.32 | 1 | 0.00 | 347.7 | 30 | 17.93 | 33.68 | 5.74 | 24.30 | 363.4 | .114 |
| 57 | 16.36 | 33.673 | 6.01 | 0.33 | 2 | 0.00 | 328.5 | 50 | 16.72 | 33.69 | 5.97 | 24.60 | 335.2 | .184 |
| 71 | 15.70 | 33.638 | 6.07 | 0.34 | 2 | 0.00 | 316.8 | 75 | 15.60 | 33.64 | 6.06 | 24.81 | 314.5 | .265 |
| 94 | 14.81 | 33.629 | 5.90 | 0.41 | 2 | 0.07 | 298.9 | 100 | 14.60 | 33.63 | 5.80 | 25.02 | 294.5 | .342 |
| 112 | 13.34 | 33.641 | 5.10 | 0.77 | 5 | 0.03 | 268.8 | 125 | 12.39 | 33.64 | 4.82 | 25.48 | 251.1 | .411 |
| 131 | 11.98 | 33.649 | 4.69 | 1.11 | 10 | 0.01 | 243.0 | 150 | 10.85 | 33.70 | 4.38 | 25.81 | 219.5 | .471 |
| 158 | 10.44 | 33.761 | 4.22 | 1.46 | 16 | 0.00 | 208.2 | 200 | 9.18 | 33.93 | 3.83 | 26.27 | 175.7 | .571 |
| 185 | 9.60 | 33.892 | 3.94 | - | - | - | 185.0 | 250 | 8.75 | 34.14 | 2.41 | 26.51 | 153.6 | .656 |
| 221 | 8.72 | 33.990 | 3.49 | - | - | - | 164.3 | 300 | 7.88 | 34.13 | 1.98 | 26.63 | 141.8 | .732 |
| 248 | 8.76 | 34.136 | 2.42 | - | - | - | 154.1 | 400 | 7.20 | 34.27 | .96 | 26.84 | 122.1 | .870 |
| 295 | 7.92 | 34.126 | 2.03 | - | - | - | 142.7 | 500 | 6.54 | 34.36 | .54 | 27.00 | 106.8 | .991 |
| 355 | 7.64 | 34.243 | 1.21 | - | - | - | 130.1 | 600 | 5.90 | 34.40 | .41 | 27.11 | 96.0 | 1.100 |
| 449 | 6.72 | 34.296 | .73 | - | - | - | 113.9 | | | | | | | |
| 535 | 6.41 | 34.398 | .45 | - | - | - | 102.4 | | | | | | | |
| 609 | 5.83 | 34.395 | .41 | - | - | - | 95.5 | | | | | | | |

| OBSERVED LEVELS OF DEPTH | | | | | | | | STANDARD LEVELS OF DEPTH | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | INPUT | | | | | COMPUTED | | INPUT | | | | COMPUTED | |
| Z | T | S | OXY | PHC | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |

123.42 CCOFI CRUISE 6407 123.42

ALEXANDER AGASSIZ, JULY 26 1964, 1627 GCT, 27 14N 114 59.5W, SOUNDING 930 FM, WIND 280 FORCE 2, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 00.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.37 | 33.795 | 6.10 | - | - | - | 365.3 | 0 | 18.37 | 33.80 | 6.10 | 24.28 | 365.0 | 0 |
| 10 | 18.30 | 33.795 | 6.07 | - | - | - | 363.7 | 10 | 18.30 | 33.80 | 6.07 | 24.30 | 363.3 | .036 |
| 30 | 14.69 | 33.755 | 5.40 | - | - | - | 287.2 | 20 | 17.00 | 33.78 | 5.83 | 24.60 | 334.9 | .071 |
| 40 | 13.68 | 33.730 | 4.91 | - | - | - | 268.8 | 30 | 14.69 | 33.76 | 5.40 | 25.10 | 286.8 | .103 |
| 55 | 12.22 | 33.714 | 4.01 | - | - | - | 242.5 | 50 | 13.00 | 33.72 | 4.48 | 25.42 | 256.5 | .157 |
| 70 | 11.70 | 33.747 | 3.76 | - | - | - | 230.8 | 75 | 11.50 | 33.76 | 3.70 | 25.74 | 226.3 | .218 |
| 95 | 10.59 | 33.852 | 3.39 | - | - | - | 204.0 | 100 | 10.54 | 33.86 | 3.37 | 25.99 | 202.5 | .272 |
| 115 | 10.29 | 33.972 | 3.02 | - | - | - | 190.1 | 125 | 10.23 | 34.02 | 2.80 | 26.17 | 185.6 | .321 |
| 135 | 10.18 | 34.070 | 2.52 | - | - | - | 181.1 | 150 | 10.01 | 34.16 | 2.21 | 26.31 | 171.7 | .366 |
| 155 | 9.96 | 34.180 | 2.11 | - | - | - | 169.4 | 200 | 9.55 | 34.31 | 1.37 | 26.51 | 153.3 | .449 |
| 185 | 9.56 | 34.247 | 1.68 | - | - | - | 158.1 | 250 | 9.36 | 34.39 | .87 | 26.60 | 144.4 | .526 |
| 220 | 9.54 | 34.367 | 1.01 | - | - | - | 148.9 | 300 | 8.91 | 34.38 | .86 | 26.67 | 138.2 | .599 |
| 250 | 9.36 | 34.386 | .87 | - | - | - | 144.7 | 400 | 8.25 | 34.42 | .46 | 26.80 | 125.5 | .738 |
| 301 | 8.90 | 34.384 | .86 | - | - | - | 137.8 | 500 | 7.26 | 34.47 | .44 | 26.99 | 108.0 | .862 |
| 356 | 8.53 | 34.412 | .61 | - | - | - | 130.2 | 600 | 6.24 | 34.44 | .38 | 27.10 | 97.1 | .973 |
| 441 | 7.95 | 34.436 | .39 | - | - | - | 120.0 | | | | | | | |
| 526 | 6.94 | 34.472 | .45 | - | - | - | 103.6 | | | | | | | |
| 611 | 6.17 | 34.430 | .37 | - | - | - | 97.0 | | | | | | | |

127.40 CCOFI CRUISE 6407 127.40

ALEXANDER AGASSIZ, JULY 26 1964, 1147 GCT, 26 44.5N 114 28W, SOUNDING 1465 FM, WIND 320 FORCE 3, WEATHER PARTLY CLOUDY, SEA MODERATE, WIRE ANGLE 05.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.54 | 33.908 | 5.46 | - | - | - | 410.3 | 0 | 20.54 | 33.91 | 5.46 | 23.81 | 410.1 | 0 |
| 10 | 20.53 | 33.910 | 5.35 | - | - | - | 409.9 | 10 | 20.53 | 33.91 | 5.35 | 23.81 | 409.9 | .041 |
| 30 | 18.79 | 33.917 | 5.65 | - | - | - | 366.4 | 20 | 20.50 | 33.91 | 5.35 | 23.82 | 409.1 | .082 |
| 40 | 17.95 | 33.937 | 5.86 | - | - | - | 345.2 | 30 | 18.79 | 33.92 | 5.65 | 24.27 | 366.2 | .121 |
| 55 | 16.55 | 33.793 | 5.89 | - | - | - | 323.9 | 50 | 16.80 | 33.81 | 5.88 | 24.67 | 328.2 | .191 |
| 69 | 15.82 | 33.754 | 5.93 | - | - | - | 310.9 | 75 | 15.33 | 33.75 | 5.77 | 24.96 | 300.8 | .270 |
| 93 | 13.37 | 33.723 | 4.74 | - | - | - | 263.4 | 100 | 12.89 | 33.73 | 4.45 | 25.45 | 253.7 | .340 |
| 112 | 12.22 | 33.772 | 4.05 | - | - | - | 238.2 | 125 | 11.58 | 33.86 | 3.59 | 25.80 | 220.3 | .399 |
| 132 | 11.26 | 33.894 | 3.38 | - | - | - | 212.2 | 150 | 10.64 | 33.98 | 2.94 | 26.07 | 195.3 | .452 |
| 152 | 10.60 | 33.986 | 2.90 | - | - | - | 194.2 | 200 | 9.73 | 34.13 | 2.28 | 26.34 | 169.4 | .545 |
| 181 | 10.16 | 34.102 | 2.41 | - | - | - | 178.4 | 250 | 9.44 | 34.32 | 1.25 | 26.53 | 150.8 | .628 |
| 216 | 9.48 | 34.173 | 2.16 | - | - | - | 162.3 | 300 | 9.06 | 34.40 | .77 | 26.66 | 139.0 | .703 |
| 245 | 9.46 | 34.305 | 1.35 | - | - | - | 152.2 | 400 | 7.99 | 34.40 | .55 | 26.82 | 123.3 | .840 |
| 293 | 9.12 | 34.398 | .80 | - | - | - | 140.1 | 500 | 6.83 | 34.39 | .44 | 26.98 | 108.3 | .963 |
| 347 | 8.60 | 34.418 | .61 | - | - | - | 130.8 | 600 | 6.20 | 34.43 | .33 | 27.10 | 97.4 | 1.074 |
| 431 | 7.60 | 34.382 | .51 | - | - | - | 119.2 | | | | | | | |
| 515 | 6.68 | 34.397 | .41 | - | - | - | 105.8 | | | | | | | |
| 600 | 6.20 | 34.426 | .33 | - | - | - | 97.7 | | | | | | | |

130.30 CCOFI CRUISE 6407 130.30

ALEXANDER AGASSIZ, JULY 21 1964, 0943 GCT, 26 29N 113 29W, SOUNDING 35 FM, WIND 200 FORCE 2, WEATHER CLOUDY, SEA MODERATE, WIRE ANGLE 02.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.80 | 33.918 | 6.09 | 0.43 | 4 | 0.02 | 343.1 | 0 | 17.80 | 33.92 | 6.09 | 24.51 | 342.9 | 0 |
| 9 | 14.42 | 33.756 | 5.22 | 0.79 | 7 | 0.22 | 281.6 | 10 | 13.80 | 33.78 | 4.58 | 25.31 | 267.5 | .031 |
| 20 | 12.17 | 33.868 | 2.89 | 1.87 | 17 | 0.73 | 230.3 | 20 | 12.17 | 33.87 | 2.89 | 25.70 | 230.1 | .055 |
| 30 | 11.60 | 33.863 | 2.83 | 2.00 | 20 | 0.89 | 220.4 | 30 | 11.60 | 33.86 | 2.83 | 25.80 | 220.7 | .078 |
| 50 | 12.08 | 34.191 | .50 | 3.06 | 40 | 0.18 | 204.9 | 50 | 12.08 | 34.19 | .50 | 25.96 | 204.9 | .121 |

130.40 CCOFI CRUISE 6407 130.40

ALEXANDER AGASSIZ, JULY 21 1964, 0506 GCT, 26 14.5N 114 06W, SOUNDING 980 FM, WIND 270 FORCE 3, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 11.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.48 | 33.852 | 5.52 | 0.32 | 0 | 0.00 | 412.8 | 0 | 20.48 | 33.85 | 5.52 | 23.78 | 413.0 | 0 |
| 10 | 20.20 | 33.852 | 5.42 | 0.32 | 1 | 0.01 | 405.8 | 10 | 20.20 | 33.85 | 5.42 | 23.85 | 405.9 | .041 |
| 30 | 18.14 | 33.800 | 5.72 | 0.31 | 1 | 0.01 | 359.6 | 20 | 20.00 | 33.85 | 5.43 | 23.91 | 400.9 | .081 |
| 40 | 17.12 | 33.796 | 6.00 | 0.33 | 1 | 0.00 | 336.4 | 30 | 18.14 | 33.80 | 5.72 | 24.34 | 359.6 | .119 |
| 54 | 16.12 | 33.769 | 5.89 | 0.33 | 1 | 0.00 | 316.3 | 50 | 16.37 | 33.78 | 5.92 | 24.75 | 320.9 | .188 |
| 69 | 15.46 | 33.737 | 5.87 | 0.41 | 1 | 0.03 | 304.5 | 75 | 15.09 | 33.73 | 5.73 | 24.99 | 297.3 | .265 |
| 93 | 13.40 | 33.714 | 4.72 | 0.90 | 6 | 0.00 | 264.6 | 100 | 13.02 | 33.72 | 4.53 | 25.42 | 256.9 | .335 |
| 113 | 12.36 | 33.741 | 4.18 | 1.18 | 11 | 0.00 | 243.1 | 125 | 10.93 | 33.77 | 3.86 | 25.85 | 215.7 | .395 |
| 132 | 10.78 | 33.796 | 3.74 | 1.53 | 17 | 0.01 | 211.3 | 150 | 11.03 | 34.03 | 2.50 | 26.04 | 198.2 | .448 |
| 151 | 11.05 | 34.054 | 2.39 | 2.06 | 24 | 0.00 | 196.8 | 200 | 11.12 | 34.52 | .58 | 26.40 | 163.6 | .540 |
| 180 | 11.16 | 34.402 | 1.06 | - | - | - | 173.0 | 250 | 10.46 | 34.56 | .39 | 26.55 | 149.5 | .621 |
| 215 | 11.04 | 34.568 | .43 | - | - | - | 158.7 | 300 | 9.97 | 34.59 | .29 | 26.66 | 139.2 | .696 |
| 244 | 10.54 | 34.555 | .41 | - | - | - | 151.2 | 400 | 8.64 | 34.51 | .29 | 26.81 | 124.5 | .835 |
| 293 | 10.02 | 34.597 | .30 | - | - | - | 139.5 | 500 | 7.38 | 34.45 | .31 | 26.95 | 111.1 | .960 |
| 346 | 9.56 | 34.570 | .27 | - | - | - | 134.2 | 600 | 6.26 | 34.40 | .33 | 27.07 | 100.3 | 1.074 |
| 429 | 8.16 | 34.481 | .31 | - | - | - | 119.7 | | | | | | | |
| 511 | 7.28 | 34.452 | .32 | - | - | - | 109.6 | | | | | | | |
| 596 | 6.32 | 34.405 | .33 | - | - | - | 100.7 | | | | | | | |

| 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 |

130.50 CCOFI CRUISE 6407 130.50

ALEXANDER AGASSIZ, JULY 20 1964, 2318 GCT, 25 52N 114 47W, SOUNDING 1920 FM, WIND 060 FORCE 2, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 08.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C | 20.70 | 33.848 | 5.49 | 0.34 | 1 | 0.00 | 418.7 | 0 | 20.70 | 33.85 | 5.49 | 23.72 | 418.6 | 0 |
| 10 | 20.18 | 33.867 | 5.48 | 0.33 | 1 | 0.00 | 404.2 | 10 | 20.18 | 33.87 | 5.48 | 23.87 | 404.0 | .041 |
| 30 | 17.78 | 33.774 | 5.94 | 0.33 | 1 | 0.00 | 353.1 | 20 | 19.00 | 33.83 | 5.65 | 24.15 | 377.8 | .080 |
| 40 | 17.26 | 33.755 | 6.14 | 0.33 | 1 | 0.00 | 342.6 | 30 | 17.78 | 33.77 | 5.94 | 24.40 | 353.4 | .117 |
| 50 | 16.74 | 33.743 | 6.15 | 0.33 | 1 | 0.00 | 331.8 | 50 | 16.74 | 33.74 | 6.15 | 24.63 | 332.0 | .186 |
| 65 | 15.92 | 33.717 | 6.07 | 0.33 | 1 | 0.00 | 315.7 | 75 | 15.25 | 33.67 | 6.03 | 24.91 | 305.0 | .266 |
| 80 | 15.20 | 33.665 | 6.02 | 0.38 | 1 | 0.00 | 304.3 | 100 | 13.20 | 33.63 | 4.97 | 25.31 | 266.9 | .338 |
| 99 | 13.31 | 33.627 | 5.08 | 0.82 | 5 | 0.13 | 269.3 | 125 | 11.80 | 33.89 | 3.20 | 25.79 | 222.0 | .400 |
| 124 | 11.83 | 33.879 | 3.25 | 1.70 | 16 | 0.05 | 223.3 | 150 | 11.11 | 34.07 | 2.37 | 26.05 | 196.7 | .453 |
| 144 | 11.22 | 34.024 | 2.54 | 2.04 | 22 | 0.01 | 201.9 | 200 | 10.47 | 34.39 | 1.29 | 26.41 | 162.2 | .544 |
| 174 | 10.74 | 34.231 | 1.80 | - | - | - | 178.5 | 250 | 10.27 | 34.54 | .58 | 26.57 | 147.8 | .624 |
| 203 | 10.44 | 34.403 | 1.25 | - | - | - | 160.8 | 300 | 9.75 | 34.56 | .37 | 26.67 | 137.9 | .699 |
| 233 | 10.31 | 34.492 | .86 | - | - | - | 152.0 | 400 | 8.19 | 34.46 | .39 | 26.84 | 121.7 | .835 |
| 272 | 10.17 | 34.582 | .37 | - | - | - | 143.1 | 500 | 6.97 | 34.44 | .39 | 27.00 | 106.4 | .957 |
| 332 | 9.22 | 34.526 | .37 | - | - | - | 132.1 | | | | | | | |
| 406 | 8.10 | 34.459 | .39 | - | - | - | 120.4 | | | | | | | |
| 481 | 7.16 | 34.440 | .41 | - | - | - | 108.9 | | | | | | | |
| 561 | 6.43 | 34.443 | .35 | - | - | - | 99.2 | | | | | | | |

130.60 CCOFI CRUISE 6407 130.60

ALEXANDER AGASSIZ, JULY 20 1964, 1746 GCT, 25 29.5N 115 23.5W, SOUNDING 2050 FM, WIND 030 FORCE 3, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 07.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C | 20.76 | 33.852 | - | 0.29 | 2 | 0.00 | 419.9 | 0 | 20.76 | 33.85 | - | 23.70 | 420.1 | 0 |
| 10 | 20.67 | 33.852 | - | 0.30 | 2 | 0.00 | 417.7 | 10 | 20.67 | 33.85 | - | 23.73 | 417.8 | .042 |
| 30 | 18.07 | 33.765 | - | 0.30 | 1 | 0.00 | 360.5 | 20 | 19.00 | 33.79 | - | 24.12 | 380.7 | .082 |
| 40 | 17.11 | 33.726 | - | 0.32 | 4 | 0.00 | 341.3 | 30 | 18.07 | 33.76 | - | 24.33 | 360.8 | .119 |
| 54 | 16.28 | 33.747 | - | 0.32 | 2 | 0.00 | 321.4 | 50 | 16.60 | 33.74 | - | 24.66 | 328.9 | .188 |
| 69 | 15.60 | 33.718 | - | 0.37 | 1 | 0.00 | 308.8 | 75 | 15.27 | 33.72 | - | 24.95 | 301.7 | .268 |
| 94 | 13.92 | 33.712 | - | 0.74 | 5 | 0.04 | 274.9 | 100 | 13.48 | 33.72 | - | 25.33 | 265.7 | .339 |
| 114 | 12.33 | 33.774 | - | 1.33 | 11 | 0.02 | 240.1 | 125 | 11.69 | 33.87 | - | 25.79 | 221.5 | .401 |
| 134 | 11.26 | 33.937 | - | 1.75 | 18 | 0.00 | 209.1 | 150 | 10.65 | 34.01 | - | 26.09 | 193.3 | .453 |
| 153 | 10.60 | 34.027 | - | 2.01 | 24 | 0.01 | 191.2 | 200 | 10.61 | 34.35 | - | 26.36 | 167.5 | .545 |
| 183 | 10.66 | 34.262 | - | - | - | - | 174.8 | 250 | 10.02 | 34.48 | - | 26.56 | 148.2 | .627 |
| 218 | 10.50 | 34.427 | - | - | - | - | 160.0 | 300 | 9.46 | 34.49 | - | 26.66 | 138.5 | .701 |
| 248 | 10.04 | 34.479 | - | - | - | - | 148.6 | 400 | 8.20 | 34.47 | - | 26.85 | 121.1 | .838 |
| 298 | 9.48 | 34.489 | - | - | - | - | 138.9 | 500 | 7.18 | 34.45 | - | 26.98 | 108.4 | .960 |
| 353 | 8.90 | 34.494 | - | - | - | - | 129.6 | 600 | 6.25 | 34.44 | - | 27.10 | 97.2 | 1.071 |
| 437 | 7.68 | 34.446 | - | - | - | - | 115.5 | | | | | | | |
| 521 | 7.01 | 34.445 | - | - | - | - | 106.5 | | | | | | | |
| 606 | 6.20 | 34.436 | - | - | - | - | 96.9 | | | | | | | |

130.70 CCOFI CRUISE 6407 130.70

ALEXANDER AGASSIZ, JULY 20 1964, 1218 GCT, 25 07.5N 116 05W, SOUNDING 2056 FM, WIND 030 FORCE 3, WEATHER MISSING, SEA ROUGH, WIRE ANGLE 14.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C | 21.02 | 33.910 | 5.36 | 0.29 | 1 | 0.00 | 422.4 | 0 | 21.02 | 33.91 | 5.36 | 23.68 | 422.4 | 0 |
| 9 | 21.02 | 33.912 | 5.32 | 0.30 | 1 | 0.00 | 422.3 | 10 | 21.02 | 33.91 | 5.32 | 23.68 | 422.4 | .042 |
| 29 | 18.94 | 33.814 | 5.58 | 0.32 | 1 | 0.00 | 377.5 | 20 | 19.50 | 33.84 | 5.48 | 24.03 | 389.3 | .083 |
| 39 | 18.03 | 33.774 | 5.75 | 0.32 | 1 | 0.01 | 358.9 | 30 | 18.93 | 33.81 | 5.59 | 24.15 | 377.6 | .121 |
| 53 | 17.16 | 33.805 | 5.95 | 0.29 | 1 | 0.00 | 336.7 | 50 | 17.32 | 33.80 | 5.93 | 24.54 | 340.6 | .193 |
| 67 | 16.45 | 33.789 | 5.95 | 0.29 | 1 | 0.00 | 322.0 | 75 | 16.02 | 33.75 | 5.94 | 24.80 | 315.5 | .276 |
| 93 | 14.88 | 33.657 | 5.88 | 0.40 | 2 | 0.01 | 298.3 | 100 | 14.30 | 33.66 | 5.54 | 25.11 | 286.2 | .352 |
| 112 | 13.44 | 33.721 | 4.72 | 0.87 | 6 | 0.02 | 264.9 | 125 | 12.42 | 33.73 | 4.35 | 25.54 | 245.0 | .419 |
| 131 | 12.06 | 33.736 | 4.21 | 1.19 | 11 | 0.00 | 238.0 | 150 | 11.02 | 33.88 | 3.36 | 25.92 | 209.1 | .476 |
| 149 | 11.06 | 33.870 | 3.40 | 1.65 | 17 | 0.00 | 210.6 | 200 | 10.02 | 34.16 | 2.17 | 26.31 | 171.8 | .574 |
| 179 | 10.29 | 34.029 | 2.73 | - | - | - | 185.9 | 250 | 9.45 | 34.25 | 1.73 | 26.48 | 156.1 | .658 |
| 211 | 9.90 | 34.199 | 1.99 | - | - | - | 167.0 | 300 | 8.81 | 34.31 | 1.20 | 26.63 | 141.9 | .735 |
| 241 | 9.58 | 34.237 | 1.79 | - | - | - | 159.1 | 400 | 7.95 | 34.40 | .51 | 26.83 | 122.7 | .874 |
| 289 | 8.84 | 34.289 | 1.34 | - | - | - | 143.9 | 500 | 7.12 | 34.44 | .36 | 26.98 | 108.4 | .997 |
| 342 | 8.72 | 34.415 | .60 | - | - | - | 132.8 | 600 | 6.24 | 34.45 | .31 | 27.11 | 96.4 | 1.107 |
| 425 | 7.62 | 34.398 | .48 | - | - | - | 118.3 | | | | | | | |
| 511 | 7.04 | 34.443 | .35 | - | - | - | 107.1 | | | | | | | |
| 593 | 6.29 | 34.445 | .31 | - | - | - | 97.4 | | | | | | | |

| 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 |

130.80 CCCFI CRUISE 6407 130.80

ALEXANDER AGASSIZ, JULY 19 1964, 2317 GCT, 24 48.5N 116 40.5W, SOUNDING 2145 FM, WIND 360 FORCE 3, WEATHER CLOUDY, SEA ROUGH, WIRE ANGLE 15.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.28 | 33.828 | 5.43 | 0.34 | 1 | 0.00 | 409.5 | 0 | 20.28 | 33.83 | 5.43 | 23.82 | 409.4 | 0 |
| 10 | 20.28 | 33.821 | 5.43 | 0.43 | 1 | 0.00 | 410.0 | 10 | 20.28 | 33.82 | 5.43 | 23.81 | 410.1 | .041 |
| 29 | 19.08 | 34.006 | 5.55 | 0.33 | 1 | 0.00 | 367.0 | 20 | 19.45 | 33.88 | 5.49 | 24.07 | 385.1 | .081 |
| 39 | 18.80 | 34.092 | 5.66 | 0.32 | 1 | 0.00 | 354.0 | 30 | 19.09 | 34.02 | 5.56 | 24.27 | 366.2 | .118 |
| 53 | 17.64 | 33.934 | 5.66 | 0.32 | 2 | 0.00 | 338.2 | 50 | 17.83 | 33.96 | 5.66 | 24.54 | 340.7 | .189 |
| 67 | 17.14 | 33.923 | 5.84 | 0.31 | 1 | 0.00 | 327.6 | 75 | 17.00 | 33.92 | 5.84 | 24.71 | 324.7 | .273 |
| 91 | 15.14 | 33.819 | 5.42 | 0.64 | 3 | 0.08 | 291.8 | 100 | 14.22 | 33.78 | 5.13 | 25.22 | 275.9 | .349 |
| 110 | 13.32 | 33.763 | 4.81 | 0.90 | 6 | 0.10 | 259.5 | 125 | 12.27 | 33.79 | 4.37 | 25.62 | 237.8 | .414 |
| 129 | 11.99 | 33.802 | 4.22 | 1.20 | 11 | 0.07 | 231.9 | 150 | 10.98 | 33.91 | 3.29 | 25.95 | 206.2 | .470 |
| 148 | 11.02 | 33.901 | 3.37 | 1.67 | 19 | 0.06 | 207.6 | 200 | 10.22 | 34.15 | 2.20 | 26.27 | 175.8 | .567 |
| 176 | 10.41 | 34.057 | 2.59 | - | - | - | 185.8 | 250 | 9.57 | 34.33 | 1.32 | 26.52 | 152.1 | .652 |
| 209 | 10.13 | 34.184 | 2.05 | - | - | - | 171.8 | 300 | 9.13 | 34.43 | .70 | 26.67 | 137.8 | .727 |
| 238 | 9.69 | 34.296 | 1.55 | - | - | - | 156.5 | 400 | 7.97 | 34.43 | .44 | 26.85 | 120.8 | .863 |
| 284 | 9.28 | 34.411 | .85 | - | - | - | 141.6 | 500 | 6.80 | 34.41 | .36 | 27.00 | 106.4 | .983 |
| 336 | 8.72 | 34.449 | .51 | - | - | - | 130.2 | 600 | 6.20 | 34.45 | - | 27.11 | 95.9 | 1.093 |
| 417 | 7.77 | 34.421 | .43 | - | - | - | 118.6 | | | | | | | |
| 498 | 6.82 | 34.405 | .37 | - | - | - | 107.0 | | | | | | | |
| 581 | 6.28 | 34.443 | .31 | - | - | - | 97.4 | | | | | | | |

130.90 CCCFI CRUISE 6407 130.90

ALEXANDER AGASSIZ, JULY 20 1964, 0204 GCT, 24 27N 117 19.5W, SOUNDING 2100 FM, WIND 080 FORCE 3, WEATHER CLOUDY, SEA ROUGH, WIRE ANGLE 23.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.40 | 33.833 | 5.49 | 0.35 | 1 | 0.00 | 412.2 | 0 | 20.40 | 33.83 | 5.49 | 23.79 | 412.4 | 0 |
| 9 | 20.40 | 33.830 | 5.58 | 0.32 | 1 | 0.00 | 412.4 | 10 | 20.40 | 33.83 | 5.58 | 23.79 | 412.4 | .041 |
| 28 | 19.32 | 33.986 | 5.64 | 0.32 | 1 | 0.00 | 374.2 | 20 | 19.80 | 33.88 | 5.63 | 23.98 | 393.7 | .082 |
| 36 | 19.10 | 34.124 | 5.72 | 0.33 | 1 | 0.00 | 358.9 | 30 | 19.29 | 34.02 | 5.66 | 24.22 | 371.0 | .120 |
| 50 | 18.70 | 34.103 | 5.78 | 0.28 | 1 | 0.00 | 350.8 | 50 | 18.70 | 34.10 | 5.78 | 24.43 | 351.0 | .192 |
| 63 | 17.88 | 34.017 | 5.92 | 0.31 | 1 | 0.00 | 337.7 | 75 | 17.39 | 34.00 | 5.92 | 24.67 | 327.7 | .278 |
| 86 | 17.02 | 33.992 | 5.90 | 0.35 | 1 | 0.00 | 319.9 | 100 | 15.62 | 33.89 | 5.48 | 25.00 | 296.7 | .356 |
| 105 | 15.02 | 33.851 | 5.29 | 0.61 | 4 | 0.12 | 287.0 | 125 | 12.68 | 33.77 | 4.44 | 25.52 | 246.8 | .425 |
| 123 | 12.84 | 33.767 | 4.49 | 1.08 | 9 | 0.01 | 250.1 | 150 | 11.33 | 33.89 | 3.50 | 25.87 | 213.7 | .484 |
| 141 | 11.54 | 33.819 | 3.97 | 1.42 | 13 | 0.00 | 222.6 | 200 | 10.74 | 34.27 | 1.64 | 26.27 | 175.6 | .583 |
| 167 | 11.08 | 34.037 | 2.64 | - | - | - | 198.6 | 250 | 10.27 | 34.45 | .93 | 26.50 | 154.5 | .668 |
| 199 | 10.75 | 34.263 | 1.65 | - | - | - | 176.3 | 300 | 9.64 | 34.46 | .77 | 26.61 | 143.6 | .745 |
| 226 | 10.50 | 34.385 | 1.18 | - | - | - | 163.1 | 400 | 8.44 | 34.46 | .47 | 26.80 | 125.3 | .886 |
| 272 | 10.02 | 34.471 | .81 | - | - | - | 148.8 | 500 | 7.19 | 34.45 | .39 | 26.98 | 108.6 | 1.011 |
| 322 | 9.35 | 34.452 | .73 | - | - | - | 139.6 | | | | | | | |
| 401 | 8.42 | 34.456 | .47 | - | - | - | 125.3 | | | | | | | |
| 481 | 7.41 | 34.449 | .40 | - | - | - | 111.6 | | | | | | | |
| 563 | 6.52 | 34.443 | .34 | - | - | - | 100.4 | | | | | | | |

137.23 CCCFI CRUISE 6407 137.23

ALEXANDER AGASSIZ, JULY 22 1964, 1316 GCT, 25 34N 112 19.5W, SOUNDING 40 FM, WIND 330 FORCE 2, WEATHER PARTLY CLOUDY, SEA MODERATE, WIRE ANGLE 02.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.46 | 34.193 | 6.14 | 0.12 | 2 | 0.01 | 495.4 | 0 | 24.46 | 34.19 | 6.14 | 22.91 | 495.6 | 0 |
| 10 | 23.37 | 34.119 | 6.34 | 0.14 | 2 | 0.01 | 470.1 | 10 | 23.37 | 34.12 | 6.34 | 23.18 | 470.1 | .048 |
| 20 | 16.56 | 33.840 | 7.39 | 0.08 | 1 | 0.00 | 320.7 | 20 | 16.56 | 33.84 | 7.39 | 24.75 | 320.7 | .088 |
| 30 | 13.80 | 33.874 | 3.70 | 0.63 | 7 | 0.15 | 260.6 | 30 | 13.80 | 33.87 | 3.70 | 25.38 | 260.9 | .117 |
| 40 | 12.87 | 33.972 | 2.45 | 1.84 | 16 | 0.32 | 235.6 | 50 | 12.61 | 34.09 | 1.76 | 25.78 | 222.0 | .166 |
| 55 | 12.54 | 34.165 | 1.33 | 2.40 | 25 | 0.03 | 215.2 | | | | | | | |

137.30 CCCFI CRUISE 6407 137.30

ALEXANDER AGASSIZ, JULY 22 1964, 1625 GCT, 25 19.5N 112 47W, SOUNDING 184 FM, WIND 030 FORCE 3, WEATHER CLOUDY, SEA ROUGH, WIRE ANGLE 03.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.82 | 34.026 | 5.67 | 0.47 | 1 | 0.00 | 461.8 | 0 | 22.82 | 34.03 | 5.67 | 23.27 | 461.5 | 0 |
| 10 | 21.90 | 33.996 | 5.92 | 0.30 | 1 | 0.00 | 439.2 | 10 | 21.90 | 34.00 | 5.92 | 23.51 | 438.9 | .045 |
| 30 | 14.08 | 33.871 | 4.95 | 0.72 | 5 | 0.23 | 266.4 | 20 | 16.40 | 33.88 | 5.44 | 24.82 | 314.3 | .083 |
| 45 | 12.57 | 33.881 | 3.21 | 1.58 | 14 | 0.26 | 236.6 | 30 | 14.08 | 33.87 | 4.95 | 25.32 | 266.5 | .112 |
| 60 | 12.52 | 34.088 | 1.41 | 2.30 | 19 | 0.19 | 220.5 | 50 | 12.54 | 33.97 | 2.40 | 25.71 | 229.5 | .162 |
| 75 | 12.36 | 34.234 | .93 | 2.53 | 25 | 0.10 | 206.8 | 75 | 12.36 | 34.23 | .93 | 25.94 | 207.1 | .217 |
| 90 | 12.08 | 34.349 | .78 | 2.58 | 28 | 0.04 | 193.2 | 100 | 11.91 | 34.39 | .74 | 26.15 | 187.1 | .266 |
| 110 | 11.78 | 34.423 | .68 | 2.76 | 30 | 0.02 | 182.4 | 125 | 11.67 | 34.48 | .55 | 26.27 | 176.2 | .313 |
| 135 | 11.60 | 34.531 | .46 | 2.89 | 32 | 0.03 | 171.2 | 150 | 11.45 | 34.58 | .33 | 26.39 | 165.0 | .356 |
| 155 | 11.40 | 34.590 | .32 | 2.94 | 34 | 0.02 | 163.4 | 200 | 10.99 | 34.61 | .46 | 26.49 | 154.8 | .438 |
| 200 | 10.99 | 34.608 | .46 | - | - | - | 154.9 | 250 | 10.57 | 34.60 | .21 | 26.56 | 148.4 | .516 |
| 234 | 10.71 | 34.602 | .24 | - | - | - | 150.6 | 300 | 10.23 | 34.58 | .27 | 26.60 | 144.2 | .593 |
| 269 | 10.42 | 34.584 | .20 | - | - | - | 147.1 | | | | | | | |
| 309 | 10.20 | 34.582 | .27 | - | - | - | 143.6 | | | | | | | |

| OBSERVED LEVELS OF DEPTH | | | | | | | | STANDARD LEVELS OF DEPTH | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | INPUT | | | | | COMPUTED | | | INPUT | | | | COMPUTED | |
| Z | T | S | OXY | PHC | SIL | NIT | D*T | Z | T | S | OXY | SIG*T | D*T | DD |

137.40 CCOFI CRUISE 6407 137.40

ALEXANDER AGASSIZ, JULY 22 1964, 2135 GCT, 25 01N 113 24W, SOUNDING 1500 FM, WIND 270 FORCE 3, WEATHER PARTLY CLOUDY, SEA ROUGH, WIRE ANGLE 22.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.54 | 33.953 | 5.22 | 0.33 | 1 | 0.00 | 486.8 | 0 | 23.54 | 33.95 | 5.22 | 23.00 | 487.0 | 0 |
| 9 | 21.56 | 33.879 | 5.33 | 0.32 | 1 | 0.00 | 438.7 | 10 | 19.80 | 33.82 | 5.56 | 23.94 | 398.1 | .044 |
| 28 | 17.56 | 33.764 | 5.95 | 0.33 | 2 | 0.01 | 348.7 | 20 | 18.25 | 33.78 | 5.84 | 24.30 | 363.6 | .082 |
| 38 | 16.80 | 33.752 | 6.09 | 0.37 | 2 | 0.01 | 332.5 | 30 | 17.37 | 33.76 | 6.00 | 24.50 | 344.7 | .118 |
| 51 | 16.15 | 33.777 | 5.97 | 0.38 | 2 | 0.01 | 316.3 | 50 | 16.20 | 33.78 | 5.98 | 24.78 | 317.2 | .184 |
| 65 | 15.42 | 33.761 | 5.80 | 0.46 | 2 | 0.04 | 301.9 | 75 | 14.90 | 33.77 | 5.53 | 25.07 | 290.4 | .261 |
| 88 | 13.86 | 33.776 | 4.82 | 1.03 | 7 | 0.10 | 269.0 | 100 | 12.80 | 33.82 | 3.84 | 25.54 | 245.4 | .328 |
| 105 | 12.48 | 33.860 | 3.36 | 1.53 | 14 | 0.03 | 236.5 | 125 | 12.32 | 34.23 | 1.58 | 25.95 | 206.4 | .385 |
| 123 | 12.37 | 34.219 | 1.63 | 2.28 | 23 | 0.01 | 208.1 | 150 | 11.41 | 34.34 | 1.27 | 26.21 | 182.0 | .435 |
| 141 | 11.70 | 34.298 | 1.38 | 2.47 | 26 | 0.01 | 190.2 | 200 | 10.76 | 34.53 | .61 | 26.47 | 156.7 | .522 |
| 169 | 11.04 | 34.418 | 1.06 | - | - | - | 169.8 | 250 | 10.19 | 34.54 | .43 | 26.58 | 146.5 | .600 |
| 200 | 10.76 | 34.526 | .61 | - | - | - | 157.0 | 300 | 9.62 | 34.55 | .32 | 26.68 | 136.6 | .673 |
| 229 | 10.40 | 34.532 | .50 | - | - | - | 150.6 | 400 | 8.26 | 34.49 | .59 | 26.85 | 120.4 | .809 |
| 273 | 9.98 | 34.556 | .37 | - | - | - | 141.9 | 500 | 7.33 | 34.49 | .36 | 26.99 | 107.4 | .930 |
| 325 | 9.26 | 34.527 | .29 | - | - | - | 132.7 | | | | | | | |
| 402 | 8.24 | 34.485 | .60 | - | - | - | 120.5 | | | | | | | |
| 485 | 7.50 | 34.491 | .35 | - | - | - | 109.7 | | | | | | | |
| 567 | 6.60 | 34.461 | .48 | - | - | - | 100.0 | | | | | | | |

137.50 CCOFI CRUISE 6407 137.50

ALEXANDER AGASSIZ, JULY 23 1964, 0310 GCT, 24 41N 114 00.5W, SOUNDING 1930 FM, WIND 270 FORCE 4, WEATHER PARTLY CLOUDY, SEA VERY ROUGH, WIRE ANGLE 21.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 22.70 | 33.901 | 5.30 | 0.31 | 0 | 0.01 | 467.5 | 0 | 22.70 | 33.90 | 5.30 | 23.21 | 467.6 | 0 |
| 10 | 22.25 | 33.877 | 5.39 | 0.29 | 2 | 0.02 | 457.1 | 10 | 22.25 | 33.88 | 5.39 | 23.32 | 456.9 | .046 |
| 34 | 16.38 | 33.730 | 6.29 | 0.31 | 1 | 0.02 | 324.8 | 20 | 18.80 | 33.77 | 6.04 | 24.15 | 377.4 | .088 |
| 43 | 15.67 | 33.722 | 6.26 | 0.35 | 1 | 0.00 | 310.0 | 30 | 16.70 | 33.73 | 6.28 | 24.63 | 331.8 | .124 |
| 57 | 13.96 | 33.678 | 5.24 | 0.76 | 5 | 0.40 | 278.2 | 50 | 14.78 | 33.70 | 5.78 | 25.04 | 293.1 | .186 |
| 71 | 12.98 | 33.703 | 4.64 | 1.11 | 8 | 0.46 | 257.4 | 75 | 12.60 | 33.71 | 4.49 | 25.49 | 249.8 | .255 |
| 95 | 11.50 | 33.752 | 3.85 | 1.47 | 14 | 0.06 | 226.9 | 100 | 11.47 | 33.84 | 3.37 | 25.81 | 219.9 | .314 |
| 113 | 11.42 | 34.063 | 2.13 | 2.16 | 25 | 0.02 | 202.5 | 125 | 11.03 | 34.14 | 1.93 | 26.12 | 190.1 | .366 |
| 132 | 10.97 | 34.175 | 1.85 | 2.32 | 28 | 0.02 | 186.5 | 150 | 10.79 | 34.28 | 1.47 | 26.27 | 175.7 | .412 |
| 160 | 10.71 | 34.329 | 1.26 | 2.57 | 32 | 0.02 | 170.7 | 200 | 10.38 | 34.44 | .76 | 26.47 | 157.0 | .497 |
| 187 | 10.52 | 34.418 | .91 | - | - | - | 161.0 | 250 | 9.77 | 34.49 | .45 | 26.61 | 143.4 | .575 |
| 224 | 10.06 | 34.474 | .54 | - | - | - | 149.3 | 300 | 9.12 | 34.47 | .47 | 26.70 | 134.7 | .647 |
| 251 | 9.76 | 34.494 | .45 | - | - | - | 143.0 | 400 | 7.99 | 34.46 | .39 | 26.87 | 118.8 | .780 |
| 298 | 9.14 | 34.474 | .47 | - | - | - | 134.7 | 500 | 6.92 | 34.44 | .31 | 27.01 | 105.7 | .900 |
| 358 | 8.42 | 34.460 | .43 | - | - | - | 125.0 | 600 | 5.89 | 34.44 | .34 | 27.15 | 92.9 | 1.007 |
| 452 | 7.44 | 34.446 | .36 | - | - | - | 112.2 | | | | | | | |
| 537 | 6.52 | 34.432 | .29 | - | - | - | 101.2 | | | | | | | |
| 610 | 5.80 | 34.443 | .35 | - | - | - | 91.6 | | | | | | | |

137.60 CCOFI CRUISE 6407 137.60

ALEXANDER AGASSIZ, JULY 23 1964, 0900 GCT, 24 18.5N 114 40W, SOUNDING 2060 FM, WIND 060 FORCE 3, WEATHER PARTLY CLOUDY, SEA ROUGH, WIRE ANGLE 27.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 20.75 | 33.841 | 5.46 | 0.27 | 1 | 0.01 | 420.5 | 0 | 20.75 | 33.84 | 5.46 | 23.70 | 420.6 | 0 |
| 10 | 20.56 | 33.840 | 5.49 | 0.27 | 2 | 0.01 | 415.7 | 10 | 20.56 | 33.84 | 5.49 | 23.75 | 415.7 | .042 |
| 28 | 18.02 | 33.822 | 5.80 | 0.28 | 1 | 0.01 | 355.2 | 20 | 18.55 | 33.83 | 5.72 | 24.26 | 367.0 | .081 |
| 36 | 17.45 | 33.772 | 5.94 | 0.30 | 1 | 0.01 | 345.6 | 30 | 17.92 | 33.82 | 5.82 | 24.41 | 353.0 | .117 |
| 50 | 16.36 | 33.733 | 6.15 | 0.29 | 1 | 0.00 | 324.1 | 50 | 16.36 | 33.73 | 6.15 | 24.71 | 324.3 | .185 |
| 63 | 16.01 | 33.727 | 6.22 | 0.30 | 1 | 0.00 | 317.0 | 75 | 15.10 | 33.71 | 5.84 | 24.98 | 298.9 | .263 |
| 84 | 14.04 | 33.696 | 5.22 | 0.68 | 5 | 0.17 | 278.4 | 100 | 12.80 | 33.72 | 4.46 | 25.46 | 252.8 | .333 |
| 102 | 12.58 | 33.727 | 4.31 | 1.17 | 10 | 0.02 | 248.2 | 125 | 11.02 | 33.90 | 3.14 | 25.94 | 207.7 | .391 |
| 117 | 11.22 | 33.823 | 3.55 | 1.60 | 17 | 0.01 | 216.8 | 150 | 10.72 | 34.14 | 2.10 | 26.18 | 184.9 | .441 |
| 135 | 10.83 | 34.051 | 2.44 | 2.04 | 24 | 0.00 | 193.3 | 200 | 10.42 | 34.40 | 1.19 | 26.43 | 160.6 | .529 |
| 158 | 10.68 | 34.179 | 1.94 | - | - | - | 181.3 | 250 | 9.80 | 34.47 | .45 | 26.59 | 145.4 | .608 |
| 187 | 10.53 | 34.360 | 1.22 | - | - | - | 165.4 | 300 | 9.20 | 34.48 | .46 | 26.70 | 135.2 | .681 |
| 212 | 10.28 | 34.423 | 1.16 | - | - | - | 156.6 | 400 | 8.00 | 34.44 | .38 | 26.85 | 120.4 | .815 |
| 254 | 9.76 | 34.471 | .40 | - | - | - | 144.7 | 500 | 6.83 | 34.43 | .36 | 27.01 | 105.3 | .936 |
| 303 | 9.16 | 34.478 | .47 | - | - | - | 134.8 | | | | | | | |
| 377 | 8.30 | 34.454 | .40 | - | - | - | 123.7 | | | | | | | |
| 465 | 7.18 | 34.423 | .37 | - | - | - | 110.4 | | | | | | | |
| 536 | 6.56 | 34.436 | .36 | - | - | - | 101.4 | | | | | | | |

| 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 |

137.70 CCCFI CRUISE 6407 137.70

ALEXANDER AGASSIZ, JULY 23 1964, 1413 GCT, 24 00N 115 18W, SOUNDING 2042 FM, WIND 320 FORCE 4, WEATHER PARTLY CLOUDY, SEA ROUGH, WIRE ANGLE 26.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 21.81 | 33.852 | 5.35 | 0.30 | 0 | 0.00 | 447.2 | 0 | 21.81 | 33.85 | 5.35 | 23.42 | 447.4 | 0 |
| 10 | 21.76 | 33.851 | 5.33 | 0.30 | 1 | 0.00 | 446.0 | 10 | 21.76 | 33.85 | 5.33 | 23.43 | 446.1 | .045 |
| 32 | 18.52 | 33.905 | 5.78 | 0.29 | 1 | 0.00 | 360.9 | 20 | 21.00 | 33.86 | 5.42 | 23.65 | 425.5 | .088 |
| 41 | 17.70 | 33.849 | 5.91 | 0.32 | 1 | 0.00 | 345.8 | 30 | 18.70 | 33.91 | 5.75 | 24.28 | 364.8 | .128 |
| 54 | 17.10 | 33.834 | 5.95 | 0.33 | 1 | 0.00 | 333.2 | 50 | 17.24 | 33.84 | 5.94 | 24.59 | 335.9 | .198 |
| 68 | 16.63 | 33.828 | 6.01 | 0.34 | 1 | 0.00 | 323.1 | 75 | 16.28 | 33.83 | 5.92 | 24.80 | 315.3 | .280 |
| 89 | 15.12 | 33.815 | 5.41 | 0.57 | 3 | 0.08 | 291.7 | 100 | 13.72 | 33.75 | 4.75 | 25.30 | 268.2 | .354 |
| 107 | 12.94 | 33.733 | 4.35 | 1.12 | 9 | 0.03 | 254.4 | 125 | 12.07 | 33.92 | 3.22 | 25.76 | 224.6 | .416 |
| 124 | 12.10 | 33.905 | 3.25 | 1.65 | 15 | 0.01 | 226.3 | 150 | 11.20 | 34.14 | 2.11 | 26.09 | 193.0 | .469 |
| 150 | 11.20 | 34.136 | 2.11 | 2.21 | 25 | 0.00 | 193.3 | 200 | 10.58 | 34.46 | .87 | 26.45 | 158.9 | .559 |
| 176 | 10.92 | 34.363 | 1.26 | - | - | - | 171.8 | 250 | 9.85 | 34.46 | .72 | 26.58 | 146.9 | .638 |
| 210 | 10.42 | 34.463 | .81 | - | - | - | 156.0 | 300 | 9.31 | 34.47 | .55 | 26.67 | 137.7 | .712 |
| 237 | 10.00 | 34.447 | .76 | - | - | - | 150.3 | 400 | 8.08 | 34.45 | .46 | 26.85 | 120.8 | .848 |
| 280 | 9.55 | 34.478 | .59 | - | - | - | 140.8 | 500 | 6.98 | 34.43 | .41 | 26.99 | 107.3 | .969 |
| 337 | 8.84 | 34.462 | .51 | - | - | - | 131.1 | 600 | 6.26 | 34.45 | - | 27.11 | 96.6 | 1.079 |
| 428 | 7.74 | 34.441 | .43 | - | - | - | 116.7 | | | | | | | |
| 513 | 6.84 | 34.425 | .40 | - | - | - | 105.8 | | | | | | | |
| 584 | 6.36 | 34.445 | .37 | - | - | - | 98.2 | | | | | | | |

137.80 CCCFI CRUISE 6407 137.80

ALEXANDER AGASSIZ, JULY 23 1964, 1900 GCT, 23 39.5N 115 59.5W, SOUNDING 2040 FM, WIND 320 FORCE 4, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 30.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 22.45 | 33.962 | 5.22 | 0.31 | 1 | 0.00 | 456.4 | 0 | 22.45 | 33.96 | 5.22 | 23.32 | 456.5 | 0 |
| 9 | 22.43 | 33.966 | 5.21 | 0.34 | 1 | 0.00 | 455.5 | 10 | 22.43 | 33.97 | 5.21 | 23.34 | 455.2 | .046 |
| 31 | 18.87 | 33.991 | 5.69 | 0.32 | 1 | 0.00 | 363.0 | 20 | 20.00 | 33.99 | 5.54 | 24.01 | 390.7 | .088 |
| 39 | 18.54 | 33.990 | 5.73 | 0.30 | 1 | 0.01 | 355.2 | 30 | 18.92 | 33.99 | 5.68 | 24.29 | 364.3 | .126 |
| 57 | 18.32 | 34.024 | 5.73 | 0.33 | 1 | 0.01 | 347.5 | 50 | 18.40 | 34.02 | 5.73 | 24.44 | 349.7 | .197 |
| 66 | 17.66 | 33.961 | 5.86 | 0.34 | 1 | 0.00 | 336.7 | 75 | 17.20 | 33.92 | 5.84 | 24.66 | 329.2 | .283 |
| 88 | 16.28 | 33.859 | 5.73 | 0.43 | 1 | 0.01 | 313.2 | 100 | 15.16 | 33.81 | 5.26 | 25.04 | 292.9 | .361 |
| 104 | 14.56 | 33.792 | 4.90 | 0.74 | 4 | 0.07 | 281.8 | 125 | 12.49 | 33.77 | 3.86 | 25.56 | 243.3 | .429 |
| 121 | 12.78 | 33.771 | 3.98 | 1.29 | 10 | 0.03 | 248.6 | 150 | 11.08 | 33.77 | 3.44 | 25.82 | 218.3 | .487 |
| 146 | 11.26 | 33.754 | 3.50 | 1.58 | 17 | 0.02 | 222.6 | 200 | 10.84 | 34.33 | 1.36 | 26.30 | 172.9 | .587 |
| 170 | 10.58 | 33.957 | 3.04 | - | - | - | 196.0 | 250 | 10.30 | 34.46 | .70 | 26.50 | 154.2 | .671 |
| 203 | 10.86 | 34.349 | 1.23 | - | - | - | 171.8 | 300 | 9.36 | 34.45 | .68 | 26.65 | 139.9 | .748 |
| 227 | 10.82 | 34.465 | .78 | - | - | - | 162.6 | 400 | 8.03 | 34.44 | .49 | 26.85 | 120.9 | .885 |
| 268 | 9.83 | 34.445 | .69 | - | - | - | 147.7 | 500 | 6.93 | 34.39 | .69 | 26.97 | 109.6 | 1.007 |
| 323 | 9.02 | 34.446 | .67 | - | - | - | 135.0 | | | | | | | |
| 408 | 7.94 | 34.437 | .48 | - | - | - | 119.8 | | | | | | | |
| 485 | 7.04 | 34.389 | .69 | - | - | - | 111.1 | | | | | | | |
| 558 | 6.36 | 34.405 | .57 | - | - | - | 101.2 | | | | | | | |

140.30 CCCFI CRUISE 6407 140.30

ALEXANDER AGASSIZ, JULY 24 1964, 2202 GCT, 24 45N 112 24.5W, SOUNDING 58 FM, WIND 290 FORCE 3, WEATHER PARTLY CLOUDY, SEA MODERATE, WIRE ANGLE 05.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.24 | 34.057 | 5.96 | 0.37 | 2 | 0.02 | 417.5 | 0 | 21.24 | 34.06 | 5.96 | 23.73 | 417.3 | 0 |
| 10 | 19.16 | 33.908 | 6.21 | 0.28 | 1 | 0.01 | 376.0 | 10 | 19.16 | 33.91 | 6.21 | 24.17 | 375.9 | .040 |
| 20 | 16.06 | 33.825 | 5.67 | 0.40 | 2 | 0.05 | 310.9 | 20 | 16.06 | 33.82 | 5.67 | 24.85 | 311.2 | .074 |
| 30 | 13.76 | 33.792 | 3.82 | 1.07 | 7 | 0.43 | 265.9 | 30 | 13.76 | 33.79 | 3.82 | 25.32 | 266.0 | .103 |
| 50 | 12.10 | 33.939 | 2.89 | 1.73 | 17 | 0.08 | 223.8 | 50 | 12.10 | 33.94 | 2.89 | 25.77 | 223.7 | .152 |
| 76 | 12.12 | 34.338 | .89 | 2.64 | 29 | 0.16 | 194.8 | 75 | 12.11 | 34.33 | .90 | 26.07 | 195.2 | .205 |

140.40 CCCFI CRUISE 6407 140.40

ALEXANDER AGASSIZ, JULY 24 1964, 1641 GCT, 24 25.5N 113 02W, SOUNDING 1793 FM, WIND 310 FORCE 3, WEATHER PARTLY CLOUDY, SEA MODERATE, WIRE ANGLE 19.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.16 | 33.848 | 5.53 | 0.23 | 0 | 0.00 | 430.5 | 0 | 21.16 | 33.85 | 5.53 | 23.60 | 430.4 | 0 |
| 9 | 20.88 | 33.845 | 5.60 | 0.21 | 0 | 0.00 | 423.5 | 10 | 20.80 | 33.84 | 5.62 | 23.69 | 421.8 | .043 |
| 28 | 16.65 | 33.734 | 6.16 | 0.42 | 1 | 0.00 | 330.4 | 20 | 17.55 | 33.75 | 6.04 | 24.44 | 349.5 | .081 |
| 38 | 15.67 | 33.725 | 6.26 | 0.36 | 1 | 0.00 | 309.8 | 30 | 16.47 | 33.73 | 6.18 | 24.68 | 326.8 | .115 |
| 52 | 14.74 | 33.708 | 5.73 | 0.55 | 2 | 0.14 | 291.6 | 50 | 14.91 | 33.71 | 5.90 | 25.02 | 295.0 | .178 |
| 66 | 13.38 | 33.723 | 4.00 | 1.31 | 9 | 0.45 | 263.5 | 75 | 13.10 | 33.77 | 3.65 | 25.44 | 254.7 | .247 |
| 88 | 12.34 | 34.015 | 2.42 | 1.93 | 18 | 0.12 | 222.6 | 100 | 12.17 | 34.13 | 1.84 | 25.90 | 211.0 | .305 |
| 106 | 11.97 | 34.218 | 1.41 | 2.34 | 24 | 0.04 | 200.9 | 125 | 11.69 | 34.36 | 1.01 | 26.17 | 185.4 | .356 |
| 124 | 11.70 | 34.347 | 1.04 | 2.55 | 27 | 0.04 | 186.6 | 150 | 11.43 | 34.54 | .59 | 26.36 | 167.6 | .401 |
| 142 | 11.52 | 34.503 | .67 | 2.75 | 31 | 0.03 | 171.9 | 200 | 10.87 | 34.61 | .38 | 26.51 | 152.7 | .483 |
| 170 | 11.20 | 34.585 | .44 | - | - | - | 160.2 | 250 | 10.33 | 34.62 | .26 | 26.62 | 142.9 | .559 |
| 202 | 10.86 | 34.606 | .38 | - | - | - | 152.8 | 300 | 9.56 | 34.56 | .36 | 26.70 | 134.9 | .632 |
| 229 | 10.57 | 34.624 | .26 | - | - | - | 146.6 | 400 | 8.05 | 34.48 | .34 | 26.88 | 118.2 | .765 |
| 274 | 10.00 | 34.593 | .30 | - | - | - | 139.5 | 500 | 7.02 | 34.46 | .47 | 27.01 | 105.6 | .884 |
| 325 | 9.12 | 34.532 | .40 | - | - | - | 130.1 | | | | | | | |
| 404 | 7.99 | 34.470 | .34 | - | - | - | 118.1 | | | | | | | |
| 485 | 7.14 | 34.451 | .48 | - | - | - | 107.8 | | | | | | | |
| 569 | 6.58 | 34.481 | .28 | - | - | - | 98.3 | | | | | | | |

| 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 |
| 140.50 | | | | | | | CCOFI CRUISE 6407 | | | | | | 140.50 | |

ALEXANDER AGASSIZ, JULY 24 1964, 1047 GCT, 24 02N 113 41.5W, SOUNDING 1845 FM, WIND 360 FORCE 4, WEATHER CLOUDY, SEA ROUGH, WIRE ANGLE 22.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 22.92 | 33.950 | 5.25 | 0.27 | 0 | 0.00 | 470.0 | 0 | 22.92 | 33.95 | 5.25 | 23.18 | 470.0 | 0 |
| 10 | 22.88 | 33.948 | 5.28 | 0.29 | 0 | 0.00 | 469.0 | 10 | 22.88 | 33.95 | 5.28 | 23.19 | 468.9 | .047 |
| 33 | 18.05 | 33.872 | 5.88 | 0.30 | 1 | 0.00 | 352.2 | 20 | 19.25 | 33.89 | 5.72 | 24.13 | 379.5 | .089 |
| 42 | 17.28 | 33.830 | 5.96 | 0.30 | 2 | 0.01 | 337.6 | 30 | 18.27 | 33.87 | 5.85 | 24.36 | 357.5 | .126 |
| 56 | 16.12 | 33.787 | 5.84 | 0.43 | 2 | 0.01 | 315.0 | 50 | 16.57 | 33.80 | 5.90 | 24.71 | 323.9 | .195 |
| 70 | 15.39 | 33.761 | 5.77 | 0.52 | 1 | 0.05 | 301.3 | 75 | 15.00 | 33.78 | 5.51 | 25.05 | 291.7 | .272 |
| 93 | 13.79 | 33.888 | 4.06 | 1.20 | 10 | 0.08 | 259.4 | 100 | 13.00 | 33.89 | 3.60 | 25.55 | 244.0 | .340 |
| 112 | 12.12 | 33.904 | 3.12 | 1.72 | 16 | 0.03 | 226.7 | 125 | 11.74 | 34.03 | 2.50 | 25.90 | 210.6 | .397 |
| 130 | 11.62 | 34.070 | 2.33 | 2.05 | 22 | 0.02 | 205.5 | 150 | 11.28 | 34.16 | 2.00 | 26.09 | 193.0 | .448 |
| 158 | 11.13 | 34.204 | 1.83 | 2.31 | 26 | 0.01 | 187.1 | 200 | 10.43 | 34.40 | 1.07 | 26.43 | 160.8 | .539 |
| 187 | 10.68 | 34.372 | 1.20 | - | - | - | 167.1 | 250 | 9.93 | 34.48 | .64 | 26.58 | 146.7 | .618 |
| 224 | 10.03 | 34.430 | .87 | - | - | - | 152.0 | 300 | 9.34 | 34.48 | .63 | 26.68 | 137.4 | .692 |
| 251 | 9.92 | 34.482 | .64 | - | - | - | 146.4 | 400 | 8.53 | 34.52 | .25 | 26.84 | 122.2 | .829 |
| 298 | 9.36 | 34.481 | .64 | - | - | - | 137.6 | 500 | 7.32 | 34.50 | .26 | 27.00 | 106.6 | .951 |
| 359 | 9.00 | 34.521 | .28 | - | - | - | 129.1 | 600 | 6.14 | 34.45 | .37 | 27.12 | 95.1 | 1.060 |
| 453 | 7.86 | 34.521 | .24 | - | - | - | 112.4 | | | | | | | |
| 540 | 6.86 | 34.474 | .30 | - | - | - | 102.4 | | | | | | | |
| 613 | 5.99 | 34.444 | .39 | - | - | - | 93.8 | | | | | | | |

DATA AT NET TOW STATIONS

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $NO_2$-N µg at/L | δT cl/ton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 60.49-G | VII-3 | 2131 | 37°59.0' | 122°50.5' | 18 | 300° | 4 | overcast | moderate | 10 | 8.80 | 34.021 | | | | | 163 |
| 60.50-G | 3 | 2210 | 37°57.5' | 122°53.0' | 27 | 280° | 4 | overcast | moderate | 10 | 9.83 | 33.994 | | | | | 181 |
| 60.51-G | 3 | 2255 | 37°55.0' | 122°57.5' | 36 | 270° | 4 | overcast | moderate | 10 | 9.84 | 33.995 | | | | | 181 |
| 60.55-G | 4 | 0131 | 37°47.5' | 123°15.0' | 62 | 300° | 5 | overcast | very rough | 10 | 10.10 | 33.865 | | | | | 195 |
| 63.50-G | 1 | 0148 | 37°23.5' | 122°28.0' | 17 | 320° | 2 | overcast | moderate | 10 | 11.36 | 33.880 | | | | | 215 |
| 63.51-G | 1 | 0055 | 37°21.5' | 122°32.5' | 35 | 320° | 3 | overcast | moderate | 10 | 12.71 | 33.839 | | | | | 242 |
| 67.47-G | VI-30 | 0530 | 36°54.5' | 121°52.5' | 10 | 080° | 3 | missing | slight | 10 | 12.48 | 33.830 | | | | | 239 |
| 67.48-G | 30 | 0613 | 36°53.0' | 121°56.0' | 18 | 080° | 3 | missing | slight | 10 | 11.58 | 33.803 | | | | | 225 |
| 67.49-G | 30 | 0702 | 36°50.5' | 122°00.5' | 44 | 040° | 3 | missing | slight | 10 | 11.48 | 33.859 | | | | | 219 |
| 70.50-G | 29 | 2348 | 36°11.5' | 121°44.0' | 110 | 300° | 4 | partly cloudy | slight | 10 | 9.80 | 33.885 | | | | | 189 |
| 70.51-G | 29 | 2307 | 36°10.5' | 121°45.5' | 200 | 300° | 5 | partly cloudy | moderate | 10 | 10.23 | 33.853 | | | | | 198 |
| 70.52-G | 29 | 2217 | 36°08.5' | 121°50.0' | 348 | 310° | 5 | partly cloudy | moderate | 10 | 9.87 | 33.814 | | | | | 195 |
| 73.50-G | 26 | 2220 | 35°38.0' | 121°14.0' | 10 | 300° | 6 | clear | moderate | 10 | 10.24 | 33.790 | | | | | 203 |
| 73.50-G | 26 | 2300 | 35°37.0' | 121°17.0' | 65 | 290° | 4 | clear | moderate | 10 | 11.80 | 33.607 | | | | | 243 |
| 73.51-G | 26 | 2350 | 35°35.0' | 121°21.0' | 206 | 360° | 5 | clear | rough | 10 | 13.56 | 33.602 | | | | | 276 |
| 77.48-G | 23 | 2335 | 35°09.0' | 120°42.0' | 6 | 230° | 1 | overcast | slight | 10 | 10.80 | 33.930 | | | | | 202 |
| 77.48-G | 24 | 0020 | 35°08.5' | 120°43.5' | 15 | 260° | 1 | overcast | slight | 10 | 10.24 | 33.943 | | | | | 192 |
| 77.49-G | 24 | 1300 | 35°06.5' | 120°48.0' | 35 | 170° | 1 | missing | slight | 10 | 11.00 | 33.845 | | | | | 211 |
| 77.58-G | 24 | 2040 | 34°48.5' | 121°23.0' | 280 | - | 3 | fog | very rough | 10 | 12.91 | 33.834 | | | | | 246 |

DATA AT NET TOW STATIONS

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $NO_2$-N µg at/L | $\delta_T$ cl/ton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 78.55A-G | VI-23 | 1710 | 34°44.0' | 121°06.5' | 290 | 190° | 1 | fog | slight | 10 | 12.75 | 33.794 | | | | | 246 |
| 78.58A-G | 23 | 1515 | 34°39.0' | 121°17.0' | 372 | - | 2 | fog | moderate | 10 | 12.44 | 33.836 | | | | | 238 |
| 78.60A-G | 23 | 1325 | 34°34.5' | 121°27.5' | 884 | - | 2 | fog | moderate | 10 | 13.06 | 33.733 | | | | | 257 |
| 78.62A-G | 23 | 1150 | 34°28.0' | 121°37.5' | 2000 | - | 2 | missing | missing | 10 | 13.56 | 33.795 | | | | | 261 |
| 78.67A-G | 23 | 0735 | 34°19.0' | 121°58.0' | 2030 | 290° | 1 | cloudy | moderate | 10 | 13.43 | 33.770 | | | | | 261 |
| 78.55B-G | 22 | 1030 | 34°35.5' | 121°00.5' | 320 | 220° | 1 | drizzle | slight | 10 | 11.48 | 33.856 | | | | | 219 |
| 78.72B-G | 22 | 2340 | 34°00.5' | 122°12.5' | 2112 | 320° | 2 | cloudy | rough | 10 | 13.93 | 33.516 | | | | | 290 |
| 79.55-G | 22 | 0430 | 34°27.0' | 120°54.0' | 392 | 120° | 3 | overcast | moderate | 10 | 11.96 | 33.870 | | | | | 226 |
| 79.58-G | 22 | 0245 | 34°22.0' | 121°04.5' | 760 | - | 3 | overcast | rough | 10 | 12.10 | 33.786 | | | | | 235 |
| 79.60-G | 22 | 0100 | 34°17.0' | 121°15.5' | 1160 | - | 4 | overcast | rough | 10 | 13.26 | 33.619 | | | | | 269 |
| 80.50-G | 20 | 1550 | 34°28.0' | 120°29.0' | 14 | - | 3 | partly cloudy | rough | 10 | 11.01 | 33.932 | | | | | 205 |
| 80.57-G | 20 | 2318 | 34°14.0' | 120°58.5' | 512 | 300° | 4 | clear | rough | 10 | 11.82 | 33.908 | | | | | 221 |
| 80.62-G | 21 | 0400 | 34°04.0' | 121°19.0' | 1575 | 320° | 4 | overcast | rough | 10 | 14.28 | 33.562 | | | | | 293 |
| 80.67-G | 21 | 0750 | 33°53.5' | 121°40.0' | 1950 | 330° | 4 | overcast | moderate | 10 | 13.71 | 33.552 | | | | | 283 |
| 81.58-G | 20 | 0630 | 34°04.5' | 120°52.0' | 700 | 310° | 4 | cloudy | rough | 10 | 11.80 | 33.880 | | | | | 223 |
| 81.60-G | 20 | 0415 | 33°59.0' | 121°02.5' | 1420 | 330° | 5 | cloudy | rough | 10 | 13.55 | 33.511 | | | | | 282 |
| 81.62-G | 20 | 0255 | 33°54.0' | 121°12.5' | 1400 | 300° | 7 | cloudy | rough | 10 | 13.51 | 33.550 | | | | | 278 |
| 81.67-G | 19 | 2305 | 33°44.5' | 121°33.5' | 1890 | 310° | 5 | cloudy | rough | 10 | 14.04 | 33.547 | | | | | 289 |
| 82.45-G | 19 | 0030 | 34°20.0' | 119°56.0' | 242 | 260° | 2 | clear | moderate | 10 | 12.44 | 33.966 | | | | | 228 |

DATA AT NET TOW STATIONS

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $NO_2$-N µg at/L | $\delta_T$ cl/ton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 82.47-B | VII-16 | 1805 | 34°15.0' | 119°58.0' | 300 | 250° | 3 | missing | moderate | 10 | 12.64 | 33.931 | | | | | 235 |
| 82.58-G | VI-19 | 1135 | 33°56.0' | 120°46.0' | 1440 | 330° | 4 | clear | rough | 10 | 11.80 | 33.790 | | | | | 229 |
| 82.62-G | 19 | 1500 | 33°46.0' | 121°06.5' | 1650 | 310° | 6 | overcast | very rough | 10 | 13.51 | 33.527 | | | | | 280 |
| 83.43A-G | 18 | 2255 | 34°16.0' | 119°41.0' | 102 | 360° | 2 | clear | moderate | 10 | 12.40 | 33.863 | | | | | 235 |
| 83.57A-G | 18 | 0900 | 33°47.0' | 120°40.0' | 888 | 320° | 6 | partly cloudy | missing | 10 | 12.57 | 33.605 | | | | | 257 |
| 83.60A-G | 18 | 0700 | 33°42.5' | 120°51.0' | 660 | 320° | 7 | partly cloudy | missing | 10 | 12.86 | 33.594 | | | | | 264 |
| 83.62A-G | 18 | 0520 | 33°37.0' | 121°01.0' | 1700 | 320° | 7 | partly cloudy | missing | 10 | 14.05 | 33.589 | | | | | 286 |
| 83.65A-G | 18 | 0325 | 33°32.0' | 121°12.0' | 1905 | 360° | 7 | cloudy | very rough | 10 | 14.32 | 33.598 | | | | | 291 |
| 83.39-B | VII-16 | 1300 | 34°15.5' | 119°17.5' | 9 | 260° | 1 | light fog | slight | 10 | 13.54 | 33.835 | | | | | 258 |
| 83.39B-G | VI-17 | 0330 | 34°15.5' | 119°17.5' | 9 | 300° | 2 | partly cloudy | moderate | 10 | 13.14a) | 33.854 | | | | | 250 |
| 83.40-B | VII-16 | 1350 | 34°14.0' | 119°22.0' | 12 | 260° | 1 | fog | slight | 10 | 13.45 | 33.838 | | | | | 257 |
| 83.40B-G | VI-17 | 0420 | 34°14.0' | 119°22.0' | 13 | 300° | 3 | missing | missing | 10 | 12.94 | - | | | | | |
| 83.43-B | VII-16 | 1525 | 34°08.0' | 119°34.0' | 135 | 260° | 3 | missing | slight | 10 | 15.38 | 33.850 | | | | | 295 |
| 83.51-B | 16 | 2140 | 33°52.0' | 120°07.5' | 70 | 250° | 6 | partly cloudy | rough | 10 | 16.22 | 33.915 | | | | | 308 |
| 83.53B-G | VI-17 | 1500 | 33°48.0' | 120°16.0' | 400 | 300° | 6 | partly cloudy | rough | 10 | 12.12 | 33.870 | | | | | 229 |
| 83.55-B | VII-16 | 2355 | 33°44.0' | 120°24.5' | 600 | 320° | 5 | missing | rough | 10 | 13.52b) | 33.876 | | | | | 255 |
| 83.58B-G | VI-17 | 1905 | 33°39.0' | 120°34.5' | 625 | 320° | 4 | partly cloudy | rough | 10 | 13.32 | 33.535 | | | | | 276 |

a) Mean value of 13.08 and 13.20°C.

b) Alternate values: temperature, 13.30°C; delta-T, 251 cl/ton.

DATA AT NET TOW STATIONS

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $NO_2$-N µg at/L | δT cl/ton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 83.60-B | VII-17 | 0220 | 33°34.0' | 120°45.0' | 1850 | 320° | 5 | clear | very rough | 10 | 13.52 | 33.649 | | | | | 272 |
| 83.62B-G | VI-17 | 2305 | 33°29.0' | 120°55.0' | 1910 | - | 5 | clear | rough | 10 | 14.21 | 33.618 | | | | | 287 |
| 83.65-B | VII-17 | 0445 | 33°24.0' | 121°05.5' | 1900 | 300° | 5 | cloudy | very rough | 10 | 12.84 | 33.693 | | | | | 256 |
| 83.70-B | 17 | 0705 | 33°14.0' | 121°26.0' | 2000 | 300° | 5 | cloudy | very rough | 10 | 14.44 | 33.367 | | | | | 310 |
| 83.80-B | 17 | 1135 | 32°51.0' | 122°06.0' | 2200 | 300° | 5 | cloudy | very rough | 10 | 16.58 | 33.391 | | | | | 354 |
| 83.90-B | 17 | 1615 | 32°31.0' | 122°42.5' | 2000+ | 330° | 5 | overcast | very rough | 10 | 17.12 | 33.498 | | | | | 358 |
| 84.48-G | VI-17 | 1045 | 33°49.0' | 119°49.0' | 380 | 360° | 4 | clear | missing | 10 | 13.40 | 33.814 | | | | | 257 |
| 85.39-G | 16 | 2335 | 33°58.0' | 119°07.0' | 410 | 300° | 4 | cloudy | moderate | 10 | 16.28 | 33.840 | | | | | 315 |
| 85.43-G | 16 | 1835 | 33°50.5' | 119°22.5' | 520 | 280° | 2 | cloudy | slight | 10 | 14.91 | 33.810 | | | | | 287 |
| 85.49-G | 16 | 1130 | 33°38.0' | 119°47.5' | 252 | 320° | 2 | missing | missing | 10 | 14.18 | 33.823 | | | | | 272 |
| 85.51-G | 16 | 0945 | 33°35.0' | 119°55.5' | 328 | 320° | 5 | missing | missing | 10 | 13.94 | 33.843 | | | | | 265 |
| 85.53-G | 16 | 0755 | 33°30.5' | 120°04.0' | 547 | 330° | 6 | missing | missing | 10 | 13.81 | 33.850 | | | | | 263 |
| 87.32-B | VII-19 | 0150 | 33°55.0' | 118°27.0' | 8 | 270° | 3 | overcast | moderate | 10 | 13.80 | 33.777 | | | | | 268 |
| 87.33-B | 19 | 0105 | 33°54.0' | 118°29.5' | 27 | 270° | 3 | overcast | moderate | 10 | 15.46 | 33.785 | | | | | 301 |
| 87.34-B | 19 | 0025 | 33°52.0' | 118°33.5' | 37 | 280° | 3 | overcast | rough | 10 | 15.48 | 33.787 | | | | | 302 |
| 87.35-B | 18 | 2335 | 33°50.0' | 118°37.5' | 300 | 280° | 3 | overcast | rough | 10 | 17.20 | 33.869 | | | | | 333 |
| 87.40-B | 18 | 2130 | 33°40.0' | 118°58.0' | 480 | 280° | 2 | overcast | moderate | 10 | 16.82 | 33.831 | | | | | 327 |
| 87.45-B | 18 | 1855 | 33°30.0' | 119°19.0' | 915 | 300° | 1 | overcast | moderate | 10 | 14.89 | 33.902 | | | | | 281 |
| 87.50-B | 18 | 1620 | 33°20.0' | 119°39.5' | 38 | 300° | 3 | overcast | rough | 10 | 13.46 | 33.918 | | | | | 251 |

DATA AT NET TOW STATIONS

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $NO_2$-N µg at/L | $\delta_T$ cl/ton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 87.55-B | VII-18 | 1405 | 33°07.5' | 119°58.5' | 650 | 320° | 4 | overcast | rough | 10 | 13.84 | 33.877 | | | | | 262 |
| 87.60-B | 18 | 1110 | 32°58.0' | 120°20.5' | 450 | 320° | 4 | drizzle | rough | 10 | 15.10 | 33.564 | | | | | 310 |
| 87.65-B | 18 | 0830 | 32°49.0' | 120°40.5' | 2000 | 320° | 5 | overcast | rough | 10 | 15.50 | 33.551 | | | | | 319 |
| 87.70-B | 18 | 0550 | 32°39.5' | 121°02.0' | 2100 | 340° | 4 | overcast | rough | 10 | 15.06 | 33.278 | | | | | 330 |
| 87.80-B | 18 | 0050 | 32°19.5' | 121°43.0' | 2000 | 340° | 5 | overcast | very rough | 10 | 15.21 | 33.238 | | | | | 336 |
| 87.90-B | 17 | 2015 | 31°59.5' | 122°23.5' | 2200 | 340° | 5 | overcast | very rough | 10 | 16.04 | 33.206 | | | | | 356 |
| 90.28-G | 12 | 0814 | 33°29.5' | 117°44.5' | 16 | 020° | 2 | partly cloudy | moderate | 10 | 11.19a) | - | | | | | |
| 90.65-G | 11 | 0920 | 32°15.0' | 120°18.0' | 1825 | 300° | 3 | missing | rough | 10 | 13.84 | 33.448 | | | | | 292 |
| 93.26-B | 19 | 1105 | 32°57.0' | 117°16.5' | 20 | - | 1 | overcast | moderate | 10 | 14.18 | 33.732 | | | | | 279 |
| 93.27-B | 19 | 1140 | 32°56.0' | 117°19.0' | 60 | - | 1 | overcast | moderate | 10 | 13.53 | 33.722 | | | | | 266 |
| 93.28-B | 19 | 1220 | 32°54.5' | 117°22.0' | 300 | - | 1 | overcast | moderate | 10 | 16.26 | 33.773 | | | | | 319 |
| 93.30-B | 19 | 1350 | 32°50.5' | 117°31.0' | 450 | - | 1 | overcast | moderate | 10 | 19.24 | 33.845 | | | | | 382 |
| 93.35-B | 19 | 1605 | 32°40.5' | 117°51.5' | 250 | - | 1 | overcast | moderate | 10 | 17.45 | 33.834 | | | | | 341 |
| 93.40-B | 19 | 1850 | 32°30.0' | 118°11.5' | 950 | 280° | 3 | cloudy | rough | 10 | 17.18 | 33.846 | | | | | 334 |
| 93.45-B | 19 | 2125 | 32°20.0' | 118°32.0' | 900 | 300° | 6 | cloudy | very rough | 10 | 16.30 | 33.893 | | | | | 311 |
| 93.50-B | 19 | 2350 | 32°10.0' | 118°52.5' | 900 | 320° | 5 | cloudy | very rough | 10 | 15.36 | 33.914 | | | | | 290 |
| 93.55-B | 20 | 0225 | 32°00.0' | 119°13.5' | 900 | 320° | 5 | overcast | very rough | 10 | 14.12 | 33.854 | | | | | 268 |

a) Alternate value, 13.36°C.

DATA AT NET TOW STATIONS

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $NO_2$-N µg at/L | δT cl/ton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 93.60-B | VII-20 | 0510 | 31°50.0' | 119°34.0' | 2000+ | 330° | 6 | overcast | very rough | 10 | 15.46 | 33.642 | | | | | 312 |
| 93.65-B | 20 | 0725 | 31°40.0' | 119°53.5' | 2000+ | 330° | 7 | overcast | high | 10 | 15.17 | 33.722 | | | | | 299 |
| 93.70-B | 20 | 1000 | 31°30.0' | 120°14.0' | 2000+ | 330° | 7 | overcast | high | 10 | 13.90 | 33.823 | | | | | 266 |
| 97.29-B | 21 | 1210 | 32°17.5' | 117°04.5' | 27 | - | 1 | overcast | moderate | 10 | 14.58 | 33.814 | | | | | 281 |
| 97.29-B | 21 | 1245 | 32°19.5' | 117°04.0' | 10 | - | 1 | overcast | moderate | 10 | 14.00 | 33.824 | | | | | 268 |
| 97.30-B | 21 | 1115 | 32°15.5' | 117°08.5' | 38 | - | 1 | overcast | moderate | 10 | 13.80 | 33.924a) | | | | | 257 |
| 97.32-B | 21 | 1005 | 32°11.5' | 117°16.5' | 600 | 300° | 2 | overcast | moderate | 10 | 15.62 | 33.768 | | | | | 305 |
| 97.35-B | 21 | 0830 | 32°05.5' | 117°28.5' | 700 | 300° | 3 | overcast | moderate | 10 | 17.50 | 33.843 | | | | | 342 |
| 97.40-B | 21 | 0550 | 31°56.0' | 117°51.0' | 450 | 300° | 3 | cloudy | moderate | 10 | 17.33 | 33.870 | | | | | 336 |
| 97.45-B | 21 | 0310 | 31°46.0' | 118°10.0' | 700 | 320° | 6 | cloudy | very rough | 10 | 17.38 | 33.871 | | | | | 337 |
| 97.50-B | 21 | 0025 | 31°36.0' | 118°31.0' | 1300 | 330° | 6 | cloudy | very rough | 10 | 16.11 | 33.855 | | | | | 310 |
| 97.55-B | 20 | 2200 | 31°25.5' | 118°50.5' | 280 | 330° | 6 | cloudy | very rough | 10 | 15.12 | 33.505 | | | | | 314 |
| 97.60-B | 20 | 1920 | 31°15.5' | 119°11.0' | 1300 | 330° | 6 | cloudy | very rough | 10 | 16.82 | 33.629 | | | | | 342 |
| 97.65-B | 20 | 1650 | 31°05.0' | 119°30.5' | 1930 | 330° | 6 | cloudy | very rough | 10 | 16.54 | 33.566 | | | | | 340 |
| 97.70-B | 20 | 1425 | 30°55.5' | 119°52.0' | 1950 | 330° | 5 | overcast | very rough | 10 | 15.78 | 33.506 | | | | | 328 |
| 100.29-G | 14 | 0500 | 31°42.0' | 116°43.5' | 60 | - | 1 | light fog | moderate | 10 | 11.36 | 33.863 | | | | | 216 |
| 100.45-G | 14 | 1530 | 31°08.5' | 117°47.5' | 850 | 320° | 3 | overcast | rough | 10 | 16.84 | 33.845 | | | | | 327 |

a) Possible evaporation.

DATA AT NET TOW STATIONS

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $NO_2$-N µg at/L | $\delta_T$ cl/ton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 100.55-G | VII-14 | 2100 | 30°50.0' | 118°28.0' | 1400 | 320° | 4 | overcast | rough | 10 | 16.82 | 33.563 | | | | | 347 |
| 100.65-G | 15 | 0220 | 30°30.0' | 119°07.5' | 2085 | 360° | 5 | overcast | rough | 10 | 16.92 | 33.620 | | | | | 345 |
| 103.28-B | 24 | 0540 | 31°08.0' | 116°19.0' | 9 | 270° | 2 | cloudy | moderate | 10 | 12.52 | 33.763 | | | | | 244 |
| 103.29-B | 24 | 0620 | 31°07.5' | 116°21.0' | 18 | 270° | 2 | cloudy | moderate | 10 | 12.42 | 33.773 | | | | | 242 |
| 103.30-B | 24 | 0700 | 31°05.5' | 116°24.5' | 37 | 290° | 2 | cloudy | moderate | 10 | 14.08 | 33.744 | | | | | 276 |
| 103.35-B | 24 | 0925 | 30°55.5' | 116°45.0' | 1000 | 300° | 3 | cloudy | rough | 10 | 17.39 | 33.798 | | | | | 343 |
| 103.40-B | 24 | 1150 | 30°45.5' | 117°05.5' | 900 | 300° | 3 | cloudy | rough | 10 | 17.44 | 33.791 | | | | | 344 |
| 103.45-B | 24 | 1425 | 30°37.0' | 117°24.0' | 1200 | 320° | 3 | cloudy | rough | 10 | 17.76 | 33.770 | | | | | 353 |
| 103.50-B | 24 | 1650 | 30°27.5' | 117°45.0' | 1310 | 320° | 4 | overcast | rough | 10 | 16.91 | 33.730 | | | | | 336 |
| 103.55-B | 24 | 1920 | 30°19.0' | 118°05.0' | 1100 | 320° | 3 | overcast | rough | 10 | 16.34 | 33.795 | | | | | 319 |
| 103.60-B | 24 | 2150 | 30°08.0' | 118°25.5' | 1800 | 320° | 4 | overcast | rough | 10 | 16.54 | 33.759 | | | | | 326 |
| 103.65-B | 25 | 0025 | 29°56.0' | 118°45.0' | 1900 | 320° | 3 | cloudy | rough | 10 | 16.80 | 33.617 | | | | | 343 |
| 103.70-B | 25 | 0320 | 29°46.0' | 119°03.5' | 1900 | 320 | 3 | cloudy | rough | 10 | 17.06 | 33.653 | | | | | 345 |
| 103.80-B | 25 | 0755 | 29°25.0' | 119°42.0' | 2100 | 320° | 3 | cloudy | rough | 10 | 17.05 | 33.602 | | | | | 349 |
| 103.90-B | 25 | 1225 | 29°04.0' | 120°19.0' | 2000 | 300° | 3 | overcast | rough | 10 | 17.34 | 33.483 | | | | | 364 |
| 106.40-B | 26 | 1650 | 30°17.0' | 116°46.5' | 1500 | 330° | 2 | cloudy | moderate | 10 | 17.40 | 33.716 | | | | | 349 |
| 107.30-B | 26 | 2320 | 30°30.0' | 116°03.5' | 8 | 350° | 3 | partly cloudy | moderate | 10 | 12.98 | 33.774 | | | | | 252 |

DATA AT NET TOW STATIONS

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $NO_2$-N µg at/L | $\delta_T$ cl/ton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 107.31-B | VII-26 | 2225 | 30°28.0' | 116°07.0' | 25 | 280° | 2 | partly cloudy | moderate | 10 | 13.24a) | 33.739 | | | | | 260 |
| 107.32-B | 26 | 2140 | 30°26.0' | 116°11.0' | 260 | 300° | 3 | partly cloudy | moderate | 10 | 14.90 | 33.750 | | | | | 292 |
| 107.35-B | 26 | 1950 | 30°20.5' | 116°23.0' | 800 | 280° | 3 | cloudy | moderate | 10 | 17.97 | 33.748 | | | | | 359 |
| 107.45-B | 26 | 1425 | 30°02.5' | 117°04.0' | 900 | 340° | 2 | cloudy | moderate | 10 | 17.69 | 33.650 | | | | | 360 |
| 107.50-B | 26 | 1150 | 29°50.5' | 117°23.5' | 1200 | 340° | 2 | overcast | moderate | 10 | 17.60 | 33.600 | | | | | 361 |
| 107.55-B | 26 | 0920 | 29°41.0' | 117°42.0' | 1700 | 340° | 2 | overcast | moderate | 10 | 17.68 | 33.608 | | | | | 363 |
| 107.60-B | 26 | 0650 | 29°31.0' | 118°01.5' | 1900 | 340° | 2 | overcast | moderate | 10 | 17.79 | 33.614 | | | | | 365 |
| 107.65-B | 26 | 0425 | 29°21.5' | 118°21.0' | 1500 | 330° | 2 | cloudy | moderate | 10 | 17.86 | 33.634 | | | | | 365 |
| 107.70-B | 26 | 0155 | 29°10.5' | 118°40.0' | 1700 | 340° | 2 | cloudy | moderate | 10 | 17.65 | 33.547 | | | | | 367 |
| 107.80-B | 25 | 2105 | 28°49.0' | 119°20.5' | 2000 | 350° | 3 | overcast | rough | 10 | 18.50 | 33.737 | | | | | 373 |
| 107.90-B | 25 | 1645 | 28°30.0' | 119°55.5' | 2100 | 320° | 3 | overcast | rough | 10 | 18.90 | 33.826 | | | | | 376 |
| 110.32-G | 17 | 1000 | 29°52.0' | 115°47.5' | - | - | - | missing | missing | 10 | 12.18 | 33.785 | | | | | 236 |
| 110.45-G | 17 | 0206 | 29°26.5' | 116°39.0' | 524 | 080° | 3 | overcast | moderate | 10 | 17.38 | 33.578 | | | | | 358 |
| 110.55-G | 16 | 2033 | 29°07.0' | 117°19.0' | 1804 | 350° | 3 | fog | rough | 10 | 18.02 | 33.758 | | | | | 360 |
| 110.65-G | 16 | 1450 | 28°46.5' | 117°58.0' | 1900 | 020° | 4 | overcast | rough | 10 | 17.52 | 33.741 | | | | | 349 |
| 113.28-B | 27 | 0845 | 29°25.0' | 115°11.5' | 9 | 280° | 2 | clear | moderate | 10 | 12.25 | 33.763 | | | | | 240 |
| 113.29-B | 27 | 0915 | 29°24.0' | 115°13.0' | 13 | 280° | 3 | clear | moderate | 10 | 12.20 | 33.754 | | | | | 239 |

a) Alternate values: temperature, 13.46°C; delta-T, 264 cl/ton.

DATA AT NET TOW STATIONS

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $NO_2$-N µg at/L | $\delta_T$ cl/ton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 113.30-B | VII-27 | 1000 | 29°22.0' | 115°18.0' | 34 | 280° | 4 | clear | moderate | 10 | 15.30 | 33.752 | | | | | 300 |
| 113.35-B | 27 | 1220 | 29°12.0' | 115°38.0' | 650 | 290° | 3 | clear | rough | 10 | 16.38 | 33.741 | | | | | 324 |
| 113.40-B | 27 | 1450 | 29°02.0' | 115°55.0' | 900 | 300° | 4 | cloudy | rough | 10 | 17.74 | 33.694 | | | | | 358 |
| 113.45-B | 27 | 1730 | 28°48.5' | 116°18.0' | 1300 | 320° | 5 | cloudy | rough | 10 | 18.04 | 33.607 | | | | | 371 |
| 113.50-B | 27 | 1940 | 28°39.0' | 116°36.0' | 2300 | 320° | 4 | partly cloudy | moderate | 10 | 18.15 | 33.611 | | | | | 373 |
| 113.55-B | 27 | 2210 | 28°33.0' | 116°59.5' | 1800 | 340° | 4 | partly cloudy | rough | 10 | 17.71 | 33.664 | | | | | 359 |
| 113.60-B | 28 | 0015 | 28°24.0' | 117°19.0' | 2000 | 340° | 4 | cloudy | rough | 10 | 19.24 | 33.861 | | | | | 381 |
| 113.65-B | 28 | 0210 | 28°16.0' | 117°36.0' | 2050 | 320° | 3 | cloudy | rough | 10 | 18.93 | 33.841 | | | | | 375 |
| 113.70-B | 28 | 0440 | 28°04.5' | 117°56.5' | 1700 | 320° | 3 | cloudy | rough | 10 | 19.24 | 33.863 | | | | | 381 |
| 113.80-B | 28 | 0905 | 27°41.5' | 118°31.5' | 2000 | 350° | 3 | partly cloudy | moderate | 10 | 18.77 | 33.844 | | | | | 371 |
| 114.89-B | 28 | 1325 | 27°19.0' | 119°07.0' | 2000 | 350° | 3 | cloudy | moderate | 10 | 19.08 | 33.795 | | | | | 383 |
| 117.25-B | 30 | 0505 | 28°58.0' | 114°37.0' | 31 | 270° | 4 | fog | moderate | 10 | 15.76 | 33.751 | | | | | 310 |
| 117.25-B | 30 | 0550 | 28°58.5' | 114°36.5' | 10 | 270° | 4 | fog | moderate | 10 | 15.06 | 33.751 | | | | | 295 |
| 117.26-B | 30 | 0420 | 28°56.0' | 114°41.5' | 42 | 270° | 3 | missing | moderate | 10 | 14.66 | 33.747 | | | | | 287 |
| 117.30-B | 30 | 0225 | 28°48.0' | 114°56.5' | 60 | 320° | 4 | overcast | moderate | 10 | 15.57 | 33.685 | | | | | 311 |
| 117.35-B | 29 | 2350 | 28°38.0' | 115°16.0' | 100 | 320° | 4 | overcast | rough | 10 | 17.66 | 33.753 | | | | | 352 |
| 117.40-B | 29 | 1915 | 28°28.0' | 115°35.5' | 500 | 330° | 3 | missing | rough | 10 | 17.76 | 33.724 | | | | | 356 |
| 117.45-B | 29 | 1605 | 28°18.0' | 115°56.0' | 1700 | 340° | 5 | cloudy | rough | 10 | 18.60 | 33.774 | | | | | 372 |
| 117.50-B | 29 | 1320 | 28°07.0' | 116°14.5' | 2000 | 340° | 5 | cloudy | rough | 10 | 18.76 | 33.801 | | | | | 374 |

DATA AT NET TOW STATIONS

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $NO_2$-N µg at/L | δT cl/ton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 117.55-B | VII-29 | 1030 | 27°57.5' | 116°34.5' | 2100 | 340° | 5 | overcast | rough | 10 | 19.58 | 33.875 | | | | | 389 |
| 117.60-B | 29 | 0750 | 27°48.0' | 116°53.0' | 1700 | 340° | 5 | overcast | rough | 10 | 19.48 | 33.851 | | | | | 388 |
| 117.65-B | 29 | 0510 | 27°37.5' | 117°13.5' | 1900 | 320° | 5 | missing | rough | 10 | 19.34 | 33.852 | | | | | 384 |
| 117.70-B | 29 | 0230 | 27°26.5' | 117°35.0' | 2050 | 340° | 5 | cloudy | rough | 10 | 18.48 | 33.593 | | | | | 383 |
| 117.80-B | 28 | 2125 | 27°08.0' | 118°15.0' | 2300 | 340° | 4 | cloudy | rough | 10 | 19.02 | 33.744 | | | | | 384 |
| 117.90-B | 28 | 1705 | 26°48.0' | 118°48.0' | 2050 | 340° | 4 | cloudy | rough | 10 | 18.64 | 33.644 | | | | | 383 |
| 118.39-B | 29 | 2110 | 28°18.5' | 115°23.5' | 150 | 320° | 3 | overcast | moderate | 10 | 16.18 | 33.708 | | | | | 322 |
| 120.22-B | 30 | 1025 | 28°28.0' | 114°04.0' | 9 | 270° | 4 | partly cloudy | moderate | 10 | 17.58 | 33.767 | | | | | 349 |
| 120.23-B | 30 | 1110 | 28°26.0' | 114°06.5' | 15 | 270° | 4 | partly cloudy | moderate | 10 | 18.04 | 33.773 | | | | | 360 |
| 120.24-B | 30 | 1155 | 28°24.0' | 114°10.5' | 20 | 270° | 3 | cloudy | moderate | 10 | 17.94 | 33.759 | | | | | 358 |
| 120.25-B | 30 | 1230 | 28°22.5' | 114°15.0' | 28 | 270° | 3 | cloudy | moderate | 10 | 17.83 | 33.765 | | | | | 355 |
| 120.30-B | 30 | 1450 | 28°13.0' | 114°34.0' | 48 | 310 | 3 | missing | moderate | 10 | 17.28 | 33.762 | | | | | 343 |
| 120.35-B | 30 | 1710 | 28°03.0' | 114°54.0' | 47 | 340° | 4 | partly cloudy | rough | 10 | 18.38 | 33.796 | | | | | 365 |
| 120.40-B | 30 | 1915 | 27°56.5' | 115°14.0' | 25 | var | 1 | partly cloudy | moderate | 10 | 15.10 | 33.800 | | | | | 293 |
| 120.55-G | 18 | 2120 | 27°24.0' | 116°18.0' | 2046 | 320° | 4 | partly cloudy | rough | 10 | 19.05 | 33.870 | | | | | 376 |
| 120.65-G | 19 | 0205 | 26°58.5' | 116°50.0' | 2170 | 060° | 4 | partly cloudy | rough | 10 | 18.34 | 33.658 | | | | | 373 |
| 123.36-B | 31 | 0205 | 27°26.0' | 114°36.0' | 25 | 270° | 2 | partly cloudy | moderate | 10 | 17.32 | 33.695 | | | | | 348 |
| 123.37-B | 31 | 0245 | 27°24.0' | 114°40.0' | 36 | 270° | 2 | partly cloudy | moderate | 10 | 16.22 | 33.658 | | | | | 326 |
| 123.42-B | 31 | 0535 | 27°14.0' | 114°59.0' | 800 | 320° | 4 | partly cloudy | rough | 10 | 18.58 | 33.797 | | | | | 370 |

DATA AT NET TOW STATIONS

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $NO_2$-N µg at/L | $\delta_T$ cl/ton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 123.45-B | VII-31 | 0710 | 27°08.0' | 115°11.5' | 2200 | 320° | 4 | cloudy | rough | 10 | 18.92 | 33.814 | | | | | 397 |
| 123.50-B | 31 | 0935 | 26°58.0' | 115°30.5' | 2000 | 320° | 4 | cloudy | rough | 10 | 19.35 | 33.813 | | | | | 388 |
| 123.55-B | 31 | 1200 | 26°47.5' | 115°49.5' | 2000 | 320° | 4 | cloudy | rough | 10 | 19.42 | 33.835 | | | | | 388 |
| 123.60-B | 31 | 1420 | 26°38.5' | 116°09.0' | 2050 | 320° | 4 | cloudy | rough | 10 | 19.38 | 33.803 | | | | | 389 |
| 123.65-B | 31 | 1640 | 26°30.0' | 116°28.5' | 2050 | 320° | 4 | overcast | rough | 10 | 19.46 | 33.765 | | | | | 394 |
| 123.70-B | 31 | 1855 | 26°20.0' | 116°48.0' | 1950 | 320° | 4 | cloudy | rough | 10 | 19.44 | 33.752 | | | | | 394 |
| 123.80-B | 31 | 2320 | 26°01.5' | 117°26.0' | 2000 | 330° | 3 | cloudy | rough | 10 | 19.67 | 33.714 | | | | | 402 |
| 124.36-B | 31 | 0120 | 27°24.0' | 114°32.0' | 10 | 270° | 2 | partly cloudy | moderate | 10 | 17.88 | 33.720 | | | | | 360 |
| 127.33-B | VIII-2 | 0335 | 26°57.5' | 114°02.0' | 35 | - | 1 | missing | moderate | 10 | 18.68 | 33.921 | | | | | 364 |
| 127.33-B | 2 | 0410 | 26°58.5' | 114°00.5' | 10 | - | 1 | missing | moderate | 10 | 18.78 | 33.901 | | | | | 367 |
| 127.34-B | 2 | 0245 | 26°55.5' | 114°06.5' | 42 | 270° | 2 | missing | moderate | 10 | 19.19 | 33.793 | | | | | 385 |
| 127.40-B | 1 | 2330 | 26°42.5' | 114°29.0' | 1800 | 270° | 3 | cloudy | moderate | 10 | 21.02 | 33.911 | | | | | 422 |
| 127.45-B | 1 | 2100 | 26°34.5' | 114°50.0' | 1900 | 300° | 2 | cloudy | moderate | 10 | 20.73 | 33.887 | | | | | 416 |
| 127.50-B | 1 | 1830 | 26°24.5' | 115°08.0' | 2100 | 340° | 3 | cloudy | moderate | 10 | 19.51 | 33.812 | | | | | 391 |
| 127.55-B | 1 | 1610 | 26°13.5' | 115°27.0' | 1950 | 340° | 2 | cloudy | moderate | 10 | 18.75 | 33.797 | | | | | 375 |
| 127.60-B | 1 | 1350 | 26°03.5' | 115°46.5' | 2000 | 340° | 2 | drizzle | moderate | 10 | 18.88 | 33.770 | | | | | 379 |
| 127.65-B | 1 | 1120 | 25°54.0' | 116°05.5' | 2000 | 330° | 3 | cloudy | moderate | 10 | 19.45 | 33.733 | | | | | 396 |
| 127.70-B | 1 | 0840 | 25°44.0' | 116°24.5' | 2000 | 330° | 3 | overcast | rough | 10 | 20.18 | 33.808 | | | | | 408 |
| 127.80-B | 1 | 0350 | 25°24.0' | 117°02.5' | 2100 | 330° | 2 | cloudy | rough | 10 | 20.42 | 33.803 | | | | | 415 |

DATA AT NET TOW STATIONS

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $NO_2$-N µg at/L | $\delta_T$ cl/ton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 130.25-G | VII-21 | 1155 | 26°38.5' | 113°11.5' | 10 | 210° | 2 | cloudy | moderate | 10 | 14.22 | 34.115 | | | | | 251 |
| 130.28-G | 21 | 1107 | 26°33.0' | 113°21.0' | - | - | - | missing | missing | 10 | 19.98 | 34.122 | | | | | 380 |
| 130.35-G | 21 | 0727 | 26°24.0' | 113°48.5' | 120 | 270° | 2 | missing | moderate | 10 | 19.23 | 33.794 | | | | | 386 |
| 130.45-G | 21 | 0220 | 26°03.0' | 114°26.5' | 1878 | 360° | 3 | overcast | rough | 10 | 20.27 | 33.874 | | | | | 406 |
| 130.55-G | 20 | 2015 | 25°42.0' | 115°07.0' | 2180 | 050° | 2 | overcast | rough | 10 | 20.43 | 33.856 | | | | | 411 |
| 133.20-B | VIII-2 | 1510 | 26°13.5' | 112°26.0' | 9 | - | 1 | cloudy | slight | 10 | 21.72 | 34.029 | | | | | 432 |
| 133.21-B | 2 | 1605 | 26°13.0' | 112°32.5' | 26 | 290° | 3 | cloudy | moderate | 10 | 21.23 | 34.038 | | | | | 419 |
| 133.23-B | 2 | 1710 | 26°08.5' | 112°40.0' | 40 | 300° | 3 | cloudy | moderate | 10 | 19.38 | 33.992 | | | | | 375 |
| 133.25-B | 2 | 1810 | 26°05.0' | 112°48.5' | 45 | 300° | 3 | cloudy | moderate | 10 | 19.86 | 34.062 | | | | | 382 |
| 133.30-B | 2 | 2100 | 25°54.5' | 113°07.5' | 100 | 300° | 3 | cloudy | moderate | 10 | 20.10 | 33.782 | | | | | 409 |
| 133.35-B | 3 | 0410 | 25°44.5' | 113°26.5' | 400 | 270° | 4 | cloudy | rough | 10 | 20.14 | 33.764 | | | | | 410 |
| 133.40-B | 3 | 0640 | 25°34.5' | 113°45.5' | 900 | 270° | 3 | cloudy | rough | 10 | 18.58 | 33.652 | | | | | 381 |
| 133.45-B | 3 | 0915 | 25°22.0' | 114°04.5' | 2000 | 300° | 4 | cloudy | rough | 10 | 20.84 | 33.836 | | | | | 423 |
| 133.50-B | 3 | 1140 | 25°09.5' | 114°23.5' | 2000 | 320° | 4 | cloudy | rough | 10 | 22.18 | 33.875 | | | | | 455 |
| 133.70-B | 3 | 2155 | 24°35.0' | 115°43.5' | 2000 | 320° | 4 | cloudy | rough | 10 | 21.46 | 33.907 | | | | | 434 |
| 133.80-B | 4 | 0155 | 24°14.5' | 116°17.0' | 2100 | 330° | 3 | cloudy | rough | 10 | 21.54 | 33.971 | | | | | 431 |
| 134.56-B | 3 | 1405 | 24°56.5' | 114°43.0' | 2000 | 320° | 4 | cloudy | rough | 10 | 22.44 | 33.956 | | | | | 457 |
| 134.61-B | 3 | 1640 | 24°44.0' | 115°02.0' | 2150 | 320° | 4 | cloudy | rough | 10 | 20.96 | 33.858 | | | | | 425 |
| 134.66-B | 3 | 1900 | 24°33.5' | 115°20.0' | 2200 | 340° | 4 | cloudy | rough | 10 | 20.62 | 33.831 | | | | | 418 |

DATA AT NET TOW STATIONS

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $NO_2$-N µg at/L | $\delta_T$ cl/ton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 137.20-G | VII-22 | 1045 | 25°40.0' | 112°07.0' | 4 | 290° | 2 | partly cloudy | slight | 10 | 25.31 | 34.327 | | | | | 510 |
| 137.21-G | 22 | 1130 | 25°38.5' | 112°11.0' | 13 | 300° | 4 | cloudy | slight | 10 | 25.20 | 34.251 | | | | | 513 |
| 137.22-G | 22 | 1211 | 25°36.0' | 112°14.5' | 25 | 300° | 3 | partly cloudy | slight | 10 | 20.61a) | 33.948 | | | | | 409 |
| 137.35-G | 22 | 1903 | 25°10.0' | 113°05.0' | 768 | 100° | 3 | partly cloudy | rough | 10 | 20.12 | 33.836 | | | | | 405 |
| 137.45-G | 23 | 0004 | 24°50.5' | 113°42.0' | 1885 | 270° | 4 | partly cloudy | very rough | 10 | 21.80 | 33.872 | | | | | 446 |
| 137.55-G | 23 | 0612 | 24°29.5' | 114°21.0' | 2040 | 320° | 4 | cloudy | very rough | 10 | 21.26 | 33.855 | | | | | 433 |
| 140.29-G | 24 | 2245 | 24°47.5' | 112°20.5' | 34 | 290° | 2 | partly cloudy | moderate | 10 | 17.80 | 33.885 | | | | | 345 |
| 140.35-G | 24 | 1930 | 24°35.0' | 112°43.0' | 560 | 350° | 3 | partly cloudy | rough | 10 | 23.33 | 33.982 | | | | | 479 |
| 140.45-G | 24 | 1400 | 24°15.5' | 113°21.0' | 1830 | 330° | 3 | cloudy | moderate | 10 | 22.84 | 33.943 | | | | | 468 |

a) Mean value of 20.53 and 20.69°C.

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