

UNIVERSITY OF CALIFORNIA   SCRIPPS INSTITUTION OF OCEANOGRAPHY

# data report

PHYSICAL AND CHEMICAL DATA

CCOFI Cruise 6507  
15 June - 11 August 1965

and

CCOFI Cruise 6509  
31 August - 25 September 1965

SIO Reference 67-17

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CCOFI Cruise 6507  
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Sponsored by

Marine Research Committee

SIO Reference 67-17

Approved for distribution:

*W. A. Nierenberg*  
W. A. Nierenberg, Director

## CONTENTS

|                             |      |
|-----------------------------|------|
| INTRODUCTION . . . . .      | iii  |
| CRUISE 6507                 |      |
| List of Figures . . . . .   | viii |
| Personnel . . . . .         | x    |
| Tabulated Data . . . . .    | 1    |
| CRUISE 6509                 |      |
| List of Figures . . . . .   | xii  |
| Personnel . . . . .         | xiii |
| Tabulated Data . . . . .    | 109  |
| DISTRIBUTION LIST . . . . . | 121  |

## 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 Cruise 6507 and the RV Black Douglas on Cruise 6509 of the California Cooperative Oceanic Fisheries Investigations program. The first two figures in this cruise numbering system represent the year of the cruise; the last two figures, the month. The cruises preceding this one in the series are 6404 and 6407 (Scripps Institution report, SIO Ref. 66-20) and 6504 and 6505 (SIO Ref. 67-16).

The data are accompanied by charts of horizontal distribution.

## TABULATED DATA

On Cruise 6507 the data were obtained by bottle casts and by the in situ Salinity/Temperature/Depth Monitoring and Recording System (STD) and are presented in two forms:

1. When a station consisted of a bottle cast only such as those occupied by the RV Black Douglas, the data are presented in the usual fashion with bottle cast data to the left and standard depth values, interpolated and computed from the bottle cast data, to the right.
2. When a station included both a bottle cast and an STD lowering such as those on the RV Alexander Agassiz, both sets of data are shown with the bottle cast data to the left and the standard depth and computed values determined from the STD record to the right.

On Cruise 6509 only 10 meter temperature and salinity values at net tow stations were collected.

## STANDARD PROCEDURES

### In situ Salinity/Temperature/Depth Recorder

The manufacturer of the STD claims for the temperature an accuracy of  $\pm 0.05^{\circ}\text{C}$  on all ranges with repeatability of  $\pm 0.01^{\circ}\text{C}$  and for the salinity an accuracy of

$\pm 0.03\%$  on all ranges with repeatability of  $\pm 0.01\%$ .<sup>1/</sup> Except for the depth range corresponding to the steepest part of the thermocline, where the salinity trace appears to fluctuate more widely than the bottle samples can confirm, the results of this cruise support the manufacturer's claims.

For Cruise 6507 the close agreement between the bottle cast data and the STD records makes any corrections to the values read from the records unnecessary.

#### Hydrographic Casts

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

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 of the collected samples when determined by salinometer is recorded to three decimal places, provided it meets accepted standards. The values recorded "have a reproducibility of  $\pm 0.004\%$  salinity at the 95 per cent probability level and a probable accuracy of  $\pm 0.01\%$  salinity or better at the same level of probability."<sup>3/</sup> The values are recorded to two decimal places when only one determination per sample was obtained, or where there is doubt concerning the accuracy of a particular sample, or of all samples on a station. The accuracy of all samples obtained by salinometer and recorded to two decimal places is believed to be equal to or better than those obtained by manual titration.

On stations consisting of bottle casts only, extrapolated values and values interpolated between remote observations are not indicated but can be determined from the tabulation of observed depths. A hyphen is used to indicate a missing observed or interpolated value. The time on these stations is the time of messenger release for the bottle cast. On stations having both bottle casts and STD lowerings the first time listed in the heading

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<sup>1/</sup>In situ Salinity/Temperature/Depth Monitoring and Recording System, Model 9006, Tech. Rep. No. 102, HYTECH Marine Products, The Bissett-Berman Corporation.

<sup>2/</sup>Klein, Hans T. A new technique for processing physical oceanographic data. MS.

<sup>3/</sup>Quotation from Department of Oceanography, University of Washington, Tech. Rep. No. 66, UW Ref. 60-18, October 1960.

is the time of messenger release for the bottle cast. The second time listed is the startdown time for the STD lowering usually about one-half hour before the bottle cast. When more than one bottle cast was made on station, messenger times and wire angles are given in the order of increasing depth and a significant change in position during a multiple cast is listed similarly. Multiple casts are indicated by a letter following all observed depths of each cast except the cast originating at the surface. Footnotes corresponding to each letter will explain the type of cast.

On stations where more than one cast was lowered, slight discrepancies in the property values may be noted. These may be caused by changes in geographical position, real changes with time, slight error in measurement or a combination of these factors. Reconciled property curves from these bottle casts were used for interpolated values deeper than the 600 meter STD lowering.

#### FOOTNOTES

Laboratory personnel note any possible imperfections in the sealing of the sample 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 on stations where no STD lowering was made, 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 or not the property curve was drawn through the value.

In addition to footnotes, one special notation is used without a footnote because the meaning is always the same. Values which 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 on stations where no STD lowering was made).

## 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.

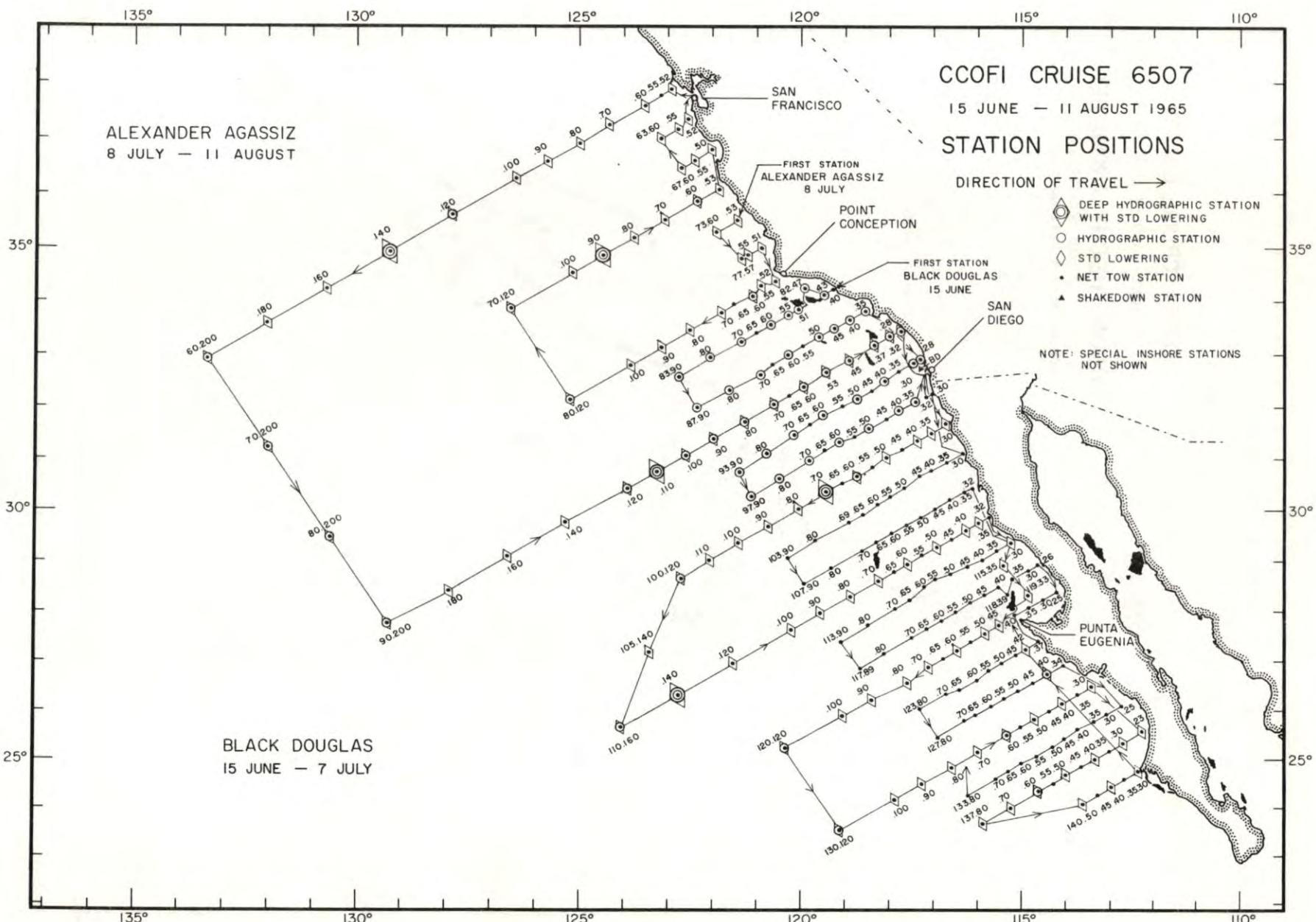


FIGURE 1

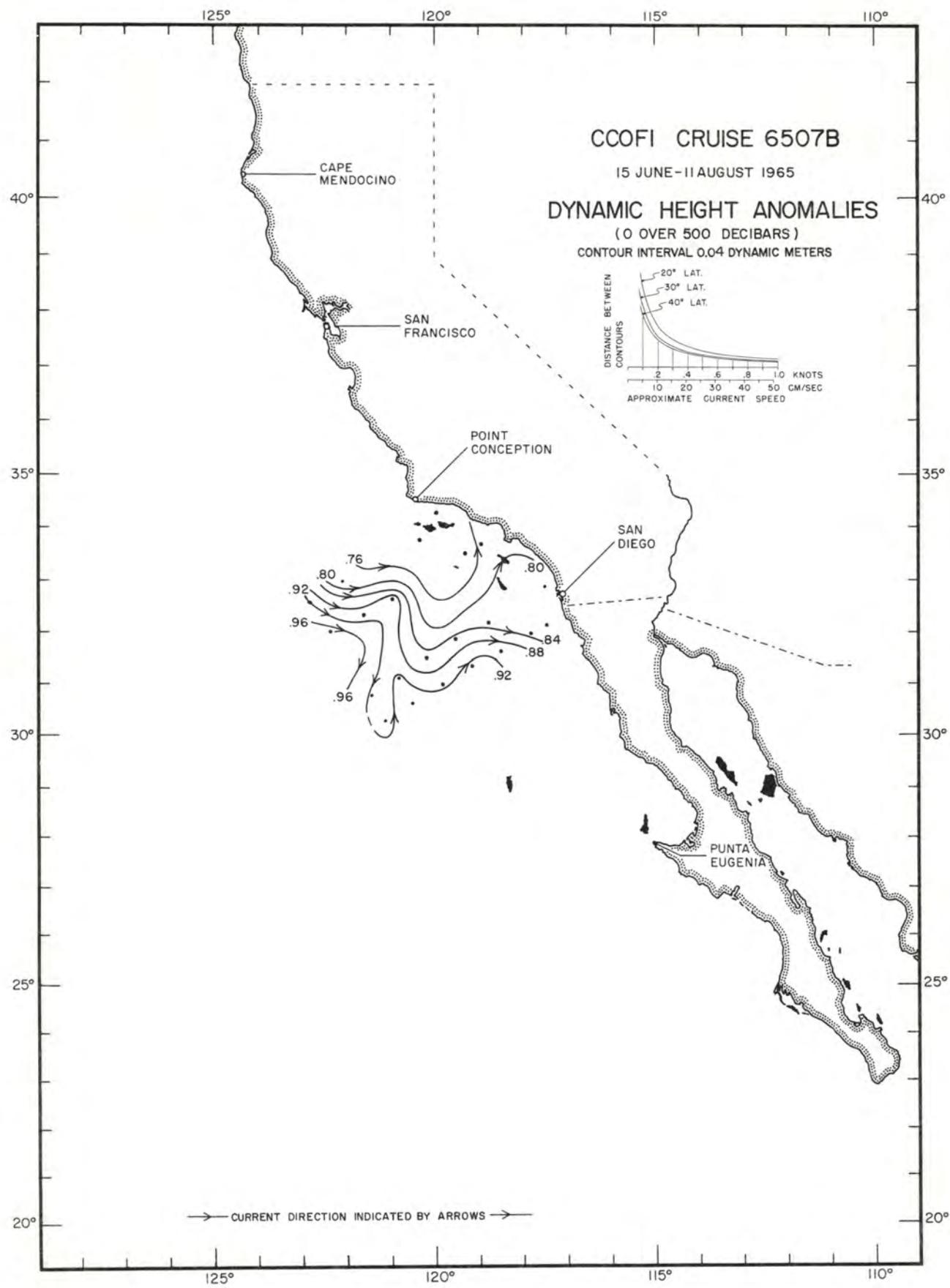


FIGURE 2

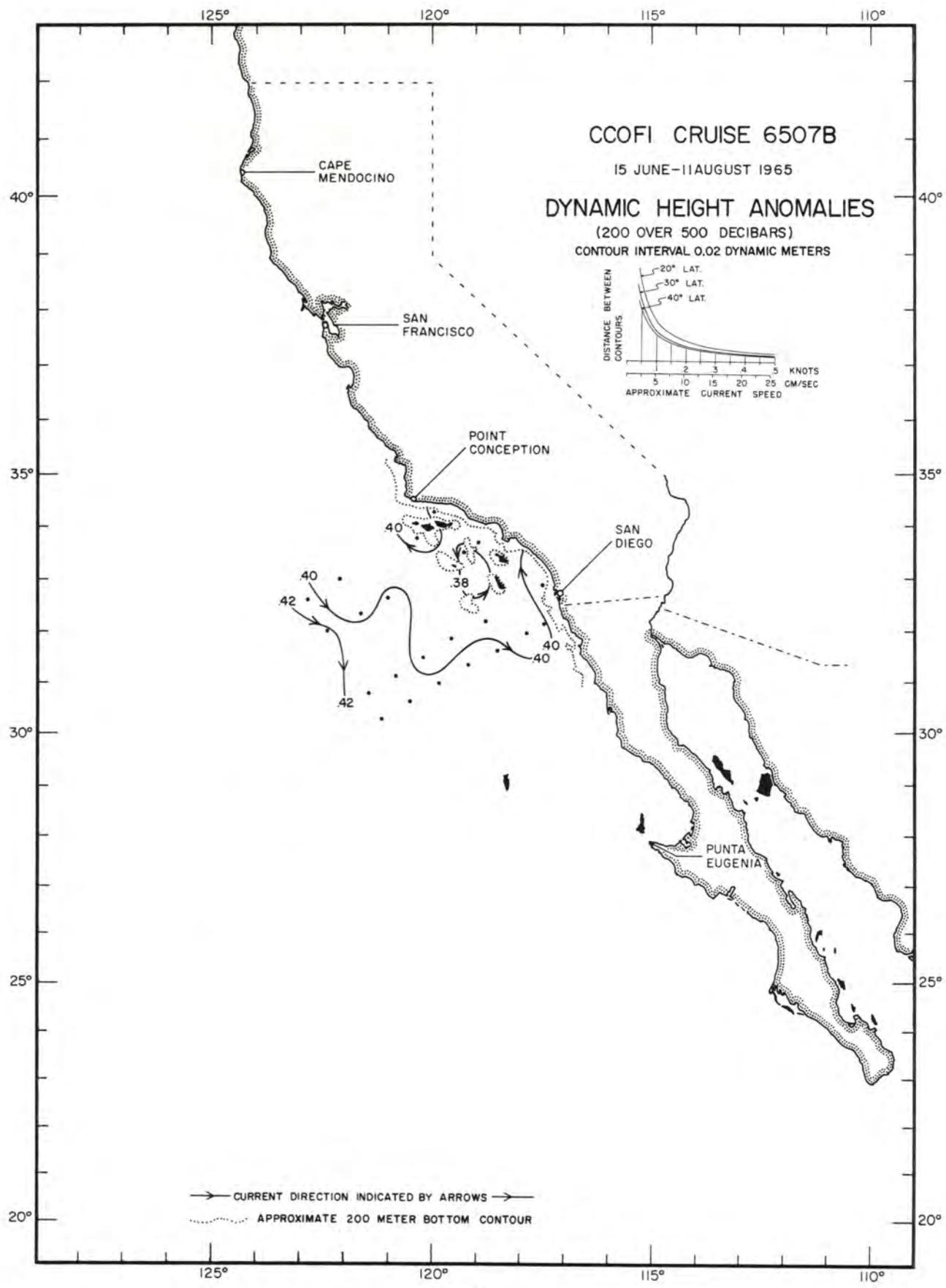


FIGURE 3

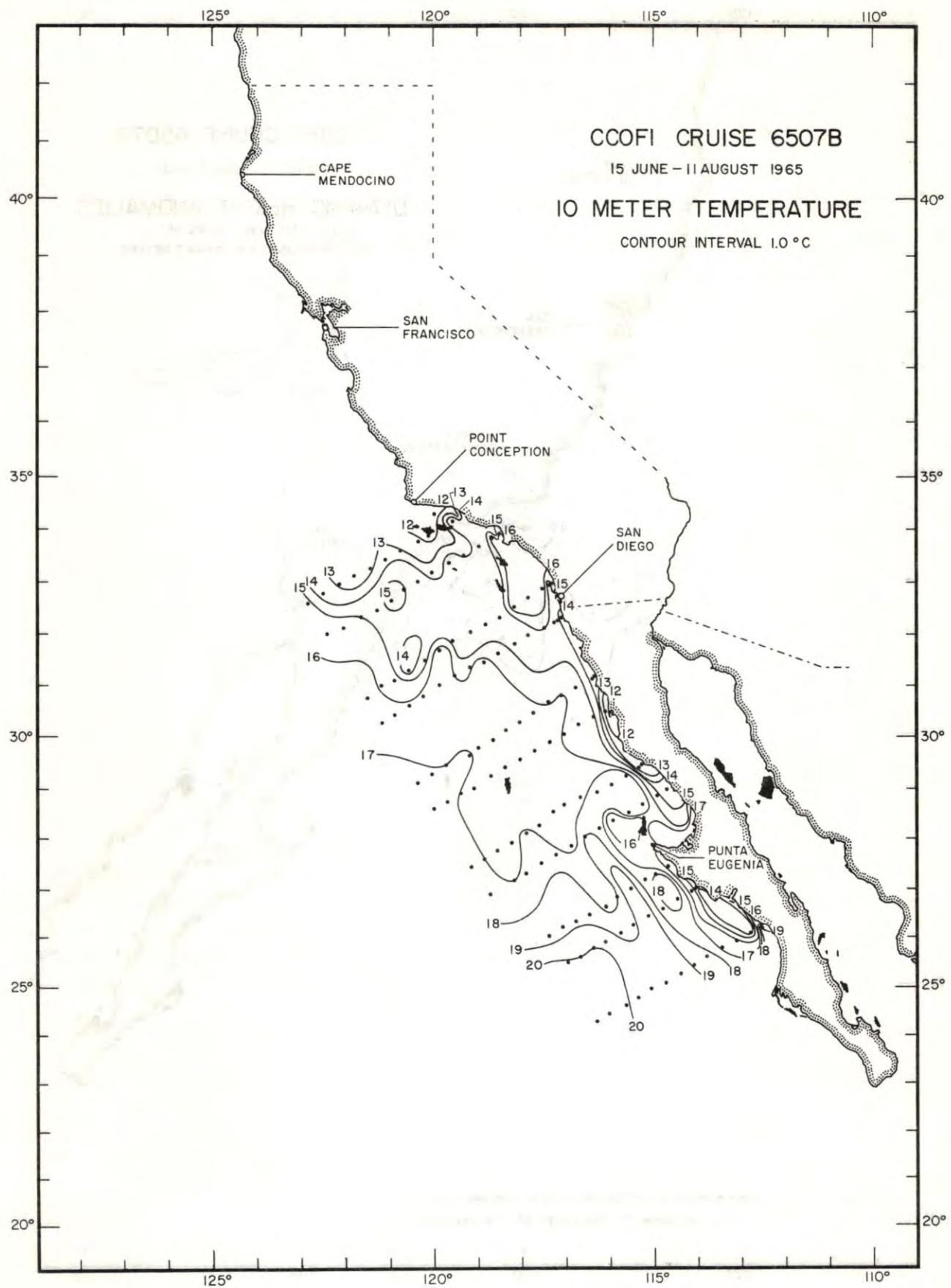


FIGURE 4

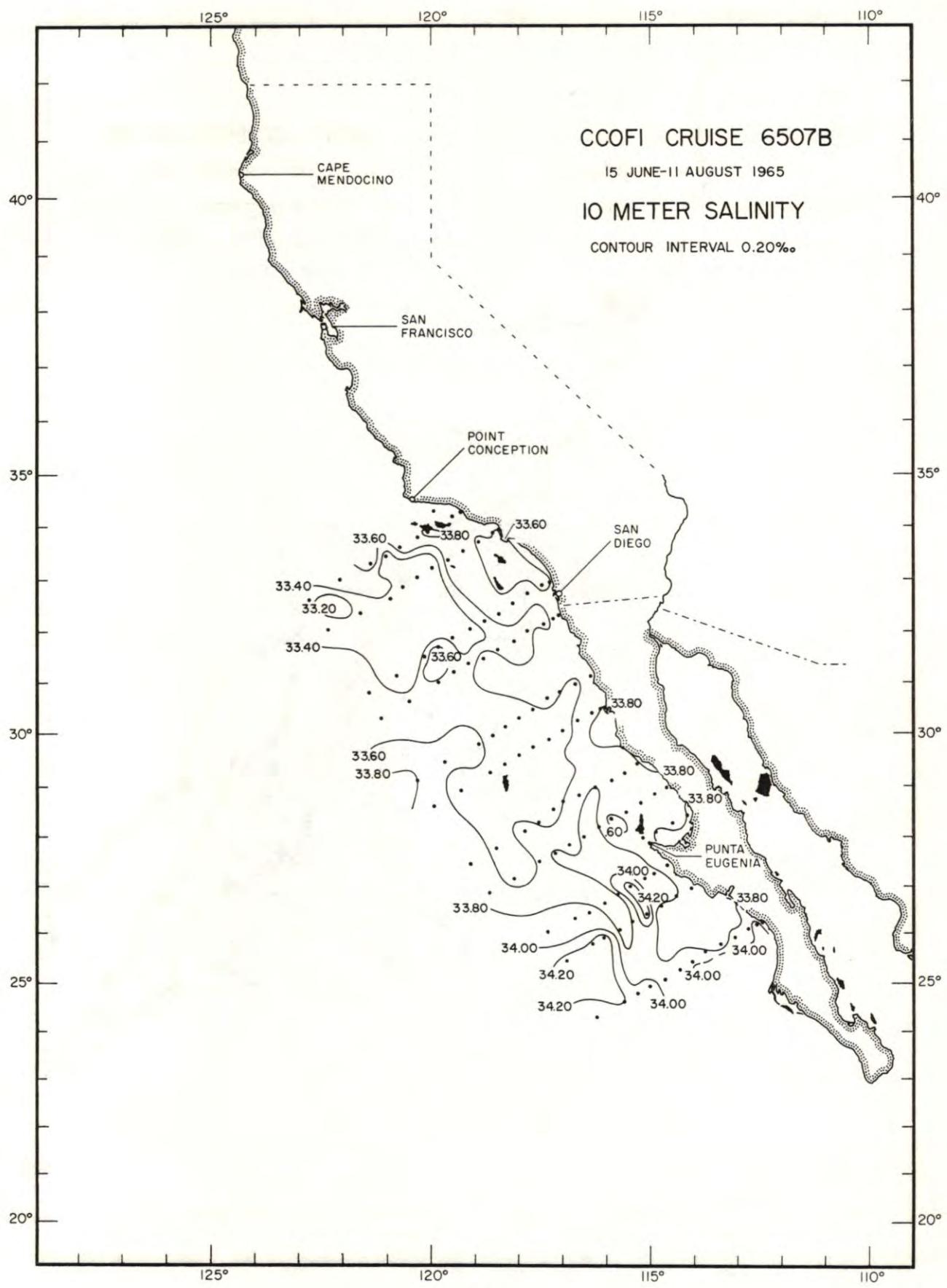


FIGURE 5

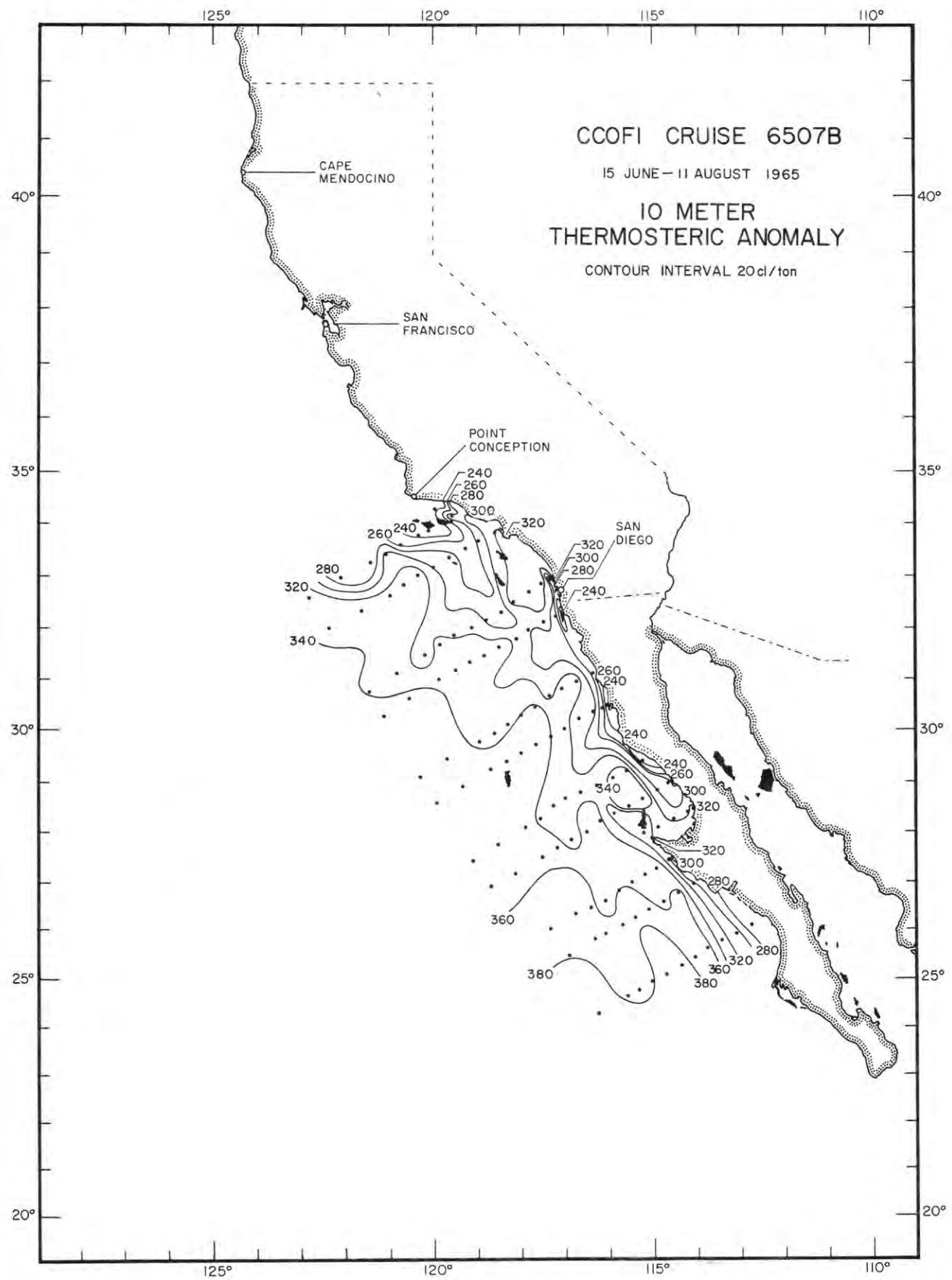


FIGURE 6

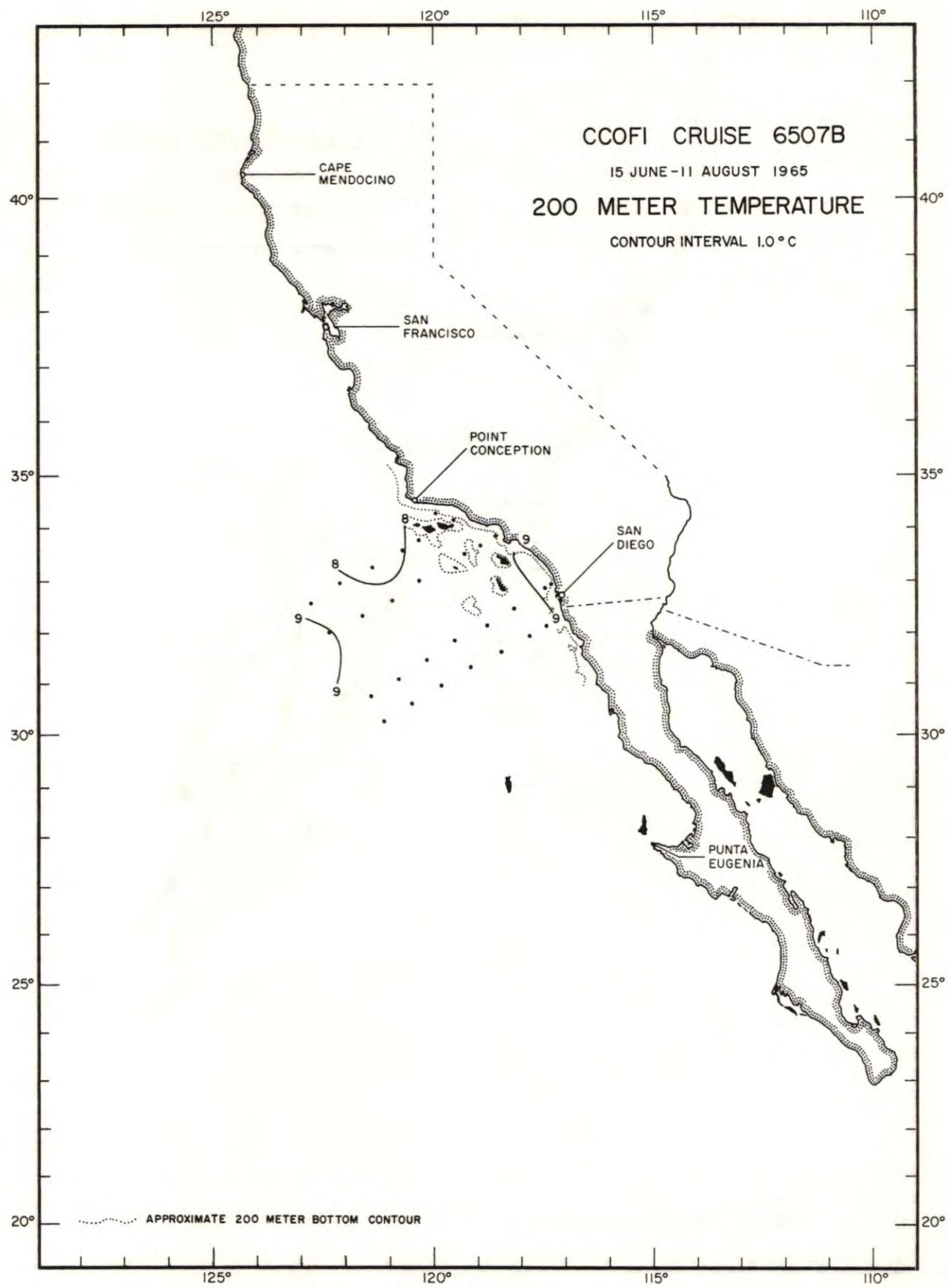


FIGURE 7

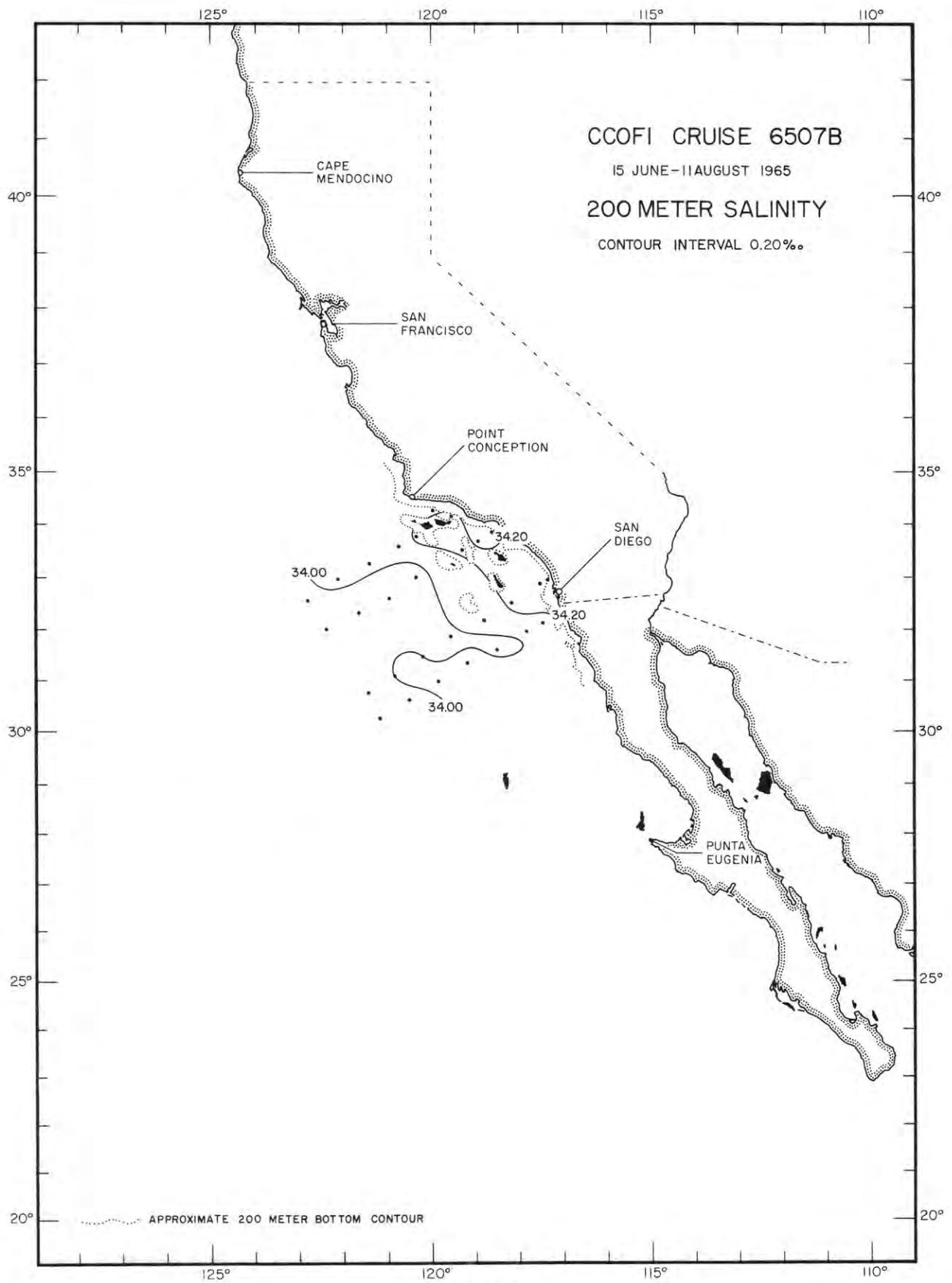


FIGURE 8

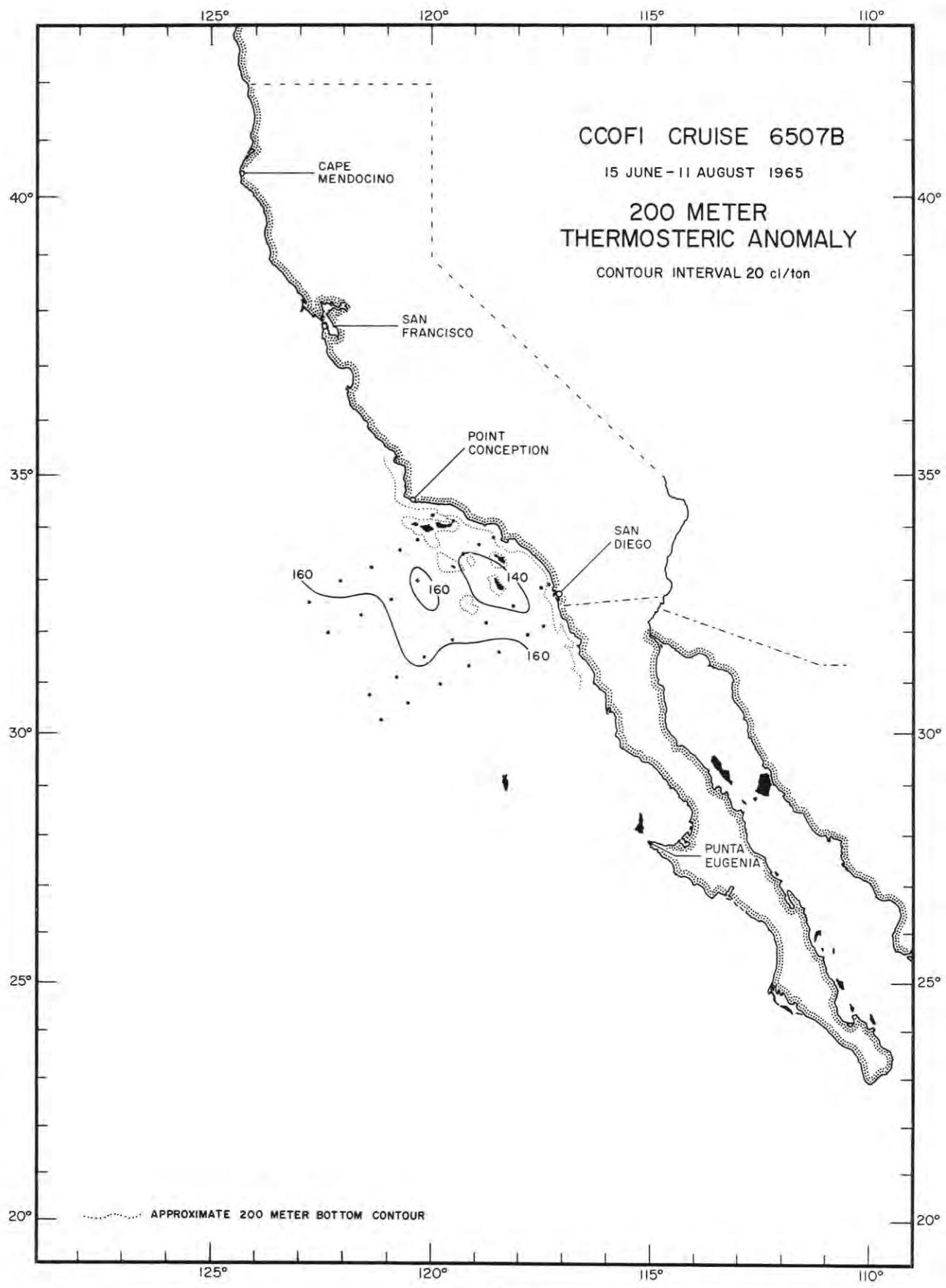


FIGURE 9

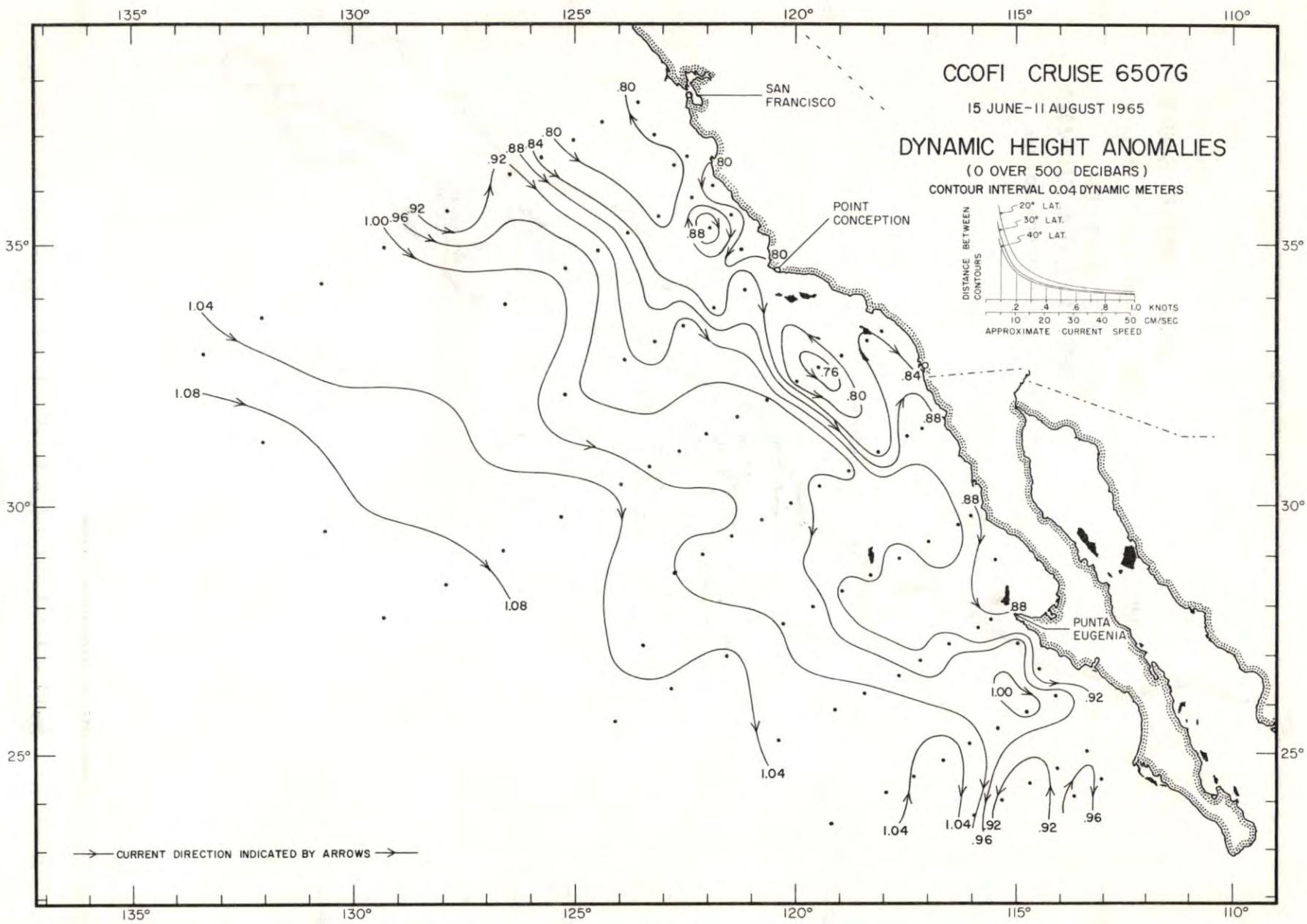


FIGURE 10

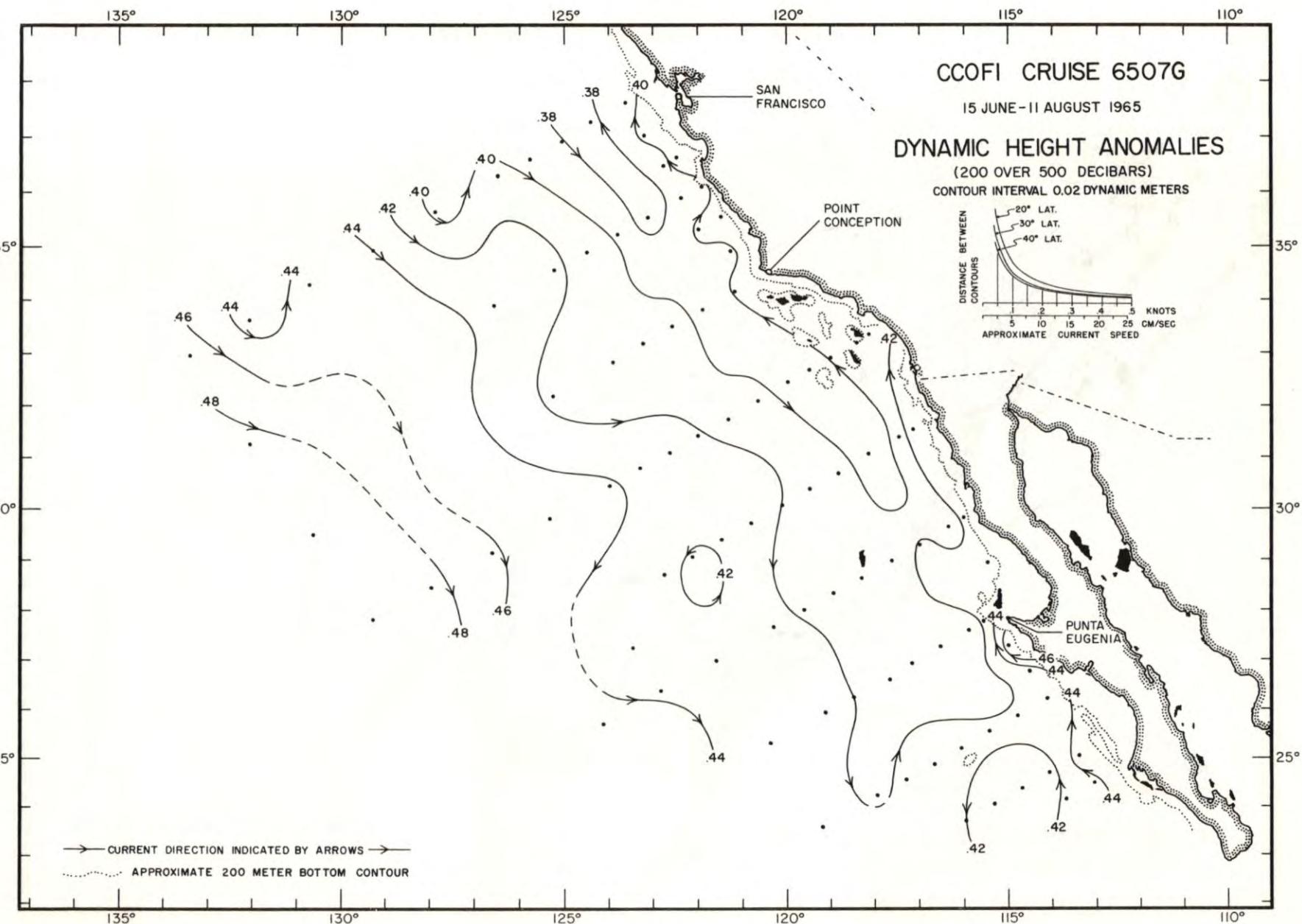
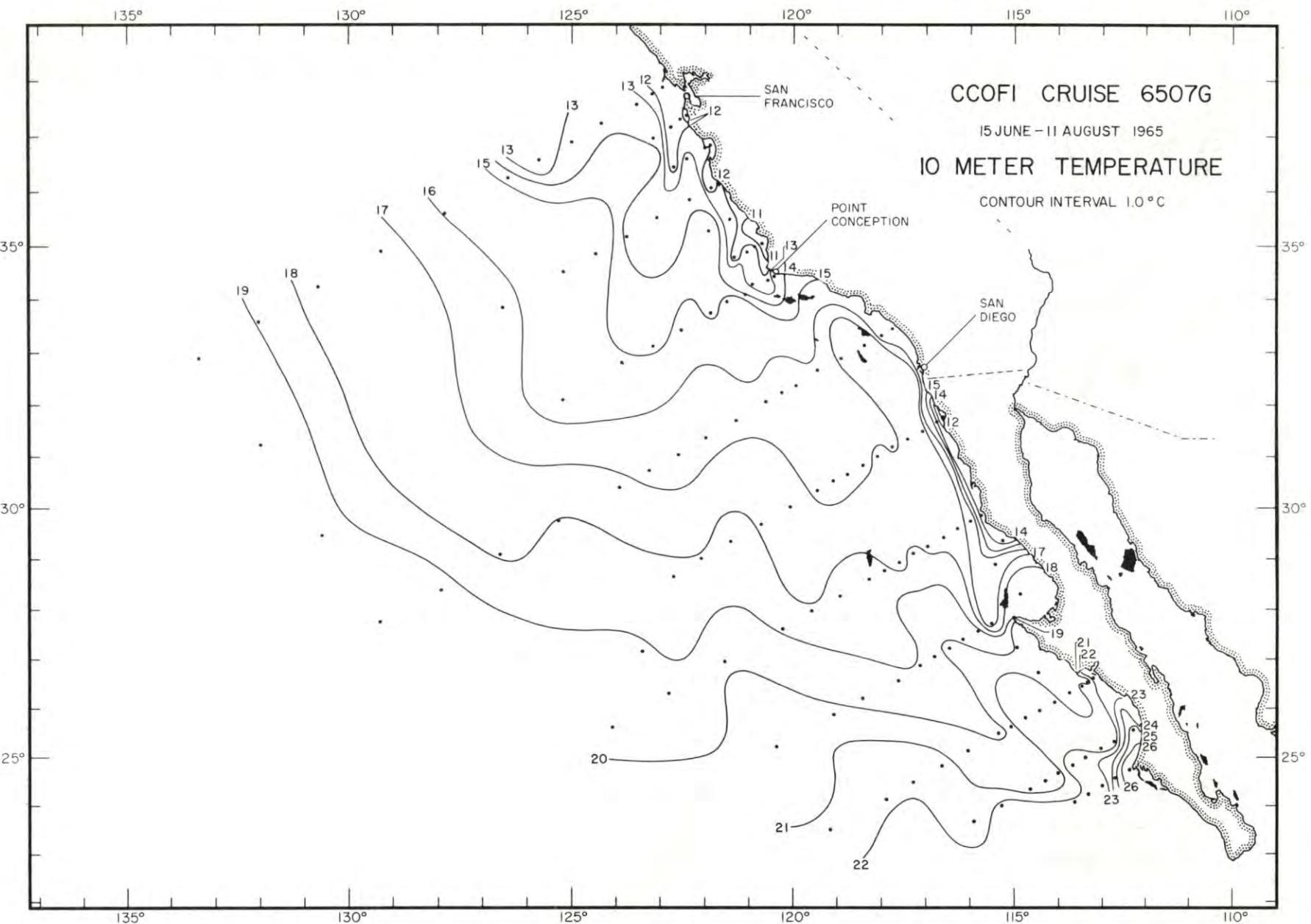


FIGURE II



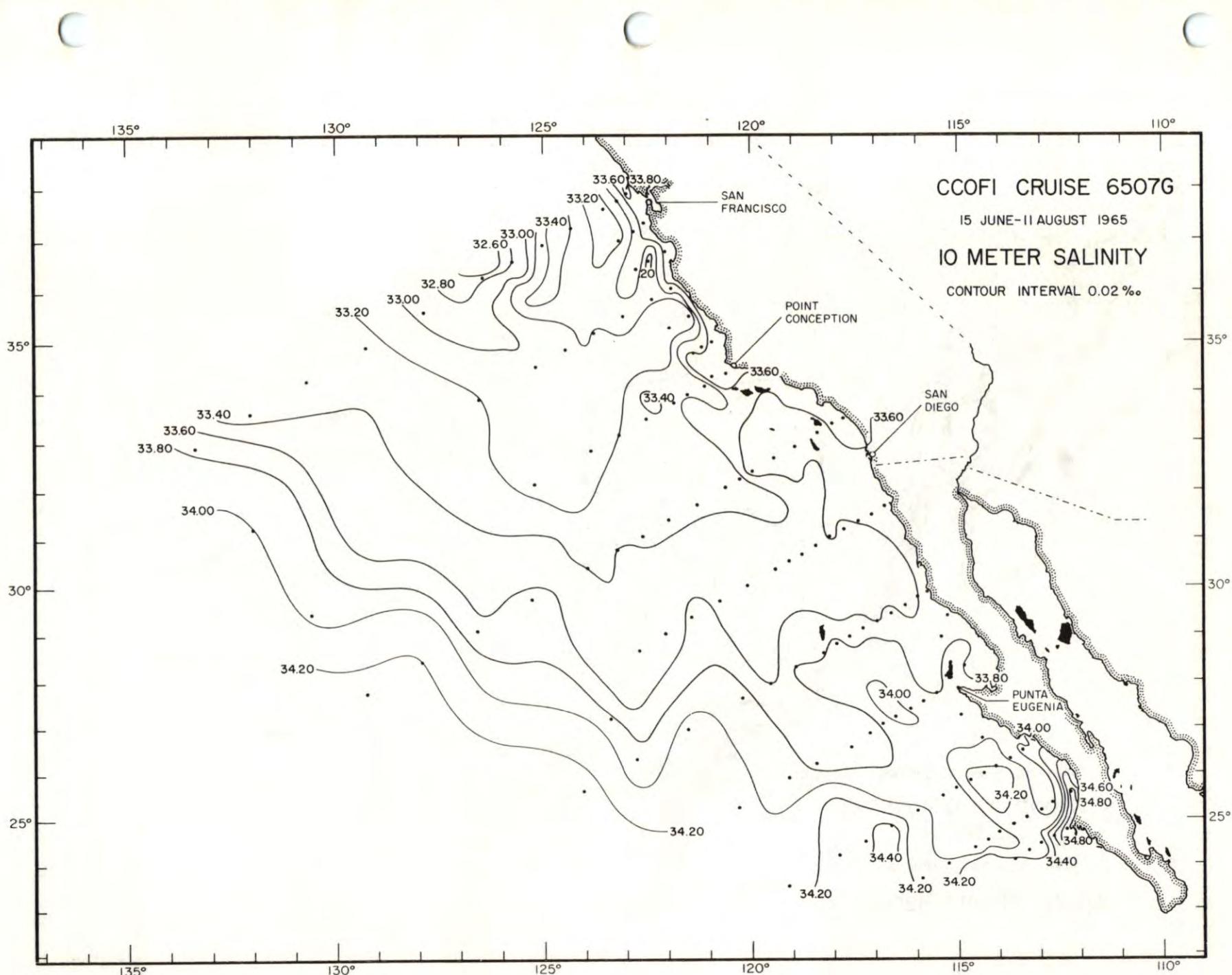


FIGURE 13

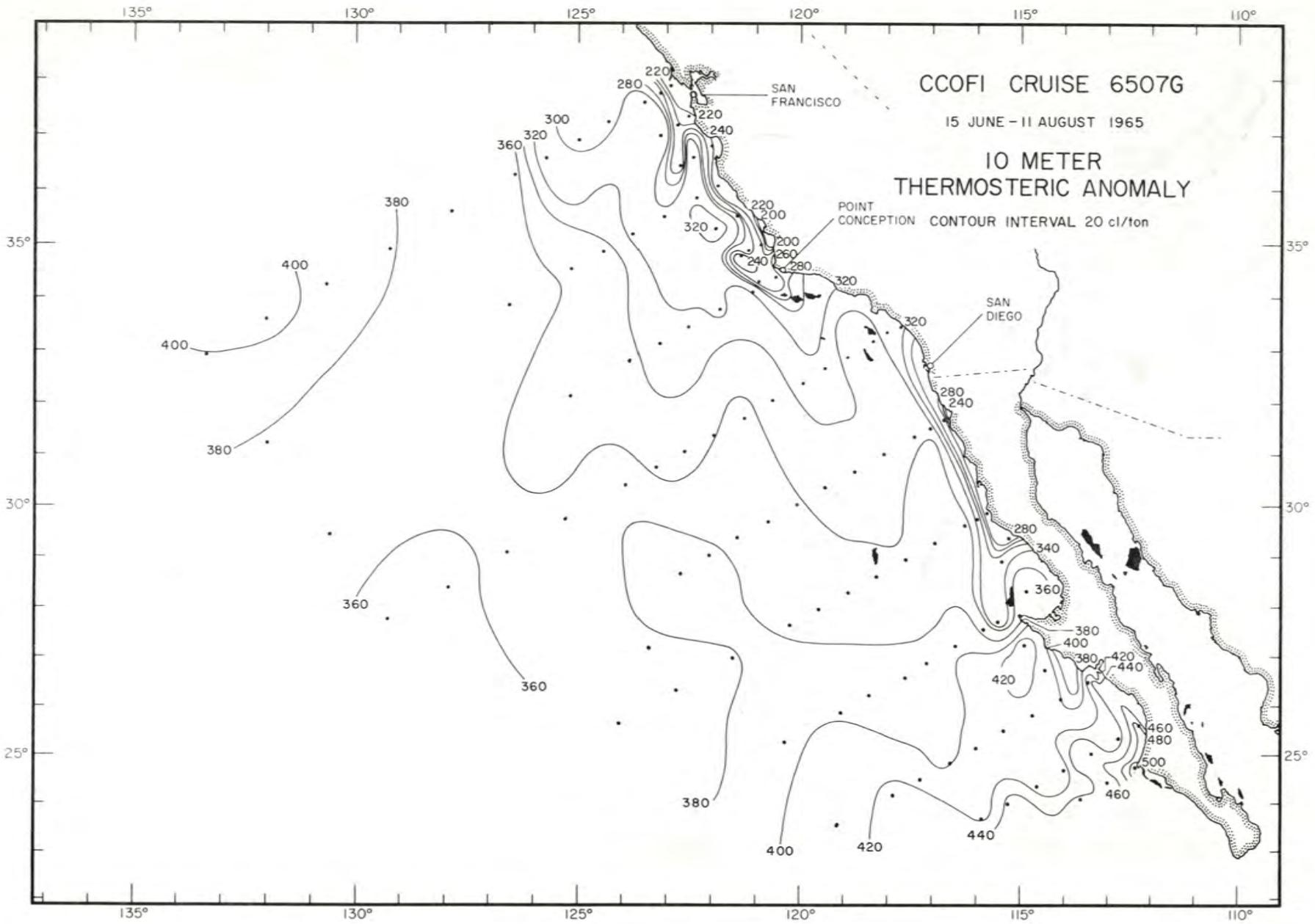


FIGURE 14

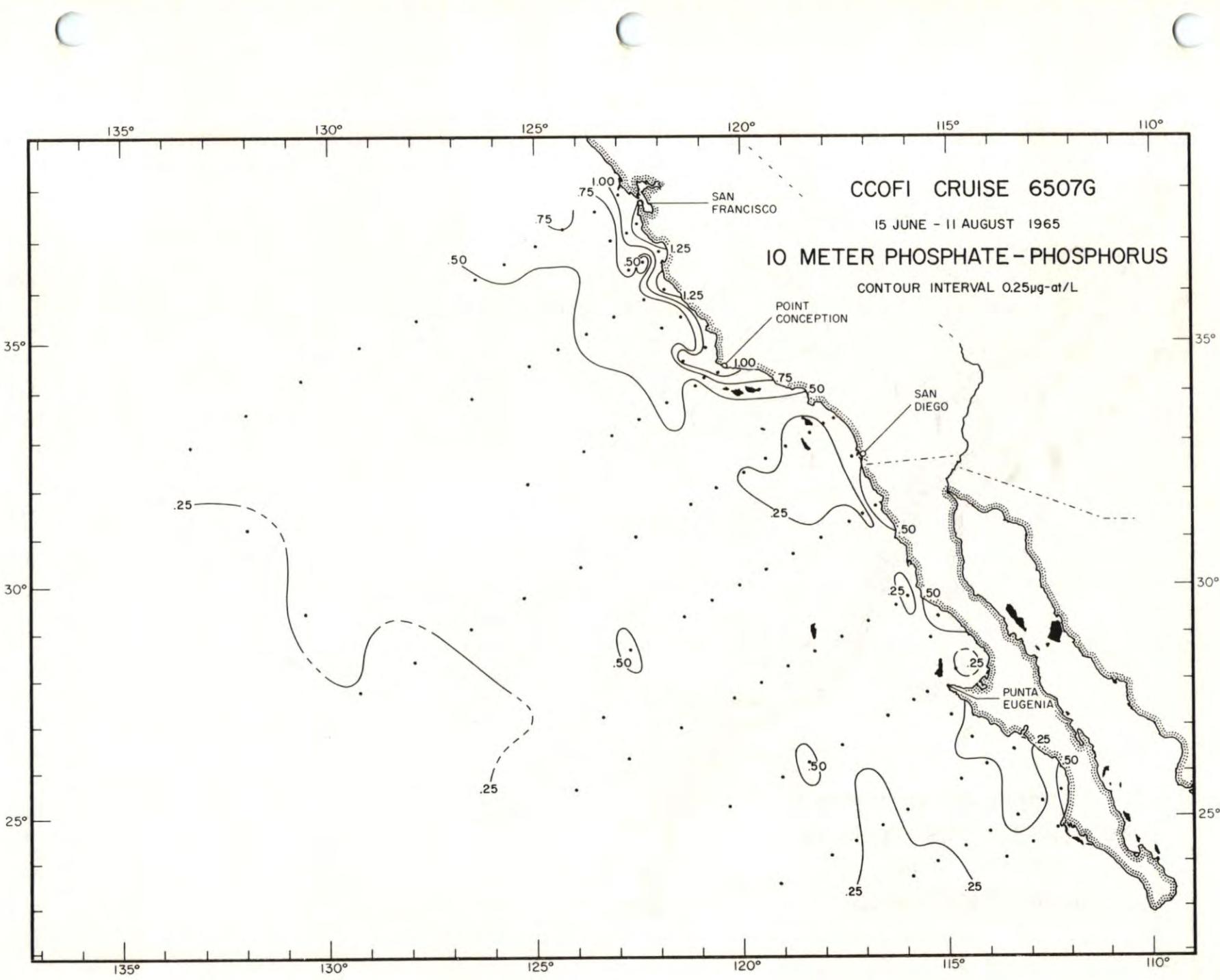


FIGURE 15

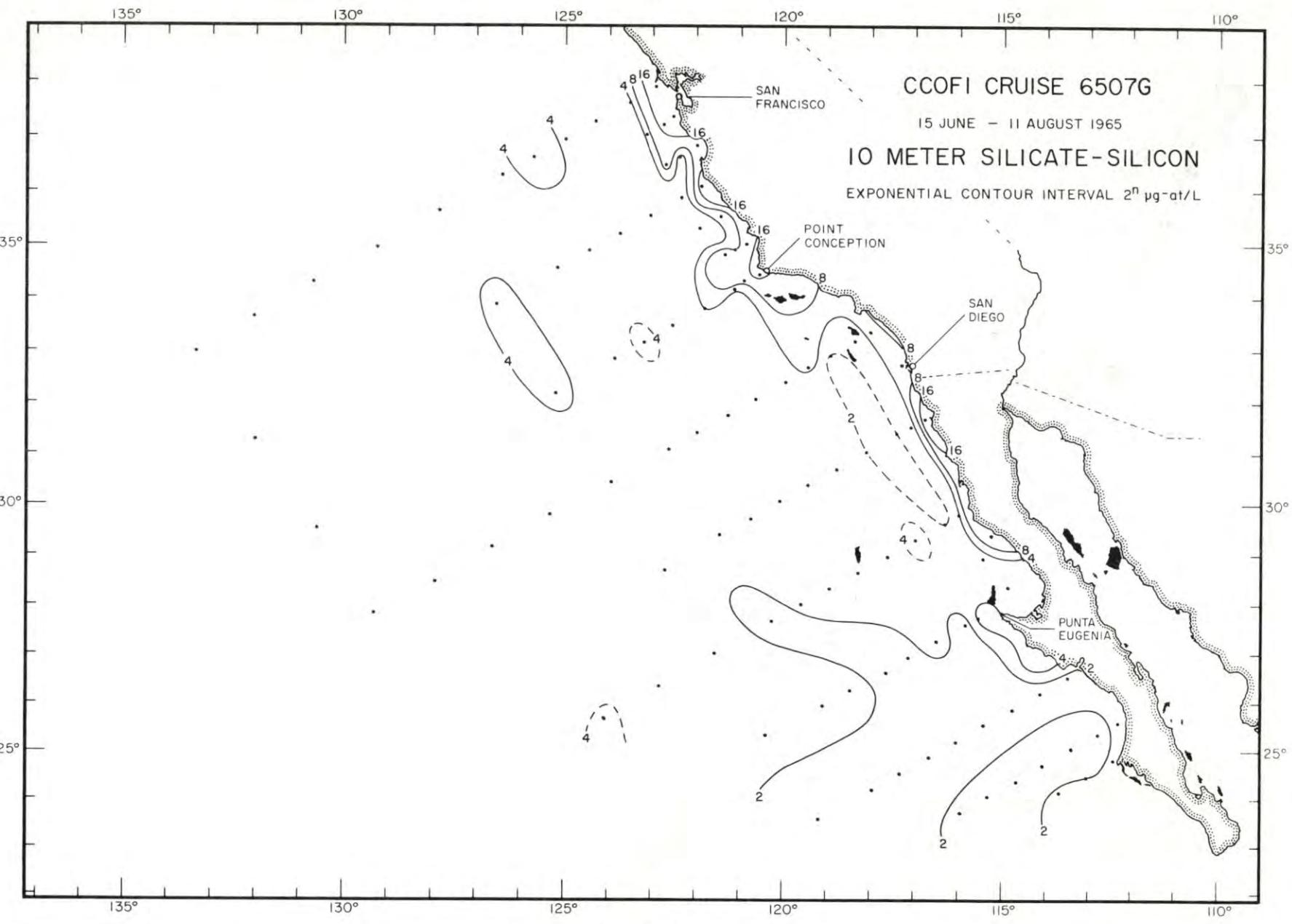


FIGURE 16

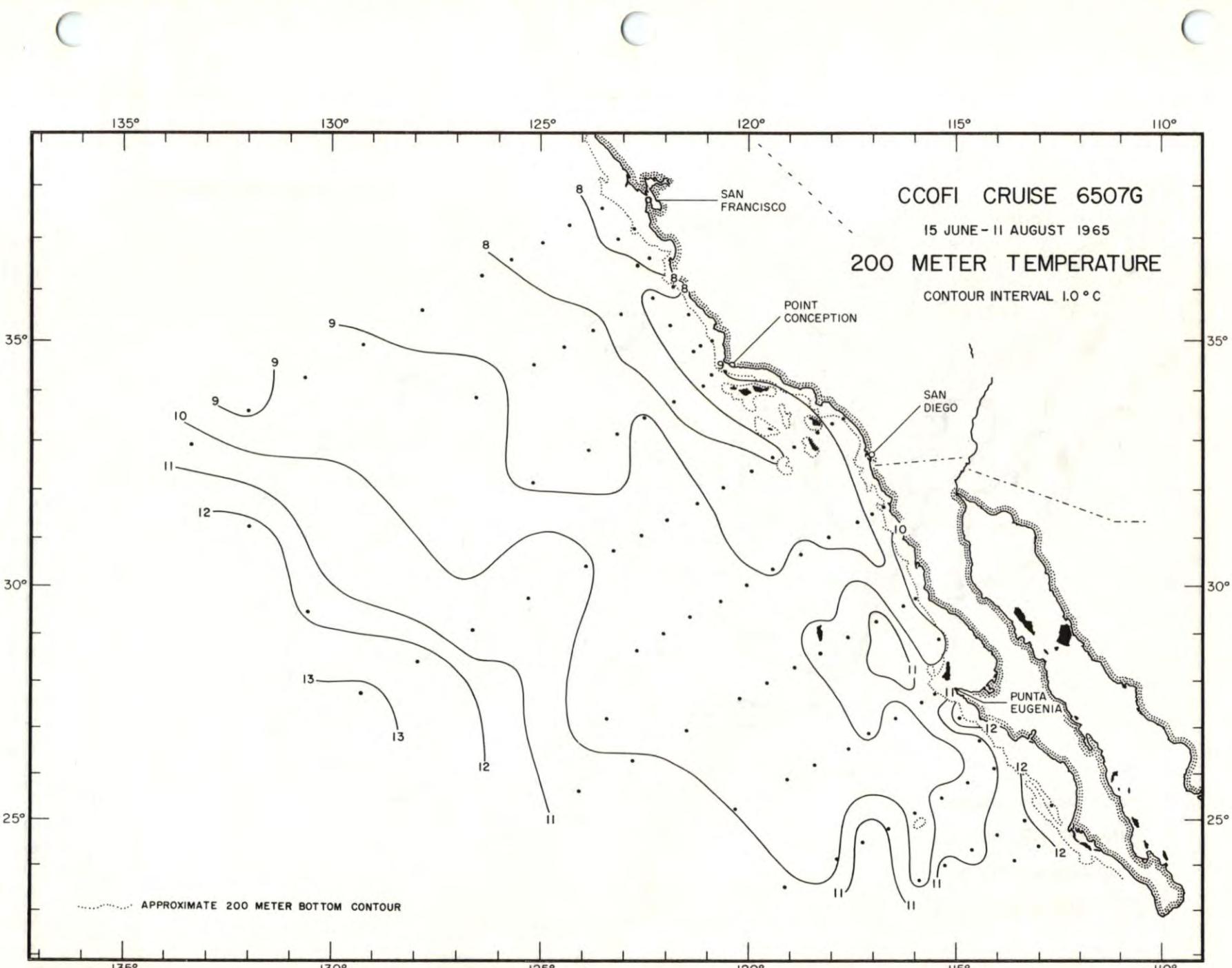


FIGURE 17

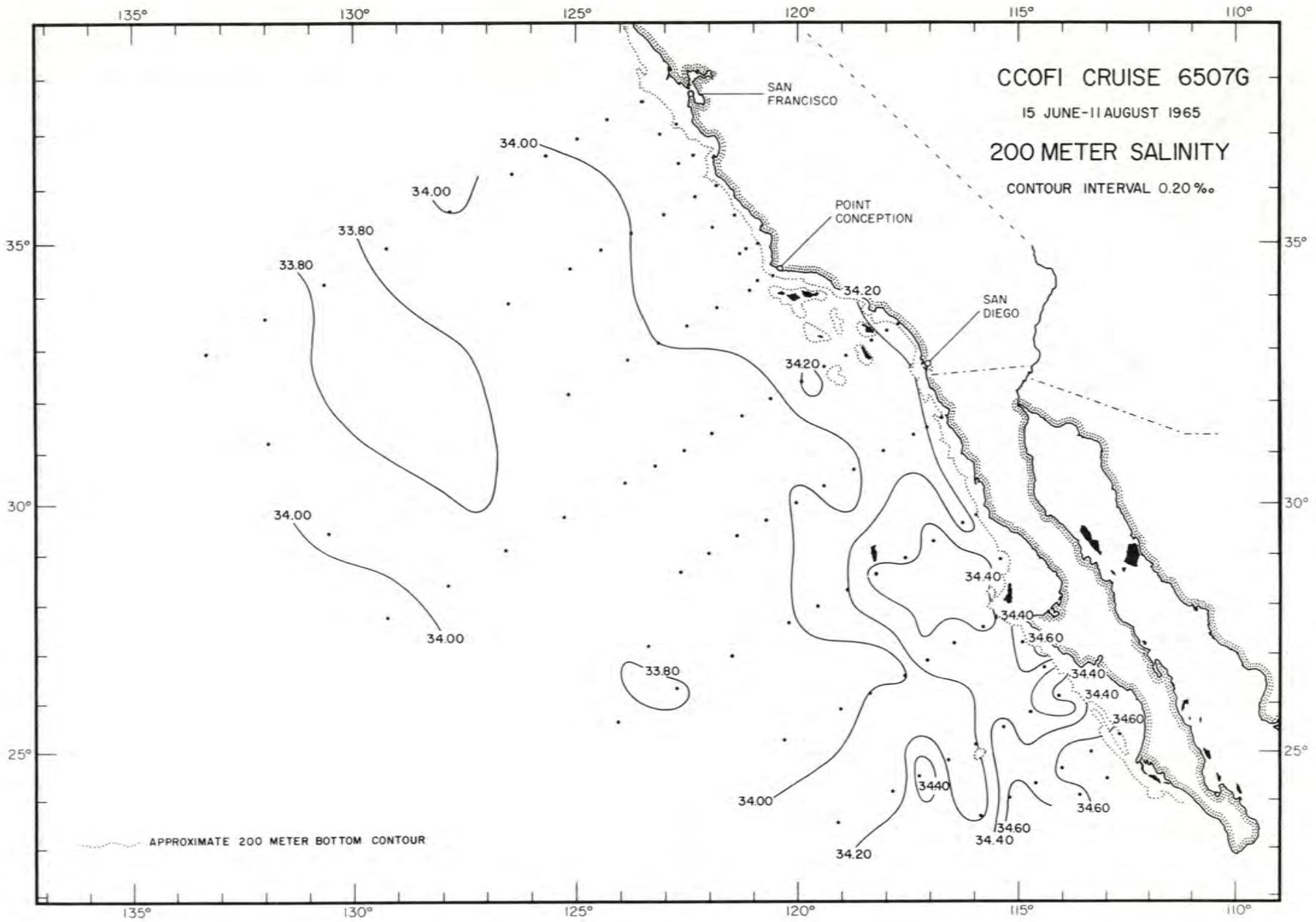


FIGURE 18

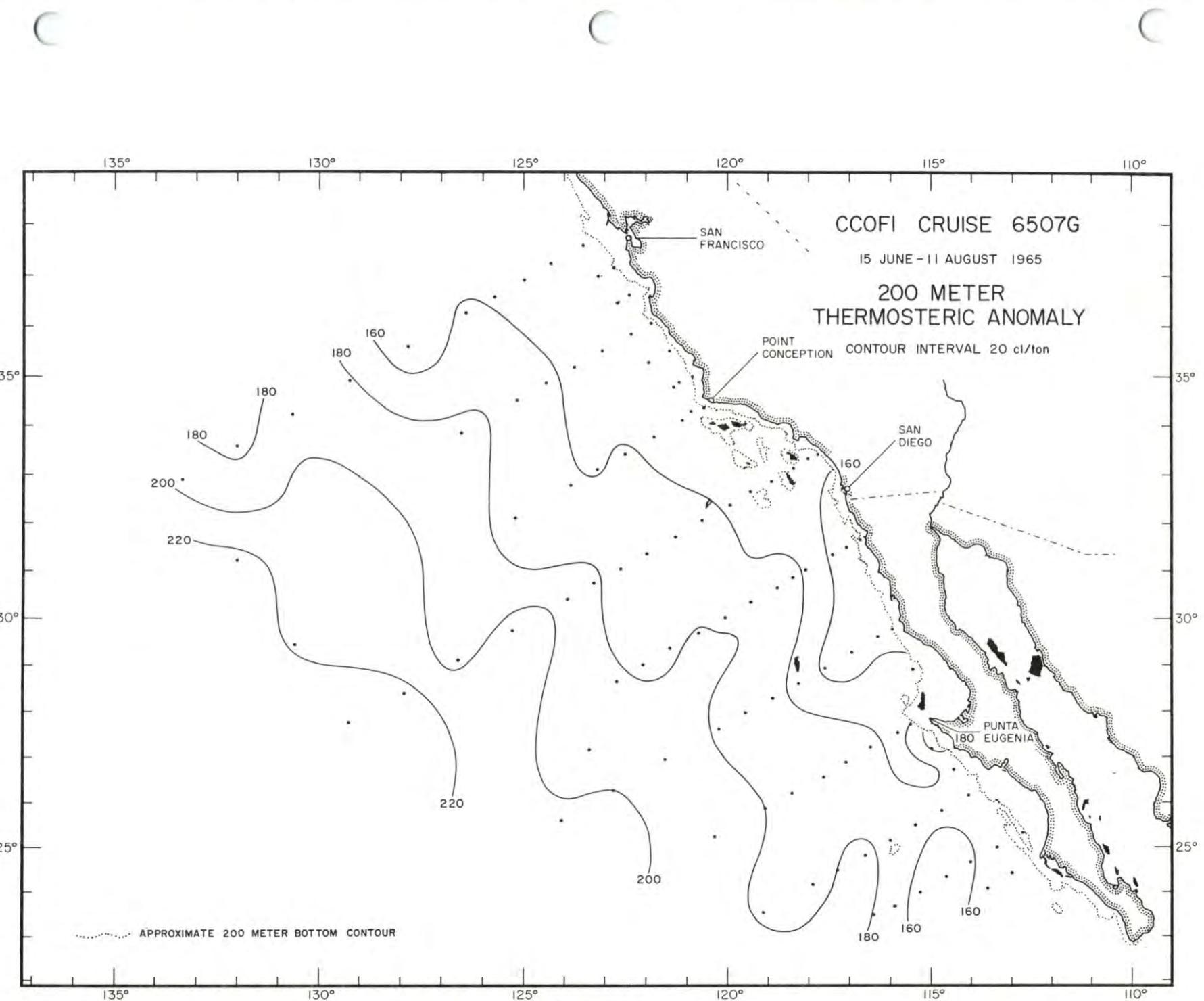


FIGURE 19

PERSONNEL  
Cruise 6507

SHIPS' CAPTAINS

Davis, Laurence, RV Alexander Agassiz  
Leed, Bjarne, RV Black Douglas

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

RV Alexander Agassiz

Hester, Arthur W., Senior Marine Technician (in charge)  
Daniel, Dick A., Marine Technician  
Davoll, Peter J., Marine Technician  
Ferreira, Simon M., Electronics Technician  
\*Goodwin, Joseph B. III, Lieutenant, United States Coast Guard  
Kavanagh, James A., Marine Technician  
Muus, David A., Senior Marine Technician  
\*\*Paulling, Dr. John R., Associate Professor, Department of Naval Architecture,  
University of California, Berkeley  
Rodrigues, Daniel A., Student, Hydrographic Office, Portugal  
Wagner, Vaughn M., Fisheries Technician, Bureau of Commercial Fisheries

RV Black Douglas

Farrar, Lloyd J., Biology Technician (Fisheries), Bureau of Commercial Fisheries  
Kimura, Makoto, Fishery Biologist (General), Bureau of Commercial Fisheries  
Perkins, Herbert C., Biology Technician (Fisheries), Bureau of Commercial  
Fisheries  
\*\*\*Wilson, Warren E., Marine Technician  
\*\*\*Wirth, David, Marine Technician

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\*Northern half of cruise only.

\*\*Southern half of cruise only.

\*\*\*Hydrographic only.

| O B S E R V E D   L E V E L S   O F   D E P T H  |       |        |       |          |     |      | S T A N D A R D   L E V E L S   C F   D E P T H |     |       |       |          |       |       |       |
|--|-------|--------|-------|----------|-----|------|---|-----|-------|-------|----------|-------|-------|-------|
| INPUT  |       |        |       | COMPUTED |     |      | INPUT   |     |       |       | COMPUTED |       |       |       |
| Z  | T     | S      | OXY   | PHO      | SIL | NIT  | D*T   | Z   | T     | S     | OXY      | SIG*T | D*T   | CD    |
| 60.52  |       |        |       |          |     |      | CCOFI CRUISE 6507                               |     |       |       |          |       |       | 60.52 |
| ALEXANDER AGASSIZ, JULY 17 1965, 0709 0642 GCT, 37 53.5N 123 02W, SOUNDING 46 FM, WIND 190 FORCE 1, WEATHER FOG, SEA SLIGHT.                         |       |        |       |          |     |      |   |     |       |       |          |       |       |       |
| 0  | 13.24 | 33.470 | A     | 0.21     | 3   | 0.04 | 279.4   | 0   | 13.18 | 33.49 | -        | 25.21 | 276.8 | 0     |
| 10   | 11.05 | 33.929 | 7.73  | 1.09     | 24  | 0.42 | 206.0   | 10  | 11.10 | 33.93 | -        | 25.94 | 206.8 | .024  |
| 72   | 9.10  | 33.946 | 2.66  | 2.51     | 44  | 0.49 | 173.3   | 20  | 10.38 | 33.96 | -        | 26.10 | 192.5 | .044  |
|  |       |        |       |          |     |      |   | 30  | 10.07 | 33.96 | -        | 26.15 | 187.4 | .063  |
| 60.60  |       |        |       |          |     |      | CCOFI CRUISE 6507                               |     |       |       |          |       |       | 60.60 |
| ALEXANDER AGASSIZ, JULY 17 1965, 1154 1109 GCT, 37 37N 123 37W, SOUNDING 1760 FM, WIND 320 FORCE 1, WEATHER OVERCAST, SEA MISSING, WIRE ANGLE 09.    |       |        |       |          |     |      |   |     |       |       |          |       |       |       |
| 1  | 14.04 | 33.095 | 5.888 | 0.58     | 4   | 0.05 | 322.5   | 0   | 13.86 | 33.08 | -        | 24.75 | 320.1 | 0     |
| 11   | 14.04 | 33.097 | 6.20  | 0.54     | 4   | 0.02 | 322.3   | 10  | 13.86 | 33.10 | -        | 24.77 | 318.6 | .032  |
| 31   | 13.05 | 33.282 | 6.23  | 0.85     | 6   | 0.15 | 289.7   | 20  | 13.58 | 33.19 | -        | 24.90 | 306.5 | .063  |
| 55   | 11.08 | 33.326 | 5.95  | 1.23     | 12  | 0.33 | 251.1   | 30  | 12.70 | 33.29 | -        | 25.15 | 282.5 | .093  |
| 65   | 10.58 | 33.366 | 5.63  | 1.37     | 15  | 0.39 | 239.7   | 50  | 11.46 | 33.30 | -        | 25.39 | 259.5 | .147  |
| 75   | 10.67 | 33.510 | 5.60  | 1.47     | 16  | 0.29 | 230.6   | 75  | 10.46 | 33.55 | -        | 25.76 | 224.1 | .208  |
| 90   | 9.74  | 33.587 | 4.86  | 1.77     | 22  | 0.55 | 209.8   | 100 | 9.38  | 33.75 | -        | 26.10 | 192.1 | .260  |
| 105  | 9.26  | 33.747 | -     | 1.98     | 25  | 0.00 | 190.5   | 125 | 8.95  | 33.91 | -        | 26.29 | 173.7 | .307  |
| 129  | 8.89  | 33.915 | 3.15  | 2.20     | 34  | 0.00 | 172.4   | 150 | 8.58  | 33.97 | -        | 26.40 | 163.7 | .349  |
| 149  | 8.52  | 33.947 | 3.11  | 2.12     | 33  | 0.00 | 164.6   | 200 | 8.11  | 34.04 | -        | 26.52 | 151.7 | .430  |
| 173  | 8.30  | 33.993 | 2.76  | 2.25     | 37  | 0.00 | 158.0   | 250 | 7.44  | 34.06 | -        | 26.64 | 141.0 | .505  |
| 203  | 7.96  | 34.023 | -     | 2.32     | 38  | 0.00 | 150.9   | 300 | 6.80  | 34.07 | -        | 26.74 | 131.8 | .575  |
| 233  | 7.58  | 34.024 | 2.64  | 2.34     | 43  | 0.00 | 145.5   | 400 | 6.17  | 34.14 | -        | 26.87 | 118.7 | .705  |
| 272  | 7.30  | 34.092 | 1.88  | 2.63     | 52  | 0.00 | 136.7   | 500 | 5.47  | 34.19 | -        | 27.00 | 106.7 | .824  |
| 331  | 6.52  | 34.070 | 1.67  | 2.76     | 57  | 0.00 | 128.2   | 600 | 5.17  | 34.28 | -        | 27.11 | 96.5  | .932  |
| 404  | 6.00  | 34.131 | 1.08  | 3.01     | 68  | 0.00 | 117.3   |     |       |       |          |       |       |       |
| 478  | 5.46  | 34.145 | .91   | 3.09     | 77  | 0.00 | 109.9   |     |       |       |          |       |       |       |
| 557  | 5.22  | 34.248 | .53   | 3.19     | 89  | 0.00 | 99.5  |     |       |       |          |       |       |       |
| 60.70  |       |        |       |          |     |      | CCOFI CRUISE 6507                               |     |       |       |          |       |       | 60.70 |
| ALEXANDER AGASSIZ, JULY 17 1965, 1721 1653 GCT, 37 17N 124 21W, SOUNDING 2150 FM, WIND 350 FORCE 3, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 03.   |       |        |       |          |     |      |   |     |       |       |          |       |       |       |
| 0  | 13.62 | 33.384 | 6.76  | 0.75     | 3   | 0.20 | 293.1   | 0   | 13.67 | 33.40 | -        | 25.04 | 292.9 | 0     |
| 10   | 13.62 | 33.377 | 6.50  | 0.75     | 3   | 0.12 | 293.6   | 10  | 13.67 | 33.40 | -        | 25.04 | 292.9 | .029  |
| 25   | 13.60 | 33.376 | 6.41  | 0.75     | 3   | 0.20 | 293.3   | 20  | 13.66 | 33.40 | -        | 25.04 | 292.7 | .059  |
| 100  | 9.02  | 33.870 | 3.91  | 2.17     | 33  | 0.03 | 177.7   | 30  | 13.18 | 33.35 | -        | 25.10 | 287.1 | .088  |
|  |       |        |       |          |     |      |   | 50  | 10.25 | 33.60 | -        | 25.84 | 217.0 | .138  |
|  |       |        |       |          |     |      |   | 75  | 9.12  | 33.78 | -        | 26.17 | 185.9 | .189  |
|  |       |        |       |          |     |      |   | 100 | 8.99  | 33.89 | -        | 26.27 | 175.8 | .235  |
|  |       |        |       |          |     |      |   | 125 | 8.63  | 33.95 | -        | 26.38 | 165.9 | .278  |
|  |       |        |       |          |     |      |   | 150 | 8.27  | 33.98 | -        | 26.45 | 158.5 | .319  |
|  |       |        |       |          |     |      |   | 200 | 7.82  | 34.07 | -        | 26.59 | 145.4 | .396  |
|  |       |        |       |          |     |      |   | 250 | 7.02  | 34.08 | -        | 26.71 | 133.9 | .468  |
|  |       |        |       |          |     |      |   | 300 | 6.41  | 34.07 | -        | 26.79 | 126.9 | .535  |
|  |       |        |       |          |     |      |   | 400 | 5.92  | 34.17 | -        | 26.93 | 113.4 | .660  |
|  |       |        |       |          |     |      |   | 500 | 5.38  | 34.25 | -        | 27.06 | 101.2 | .773  |
|  |       |        |       |          |     |      |   | 600 | 4.95  | 34.31 | -        | 27.16 | 91.9  | .876  |
| 60.80  |       |        |       |          |     |      | CCOFI CRUISE 6507                               |     |       |       |          |       |       | 60.80 |
| ALEXANDER AGASSIZ, JULY 17 1965, 2223 2145 GCT, 36 57N 125 04.5W, SOUNDING 2300 FM, WIND 330 FORCE 3, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 05. |       |        |       |          |     |      |   |     |       |       |          |       |       |       |
| 2  | 13.96 | 33.356 | 6.50  | 0.56     | 2   | 0.17 | 301.8   | 0   | 14.02 | 33.38 | -        | 24.95 | 301.2 | 0     |
| 12   | 13.86 | 33.355 | 6.55  | 0.53     | 2   | 0.07 | 299.9   | 10  | 13.88 | 33.38 | -        | 24.98 | 298.4 | .030  |
| 22   | 13.80 | 33.353 | 6.51  | 0.52     | 1   | 0.18 | 298.9   | 20  | 13.70 | 33.39 | -        | 25.03 | 294.2 | .060  |
| 42   | 10.34 | 33.088 | -     | -        | -   | 0.26 | 256.3   | 30  | 11.35 | 33.06 | -        | 25.22 | 275.3 | .088  |
| 52   | 9.52  | 33.202 | -     | -        | -   | 0.30 | 234.9   | 50  | 9.73  | 33.35 | -        | 25.73 | 227.2 | .139  |
| 62   | 9.55  | 33.436 | -     | -        | -   | 0.33 | 218.0   | 75  | 9.43  | 33.66 | -        | 26.02 | 199.5 | .192  |
| 102  | 9.18  | 33.843 | 3.81  | 2.05     | 30  | 0.00 | 182.1   | 100 | 9.16  | 33.84 | -        | 26.21 | 182.0 | .240  |
|  |       |        |       |          |     |      |   | 125 | 8.57  | 33.92 | -        | 26.36 | 167.3 | .285  |
|  |       |        |       |          |     |      |   | 150 | 8.27  | 33.99 | -        | 26.46 | 157.7 | .326  |
|  |       |        |       |          |     |      |   | 200 | 7.81  | 34.05 | -        | 26.58 | 146.8 | .403  |
|  |       |        |       |          |     |      |   | 250 | 7.21  | 34.08 | -        | 26.69 | 136.4 | .476  |
|  |       |        |       |          |     |      |   | 300 | 6.72  | 34.11 | -        | 26.78 | 127.8 | .544  |
|  |       |        |       |          |     |      |   | 400 | 5.72  | 34.12 | -        | 26.91 | 114.8 | .670  |
|  |       |        |       |          |     |      |   | 500 | 5.25  | 34.21 | -        | 27.04 | 102.7 | .784  |
|  |       |        |       |          |     |      |   | 600 | 5.08  | 34.32 | -        | 27.15 | 92.6  | .888  |

A) AN OXYGEN VALUE OF 12.84 AT THE SURFACE WAS CAREFULLY VERIFIED. NOTE SIMILAR HIGH VALUE ON STATION 63-52.

B) THIS OXYGEN SAMPLE CONTAINED FOREIGN MATERIAL.

| 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 | DO |
| 60.90 CCOFI CRUISE 6507   |                                   |   |     |          |     |     | 60.90                    |                                   |   |   |          |       |     |    |
| ALEXANDER AGASSIZ, JULY 18 1965, 0310 0240 GCT, 36 37N 125 46.5W, SOUNDING 2410 FM, WIND 360 FORCE 3, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 16. |                                   |   |     |          |     |     |                          |                                   |   |   |          |       |     |    |
| 0 12.34 32.896 6.53 0.75 5 0.18 304.9   | 0 12.83 32.78 - 24.73 322.4 0     |   |     |          |     |     |                          | 10 12.02 32.84 - 24.93 303.3 .031 |   |   |          |       |     |    |
| 10 12.04 32.871 6.57 0.69 7 0.15 301.3  | 20 10.64 32.69 - 25.06 290.7 .061 |   |     |          |     |     |                          | 20 10.55 32.70 - 25.09 288.5 .090 |   |   |          |       |     |    |
| 38 10.11 32.784 6.22 0.86 6 0.42 275.1  | 30 9.60 32.81 - 25.33 265.2 .146  |   |     |          |     |     |                          | 50 10.27 33.30 - 25.60 239.5 .209 |   |   |          |       |     |    |
| 48 9.77 32.840 - - 0.27 265.6   | 75 9.59 33.48 - 25.85 215.4 .266  |   |     |          |     |     |                          | 100 9.69 33.78 - 26.07 194.7 .318 |   |   |          |       |     |    |
| 57 10.10 33.053 - - 0.24 255.0  | 125 8.54 33.83 - 26.30 173.5 .365 |   |     |          |     |     |                          | 150 8.54 33.83 - 26.51 152.7 .448 |   |   |          |       |     |    |
| 67 10.27 33.152 - - 0.23 250.5  | 200 7.86 33.98 - 26.64 140.4 .523 |   |     |          |     |     |                          | 250 7.45 34.07 - 26.73 132.0 .593 |   |   |          |       |     |    |
| 96 9.52 33.514 4.70 1.73 23 0.02 211.8  | 300 6.93 34.09 - 26.89 117.0 .722 |   |     |          |     |     |                          | 400 5.72 34.09 - 27.02 104.9 .839 |   |   |          |       |     |    |
|   |                                   |   |     |          |     |     |                          | 500 5.38 34.20 - 27.13 94.3 .945  |   |   |          |       |     |    |
|   |                                   |   |     |          |     |     |                          |                                   |   |   |          |       |     |    |
| 60.100 CCOFI CRUISE 6507  |                                   |   |     |          |     |     | 60.100                   |                                   |   |   |          |       |     |    |
| ALEXANDER AGASSIZ, JULY 18 1965, 0755 0817 GCT, 36 17N 126 30W, SOUNDING 2452 FM, WIND 010 FORCE 4, WEATHER OVERCAST, SEA MISSING, WIRE ANGLE 14. |                                   |   |     |          |     |     |                          |                                   |   |   |          |       |     |    |
| 0 14.74 32.742 6.04 0.47 2 0.00 362.4   | 0 14.75 32.74 - 24.31 362.7 0     |   |     |          |     |     |                          | 10 14.75 32.75 - 24.31 362.0 .036 |   |   |          |       |     |    |
| 10 14.74 32.745 6.09 0.45 3 0.00 362.2  | 20 14.20 32.73 - 24.41 352.4 .072 |   |     |          |     |     |                          | 20 13.93 32.75 - 24.49 345.6 .107 |   |   |          |       |     |    |
| 29 13.93 32.747 6.30 0.46 2 0.00 345.9  | 30 13.00 32.71 - 24.64 330.8 .175 |   |     |          |     |     |                          | 50 11.32 32.78 - 25.01 295.5 .253 |   |   |          |       |     |    |
| 97 9.98 32.880 5.92 0.97 8 0.16 265.9   | 75 10.23 32.94 - 25.33 265.5 .324 |   |     |          |     |     |                          | 125 9.71 33.37 - 25.75 225.4 .386 |   |   |          |       |     |    |
|   |                                   |   |     |          |     |     |                          | 150 9.20 33.80 - 26.17 185.6 .438 |   |   |          |       |     |    |
|   |                                   |   |     |          |     |     |                          | 200 8.42 33.94 - 26.40 163.6 .527 |   |   |          |       |     |    |
|   |                                   |   |     |          |     |     |                          | 250 7.78 34.02 - 26.56 148.6 .607 |   |   |          |       |     |    |
|   |                                   |   |     |          |     |     |                          | 300 7.06 34.04 - 26.68 137.4 .681 |   |   |          |       |     |    |
|   |                                   |   |     |          |     |     |                          | 400 6.27 34.13 - 26.85 120.6 .815 |   |   |          |       |     |    |
|   |                                   |   |     |          |     |     |                          | 500 5.62 34.19 - 26.98 108.4 .935 |   |   |          |       |     |    |
|   |                                   |   |     |          |     |     |                          | 600 5.15 34.28 - 27.11 96.3 1.044 |   |   |          |       |     |    |
|   |                                   |   |     |          |     |     |                          |                                   |   |   |          |       |     |    |
| 60.120 CCOFI CRUISE 6507  |                                   |   |     |          |     |     | 60.120                   |                                   |   |   |          |       |     |    |
| ALEXANDER AGASSIZ, JULY 18 1965, 1654 1612 GCT, 35 37N 127 55W, SOUNDING 2540 FM, WIND 010 FORCE 4, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 23.   |                                   |   |     |          |     |     |                          |                                   |   |   |          |       |     |    |
| 1 15.83 32.900 5.99 0.48 2 0.00 373.5   | 0 15.93 32.94 - 24.20 372.7 0     |   |     |          |     |     |                          | 10 15.92 32.94 - 24.20 372.5 .037 |   |   |          |       |     |    |
| 10 15.84 32.891 6.01 0.42 3 0.00 374.4  | 20 15.92 32.94 - 24.20 372.5 .075 |   |     |          |     |     |                          | 20 14.00 32.74 - 24.46 347.7 .111 |   |   |          |       |     |    |
| 29 14.54 32.870 6.26 0.45 2 0.00 349.0  | 30 12.14 32.90 - 24.95 301.0 .176 |   |     |          |     |     |                          | 50 10.34 33.16 - 25.48 251.0 .245 |   |   |          |       |     |    |
| 38 13.13 32.856 6.59 0.44 2 0.01 322.5  | 75 9.85 33.54 - 25.86 215.0 .304  |   |     |          |     |     |                          | 100 9.18 33.72 - 26.11 191.3 .355 |   |   |          |       |     |    |
| 53 11.67 32.942 6.53 0.73 6 0.16 289.6  | 125 8.77 33.87 - 26.29 174.0 .401 |   |     |          |     |     |                          | 150 8.06 34.00 - 26.50 154.0 .485 |   |   |          |       |     |    |
| 66 10.52 32.998 5.98 1.00 9 0.25 265.9  | 200 7.43 34.03 - 26.62 143.1 .561 |   |     |          |     |     |                          | 200 7.00 34.04 - 26.72 133.6 .632 |   |   |          |       |     |    |
| 89 9.82 33.305 5.01 1.41 18 0.10 231.9  | 250 6.77 34.11 - 26.86 120.3 .764 |   |     |          |     |     |                          | 250 6.44 34.19 - 27.00 106.3 .883 |   |   |          |       |     |    |
| 108 9.59 33.580 4.23 1.76 23 0.03 208.0   | 300 6.12 34.25 - 27.12 95.3 .990  |   |     |          |     |     |                          |                                   |   |   |          |       |     |    |
| 126 9.12 33.690 3.89 1.81 27 0.01 192.6   |                                   |   |     |          |     |     |                          |                                   |   |   |          |       |     |    |
| 145 8.94 33.818 3.37 2.00 30 0.01 180.4   |                                   |   |     |          |     |     |                          |                                   |   |   |          |       |     |    |
| 172 8.46 33.924 3.25 2.09 34 0.02 165.4   |                                   |   |     |          |     |     |                          |                                   |   |   |          |       |     |    |
| 204 8.03 33.984 3.07 2.15 38 0.00 154.8   |                                   |   |     |          |     |     |                          |                                   |   |   |          |       |     |    |
| 232 7.54 34.004 2.94 2.24 42 0.01 146.5   |                                   |   |     |          |     |     |                          |                                   |   |   |          |       |     |    |
| 279 6.96 34.020 2.59 2.42 50 0.01 137.6   |                                   |   |     |          |     |     |                          |                                   |   |   |          |       |     |    |
| 330 6.57 34.079 1.64 2.78 59 - 128.2  |                                   |   |     |          |     |     |                          |                                   |   |   |          |       |     |    |
| 412 5.74 34.090 1.47 2.94 71 - 117.3  |                                   |   |     |          |     |     |                          |                                   |   |   |          |       |     |    |
| 495 5.22 34.151 .95 3.12 82 - 106.8   |                                   |   |     |          |     |     |                          |                                   |   |   |          |       |     |    |
| 579 4.80 34.225 .57 3.24 97 - 96.6  |                                   |   |     |          |     |     |                          |                                   |   |   |          |       |     |    |

| O B S E R V E D   L E V E L S   O F   D E P T H |   |   |     |          |     |     | S T A N D A R D   L E V E L S   O F   D E P T H |   |   |   |          |       |     |    |
|---|---|---|-----|----------|-----|-----|---|---|---|---|----------|-------|-----|----|
| INPUT   |   |   |     | COMPUTED |     |     | INPUT   |   |   |   | COMPUTED |       |     |    |
| Z   | T | S | CXY | PHD      | SIL | NIT | D*T   | Z | T | S | CXY      | SIG*T | C*T | DD |
| CCDFI CRUISE 6507                               |   |   |     |          |     |     |   |   |   |   |          |       |     |    |
| 60.140  |   |   |     |          |     |     |   |   |   |   |          |       |     |    |

ALEXANDER AGASSIZ, JULY 19 1965, 0145 0355 0600 GCT, 34 56.5N 129 19W, SOUNDING 2582 FM, WIND 010 FORCE 4, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 31 35.

|       |       |        |      |      |     |      |       |      |       |       |   |       |       |       |
|-------|-------|--------|------|------|-----|------|-------|------|-------|-------|---|-------|-------|-------|
| 1     | 17.54 | 33.263 | 5.71 | 0.45 | 3   | 0.00 | 384.8 | 0    | 17.62 | 33.32 | - | 24.10 | 382.4 | 0     |
| 9     | 17.54 | 33.262 | 5.73 | 0.37 | 3   | 0.00 | 384.8 | 10   | 17.62 | 33.33 | - | 24.11 | 381.7 | .038  |
| 27    | 16.94 | 33.329 | 5.85 | 0.36 | 3   | 0.00 | 366.4 | 20   | 17.62 | 33.33 | - | 24.11 | 381.7 | .076  |
| 35    | 16.37 | 33.317 | 5.95 | 0.36 | 2   | 0.00 | 354.7 | 30   | 17.11 | 33.37 | - | 24.26 | 367.2 | .114  |
| 49    | 15.70 | 33.324 | 6.06 | 0.36 | 2   | 0.00 | 339.8 | 50   | 15.23 | 33.15 | - | 24.52 | 342.6 | .185  |
| 62    | 15.13 | 33.301 | 6.11 | 0.39 | 3   | 0.00 | 329.5 | 75   | 14.02 | 33.18 | - | 24.80 | 315.9 | .268  |
| 84    | 14.02 | 33.228 | 6.14 | 0.42 | 2   | 0.00 | 312.3 | 100  | 12.97 | 33.16 | - | 25.00 | 297.1 | .345  |
| 101   | 12.54 | 33.132 | 5.90 | 0.53 | 4   | 0.07 | 291.2 | 125  | 11.43 | 33.27 | - | 25.37 | 261.2 | .416  |
| 118   | 11.56 | 33.242 | 5.66 | 0.80 | 6   | 0.06 | 265.5 | 150  | 10.65 | 33.62 | - | 25.78 | 222.1 | .477  |
| 135   | 11.34 | 33.467 | 5.22 | 0.93 | 9   | 0.01 | 245.1 | 200  | 9.14  | 33.85 | - | 26.22 | 181.0 | .579  |
| 183   | 9.50  | 33.760 | 3.82 | 1.81 | 23  | 0.00 | 193.2 | 250  | 8.50  | 33.99 | - | 26.43 | 161.1 | .667  |
| 272   | 8.04  | 34.022 | 2.70 | 2.27 | 38  | 0.00 | 152.1 | 300  | 7.93  | 34.05 | - | 26.56 | 148.5 | .747  |
| 361   | 6.88  | 34.060 | 1.93 | 2.63 | 52  | 0.00 | 133.6 | 400  | 6.69  | 34.08 | - | 26.76 | 129.6 | .891  |
| 451   | 6.17  | 34.122 | 1.17 | 2.95 | 66  | 0.00 | 120.0 | 500  | 5.87  | 34.14 | - | 26.91 | 115.1 | 1.019 |
| 540   | 5.53  | 34.178 | .74  | 3.20 | 75  | -    | 108.3 | 600  | 5.35  | 34.22 | - | 27.04 | 103.1 | 1.135 |
| 631   | 5.10  | 34.239 | .53  | 3.34 | 86  | -    | 98.8  | 700  | 4.78  | 34.28 | - | 27.15 | 92.3  | 1.240 |
| 714A  | 4.70  | 34.284 | .44  | 3.20 | 97  | -    | 91.1  | 800  | 4.39  | 34.34 | - | 27.24 | 83.7  | 1.336 |
| 723   | 4.60  | 34.291 | .38  | 3.34 | 97  | -    | 89.6  | 1000 | 3.81  | 34.43 | - | 27.37 | 71.2  | 1.507 |
| 816   | 4.37  | 34.355 | .37  | 3.38 | 107 | -    | 82.4  | 1200 | 3.33  | 34.48 | - | 27.46 | 63.0  | 1.658 |
| 910A  | 4.10  | 34.382 | .39  | 3.31 | 116 | -    | 77.6  | 1500 | 2.72  | 34.54 | - | 27.57 | 53.1  | 1.859 |
| 911   | 4.06  | 34.398 | .72  | 3.36 | 116 | -    | 76.0  | 2000 | 2.00  | 34.60 | - | 27.67 | 42.9  | 2.144 |
| 1007  | 3.79  | 34.436 | .71  | 3.38 | 121 | -    | 70.5  | 2500 | 1.72  | 34.64 | - | 27.73 | 37.8  | 2.390 |
| 1190A | 3.35  | 34.482 | .72  | 3.24 | 130 | -    | 63.0  | 3000 | 1.60  | 34.66 | - | 27.75 | 35.5  | 2.621 |
| 1471A | 2.80  | 34.530 | 1.02 | 3.16 | 145 | -    | 54.5  | 4000 | 1.51  | 34.68 | - | 27.77 | 33.3  | 3.077 |
| 1752A | 2.28  | 34.570 | 1.27 | 3.04 | 165 | -    | 47.3  |      |       |       |   |       |       |       |
| 2033A | 1.98  | 34.604 | 1.81 | 2.95 | 165 | -    | 42.4  |      |       |       |   |       |       |       |
| 2319A | 1.79  | 34.632 | 2.08 | 2.84 | 167 | -    | 38.9  |      |       |       |   |       |       |       |
| 2607A | 1.68  | 34.643 | 2.36 | 2.83 | 163 | -    | 37.3  |      |       |       |   |       |       |       |
| 2892A | 1.62  | 34.657 | 2.58 | 2.73 | 162 | -    | 35.8  |      |       |       |   |       |       |       |
| 3177A | 1.56  | 34.664 | 2.77 | 2.73 | 162 | -    | 34.9  |      |       |       |   |       |       |       |
| 3469A | 1.51  | 34.670 | 3.03 | 2.65 | 161 | -    | 34.1  |      |       |       |   |       |       |       |
| 3605A | 1.50  | 34.673 | 3.17 | 2.64 | 161 | -    | 33.8  |      |       |       |   |       |       |       |
| 3746A | 1.52  | 34.678 | 3.20 | 2.60 | 161 | -    | 33.5  |      |       |       |   |       |       |       |
| 3889A | 1.51  | 34.679 | 3.30 | 2.59 | 158 | -    | 33.4  |      |       |       |   |       |       |       |
| 4031A | 1.50  | 34.679 | 3.37 | 2.57 | 154 | -    | 33.3  |      |       |       |   |       |       |       |
| 4175A | 1.52  | 34.684 | 3.45 | 2.55 | 154 | -    | 33.1  |      |       |       |   |       |       |       |
| 4319A | 1.54  | 34.680 | 3.44 | 2.51 | 154 | -    | 33.5  |      |       |       |   |       |       |       |
| 4462A | 1.54  | 34.680 | 3.42 | 2.47 | 157 | -    | 33.5  |      |       |       |   |       |       |       |
| 4608A | 1.56  | 34.684 | 3.49 | 2.54 | 153 | -    | 33.4  |      |       |       |   |       |       |       |
| 4704A | 1.58  | 34.683 | 3.48 | 2.41 | 157 | -    | 33.6  |      |       |       |   |       |       |       |

|    |       |        |      |      |   |   |       |     |       |       |   |       |       |       |
|----|-------|--------|------|------|---|---|-------|-----|-------|-------|---|-------|-------|-------|
| 0  | 17.49 | 33.174 | 5.75 | 0.45 | 3 | - | 390.1 | 0   | 17.51 | 33.21 | - | 24.04 | 387.9 | 0     |
| 9  | 17.50 | 33.173 | 5.79 | 0.41 | 3 | - | 390.4 | 10  | 17.52 | 33.21 | - | 24.04 | 388.2 | .039  |
| 23 | 17.23 | 33.279 | 5.81 | 0.40 | 3 | - | 376.6 | 20  | 17.29 | 33.30 | - | 24.16 | 376.4 | .077  |
| 94 | 13.16 | 33.095 | 6.23 | 0.45 | 3 | - | 305.5 | 30  | 16.15 | 33.26 | - | 24.40 | 354.1 | .114  |
|    |       |        |      |      |   |   |       | 50  | 14.90 | 33.24 | - | 24.66 | 329.2 | .182  |
|    |       |        |      |      |   |   |       | 75  | 13.89 | 33.21 | - | 24.85 | 311.1 | .263  |
|    |       |        |      |      |   |   |       | 100 | 12.89 | 33.03 | - | 24.91 | 305.2 | .340  |
|    |       |        |      |      |   |   |       | 125 | 12.19 | 33.24 | - | 25.21 | 276.9 | .414  |
|    |       |        |      |      |   |   |       | 150 | 11.23 | 33.46 | - | 25.56 | 243.7 | .480  |
|    |       |        |      |      |   |   |       | 200 | 9.54  | 33.78 | - | 26.10 | 192.4 | .590  |
|    |       |        |      |      |   |   |       | 250 | 8.61  | 33.98 | - | 26.40 | 163.4 | .681  |
|    |       |        |      |      |   |   |       | 300 | 7.98  | 34.04 | - | 26.54 | 149.9 | .762  |
|    |       |        |      |      |   |   |       | 400 | 6.69  | 34.10 | - | 26.77 | 128.1 | .907  |
|    |       |        |      |      |   |   |       | 500 | 6.03  | 34.18 | - | 26.92 | 114.0 | 1.034 |
|    |       |        |      |      |   |   |       | 600 | 5.25  | 34.24 | - | 27.07 | 100.4 | 1.148 |

|     |       |        |      |      |   |      |       |     |       |       |   |       |       |       |
|-----|-------|--------|------|------|---|------|-------|-----|-------|-------|---|-------|-------|-------|
| 0   | 19.10 | 33.313 | 5.62 | 0.40 | 2 | 0.00 | 417.8 | 0   | 19.06 | 33.34 | - | 23.76 | 414.9 | 0     |
| 10  | 18.96 | 33.308 | 5.64 | 0.36 | 3 | 0.00 | 414.8 | 10  | 18.97 | 33.33 | - | 23.77 | 413.4 | .041  |
| 30  | 17.07 | 33.288 | 5.96 | 0.36 | 2 | 0.00 | 372.3 | 20  | 18.77 | 33.30 | - | 23.80 | 410.8 | .083  |
| 100 | 12.92 | 33.153 | 6.18 | 0.41 | 3 | 0.00 | 296.7 | 30  | 17.24 | 33.29 | - | 24.17 | 376.0 | .122  |
|     |       |        |      |      |   |      |       | 50  | 15.10 | 33.20 | - | 24.58 | 336.2 | .194  |
|     |       |        |      |      |   |      |       | 75  | 14.06 | 33.20 | - | 24.81 | 315.2 | .275  |
|     |       |        |      |      |   |      |       | 100 | 13.12 | 33.19 | - | 24.99 | 297.7 | .353  |
|     |       |        |      |      |   |      |       | 125 | 11.64 | 33.23 | - | 25.30 | 267.8 | .424  |
|     |       |        |      |      |   |      |       | 150 | 10.37 | 33.49 | - | 25.73 | 227.1 | .487  |
|     |       |        |      |      |   |      |       | 200 | 8.98  | 33.86 | - | 26.25 | 177.8 | .589  |
|     |       |        |      |      |   |      |       | 250 | 8.23  | 33.99 | - | 26.47 | 157.2 | .675  |
|     |       |        |      |      |   |      |       | 300 | 7.58  | 34.02 | - | 26.59 | 145.8 | .753  |
|     |       |        |      |      |   |      |       | 400 | 6.06  | 34.01 | - | 26.78 | 127.1 | .895  |
|     |       |        |      |      |   |      |       | 500 | 5.34  | 34.09 | - | 26.94 | 112.7 | 1.020 |
|     |       |        |      |      |   |      |       | 600 | 4.84  | 34.19 | - | 27.07 | 99.7  | 1.132 |

A) OVERLAPPING CASTS, VALUES FOR STANDARD DEPTHS GREATER THAN 600 METERS  
WERE DETERMINED FROM RECONCILED PROPERTY CURVES.

| OBSERVED LEVELS OF DEPTH   |       |        |      |      |     |      |          | STANDARD LEVELS OF DEPTH |       |       |     |       |       |       |          |
|--|-------|--------|------|------|-----|------|----------|--------------------------|-------|-------|-----|-------|-------|-------|----------|
| Z  | T     | S      | OXY  | PHI  | STL | N/T  | COMPUTED | Z                        | T     | S     | OXY | SIG*T | D*T   | DD    | COMPUTED |
| 60.200 CCOFI CRUISE 6507   |       |        |      |      |     |      |          |                          |       |       |     |       |       |       |          |
| ALEXANDER AGASSIZ, JULY 20 1965, 0846 0806 GCT, 32 56N 133 27.5W, SCOUNDING 2260 FM, WIND 080 FORCE 3, WEATHER MISSING, SEA SLIGHT, WIRE ANGLE 11.     |       |        |      |      |     |      |          |                          |       |       |     |       |       |       |          |
| 0  | 19.54 | 33.767 | 5.56 | 0.34 | 3   | 0.00 | 395.5    | 0                        | 19.63 | 33.79 | -   | 23.96 | 396.1 | 0     |          |
| 10   | 19.56 | 33.766 | 5.61 | 0.36 | 3   | 0.00 | 396.1    | 10                       | 19.63 | 33.79 | -   | 23.96 | 396.1 | .040  |          |
| 29   | 18.56 | 33.775 | 5.81 | 0.41 | 3   | 0.00 | 371.3    | 20                       | 18.77 | 33.80 | -   | 24.18 | 374.5 | .078  |          |
| 39   | 18.24 | 33.803 | 5.91 | 0.31 | 3   | 0.00 | 361.7    | 30                       | 18.43 | 33.86 | -   | 24.31 | 362.0 | .115  |          |
| 54   | 16.83 | 33.882 | 6.06 | 0.30 | 3   | 0.00 | 323.6    | 50                       | 17.12 | 34.00 | -   | 24.74 | 321.5 | .184  |          |
| 68   | 16.26 | 33.879 | 6.05 | 0.28 | 3   | 0.00 | 311.3    | 75                       | 16.46 | 34.01 | -   | 24.90 | 306.1 | .263  |          |
| 93   | 16.24 | 34.053 | 5.88 | 0.28 | 3   | 0.00 | 298.2    | 100                      | 16.63 | 34.25 | -   | 25.05 | 292.4 | .338  |          |
| 113  | 16.39 | 34.267 | 5.68 | 0.26 | 3   | 0.01 | 285.8    | 125                      | 15.35 | 34.16 | -   | 25.27 | 271.3 | .409  |          |
| 133  | 14.15 | 33.982 | 5.58 | 0.46 | 4   | 0.02 | 259.7    | 150                      | 13.10 | 33.92 | -   | 25.56 | 243.7 | .475  |          |
| 153  | 12.94 | 33.925 | 5.35 | 0.64 | 7   | 0.00 | 240.3    | 200                      | 10.28 | 33.95 | -   | 26.11 | 191.6 | .566  |          |
| 182  | 11.12 | 33.937 | 5.12 | 0.96 | 11  | 0.00 | 206.6    | 250                      | 9.60  | 34.07 | -   | 26.31 | 171.8 | .679  |          |
| 218  | 10.08 | 34.021 | 5.06 | 1.19 | 15  | 0.00 | 183.1    | 300                      | 8.71  | 34.02 | -   | 26.42 | 161.9 | .765  |          |
| 247  | 9.42  | 34.035 | 5.06 | 1.23 | -   | 0.00 | 171.6    | 400                      | 6.97  | 34.00 | -   | 26.66 | 139.2 | .921  |          |
| 296  | 8.80  | 34.049 | 4.82 | 1.46 | 24  | 0.00 | 161.1    | 500                      | 5.52  | 34.02 | -   | 26.86 | 120.0 | 1.057 |          |
| 349  | 7.86  | 34.015 | 4.17 | 1.81 | 33  | -    | 150.1    | 600                      | 4.78  | 34.12 | -   | 27.02 | 104.3 | 1.175 |          |
| 432  | 6.40  | 33.988 | 3.08 | 2.39 | 50  | -    | 132.9    |                          |       |       |     |       |       |       |          |
| 514  | 5.35  | 34.016 | 2.00 | 2.85 | 67  | -    | 118.4    |                          |       |       |     |       |       |       |          |
| 598  | 4.72  | 34.118 | 1.11 | 3.14 | 86  | -    | 103.8    |                          |       |       |     |       |       |       |          |
| 63.52 CCOFI CRUISE 6507  |       |        |      |      |     |      |          |                          |       |       |     |       |       |       |          |
| ALEXANDER AGASSIZ, JULY 15 1965, 0226 0210 GCT, 37 21N 122 37.5W, SOUNDING 43 FM, WIND 320 FORCE 2, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 04.     |       |        |      |      |     |      |          |                          |       |       |     |       |       |       |          |
| 0  | 13.82 | 33.376 | A    | 0.14 | 6   | 0.04 | 297.6    | 0                        | 13.85 | 33.38 | -   | 24.99 | 297.8 | 0     |          |
| 10   | 11.14 | 33.715 | 6.84 | 1.38 | 20  | 0.14 | 223.4    | 10                       | 11.33 | 33.71 | -   | 25.73 | 227.0 | .026  |          |
| 25   | 9.93  | 33.837 | 4.62 | 2.04 | 30  | 0.33 | 194.3    | 20                       | 11.06 | 33.84 | -   | 25.88 | 212.8 | .048  |          |
| 50   | 9.05  | 33.928 | 2.58 | 2.33 | 42  | 0.04 | 173.9    | 30                       | 10.46 | 33.88 | -   | 26.02 | 199.7 | .089  |          |
|  |       |        |      |      |     |      |          | 50                       | 9.55  | 33.88 | -   | 26.17 | 165.1 | .108  |          |
|  |       |        |      |      |     |      |          | 75                       | 9.03  | 33.98 | -   | 26.34 | 169.7 | .152  |          |
| 63.55 CCOFI CRUISE 6507  |       |        |      |      |     |      |          |                          |       |       |     |       |       |       |          |
| ALEXANDER AGASSIZ, JULY 15 1965, 0027 0014 GCT, 37 12.5N 122 49.5W, SOUNDING 150 FM, WIND 330 FORCE 3, WEATHER OVERCAST, SEA SLIGHT, WIRE ANGLE 07.    |       |        |      |      |     |      |          |                          |       |       |     |       |       |       |          |
| 0  | 11.88 | 33.349 | 6.15 | 1.07 | 12  | 0.26 | 263.3    | 0                        | 11.95 | 33.37 | -   | 25.35 | 263.0 | 0     |          |
| 10   | 11.20 | 33.395 | 5.95 | 1.15 | 16  | 0.12 | 248.0    | 10                       | 11.26 | 33.42 | -   | 25.52 | 247.2 | .026  |          |
| 25   | 10.50 | 33.550 | 5.61 | 1.45 | 20  | 0.35 | 224.8    | 20                       | 10.68 | 33.42 | -   | 25.62 | 237.4 | .050  |          |
| 99   | 8.90  | 33.956 | 2.48 | 2.36 | 39  | 0.18 | 169.5    | 30                       | 10.59 | 33.56 | -   | 25.75 | 225.5 | .073  |          |
|  |       |        |      |      |     |      |          | 50                       | 10.29 | 33.76 | -   | 25.96 | 205.8 | .116  |          |
|  |       |        |      |      |     |      |          | 75                       | 9.64  | 33.87 | -   | 26.15 | 187.3 | .166  |          |
|  |       |        |      |      |     |      |          | 100                      | 9.09  | 33.95 | -   | 26.30 | 172.8 | .211  |          |
|  |       |        |      |      |     |      |          | 125                      | 8.78  | 34.01 | -   | 26.40 | 163.7 | .254  |          |
|  |       |        |      |      |     |      |          | 150                      | 8.72  | 34.02 | -   | 26.42 | 162.1 | .295  |          |
|  |       |        |      |      |     |      |          | 200                      | 8.55  | 34.05 | -   | 26.47 | 157.3 | .377  |          |
|  |       |        |      |      |     |      |          | 250                      | 7.93  | 34.10 | -   | 26.60 | 144.7 | .454  |          |
| 63.60 CCOFI CRUISE 6507  |       |        |      |      |     |      |          |                          |       |       |     |       |       |       |          |
| ALEXANDER AGASSIZ, JULY 14 1965, 2056 2022 GCT, 37 02.5N 123 11.5W, SOUNDING 1405 FM, WIND 300 FORCE 3, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 05. |       |        |      |      |     |      |          |                          |       |       |     |       |       |       |          |
| 0  | 13.84 | 33.128 | 6.45 | 0.47 | 4   | 0.08 | 316.1    | 0                        | 13.93 | 33.11 | -   | 24.76 | 319.2 | 0     |          |
| 10   | 13.36 | 33.131 | 6.29 | 0.55 | 5   | 0.05 | 306.6    | 10                       | 13.65 | 33.12 | -   | 24.83 | 313.0 | .032  |          |
| 40   | 11.68 | 33.313 | 6.01 | 1.04 | 11  | 0.31 | 262.4    | 20                       | 13.10 | 33.13 | -   | 24.95 | 301.8 | .062  |          |
| 50   | 10.30 | 33.403 | -    | -    | -   | 0.33 | 232.4    | 30                       | 11.82 | 33.22 | -   | 25.26 | 271.7 | .091  |          |
| 60   | 9.72  | 33.528 | -    | -    | -   | 0.11 | 213.8    | 50                       | 10.74 | 33.31 | -   | 25.53 | 246.5 | .143  |          |
| 100  | 9.22  | 33.853 | 3.52 | 2.02 | 30  | 0.01 | 182.0    | 75                       | 9.58  | 33.73 | -   | 26.05 | 196.7 | .199  |          |
|  |       |        |      |      |     |      |          | 100                      | 9.25  | 33.89 | -   | 26.23 | 179.7 | .246  |          |
|  |       |        |      |      |     |      |          | 125                      | 8.92  | 33.95 | -   | 26.33 | 170.3 | .291  |          |
|  |       |        |      |      |     |      |          | 150                      | 8.67  | 34.00 | -   | 26.41 | 162.8 | .333  |          |
|  |       |        |      |      |     |      |          | 200                      | 8.33  | 34.09 | -   | 26.53 | 151.2 | .413  |          |
|  |       |        |      |      |     |      |          | 250                      | 8.06  | 34.13 | -   | 26.60 | 144.3 | .489  |          |
|  |       |        |      |      |     |      |          | 300                      | 7.77  | 34.16 | -   | 26.67 | 138.0 | .562  |          |
|  |       |        |      |      |     |      |          | 400                      | 6.98  | 34.20 | -   | 26.81 | 124.4 | .659  |          |
|  |       |        |      |      |     |      |          | 500                      | 6.08  | 34.25 | -   | 26.97 | 109.4 | .822  |          |
|  |       |        |      |      |     |      |          | 600                      | 5.54  | 34.31 | -   | 27.09 | 98.5  | .933  |          |

AT AN OXYGEN VALUE OF 10.61 AT THE SURFACE WAS CAREFULLY VERIFIED. NOTE SIMILAR HIGH VALUE ON STATION 60.52.

## O B S E R V E D   L E V E L S   O F   C E P T H

## S T A N D A R D   L E V E L S   C F   C E P T H

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67.50

CCOFI CRUISE 6507

67.50

ALEXANDER AGASSIZ, JULY 14 1965, 0955 0940 GCT, 36 49N 122 04.5W, SOUNDING 60 FM, WIND 310 FORCE 3, WEATHER FOG, SEA SLIGHT, WIRE ANGLE 04.

|     |       |        |      |      |    |      |       |     |       |       |   |       |       |      |
|-----|-------|--------|------|------|----|------|-------|-----|-------|-------|---|-------|-------|------|
| 0   | 12.46 | 33.634 | 6.21 | 1.32 | 13 | 0.28 | 252.8 | 0   | 12.52 | 33.66 | - | 25.47 | 252.0 | 0    |
| 10  | 12.04 | 33.612 | 6.11 | 1.20 | 13 | 0.10 | 246.8 | 10  | 12.02 | 33.62 | - | 25.53 | 245.8 | .025 |
| 25  | 11.34 | 33.642 | 5.58 | 1.40 | 14 | 0.32 | 232.2 | 20  | 11.64 | 33.64 | - | 25.62 | 237.6 | .049 |
| 100 | 8.91  | 33.908 | 3.02 | 2.18 | 34 | 0.11 | 173.2 | 30  | 11.06 | 33.66 | - | 25.74 | 226.1 | .072 |
|     |       |        |      |      |    |      |       | 50  | 9.48  | 33.78 | - | 26.11 | 191.4 | .114 |
|     |       |        |      |      |    |      |       | 75  | 9.25  | 33.88 | - | 26.22 | 180.5 | .161 |
|     |       |        |      |      |    |      |       | 100 | 8.99  | 33.94 | - | 26.31 | 172.1 | .206 |

67.55

CCOFI CRUISE 6507

67.55

ALEXANDER AGASSIZ, JULY 14 1965, 1250 1222 GCT, 36 38N 122 27.5W, SOUNDING 1220 FM, WIND 320 FORCE 4, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 11.

|    |       |        |      |      |    |      |       |     |       |       |   |       |       |      |
|----|-------|--------|------|------|----|------|-------|-----|-------|-------|---|-------|-------|------|
| 0  | 13.89 | 33.108 | 6.28 | 0.50 | 4  | 0.05 | 318.6 | 0   | 13.94 | 33.14 | - | 24.78 | 317.2 | 0    |
| 10 | 13.89 | 33.103 | 6.27 | 0.50 | 4  | 0.02 | 319.0 | 10  | 13.90 | 33.14 | - | 24.79 | 316.4 | .032 |
| 15 | 13.78 | 33.106 | 6.33 | 0.52 | 4  | 0.06 | 316.6 | 20  | 12.80 | 33.11 | - | 24.99 | 297.6 | .062 |
| 98 | 9.16  | 33.944 | 2.78 | 2.35 | 33 | 0.04 | 174.3 | 30  | 12.45 | 33.26 | - | 25.17 | 280.1 | .091 |
|    |       |        |      |      |    |      |       | 50  | 10.67 | 33.56 | - | 25.73 | 226.9 | .142 |
|    |       |        |      |      |    |      |       | 75  | 9.97  | 33.74 | - | 25.99 | 202.1 | .196 |
|    |       |        |      |      |    |      |       | 100 | 9.32  | 33.91 | - | 26.23 | 179.3 | .244 |
|    |       |        |      |      |    |      |       | 125 | 9.06  | 34.00 | - | 26.35 | 168.7 | .288 |
|    |       |        |      |      |    |      |       | 150 | 8.99  | 34.02 | - | 26.37 | 166.1 | .331 |
|    |       |        |      |      |    |      |       | 200 | 8.65  | 34.06 | - | 26.46 | 158.1 | .414 |
|    |       |        |      |      |    |      |       | 250 | 8.05  | 34.15 | - | 26.62 | 142.7 | .491 |
|    |       |        |      |      |    |      |       | 300 | 7.70  | 34.16 | - | 26.68 | 137.1 | .563 |
|    |       |        |      |      |    |      |       | 400 | 7.17  | 34.23 | - | 26181 | 124.7 | .699 |
|    |       |        |      |      |    |      |       | 500 | 6.65  | 34.25 | - | 26.90 | 116.4 | .827 |
|    |       |        |      |      |    |      |       | 600 | 5.70  | 34.25 | - | 27.02 | 104.8 | .945 |

67.60

CCOFI CRUISE 6507

67.60

ALEXANDER AGASSIZ, JULY 14 1965, 1549 1524 GCT, 36 29N 122 47.5W, SOUNDING 1680 FM, WIND 340 FORCE 2, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 08.

|    |       |        |      |      |    |      |       |     |       |       |   |       |       |      |
|----|-------|--------|------|------|----|------|-------|-----|-------|-------|---|-------|-------|------|
| 0  | 12.66 | 33.424 | 6.35 | 0.91 | 9  | 0.21 | 271.9 | 0   | 12.80 | 33.40 | - | 25.21 | 276.3 | 0    |
| 10 | 12.07 | 33.522 | 6.59 | 0.88 | 9  | 0.23 | 253.9 | 10  | 11.63 | 33.52 | - | 25.53 | 246.3 | .026 |
| 30 | 10.13 | 33.646 | 4.69 | 1.55 | 19 | 0.26 | 211.6 | 20  | 11.46 | 33.69 | - | 25.69 | 230.7 | .050 |
| 99 | 9.20  | 33.848 | 3.48 | 2.06 | 30 | 0.02 | 182.1 | 30  | 10.07 | 33.63 | - | 25.89 | 211.9 | .072 |
|    |       |        |      |      |    |      |       | 50  | 9.96  | 33.74 | - | 26.00 | 202.0 | .114 |
|    |       |        |      |      |    |      |       | 75  | 9.73  | 33.77 | - | 26.06 | 196.1 | .164 |
|    |       |        |      |      |    |      |       | 100 | 9.23  | 33.85 | - | 26.20 | 182.4 | .212 |
|    |       |        |      |      |    |      |       | 125 | 8.83  | 33.94 | - | 26.34 | 169.7 | .256 |
|    |       |        |      |      |    |      |       | 150 | 8.62  | 33.97 | - | 26.39 | 164.3 | .298 |
|    |       |        |      |      |    |      |       | 200 | 7.69  | 34.03 | - | 26.58 | 146.6 | .378 |
|    |       |        |      |      |    |      |       | 250 | 7.28  | 34.08 | - | 26.68 | 137.3 | .450 |
|    |       |        |      |      |    |      |       | 300 | 6.61  | 34.05 | - | 26.74 | 130.9 | .520 |
|    |       |        |      |      |    |      |       | 400 | 5.81  | 34.12 | - | 26.90 | 116.6 | .648 |
|    |       |        |      |      |    |      |       | 500 | 5.46  | 34.21 | - | 27.02 | 105.1 | .764 |
|    |       |        |      |      |    |      |       | 600 | 5.30  | 34.31 | - | 27.12 | 95.8  | .871 |

70.53

CCOFI CRUISE 6507

70.53

ALEXANDER AGASSIZ, JULY 13 1965, 2245 2213 GCT, 36 06.5N 121 54W, SOUNDING 540 FM, WIND 010 FORCE 2, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 00.

|     |       |        |      |      |    |      |       |     |       |       |   |       |       |      |
|-----|-------|--------|------|------|----|------|-------|-----|-------|-------|---|-------|-------|------|
| 0   | 13.22 | 33.368 | 6.25 | 1.00 | 11 | 0.18 | 286.6 | 0   | 13.03 | 33.35 | - | 25.13 | 284.3 | 0    |
| 10  | 11.88 | 33.526 | 5.91 | 1.31 | 17 | 0.11 | 250.2 | 10  | 11.27 | 33.53 | - | 25.60 | 239.2 | .026 |
| 20  | 10.94 | 33.532 | 5.51 | 1.40 | 17 | 0.28 | 233.5 | 20  | 11.08 | 33.54 | - | 25.65 | 235.3 | .050 |
| 40  | 10.40 | 33.661 | -    | -    | -  | 0.38 | 214.9 | 30  | 10.90 | 33.61 | - | 25.73 | 227.0 | .073 |
| 50  | 10.20 | 33.696 | -    | -    | -  | 0.47 | 209.1 | 50  | 10.18 | 33.71 | - | 25.94 | 207.7 | .117 |
| 60  | 9.69  | 33.739 | -    | -    | -  | 0.08 | 197.7 | 75  | 9.38  | 33.82 | - | 26.15 | 186.9 | .166 |
| 100 | 9.26  | 33.898 | 3.11 | 2.16 | 32 | 0.04 | 179.3 | 100 | 9.36  | 33.91 | - | 26.23 | 179.9 | .213 |
|     |       |        |      |      |    |      |       | 125 | 9.07  | 33.92 | - | 26.28 | 174.7 | .258 |
|     |       |        |      |      |    |      |       | 150 | 8.65  | 33.98 | - | 26.40 | 164.0 | .301 |
|     |       |        |      |      |    |      |       | 200 | 7.95  | 34.03 | - | 26.54 | 150.2 | .381 |
|     |       |        |      |      |    |      |       | 250 | 7.84  | 34.11 | - | 26.62 | 142.7 | .456 |
|     |       |        |      |      |    |      |       | 300 | 7.36  | 34.14 | - | 26.71 | 133.9 | .527 |
|     |       |        |      |      |    |      |       | 400 | 6.78  | 34.23 | - | 26.86 | 119.6 | .659 |
|     |       |        |      |      |    |      |       | 500 | 6.26  | 34.30 | - | 26.99 | 107.8 | .779 |
|     |       |        |      |      |    |      |       | 600 | 5.72  | 34.32 | - | 27.07 | 99.8  | .890 |

| O B S E R V E D   L E V E L S   O F   D E P T H  |   |   |     |                 |     |     | S T A N D A R D   L E V E L S   O F   D E P T H |                                   |   |   |                 |       |       |    |
|--|---|---|-----|-----------------|-----|-----|---|-----------------------------------|---|---|-----------------|-------|-------|----|
| I N P U T  |   |   |     | C O M P U T E D |     |     | I N P U T                                       |                                   |   |   | C O M P U T E D |       |       |    |
| Z  | T | S | CXY | PHQ             | SIL | NIT | D*T   | Z                                 | T | S | CXY             | SIG*T | D*T   | DD |
| 70.60  |   |   |     |                 |     |     | CCOFI CRUISE 6507                               |                                   |   |   |                 |       | 70.60 |    |
| ALEXANDER AGASSIZ, JULY 13 1965, 1851 1810 GCT, 35 53N 122 23W, SOUNDING 1700 FM, WIND 360 FORCE 2, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 02. |   |   |     |                 |     |     |   |                                   |   |   |                 |       |       |    |
| 0 14.27 33.189 6.24 0.53 3 0.07 320.2  |   |   |     |                 |     |     |   | 0 14.23 33.18 - 24.75 320.0 0     |   |   |                 |       |       |    |
| 10 14.26 33.188 6.27 0.54 3 0.04 320.0   |   |   |     |                 |     |     |   | 10 13.91 33.21 - 24.84 311.5 .032 |   |   |                 |       |       |    |
| 30 13.74 33.237 6.34 - 3 0.12 306.2  |   |   |     |                 |     |     |   | 20 13.78 33.24 - 24.89 306.8 .063 |   |   |                 |       |       |    |
| 40 11.63 33.301 6.23 1.03 9 0.34 262.4   |   |   |     |                 |     |     |   | 30 13.74 33.25 - 24.91 305.2 .093 |   |   |                 |       |       |    |
| 50 10.94 33.364 5.84 1.26 13 0.65 245.9  |   |   |     |                 |     |     |   | 50 11.04 33.36 - 25.51 247.9 .149 |   |   |                 |       |       |    |
| 65 10.56 33.452 5.66 1.42 16 0.53 233.0  |   |   |     |                 |     |     |   | 75 9.79 33.57 - 25.89 211.8 .206  |   |   |                 |       |       |    |
| 80 9.64 33.571 4.76 1.79 24 0.11 269.4   |   |   |     |                 |     |     |   | 100 9.36 33.76 - 26.11 191.0 .257 |   |   |                 |       |       |    |
| 100 9.36 33.724 3.78 1.95 26 0.02 193.7  |   |   |     |                 |     |     |   | 125 8.89 33.88 - 26.28 175.0 .304 |   |   |                 |       |       |    |
| 125 8.92 33.862 3.23 2.12 32 0.00 176.8  |   |   |     |                 |     |     |   | 150 8.70 33.95 - 26.36 167.0 .347 |   |   |                 |       |       |    |
| 146 8.73 33.919 2.89 2.22 35 0.00 169.7  |   |   |     |                 |     |     |   | 200 8.19 34.05 - 26.52 152.1 .428 |   |   |                 |       |       |    |
| 176 8.42 33.985 2.66 2.28 36 0.00 160.3  |   |   |     |                 |     |     |   | 250 7.38 34.04 - 26.63 141.6 .504 |   |   |                 |       |       |    |
| 206 8.10 34.052 2.16 2.47 41 - 150.7   |   |   |     |                 |     |     |   | 300 6.87 34.07 - 26.73 132.7 .574 |   |   |                 |       |       |    |
| 236 7.36 34.002 2.81 2.31 43 - 144.2   |   |   |     |                 |     |     |   | 400 6.06 34.12 - 26.87 118.8 .705 |   |   |                 |       |       |    |
| 276 7.04 34.027 2.24 2.54 50 - 138.1   |   |   |     |                 |     |     |   | 500 5.44 34.20 - 27.01 105.6 .823 |   |   |                 |       |       |    |
| 335 6.44 34.060 1.66 2.81 59 - 128.0   |   |   |     |                 |     |     |   | 600 4.98 34.29 - 27.14 93.7 .929  |   |   |                 |       |       |    |
| 409 5.88 34.106 1.19 3.01 69 - 117.7   |   |   |     |                 |     |     |   |                                   |   |   |                 |       |       |    |
| 483 5.36 34.161 .86 3.17 80 - 107.6  |   |   |     |                 |     |     |   |                                   |   |   |                 |       |       |    |
| 563 5.00 34.238 .56 3.28 95 - 97.8   |   |   |     |                 |     |     |   |                                   |   |   |                 |       |       |    |
| 70.70  |   |   |     |                 |     |     | CCOFI CRUISE 6507                               |                                   |   |   |                 |       | 70.70 |    |
| ALEXANDER AGASSIZ, JULY 13 1965, 1346 1322 GCT, 35 33N 123 06W, SOUNDING 2027 FM, WIND 350 FORCE 4, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 03.    |   |   |     |                 |     |     |   |                                   |   |   |                 |       |       |    |
| 0 13.82 33.263 6.30 0.57 3 0.11 305.8  |   |   |     |                 |     |     |   | 0 13.86 33.30 - 24.92 303.9 0     |   |   |                 |       |       |    |
| 10 13.82 33.257 6.33 0.57 3 0.05 306.3   |   |   |     |                 |     |     |   | 10 13.86 33.30 - 24.92 303.9 .030 |   |   |                 |       |       |    |
| 30 13.84 33.310 6.28 0.61 4 0.10 302.8   |   |   |     |                 |     |     |   | 20 13.90 33.35 - 24.95 301.0 .061 |   |   |                 |       |       |    |
| 100 9.22 33.755 3.57 1.90 29 0.02 189.3  |   |   |     |                 |     |     |   | 30 13.86 33.34 - 24.95 301.0 .091 |   |   |                 |       |       |    |
|  |   |   |     |                 |     |     |   | 50 11.33 33.45 - 25.53 246.2 .146 |   |   |                 |       |       |    |
|  |   |   |     |                 |     |     |   | 75 9.89 33.59 - 25.89 211.9 .203  |   |   |                 |       |       |    |
|  |   |   |     |                 |     |     |   | 100 9.26 33.79 - 26.15 187.3 .254 |   |   |                 |       |       |    |
|  |   |   |     |                 |     |     |   | 125 8.79 33.92 - 26.33 170.5 .299 |   |   |                 |       |       |    |
|  |   |   |     |                 |     |     |   | 150 8.41 34.02 - 26.46 157.5 .341 |   |   |                 |       |       |    |
|  |   |   |     |                 |     |     |   | 200 7.81 34.08 - 26.60 144.5 .418 |   |   |                 |       |       |    |
|  |   |   |     |                 |     |     |   | 250 7.23 34.11 - 26.71 134.4 .489 |   |   |                 |       |       |    |
|  |   |   |     |                 |     |     |   | 300 6.68 34.12 - 26.79 126.5 .556 |   |   |                 |       |       |    |
|  |   |   |     |                 |     |     |   | 400 6.01 34.17 - 26.92 114.5 .682 |   |   |                 |       |       |    |
|  |   |   |     |                 |     |     |   | 500 5.50 34.26 - 27.05 101.8 .796 |   |   |                 |       |       |    |
|  |   |   |     |                 |     |     |   | 600 5.13 34.32 - 27.14 93.1 .899  |   |   |                 |       |       |    |
| 70.80  |   |   |     |                 |     |     | CCOFI CRUISE 6507                               |                                   |   |   |                 |       | 70.80 |    |
| ALEXANDER AGASSIZ, JULY 13 1965, 0845 0825 GCT, 35 13N 123 48W, SOUNDING 2180 FM, WIND 350 FORCE 5, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 12.    |   |   |     |                 |     |     |   |                                   |   |   |                 |       |       |    |
| 0 13.87 33.120 6.34 0.54 2 0.09 317.3  |   |   |     |                 |     |     |   | 0 13.89 33.16 - 24.81 314.8 0     |   |   |                 |       |       |    |
| 10 13.88 33.122 6.35 0.53 3 0.05 317.4   |   |   |     |                 |     |     |   | 10 13.89 33.16 - 24.81 314.8 .031 |   |   |                 |       |       |    |
| 34 13.86 33.125 6.36 0.53 1 0.10 316.8   |   |   |     |                 |     |     |   | 20 13.89 33.16 - 24.81 314.8 .063 |   |   |                 |       |       |    |
| 98 9.99 33.428 4.65 1.54 19 0.02 225.5   |   |   |     |                 |     |     |   | 30 13.89 33.16 - 24.81 314.8 .095 |   |   |                 |       |       |    |
|  |   |   |     |                 |     |     |   | 50 13.03 33.07 - 24.91 304.9 .157 |   |   |                 |       |       |    |
|  |   |   |     |                 |     |     |   | 75 10.91 33.27 - 25.47 252.3 .227 |   |   |                 |       |       |    |
|  |   |   |     |                 |     |     |   | 100 9.90 33.57 - 25.87 213.6 .285 |   |   |                 |       |       |    |
|  |   |   |     |                 |     |     |   | 125 9.16 33.74 - 26.13 189.5 .336 |   |   |                 |       |       |    |
|  |   |   |     |                 |     |     |   | 150 9.68 33.87 - 26.14 187.9 .384 |   |   |                 |       |       |    |
|  |   |   |     |                 |     |     |   | 200 8.14 34.00 - 26.49 155.1 .472 |   |   |                 |       |       |    |
|  |   |   |     |                 |     |     |   | 250 7.70 34.04 - 26.59 146.0 .549 |   |   |                 |       |       |    |
|  |   |   |     |                 |     |     |   | 300 6.81 34.08 - 26.74 131.2 .620 |   |   |                 |       |       |    |
|  |   |   |     |                 |     |     |   | 400 6.02 34.13 - 26.88 117.6 .749 |   |   |                 |       |       |    |
|  |   |   |     |                 |     |     |   | 500 5.51 34.19 - 27.00 107.1 .867 |   |   |                 |       |       |    |
|  |   |   |     |                 |     |     |   | 600 5.00 34.25 - 27.10 96.9 .976  |   |   |                 |       |       |    |

| O B S E R V E D   L E V E L S   O F   D E P T H   |       |        |          |      |      | S T A N D A R D   L E V E L S   C F   D E P T H |       |      |          |       |     |       |       |       |
|---|-------|--------|----------|------|------|---|-------|------|----------|-------|-----|-------|-------|-------|
| INPUT   |       |        | COMPUTED |      |      | INPUT   |       |      | COMPUTED |       |     |       |       |       |
| Z   | T     | S      | OXY      | PHO  | SIL  | NIT   | D*T   | Z    | T        | S     | OXY | SIG*T | D*T   | DC    |
| 70.90   |       |        |          |      |      | CCOFI CRUISE 6507                               |       |      |          |       |     | 70.90 |       |       |
| ALEXANDER AGASSIZ, JULY 12-13 1965, 2355 0201 0028 GCT, 34 53N 124 29.5W, SOUNDING 2300 FM, WIND 330 FORCE 5, WEATHER OVERCAST, SEA VERY ROUGH, WIRE ANGLE 25 52. |       |        |          |      |      |   |       |      |          |       |     |       |       |       |
| 0   | 15.18 | 33.057 | 6.06     | 0.41 | 2    | 0.01  | 348.4 | 0    | 15.32    | 33.06 | -   | 24.43 | 351.1 | 0     |
| 8   | 15.18 | 33.049 | 6.05     | 0.42 | 3    | 0.00  | 348.9 | 10   | 15.32    | 33.06 | -   | 24.43 | 351.1 | .035  |
| 32  | 15.14 | 33.055 | 6.06     | 0.41 | 2    | 0.00  | 347.7 | 20   | 15.32    | 33.06 | -   | 24.43 | 351.1 | .070  |
| 60  | 12.62 | 32.958 | 6.56     | 0.42 | 3    | 0.00  | 305.5 | 30   | 15.32    | 33.07 | -   | 24.44 | 350.3 | .105  |
| 69  | 12.42 | 32.955 | 6.41     | 0.41 | 3    | 0.00  | 302.0 | 50   | 12.82    | 32.94 | -   | 24.85 | 310.5 | .172  |
| 86  | 11.96 | 32.947 | 6.34     | 0.46 | 4    | 0.01  | 294.3 | 75   | 12.36    | 32.99 | -   | 24.98 | 298.4 | .248  |
| 100   | 10.78 | 33.002 | 5.83     | 0.83 | 7    | 0.12  | 269.9 | 100  | 11.04    | 32.98 | -   | 25.22 | 275.9 | .320  |
| 114   | 10.08 | 33.173 | 5.46     | 1.02 | 9    | 0.04  | 245.8 | 125  | 9.87     | 33.30 | -   | 25.67 | 233.1 | .385  |
| 141   | 9.54  | 33.630 | 3.85     | 1.88 | 25   | 0.00  | 203.5 | 150  | 9.50     | 33.71 | -   | 26.05 | 196.9 | .439  |
| 160   | 9.08  | 33.755 | 3.97     | 1.77 | 26   | 0.00  | 187.1 | 200  | 8.60     | 33.95 | -   | 26.38 | 165.5 | .531  |
| 186   | 8.68  | 33.895 | 4.09     | 1.76 | 27   | 0.01  | 170.8 | 250  | 7.94     | 34.02 | -   | 26.53 | 150.8 | .612  |
| 217   | 8.34  | 33.974 | 3.54     | 1.95 | 33   | 0.00  | 159.9 | 300  | 7.27     | 34.04 | -   | 26.65 | 140.2 | .687  |
| 243   | 8.01  | 34.006 | 2.96     | 2.19 | 38   | 0.00  | 152.9 | 400  | 6.20     | 34.07 | -   | 26.81 | 124.3 | .825  |
| 289   | 7.34  | 34.011 | 2.71     | 2.35 | 46   | 0.00  | 143.3 | 500  | 5.72     | 34.19 | -   | 26.97 | 109.6 | .947  |
| 346   | 6.70  | 34.044 | 1.91     | 2.69 | 56   | 0.00  | 132.4 | 600  | 5.21     | 34.26 | -   | 27.09 | 98.5  | 1.058 |
| 433   | 5.86  | 34.102 | 1.22     | 2.99 | 70   | 0.00  | 117.8 | 700  | 4.60     | 34.32 | -   | 27.20 | 87.4  | 1.158 |
| 513   | 5.50  | 34.190 | .71      | 3.19 | 81   | 0.00  | 107.0 | 800  | 4.20     | 34.37 | -   | 27.29 | 79.5  | 1.249 |
| 580   | 5.10  | 34.239 | .43      | 3.27 | 92   | 0.00  | 98.8  | 1000 | 3.82     | 34.45 | -   | 27.39 | 69.8  | 1.414 |
| 673   | 4.70  | 34.303 | .45      | 3.32 | 117U | 0.00  | 89.7  | 1200 | 3.33     | 34.50 | -   | 27.48 | 61.4  | 1.563 |
| 818   | 4.17  | 34.381 | .44      | 3.34 | 101U | 0.00  | 78.4  | 1500 | 2.75     | 34.55 | -   | 27.57 | 52.6  | 1.761 |
| 931A  | 4.02  | 34.440 | .64      | 3.27 | 114  | -   | 72.5  | 2000 | 2.06     | 34.61 | -   | 27.68 | 42.6  | 2.044 |
| 1008A   | 3.78  | 34.452 | .65      | 3.31 | 123  | -   | 69.2  | 2500 | 1.77     | 34.64 | -   | 27.72 | 38.2  | 2.292 |
| 1163A   | 3.42  | 34.488 | .90      | 3.22 | 127  | -   | 63.2  | 3000 | 1.62     | 34.66 | -   | 27.75 | 35.6  | 2.526 |
| 1325A   | 3.08  | 34.523 | 1.08     | 3.22 | 136  | -   | 57.5  | 4000 | 1.53     | 34.67 | -   | 27.76 | 34.2  | 2.988 |
| 1527A   | 2.70  | 34.558 | 1.23     | 3.08 | 150  | -   | 51.6  |      |          |       |     |       |       |       |
| 1734A   | 2.38  | 34.574 | 1.52     | 3.09 | 156  | -   | 47.8  |      |          |       |     |       |       |       |
| 1937A   | 2.14  | 34.602 | 1.86     | 3.01 | 159  | -   | 43.8  |      |          |       |     |       |       |       |
| 2103A   | 1.97  | 34.620 | 1.98     | 2.99 | 164  | -   | 41.2  |      |          |       |     |       |       |       |
| 2273A   | 1.87  | 34.629 | 2.14     | 2.92 | 168  | -   | 39.7  |      |          |       |     |       |       |       |
| 2443A   | 1.79  | 34.633 | 2.24     | 2.92 | 168  | -   | 38.9  |      |          |       |     |       |       |       |
| 2613A   | 1.72  | 34.642 | 2.49     | 2.82 | 169  | -   | 37.7  |      |          |       |     |       |       |       |
| 2783A   | 1.67  | 34.651 | 2.68     | 2.82 | 167  | -   | 36.6  |      |          |       |     |       |       |       |
| 2955A   | 1.65  | 34.657 | 2.78     | 2.81 | 168  | -   | 36.0  |      |          |       |     |       |       |       |
| 3125A   | 1.59  | 34.660 | 2.85     | 2.76 | 168  | -   | 35.4  |      |          |       |     |       |       |       |
| 3259A   | 1.57  | 34.662 | 2.99     | 2.76 | 167  | -   | 35.1  |      |          |       |     |       |       |       |
| 3388A   | 1.54  | 34.675 | 3.06     | 2.76 | 167  | -   | 33.9  |      |          |       |     |       |       |       |
| 3520A   | 1.52  | 34.680 | 3.07     | 2.67 | 167  | -   | 33.4  |      |          |       |     |       |       |       |
| 3653A   | 1.51  | 34.665 | 3.24     | 2.63 | 166  | -   | 34.5  |      |          |       |     |       |       |       |
| 3789A   | 1.50  | 34.671 | 3.10     | 2.64 | 163  | -   | 33.9  |      |          |       |     |       |       |       |
| 3871A   | -     | 34.680 | 3.20     | 2.63 | 164  | -   | -     |      |          |       |     |       |       |       |
| 3880A   | 1.52  | 34.680 | 3.30     | 2.61 | 168  | -   | 33.4  |      |          |       |     |       |       |       |

|  |       |        |       |      |   |                   |       |     |       |       |   |        |       |       |  |  |  |  |  |
|--|-------|--------|-------|------|---|-------------------|-------|-----|-------|-------|---|--------|-------|-------|--|--|--|--|--|
| 70.100   |       |        |       |      |   | CCUFI CRUISE 6507 |       |     |       |       |   | 70.100 |       |       |  |  |  |  |  |
| ALEXANDER AGASSIZ, JULY 12 1965, 1849 1816 GCT, 34 33N 125 12W, SOUNDING 2430 FM, WIND 350 FORCE 5, WEATHER OVERCAST, SEA VERY ROUGH, WIRE ANGLE 13. |       |        |       |      |   |                   |       |     |       |       |   |        |       |       |  |  |  |  |  |
|  |       |        |       |      |   |                   |       |     |       |       |   |        |       |       |  |  |  |  |  |
| 0  | 15.48 | 33.022 | 6.01  | 0.37 | 3 | 0.00              | 357.2 | 0   | 15.53 | 33.04 | - | 24.37  | 356.9 | 0     |  |  |  |  |  |
| 10   | 15.48 | 33.010 | 6.04  | 0.36 | 3 | 0.00              | 358.1 | 10  | 15.53 | 33.04 | - | 24.37  | 356.9 | .036  |  |  |  |  |  |
| 49   | 15.24 | 33.021 | 6.06  | 0.37 | 2 | 0.00              | 352.2 | 20  | 15.53 | 33.04 | - | 24.37  | 356.9 | .071  |  |  |  |  |  |
| 97   | 12.30 | 32.962 | 6.398 | 0.40 | 3 | 0.00              | 299.3 | 30  | 15.53 | 33.04 | - | 24.37  | 356.9 | .107  |  |  |  |  |  |
|  |       |        |       |      |   |                   |       | 50  | 15.17 | 33.03 | - | 24.44  | 350.1 | .178  |  |  |  |  |  |
|  |       |        |       |      |   |                   |       | 75  | 13.56 | 33.04 | - | 24.78  | 317.2 | .262  |  |  |  |  |  |
|  |       |        |       |      |   |                   |       | 100 | 12.33 | 32.99 | - | 24.99  | 297.8 | .339  |  |  |  |  |  |
|  |       |        |       |      |   |                   |       | 125 | 10.74 | 33.13 | - | 25.39  | 259.8 | .410  |  |  |  |  |  |
|  |       |        |       |      |   |                   |       | 150 | 9.71  | 33.47 | - | 25.83  | 218.0 | .470  |  |  |  |  |  |
|  |       |        |       |      |   |                   |       | 200 | 8.80  | 33.86 | - | 26.28  | 175.1 | .570  |  |  |  |  |  |
|  |       |        |       |      |   |                   |       | 250 | 8.22  | 33.99 | - | 26.47  | 157.0 | .655  |  |  |  |  |  |
|  |       |        |       |      |   |                   |       | 300 | 7.64  | 34.05 | - | 26.60  | 144.4 | .733  |  |  |  |  |  |
|  |       |        |       |      |   |                   |       | 400 | 6.31  | 34.09 | - | 26.82  | 124.1 | .872  |  |  |  |  |  |
|  |       |        |       |      |   |                   |       | 500 | 5.52  | 34.15 | - | 26.96  | 110.2 | .955  |  |  |  |  |  |
|  |       |        |       |      |   |                   |       | 600 | 4.95  | 34.23 | - | 27.09  | 97.9  | 1.105 |  |  |  |  |  |

A) CAST II, VALUES FOR STANDARD DEPTHS GREATER THAN 600 METERS WERE DETERMINED FROM THESE CASTS.

B) ALTERNATE VALUE, 5.50.

| O B S E R V E D L E V E L S O F D E P T H  |   |   |       |                 |       |       |                   | S T A N D A R D L E V E L S C F D E P T H |   |   |       |                 |       |     |        |
|--|---|---|-------|-----------------|-------|-------|-------------------|---|---|---|-------|-----------------|-------|-----|--------|
| I N P U T  |   |   |       | C O M P U T E D |       |       |                   | I N P U T                                 |   |   |       | C O M P U T E D |       |     |        |
| Z  | T | S | O X Y | P H O           | S I L | N I T | D * T             | Z   | T | S | O X Y | S I G * T       | D * T | D D |        |
| 70.120   |   |   |       |                 |       |       | CCOFI CRUISE 6507 |   |   |   |       |                 |       |     | 70.120 |
| ALEXANDER AGASSIZ, JULY 12 1965, 0940 0906 GCT, 33 53.5N 126 35W, SOUNDING 2540 FM, WIND 360 FORCE 4, WEATHER CLOUDY,<br>SEA MODERATE, WIRE ANGLE 15.  |   |   |       |                 |       |       |                   |   |   |   |       |                 |       |     |        |
| 1 16.26 33.181 5.99 0.39 3 - 362.2 0 16.33 33.20 - 24.31 362.4 0<br>11 16.27 33.161 5.98 0.36 4 - 363.9 10 16.33 33.20 - 24.31 362.4 .036<br>30 16.25 33.164 5.91 0.39 3 - 363.3 20 16.33 33.20 - 24.31 362.4 .073<br>39 16.22 33.171 6.05 0.39 3 0.00 362.1 30 16.33 33.20 - 24.31 362.4 .109<br>54 15.52 33.188 6.10 0.38 3 0.00 345.9 50 15.86 33.23 - 24.44 350.0 .180<br>68 14.65 33.212 6.29 0.38 3 0.00 326.1 75 14.72 33.32 - 24.76 319.6 .264<br>93 13.66 33.161 6.30 0.38 3 0.01 310.2 100 13.28 33.14 - 24.92 304.4 .343<br>112 12.84 33.091 6.24 0.47 4 0.04 299.8 125 12.58 33.38 - 25.24 273.7 .416<br>131 12.45 33.321 5.97 0.60 6 0.09 275.6 150 11.50 33.46 - 25.51 248.4 .482<br>149 11.56 33.419 5.41 0.94 10 0.04 252.5 200 9.17 33.82 - 26.19 183.7 .592<br>176 9.96 33.618 4.51 1.55 19 0.01 211.0 250 8.47 34.01 - 26.45 159.1 .680<br>218 9.10 33.828 4.03 1.78 25 0.01 182.0 300 7.83 34.06 - 26.58 146.3 .758<br>236 8.74 33.942 3.46 2.00 31 0.01 168.2 400 6.83 34.13 - 26.78 127.7 .901<br>281 8.16 34.008 3.25 2.11 38 0.01 154.8 500 6.06 34.19 - 26.93 113.6 1.028<br>332 7.52 34.057 2.44 2.47 47 0.01 142.3 600 5.43 34.27 - 27.07 100.2 1.142<br>411 6.62 34.109 1.53 2.80 60 0.01 126.6<br>492 5.97 34.164 1.00 3.02 71 0.01 114.5<br>575 5.44 34.229 .61 3.18 89 0.01 103.4 |   |   |       |                 |       |       |                   |   |   |   |       |                 |       |     |        |
| 70.200   |   |   |       |                 |       |       | CCOFI CRUISE 6507 |   |   |   |       |                 |       |     | 70.200 |
| ALEXANDER AGASSIZ, JULY 20 1965, 2117 2030 GCT, 31 13N 132 02W, SOUNDING 2500 FM, WIND 020 FORCE 3, WEATHER PARTLY<br>CLOUDY, SEA MODERATE, WIRE ANGLE 19.   |   |   |       |                 |       |       |                   |   |   |   |       |                 |       |     |        |
| 0 19.62 33.993 5.57 0.25 2 0.00 381.1 0 19.54 33.93 - 24.09 383.7 0<br>9 19.38 34.011 5.59 0.20 3 0.00 373.9 10 19.45 34.01 - 24.17 375.7 .038<br>28 18.17 33.846 5.77 0.26 2 0.00 356.9 20 19.43 34.04 - 24.20 373.0 .075<br>37 17.15 33.691 6.00 0.24 2 0.00 344.7 30 17.90 33.78 - 24.38 355.4 .112<br>52 15.98 33.617 6.07 0.27 2 0.00 324.3 50 16.25 33.70 - 24.71 324.1 .180<br>66 15.78 33.676 6.04 0.26 3 0.00 315.7 75 15.76 33.75 - 24.86 309.9 .260<br>90 16.24 33.926 5.89 0.24 3 0.00 307.4 100 16.53 34.13 - 24.98 298.9 .337<br>110 17.10 34.276 5.71 0.18 3 0.00 301.0 125 16.89 34.36 - 25.07 290.1 .411<br>128 16.60 34.247 5.67 0.23 3 0.01 291.9 150 15.52 34.01 - 25.11 285.8 .484<br>148 16.28 34.325 5.50 0.25 3 0.05 279.2 200 12.21 33.97 - 25.77 223.5 .614<br>176 14.44 34.181 5.29 0.45 5 0.02 250.9 250 9.99 34.01 - 26.20 182.5 .718<br>208 11.94 33.967 5.07 0.82 9 0.00 218.8 300 9.14 34.06 - 26.38 165.4 .807<br>235 10.58 34.002 4.93 1.07 13 0.00 192.7 400 7.26 34.04 - 26.65 140.0 .966<br>281 9.43 34.036 4.97 1.30 19 0.00 171.7 500 6.04 34.09 - 26.85 120.8 1.1C3<br>332 8.36 34.018 4.40 1.63 28 - 157.0 600 5.27 34.18 - 27.02 105.2 1.223<br>409 6.96 34.004 2.94 2.32 44 - 138.8<br>489 5.93 34.059 1.66 2.87 61 - 121.8<br>572 5.41 34.148 .90 3.14 77 - 109.1    |   |   |       |                 |       |       |                   |   |   |   |       |                 |       |     |        |
| 73.53  |   |   |       |                 |       |       | CCOFI CRUISE 6507 |   |   |   |       |                 |       |     | 73.53  |
| ALEXANDER AGASSIZ, JULY 9 1965, 0347 0108 GCT, 35 32N 121 28.5W, SOUNDING 390 FM, WIND 320 FORCE 4, WEATHER CLOUDY,<br>SEA ROUGH.  |   |   |       |                 |       |       |                   |   |   |   |       |                 |       |     |        |
| 0 12.94 33.006 6.36 0.54 3 0.10 307.9 0 13.08 33.04 - 24.88 308.0 0<br>10 12.54 33.008 6.39 0.57 5 0.05 300.3 10 12.56 33.03 - 24.97 299.1 .030<br>48 11.26 33.548 5.72 1.34 16 0.28 237.7 20 11.57 33.10 - 25.22 276.2 .059<br>95 9.58 33.867 3.56 2.07 29 0.03 186.5 30 10.77 33.14 - 25.39 259.6 .086<br>50 11.14 33.64 - 25.71 228.9 .135<br>75 9.93 33.67 - 25.95 206.7 .190<br>100 9.62 33.88 - 26.16 186.2 .239<br>125 9.19 33.91 - 26.26 177.3 .285<br>150 8.87 33.94 - 26.33 170.3 .329<br>200 8.17 34.02 - 26.50 154.1 .412<br>250 7.78 34.08 - 26.61 144.1 .489<br>300 7.52 34.15 - 26.70 135.3 .561<br>400 6.98 34.26 - 26.86 119.9 .694<br>500 6.32 34.30 - 26.98 108.6 .815<br>600 5.66 34.35 - 27.10 96.9 .925  |   |   |       |                 |       |       |                   |   |   |   |       |                 |       |     |        |
| 73.60  |   |   |       |                 |       |       | CCOFI CRUISE 6507 |   |   |   |       |                 |       |     | 73.60  |
| ALEXANDER AGASSIZ, JULY 9 1965, 0727 0700 GCT, 35 18N 121 57.5W, SOUNDING 1200 FM, WIND 320 FORCE 5, WEATHER CLOUDY,<br>SEA ROUGH, WIRE ANGLE 12.  |   |   |       |                 |       |       |                   |   |   |   |       |                 |       |     |        |
| 0 14.38 33.054 6.25 0.50 2 0.00 332.3 0 14.41 33.08 - 24.64 331.0 0<br>10 14.38 33.051 6.17 0.43 2 0.00 332.5 10 14.41 33.08 - 24.64 331.0 .033<br>20 14.32 33.061 6.22 0.47 3 0.00 330.5 20 14.37 33.09 - 24.66 329.4 .066<br>98 10.56 33.537 4.98 1.42 14 0.28 226.7 30 13.70 33.08 - 24.79 316.9 .099<br>50 11.92 32.97 - 25.05 291.9 .160<br>75 11.17 33.06 - 25.26 272.2 .230<br>100 10.77 33.51 - 25.68 232.2 .294<br>125 9.99 33.72 - 25.98 203.9 .349<br>150 9.57 33.89 - 26.18 184.7 .398<br>200 8.55 34.01 - 26.43 160.3 .486<br>250 7.82 34.07 - 26.59 145.4 .565<br>300 7.22 34.10 - 26.70 135.0 .637<br>400 6.56 34.19 - 26.86 119.8 .770<br>500 6.17 34.30 - 27.00 106.7 .889<br>600 5.08 34.26 - 27.10 97.1 .998  |   |   |       |                 |       |       |                   |   |   |   |       |                 |       |     |        |

O B S E R V E D   L E V E L S   O F   D E P T H                    S T A N D A R D   L E V E L S   O F   D E P T H

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

77.51

CCOFI CRUISE 6507

77.51

ALEXANDER AGASSIZ, JULY 9 1965, 1820 1750 GCT, 35 02N 120 56.5W, SOUNDING 142 FM, WIND 040 FORCE 3, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE MISSING.

|     |       |        |      |      |    |      |       |     |       |       |   |       |       |      |
|-----|-------|--------|------|------|----|------|-------|-----|-------|-------|---|-------|-------|------|
| 0   | 12.15 | 33.630 | 6.05 | 1.09 | 13 | 0.36 | 247.4 | 0   | 12.21 | 33.65 | - | 25.52 | 247.0 | 0    |
| 10  | 11.90 | 33.628 | 5.98 | 1.06 | 15 | 0.13 | 243.1 | 10  | 12.02 | 33.66 | - | 25.57 | 242.9 | .025 |
| 50  | 10.71 | 33.757 | 4.85 | 1.46 | 19 | 0.31 | 213.0 | 20  | 11.54 | 33.79 | - | 25.76 | 224.8 | .048 |
| 100 | 9.20  | 33.911 | 3.20 | 1.95 | 29 | 0.04 | 177.4 | 30  | 11.43 | 33.79 | - | 25.78 | 222.8 | .070 |
|     |       |        |      |      |    |      |       | 50  | 10.88 | 33.77 | - | 25.86 | 214.9 | .114 |
|     |       |        |      |      |    |      |       | 75  | 9.88  | 33.82 | - | 26.07 | 194.8 | .166 |
|     |       |        |      |      |    |      |       | 100 | 9.24  | 33.95 | - | 26.28 | 175.1 | .213 |
|     |       |        |      |      |    |      |       | 125 | 9.14  | 34.05 | - | 26.37 | 166.2 | .256 |
|     |       |        |      |      |    |      |       | 150 | 8.97  | 34.09 | - | 26.43 | 160.6 | .297 |
|     |       |        |      |      |    |      |       | 200 | 8.78  | 34.13 | - | 26.49 | 154.8 | .378 |
|     |       |        |      |      |    |      |       | 250 | 8.57  | 34.16 | - | 26.55 | 149.5 | .456 |

77.55

CCOFI CRUISE 6507

77.55

ALEXANDER AGASSIZ, JULY 9 1965, 1448 1405 GCT, 34 54N 121 14W, SOUNDING 307 FM, WIND 340 FORCE 4, WEATHER PARTLY CLOUDY, SEA ROUGH, WIRE ANGLE 05.

|     |       |        |      |      |    |      |       |     |       |       |   |       |       |      |
|-----|-------|--------|------|------|----|------|-------|-----|-------|-------|---|-------|-------|------|
| 0   | 13.12 | 33.599 | 6.24 | 0.75 | 7  | 0.25 | 267.7 | 0   | 12.85 | 33.55 | - | 25.32 | 266.2 | 0    |
| 10  | 13.14 | 33.595 | 6.23 | 0.72 | 8  | 0.16 | 268.4 | 10  | 12.85 | 33.56 | - | 25.33 | 265.5 | .027 |
| 25  | 12.26 | 33.601 | 5.82 | 1.04 | 11 | 0.37 | 251.6 | 20  | 12.77 | 33.57 | - | 25.35 | 263.2 | .053 |
| 100 | 9.62  | 33.832 | 3.37 | 2.01 | 26 | 0.02 | 189.8 | 30  | 11.02 | 33.67 | - | 25.76 | 224.6 | .078 |
|     |       |        |      |      |    |      |       | 50  | 10.14 | 33.76 | - | 25.98 | 203.4 | .120 |
|     |       |        |      |      |    |      |       | 75  | 9.78  | 33.83 | - | 26.10 | 192.4 | .170 |
|     |       |        |      |      |    |      |       | 100 | 9.43  | 33.89 | - | 26.20 | 182.5 | .218 |
|     |       |        |      |      |    |      |       | 125 | 9.10  | 33.94 | - | 26.29 | 173.7 | .263 |
|     |       |        |      |      |    |      |       | 150 | 8.87  | 34.00 | - | 26.38 | 165.8 | .306 |
|     |       |        |      |      |    |      |       | 200 | 8.25  | 34.13 | - | 26.57 | 147.1 | .386 |
|     |       |        |      |      |    |      |       | 250 | 7.83  | 34.12 | - | 26.63 | 141.9 | .460 |
|     |       |        |      |      |    |      |       | 300 | 7.66  | 34.22 | - | 26.73 | 132.1 | .530 |
|     |       |        |      |      |    |      |       | 400 | 6.67  | 34.22 | - | 26.87 | 118.9 | .661 |
|     |       |        |      |      |    |      |       | 500 | 6.41  | 34.28 | - | 26.95 | 111.2 | .783 |

77.57

CCOFI CRUISE 6507

77.57

ALEXANDER AGASSIZ, JULY 9 1965, 1219 1145 GCT, 34 49N 121 23W, SOUNDING 270 FM, WIND 340 FORCE 2, WEATHER PARTLY CLOUDY, SEA ROUGH, WIRE ANGLE 05.

|     |       |        |      |      |    |      |       |     |       |       |   |       |       |      |
|-----|-------|--------|------|------|----|------|-------|-----|-------|-------|---|-------|-------|------|
| 0   | 11.94 | 33.604 | 5.87 | 1.15 | 13 | 0.40 | 245.6 | 0   | 11.85 | 33.60 | - | 25.55 | 244.3 | 0    |
| 10  | 11.92 | 33.600 | 5.86 | 1.10 | 14 | 0.14 | 245.5 | 10  | 11.66 | 33.62 | - | 25.60 | 239.8 | .024 |
| 20  | 11.42 | 33.626 | 5.58 | 1.29 | 16 | 0.41 | 234.8 | 20  | 11.36 | 33.64 | - | 25.67 | 232.7 | .048 |
| 100 | 9.01  | 33.943 | 2.81 | 2.14 | 33 | 0.01 | 172.1 | 30  | 10.86 | 33.70 | - | 25.81 | 219.7 | .071 |
|     |       |        |      |      |    |      |       | 50  | 10.27 | 33.77 | - | 25.97 | 204.7 | .113 |
|     |       |        |      |      |    |      |       | 75  | 9.24  | 33.91 | - | 26.25 | 178.1 | .161 |
|     |       |        |      |      |    |      |       | 100 | 9.03  | 33.97 | - | 26.33 | 170.4 | .205 |
|     |       |        |      |      |    |      |       | 125 | 8.82  | 34.00 | - | 26.38 | 165.1 | .248 |
|     |       |        |      |      |    |      |       | 150 | 8.56  | 34.06 | - | 26.47 | 156.8 | .288 |
|     |       |        |      |      |    |      |       | 200 | 8.42  | 34.10 | - | 26.52 | 151.7 | .367 |
|     |       |        |      |      |    |      |       | 250 | 8.03  | 34.12 | - | 26.60 | 144.7 | .443 |
|     |       |        |      |      |    |      |       | 300 | 7.74  | 34.18 | - | 26.69 | 136.1 | .516 |
|     |       |        |      |      |    |      |       | 400 | 6.62  | 34.20 | - | 26.86 | 119.8 | .649 |

80.52

CCOFI CRUISE 6507

80.52

ALEXANDER AGASSIZ, JULY 10 1965, 0430 0408 GCT, 34 24.5N 120 36.5W, SOUNDING 170 FM, WIND 330 FORCE 6, WEATHER CLEAR, SEA VERY ROUGH, WIRE ANGLE 25.

|    |       |        |      |      |    |      |       |     |       |       |   |       |       |      |
|----|-------|--------|------|------|----|------|-------|-----|-------|-------|---|-------|-------|------|
| 0  | 12.40 | 33.700 | 5.38 | 1.20 | 14 | 0.26 | 246.8 | 0   | 12.55 | 33.73 | - | 25.52 | 247.4 | 0    |
| 9  | 12.40 | 33.695 | 5.14 | 1.16 | 16 | 0.09 | 247.2 | 10  | 12.55 | 33.73 | - | 25.52 | 247.4 | .025 |
| 18 | 11.28 | 33.681 | 4.17 | 1.55 | 15 | 0.34 | 228.3 | 20  | 11.50 | 33.68 | - | 25.68 | 232.2 | .049 |
| 90 | 9.78  | 33.864 | 3.19 | 2.00 | 22 | 0.14 | 189.9 | 30  | 10.88 | 33.75 | - | 25.84 | 216.4 | .071 |
|    |       |        |      |      |    |      |       | 50  | 10.54 | 33.80 | - | 25.94 | 207.0 | .114 |
|    |       |        |      |      |    |      |       | 75  | 10.18 | 33.83 | - | 26.03 | 198.8 | .165 |
|    |       |        |      |      |    |      |       | 100 | 10.03 | 33.85 | - | 26.07 | 194.9 | .214 |
|    |       |        |      |      |    |      |       | 125 | 9.77  | 33.93 | - | 26.18 | 184.9 | .263 |
|    |       |        |      |      |    |      |       | 150 | 9.36  | 34.03 | - | 26.32 | 171.0 | .308 |
|    |       |        |      |      |    |      |       | 200 | 9.00  | 34.12 | - | 26.45 | 158.9 | .352 |
|    |       |        |      |      |    |      |       | 250 | 8.85  | 34.15 | - | 26.50 | 154.4 | .472 |

| O B S E R V E D   L E V E L S   O F   D E P T H  |   |   |     |          |     |     | S T A N D A R D   L E V E L S   O F   D E P T H |                                    |   |   |          |       |     |       |
|--|---|---|-----|----------|-----|-----|---|------------------------------------|---|---|----------|-------|-----|-------|
| INPUT  |   |   |     | COMPUTED |     |     | INPUT   |                                    |   |   | COMPUTED |       |     |       |
| Z  | T | S | OXY | PHO      | SIL | NIT | D*T   | Z                                  | T | S | OXY      | SIG*T | D*T | CC    |
| 80.55 CCOFI CRUISE 6507  |   |   |     |          |     |     |   |                                    |   |   |          |       |     |       |
| ALEXANDER AGASSIZ, JULY 10 1965, 0634 0555 GCT, 34 19.5N 120 48.5W, SOUNDING 410 FM, WIND 320 FORCE 7, WEATHER CLEAR, SEA VERY ROUGH, WIRE ANGLE 25.   |   |   |     |          |     |     |   |                                    |   |   |          |       |     | 80.55 |
| 0 12.86 33.775 6.31 0.77 8 0.15 249.8  |   |   |     |          |     |     |   | 0 12.97 33.77 - 25.47 252.3 0      |   |   |          |       |     |       |
| 9 12.86 33.776 6.72 0.71 8 0.09 249.8  |   |   |     |          |     |     |   | 10 12.97 33.77 - 25.47 252.3 .025  |   |   |          |       |     |       |
| 36 11.26 33.787 5.66 1.05 11 0.19 220.1  |   |   |     |          |     |     |   | 20 12.96 33.78 - 25.48 251.4 .050  |   |   |          |       |     |       |
| 90 9.34 34.013 2.66 2.21 32 0.06 172.0   |   |   |     |          |     |     |   | 30 12.65 33.75 - 25.51 247.8 .075  |   |   |          |       |     |       |
|  |   |   |     |          |     |     |   | 50 10.78 33.83 - 25.92 208.8 .121  |   |   |          |       |     |       |
|  |   |   |     |          |     |     |   | 75 9.47 33.99 - 26.27 175.7 .170   |   |   |          |       |     |       |
|  |   |   |     |          |     |     |   | 100 9.37 34.03 - 26.32 171.2 .213  |   |   |          |       |     |       |
|  |   |   |     |          |     |     |   | 125 9.30 34.08 - 26.37 166.4 .256  |   |   |          |       |     |       |
|  |   |   |     |          |     |     |   | 150 9.13 34.10 - 26.41 162.3 .298  |   |   |          |       |     |       |
|  |   |   |     |          |     |     |   | 200 8.85 34.17 - 26.51 152.9 .378  |   |   |          |       |     |       |
|  |   |   |     |          |     |     |   | 250 8.38 34.18 - 26.59 145.2 .455  |   |   |          |       |     |       |
|  |   |   |     |          |     |     |   | 300 8.19 34.21 - 26.65 140.2 .529  |   |   |          |       |     |       |
| 80.60 CCOFI CRUISE 6507  |   |   |     |          |     |     |   |                                    |   |   |          |       |     |       |
| ALEXANDER AGASSIZ, JULY 10 1965, 1031 0923 GCT, 34 08N 121 09.5W, SOUNDING 1170 FM, WIND 330 FORCE 6, WEATHER MISSING, SEA VERY ROUGH, WIRE ANGLE 48.  |   |   |     |          |     |     |   |                                    |   |   |          |       |     | 80.60 |
| 0 14.57 33.321 6.15 0.48 3 0.05 316.5  |   |   |     |          |     |     |   | 0 14.66 33.28 - 24.74 321.4 0      |   |   |          |       |     |       |
| 8 14.58 33.314 6.17 0.43 4 0.01 317.2  |   |   |     |          |     |     |   | 10 14.67 33.30 - 24.75 320.1 .032  |   |   |          |       |     |       |
| 24 14.52 33.320 6.18 0.49 3 0.05 315.6   |   |   |     |          |     |     |   | 20 14.65 33.31 - 24.77 319.0 .064  |   |   |          |       |     |       |
| 31 14.42 33.330 6.24 0.47 4 0.07 312.8   |   |   |     |          |     |     |   | 30 14.54 33.32 - 24.80 316.0 .096  |   |   |          |       |     |       |
| 40 13.95 33.467 6.31 0.59 4 0.16 293.4   |   |   |     |          |     |     |   | 50 13.21 33.40 - 25.13 284.0 .156  |   |   |          |       |     |       |
| 49 13.55 33.456 6.23 0.72 5 0.20 286.4   |   |   |     |          |     |     |   | 75 11.28 33.44 - 25.53 246.1 .223  |   |   |          |       |     |       |
| 65 11.66 33.401 5.40 1.01 9 0.19 255.6   |   |   |     |          |     |     |   | 100 10.46 33.61 - 25.81 219.7 .281 |   |   |          |       |     |       |
| 77 11.12 33.439 5.00 1.19 13 0.12 243.4  |   |   |     |          |     |     |   | 125 9.74 33.82 - 26.10 192.5 .334  |   |   |          |       |     |       |
| 89 10.80 33.506 4.76 1.33 16 0.02 233.0  |   |   |     |          |     |     |   | 150 8.92 33.92 - 26.31 172.5 .380  |   |   |          |       |     |       |
| 107 10.22 - 4.37 - - -   |   |   |     |          |     |     |   | 200 8.42 34.01 - 26.45 158.4 .464  |   |   |          |       |     |       |
| 124 9.74 33.750 3.60 1.86 24 0.02 197.7  |   |   |     |          |     |     |   | 250 7.82 34.06 - 26.58 146.2 .542  |   |   |          |       |     |       |
| 148 9.28 33.849 3.34 1.96 28 0.00 183.2  |   |   |     |          |     |     |   | 300 7.31 34.09 - 26.68 137.0 .615  |   |   |          |       |     |       |
| 166 8.84 33.911 3.50 1.88 28 0.01 172.0  |   |   |     |          |     |     |   | 400 6.34 34.17 - 26.88 118.5 .748  |   |   |          |       |     |       |
| 195 8.38 33.978 3.52 1.88 33 0.01 160.2  |   |   |     |          |     |     |   | 500 5.82 34.25 - 27.00 106.2 .866  |   |   |          |       |     |       |
| 233 7.98 34.027 2.84 2.15 39 - 150.9   |   |   |     |          |     |     |   | 600 5.53 34.34 - 27.11 96.1 .975   |   |   |          |       |     |       |
| 293 7.36 34.059 2.33 2.47 46 - 140.0   |   |   |     |          |     |     |   |                                    |   |   |          |       |     |       |
| 353 6.76 34.129 1.53 2.75 58 - 126.9   |   |   |     |          |     |     |   |                                    |   |   |          |       |     |       |
| 412 6.20 34.158 1.05 2.94 71 - 117.7   |   |   |     |          |     |     |   |                                    |   |   |          |       |     |       |
| 80.70 CCOFI CRUISE 6507  |   |   |     |          |     |     |   |                                    |   |   |          |       |     |       |
| ALEXANDER AGASSIZ, JULY 10 1965, 1834 1800 GCT, 33 48.5N 121 50.5W, SOUNDING 1960 FM, WIND 340 FORCE 5, WEATHER CLOUDY, SEA VERY ROUGH, WIRE ANGLE 22. |   |   |     |          |     |     |   |                                    |   |   |          |       |     | 80.70 |
| 0 14.44 33.330 6.23 0.50 4 0.07 313.2  |   |   |     |          |     |     |   | 0 14.53 33.36 - 24.83 312.9 0      |   |   |          |       |     |       |
| 9 14.42 33.319 6.27 0.52 4 0.02 313.6  |   |   |     |          |     |     |   | 10 14.53 33.36 - 24.83 312.9 .031  |   |   |          |       |     |       |
| 18 14.36 33.317 6.20 0.49 3 0.07 312.6   |   |   |     |          |     |     |   | 20 14.49 33.33 - 24.82 314.2 .063  |   |   |          |       |     |       |
| 93 9.78 33.696 3.85 1.82 22 0.01 202.3   |   |   |     |          |     |     |   | 30 12.48 33.24 - 25.15 282.1 .093  |   |   |          |       |     |       |
|  |   |   |     |          |     |     |   | 50 11.45 33.39 - 25.46 252.7 .146  |   |   |          |       |     |       |
|  |   |   |     |          |     |     |   | 75 10.33 33.61 - 25.83 217.6 .205  |   |   |          |       |     |       |
|  |   |   |     |          |     |     |   | 100 9.59 33.79 - 26.10 192.4 .257  |   |   |          |       |     |       |
|  |   |   |     |          |     |     |   | 125 9.14 33.88 - 26.24 178.8 .304  |   |   |          |       |     |       |
|  |   |   |     |          |     |     |   | 150 8.64 33.97 - 26.39 164.6 .348  |   |   |          |       |     |       |
|  |   |   |     |          |     |     |   | 200 7.86 34.05 - 26.57 147.5 .427  |   |   |          |       |     |       |
|  |   |   |     |          |     |     |   | 250 7.56 34.12 - 26.67 138.1 .500  |   |   |          |       |     |       |
|  |   |   |     |          |     |     |   | 300 7.33 34.21 - 26.77 128.3 .569  |   |   |          |       |     |       |
|  |   |   |     |          |     |     |   | 400 6.38 34.21 - 26.90 116.0 .697  |   |   |          |       |     |       |
|  |   |   |     |          |     |     |   | 500 5.78 34.27 - 27.03 104.3 .813  |   |   |          |       |     |       |
|  |   |   |     |          |     |     |   | 600 5.41 34.32 - 27.11 96.2 .920   |   |   |          |       |     |       |
| 80.80 CCOFI CRUISE 6507  |   |   |     |          |     |     |   |                                    |   |   |          |       |     |       |
| ALEXANDER AGASSIZ, JULY 10 1965, 2350 2318 GCT, 33 29N 122 32.5W, SOUNDING 2140 FM, WIND 320 FORCE 5, WEATHER CLOUDY, SEA VERY ROUGH, WIRE ANGLE 22.   |   |   |     |          |     |     |   |                                    |   |   |          |       |     | 80.80 |
| 0 15.08 33.235 6.09 0.44 3 0.01 333.3  |   |   |     |          |     |     |   | 0 15.11 33.26 - 24.63 332.1 0      |   |   |          |       |     |       |
| 9 15.08 33.230 6.09 0.44 3 0.01 333.6  |   |   |     |          |     |     |   | 10 15.11 33.26 - 24.63 332.1 .033  |   |   |          |       |     |       |
| 37 15.00 33.233 6.06 0.44 3 0.02 331.8   |   |   |     |          |     |     |   | 20 15.11 33.26 - 24.63 332.1 .066  |   |   |          |       |     |       |
| 93 11.72 33.239 5.75 0.90 7 0.22 268.6   |   |   |     |          |     |     |   | 30 15.08 33.26 - 24.63 331.4 .100  |   |   |          |       |     |       |
|  |   |   |     |          |     |     |   | 50 14.47 33.20 - 24.72 323.4 .165  |   |   |          |       |     |       |
|  |   |   |     |          |     |     |   | 75 12.21 33.20 - 25.17 280.2 .241  |   |   |          |       |     |       |
|  |   |   |     |          |     |     |   | 100 11.26 33.44 - 25.54 245.7 .307 |   |   |          |       |     |       |
|  |   |   |     |          |     |     |   | 125 10.50 33.64 - 25.83 218.1 .366 |   |   |          |       |     |       |
|  |   |   |     |          |     |     |   | 150 9.75 33.80 - 26.08 194.2 .418  |   |   |          |       |     |       |
|  |   |   |     |          |     |     |   | 200 9.01 34.04 - 26.39 164.9 .510  |   |   |          |       |     |       |
|  |   |   |     |          |     |     |   | 250 8.21 34.10 - 26.56 148.7 .590  |   |   |          |       |     |       |
|  |   |   |     |          |     |     |   | 300 7.79 34.15 - 26.66 139.1 .665  |   |   |          |       |     |       |
|  |   |   |     |          |     |     |   | 400 6.73 34.17 - 26.82 123.4 .801  |   |   |          |       |     |       |
|  |   |   |     |          |     |     |   | 500 5.86 34.23 - 26.98 108.2 .923  |   |   |          |       |     |       |
|  |   |   |     |          |     |     |   | 600 5.30 34.31 - 27.12 95.8 1.032  |   |   |          |       |     |       |

## O B S E R V E D   L E V E L S   O F   D E P T H

## S T A N D A R D   L E V E L S   O F   D E P T H

## INPUT

## COMPUTED

## INPUT

## COMPUTED

Z

T

S

OXY

PHO

SIL

NIT

D\*T

Z

T

S

OXY

SIG\*T

D\*T

DD

80.90

CCOFI CRUISE 6507

80.90

ALEXANDER AGASSIZ, JULY 11 1965, 0510 0428 GCT, 33 09N 123 13W, SOUNDING 2245 FM, WIND 330 FORCE 6, WEATHER PARTLY CLOUDY, SEA VERY ROUGH, WIRE ANGLE 30.

|    |       |        |      |      |    |      |       |
|----|-------|--------|------|------|----|------|-------|
| 0  | 14.62 | 33.183 | 6.25 | 0.39 | 4  | 0.00 | 327.6 |
| 9  | 14.66 | 33.173 | 6.15 | 0.35 | 4  | 0.00 | 329.2 |
| 44 | 14.19 | 33.178 | 6.17 | 0.39 | 3  | 0.02 | 319.4 |
| 86 | 11.18 | 33.377 | 5.17 | 1.07 | 10 | 0.15 | 249.0 |

|     |       |       |   |       |       |       |
|-----|-------|-------|---|-------|-------|-------|
| 0   | 14.72 | 33.20 | - | 24.67 | 328.4 | 0     |
| 10  | 14.72 | 33.20 | - | 24.67 | 328.4 | .033  |
| 20  | 14.72 | 33.21 | - | 24.67 | 327.7 | .066  |
| 30  | 14.72 | 33.21 | - | 24.67 | 327.7 | .099  |
| 50  | 13.75 | 33.20 | - | 24.87 | 309.1 | .162  |
| 75  | 11.99 | 33.33 | - | 25.32 | 266.6 | .235  |
| 100 | 10.82 | 33.55 | - | 25.70 | 230.1 | .297  |
| 125 | 10.07 | 33.68 | - | 25.93 | 208.2 | .353  |
| 150 | 9.21  | 33.84 | - | 26.20 | 182.8 | .402  |
| 200 | 8.43  | 34.00 | - | 26.45 | 159.3 | .489  |
| 250 | 7.78  | 34.06 | - | 26.59 | 145.6 | .568  |
| 300 | 7.17  | 34.07 | - | 26.68 | 136.6 | .640  |
| 400 | 6.40  | 34.15 | - | 26.85 | 120.8 | .774  |
| 500 | 5.68  | 34.21 | - | 26.99 | 107.6 | .894  |
| 600 | 5.24  | 34.28 | - | 27.10 | 97.3  | 1.003 |

80.100

CCOFI CRUISE 6507

80.100

ALEXANDER AGASSIZ, JULY 11 1965, 1030 0941 GCT, 32 49N 123 53W, SOUNDING 2335 FM, WIND 340 FORCE 5, WEATHER PARTLY CLOUDY, SEA ROUGH, WIRE ANGLE 17.

|    |       |        |      |      |   |      |       |
|----|-------|--------|------|------|---|------|-------|
| 0  | 14.93 | 33.075 | 6.25 | 0.38 | 3 | 0.00 | 341.9 |
| 10 | 14.96 | 33.064 | 6.07 | 0.39 | 3 | 0.00 | 343.3 |
| 24 | 14.94 | 33.069 | 6.07 | 0.39 | 2 | 0.00 | 342.5 |
| 96 | 11.82 | 33.299 | 5.56 | 0.83 | 7 | 0.15 | 265.9 |

|     |       |       |   |       |       |       |
|-----|-------|-------|---|-------|-------|-------|
| 0   | 15.11 | 33.10 | - | 24.51 | 343.8 | 0     |
| 10  | 15.11 | 33.10 | - | 24.51 | 343.8 | .034  |
| 20  | 15.11 | 33.10 | - | 24.51 | 343.8 | .069  |
| 30  | 15.11 | 33.11 | - | 24.51 | 343.0 | .103  |
| 50  | 15.07 | 33.12 | - | 24.53 | 341.5 | .172  |
| 75  | 13.05 | 33.07 | - | 24.91 | 305.2 | .253  |
| 100 | 11.62 | 33.35 | - | 25.40 | 258.6 | .324  |
| 125 | 10.61 | 33.56 | - | 25.74 | 225.9 | .385  |
| 150 | 9.74  | 33.72 | - | 26.02 | 199.9 | .439  |
| 200 | 8.68  | 33.98 | - | 26.39 | 164.5 | .532  |
| 250 | 8.10  | 34.08 | - | 26.56 | 148.6 | .612  |
| 300 | 7.42  | 34.08 | - | 26.66 | 139.2 | .686  |
| 400 | 6.47  | 34.16 | - | 26.85 | 120.9 | .822  |
| 500 | 5.77  | 34.22 | - | 26.99 | 107.9 | .942  |
| 600 | 5.18  | 34.27 | - | 27.10 | 97.4  | 1.051 |

80.120

CCOFI CRUISE 6507

80.120

ALEXANDER AGASSIZ, JULY 11 1965, 1903 1830 GCT, 32 09N 125 14.5W, SOUNDING 2322 FM, WIND 330 FORCE 4, WEATHER CLOUDY, SEA ROUGH, WIRE ANGLE 15.

|     |       |        |      |      |    |      |       |
|-----|-------|--------|------|------|----|------|-------|
| 0   | 15.40 | 33.097 | 6.14 | 0.51 | 3  | -    | 350.0 |
| 10  | 15.38 | 33.095 | 6.13 | 0.41 | 4  | -    | 349.8 |
| 30  | 15.32 | 33.097 | 6.08 | 0.41 | 4  | -    | 348.3 |
| 59  | 13.97 | 33.111 | 6.49 | 0.39 | 3  | -    | 319.9 |
| 68  | 13.62 | 33.136 | 6.34 | 0.42 | 4  | 0.01 | 311.3 |
| 83  | 13.06 | 33.110 | 6.34 | 0.47 | 3  | 0.03 | 302.5 |
| 97  | 12.36 | 33.188 | 6.08 | 0.63 | 5  | 0.20 | 283.8 |
| 112 | 11.80 | 33.285 | 5.33 | 0.81 | 6  | 0.08 | 266.6 |
| 136 | 10.50 | 33.461 | 5.02 | 1.32 | 15 | 0.01 | 231.4 |
| 156 | 9.82  | 33.614 | 4.54 | 1.51 | 19 | 0.01 | 209.1 |
| 185 | 9.15  | 33.839 | 3.60 | 1.97 | 26 | 0.01 | 182.0 |
| 213 | 8.62  | 33.959 | 3.32 | 2.05 | 32 | 0.01 | 165.1 |
| 243 | 8.16  | 34.018 | 3.24 | 2.14 | 37 | 0.01 | 154.1 |
| 291 | 7.46  | 33.998 | 3.49 | 2.07 | 43 | 0.01 | 145.9 |
| 345 | 6.86  | 34.055 | 2.33 | 2.58 | 52 | 0.01 | 133.7 |
| 427 | 5.90  | 34.095 | 1.47 | 2.95 | 67 | 0.01 | 118.8 |
| 511 | 5.58  | 34.215 | .86  | 3.16 | 77 | 0.01 | 106.1 |
| 594 | 5.02  | 34.254 | .59  | 3.22 | 94 | 0.01 | 96.8  |

|     |       |       |   |       |       |       |
|-----|-------|-------|---|-------|-------|-------|
| 0   | 15.45 | 33.13 | - | 24.45 | 348.7 | 0     |
| 10  | 15.41 | 33.13 | - | 24.46 | 347.8 | .035  |
| 20  | 15.37 | 33.13 | - | 24.47 | 347.0 | .070  |
| 30  | 15.37 | 33.13 | - | 24.47 | 347.0 | .104  |
| 50  | 14.50 | 33.15 | - | 24.67 | 327.6 | .172  |
| 75  | 13.39 | 33.18 | - | 24.93 | 303.6 | .251  |
| 100 | 12.29 | 33.22 | - | 25.17 | 280.1 | .325  |
| 125 | 11.13 | 33.43 | - | 25.55 | 244.2 | .391  |
| 200 | 8.91  | 33.94 | - | 26.32 | 170.9 | .545  |
| 250 | 8.00  | 34.01 | - | 26.52 | 152.4 | .628  |
| 300 | 7.34  | 34.04 | - | 26.64 | 141.1 | .704  |
| 400 | 6.34  | 34.11 | - | 26.83 | 123.0 | .841  |
| 500 | 5.80  | 34.22 | - | 26.98 | 108.3 | .962  |
| 600 | 5.11  | 34.27 | - | 27.11 | 96.6  | 1.071 |

80.200

CCOFI CRUISE 6507

80.200

ALEXANDER AGASSIZ, JULY 21 1965, 1028 0941 GCT, 29 28.5N 130 38.5W, SOUNDING 2460 FM, WIND 050 FORCE 3, WEATHER CLOUDY, SEA SLIGHT, WIRE ANGLE 13.

|     |       |        |      |      |    |      |       |
|-----|-------|--------|------|------|----|------|-------|
| 0   | 19.14 | 33.962 | 5.61 | 0.39 | 3  | 0.00 | 371.6 |
| 10  | 19.13 | 33.954 | 5.60 | 0.29 | 2  | 0.00 | 372.0 |
| 44  | 17.85 | 34.100 | 5.90 | 0.24 | 2  | 0.00 | 331.0 |
| 73  | 16.82 | 34.082 | 5.88 | 0.25 | 2  | 0.00 | 308.8 |
| 93  | 17.76 | 34.474 | 5.71 | 0.24 | 2  | 0.00 | 301.7 |
| 108 | 17.67 | 34.562 | 5.66 | 0.20 | 2  | 0.00 | 293.2 |
| 123 | 17.79 | 34.708 | 5.56 | 0.17 | 3  | 0.00 | 285.3 |
| 142 | 16.91 | 34.568 | 5.40 | 0.26 | 3  | 0.12 | 275.4 |
| 162 | 15.04 | 34.367 | 5.19 | 0.46 | 6  | 0.01 | 249.6 |
| 191 | 11.90 | 33.963 | 5.10 | 0.81 | 10 | 0.00 | 218.4 |
| 215 | 10.60 | 33.931 | 4.99 | 1.09 | 13 | 0.00 | 198.3 |
| 240 | 9.98  | 33.993 | 4.98 | 1.22 | 16 | 0.00 | 183.6 |
| 274 | 9.28  | 34.027 | 4.80 | 1.37 | 20 | 0.00 | 170.0 |
| 314 | 8.59  | 34.020 | 4.31 | 1.63 | 26 | 0.00 | 160.2 |
| 362 | 7.60  | 34.022 | 3.54 | 2.03 | 37 | 0.03 | 146.0 |
| 429 | 6.54  | 34.053 | 2.18 | 2.61 | 53 | 0.00 | 129.8 |
| 510 | 5.74  | 34.124 | 1.19 | 3.00 | 68 | 0.00 | 114.7 |
| 593 | 5.28  | 34.202 | .76  | 3.21 | 82 | 0.00 | 103.6 |

|     |       |       |   |       |       |       |
|-----|-------|-------|---|-------|-------|-------|
| 0   | 19.20 | 33.97 | - | 24.20 | 372.5 | 0     |
| 10  | 19.18 | 33.97 | - | 24.21 | 372.0 | .037  |
| 20  | 18.66 | 33.94 | - | 24.32 | 361.7 | .074  |
| 30  | 18.56 | 33.94 | - | 24.34 | 359.3 | .110  |
| 50  | 17.63 | 34.12 | - | 24.71 | 324.4 | .179  |
| 75  | 17.12 | 34.23 | - | 24.91 | 304.8 | .258  |
| 100 | 17.77 | 34.58 | - | 25.03 | 294.2 | .333  |
| 125 | 17.83 | 34.73 | - | 25.13 | 284.7 | .407  |
| 150 | 16.40 | 34.49 | - | 25.28 | 269.8 | .477  |
| 200 | 11.88 | 33.96 | - | 25.82 | 218.3 | .601  |
| 250 | 9.90  | 34.02 | - | 26.22 | 180.3 | .704  |
| 300 | 9.01  | 34.03 | - | 26.38 | 165.7 | .793  |
| 400 | 7.19  | 34.04 | - | 26.66 | 139.1 | .951  |
| 500 | 5.92  | 34.11 | - | 26.88 | 117.9 | 1.086 |
| 600 | 5.34  | 34.21 | - | 27.03 | 103.7 | 1.203 |

| O B S E R V E D   L E V E L S   O F   C E P T H   |       |        |      |          |     |     | S T A N D A R D   L E V E L S   C F   C E P T H |     |       |       |          |       |       |      |
|---|-------|--------|------|----------|-----|-----|---|-----|-------|-------|----------|-------|-------|------|
| INPUT   |       |        |      | COMPUTED |     |     | INPUT   |     |       |       | COMPUTED |       |       |      |
| Z   | T     | S      | OXY  | PHO      | SIL | NIT | D*T   | Z   | T     | S     | OXY      | SIG*T | D*T   | CC   |
| 82.47   |       |        |      |          |     |     | CCOFI CRUISE 6507                               |     |       |       |          |       | 82.47 |      |
| BLACK DOUGLAS, JUNE 16 1965, 2115 GMT, 34 15N 119 59W, SOUNDING 310 FM, WIND 280 FORCE 2, WEATHER CLEAR, SEA MODERATE, WIRE ANGLE 00. |       |        |      |          |     |     |   |     |       |       |          |       |       |      |
| 0   | 14.41 | 33.753 | 6.97 | -        | -   | -   | 281.6   | 0   | 14.41 | 33.75 | 6.97     | 25.16 | 281.9 | 0    |
| 10  | 11.36 | 33.781 | 4.39 | -        | -   | -   | 222.3   | 10  | 11.36 | 33.78 | 4.39     | 25.78 | 222.4 | .025 |
| 29  | 10.46 | 33.832 | 3.52 | -        | -   | -   | 203.3   | 20  | 10.73 | 33.81 | 3.79     | 25.92 | 209.4 | .047 |
| 39  | 10.20 | 33.848 | 3.26 | -        | -   | -   | 197.8   | 30  | 10.44 | 33.83 | 3.48     | 25.98 | 203.1 | .068 |
| 49  | 9.94  | 33.877 | 3.05 | -        | -   | -   | 191.5   | 50  | 9.92  | 33.88 | 3.03     | 26.11 | 191.0 | .107 |
| 63  | 9.57  | 33.946 | 2.74 | -        | -   | -   | 180.5   | 75  | 9.37  | 34.01 | 2.52     | 26.30 | 172.7 | .153 |
| 78  | 9.32  | 34.031 | 2.47 | -        | -   | -   | 170.3   | 100 | 9.02  | 34.12 | 1.99     | 26.45 | 159.2 | .195 |
| 98  | 9.06  | 34.111 | 2.05 | -        | -   | -   | 160.4   | 125 | 8.77  | 34.18 | 1.56     | 26.53 | 150.9 | .234 |
| 121   | 8.80  | 34.180 | 1.63 | -        | -   | -   | 151.4   | 150 | 8.61  | 34.18 | 1.40     | 26.56 | 148.6 | .272 |
| 141   | 8.69  | 34.182 | 1.49 | -        | -   | -   | 149.6   | 200 | 8.25  | 34.18 | .90      | 26.61 | 143.3 | .347 |
| 170   | 8.45  | 34.165 | 1.13 | -        | -   | -   | 147.3   | 250 | 8.01  | 34.21 | .70      | 26.67 | 137.7 | .419 |
| 199   | 8.26  | 34.177 | .91  | -        | -   | -   | 143.7   | 300 | 7.67  | 34.22 | .53      | 26.73 | 132.2 | .489 |
| 227   | 8.12  | 34.200 | .77  | -        | -   | -   | 140.0   | 400 | 7.15  | 34.27 | .41      | 26.84 | 121.4 | .621 |
| 266   | 7.90  | 34.210 | .63  | -        | -   | -   | 136.1   | 500 | 6.54  | 34.28 | .16      | 26.94 | 112.8 | .745 |
| 324   | 7.52  | 34.233 | .49  | -        | -   | -   | 129.2   |     |       |       |          |       |       |      |
| 397   | 7.16  | 34.268 | .43  | -        | -   | -   | 121.7   |     |       |       |          |       |       |      |
| 470   | 6.64  | 34.272 | .25  | -        | -   | -   | 114.7   |     |       |       |          |       |       |      |
| 548   | 6.48  | 34.289 | .11  | -        | -   | -   | 111.4   |     |       |       |          |       |       |      |
| 83.43   |       |        |      |          |     |     | CCOFI CRUISE 6507                               |     |       |       |          |       | 83.43 |      |
| BLACK DOUGLAS, JUNE 16 1965, 1700 GMT, 34 08N 119 34W, SOUNDING 134 FM, WIND 260 FORCE 1, WEATHER CLOUDY, SEA SLIGHT, WIRE ANGLE 00.  |       |        |      |          |     |     |   |     |       |       |          |       |       |      |
| 0   | 14.66 | 33.664 | 6.54 | -        | -   | -   | 293.2   | 0   | 14.66 | 33.66 | 6.54     | 25.03 | 293.5 | 0    |
| 10  | 14.60 | 33.663 | 6.66 | -        | -   | -   | 292.1   | 10  | 14.60 | 33.66 | 6.66     | 25.05 | 292.3 | .029 |
| 29  | 12.10 | 33.716 | 4.53 | -        | -   | -   | 240.2   | 20  | 14.34 | 33.67 | 6.47     | 25.11 | 286.3 | .058 |
| 44  | 10.66 | 33.786 | 3.55 | -        | -   | -   | 210.0   | 30  | 11.98 | 33.72 | 4.43     | 25.62 | 237.7 | .085 |
| 53  | 10.20 | 33.844 | 3.17 | -        | -   | -   | 198.1   | 50  | 10.33 | 33.83 | 3.26     | 26.00 | 201.3 | .129 |
| 68  | 9.53  | 33.915 | 2.86 | -        | -   | -   | 182.2   | 75  | 9.43  | 33.94 | 2.78     | 26.24 | 178.8 | .176 |
| 83  | 9.36  | 33.961 | 2.73 | -        | -   | -   | 176.1   | 100 | 9.21  | 33.98 | 2.68     | 26.31 | 172.4 | .221 |
| 102   | 9.18  | 33.987 | 2.66 | -        | -   | -   | 171.5   | 125 | 9.09  | 34.08 | 2.16     | 26.40 | 163.2 | .263 |
| 126   | 9.08  | 34.093 | 2.13 | -        | -   | -   | 162.1   | 150 | 8.95  | 34.14 | 1.86     | 26.47 | 156.6 | .304 |
| 146   | 8.97  | 34.131 | 1.90 | -        | -   | -   | 157.6   | 200 | 8.56  | 34.21 | 1.30     | 26.59 | 145.6 | .381 |
| 176   | 8.84  | 34.169 | 1.65 | -        | -   | -   | 152.8   |     |       |       |          |       |       |      |
| 199   | 8.58  | 34.207 | 1.31 | -        | -   | -   | 146.1   |     |       |       |          |       |       |      |
| 83.51   |       |        |      |          |     |     | CCOFI CRUISE 6507                               |     |       |       |          |       | 83.51 |      |
| BLACK DOUGLAS, JUNE 17 1965, 0140 GMT, 33 52N 120 07.5W, SOUNDING 66 FM, WIND 280 FORCE 2, WEATHER CLEAR, SEA ROUGH, WIRE ANGLE 05.   |       |        |      |          |     |     |   |     |       |       |          |       |       |      |
| 0   | 12.52 | 33.770 | 5.91 | -        | -   | -   | 243.9   | 0   | 12.52 | 33.77 | 5.91     | 25.55 | 243.9 | 0    |
| 19  | 11.72 | 33.837 | 5.34 | -        | -   | -   | 224.5   | 10  | 11.85 | 33.83 | 5.47     | 25.73 | 227.3 | .024 |
| 29  | 11.60 | 33.817 | 5.16 | -        | -   | -   | 223.8   | 20  | 11.70 | 33.84 | 5.32     | 25.77 | 223.9 | .046 |
| 44  | 11.28 | 33.853 | 4.73 | -        | -   | -   | 215.6   | 30  | 11.59 | 33.82 | 5.12     | 25.77 | 223.4 | .069 |
| 58  | 10.86 | 33.880 | 4.23 | -        | -   | -   | 206.4   | 50  | 11.09 | 33.86 | 4.50     | 25.89 | 211.8 | .112 |
| 72  | 10.61 | 33.896 | 4.01 | -        | -   | -   | 201.0   | 75  | 10.52 | 33.90 | 3.89     | 26.02 | 199.2 | .164 |
| 91  | 8.94  | 34.093 | 2.07 | -        | -   | -   | 160.0   | 100 | 8.89  | 34.10 | 2.01     | 26.45 | 158.7 | .209 |
| 111   | 8.84  | 34.110 | 1.95 | -        | -   | -   | 157.2   |     |       |       |          |       |       |      |
| 83.55   |       |        |      |          |     |     | CCOFI CRUISE 6507                               |     |       |       |          |       | 83.55 |      |
| BLACK DOUGLAS, JUNE 17 1965, 0358 GMT, 33 45.5N 120 21W, SOUNDING 460 FM, WIND 280 FORCE 2, WEATHER CLOUDY, SEA ROUGH, WIRE ANGLE 05. |       |        |      |          |     |     |   |     |       |       |          |       |       |      |
| 0   | 12.86 | 33.742 | 6.07 | -        | -   | -   | 252.3   | 0   | 12.86 | 33.74 | 6.07     | 25.47 | 252.4 | 0    |
| 10  | 12.08 | 33.738 | 5.76 | -        | -   | -   | 238.2   | 10  | 12.08 | 33.74 | 5.76     | 25.62 | 238.1 | .025 |
| 29  | 10.65 | 33.828 | 3.60 | -        | -   | -   | 206.7   | 20  | 11.80 | 33.75 | 5.45     | 25.68 | 232.3 | .048 |
| 39  | 9.63  | 33.913 | 2.84 | -        | -   | -   | 183.9   | 30  | 10.52 | 33.84 | 3.47     | 25.98 | 203.7 | .070 |
| 49  | 9.50  | 33.951 | 2.75 | -        | -   | -   | 179.1   | 50  | 9.49  | 33.95 | 2.72     | 26.24 | 179.0 | .108 |
| 63  | 9.22  | 34.019 | 2.43 | -        | -   | -   | 169.7   | 75  | 8.98  | 34.04 | 2.28     | 26.39 | 164.5 | .152 |
| 79  | 8.92  | 34.059 | 2.21 | -        | -   | -   | 162.2   | 100 | 8.79  | 34.14 | 1.85     | 26.50 | 154.2 | .192 |
| 96  | 8.80  | 34.127 | 1.92 | -        | -   | -   | 155.3   | 125 | 8.74  | 34.16 | 1.70     | 26.52 | 152.0 | .231 |
| 121   | 8.75  | 34.157 | 1.79 | -        | -   | -   | 152.4   | 150 | 8.67  | 34.17 | 1.57     | 26.54 | 150.2 | .269 |
| 140   | 8.72  | 34.166 | 1.55 | -        | -   | -   | 151.2   | 200 | 8.38  | 34.21 | 1.32     | 26.62 | 143.0 | .344 |
| 170   | 8.56  | 34.183 | 1.69 | -        | -   | -   | 147.6   | 250 | 8.12  | 34.24 | 1.10     | 26.68 | 137.0 | .416 |
| 197   | 8.39  | 34.205 | 1.37 | -        | -   | -   | 143.5   | 300 | 7.85  | 34.25 | .97      | 26.73 | 132.5 | .486 |
| 227   | 8.32  | 34.232 | 1.21 | -        | -   | -   | 140.5   | 400 | 7.29  | 34.26 | .72      | 26.82 | 124.0 | .620 |
| 266   | 7.98  | 34.249 | 1.02 | -        | -   | -   | 134.4   | 500 | 6.76  | 34.30 | .50      | 26.92 | 114.1 | .746 |
| 323   | 7.78  | 34.250 | .92  | -        | -   | -   | 131.5   |     |       |       |          |       |       |      |
| 404   | 7.26  | 34.266 | .70  | -        | -   | -   | 123.2   |     |       |       |          |       |       |      |
| 472   | 6.92  | 34.288 | .55  | -        | -   | -   | 117.1   |     |       |       |          |       |       |      |
| 550   | 6.38  | 34.305 | .38  | -        | -   | -   | 108.9   |     |       |       |          |       |       |      |

## O B S E R V E D L E V E L S O F D E P T H

## S T A N D A R D L E V E L S O F D E P T H

## INPUT

## COMPUTED

## INPUT

## COMPUTED

83.60

CCOFI CRUISE 6507

83.60

BLACK DOUGLAS, JUNE 17 1965, 0740 GMT, 33 34N 120 45W, SOUNDING 800 FM, WIND 270 FORCE 1, WEATHER CLEAR, SEA ROUGH,  
WIRE ANGLE 05.

| Z                 | T     | S      | OXY  | PHO | SIL | NIT | D*T   | Z   | T     | S     | OXY  | SIG*T | D*T   | DD   |
|-------------------|-------|--------|------|-----|-----|-----|-------|-----|-------|-------|------|-------|-------|------|
| CCOFI CRUISE 6507 |       |        |      |     |     |     |       |     |       |       |      |       |       |      |
| 0                 | 13.44 | 33.684 | 6.02 | -   | -   | -   | 267.6 | 0   | 13.44 | 33.68 | 6.02 | 25.30 | 267.9 | 0    |
| 10                | 13.01 | 33.672 | 6.12 | -   | -   | -   | 260.2 | 10  | 13.01 | 33.67 | 6.12 | 25.38 | 260.4 | .026 |
| 29                | 12.92 | 33.668 | 5.83 | -   | -   | -   | 258.8 | 20  | 12.97 | 33.67 | 5.97 | 25.39 | 259.6 | .052 |
| 52                | 12.28 | 33.601 | 5.57 | -   | -   | -   | 251.9 | 30  | 12.91 | 33.67 | 5.82 | 25.40 | 258.5 | .078 |
| 62                | 10.62 | 33.592 | 4.44 | -   | -   | -   | 223.7 | 50  | 12.85 | 33.66 | 5.80 | 25.41 | 258.1 | .130 |
| 72                | 10.71 | 33.767 | 4.28 | -   | -   | -   | 212.2 | 75  | 10.65 | 33.78 | 4.20 | 25.91 | 210.3 | .189 |
| 86                | 10.12 | 33.817 | 3.65 | -   | -   | -   | 198.8 | 100 | 9.74  | 33.84 | 3.28 | 26.11 | 191.1 | .240 |
| 101               | 9.72  | 33.840 | 3.26 | -   | -   | -   | 190.7 | 125 | 8.94  | 33.93 | 2.83 | 26.31 | 172.0 | .286 |
| 124               | 8.96  | 33.931 | 2.84 | -   | -   | -   | 172.3 | 150 | 8.59  | 34.00 | 2.60 | 26.42 | 161.6 | .328 |
| 145               | 8.60  | 33.986 | 2.64 | -   | -   | -   | 162.8 | 200 | 7.90  | 34.05 | 2.19 | 26.56 | 148.0 | .407 |
| 168               | 8.56  | 34.059 | 2.13 | -   | -   | -   | 156.8 | 250 | 7.46  | 34.11 | 1.69 | 26.67 | 137.5 | .480 |
| 198               | 7.94  | 34.046 | 2.21 | -   | -   | -   | 148.9 | 300 | 7.34  | 34.18 | 1.15 | 26.75 | 130.7 | .550 |
| 226               | 7.59  | 34.083 | 1.89 | -   | -   | -   | 141.3 |     |       |       |      |       |       |      |
| 264               | 7.43  | 34.122 | 1.55 | -   | -   | -   | 136.2 |     |       |       |      |       |       |      |
| 322               | 7.28  | 34.214 | .90  | -   | -   | -   | 127.3 |     |       |       |      |       |       |      |

83.70

CCOFI CRUISE 6507

83.70

BLACK DOUGLAS, JUNE 17 1965, 1349 GMT, 33 14N 121 26W, SOUNDING 1900 FM, WIND 320 FORCE 2, WEATHER OVERCAST,  
SEA ROUGH, WIRE ANGLE 08.

| Z                 | T     | S      | OXY  | PHO | SIL | NIT | D*T   | Z   | T     | S     | OXY  | SIG*T | D*T   | DD   |
|-------------------|-------|--------|------|-----|-----|-----|-------|-----|-------|-------|------|-------|-------|------|
| CCOFI CRUISE 6507 |       |        |      |     |     |     |       |     |       |       |      |       |       |      |
| 0                 | 13.15 | 33.627 | 6.14 | -   | -   | -   | 266.2 | 0   | 13.15 | 33.63 | 6.14 | 25.32 | 266.0 | 0    |
| 10                | 12.90 | 33.615 | 6.09 | -   | -   | -   | 262.4 | 10  | 12.90 | 33.62 | 6.09 | 25.36 | 262.0 | .026 |
| 29                | 12.84 | 33.604 | 5.98 | -   | -   | -   | 262.0 | 20  | 12.86 | 33.61 | 6.03 | 25.36 | 262.0 | .053 |
| 57                | 12.10 | 33.585 | 5.60 | -   | -   | -   | 249.8 | 30  | 12.83 | 33.60 | 5.97 | 25.36 | 262.1 | .079 |
| 67                | 11.25 | 33.692 | 4.58 | -   | -   | -   | 227.0 | 50  | 12.25 | 33.59 | 5.70 | 25.47 | 252.2 | .131 |
| 82                | 10.40 | 33.717 | 3.97 | -   | -   | -   | 210.8 | 75  | 10.77 | 33.70 | 4.23 | 25.83 | 218.2 | .190 |
| 96                | 9.73  | 33.780 | 3.45 | -   | -   | -   | 195.3 | 100 | 9.59  | 33.78 | 3.49 | 26.09 | 193.1 | .242 |
| 111               | 9.14  | 33.796 | 3.65 | -   | -   | -   | 185.0 | 125 | 8.91  | 33.88 | 3.35 | 26.28 | 175.3 | .288 |
| 135               | 8.76  | 33.927 | 3.08 | -   | -   | -   | 169.6 | 150 | 8.53  | 33.97 | 2.95 | 26.41 | 163.0 | .331 |
| 154               | 8.47  | 33.976 | 2.91 | -   | -   | -   | 161.7 | 200 | 7.81  | 34.06 | 2.22 | 26.58 | 146.0 | .410 |
| 183               | 8.02  | 34.039 | 2.50 | -   | -   | -   | 150.5 | 250 | 7.23  | 34.09 | 1.75 | 26.69 | 135.9 | .482 |
| 212               | 7.66  | 34.064 | 2.08 | -   | -   | -   | 143.7 | 300 | 6.75  | 34.13 | 1.26 | 26.79 | 126.7 | .550 |
| 240               | 7.35  | 34.081 | 1.83 | -   | -   | -   | 138.2 |     |       |       |      |       |       |      |
| 287               | 6.87  | 34.123 | 1.38 | -   | -   | -   | 128.7 |     |       |       |      |       |       |      |
| 343               | 6.46  | 34.157 | 1.00 | -   | -   | -   | 121.0 |     |       |       |      |       |       |      |

83.80

CCOFI CRUISE 6507

83.80

BLACK DOUGLAS, JUNE 17 1965, 1945 GMT, 32 57N 122 09W, SOUNDING 2000+ FM, WIND 270 FORCE 3, WEATHER CLOUDY,  
SEA VERY ROUGH, WIRE ANGLE 05.

| Z                 | T     | S      | OXY  | PHO | SIL | NIT | D*T   | Z   | T     | S     | OXY   | SIG*T | D*T   | DD   |
|-------------------|-------|--------|------|-----|-----|-----|-------|-----|-------|-------|-------|-------|-------|------|
| CCOFI CRUISE 6507 |       |        |      |     |     |     |       |     |       |       |       |       |       |      |
| 0                 | 13.40 | 33.352 | 6.34 | -   | -   | -   | 291.2 | 0   | 13.40 | 33.35 | 6.34  | 25.06 | 291.3 | 0    |
| 10                | 12.92 | 33.518 | 6.23 | -   | -   | -   | 269.9 | 10  | 12.92 | 33.52 | 6.23  | 25.28 | 269.7 | .028 |
| 29                | 12.44 | 33.565 | 5.83 | -   | -   | -   | 257.5 | 20  | 12.87 | 33.54 | 6.13  | 25.31 | 267.3 | .055 |
| 39                | 10.76 | 33.698 | 4.83 | -   | -   | -   | 218.2 | 30  | 12.20 | 33.59 | 5.66  | 25.48 | 251.3 | .081 |
| 49                | 10.40 | 33.732 | 4.31 | -   | -   | -   | 209.7 | 50  | 10.39 | 33.73 | 4.129 | 25.91 | 209.7 | .127 |
| 63                | 9.93  | 33.813 | 3.83 | -   | -   | -   | 196.1 | 75  | 9.72  | 33.86 | 3.20  | 26.13 | 189.3 | .177 |
| 78                | 9.64  | 33.865 | 3.09 | -   | -   | -   | 187.6 | 100 | 9.02  | 33.88 | 2.97  | 26.26 | 177.0 | .224 |
| 98                | 9.06  | 33.872 | 2.99 | -   | -   | -   | 178.2 | 125 | 8.83  | 34.00 | 2.50  | 26.38 | 165.2 | .267 |
| 121               | 8.82  | 33.981 | 2.63 | -   | -   | -   | 166.5 | 150 | 8.79  | 34.07 | 2.05  | 26.44 | 159.4 | .308 |
| 140               | 8.85  | 34.059 | 2.09 | -   | -   | -   | 161.1 | 200 | 8.09  | 34.10 | 1.81  | 26.57 | 147.0 | .386 |
| 170               | 8.55  | 34.079 | 1.98 | -   | -   | -   | 155.2 | 250 | 7.55  | 34.12 | 1.57  | 26.67 | 138.0 | .459 |
| 198               | 8.11  | 34.098 | 1.82 | -   | -   | -   | 147.4 | 300 | 6.94  | 34.12 | 1.35  | 26.76 | 129.9 | .529 |
| 227               | 7.87  | 34.121 | 1.63 | -   | -   | -   | 142.3 | 400 | 6.39  | 34.23 | .60   | 26.92 | 114.7 | .656 |
| 265               | 7.32  | 34.123 | 1.52 | -   | -   | -   | 134.7 | 500 | 5.81  | 34.28 | .31   | 27.03 | 103.9 | .771 |
| 321               | 6.76  | 34.129 | 1.19 | -   | -   | -   | 126.9 |     |       |       |       |       |       |      |
| 391               | 6.42  | 34.211 | .66  | -   | -   | -   | 116.4 |     |       |       |       |       |       |      |
| 463               | 6.20  | 34.289 | .39  | -   | -   | -   | 107.9 |     |       |       |       |       |       |      |
| 540               | 5.35  | 34.273 | .22  | -   | -   | -   | 99.1  |     |       |       |       |       |       |      |

| O B S E R V E D   L E V E L S   O F   D E P T H  |       |         |       |                 |       |       | S T A N D A R D   L E V E L S   O F   D E P T H |     |       |       |                 |         |       |      |
|--|-------|---------|-------|-----------------|-------|-------|---|-----|-------|-------|-----------------|---------|-------|------|
| I N P U T  |       |         |       | C O M P U T E D |       |       | I N P U T                                       |     |       |       | C O M P U T E D |         |       |      |
| Z  | T     | S       | O X Y | P H O           | S I L | N I T | D * T   | Z   | T     | S     | O X Y           | S I G T | D * T | D D  |
| 83.90  |       |         |       |                 |       |       | CCOFI CRUISE 6507                               |     |       |       |                 |         | 83.90 |      |
| BLACK DOUGLAS, JUNE 18 1965, 0134 GMT, 32 34N 122 50W, SOUNDING 2050 FM, WIND 330 FORCE 4, WEATHER OVERCAST,<br>SEA VERY ROUGH, WIRE ANGLE 17. |       |         |       |                 |       |       |   |     |       |       |                 |         |       |      |
| 1  | 15.20 | 33.268  | 5.79  | -               | -     | -     | 333.3   | 0   | 15.20 | 33.27 | 5.79            | 24.62   | 333.2 | 0    |
| 10   | 15.21 | 33.272  | 5.81  | -               | -     | -     | 333.3   | 10  | 15.21 | 33.27 | 5.81            | 24.61   | 333.4 | .033 |
| 28   | 15.06 | 33.269A | 5.84  | -               | -     | -     | 330.4   | 20  | 15.12 | 33.27 | 5.83            | 24.63   | 331.5 | .067 |
| 38   | 15.06 | 33.265A | 5.84  | -               | -     | -     | 330.7   | 30  | 15.06 | 33.27 | 5.84            | 24.65   | 330.3 | .100 |
| 52   | 14.36 | 33.197  | 5.98  | -               | -     | -     | 321.4   | 50  | 14.68 | 33.23 | 5.93            | 24.70   | 325.4 | .166 |
| 66   | 13.38 | 33.151  | 6.09  | -               | -     | -     | 305.5   | 75  | 12.92 | 33.23 | 5.92            | 25.06   | 291.0 | .243 |
| 89   | 12.20 | 33.350  | 5.42  | -               | -     | -     | 268.9   | 100 | 11.59 | 33.42 | 5.00            | 25.46   | 252.9 | .312 |
| 108  | 11.15 | 33.451  | 4.76  | -               | -     | -     | 243.0   | 125 | 10.59 | 33.56 | 4.37            | 25.75   | 225.5 | .372 |
| 126  | 10.54 | 33.562  | 4.34  | -               | -     | -     | 224.6   | 150 | 9.40  | 33.78 | 3.53            | 26.12   | 190.2 | .425 |
| 144  | 9.60  | 33.732  | 3.73  | -               | -     | -     | 196.8   | 200 | 8.62  | 33.96 | 2.91            | 26.38   | 165.1 | .515 |
| 173  | 8.94  | 33.903  | 3.06  | -               | -     | -     | 174.0   | 250 | 7.88  | 34.03 | 2.93            | 26.55   | 149.2 | .596 |
| 206  | 8.54  | 33.979  | 2.89  | -               | -     | -     | 162.5   | 300 | 7.15  | 34.04 | 1.52            | 26.66   | 138.6 | .670 |
| 233  | 8.18  | 34.029A | 2.95  | -               | -     | -     | 153.6   | 400 | 6.21  | 34.16 | -               | 26.88   | 117.7 | .803 |
| 280  | 7.38  | 34.022  | 2.83  | -               | -     | -     | 143.0   | 500 | 5.72  | 34.24 | .52             | 27.01   | 105.8 | .921 |
| 331  | 6.84  | 34.073A | 1.84  | -               | -     | -     | 132.1   |     |       |       |                 |         |       |      |
| 409  | 6.13  | -       | -     | -               | -     | -     | -   |     |       |       |                 |         |       |      |
| 489  | 5.76  | 34.228  | .55   | -               | -     | -     | 107.2   |     |       |       |                 |         |       |      |
| 570  | 5.36  | 34.298  | .33   | -               | -     | -     | 97.3  |     |       |       |                 |         |       |      |
| 87.35  |       |         |       |                 |       |       | CCOFI CRUISE 6507                               |     |       |       |                 |         | 87.35 |      |
| BLACK DOUGLAS, JUNE 19 1965, 1654 GMT, 33 50N 118 37.5W, SOUNDING 250 FM, WIND 240 FORCE 1, WEATHER OVERCAST,<br>SEA SLIGHT, WIRE ANGLE 00.    |       |         |       |                 |       |       |   |     |       |       |                 |         |       |      |
| 0  | 16.50 | 33.612  | 6.15  | -               | -     | -     | 336.0   | 0   | 16.50 | 33.61 | 6.15            | 24.59   | 336.2 | 0    |
| 10   | 16.42 | 33.615  | 6.37  | -               | -     | -     | 334.0   | 10  | 16.42 | 33.62 | 6.37            | 24.61   | 333.7 | .034 |
| 19   | 13.71 | 33.572  | 6.17  | -               | -     | -     | 281.0   | 20  | 13.40 | 33.56 | 6.06            | 25.22   | 275.9 | .064 |
| 29   | 12.54 | 33.525  | 5.49  | -               | -     | -     | 262.3   | 30  | 12.52 | 33.53 | 5.48            | 25.37   | 261.5 | .091 |
| 44   | 11.72 | 33.604  | 4.69  | -               | -     | -     | 241.7   | 50  | 11.40 | 33.64 | 4.47            | 25.67   | 233.4 | .141 |
| 68   | 10.32 | 33.735  | 3.66  | -               | -     | -     | 208.1   | 75  | 10.20 | 33.75 | 3.57            | 25.96   | 205.1 | .196 |
| 83   | 10.04 | 33.772  | 3.45  | -               | -     | -     | 200.9   | 100 | 9.46  | 33.88 | 3.08            | 26.19   | 183.7 | .245 |
| 97   | 9.52  | 33.870  | 3.10  | -               | -     | -     | 185.4   | 125 | 9.23  | 34.00 | 2.67            | 26.32   | 171.3 | .290 |
| 121  | 9.22  | 33.975  | 2.75  | -               | -     | -     | 173.0   | 150 | 9.18  | 34.10 | 2.14            | 26.41   | 163.1 | .332 |
| 141  | 9.28  | 34.088  | 2.19  | -               | -     | -     | 165.5   | 200 | 8.83  | 34.18 | 1.61            | 26.52   | 151.8 | .413 |
| 169  | 8.88  | 34.118  | 2.04  | -               | -     | -     | 157.2   | 250 | 8.62  | 34.22 | 1.42            | 26.59   | 145.8 | .489 |
| 199  | 8.83  | 34.179  | 1.62  | -               | -     | -     | 151.9   | 300 | 8.27  | 34.26 | 1.07            | 26.67   | 137.7 | .562 |
| 233  | 8.72  | 34.203  | 1.50  | -               | -     | -     | 148.5   | 400 | 7.40  | 34.28 | .73             | 26.82   | 124.0 | .699 |
| 286  | 8.38  | 34.253  | 1.13  | -               | -     | -     | 139.8   |     |       |       |                 |         |       |      |
| 340  | 7.94  | 34.258  | .94   | -               | -     | -     | 133.1   |     |       |       |                 |         |       |      |
| 399  | 7.42  | 34.276  | .74   | -               | -     | -     | 124.6   |     |       |       |                 |         |       |      |
| 87.40  |       |         |       |                 |       |       | CCOFI CRUISE 6507                               |     |       |       |                 |         | 87.40 |      |
| BLACK DOUGLAS, JUNE 19 1965, 1328 GMT, 33 40N 118 58W, SOUNDING 450 FM, WIND 300 FORCE 1, WEATHER OVERCAST,<br>SEA MODERATE, WIRE ANGLE 05.    |       |         |       |                 |       |       |   |     |       |       |                 |         |       |      |
| 0  | 16.52 | 33.642  | 6.11  | -               | -     | -     | 334.3   | 0   | 16.52 | 33.64 | 6.11            | 24.60   | 334.4 | 0    |
| 10   | 14.14 | 33.591  | 6.76  | -               | -     | -     | 288.1   | 10  | 14.14 | 33.59 | 6.76            | 25.09   | 288.2 | .031 |
| 29   | 11.58 | 33.631  | 4.56  | -               | -     | -     | 237.2   | 20  | 12.35 | 33.61 | 5.22            | 25.46   | 252.5 | .058 |
| 39   | 11.10 | 33.662  | 4.31  | -               | -     | -     | 226.6   | 30  | 11.56 | 33.63 | 4.54            | 25.63   | 236.9 | .083 |
| 48   | 10.46 | 33.698  | 3.80  | -               | -     | -     | 213.2   | 50  | 10.39 | 33.71 | 3.74            | 25.90   | 211.1 | .128 |
| 62   | 10.16 | 33.746  | 3.57  | -               | -     | -     | 204.7   | 75  | 9.87  | 33.81 | 3.35            | 26.07   | 195.3 | .179 |
| 78   | 9.80  | 33.827  | 3.28  | -               | -     | -     | 193.0   | 100 | 9.44  | 33.90 | 3.00            | 26.21   | 181.9 | .226 |
| 96   | 9.46  | 33.879  | 3.05  | -               | -     | -     | 183.8   | 125 | 9.12  | 33.98 | 2.62            | 26.32   | 171.1 | .271 |
| 120  | 9.19  | 33.974  | 2.63  | -               | -     | -     | 172.6   | 150 | 8.82  | 34.04 | 2.53            | 26.42   | 162.1 | .313 |
| 140  | 8.91  | 34.008  | 2.61  | -               | -     | -     | 165.8   | 200 | 8.07  | 34.08 | 2.17            | 26.56   | 148.2 | .353 |
| 168  | 8.68  | 34.072A | 2.39  | -               | -     | -     | 157.6   | 250 | 7.72  | 34.15 | 1.63            | 26.67   | 138.1 | .466 |
| 196  | 8.12  | 34.079  | 2.19  | -               | -     | -     | 149.0   | 300 | 7.60  | 34.24 | 1.05            | 26.76   | 129.7 | .535 |
| 225  | 7.84  | 34.124  | 1.89  | -               | -     | -     | 141.7   | 400 | 6.78  | 34.30 | .51             | 26.92   | 114.4 | .663 |
| 264  | 7.67  | 34.169  | 1.50  | -               | -     | -     | 136.0   | 500 | 6.28  | 34.33 | .35             | 27.01   | 105.8 | .779 |
| 322  | 7.54  | 34.280  | .81   | -               | -     | -     | 125.9   |     |       |       |                 |         |       |      |
| 394  | 6.82  | 34.295  | .53   | -               | -     | -     | 115.3   |     |       |       |                 |         |       |      |
| 467  | 6.44  | -       | .40   | -               | -     | -     | -   |     |       |       |                 |         |       |      |
| 546  | 6.00  | 34.361  | .26   | -               | -     | -     | 100.1   |     |       |       |                 |         |       |      |

A) POSSIBLE EVAPORATION, VALUE FALLS ON PROPERTY CURVE.



| O B S E R V E D   L E V E L S   O F   D E P T H   |       |         |      |          |     |      | S T A N D A R D   L E V E L S   O F   D E P T H |     |       |       |          |       |       |       |
|---|-------|---------|------|----------|-----|------|---|-----|-------|-------|----------|-------|-------|-------|
| INPUT   |       |         |      | COMPUTED |     |      | INPUT   |     |       |       | COMPUTED |       |       |       |
| Z   | T     | S       | OXY  | PHO      | SIL | NIT  | D*T   | Z   | T     | S     | OXY      | SIG*T | D*T   | DD    |
| 87.80   |       |         |      |          |     |      | CCOFI CRUISE 6507                               |     |       |       |          |       |       | 87.80 |
| BLACK DOUGLAS, JUNE 18 1965, 1235 GMT, 32 18.5N 121 40W, SOUNDING 2150 FM, WIND 330 FORCE 3, WEATHER CLOUDY, SEA ROUGH, WIRE ANGLE 17.          |       |         |      |          |     |      |   |     |       |       |          |       |       |       |
| 0   | 15.03 | 33.243  | 5.77 | -        | -   | -    | 331.6   | 0   | 15.03 | 33.24 | 5.77     | 24.63 | 331.9 | 0     |
| 9   | 15.04 | 33.244  | 5.84 | -        | -   | -    | 331.8   | 10  | 15.04 | 33.24 | 5.84     | 24.63 | 332.1 | .033  |
| 27  | 14.96 | 33.256  | 5.84 | -        | -   | -    | 329.2   | 20  | 14.99 | 33.25 | 5.84     | 24.65 | 330.3 | .066  |
| 55  | 13.07 | 33.268  | -    | -        | -   | -    | 291.1   | 30  | 14.96 | 33.26 | 5.84     | 24.66 | 329.0 | .099  |
| 64  | 13.24 | 33.334  | 5.94 | -        | -   | -    | 289.4   | 50  | 13.09 | 33.27 | -        | 25.06 | 291.3 | .162  |
| 78  | 13.04 | 33.383  | 5.98 | -        | -   | -    | 282.0   | 75  | 13.23 | 33.39 | 5.97     | 25.12 | 285.1 | .234  |
| 92  | 11.93 | 33.337  | 5.47 | -        | -   | -    | 265.1   | 100 | 11.32 | 33.39 | 4.88     | 25.49 | 250.4 | .302  |
| 106   | 10.91 | 33.453  | 4.51 | -        | -   | -    | 238.8   | 125 | 9.96  | 33.64 | 4.10     | 25.92 | 209.4 | .360  |
| 129   | 9.82  | 33.659  | 4.04 | -        | -   | -    | 205.7   | 150 | 9.24  | 33.76 | 3.72     | 26.13 | 189.2 | .410  |
| 146   | 9.32  | 33.744  | 3.74 | -        | -   | -    | 191.6   | 200 | 8.50  | 33.95 | 3.46     | 26.40 | 164.0 | .500  |
| 173   | 8.86  | 33.868  | 3.63 | -        | -   | -    | 175.4   | 250 | 7.80  | 34.05 | 2.35     | 26.58 | 146.6 | .580  |
| 201   | 8.49  | 33.950  | 3.45 | -        | -   | -    | 163.9   | 300 | 7.02  | 34.07 | 2.03     | 26.71 | 134.6 | .652  |
| 228   | 8.09  | 34.023  | 2.75 | -        | -   | -    | 152.7   | 400 | 6.25  | 34.17 | .91      | 26.89 | 117.4 | .783  |
| 272   | 7.51  | 34.060  | 2.13 | -        | -   | -    | 141.9   | 500 | 5.50  | 34.26 | .47      | 27.05 | 101.8 | .859  |
| 323   | 6.66  | 34.070  | 1.93 | -        | -   | -    | 130.0   |     |       |       |          |       |       |       |
| 399   | 6.26  | 34.164  | .93  | -        | -   | -    | 118.0   |     |       |       |          |       |       |       |
| 478   | 5.60  | 34.246  | .53  | -        | -   | -    | 104.0   |     |       |       |          |       |       |       |
| 560   | 5.24  | 34.295  | .32  | -        | -   | -    | 96.2  |     |       |       |          |       |       |       |
| 87.90   |       |         |      |          |     |      | CCOFI CRUISE 6507                               |     |       |       |          |       |       | 87.90 |
| BLACK DOUGLAS, JUNE 18 1965, 0653 GMT, 31 59N 122 25W, SOUNDING 2000 FM, WIND 320 FORCE 4, WEATHER MISSING, SEA VERY ROUGH, WIRE ANGLE 15.      |       |         |      |          |     |      |   |     |       |       |          |       |       |       |
| 1   | 15.68 | 33.383A | 5.70 | -        | -   | -    | 335.0   | 0   | 15.68 | 33.38 | 5.70     | 24.59 | 335.2 | 0     |
| 10  | 15.70 | 33.373  | 5.77 | -        | -   | -    | 336.2   | 10  | 15.70 | 33.37 | 5.77     | 24.58 | 336.4 | .034  |
| 43  | 15.66 | 33.385  | 5.77 | -        | -   | -    | 334.4   | 20  | 15.70 | 33.37 | 5.77     | 24.58 | 336.4 | .067  |
| 71  | 15.40 | 33.493  | 5.83 | -        | -   | -    | 321.1   | 30  | 15.69 | 33.37 | 5.77     | 24.58 | 336.2 | .101  |
| 89  | 12.96 | -       | 5.70 | -        | -   | -    | -   | 50  | 15.63 | 33.40 | 5.78     | 24.62 | 332.7 | .168  |
| 104   | 12.72 | 33.422  | 5.64 | -        | -   | -    | 273.2   | 75  | 15.27 | 33.49 | 5.83     | 24.77 | 318.6 | .250  |
| 116   | 11.79 | 33.448  | 5.16 | -        | -   | -    | 254.4   | 100 | 12.80 | 33.42 | 5.66     | 25.23 | 274.8 | .325  |
| 136   | 11.24 | 33.631  | 4.75 | -        | -   | -    | 231.3   | 125 | 11.53 | 33.54 | 4.93     | 25.56 | 243.0 | .390  |
| 154   | 10.28 | 33.731  | 4.65 | -        | -   | -    | 207.8   | 150 | 10.48 | 33.71 | 4.67     | 25.88 | 212.6 | .448  |
| 181   | 9.38  | 33.873  | 4.58 | -        | -   | -    | 183.0   | 200 | 9.10  | 33.92 | 4.42     | 26.28 | 175.2 | .547  |
| 204   | 9.048 | 33.933  | 4.39 | -        | -   | -    | 173.3   | 250 | 8.37  | 34.00 | 3.67     | 26.45 | 158.4 | .632  |
| 227   | 8.69  | 33.987  | 3.97 | -        | -   | -    | 164.1   | 300 | 7.47  | 34.03 | 2.55     | 26.61 | 143.6 | .710  |
| 263   | 8.18  | 34.012  | 3.48 | -        | -   | -    | 154.8   | 400 | 6.14  | 34.06 | 1.70     | 26.81 | 124.3 | .849  |
| 296   | 7.54  | 34.035  | 2.57 | -        | -   | -    | 144.2   | 500 | 5.99  | 34.22 | .42      | 26.96 | 110.5 | .972  |
| 343   | 6.80  | 34.033  | 2.37 | -        | -   | -    | 134.5   |     |       |       |          |       |       |       |
| 408   | 6.08  | 34.064  | 1.64 | -        | -   | -    | 123.3   |     |       |       |          |       |       |       |
| 486   | 6.00  | 34.272N | .51  | -        | -   | -    | 106.7   |     |       |       |          |       |       |       |
| 566   | 5.74  | 34.298  | .34  | -        | -   | -    | 101.7   |     |       |       |          |       |       |       |
| 90.28   |       |         |      |          |     |      | CCOFI CRUISE 6507                               |     |       |       |          |       |       | 90.28 |
| ALEXANDER AGASSIZ, JULY 25 1965, 1644 1616 GCT, 33 28.5N 117 47W, SOUNDING 200 FM, WIND 180 FORCE 2, WEATHER CLOUDY, SEA SLIGHT, WIRE ANGLE 09. |       |         |      |          |     |      |   |     |       |       |          |       |       |       |
| 0   | 17.10 | 33.608  | 6.74 | 0.24     | 5   | 0.00 | 349.7   | 0   | 17.35 | 33.60 | -        | 24.38 | 355.9 | 0     |
| 10  | 16.04 | 33.590  | 6.74 | 0.30     | 8   | 0.01 | 327.6   | 10  | 15.87 | 33.59 | -        | 24.71 | 324.0 | .034  |
| 30  | 11.77 | 33.529  | 4.81 | 1.16     | 10  | 0.12 | 248.1   | 20  | 12.88 | 33.53 | -        | 25.30 | 268.2 | .064  |
| 44  | 10.80 | 33.661  | 4.30 | 1.55     | 15  | 0.01 | 221.6   | 30  | 11.76 | 33.54 | -        | 25.52 | 247.1 | .089  |
| 59  | 10.46 | 33.845  | 3.10 | 1.85     | 22  | 0.01 | 202.3   | 50  | 10.92 | 33.73 | -        | 25.82 | 218.5 | .136  |
| 74  | 10.30 | 33.915  | 2.87 | 1.99     | 24  | 0.01 | 194.5   | 75  | 10.45 | 33.90 | -        | 26.04 | 198.1 | .169  |
| 89  | 10.12 | 33.954  | 2.79 | 2.04     | 24  | 0.00 | 188.7   | 100 | 10.17 | 33.99 | -        | 26.16 | 186.8 | .237  |
| 108   | 10.04 | 33.997  | 2.64 | 2.11     | 26  | 0.01 | 184.2   | 125 | 10.11 | 34.07 | -        | 26.23 | 180.0 | .284  |
| 133   | 9.84  | 34.088  | 2.28 | 2.30     | 30  | 0.02 | 174.3   | 150 | 9.65  | 34.07 | -        | 26.31 | 172.6 | .328  |
| 163   | 9.70  | 34.154  | 1.96 | 2.39     | 33  | 0.01 | 167.2   | 200 | 9.51  | 34.24 | -        | 26.46 | 157.8 | .413  |
| 198   | 9.52  | 34.218  | 1.68 | 2.78     | 34  | -    | 159.6   | 250 | 9.29  | 34.29 | -        | 26.54 | 150.7 | .492  |
| 232   | 9.30  | 34.267  | 1.45 | 2.87     | 37  | -    | 152.5   | 300 | 8.98  | 34.35 | -        | 26.63 | 141.5 | .568  |
| 267   | 9.02  | 34.294  | 1.19 | 2.52U    | 40  | -    | 146.3   | 400 | 8.09  | 34.35 | -        | 26.77 | 128.4 | .709  |
| 307   | 8.82  | 34.335  | .98  | 2.70     | 44  | -    | 140.2   |     |       |       |          |       |       |       |

A) POSSIBLE EVAPORATION, VALUE FALLS ON PROPERTY CURVE.  
B) ALTERNATE VALUE, .8.93, NOT USED IN INTERPOLATION.  
N) POSSIBLE EVAPORATION, VALUE DOES NOT FALL ON PROPERTY CURVE.









| O B S E R V E D    L E V E L S    O F    D E P T H   |                                  |  |                                      |  |                                      |  |                                      | S T A N D A R D    L E V E L S    O F    D E P T H |                                      |  |                                     |  |                                      |   |                                      |   |                                      |   |                                      |   |                                     |  |                                     |  |                                     |   |                                    |                                      |                                    |   |  |  |  |                                       |  |
|--|----------------------------------|--|--------------------------------------|--|--------------------------------------|--|--------------------------------------|--|--------------------------------------|--|-------------------------------------|--|--------------------------------------|---|--------------------------------------|---|--------------------------------------|---|--------------------------------------|---|-------------------------------------|--|-------------------------------------|--|-------------------------------------|---|------------------------------------|--------------------------------------|------------------------------------|---|--|--|--|---------------------------------------|--|
| I N P U T  |                                  |  |                                      | C O M P U T E D                        |                                      |  |                                      | I N P U T  |                                      |  |                                     | C O M P U T E D                        |                                      |   |                                      |   |                                      |   |                                      |   |                                     |  |                                     |  |                                     |   |                                    |                                      |                                    |   |  |  |  |                                       |  |
| Z  | T                                | S                                      | C X Y                                | P H O                                  | S I L                                | N I T                                  | D * T                                | Z  | T                                    | S                                      | C X Y                               | S I G * T                              | D * T                                | C C                                     |                                      |   |                                      |   |                                      |   |                                     |  |                                     |  |                                     |   |                                    |                                      |                                    |   |  |  |  |                                       |  |
| 90.160   |                                  |  |                                      |  |                                      |  |                                      | CCOFI CRUISE 6507                                  |                                      |  |                                     |  |                                      |   |                                      | 90.160                                  |                                      |   |                                      |   |                                     |  |                                     |  |                                     |   |                                    |                                      |                                    |   |  |  |  |                                       |  |
| ALEXANDER AGASSIZ, JULY 22 1965, 1706 1633 GCT, 29 05N 126 40W, SOUNDING 2100 FM, WIND 350 FORCE 3, WEATHER CLOUDY, SEA MODERATE, WIRE ANGLE 10.   |                                  |  |                                      |  |                                      |  |                                      |  |                                      |  |                                     |  |                                      |   |                                      |   |                                      |   |                                      |   |                                     |  |                                     |  |                                     |   |                                    |                                      |                                    |   |  |  |  |                                       |  |
| 0 17.86 33.575 5.61 0.31 3 0.00 369.4  | 0 17.93 33.60 - 24.24 369.2 0    | 10 17.90 33.570 5.69 0.31 3 0.00 370.7 | 10 17.93 33.61 - 24.25 368.5 .031    | 15 17.87 33.567 5.67 0.31 3 0.00 370.2 | 20 17.75 33.59 - 24.27 365.8 .074    | 99 16.12 33.953 5.79 0.27 3 0.00 302.8 | 30 17.41 33.57 - 24.34 359.4 .110    | 50 16.86 33.80 - 24.65 330.3 .179                  | 75 16.52 33.93 - 24.83 313.3 .260    | 100 16.16 34.02 - 24.98 298.8 .337     | 125 15.54 34.10 - 25.18 279.7 .410  | 150 13.56 33.92 - 25.46 252.6 .478     | 200 10.20 33.84 - 26.03 198.4 .593   | 250 9.04 34.04 - 26.38 165.4 .686       | 300 8.75 34.14 - 26.51 153.6 .768    | 400 7.97 34.23 - 26.69 135.6 .919       | 500 6.87 34.23 - 26.85 120.7 1.054   | 600 5.82 34.23 - 26.99 107.7 1.176      |                                      |   |                                     |  |                                     |  |                                     |   |                                    |                                      |                                    |   |  |  |  |                                       |  |
| 90.180   |                                  |  |                                      |  |                                      |  |                                      | CCOFI CRUISE 6507                                  |                                      |  |                                     |  |                                      |   |                                      | 90.180                                  |                                      |   |                                      |   |                                     |  |                                     |  |                                     |   |                                    |                                      |                                    |   |  |  |  |                                       |  |
| ALEXANDER AGASSIZ, JULY 22 1965, 0849 0820 GCT, 28 24.5N 127 58.5W, SOUNDING 2460 FM, WIND 060 FORCE 4, WEATHER RAIN, SEA SLIGHT, WIRE ANGLE 08.   |                                  |  |                                      |  |                                      |  |                                      |  |                                      |  |                                     |  |                                      |   |                                      |   |                                      |   |                                      |   |                                     |  |                                     |  |                                     |   |                                    |                                      |                                    |   |  |  |  |                                       |  |
| 0 19.06 34.158 5.52 0.20 3 0.00 355.4  | 0 19.14 34.18 - 24.38 355.8 0    | 10 19.07 34.153 5.57 0.16 2 0.00 356.0 | 10 19.13 34.20 - 24.40 354.1 .036    | 50 18.80 34.232 5.60 0.16 2 0.00 343.8 | 20 19.02 34.27 - 24.48 346.3 .071    | 99 18.04 34.490 5.68 0.11 2 0.00 307.0 | 30 18.97 34.27 - 24.49 345.1 .105    | 50 18.71 34.26 - 24.55 339.6 .174                  | 75 18.10 34.29 - 24.72 323.0 .257    | 100 18.01 34.51 - 24.91 304.9 .337     | 125 18.00 34.67 - 25.04 293.0 .412  | 150 17.36 34.62 - 25.16 281.8 .485     | 200 12.57 33.90 - 25.65 235.2 .617   | 250 9.96 33.95 - 26.16 186.4 .725       | 300 8.70 34.02 - 26.42 161.8 .814    | 400 7.12 34.06 - 26.68 136.7 .970       | 500 6.06 34.16 - 26.90 115.8 1.102   | 600 5.45 34.26 - 27.06 101.2 1.218      |                                      |   |                                     |  |                                     |  |                                     |   |                                    |                                      |                                    |   |  |  |  |                                       |  |
| 90.200   |                                  |  |                                      |  |                                      |  |                                      | CCOFI CRUISE 6507                                  |                                      |  |                                     |  |                                      |   |                                      | 90.200                                  |                                      |   |                                      |   |                                     |  |                                     |  |                                     |   |                                    |                                      |                                    |   |  |  |  |                                       |  |
| ALEXANDER AGASSIZ, JULY 21 1965, 2347 2250 GCT, 27 45N 129 18.5W, SOUNDING 2100 FM, WIND 060 FORCE 2, WEATHER OVERCAST, SEA SLIGHT, WIRE ANGLE 07. |                                  |  |                                      |  |                                      |  |                                      |  |                                      |  |                                     |  |                                      |   |                                      |   |                                      |   |                                      |   |                                     |  |                                     |  |                                     |   |                                    |                                      |                                    |   |  |  |  |                                       |  |
| 0 19.80 34.367 5.45 0.29 3 - 358.4   | 0 19.87 34.39 - 24.35 358.5 0    | 10 19.57 34.356 5.49 0.24 3 0.00 353.5 | 10 19.57 34.39 - 24.43 351.1 .035    | 30 19.22 34.325 5.53 0.24 2 0.00 347.2 | 20 19.52 34.38 - 24.43 350.6 .071    | 40 19.11 34.463 5.62 0.21 2 0.00 334.5 | 30 19.28 34.51 - 24.59 335.2 .105    | 56 18.82 34.470 5.64 0.25 2 0.00 327.0             | 50 18.75 34.48 - 24.71 324.6 .171    | 70 18.06 34.419 5.76 0.22 2 0.00 312.7 | 75 18.19 34.59 - 24.93 303.3 .250   | 95 18.06 34.577 5.67 0.20 2 0.00 301.2 | 100 17.94 34.63 - 25.02 295.4 .326   | 115 18.12 34.691 5.44 0.19 3 0.00 294.3 | 125 17.77 34.68 - 25.10 286.9 .399   | 135 17.79 34.691 5.43 0.23 3 0.07 286.6 | 150 16.84 34.55 - 25.23 275.2 .471   | 155 16.81 34.514 5.34 0.26 3 0.19 277.1 | 200 13.04 34.10 - 25.71 229.4 .599   | 184 14.87 34.286 5.15 0.49 5 0.01 252.0 | 250 10.20 33.96 - 26.13 189.6 .707  | 219 11.26 33.964 4.96 0.96 11 0.00 207.1 | 300 8.93 34.02 - 26.38 165.2 .798   | 249 10.24 33.939 4.81 1.18 14 0.00 191.8 | 400 7.00 34.04 - 26.68 136.6 .955   | 297 8.92 34.004 4.39 1.56 24 0.00 166.3 | 500 6.07 34.12 - 26.87 119.0 1.089 | 350 7.92 34.022 3.59 2.00 34 - 150.4 | 600 5.56 34.24 - 27.03 104.0 1.207 | 433 6.44 34.053 2.09 2.65 53 0.00 128.5 |  | 517 5.78 34.169 .97 3.11 69 0.00 111.8 |  | 601 5.30 34.257 .55 3.30 76 0.00 99.7 |  |
| 93.28  |                                  |  |                                      |  |                                      |  |                                      | CCOFI CRUISE 6507                                  |                                      |  |                                     |  |                                      |   |                                      | 93.28                                   |                                      |   |                                      |   |                                     |  |                                     |  |                                     |   |                                    |                                      |                                    |   |  |  |  |                                       |  |
| BLACK DOUGLAS, JUNE 20 1965, 0625 GMT, 32 54.5N 117 23W, SOUNDING 250 FM, WIND 280 FORCE 3, WEATHER CLOUDY, SEA SLIGHT, WIRE ANGLE 02.             |                                  |  |                                      |  |                                      |  |                                      |  |                                      |  |                                     |  |                                      |   |                                      |   |                                      |   |                                      |   |                                     |  |                                     |  |                                     |   |                                    |                                      |                                    |   |  |  |  |                                       |  |
| 0 16.88 33.644 6.17 - - 342.1  | 0 16.88 33.64 6.17 24.52 342.4 0 | 10 13.04 33.563 5.76 - - 268.8         | 10 13.04 33.56 5.76 25.29 269.0 .031 | 29 11.58 33.576 4.48 - - 241.2         | 20 12.10 33.56 5.03 25.47 251.7 .057 | 44 10.62 33.661 3.89 - - 218.6         | 30 11.30 33.58 4.30 25.64 236.1 .081 | 53 10.30 33.696 3.75 - - 210.7                     | 50 10.30 33.70 3.76 25.91 210.4 .126 | 68 9.87 33.761 3.58 - - 199.0          | 75 9.74 33.82 3.42 26.10 192.5 .177 | 83 9.54 33.890 3.14 - - 184.2          | 100 9.90 34.08 2.26 26.27 175.8 .223 | 97 9.76 34.026 2.37 - - 177.6           | 125 9.81 34.17 1.84 26.36 167.7 .267 | 122 9.81 34.154 1.89 - - 168.9          | 150 9.84 34.24 1.47 26.41 163.0 .309 | 141 9.82 34.222 1.54 - - 164.0          | 200 9.36 34.25 1.39 26.49 154.7 .390 | 170 9.86 34.276 1.17 - - 160.7          | 250 9.39 34.34 .95 26.56 148.5 .468 | 199 9.36 34.246 1.39 - - 155.0           | 300 8.96 34.35 .81 26.64 141.2 .543 | 233 9.44 34.326 1.03 - - 150.3           | 400 7.55 34.28 .73 26.80 126.1 .683 | 286 9.17 34.379 .78 - - 142.2           |                                    | 340 8.18 34.269 .99 - - 135.7        |                                    | 398 7.57 34.279 .74 - - 126.4           |  |  |  |                                       |  |



| O B S E R V E D   L E V E L S   O F   D E P T H   |   |   |          |     |     | S T A N D A R D   L E V E L S   C F   D E P T H |   |  |  |   |     |       |       |    |
|---|---|---|----------|-----|-----|---|---|--|--|---|-----|-------|-------|----|
| INPUT   |   |   | COMPUTED |     |     | INPUT   |   |  | COMPUTED   |   |     |       |       |    |
| Z   | T | S | OXY      | PHO | SIL | NIT   | D*T   | Z  | T  | S | OXY | SIG*T | D*T   | DD |
| 93.60   |   |   |          |     |     |   | CCOFI CRUISE 6507   |  |  |   |     |       | 93.60 |    |
| BLACK DOUGLAS, JUNE 21 1965, 0228 GMT, 31 50N 119 34W, SOUNDING 1200 FM, WIND 300 FORCE 4, WEATHER OVERCAST, SEA VERY ROUGH, WIRE ANGLE 15. |   |   |          |     |     |   |   |  |  |   |     |       |       |    |
| 0 15.12 33.396 5.94 - - - 322.3 0 15.12 33.40 5.94 24.73 322.0 0  |   |   |          |     |     |   |   | 9  | 14.56 33.340 6.01 - - - 314.9 10 14.48 33.34 6.01 24.83 313.3 .032 |   |     |       |       |    |
| 28 13.86 33.396 5.96 - - - 296.9 20 14.23 33.36 6.00 24.89 306.8 .063   |   |   |          |     |     |   |   | 37 13.03 33.420 5.76 - - - 279.1 30 13.58 33.40 5.90 25.06 291.1 .093  |  |   |     |       |       |    |
| 51 12.40 33.473 5.33 - - - 263.5 50 12.45 33.47 5.37 25.34 264.7 .149   |   |   |          |     |     |   |   | 65 11.90 33.486 5.04 - - - 253.5 75 11.40 33.52 4.77 25.57 242.2 .212  |  |   |     |       |       |    |
| 88 10.96 33.569 4.47 - - - 231.1 100 10.40 33.62 4.09 25.83 218.0 .270  |   |   |          |     |     |   |   | 108 10.31 33.659 3.98 - - - 213.6 125 9.62 33.76 3.69 26.07 195.1 .322 |  |   |     |       |       |    |
| 125 9.62 33.764 3.69 - - - 194.8 150 9.15 33.88 3.29 26.24 178.9 .370   |   |   |          |     |     |   |   | 145 9.25 33.853 3.37 - - - 182.5 200 8.42 34.00 2.95 26.45 159.2 .456  |  |   |     |       |       |    |
| 174 8.70 33.952 3.08 - - - 166.8 250 7.79 34.07 2.30 26.60 145.0 .534   |   |   |          |     |     |   |   | 206 8.34 34.010 2.89 - - - 157.3 300 7.14 34.09 1.75 26.70 134.7 .606  |  |   |     |       |       |    |
| 235 7.97 34.053 2.52 - - - 148.8 400 6.22 34.18 .86 26.90 116.3 .737  |   |   |          |     |     |   |   | 281 7.42 34.080 1.96 - - - 139.2 500 5.81 34.30 .45 27.05 102.4 .852   |  |   |     |       |       |    |
| 333 6.70 34.116 1.40 - - - 127.1 - - - - - - - -  |   |   |          |     |     |   |   | 411 6.16 34.193 .77 - - - 114.6 - - - - - - - -                        |  |   |     |       |       |    |
| 496 5.82 34.291 .46 - - - 103.2 - - - - - - - -   |   |   |          |     |     |   |   | 579 5.50 34.327 .32 - - - 96.8 - - - - - - - -                         |  |   |     |       |       |    |
| 93.70   |   |   |          |     |     |   | CCOFI CRUISE 6507   |  |  |   |     |       | 93.70 |    |
| BLACK DOUGLAS, JUNE 21 1965, 0833 GMT, 31 28N 120 13W, SOUNDING 2000+ FM, WIND 320 FORCE 4, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 10.  |   |   |          |     |     |   |   |  |  |   |     |       |       |    |
| 0 14.95 33.425 5.89 - - - 316.7 0 14.95 33.42 5.89 24.79 317.0 0  |   |   |          |     |     |   | 10 14.63 33.443 6.01 - - - 308.8 10 14.63 33.44 6.01 24.87 309.0 .031   |  |  |   |     |       |       |    |
| 29 13.50 33.562 6.06 - - - 277.7 20 13.75 33.55 6.05 25.14 283.4 .061   |   |   |          |     |     |   | 38 13.46 33.562 5.95 - - - 276.9 30 13.49 33.56 6.05 25.20 277.6 .089   |  |  |   |     |       |       |    |
| 52 12.38 33.486 5.56 - - - 262.2 50 12.55 33.49 5.59 25.33 265.0 .144   |   |   |          |     |     |   | 67 11.78 33.539 5.40 - - - 247.5 75 11.52 33.55 5.13 25.57 242.1 .207   |  |  |   |     |       |       |    |
| 90 10.98 33.596 4.44 - - - 229.4 100 10.40 33.64 4.08 25.84 216.5 .265  |   |   |          |     |     |   | 110 10.17 33.658 3.97 - - - 211.4 125 9.74 33.73 3.72 26.03 199.2 .318  |  |  |   |     |       |       |    |
| 129 9.62 33.753 3.66 - - - 195.6 150 9.22 33.86 3.43 26.21 181.5 .366   |   |   |          |     |     |   | 149 9.23 33.856 3.45 - - - 181.9 200 8.43 34.00 2.92 26.45 159.3 .453   |  |  |   |     |       |       |    |
| 179 8.72 33.965 2.95 - - - 166.2 250 7.63 34.05 2.32 26.60 144.3 .531   |   |   |          |     |     |   | 214 8.21 34.019 2.91 - - - 154.7 300 7.05 34.08 1.80 26.71 134.3 .602   |  |  |   |     |       |       |    |
| 243 7.72 34.048 2.41 - - - 145.7 400 6.23 34.16 .92 26.88 117.9 .733  |   |   |          |     |     |   | 292 7.13 34.077 1.87 - - - 135.6 500 5.81 34.28 .49 27.03 103.9 .850    |  |  |   |     |       |       |    |
| 347 6.61 34.111 1.36 - - - 126.3 600 5.32 34.34 .29 27.14 93.7 .956   |   |   |          |     |     |   | 428 6.10 34.193 .73 - - - 113.9 - - - - - - - -                         |  |  |   |     |       |       |    |
| 513 5.76 34.298 .45 - - - 101.9 - - - - - - - -   |   |   |          |     |     |   | 597 5.34 34.340 .29 - - - 94.0 - - - - - - - -                          |  |  |   |     |       |       |    |
| 93.80   |   |   |          |     |     |   | CCOFI CRUISE 6507   |  |  |   |     |       | 93.80 |    |
| BLACK DOUGLAS, JUNE 21 1965, 1345 GMT, 31 05.5N 120 50.5W, SOUNDING 2050 FM, WIND 320 FORCE 2, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 07.  |   |   |          |     |     |   |   |  |  |   |     |       |       |    |
| 0 15.50 33.298 5.78 - - - 337.4 0 15.50 33.30 5.78 24.57 337.3 0  |   |   |          |     |     |   | 10 15.50 33.298 5.80 - - - 337.4 10 15.50 33.30 5.80 24.57 337.3 .034   |  |  |   |     |       |       |    |
| 29 14.85 33.218 5.88 - - - 329.8 20 14.91 33.22 5.87 24.64 330.9 .067   |   |   |          |     |     |   | 53 14.46 33.241 5.93 - - - 320.2 30 14.85 33.22 5.88 24.65 329.6 .100   |  |  |   |     |       |       |    |
| 64 14.02 33.269 5.96 - - - 309.3 50 14.70 33.22 5.90 24.69 326.6 .166   |   |   |          |     |     |   | 73 13.30 33.248 5.84 - - - 296.9 75 12.95 33.23 5.78 25.05 291.6 .244   |  |  |   |     |       |       |    |
| 87 12.08 33.244 5.59 - - - 274.6 100 11.37 33.31 5.19 25.41 257.2 .313  |   |   |          |     |     |   | 101 11.36 33.313 5.18 - - - 256.8 125 10.43 33.50 4.53 25.73 227.3 .374 |  |  |   |     |       |       |    |
| 126 10.40 33.502 4.51 - - - 226.7 150 9.67 33.78 3.90 26.08 194.4 .427  |   |   |          |     |     |   | 146 9.78 33.753 4.01 - - - 198.1 200 8.69 34.00 2.87 26.40 163.1 .519   |  |  |   |     |       |       |    |
| 169 9.22 33.860 3.42 - - - 181.5 250 8.12 34.09 2.17 26.56 148.2 .598   |   |   |          |     |     |   | 197 8.74 33.984 2.91 - - - 165.0 300 7.61 34.15 1.51 26.68 136.6 .672   |  |  |   |     |       |       |    |
| 226 8.39 34.042 2.56 - - - 155.6 400 6.73 34.20 .86 26.85 121.2 .806  |   |   |          |     |     |   | 264 7.98 34.102 1.95 - - - 145.3 500 6.00 34.28 .43 27.01 106.1 .926    |  |  |   |     |       |       |    |
| 321 7.42 34.162 1.34 - - - 133.1 - - - - - - - -  |   |   |          |     |     |   | 392 6.81 34.197 .90 - - - 122.4 - - - - - - - -                         |  |  |   |     |       |       |    |
| 465 6.17 34.248 .53 - - - 110.6 - - - - - - - -   |   |   |          |     |     |   | 543 5.86 34.315 .36 - - - 101.9 - - - - - - - -                         |  |  |   |     |       |       |    |

| O B S E R V E D    L E V E L S    O F    D E P T H  |       |        |      |          |     |      | S T A N D A R D    L E V E L S    O F    D E P T H |     |       |       |          |       |       |       |
|---|-------|--------|------|----------|-----|------|--|-----|-------|-------|----------|-------|-------|-------|
| INPUT   |       |        |      | COMPUTED |     |      | INPUT  |     |       |       | COMPUTED |       |       |       |
| Z   | T     | S      | OXY  | PHO      | SIL | NIT  | D*T  | Z   | T     | S     | OXY      | SIG*T | D*T   | DD    |
| 93.90   |       |        |      |          |     |      | CCOFI CRUISE 6507                                  |     |       |       |          |       | 93.90 |       |
| BLACK DOUGLAS, JUNE 21 1965, 1907 GMT, 30 44N 121 28.5W, SOUNDING 2000+ FM, WIND 300 FORCE 3, WEATHER OVERCAST,<br>SEA MODERATE, WIRE ANGLE 04.     |       |        |      |          |     |      |  |     |       |       |          |       |       |       |
| 0   | 16.08 | 33.438 | 5.67 | -        | -   | -    | 339.6  | 0   | 16.08 | 33.44 | 5.67     | 24.55 | 339.4 | 0     |
| 10  | 16.06 | 33.432 | 5.71 | -        | -   | -    | 339.6  | 10  | 16.06 | 33.43 | 5.71     | 24.55 | 339.7 | .034  |
| 29  | 15.93 | 33.428 | 5.74 | -        | -   | -    | 337.1  | 20  | 16.00 | 33.43 | 5.72     | 24.56 | 338.4 | .068  |
| 58  | 14.29 | 33.357 | 6.04 | -        | -   | -    | 308.3  | 30  | 15.92 | 33.43 | 5.75     | 24.58 | 336.7 | .102  |
| 68  | 13.68 | 33.404 | 5.85 | -        | -   | -    | 292.8  | 50  | 14.90 | 33.37 | 5.194    | 24.76 | 319.7 | .168  |
| 83  | 13.55 | 33.663 | 5.43 | -        | -   | -    | 271.2  | 75  | 13.40 | 33.45 | 5.70     | 25.13 | 284.0 | .243  |
| 98  | 12.00 | 33.475 | 5.07 | -        | -   | -    | 256.1  | 100 | 11.97 | 33.48 | 5.02     | 25.44 | 255.2 | .311  |
| 112   | 11.24 | 33.573 | 4.33 | -        | -   | -    | 235.6  | 125 | 10.47 | 33.67 | 4.15     | 25.85 | 215.4 | .371  |
| 136   | 10.08 | 33.718 | 4.05 | -        | -   | -    | 205.5  | 150 | 9.71  | 33.79 | 3.50     | 26.08 | 194.3 | .423  |
| 155   | 9.57  | 33.819 | 3.36 | -        | -   | -    | 189.9  | 200 | 8.64  | 33.99 | 3.22     | 26.40 | 163.1 | .514  |
| 184   | 8.96  | 33.941 | 3.44 | -        | -   | -    | 171.5  | 250 | 7.80  | 34.04 | 2.57     | 26.57 | 147.4 | .593  |
| 213   | 8.40  | 34.020 | 3.01 | -        | -   | -    | 157.4  | 300 | 7.25  | 34.08 | 1.93     | 26.68 | 136.9 | .667  |
| 242   | 7.90  | 34.033 | 2.68 | -        | -   | -    | 149.3  | 400 | 6.33  | 34.17 | .92      | 26.88 | 118.4 | .799  |
| 290   | 7.36  | 34.068 | 2.04 | -        | -   | -    | 139.3  | 500 | 5.73  | 34.26 | .51      | 27.02 | 104.4 | .917  |
| 344   | 6.77  | 34.110 | 1.51 | -        | -   | -    | 128.4  | 600 | 5.34  | 34.33 | -        | 27.13 | 94.7  | 1.023 |
| 425   | 6.17  | 34.193 | .74  | -        | -   | -    | 114.7  |     |       |       |          |       |       |       |
| 506   | 5.69  | 34.261 | .50  | -        | -   | -    | 103.9  |     |       |       |          |       |       |       |
| 589   | 5.36  | 34.322 | .32  | -        | -   | -    | 95.5   |     |       |       |          |       |       |       |
| 94.29   |       |        |      |          |     |      | CCOFI CRUISE 6507                                  |     |       |       |          |       | 94.29 |       |
| ALEXANDER AGASSIZ, JULY 7 1965, 2149 2206 GCT, 32 43N 117 22W, SOUNDING 125 FM, WIND 270 FORCE 2, WEATHER CLOUDY,<br>SEA MODERATE, WIRE ANGLE 18.A) |       |        |      |          |     |      |  |     |       |       |          |       |       |       |
| 0   | 18.30 | 33.654 | 5.97 | 0.27     | 3   | 0.05 | 373.9  | 0   | 18.45 | 33.69 | -        | 24.18 | 374.8 | 0     |
| 9   | 14.33 | 33.542 | 6.12 | 0.42     | 5   | 0.10 | 295.5  | 10  | 14.20 | 33.51 | -        | 25.01 | 295.2 | .034  |
| 19  | 12.62 | 33.494 | 5.36 | 0.89     | 7   | 0.56 | 266.0  | 20  | 12.62 | 33.50 | -        | 25.33 | 265.6 | .062  |
| 28  | 12.20 | 33.516 | 5.50 | 1.04     | 8   | 0.62 | 256.7  | 30  | 12.05 | 33.56 | -        | 25.48 | 250.8 | .087  |
| 38  | 11.60 | 33.577 | 4.87 | 1.24     | 11  | 0.06 | 241.5  | 50  | 10.85 | 33.69 | -        | 25.80 | 220.3 | .135  |
| 47  | 11.08 | 33.666 | 4.10 | 1.53     | 17  | 0.27 | 226.0  | 75  | 10.31 | 33.87 | -        | 26.04 | 198.0 | .187  |
| 56  | 10.36 | 33.685 | 4.03 | 1.58     | 18  | 0.05 | 212.5  | 100 | 10.11 | 33.95 | -        | 26.13 | 188.8 | .236  |
| 65  | 10.22 | 33.761 | 3.59 | 1.83     | 22  | 0.10 | 204.6  |     |       |       |          |       |       |       |
| 74  | 10.24 | 33.850 | 3.14 | 2.01     | 26  | 0.02 | 198.3  |     |       |       |          |       |       |       |
| 83  | 10.12 | -      | 2.98 | -        | -   | -    | -  |     |       |       |          |       |       |       |
| 92  | 10.05 | 33.879 | 3.25 | 2.01     | 26  | 0.07 | 193.1  |     |       |       |          |       |       |       |
| 102   | 10.00 | 33.906 | 2.94 | 2.00     | 27  | 0.07 | 190.3  |     |       |       |          |       |       |       |
| 111   | 9.92  | 33.951 | 2.80 | 2.12     | 27  | 0.04 | 185.7  |     |       |       |          |       |       |       |
| 94.30   |       |        |      |          |     |      | CCOFI CRUISE 6507                                  |     |       |       |          |       | 94.30 |       |
| BLACK DOUGLAS JUNE 15 1965, 2340 GMT, 32 44.5N 117 24W, SOUNDING 200 FM, WIND 270 FORCE 4, WEATHER CLOUDY, SEA ROUGH,<br>WIRE ANGLE 08.A)           |       |        |      |          |     |      |  |     |       |       |          |       |       |       |
| 0   | 16.84 | 33.650 | 5.98 | -        | -   | -    | 340.8  |     |       |       |          |       |       |       |
| 10  | 15.18 | 33.587 | 6.55 | -        | -   | -    | 309.6  |     |       |       |          |       |       |       |
| 19  | 12.01 | 33.556 | 4.57 | -        | -   | -    | 250.4  |     |       |       |          |       |       |       |
| 30  | 11.24 | 33.573 | 4.45 | -        | -   | -    | 235.6  |     |       |       |          |       |       |       |
| 38  | 10.82 | 33.612 | 4.23 | -        | -   | -    | 225.5  |     |       |       |          |       |       |       |
| 48  | 10.43 | 33.682 | 3.88 | -        | -   | -    | 213.9  |     |       |       |          |       |       |       |
| 57  | 9.97  | 33.809 | 3.35 | -        | -   | -    | 197.0  |     |       |       |          |       |       |       |
| 67  | 9.82  | 33.886 | 3.03 | -        | -   | -    | 188.9  |     |       |       |          |       |       |       |
| 77  | 9.78  | 33.935 | 2.81 | -        | -   | -    | 184.7  |     |       |       |          |       |       |       |
| 86  | 9.74  | 33.957 | 2.77 | -        | -   | -    | 182.4  |     |       |       |          |       |       |       |
| 96  | 9.55  | 33.955 | 2.87 | -        | -   | -    | 179.5  |     |       |       |          |       |       |       |
| 106   | 9.52  | 33.961 | 2.86 | -        | -   | -    | 178.6  |     |       |       |          |       |       |       |
| 115   | 9.60  | 34.016 | 2.58 | -        | -   | -    | 175.8  |     |       |       |          |       |       |       |
| 124   | 9.57  | 34.036 | 2.43 | -        | -   | -    | 173.9  |     |       |       |          |       |       |       |
| 134   | 9.49  | 34.058 | 2.32 | -        | -   | -    | 171.0  |     |       |       |          |       |       |       |
| 145   | 9.34  | 34.112 | 2.17 | -        | -   | -    | 164.6  |     |       |       |          |       |       |       |
| 154   | 9.40  | 34.156 | 1.97 | -        | -   | -    | 162.3  |     |       |       |          |       |       |       |
| 164   | 9.39  | 34.178 | 1.86 | -        | -   | -    | 160.5  |     |       |       |          |       |       |       |

A) SHAKEDOWN STATION.

| O B S E R V E D   L E V E L S   O F   D E P T H  |        |      |     |     |     |          | S T A N D A R D   L E V E L S   O F   D E P T H |          |       |      |       |       |       |          |
|--|--------|------|-----|-----|-----|----------|---|----------|-------|------|-------|-------|-------|----------|
| INPUT  |        |      |     |     |     | COMPUTED |   | INPUT    |       |      |       |       |       | COMPUTED |
| Z  | T      | S    | OXY | PHO | SIL | NIT      | D*T   | Z        | T     | S    | OXY   | SIG*T | D*T   | DD       |
| 97.35  |        |      |     |     |     |          | CCOFI CRUISE 6507                               |          |       |      |       |       | 97.35 |          |
| BLACK DOUGLAS, JUNE 23 1965, 0950 GMT, 32 05.5N 117 28.5W, SOUNDING 700 FM, WIND 270 FORCE 2, WEATHER CLOUDY, SEA SLIGHT, WIRE ANGLE 02. |        |      |     |     |     |          |   |          |       |      |       |       |       |          |
| 0 15.00  | 33.475 | 5.99 | -   | -   | -   | -        | 314.0   | 0 15.00  | 33.48 | 5.99 | 24.82 | 313.7 | 0     |          |
| 10 15.01   | 33.470 | 5.99 | -   | -   | -   | -        | 314.6   | 10 15.01 | 33.47 | 5.99 | 24.81 | 314.6 | .031  |          |
| 29 13.26   | 33.442 | 5.83 | -   | -   | -   | -        | 281.9   | 20 13.93 | 33.45 | 5.92 | 25.02 | 294.3 | .062  |          |
| 39 12.63   | 33.460 | 5.40 | -   | -   | -   | -        | 268.7   | 30 13.18 | 33.44 | 5.79 | 25.17 | 280.5 | .091  |          |
| 49 11.84   | 33.431 | 5.13 | -   | -   | -   | -        | 256.5   | 50 11.81 | 33.43 | 5.11 | 25.43 | 256.1 | .145  |          |
| 64 11.42   | 33.483 | 4.81 | -   | -   | -   | -        | 245.3   | 75 11.00 | 33.58 | 4.38 | 25.69 | 230.9 | .206  |          |
| 79 10.92   | 33.589 | 4.34 | -   | -   | -   | -        | 228.9   | 100 9.87 | 33.75 | 3.70 | 26.02 | 199.8 | .260  |          |
| 98 9.92  | 33.736 | 3.73 | -   | -   | -   | -        | 201.6   | 125 9.34 | 33.87 | 3.32 | 26.20 | 182.6 | .308  |          |
| 122 9.39   | 33.858 | 3.39 | -   | -   | -   | -        | 184.2   | 150 8.88 | 33.98 | 2.78 | 26.36 | 167.4 | .353  |          |
| 142 9.02   | 33.942 | 2.98 | -   | -   | -   | -        | 172.4   | 200 8.16 | 34.07 | 2.29 | 26.54 | 150.2 | .434  |          |
| 170 8.58   | 34.042 | 2.46 | -   | -   | -   | -        | 158.4   | 250 7.90 | 34.11 | 1.83 | 26.61 | 143.6 | .509  |          |
| 199 8.17   | 34.072 | 2.30 | -   | -   | -   | -        | 150.2   | 300 7.61 | 34.18 | 1.25 | 26.71 | 134.3 | .581  |          |
| 228 8.00   | 34.081 | 2.12 | -   | -   | -   | -        | 147.1   | 400 6.87 | 34.29 | .52  | 26.90 | 116.3 | .712  |          |
| 266 7.81   | 34.135 | 1.63 | -   | -   | -   | -        | 140.5   | 500 6.33 | 34.34 | .31  | 27.01 | 105.7 | .829  |          |
| 323 7.44   | 34.205 | 1.06 | -   | -   | -   | -        | 130.2   |          |       |      |       |       |       |          |
| 396 6.88   | 34.280 | .56  | -   | -   | -   | -        | 117.1   |          |       |      |       |       |       |          |
| 469 6.54   | 34.321 | .38  | -   | -   | -   | -        | 109.7   |          |       |      |       |       |       |          |
| 546 5.96   | 34.352 | .29  | -   | -   | -   | -        | 100.3   |          |       |      |       |       |       |          |

|  |        |                   |       |
|--|--------|-------------------|-------|
| 97.40  |        | CCOFI CRUISE 6507 | 97.40 |
| BLACK DOUGLAS, JUNE 23 1965, 0605 GMT, 31 57N 117 51W, SOUNDING 600 FM, WIND 320 FORCE 2, WEATHER CLOUDY, SEA SLIGHT, WIRE ANGLE 07. |        |                   |       |
| 0 14.40  | 33.482 | 5.98              | -     |
| 10 14.32   | 33.483 | 6.02              | -     |
| 29 14.10   | 33.506 | 6.01              | -     |
| 39 13.78   | 33.589 | 5.93              | -     |
| 49 12.64   | 33.550 | 5.46              | -     |
| 63 11.68   | 33.564 | 5.08              | -     |
| 78 10.99   | 33.588 | 4.58              | -     |
| 97 10.06   | 33.669 | 4.02              | -     |
| 120 9.54   | 33.840 | 3.33              | -     |
| 141 9.26   | 33.934 | 2.94              | -     |
| 169 8.92   | 33.984 | 2.84              | -     |
| 198 8.27   | 34.033 | 2.60              | -     |
| 227 8.00   | 34.073 | 2.21              | -     |
| 265 7.64   | 34.157 | 1.47              | -     |
| 321 6.92   | 34.161 | 1.19              | -     |
| 393 6.63   | 34.248 | .65               | -     |
| 465 6.17   | 34.282 | .44               | -     |
| 542 5.82   | 34.338 | .31               | -     |
|  |        | 99.7              |       |

|   |        |                   |       |
|---|--------|-------------------|-------|
| 97.50   |        | CCOFI CRUISE 6507 | 97.50 |
| BLACK DOUGLAS, JUNE 22 1965, 2355 GMT, 31 35N 118 31.5W, SOUNDING 1300 FM, WIND 320 FORCE 2, WEATHER CLOUDY, SEA SLIGHT, WIRE ANGLE 05. |        |                   |       |
| 0 16.12   | 33.391 | 5.81              | -     |
| 10 15.34  | 33.391 | 5.89              | -     |
| 28 15.18  | 33.423 | 5.91              | -     |
| 57 14.43  | 33.513 | 5.96              | -     |
| 67 14.12  | 33.517 | 5.91              | -     |
| 82 13.12  | 33.460 | 5.63              | -     |
| 96 12.62  | 33.561 | 5.15              | -     |
| 110 11.64   | 33.609 | 4.38              | -     |
| 134 10.36   | 33.686 | 3.95              | -     |
| 154 9.83  | 33.783 | 3.46              | -     |
| 182 9.14  | 33.929 | 2.98              | -     |
| 212 8.52  | 34.009 | 2.60              | -     |
| 241 8.10  | 34.036 | 2.35              | -     |
| 288 7.54  | 34.092 | 1.89              | -     |
| 340 6.98  | 34.130 | 1.36              | -     |
| 422 6.34  | 34.214 | .66               | -     |
| 504 5.98  | 34.312 | .35               | -     |
| 587 5.56  | 34.343 | .26               | -     |
|   |        | 96.2              |       |

| 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   |  |   |   |
| 97.60   |   |   |   |   |   |  | CCOFI CRUISE 6507   |  |  |   |   |   | 97.60  |  |  |   |   |
| BLACK DOUGLAS, JUNE 22 1965, 1802 GMT, 31 20N 119 11W, SOUNDING 2000 FM, WIND CALM, WEATHER OVERCAST, SEA SMOOTH, WIRE ANGLE 03.            |   |   |   |   |   |  |   |  |  |   |   |   |  |  |  |   |   |
| 0 16.16 33.517 5.60 - - - 335.5 0 16.16 33.52 5.69 24.59 335.3 0  | 10 15.94 33.304 5.71 - - - 331.7 10 15.94 33.50 5.71 24.63 332.0 .033 | 29 16.08 33.580 5.73 - - - 329.2 20 16.07 33.57 5.72 24.65 329.7 .067 | 53 15.42 33.527 5.89 - - - 319.0 30 16.08 33.58 5.74 24.66 329.2 .100 | 63 14.52 33.527 5.81 - - - 300.4 50 15.80 33.56 5.82 24.71 324.6 .165 | 72 13.90 33.517 5.67 - - - 288.8 75 13.50 33.52 5.49 25.17 280.8 .241 | 86 12.30 33.542 4.85 - - - 256.6 100 11.97 33.56 4.71 25.50 249.3 .308 | 101 11.92 33.569 4.69 - - - 247.8 125 10.84 33.66 4.10 25.78 222.3 .368 | 125 10.84 33.659 4.10 - - - 222.4 150 9.78 33.78 3.58 26.06 196.1 .421 | 145 9.88 33.758 3.66 - - - 199.3 200 8.90 34.01 2.73 26.38 165.5 .513  | 168 9.45 33.870 3.22 - - - 184.3 250 8.20 34.08 2.15 26.54 150.0 .594 | 198 8.94 34.008 2.75 - - - 166.3 300 7.66 34.12 1.76 26.65 139.5 .668 | 227 8.50 34.041 2.49 - - - 157.3 400 6.74 34.19 .87 26.84 122.1 .805  | 266 8.00 34.098 1.98 - - - 145.9 500 5.99 34.27 .45 27.00 106.8 .925 | 324 7.44 34.127 1.60 - - - 136.0 - - - - - - | 396 6.78 34.182 .91 - - - 123.2 - - - - - -  | 468 6.17 34.243 .58 - - - 111.0 - - - - - - | 547 5.82 34.315 .29 - - - 101.4 - - - - - - |
| 97.70   |   |   |   |   |   |  | CCOFI CRUISE 6507   |  |  |   |   |   | 97.70  |  |  |   |   |
| BLACK DOUGLAS, JUNE 22 1965, 1145 GMT, 30 58N 119 51.5W, SOUNDING 1900 FM, WIND 320 FORCE 2, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 00. |   |   |   |   |   |  |   |  |  |   |   |   |  |  |  |   |   |
| 0 16.20 33.557 5.65 - - - 333.5 0 16.20 33.56 5.65 24.62 333.3 0  | 10 16.20 33.559 5.69 - - - 333.3 10 16.20 33.56 5.69 24.62 333.3 .033 | 29 16.19 33.558 5.69 - - - 333.2 20 16.20 33.56 5.69 24.62 333.3 .067 | 53 15.97 33.542 5.74 - - - 329.6 30 16.19 33.56 5.69 24.62 333.0 .100 | 63 14.28 33.344 - - - 309.0 50 16.10 33.55 5.71 24.63 331.8 .167      | 73 13.42 33.301 6.04 - - - 295.3 75 13.20 33.34 5.95 25.09 288.2 .245 | 87 12.80 33.469 5.42 - - - 271.2 100 12.18 33.51 4.93 25.42 256.8 .313 | 102 12.06 33.525 4.84 - - - 253.5 125 10.84 33.72 3.84 25.83 217.9 .373 | 125 10.84 33.715 3.84 - - - 218.3 150 9.61 33.85 3.43 26.14 188.3 .425 | 146 9.70 33.839 3.51 - - - 190.5 200 8.74 34.02 2.72 26.41 162.4 .514  | 169 9.24 33.917 3.09 - - - 177.6 250 8.13 34.09 1.92 26.56 148.3 .594 | 199 8.76 34.013 2.75 - - - 163.2 300 7.47 34.15 1.52 26.70 134.7 .667 | 228 8.38 34.073 2.23 - - - 153.2 400 6.70 34.22 .70 26.87 119.3 .799  | 267 7.92 34.105 1.73 - - - 144.2 500 5.97 34.29 .39 27.02 105.0 .918 | 324 7.19 34.176 1.39 - - - 129.0 - - - - - - | 398 6.72 34.218 .74 - - - 119.7 - - - - - -  | 471 6.12 34.269 .45 - - - 108.4 - - - - - - | 548 5.76 34.301 .34 - - - 101.7 - - - - - - |
| 97.80   |   |   |   |   |   |  | CCOFI CRUISE 6507   |  |  |   |   |   | 97.80  |  |  |   |   |
| BLACK DOUGLAS, JUNE 22 1965, 0600 GMT, 30 36N 120 32.5W, SOUNDING 2100 FM, WIND 270 FORCE 2, WEATHER MISSING, SEA MODERATE, WIRE ANGLE 18.  |   |   |   |   |   |  |   |  |  |   |   |   |  |  |  |   |   |
| 0 16.20 33.446 5.67 - - - 341.6 0 16.20 33.45 5.67 24.53 341.3 0  | 9 16.22 33.436 5.72 - - - 342.7 10 16.22 33.44 5.72 24.52 342.5 .034  | 27 15.89 33.408 5.76 - - - 337.7 20 16.00 33.41 5.74 24.55 339.9 .068 | 37 15.87 33.411 5.80 - - - 337.0 30 15.89 33.41 5.76 24.57 337.5 .102 | 47 15.70 33.419 5.80 - - - 332.8 50 15.59 33.42 5.82 24.65 330.4 .169 | 60 14.99 33.427 5.97 - - - 317.4 75 13.80 33.44 5.85 25.04 292.5 .248 | 74 13.88 33.440 5.87 - - - 294.0 100 12.30 33.52 5.15 25.40 258.2 .317 | 91 13.08 33.504 5.53 - - - 273.9 125 11.00 33.59 4.47 25.70 230.2 .379  | 113 11.52 33.538 4.76 - - - 243.0 150 9.98 33.71 3.94 25.97 204.5 .434 | 132 10.74 33.620 4.32 - - - 223.6 200 8.88 33.92 3.95 26.31 171.9 .530 | 158 9.68 33.744 3.85 - - - 197.2 250 8.25 34.01 2.91 26.48 156.0 .614 | 183 9.10 33.863 3.93 - - - 179.4 300 7.39 34.05 2.32 26.64 141.0 .690 | 208 8.79 34.025N 3.96 - - - 162.8 400 6.73 34.19 .82 26.84 121.9 .827 | 242 8.38 34.004 3.03 - - - 158.3 500 6.05 34.27 .40 26.99 107.5 .948 | 292 7.48 34.034 2.49 - - - 143.4 - - - - - - | 359 7.04 34.157 1.16 - - - 128.4 - - - - - - | 427 6.49 34.214 .68 - - - 117.1 - - - - - - | 505 6.02 34.277 .38 - - - 106.6 - - - - - - |

N) POSSIBLE EVAPORATION, VALUE DOES NOT FALL ON PROPERTY CURVE.

| O B S E R V E D    L E V E L S    O F    D E P T H  |        |        |       |                 |       |       |       | S T A N D A R D    L E V E L S    C F    D E P T H |       |       |       |                 |       |       |  |
|---|--------|--------|-------|-----------------|-------|-------|-------|--|-------|-------|-------|-----------------|-------|-------|--|
| I N P U T   |        |        |       | C O M P U T E D |       |       |       | I N P U T  |       |       |       | C O M P U T E D |       |       |  |
| Z   | T      | S      | O X Y | P H O           | S I L | N I T | D * T | Z  | T     | S     | O X Y | S I G * T       | D * T | C O   |  |
| 97.90 CCOFI CRUISE 6507 97.90   |        |        |       |                 |       |       |       |  |       |       |       |                 |       |       |  |
| BLACK DOUGLAS, JUNE 21 1965, 2338 GMT, 30 15.5N 121 10.5W, SOUNDING 1850 FM, WIND 320 FORCE 4, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 02.       |        |        |       |                 |       |       |       |  |       |       |       |                 |       |       |  |
| 0   | 16.48  | 33.487 | 5.66  | -               | -     | -     | 344.7 | 0  | 16.48 | 33.49 | 5.66  | 24.50           | 344.5 | 0     |  |
| 10  | 16.44  | 33.485 | 5.69  | -               | -     | -     | 344.0 | 10   | 16.44 | 33.48 | 5.69  | 24.50           | 344.3 | .034  |  |
| 29  | 16.16  | 33.460 | 5.72  | -               | -     | -     | 339.7 | 20   | 16.40 | 33.48 | 5.70  | 24.51           | 343.5 | .069  |  |
| 39  | 16.02  | 33.448 | 5.78  | -               | -     | -     | 337.5 | 30   | 16.15 | 33.46 | 5.72  | 24.55           | 339.5 | .103  |  |
| 49  | 15.42  | 33.390 | 5.84  | -               | -     | -     | 329.0 | 50   | 15.42 | 33.39 | 5.84  | 24.66           | 329.0 | .170  |  |
| 63  | 14.78  | 33.466 | 5.94  | -               | -     | -     | 310.2 | 75   | 13.25 | 33.44 | 5.72  | 25.16           | 281.8 | .247  |  |
| 78  | 13.00  | 33.437 | 5.63  | -               | -     | -     | 277.3 | 100  | 11.60 | 33.54 | 4.60  | 25.55           | 244.3 | .313  |  |
| 97  | 11.69  | 33.530 | 4.62  | -               | -     | -     | 246.6 | 125  | 9.97  | 33.71 | 4.10  | 25.97           | 204.3 | .370  |  |
| 117   | 10.34  | 33.670 | 4.30  | -               | -     | -     | 213.3 | 150  | 9.42  | 33.85 | 3.152 | 26.17           | 185.3 | .419  |  |
| 136   | 9.62   | 33.768 | 3.83  | -               | -     | -     | 194.5 | 200  | 8.69  | 33.99 | 3.50  | 26.40           | 163.9 | .508  |  |
| 170   | 9.17   | 33.922 | 3.25  | -               | -     | -     | 176.1 | 250  | 7.89  | 34.05 | 2.44  | 26.57           | 147.9 | .588  |  |
| 199   | 8.70   | 33.982 | 3.56  | -               | -     | -     | 164.6 | 300  | 7.21  | 34.09 | 1.73  | 26.69           | 135.6 | .661  |  |
| 228   | 8.19   | 34.028 | 2.80  | -               | -     | -     | 153.8 | 400  | 6.28  | 34.16 | .91   | 26.88           | 118.5 | .793  |  |
| 266   | 7.67   | 34.059 | 2.20  | -               | -     | -     | 144.2 | 500  | 5.70  | 34.24 | .45   | 27.01           | 105.6 | .911  |  |
| 324   | 6.91   | 34.105 | 1.45  | -               | -     | -     | 130.6 |  |       |       |       |                 |       |       |  |
| 395   | 6.31   | 34.158 | .93   | -               | -     | -     | 119.0 |  |       |       |       |                 |       |       |  |
| 467   | 5.88   | 34.217 | .56   | -               | -     | -     | 109.4 |  |       |       |       |                 |       |       |  |
| 546   | 5.47   | 34.278 | .39   | -               | -     | -     | 100.1 |  |       |       |       |                 |       |       |  |
| 100.30 CCOFI CRUISE 6507 100.30   |        |        |       |                 |       |       |       |  |       |       |       |                 |       |       |  |
| ALEXANDER AGASSIZ, JULY 27 1965, 0605 0542 GCT, 31 40.5N 116 47W, SOUNDING 235 FM, WIND 340 FORCE 3, WEATHER CLEAR, SEA MISSING, WIRE ANGLE 05.     |        |        |       |                 |       |       |       |  |       |       |       |                 |       |       |  |
| 0   | 15.40  | 33.693 | 7.10  | 0.63            | 16    | 0.01  | 306.4 | 0  | 15.25 | 33.69 | -     | 24.93           | 303.5 | 0     |  |
| 10  | 14.88  | 33.709 | 6.78  | 0.64            | 19    | 0.02  | 294.4 | 10   | 14.65 | 33.66 | -     | 25.04           | 293.3 | .030  |  |
| 15  | 12.82A | 33.720 | -     | 2.14U           | 20    | 0.15  | 253.1 | 20   | 12.12 | 33.72 | -     | 25.59           | 240.3 | .057  |  |
| 100   | 10.24  | 34.031 | 2.58  | 1.00U           | 28    | 0.07  | 185.0 | 30   | 11.11 | 33.77 | -     | 25.82           | 218.8 | .080  |  |
|   |        |        |       |                 |       |       |       | 50   | 10.63 | 33.92 | -     | 26.02           | 199.6 | .122  |  |
|   |        |        |       |                 |       |       |       | 75   | 10.44 | 33.99 | -     | 26.11           | 191.3 | .171  |  |
|   |        |        |       |                 |       |       |       | 100  | 10.35 | 34.02 | -     | 26.15           | 187.6 | .219  |  |
|   |        |        |       |                 |       |       |       | 125  | 10.25 | 34.11 | -     | 26.23           | 179.3 | .265  |  |
|   |        |        |       |                 |       |       |       | 150  | 10.22 | 34.14 | -     | 26.26           | 176.6 | .310  |  |
|   |        |        |       |                 |       |       |       | 200  | 9.83  | 34.22 | -     | 26.39           | 164.4 | .397  |  |
|   |        |        |       |                 |       |       |       | 250  | 9.35  | 34.30 | -     | 26.53           | 150.9 | .478  |  |
|   |        |        |       |                 |       |       |       | 300  | 9.22  | 34.35 | -     | 26.59           | 145.2 | .555  |  |
|   |        |        |       |                 |       |       |       | 400  | 8.40  | 34.37 | -     | 26.74           | 131.4 | .700  |  |
| 100.35 CCOFI CRUISE 6507 100.35   |        |        |       |                 |       |       |       |  |       |       |       |                 |       |       |  |
| ALEXANDER AGASSIZ, JULY 27 1965, 0920 0843 GCT, 31 30.5N 117 07W, SOUNDING 583 FM, WIND 320 FORCE 5, WEATHER MISSING, SEA MODERATE, WIRE ANGLE 15.  |        |        |       |                 |       |       |       |  |       |       |       |                 |       |       |  |
| 0   | 17.77  | 33.668 | 6.06  | 0.22            | 3     | 0.00  | 360.6 | 0  | 17.81 | 33.70 | -     | 24.34           | 359.2 | 0     |  |
| 10  | 17.78  | 33.666 | 6.11  | 0.21            | 3     | 0.00  | 360.9 | 10   | 17.82 | 33.70 | -     | 24.34           | 359.4 | .036  |  |
| 19  | 17.73  | 33.668 | 6.12  | 0.24            | 2     | 0.00  | 359.6 | 20   | 17.70 | 33.69 | -     | 24.36           | 357.3 | .072  |  |
| 96  | 10.92  | 33.815 | 3.26  | 1.77            | 20    | 0.01  | 212.2 | 30   | 15.13 | 33.59 | -     | 24.88           | 308.3 | .105  |  |
|   |        |        |       |                 |       |       |       | 50   | 12.44 | 33.51 | -     | 25.37           | 261.5 | .162  |  |
|   |        |        |       |                 |       |       |       | 75   | 11.50 | 33.75 | -     | 25.73           | 227.0 | .224  |  |
|   |        |        |       |                 |       |       |       | 100  | 10.89 | 33.88 | -     | 25.94           | 206.9 | .279  |  |
|   |        |        |       |                 |       |       |       | 125  | 10.42 | 34.02 | -     | 26.14           | 188.7 | .329  |  |
|   |        |        |       |                 |       |       |       | 150  | 10.14 | 34.12 | -     | 26.26           | 176.7 | .375  |  |
|   |        |        |       |                 |       |       |       | 200  | 9.86  | 34.24 | -     | 26.40           | 163.4 | .462  |  |
|   |        |        |       |                 |       |       |       | 250  | 9.46  | 34.32 | -     | 26.53           | 151.1 | .543  |  |
|   |        |        |       |                 |       |       |       | 300  | 9.12  | 34.30 | -     | 26.57           | 147.3 | .620  |  |
|   |        |        |       |                 |       |       |       | 400  | 8.33  | 34.34 | -     | 26.73           | 132.6 | .767  |  |
|   |        |        |       |                 |       |       |       | 500  | 7.33  | 34.35 | -     | 26.88           | 117.9 | .899  |  |
|   |        |        |       |                 |       |       |       | 600  | 6.58  | 34.38 | -     | 27.01           | 105.8 | 1.020 |  |
| 100.40 CCOFI CRUISE 6507 100.40   |        |        |       |                 |       |       |       |  |       |       |       |                 |       |       |  |
| ALEXANDER AGASSIZ, JULY 27 1965, 1205 1140 GCT, 31 21N 117 27W, SOUNDING 946 FM, WIND 340 FORCE 5, WEATHER PARTLY CLOUDY, SEA ROUGH, WIRE ANGLE 03. |        |        |       |                 |       |       |       |  |       |       |       |                 |       |       |  |
| 1   | 17.24  | 33.573 | 5.72  | 0.38            | 2     | 0.00  | 355.4 | 0  | 17.28 | 33.61 | -     | 24.40           | 353.6 | 0     |  |
| 11  | 17.25  | 33.571 | 5.75  | 0.32            | 2     | 0.00  | 355.7 | 10   | 17.29 | 33.61 | -     | 24.40           | 353.8 | .035  |  |
| 36  | 16.90  | 33.556 | 5.81  | 0.36            | 2     | 0.00  | 349.0 | 20   | 17.29 | 33.61 | -     | 24.40           | 353.8 | .071  |  |
| 101   | 10.94  | 33.650 | 4.67  | 1.25            | 13    | 0.01  | 224.8 | 30   | 17.28 | 33.61 | -     | 24.40           | 353.6 | .106  |  |
|   |        |        |       |                 |       |       |       | 50   | 15.38 | 33.49 | -     | 24.75           | 320.9 | .174  |  |
|   |        |        |       |                 |       |       |       | 75   | 13.08 | 33.48 | -     | 25.22           | 275.7 | .249  |  |
|   |        |        |       |                 |       |       |       | 100  | 11.37 | 33.63 | -     | 25.66           | 233.6 | .313  |  |
|   |        |        |       |                 |       |       |       | 125  | 10.18 | 33.76 | -     | 25.97           | 204.0 | .368  |  |
|   |        |        |       |                 |       |       |       | 150  | 9.57  | 33.85 | -     | 26.15           | 187.6 | .418  |  |
|   |        |        |       |                 |       |       |       | 200  | 8.90  | 34.06 | -     | 26.42           | 161.8 | .507  |  |
|   |        |        |       |                 |       |       |       | 250  | 7.93  | 34.08 | -     | 26.58           | 146.2 | .586  |  |
|   |        |        |       |                 |       |       |       | 300  | 7.42  | 34.13 | -     | 26.70           | 135.5 | .659  |  |
|   |        |        |       |                 |       |       |       | 400  | 7.25  | 34.31 | -     | 26.86           | 119.8 | .792  |  |
|   |        |        |       |                 |       |       |       | 500  | 6.61  | 34.35 | -     | 26.98           | 108.5 | .913  |  |
|   |        |        |       |                 |       |       |       | 600  | 6.05  | 34.38 | -     | 27.08           | 99.3  | 1.024 |  |

A) ALTERNATE VALUE, 11.76.

| O B S E R V E D   L E V E L S   O F   D E P T H  |                                    |   |     |          |     |     | S T A N D A R D   L E V E L S   O F   D E P T H |  |                                    |   |          |       |        |    |
|--|------------------------------------|---|-----|----------|-----|-----|---|--|------------------------------------|---|----------|-------|--------|----|
| INPUT  |                                    |   |     | COMPUTED |     |     | INPUT   |  |                                    |   | COMPUTED |       |        |    |
| Z  | T                                  | S | OXY | PHO      | SIL | NIT | D*T   | Z  | T                                  | S | OXY      | SIG*T | D*T    | DD |
| 100.50   |                                    |   |     |          |     |     | CCOIFI CRUISE 6507                              |  |                                    |   |          |       | 100.50 |    |
| ALEXANDER AGASSIZ, JULY 27 1965, 1740 1657 GCT, 31 02N 118 09W, SOUNDING 820 FM, WIND 330 FORCE 5, WEATHER PARTLY CLOUDY, SEA MODERATE, WIRE ANGLE 19. |                                    |   |     |          |     |     |   |  |                                    |   |          |       |        |    |
| 0 17.16 33.619 6.38 0.20 2 0.00 350.2  | 0 17.17 33.64 - 24.45 348.9 0      |   |     |          |     |     |   | 10 17.16 33.64 - 24.45 348.7 .035        |                                    |   |          |       |        |    |
| 10 17.16 33.623 7.14 0.26 2 0.00 349.9   | 10 17.16 33.64 - 24.45 348.7 .035  |   |     |          |     |     |   | 20 17.08 33.64 - 24.47 346.9 .070        |                                    |   |          |       |        |    |
| 33 14.78 33.582 5.58 0.49 6 0.00 301.7   | 30 14.83 33.59 - 24.94 302.1 .102  |   |     |          |     |     |   | 30 12.70 33.59 - 25.38 260.5 .159        |                                    |   |          |       |        |    |
| 95 10.10 33.791 3.62 2.00 21 - 200.4   | 50 11.07 33.68 - 25.76 224.7 .220  |   |     |          |     |     |   | 75 11.07 33.68 - 25.76 224.7 .220        |                                    |   |          |       |        |    |
|  | 100 10.18 33.85 - 26.04 197.4 .273 |   |     |          |     |     |   | 125 9.52 33.90 - 26.19 183.2 .321        |                                    |   |          |       |        |    |
|  | 150 9.09 33.97 - 26.32 171.3 .366  |   |     |          |     |     |   | 200 8.31 34.04 - 26.49 154.6 .449        |                                    |   |          |       |        |    |
|  | 250 7.92 34.15 - 26.64 140.9 .525  |   |     |          |     |     |   | 300 7.48 34.21 - 26.75 130.3 .595        |                                    |   |          |       |        |    |
|  | 400 6.56 34.26 - 26.92 114.5 .723  |   |     |          |     |     |   | 500 5.97 34.33 - 27.05 102.0 .837        |                                    |   |          |       |        |    |
|  | 600 5.46 34.38 - 27.15 92.3 .941   |   |     |          |     |     |   |  |                                    |   |          |       |        |    |
| 100.60   |                                    |   |     |          |     |     | CCOIFI CRUISE 6507                              |  |                                    |   |          |       | 100.60 |    |
| ALEXANDER AGASSIZ, JULY 27 1965, 2337 2250 GCT, 30 40N 118 48.5W, SOUNDING 1630 FM, WIND 330 FORCE 6, WEATHER PARTLY CLOUDY, SEA ROUGH, WIRE ANGLE 35. |                                    |   |     |          |     |     |   |  |                                    |   |          |       |        |    |
| 0 16.84 33.450 6.01 0.37 3 0.02 355.4  | 0 17.02 33.48 - 24.36 357.2 0      |   |     |          |     |     |   | 8 16.84 33.448 6.00 0.35 3 0.00 355.5    | 10 16.94 33.48 - 24.38 355.4 .036  |   |          |       |        |    |
| 29 16.01 33.397 6.12 0.38 3 0.00 341.1   | 20 16.33 33.47 - 24.52 342.7 .071  |   |     |          |     |     |   | 37 15.54 33.350 6.40 0.42 2 0.01 334.5   | 30 15.98 33.45 - 24.58 336.5 .105  |   |          |       |        |    |
| 50 14.86 33.384 6.36 0.43 2 0.01 317.8   | 50 15.22 33.37 - 24.69 326.3 .171  |   |     |          |     |     |   | 62 14.46 33.361 6.47 0.52 3 0.05 311.4   | 75 13.92 33.34 - 24.94 302.2 .250  |   |          |       |        |    |
| 83 13.76 33.326 6.29 0.62 3 0.11 300.0   | 100 12.83 33.43 - 25.23 274.6 .323 |   |     |          |     |     |   | 99 13.32 33.398 6.09 0.66 4 0.42 286.3   | 125 11.97 33.59 - 25.52 247.1 .389 |   |          |       |        |    |
| 115 12.52 33.401 5.75 0.95 7 0.29 271.0  | 150 10.49 33.75 - 25.91 209.8 .447 |   |     |          |     |     |   | 139 11.50 33.588 4.69 1.25 12 0.06 239.0 | 200 9.28 33.96 - 26.28 175.0 .545  |   |          |       |        |    |
| 162 10.18 33.746 4.03 - 20 - 205.1   | 250 8.49 34.10 - 26.51 152.8 .629  |   |     |          |     |     |   | 193 9.43 33.877 3.44 1.72 24 - 183.5     | 300 7.85 34.16 - 26.66 139.2 .704  |   |          |       |        |    |
| 216 8.98 33.998 2.97 1.94 30 - 167.6   | 400 6.97 34.23 - 26.84 122.0 .840  |   |     |          |     |     |   | 255 8.25 34.098 2.31 2.38 40 - 149.4     | 500 6.41 34.30 - 26.97 109.7 .963  |   |          |       |        |    |
| 307 7.64 34.131 1.84 2.67 46 - 138.4   | 600 5.72 34.35 - 27.10 97.6 1.073  |   |     |          |     |     |   | 392 6.85 34.211 1.06 3.03 59 - 121.9     |                                    |   |          |       |        |    |
| 473 6.44 34.287 .89 3.09 67 - 111.0  |                                    |   |     |          |     |     |   | 473 6.44 34.287 .89 3.09 67 - 111.0      |                                    |   |          |       |        |    |
| 546 5.88 34.294 .57 3.09 75 - 103.7  |                                    |   |     |          |     |     |   |  |                                    |   |          |       |        |    |





| O B S E R V E D   L E V E L S   O F   D E P T H  |              |                 |          |                   |     |     | S T A N D A R D   L E V E L S   O F   D E P T H |                           |               |                 |     |                   |         |    |  |
|--|--------------|-----------------|----------|-------------------|-----|-----|---|---------------------------|---------------|-----------------|-----|-------------------|---------|----|--|
| INPUT  |              |                 | COMPUTED |                   |     |     | INPUT   |                           |               | COMPUTED        |     |                   |         |    |  |
| Z  | T            | S               | OXY      | PHO               | SIL | NIT | D*T   | Z                         | T             | S               | OXY | SIG*T             | D*T     | DD |  |
| 105.140  |              |                 |          |                   |     |     | CCOFI CRUISE 6507                               |                           |               |                 |     |                   | 105.140 |    |  |
| ALEXANDER AGASSIZ, JULY 29 1965, 2335 2301 GCT, 27 09.5N 123 28W, SOUNDING 2265 FM, WIND 030 FORCE 5, WEATHER PARTLY CLOUDY, SEA ROUGH, WIRE ANGLE 12. |              |                 |          |                   |     |     |   |                           |               |                 |     |                   |         |    |  |
| 0 19.26 33.922 5.69 0.29   | 2 0.02 377.4 | 0 19.32 33.92   | -        | 24.14 379.0 0     |     |     |   | 10 19.27 33.917 5.57 0.30 | 2 0.00 378.0  | 10 19.30 33.93  | -   | 24.15 377.8 .038  |         |    |  |
| 10 16.80 33.645 6.01 0.29  | 2 0.00 340.3 | 20 19.25 33.93  | -        | 24.16 376.6 .076  |     |     |   | 98 14.86 33.617 5.96 0.38 | 3 0.00 300.8  | 30 18.84 33.92  | -   | 24.26 367.4 .113  |         |    |  |
| 50 18.55 33.87   | -            | 50 18.55 33.87  | -        | 24.29 364.1 .186  |     |     |   | 75 16.76 33.66            | -             | 75 16.76 33.66  | -   | 24.56 338.3 .275  |         |    |  |
| 100 14.88 33.64  | -            | 100 14.88 33.64 | -        | 24.97 299.5 .355  |     |     |   | 125 13.23 33.67           | -             | 125 13.23 33.67 | -   | 25.34 264.6 .426  |         |    |  |
| 150 12.05 33.69  | -            | 150 12.05 33.69 | -        | 25.58 241.2 .490  |     |     |   | 200 9.53 33.86            | -             | 200 9.53 33.86  | -   | 26.16 186.3 .599  |         |    |  |
| 250 8.55 34.00   | -            | 250 8.55 34.00  | -        | 26.43 161.1 .688  |     |     |   | 300 7.76 34.06            | -             | 300 7.76 34.06  | -   | 26.59 145.3 .767  |         |    |  |
| 400 6.65 34.21   | -            | 400 6.65 34.21  | -        | 26.87 119.4 .905  |     |     |   | 500 6.04 34.28            | -             | 500 6.04 34.28  | -   | 27.00 106.6 1.024 |         |    |  |
| 600 5.42 34.34   | -            | 600 5.42 34.34  | -        | 27.12 94.9 1.132  |     |     |   |                           |               |                 |     |                   |         |    |  |
| 110.35   |              |                 |          |                   |     |     | CCOFI CRUISE 6507                               |                           |               |                 |     |                   | 110.35  |    |  |
| ALEXANDER AGASSIZ, AUGUST 2 1965, 0650 0623 GCT, 29 46N 116 00.5W, SOUNDING 620 FM, WIND 350 FORCE 4, WEATHER FOG, SEA MODERATE, WIRE ANGLE 12.        |              |                 |          |                   |     |     |   |                           |               |                 |     |                   |         |    |  |
| 0 16.92 33.590 6.30 0.21   | 3 0.00 346.9 | 0 17.01 33.62   | -        | 24.47 346.8 0     |     |     |   | 10 16.84 33.588 6.26 0.20 | 4 0.00 345.3  | 10 16.30 33.58  | -   | 24.61 334.0 .034  |         |    |  |
| 49 13.60 33.490 5.51 0.47  | 5 0.28 284.9 | 20 15.74 33.59  | -        | 24.74 321.2 .067  |     |     |   | 98 11.06 33.686 4.46 0.95 | 13 0.02 224.1 | 30 15.48 33.58  | -   | 24.79 316.4 .099  |         |    |  |
| 50 13.64 33.52   | -            | 50 13.64 33.52  | -        | 25.14 283.5 .159  |     |     |   | 75 12.04 33.58            | -             | 75 12.04 33.58  | -   | 25.50 249.1 .226  |         |    |  |
| 100 11.12 33.71  | -            | 100 11.12 33.71 | -        | 25.77 223.4 .286  |     |     |   | 125 10.31 33.86           | -             | 125 10.31 33.86 | -   | 26.03 198.7 .339  |         |    |  |
| 150 9.96 33.98   | -            | 150 9.96 33.98  | -        | 26.18 184.2 .387  |     |     |   | 200 10.20 34.26           | -             | 200 10.20 34.26 | -   | 26.36 167.4 .477  |         |    |  |
| 250 9.22 34.24   | -            | 250 9.22 34.24  | -        | 26.51 153.3 .560  |     |     |   | 300 8.54 34.25            | -             | 300 8.54 34.25  | -   | 26.62 142.3 .636  |         |    |  |
| 400 7.75 34.32   | -            | 400 7.75 34.32  | -        | 26.80 125.9 .776  |     |     |   | 500 7.05 34.34            | -             | 500 7.05 34.34  | -   | 26.91 114.9 .904  |         |    |  |
| 600 6.22 34.37   | -            | 600 6.22 34.37  | -        | 27.05 102.1 1.020 |     |     |   |                           |               |                 |     |                   |         |    |  |
| 110.40   |              |                 |          |                   |     |     | CCOFI CRUISE 6507                               |                           |               |                 |     |                   | 110.40  |    |  |
| ALEXANDER AGASSIZ, AUGUST 2 1965, 0346 0318 GCT, 29 36N 116 19.5W, SOUNDING 1353 FM, WIND 340 FORCE 4, WEATHER OVERCAST, SEA ROUGH, WIRE ANGLE 12.     |              |                 |          |                   |     |     |   |                           |               |                 |     |                   |         |    |  |
| 0 17.53 33.547 5.78 0.31   | 1 0.00 363.9 | 0 17.54 33.56   | -        | 24.30 363.1 0     |     |     |   | 10 17.54 33.550 5.83 0.31 | 2 0.00 363.9  | 10 17.53 33.57  | -   | 24.31 362.2 .036  |         |    |  |
| 29 17.39 33.531 5.78 0.34  | 1 0.00 361.8 | 20 17.44 33.56  | -        | 24.33 360.9 .072  |     |     |   | 59 14.72 33.394 6.06 0.38 | 2 0.00 314.2  | 30 17.42 33.56  | -   | 24.33 360.4 .109  |         |    |  |
| 69 14.94 33.666 5.88 0.43  | 3 0.01 298.8 | 50 15.23 33.45  | -        | 24.75 320.6 .177  |     |     |   | 79 13.98 33.600 5.63 0.64 | 4 0.14 284.3  | 75 14.87 33.72  | -   | 25.03 293.4 .254  |         |    |  |
| 98 12.90 33.641 5.10 0.84  | 7 0.06 260.4 | 100 12.77 33.68 | -        | 25.44 255.1 .323  |     |     |   | 125 11.55 33.68           | -             | 125 11.55 33.68 | -   | 25.67 233.1 .385  |         |    |  |
| 150 10.40 33.84  | -            | 150 10.40 33.84 | -        | 26.00 201.7 .440  |     |     |   | 200 9.08 34.02            | -             | 200 9.08 34.02  | -   | 26.36 167.5 .534  |         |    |  |
| 250 8.29 34.09   | -            | 250 8.29 34.09  | -        | 26.54 150.6 .616  |     |     |   | 300 7.96 34.17            | -             | 300 7.96 34.17  | -   | 26.65 140.0 .691  |         |    |  |
| 400 7.20 34.29   | -            | 400 7.20 34.29  | -        | 26.85 120.6 .827  |     |     |   | 500 6.15 34.29            | -             | 500 6.15 34.29  | -   | 26.99 107.2 .947  |         |    |  |
| 600 5.80 34.37   | -            | 600 5.80 34.37  | -        | 27.10 97.0 1.057  |     |     |   |                           |               |                 |     |                   |         |    |  |
| 110.50   |              |                 |          |                   |     |     | CCOFI CRUISE 6507                               |                           |               |                 |     |                   | 110.50  |    |  |
| ALEXANDER AGASSIZ, AUGUST 1 1965, 2144 2111 GCT, 29 16N 116 19W, SOUNDING 1600 FM, WIND 340 FORCE 2, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 07.    |              |                 |          |                   |     |     |   |                           |               |                 |     |                   |         |    |  |
| 0 17.70 33.596 5.69 0.37   | 3 0.00 364.2 | 0 17.73 33.60   | -        | 24.29 364.6 0     |     |     |   | 10 17.62 33.592 5.70 0.35 | 4 0.00 362.6  | 10 17.65 33.60  | -   | 24.31 362.7 .036  |         |    |  |
| 55 15.70 33.627 6.01 0.39  | 3 0.00 317.6 | 20 17.62 33.60  | -        | 24.31 362.1 .073  |     |     |   | 99 12.14 33.750 3.93 1.48 | 13 0.04 238.4 | 30 17.62 33.60  | -   | 24.31 362.1 .109  |         |    |  |
| 50 16.80 33.56   | -            | 50 16.80 33.56  | -        | 24.48 346.5 .180  |     |     |   | 75 14.69 33.66            | -             | 75 14.69 33.66  | -   | 25.03 294.1 .261  |         |    |  |
| 100 12.87 33.74  | -            | 100 12.87 33.74 | -        | 25.46 252.6 .329  |     |     |   | 125 11.62 33.86           | -             | 125 11.62 33.86 | -   | 25.80 221.0 .389  |         |    |  |
| 150 11.00 34.09  | -            | 150 11.00 34.09 | -        | 26.09 193.3 .442  |     |     |   | 200 11.26 34.51           | -             | 200 11.26 34.51 | -   | 26.37 166.8 .534  |         |    |  |
| 250 10.26 34.48  | -            | 250 10.26 34.48 | -        | 26.52 152.1 .616  |     |     |   | 300 9.33 34.43            | -             | 300 9.33 34.43  | -   | 26.64 140.9 .692  |         |    |  |
| 400 8.26 34.45   | -            | 400 8.26 34.45  | -        | 26.82 123.4 .831  |     |     |   | 500 6.97 34.37            | -             | 500 6.97 34.37  | -   | 26.95 111.6 .956  |         |    |  |
| 600 6.17 34.38   | -            | 600 6.17 34.38  | -        | 27.06 100.7 1.070 |     |     |   |                           |               |                 |     |                   |         |    |  |

| O B S E R V E D   L E V E L S   O F   D E P T H  |         |       |                 |     |                   |       | S T A N D A R D   L E V E L S   O F   D E P T H |         |       |                 |     |             |        |    |
|--|---------|-------|-----------------|-----|-------------------|-------|---|---------|-------|-----------------|-----|-------------|--------|----|
| INPUT  |         |       |                 |     | COMPUTED          |       | INPUT   |         |       |                 |     | COMPUTED    |        |    |
| Z  | T       | S     | OXY             | PHO | SIL               | NIT   | D*T   | Z       | T     | S               | OXY | SIG*T       | D*T    | DD |
| 110.60   |         |       |                 |     | CCOFI CRUISE 6507 |       |   |         |       |                 |     |             | 110.60 |    |
| ALEXANDER AGASSIZ, AUGUST 1 1965, 1517 1435 GCT, 28 56N 117 38W, SOUNDING 1930 FM, WIND 330 FORCE 5, WEATHER PARTLY CLOUDY, SEA MODERATE, WIRE ANGLE 27. |         |       |                 |     |                   |       |   |         |       |                 |     |             |        |    |
| 0 17.72 33.647 5.78 0.38   | 3 0.05  | 360.9 | 0 17.84 33.69   | -   | 24.33 360.6       | 0     | 9 17.74 33.645 5.84 0.45                        | 3 0.02  | 361.5 | 10 17.84 33.69  | -   | 24.33 360.6 | .036   |    |
| 31 17.44 33.704 6.01 0.45  | 3 0.02  | 350.4 | 20 17.84 33.69  | -   | 24.33 360.6       | .072  | 59 14.66 33.641 5.71 0.72                       | 4 0.16  | 294.9 | 30 17.84 33.69  | -   | 24.33 360.6 | .108   |    |
| 67 13.52 33.730 4.54 1.24  | 9 0.49  | 265.7 | 50 16.84 33.65  | -   | 24.54 340.8       | .179  | 86 12.15 33.809 3.59 1.65                       | 16 0.04 | 234.2 | 75 12.88 33.70  | -   | 25.43 255.7 | .254   |    |
| 99 11.83 34.028 1.96 2.32  | 29 0.03 | 212.4 | 100 11.44 33.91 | -   | 25.87 214.2       | .313  | 112 11.19 34.001 2.52 2.11                      | 24 0.05 | 203.1 | 125 11.82 34.26 | -   | 26.07 195.1 | .365   |    |
| 139 11.61 34.359 1.26 2.55   | 30 0.02 | 184.1 | 150 11.25 34.28 | -   | 26.19 183.6       | .413  | 157 10.48 34.236 1.82 2.40                      | 31 0.03 | 173.8 | 200 10.14 34.33 | -   | 26.43 161.2 | .501   |    |
| 182 10.06 34.240 2.00 2.40   | 33 0.03 | 166.6 | 250 9.63 34.47  | -   | 26.62 142.7       | .579  | 212 9.73 34.318 1.43 2.81                       | 35 0.02 | 155.5 | 300 9.62 34.54  | -   | 26.68 137.3 | .652   |    |
| 237 9.80 34.402 1.00 2.95  | 36 0.05 | 150.4 | 400 8.38 34.47  | -   | 26.82 123.7       | .789  | 281 9.60 34.514 .66 3.10                        | 41 0.02 | 138.9 | 500 7.24 34.43  | -   | 26.96 110.7 | .914   |    |
| 337 9.06 34.497 .64 -  | 45 0.02 | 131.8 | 600 6.15 34.40  | -   | 27.08 99.0        | 1.027 | 424 8.06 34.459 .39 3.30                        | 54 0.01 | 119.9 |                 |     |             |        |    |
| 505 7.26 34.436 .35 3.45   | 61 0.01 | 110.5 |                 |     |                   |       | 576 6.50 34.430 .78U 3.62                       | 68 0.01 | 101.1 |                 |     |             |        |    |
| 110.70   |         |       |                 |     | CCOFI CRUISE 6507 |       |   |         |       |                 |     |             | 110.70 |    |
| ALEXANDER AGASSIZ, AUGUST 1 1965, 0852 0821 GCT, 28 36N 118 18W, SOUNDING 1900 FM, WIND 330 FORCE 4, WEATHER MISSING, SEA ROUGH, WIRE ANGLE 15.          |         |       |                 |     |                   |       |   |         |       |                 |     |             |        |    |
| 0 18.18 33.723 5.68 0.28   | 2 0.00  | 366.1 | 0 18.26 33.76   | -   | 24.28 365.3       | 0     | 10 18.19 33.723 5.70 0.29                       | 2 0.00  | 366.3 | 10 18.26 33.76  | -   | 24.28 365.3 | .037   |    |
| 39 17.94 33.740 5.73 0.29  | 2 0.00  | 359.3 | 20 18.25 33.76  | -   | 24.28 365.0       | .073  | 58 15.50 33.721 - 0.43                          | - 0.00  | 306.5 | 30 18.06 33.77  | -   | 24.34 359.9 | .109   |    |
| 77 13.30 33.714 - 1.11   | - 0.08  | 262.7 | 50 16.90 33.74  | -   | 24.59 335.6       | .179  | 97 11.85 33.760 3.85 1.46                       | 15 0.02 | 232.5 | 75 14.20 33.71  | -   | 25.17 280.6 | .257   |    |
|  |         |       | 100 11.65 33.79 | -   | 25.74 226.7       | .321  |   |         |       | 125 11.12 34.09 | -   | 26.07 195.4 | .374   |    |
|  |         |       | 150 10.62 34.19 | -   | 26.23 179.5       | .422  |   |         |       | 200 10.67 34.50 | -   | 26.46 157.4 | .508   |    |
|  |         |       | 250 9.64 34.42  | -   | 26.58 146.5       | .586  |   |         |       | 300 9.02 34.40  | -   | 26.67 138.4 | .660   |    |
|  |         |       | 400 7.43 34.30  | -   | 26.83 123.0       | .797  |   |         |       | 500 6.99 34.38  | -   | 26.95 111.1 | .921   |    |
|  |         |       | 600 6.23 34.39  | -   | 27.06 100.7       | 1.035 |   |         |       |                 |     |             |        |    |
| 110.80   |         |       |                 |     | CCOFI CRUISE 6507 |       |   |         |       |                 |     |             | 110.80 |    |
| ALEXANDER AGASSIZ, AUGUST 1 1965, 0322 0245 GCT, 26 16.5N 118 56.5W, SOUNDING 2064 FM, WIND 340 FORCE 4, WEATHER CLOUDY, SEA ROUGH, WIRE ANGLE 17.       |         |       |                 |     |                   |       |   |         |       |                 |     |             |        |    |
| 0 18.50 33.777 5.68 0.30   | 2 0.00  | 369.7 | 0 18.57 33.80   | -   | 24.23 369.7       | 0     | 10 18.53 33.773 5.73 0.30                       | 2 0.00  | 370.7 | 10 18.57 33.80  | -   | 24.23 369.7 | .037   |    |
| 14 18.50 33.776 5.73 0.28  | 2 0.00  | 369.8 | 20 18.42 33.80  | -   | 24.27 366.1       | .074  | 95 12.22 33.764 3.96 1.41                       | 13 0.02 | 238.8 | 30 18.05 33.76  | -   | 24.33 360.4 | .110   |    |
| 119 11.54 33.902 - -   | - 0.01  | 216.5 | 50 15.55 33.71  | -   | 24.88 308.4       | .177  |   |         |       | 75 13.18 33.77  | -   | 25.42 256.3 | .248   |    |
|  |         |       | 100 11.82 33.84 | -   | 25.74 226.0       | .309  |   |         |       | 125 11.34 34.00 | -   | 25.96 205.8 | .364   |    |
|  |         |       | 150 10.13 33.98 | -   | 26.15 186.9       | .414  |   |         |       | 200 9.56 34.20  | -   | 26.42 161.6 | .503   |    |
|  |         |       | 250 9.74 34.42  | -   | 26.56 148.1       | .582  |   |         |       | 300 8.46 34.29  | -   | 26.67 138.2 | .657   |    |
|  |         |       | 400 7.34 34.32  | -   | 26.86 120.2       | .792  |   |         |       | 500 6.57 34.37  | -   | 27.00 106.5 | .912   |    |
|  |         |       | 600 6.01 34.40  | -   | 27.10 97.3        | 1.021 |   |         |       |                 |     |             |        |    |
| 110.90   |         |       |                 |     | CCOFI CRUISE 6507 |       |   |         |       |                 |     |             | 110.90 |    |
| ALEXANDER AGASSIZ, JULY 31 1965, 2126 2059 GCT, 27 57N 119 36W, SOUNDING 2110 FM, WIND 360 FORCE 4, WEATHER CLOUDY, SEA MODERATE, WIRE ANGLE 14.         |         |       |                 |     |                   |       |   |         |       |                 |     |             |        |    |
| 0 18.20 33.587 5.74 0.30   | 2 0.00  | 376.5 | 0 18.27 33.59   | -   | 24.15 377.9       | 0     | 10 18.08 33.588 5.70 0.32                       | 3 0.00  | 373.6 | 10 18.09 33.60  | -   | 24.20 372.9 | .038   |    |
| 49 16.89 33.546 5.93 0.32  | 2 0.00  | 349.5 | 20 17.90 33.61  | -   | 24.25 367.8       | .075  | 97 13.22 33.572 5.56 3.61                       | - -     | 271.6 | 30 17.87 33.62  | -   | 24.27 366.4 | .111   |    |
|  |         |       | 50 17.02 33.58  | -   | 24.44 349.9       | .183  |   |         |       | 75 15.25 33.54  | -   | 24.81 314.5 | .267   |    |
|  |         |       | 100 13.70 33.58 | -   | 25.17 280.2       | .342  |   |         |       | 125 11.46 33.74 | -   | 25.73 227.1 | .406   |    |
|  |         |       | 150 10.73 33.84 | -   | 25.94 207.2       | .461  |   |         |       | 200 9.94 34.08  | -   | 26.26 176.5 | .559   |    |
|  |         |       | 250 8.55 34.14  | -   | 26.54 150.7       | .643  |   |         |       | 300 8.97 34.39  | -   | 26.67 138.4 | .717   |    |
|  |         |       | 400 7.83 34.38  | -   | 26.83 122.5       | .854  |   |         |       | 500 6.71 34.35  | -   | 26.97 109.7 | .977   |    |
|  |         |       | 600 6.11 34.39  | -   | 27.08 99.3        | 1.090 |   |         |       |                 |     |             |        |    |



| O B S E R V E D    L E V E L S    O F    D E P T H  |   |   |     |          |     |     | S T A N D A R D    L E V E L S    O F    D E P T H |                                    |   |   |          |       |         |    |
|---|---|---|-----|----------|-----|-----|--|------------------------------------|---|---|----------|-------|---------|----|
| INPUT   |   |   |     | COMPUTED |     |     | INPUT  |                                    |   |   | COMPUTED |       |         |    |
| Z   | T | S | OXY | PHO      | SIL | NIT | D*T  | Z                                  | T | S | CXY      | SIG*T | D*T     | DD |
| 110.160   |   |   |     |          |     |     | CCOFI CRUISE 6507                                  |                                    |   |   |          |       | 110.160 |    |
| ALEXANDER AGASSIZ, JULY 30 1965, 0932 0853 GCT, 25 36N 124 06.5W, SOUNDING 2270 FM, WIND 030 FORCE 5, WEATHER MISSING, SEA VERY ROUGH, WIRE ANGLE 20. |   |   |     |          |     |     |  |                                    |   |   |          |       |         |    |
| 1 19.62 34.247 5.53 0.38 3 0.00 362.7   |   |   |     |          |     |     |  | 0 19.63 34.24 - 24.30 363.4 0      |   |   |          |       |         |    |
| 10 19.63 34.238 5.51 0.39 4 0.00 363.6  |   |   |     |          |     |     |  | 10 19.63 34.25 - 24.31 362.7 .036  |   |   |          |       |         |    |
| 34 19.54 34.367 5.59 0.36 3 0.03 352.0  |   |   |     |          |     |     |  | 20 19.63 34.25 - 24.31 362.7 .073  |   |   |          |       |         |    |
| 43 19.36 34.390 5.65 0.36 3 0.01 345.9  |   |   |     |          |     |     |  | 30 19.53 34.38 - 24.43 350.8 .108  |   |   |          |       |         |    |
| 57 19.16 34.392 5.64 0.38 2 0.00 340.9  |   |   |     |          |     |     |  | 50 19.32 34.43 - 24.52 342.0 .178  |   |   |          |       |         |    |
| 71 18.74 34.422 5.75 0.41 2 0.03 328.6  |   |   |     |          |     |     |  | 75 18.64 34.47 - 24.73 322.7 .262  |   |   |          |       |         |    |
| 95 18.22 34.451 5.69 0.36 2 0.02 314.1  |   |   |     |          |     |     |  | 100 17.98 34.47 - 24.89 307.1 .341 |   |   |          |       |         |    |
| 115 17.94 34.541 5.58 0.28 3 0.02 301.0   |   |   |     |          |     |     |  | 125 17.76 34.60 - 25.04 292.5 .417 |   |   |          |       |         |    |
| 134 17.62 34.581 5.52 0.50 3 0.02 290.7   |   |   |     |          |     |     |  | 150 15.82 34.34 - 25.30 268.1 .488 |   |   |          |       |         |    |
| 162 15.24 34.270 5.14 0.55 5 0.03 260.9   |   |   |     |          |     |     |  | 200 10.70 33.85 - 25.95 205.9 .669 |   |   |          |       |         |    |
| 190 11.85 33.907 4.84 1.08 10 0.01 221.6  |   |   |     |          |     |     |  | 250 9.06 34.00 - 26.35 168.7 .705  |   |   |          |       |         |    |
| 228 9.73 33.902 4.38 1.61 18 0.00 186.3   |   |   |     |          |     |     |  | 300 8.06 34.06 - 26.55 149.5 .787  |   |   |          |       |         |    |
| 256 9.00 33.980 3.87 1.77 24 0.01 169.2   |   |   |     |          |     |     |  | 400 7.23 34.22 - 26.79 126.2 .930  |   |   |          |       |         |    |
| 302 8.00 34.051 3.03 2.17 37 0.01 149.4   |   |   |     |          |     |     |  | 500 6.57 34.33 - 26.97 109.4 1.055 |   |   |          |       |         |    |
| 362 7.42 34.183 1.51 2.87 48 0.02 131.5   |   |   |     |          |     |     |  | 600 5.94 34.38 - 27.09 97.9 1.166  |   |   |          |       |         |    |
| 456 6.68 34.294 .74 3.12 62 0.00 113.5  |   |   |     |          |     |     |  |                                    |   |   |          |       |         |    |
| 542 6.08 34.352 .50 3.39 67 0.02 101.7  |   |   |     |          |     |     |  |                                    |   |   |          |       |         |    |
| 615 5.72 34.390 .47 3.29 75 0.01 94.6   |   |   |     |          |     |     |  |                                    |   |   |          |       |         |    |
| 113.30  |   |   |     |          |     |     | CCOFI CRUISE 6507                                  |                                    |   |   |          |       | 113.30  |    |
| ALEXANDER AGASSIZ, AUGUST 2 1965, 1344 1332 GCT, 29 22N 115 18W, SOUNDING 36 FM, WIND 050 FORCE 1, WEATHER FOG, SEA SLIGHT, WIRE ANGLE 00.            |   |   |     |          |     |     |  |                                    |   |   |          |       |         |    |
| 0 17.98 33.769 5.82 0.13 2 0.01 358.1   |   |   |     |          |     |     |  | 0 18.00 33.79 - 24.37 357.0 0      |   |   |          |       |         |    |
| 10 14.00 33.778 5.15 0.81 12 0.32 271.6   |   |   |     |          |     |     |  | 10 13.98 33.78 - 25.27 271.1 .031  |   |   |          |       |         |    |
| 20 12.24 33.811 3.47 1.53 18 0.61 235.7   |   |   |     |          |     |     |  | 20 12.43 33.82 - 25.61 238.5 .057  |   |   |          |       |         |    |
| 50 10.88 33.995 1.48 2.65 32 0.15 198.3   |   |   |     |          |     |     |  | 30 11.66 33.83 - 25.76 223.9 .080  |   |   |          |       |         |    |
|   |   |   |     |          |     |     |  | 50 11.02 34.02 - 26.03 198.8 .123  |   |   |          |       |         |    |
| 115.35  |   |   |     |          |     |     | CCOFI CRUISE 6507                                  |                                    |   |   |          |       | 115.35  |    |
| ALEXANDER AGASSIZ, AUGUST 2 1965, 1722 1644 GCT, 28 54N 115 27W, SOUNDING 490 FM, WIND 340 FORCE 1, WEATHER FOG, SEA SLIGHT, WIRE ANGLE 03.           |   |   |     |          |     |     |  |                                    |   |   |          |       |         |    |
| 0 16.68 33.706 6.36 0.17 3 0.02 333.1   |   |   |     |          |     |     |  | 0 16.66 33.69 - 24.61 333.9 0      |   |   |          |       |         |    |
| 10 16.63 33.705 6.46 0.30 3 0.03 332.1  |   |   |     |          |     |     |  | 10 16.50 33.69 - 24.65 330.3 .033  |   |   |          |       |         |    |
| 20 15.97 33.700 5.84 0.43 6 0.04 318.1  |   |   |     |          |     |     |  | 20 15.75 33.66 - 24.79 316.3 .066  |   |   |          |       |         |    |
| 100 10.52 34.082 1.80 2.50 29 0.01 185.8  |   |   |     |          |     |     |  | 30 13.50 33.59 - 25.22 275.6 .095  |   |   |          |       |         |    |
|   |   |   |     |          |     |     |  | 50 11.94 33.68 - 25.60 240.0 .147  |   |   |          |       |         |    |
|   |   |   |     |          |     |     |  | 75 10.84 33.99 - 26.04 198.0 .202  |   |   |          |       |         |    |
|   |   |   |     |          |     |     |  | 100 10.62 34.09 - 26.15 186.9 .251 |   |   |          |       |         |    |
|   |   |   |     |          |     |     |  | 125 10.45 34.16 - 26.24 178.9 .297 |   |   |          |       |         |    |
|   |   |   |     |          |     |     |  | 150 10.42 34.27 - 26.33 170.3 .341 |   |   |          |       |         |    |
|   |   |   |     |          |     |     |  | 200 9.93 34.38 - 26.50 154.1 .424  |   |   |          |       |         |    |
|   |   |   |     |          |     |     |  | 250 9.88 34.50 - 26.60 144.4 .501  |   |   |          |       |         |    |
|   |   |   |     |          |     |     |  | 300 9.45 34.46 - 26.64 140.6 .575  |   |   |          |       |         |    |
|   |   |   |     |          |     |     |  | 400 8.33 34.39 - 26.77 128.9 .717  |   |   |          |       |         |    |
|   |   |   |     |          |     |     |  | 500 7.12 34.34 - 26.90 115.8 .847  |   |   |          |       |         |    |
|   |   |   |     |          |     |     |  | 600 6.36 34.36 - 27.02 104.6 .965  |   |   |          |       |         |    |
| 119.33  |   |   |     |          |     |     | CCOFI CRUISE 6507                                  |                                    |   |   |          |       | 119.33  |    |
| ALEXANDER AGASSIZ, AUGUST 2 1965, 2226 2211 GCT, 28 18.5N 114 53W, SOUNDING 60 FM, WIND 320 FORCE 4, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 14.   |   |   |     |          |     |     |  |                                    |   |   |          |       |         |    |
| 0 19.27 33.834 5.76 0.23 2 0.00 384.1   |   |   |     |          |     |     |  | 0 19.43 33.86 - 24.06 386.1 0      |   |   |          |       |         |    |
| 10 18.49 33.773 5.84 0.25 2 0.00 369.8  |   |   |     |          |     |     |  | 10 18.37 33.80 - 24.28 365.0 .038  |   |   |          |       |         |    |
| 49 17.35 33.745 5.81 0.27 2 0.04 345.3  |   |   |     |          |     |     |  | 20 17.78 33.77 - 24.40 353.4 .074  |   |   |          |       |         |    |
| 97 10.96 34.075 1.89 2.40 29 0.11 193.7   |   |   |     |          |     |     |  | 30 17.74 33.78 - 24.42 351.7 .109  |   |   |          |       |         |    |
|   |   |   |     |          |     |     |  | 50 17.36 33.79 - 24.52 342.3 .179  |   |   |          |       |         |    |
|   |   |   |     |          |     |     |  | 75 12.03 33.85 - 25.71 229.1 .250  |   |   |          |       |         |    |
|   |   |   |     |          |     |     |  | 100 11.02 34.12 - 26.11 191.4 .303 |   |   |          |       |         |    |



| O B S E R V E D    L E V E L S    O F    D E P T H  |       |        |      |          |     |       |       | S T A N D A R D    L E V E L S    O F    D E P T H |       |       |       |          |       |       |  |         |  |
|---|-------|--------|------|----------|-----|-------|-------|--|-------|-------|-------|----------|-------|-------|--|---------|--|
| INPUT   |       |        |      | COMPUTED |     |       |       | INPUT  |       |       |       | COMPUTED |       |       |  |         |  |
| Z   | T     | S      | OXY  | PHO      | SIL | NIT   | D*T   | Z  | T     | S     | OXY   | SIG*T    | D*T   | DD    |  |         |  |
| 120.80  |       |        |      |          |     |       |       | CCOFI CRUISE 6507                                  |       |       |       |          |       |       |  | 120.80  |  |
| ALEXANDER AGASSIZ, AUGUST 4 1965, 1833 1805 GCT, 26 32.5N 117 48.5W, SOUNDING 2046 FM, WIND 320 FORCE 2, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 02. |       |        |      |          |     |       |       |  |       |       |       |          |       |       |  |         |  |
| 0   | 19.42 | 33.710 | 5.62 | 0.30     | 0   | 0.00  | 396.7 | 0  | 19.46 | 33.74 | -     | 23.96    | 395.5 | 0     |  |         |  |
| 10  | 19.32 | 33.697 | 5.72 | 0.29     | 1   | 0.00  | 395.2 | 10   | 19.18 | 33.68 | -     | 23.99    | 393.1 | .039  |  |         |  |
| 50  | 17.26 | 33.667 | 5.99 | 0.28     | 1   | 0.00  | 349.0 | 20   | 18.50 | 33.64 | -     | 24.13    | 379.7 | .078  |  |         |  |
| 98  | 12.66 | 33.579 | 5.48 | 0.76     | 5   | 0.08  | 260.5 | 30   | 18.27 | 33.73 | -     | 24.25    | 367.7 | .116  |  |         |  |
|   |       |        |      |          | 50  | 17.30 | 33.69 |  |       | 24.46 | 348.2 |          | .187  |       |  |         |  |
|   |       |        |      |          | 75  | 14.98 | 33.47 |  |       | 24.82 | 314.0 |          | .271  |       |  |         |  |
|   |       |        |      |          | 100 | 12.71 | 33.58 |  |       | 25.37 | 261.4 |          | .343  |       |  |         |  |
|   |       |        |      |          | 125 | 11.74 | 33.69 |  |       | 25.64 | 235.7 |          | .406  |       |  |         |  |
|   |       |        |      |          | 150 | 10.56 | 33.79 |  |       | 25.93 | 208.0 |          | .462  |       |  |         |  |
|   |       |        |      |          | 200 | 9.18  | 33.99 |  |       | 26.32 | 171.2 |          | .559  |       |  |         |  |
|   |       |        |      |          | 250 | 8.74  | 34.15 |  |       | 26.51 | 152.7 |          | .642  |       |  |         |  |
|   |       |        |      |          | 300 | 8.47  | 34.25 |  |       | 26.63 | 141.3 |          | .718  |       |  |         |  |
|   |       |        |      |          | 400 | 7.80  | 34.37 |  |       | 26.83 | 122.8 |          | .856  |       |  |         |  |
|   |       |        |      |          | 500 | 6.78  | 34.39 |  |       | 26.99 | 107.6 |          | .978  |       |  |         |  |
|   |       |        |      |          | 600 | 6.03  | 34.39 |  |       | 27.09 | 98.3  | 1.089    |       |       |  |         |  |
| 120.90  |       |        |      |          |     |       |       | CCOFI CRUISE 6507                                  |       |       |       |          |       |       |  | 120.90  |  |
| ALEXANDER AGASSIZ, AUGUST 4 1965, 2322 2255 GCT, 26 12.5N 118 27.5W, SOUNDING 2175 FM, WIND 360 FORCE 3, WEATHER OVERCAST, SEA MODERATE, WIRE ANGLE 07. |       |        |      |          |     |       |       |  |       |       |       |          |       |       |  |         |  |
| 0   | 19.69 | 33.766 | 5.49 | 0.38     | 1   | 0.00  | 399.3 | 0  | 19.74 | 33.77 | -     | 23.91    | 400.2 | 0     |  |         |  |
| 10  | 19.50 | 33.756 | 5.57 | 0.54     | 2   | 0.00  | 395.3 | 10   | 19.16 | 33.75 | -     | 24.05    | 387.5 | .039  |  |         |  |
| 40  | 18.98 | 33.874 | 5.55 | 0.35     | 1   | 0.00  | 374.1 | 20   | 19.12 | 33.80 | -     | 24.09    | 382.9 | .078  |  |         |  |
| 99  | 14.42 | 33.635 | 5.76 | 0.46     | 3   | 0.03  | 290.5 | 30   | 18.93 | 33.83 | -     | 24.17    | 376.1 | .116  |  |         |  |
|   |       |        |      |          | 50  | 17.67 | 33.69 |  |       | 24.37 | 356.7 |          | .190  |       |  |         |  |
|   |       |        |      |          | 75  | 16.22 | 33.61 |  |       | 24.65 | 330.0 |          | .276  |       |  |         |  |
|   |       |        |      |          | 100 | 14.53 | 33.65 |  |       | 25.05 | 291.6 |          | .354  |       |  |         |  |
|   |       |        |      |          | 125 | 12.85 | 33.67 |  |       | 25.41 | 257.4 |          | .424  |       |  |         |  |
|   |       |        |      |          | 150 | 11.10 | 33.69 |  |       | 25.76 | 224.5 |          | .485  |       |  |         |  |
|   |       |        |      |          | 200 | 9.67  | 34.00 |  |       | 26.25 | 178.1 |          | .587  |       |  |         |  |
|   |       |        |      |          | 250 | 9.13  | 34.26 |  |       | 26.54 | 150.4 |          | .671  |       |  |         |  |
|   |       |        |      |          | 300 | 9.15  | 34.40 |  |       | 26.64 | 140.4 |          | .747  |       |  |         |  |
|   |       |        |      |          | 400 | 8.01  | 34.42 |  |       | 26.84 | 122.1 |          | .884  |       |  |         |  |
|   |       |        |      |          | 500 | 6.93  | 34.41 |  |       | 26.98 | 108.1 | 1.007    |       |       |  |         |  |
|   |       |        |      |          | 600 | 6.22  | 34.42 |  |       | 27.09 | 98.4  | 1.118    |       |       |  |         |  |
| 120.100   |       |        |      |          |     |       |       | CCOFI CRUISE 6507                                  |       |       |       |          |       |       |  | 120.100 |  |
| ALEXANDER AGASSIZ, AUGUST 5 1965, 0409 0135 GCT, 25 52N 119 05.5W, SOUNDING 2200 FM, WIND 340 FORCE 3, WEATHER OVERCAST, SEA MISSING, WIRE ANGLE 08.    |       |        |      |          |     |       |       |  |       |       |       |          |       |       |  |         |  |
| 0   | 19.94 | 33.909 | 5.52 | 0.41     | 1   | 0.00  | 395.1 | 0  | 20.03 | 33.92 | -     | 23.95    | 396.6 | 0     |  |         |  |
| 10  | 19.92 | 33.906 | 5.57 | 0.46     | 2   | 0.00  | 394.8 | 10   | 20.03 | 33.91 | -     | 23.94    | 397.3 | .040  |  |         |  |
| 45  | 19.08 | 33.911 | 5.52 | 0.52     | 2   | 0.00  | 373.9 | 20   | 19.57 | 33.91 | -     | 24.06    | 385.9 | .079  |  |         |  |
| 99  | 14.91 | 33.610 | 5.88 | 0.61     | 3   | 0.00  | 302.3 | 30   | 19.18 | 33.91 | -     | 24.16    | 376.4 | .117  |  |         |  |
|   |       |        |      |          | 50  | 18.50 | 33.88 |  |       | 24.31 | 362.2 |          | .191  |       |  |         |  |
|   |       |        |      |          | 75  | 16.21 | 33.58 |  |       | 24.63 | 332.0 |          | .279  |       |  |         |  |
|   |       |        |      |          | 100 | 14.82 | 33.58 |  |       | 24.94 | 302.7 |          | .358  |       |  |         |  |
|   |       |        |      |          | 125 | 13.33 | 33.67 |  |       | 25.32 | 266.5 |          | .430  |       |  |         |  |
|   |       |        |      |          | 150 | 11.74 | 33.70 |  |       | 25.65 | 234.9 |          | .494  |       |  |         |  |
|   |       |        |      |          | 200 | 9.57  | 33.95 |  |       | 26.22 | 180.2 |          | .600  |       |  |         |  |
|   |       |        |      |          | 250 | 9.13  | 34.20 |  |       | 26.49 | 154.9 |          | .685  |       |  |         |  |
|   |       |        |      |          | 300 | 8.69  | 34.30 |  |       | 26.64 | 140.9 |          | .762  |       |  |         |  |
|   |       |        |      |          | 400 | 8.04  | 34.41 |  |       | 26.83 | 123.2 |          | .900  |       |  |         |  |
|   |       |        |      |          | 500 | 7.12  | 34.42 |  |       | 26.97 | 109.9 | 1.024    |       |       |  |         |  |
|   |       |        |      |          | 600 | 6.11  | 34.42 |  |       | 27.10 | 97.0  | 1.136    |       |       |  |         |  |
| 120.120   |       |        |      |          |     |       |       | CCOFI CRUISE 6507                                  |       |       |       |          |       |       |  | 120.120 |  |
| ALEXANDER AGASSIZ, AUGUST 5 1965, 1223 1142 GCT, 25 13N 120 22W, SOUNDING 2200 FM, WIND 340 FORCE 3, WEATHER OVERCAST, SEA MISSING, WIRE ANGLE 17.      |       |        |      |          |     |       |       |  |       |       |       |          |       |       |  |         |  |
| 0   | 20.36 | 34.057 | 5.49 | 0.27     | 1   | 0.00  | 394.9 | 0  | 20.42 | 34.07 | -     | 23.96    | 395.5 | 0     |  |         |  |
| 9   | 20.40 | 34.051 | 5.52 | 0.31     | 2   | 0.00  | 396.4 | 10   | 20.42 | 34.08 | -     | 23.97    | 394.8 | .040  |  |         |  |
| 28  | 20.06 | 34.017 | 5.54 | 0.35     | 1   | 0.00  | 390.3 | 20   | 20.29 | 34.07 | -     | 24.00    | 392.2 | .079  |  |         |  |
| 38  | 19.02 | 33.897 | 5.78 | 0.31     | 1   | 0.00  | 373.4 | 30   | 20.03 | 34.04 | -     | 24.04    | 387.9 | .118  |  |         |  |
| 53  | 17.68 | 33.794 | 5.99 | 0.32     | 1   | 0.00  | 349.3 | 50   | 17.91 | 33.81 | -     | 24.40    | 353.5 | .192  |  |         |  |
| 67  | 17.43 | 33.895 | 6.05 | 0.32     | 1   | 0.00  | 336.2 | 75   | 17.30 | 33.92 | -     | 24.63    | 331.5 | .279  |  |         |  |
| 92  | 16.82 | 33.988 | 5.91 | 0.31     | 1   | 0.00  | 315.7 | 100  | 16.32 | 33.88 | -     | 24.83    | 312.5 | .360  |  |         |  |
| 111   | 15.15 | 33.824 | 5.80 | 0.35     | 2   | 0.00  | 291.6 | 125  | 13.93 | 33.80 | -     | 25.29    | 268.6 | .433  |  |         |  |
| 130   | 13.58 | 33.800 | 5.41 | 0.67     | 5   | 0.07  | 261.8 | 150  | 11.88 | 33.75 | -     | 25.66    | 233.7 | .497  |  |         |  |
| 149   | 12.20 | 33.751 | 5.06 | 0.93     | 8   | 0.01  | 239.4 | 200  | 9.99  | 33.92 | -     | 26.13    | 189.1 | .604  |  |         |  |
| 178   | 10.44 | 33.795 | 4.20 | 1.49     | 16  | 0.00  | 205.7 | 250  | 8.94  | 34.07 | -     | 26.42    | 161.7 | .694  |  |         |  |
| 211   | 9.66  | 33.944 | 3.69 | 1.77     | 22  | 0.00  | 182.1 | 300  | 8.42  | 34.20 | -     | 26.60    | 144.3 | .773  |  |         |  |
| 241   | 9.20  | 34.021 | 3.21 | 1.99     | 26  | -     | 169.2 | 400  | 7.46  | 34.30 | -     | 26.82    | 123.4 | .913  |  |         |  |
| 288   | 8.42  | 34.180 | 2.02 | 2.49     | 38  | -     | 145.8 | 500  | 6.81  | 34.37 | -     | 26.97    | 109.5 | 1.037 |  |         |  |
| 342   | 8.05  | 34.268 | 1.26 | 2.84     | 44  | -     | 133.9 | 600  | 6.02  | 34.40 | -     | 27.10    | 97.4  | 1.148 |  |         |  |
| 424   | 7.16  | 34.304 | .82  | 3.08     | 51  | -     | 119.0 |  |       |       |       |          |       |       |  |         |  |
| 507   | 6.52  | 34.365 | .52  | 3.25     | 59  | -     | 106.2 |  |       |       |       |          |       |       |  |         |  |
| 590   | 5.97  | 34.410 | .48  | 3.31     | 71  | -     | 96.1  |  |       |       |       |          |       |       |  |         |  |

| O B S E R V E D   L E V E L S   O F   D E P T H  |                               |  |                                   |   |                                   |  |                                   | S T A N D A R D   L E V E L S   O F   D E P T H |                                   |   |                                    |   |                                    |  |                                    |  |                                    |  |                                    |  |                                    |  |                                    |                                      |                                   |                                      |                                   |                                      |                                    |                                     |                                     |                                     |
|--|-------------------------------|--|-----------------------------------|---|-----------------------------------|--|-----------------------------------|---|-----------------------------------|---|------------------------------------|---|------------------------------------|--|------------------------------------|--|------------------------------------|--|------------------------------------|--|------------------------------------|--|------------------------------------|--------------------------------------|-----------------------------------|--------------------------------------|-----------------------------------|--------------------------------------|------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| I N P U T  |                               |  |                                   | C O M P U T E D                         |                                   |  |                                   | I N P U T                                       |                                   |   |                                    | C O M P U T E D                         |                                    |  |                                    |  |                                    |  |                                    |  |                                    |  |                                    |                                      |                                   |                                      |                                   |                                      |                                    |                                     |                                     |                                     |
| Z  | T                             | S                                      | CXY                               | PHO                                     | SIL                               | NIT                                      | D*T                               | Z   | T                                 | S                                       | CXY                                | SIG*T                                   | D*T                                | DD                                       |                                    |  |                                    |  |                                    |  |                                    |  |                                    |                                      |                                   |                                      |                                   |                                      |                                    |                                     |                                     |                                     |
| 123.42   |                               |  |                                   |   |                                   |  |                                   |   |                                   |   |                                    |   |                                    |  |                                    |  |                                    |  |                                    |  |                                    |  |                                    |                                      |                                   |                                      |                                   |                                      |                                    |                                     |                                     |                                     |
| ALEXANDER AGASSIZ, AUGUST 11 1965, 1839 1805 GCT, 27 14N 114 59W, SCOUNDING 900 FM, WIND 250 FORCE 2, WEATHER PARTLY CLOUDY, SEA SLIGHT, WIRE ANGLE 00.  | CCOFI CRUISE 6507             |  |                                   |   |                                   |  |                                   |   | 123.42                            |   |                                    |   |                                    |  |                                    |  |                                    |  |                                    |  |                                    |  |                                    |                                      |                                   |                                      |                                   |                                      |                                    |                                     |                                     |                                     |
| 0 20.95 33.808 5.51 0.75 2 0.00 428.0  | 0 22.03 33.83 - 23.34 454.7 0 | 10 19.20 33.755 5.81 0.32 3 0.00 388.1 | 10 20.81 33.83 - 23.68 422.8 .044 | 50 14.46 33.700 5.90 0.76 7 0.28 286.5  | 20 18.62 33.76 - 24.19 373.8 .084 | 100 12.04 34.180 1.23 2.62 32 0.03 204.9 | 30 17.18 33.68 - 24.48 346.2 .120 | 50 14.54 33.57 - 24.99 297.7 .184               | 75 12.71 33.97 - 25.67 232.7 .251 | 100 12.14 34.18 - 25.95 206.8 .307      | 125 12.17 34.31 - 26.04 197.7 .358 | 150 12.49 34.51 - 26.13 188.9 .407      | 200 12.34 34.56 - 26.20 182.5 .502 | 250 11.96 34.64 - 26.34 169.6 .593       | 300 11.31 34.67 - 26.48 155.9 .678 | 400 9.60 34.49 - 26.64 140.7 .834        | 500 8.34 34.50 - 26.85 120.9 .973  | 600 7.28 34.47 - 26.98 108.3 1.097       |                                    |  |                                    |  |                                    |                                      |                                   |                                      |                                   |                                      |                                    |                                     |                                     |                                     |
| 127.40   |                               |  |                                   |   |                                   |  |                                   |   |                                   |   |                                    |   |                                    |  |                                    |  |                                    |  |                                    |  |                                    |  |                                    |                                      |                                   |                                      |                                   |                                      |                                    |                                     |                                     |                                     |
| ALEXANDER AGASSIZ, AUGUST 11 1965, 1344 1305 GCT, 26 43.5N 114 29W, SOUNDING 1585 FM, WIND 080 FORCE 2, WEATHER CLOUDY, SEA SLIGHT, WIRE ANGLE 03.       | CCOFI CRUISE 6507             |  |                                   |   |                                   |  |                                   |   | 127.40                            |   |                                    |   |                                    |  |                                    |  |                                    |  |                                    |  |                                    |  |                                    |                                      |                                   |                                      |                                   |                                      |                                    |                                     |                                     |                                     |
| 0 21.56 33.959 7.01 0.09 4 0.02 432.9  | 0 21.64 34.00 - 23.58 432.1 0 | 10 21.38 33.973 7.15 0.11 4 0.01 427.2 | 10 20.96 33.99 - 23.76 415.1 .042 | 30 18.04 33.962 5.14 0.31 5 0.02 345.4  | 20 19.35 34.00 - 24.19 374.0 .082 | 50 14.82 33.976 3.84 1.12 9 0.17 294.7   | 30 17.15 34.00 - 24.73 322.2 .117 | 50 14.77 33.948 3.40 1.48 12 0.33 274.7         | 50 13.76 33.94 - 25.44 255.0 .175 | 66 12.97 33.884 3.40 1.52 15 0.27 243.9 | 75 11.94 33.85 - 25.73 227.4 .235  | 80 11.76 33.846 3.58 1.57 16 0.10 224.5 | 100 11.87 34.12 - 25.95 206.3 .290 | 101 11.76 34.118 2.14 2.15 23 0.06 204.5 | 125 11.84 34.35 - 26.13 188.8 .340 | 126 11.74 34.327 1.48 2.41 27 0.00 188.7 | 150 11.37 34.36 - 26.23 179.8 .387 | 146 11.45 34.362 1.44 2.47 28 0.00 181.0 | 200 10.38 34.38 - 26.42 161.5 .474 | 176 10.41 34.284 1.64 2.47 30 0.00 169.1 | 250 11.13 34.64 - 26.49 155.0 .556 | 205 10.36 34.387 1.31 2.59 33 0.00 160.6 | 300 10.53 34.64 - 26.60 144.8 .634 | 235 11.31 34.692 .30 2.91 36 - 154.3 | 400 8.83 34.47 - 26.75 130.3 .779 | 275 10.76 34.666 .31 2.94 38 - 146.7 | 500 7.69 34.49 - 26.94 112.4 .908 | 336 10.12 34.614 .36 2.98 39 - 139.9 | 600 6.55 34.44 - 27.06 101.0 1.023 | 410 8.59 34.450 .52 3.05 47 - 128.2 | 486 7.82 34.485 .34 3.24 54 - 114.6 | 566 6.92 34.453 .33 3.27 62 - 104.8 |
| 130.30   |                               |  |                                   |   |                                   |  |                                   |   |                                   |   |                                    |   |                                    |  |                                    |  |                                    |  |                                    |  |                                    |  |                                    |                                      |                                   |                                      |                                   |                                      |                                    |                                     |                                     |                                     |
| ALEXANDER AGASSIZ, AUGUST 7 1965, 2340 2315 GCT, 26 29N 113 29W, SOUNDING 42 FM, WIND 320 FORCE 2, WEATHER PARTLY CLOUDY, SEA MODERATE, WIRE ANGLE 03.   | CCOFI CRUISE 6507             |  |                                   |   |                                   |  |                                   |   | 130.30                            |   |                                    |   |                                    |  |                                    |  |                                    |  |                                    |  |                                    |  |                                    |                                      |                                   |                                      |                                   |                                      |                                    |                                     |                                     |                                     |
| 0 24.31 34.064 5.73 0.21 1 0.00 500.5  | 0 24.31 34.06 - 22.86 500.7 0 | 10 21.38 33.984 5.86 0.15 1 0.00 426.4 | 10 21.37 34.03 - 23.68 422.8 .046 | 50 14.94 34.245 2.20 2.19 17 1.34 256.5 | 20 17.40 33.84 - 24.55 339.6 .084 | 60 14.60 34.202 - - 0.92 252.6           | 30 14.44 33.97 - 25.32 266.4 .115 | 70 13.98 34.096 2.54 1.95 14 0.30 247.9         | 50 15.08 34.27 - 25.41 257.6 .167 |   |                                    |   |                                    |  |                                    |  |                                    |  |                                    |  |                                    |  |                                    |                                      |                                   |                                      |                                   |                                      |                                    |                                     |                                     |                                     |
| 130.40   |                               |  |                                   |   |                                   |  |                                   |   |                                   |   |                                    |   |                                    |  |                                    |  |                                    |  |                                    |  |                                    |  |                                    |                                      |                                   |                                      |                                   |                                      |                                    |                                     |                                     |                                     |
| ALEXANDER AGASSIZ, AUGUST 7 1965, 1810 1736 GCT, 26 09N 114 07W, SOUNDING 1090 FM, WIND 360 FORCE 2, WEATHER PARTLY CLOUDY, SEA MODERATE, WIRE ANGLE 07. | CCOFI CRUISE 6507             |  |                                   |   |                                   |  |                                   |   | 130.40                            |   |                                    |   |                                    |  |                                    |  |                                    |  |                                    |  |                                    |  |                                    |                                      |                                   |                                      |                                   |                                      |                                    |                                     |                                     |                                     |
| 0 21.42 34.173 5.52 0.25 1 0.00 413.8  | 0 21.51 34.20 - 23.77 414.2 0 | 10 20.98 34.158 5.12 0.26 1 0.00 403.4 | 10 21.05 34.19 - 23.88 402.9 .041 | 25 20.76 34.262 5.35 0.27 0 0.00 390.3  | 20 20.90 34.19 - 23.93 399.1 .081 | 99 13.27 33.764 - 1.05 6 0.10 258.4      | 30 20.23 34.16 - 24.08 384.2 .120 | 50 18.85 34.09 - 24.38 355.3 .194               | 75 15.75 33.80 - 24.90 306.0 .278 | 100 13.24 33.83 - 25.46 253.0 .348      | 125 12.16 34.15 - 25.92 209.3 .407 | 150 11.57 34.22 - 26.08 193.6 .458      | 200 10.94 34.38 - 26.32 170.9 .551 | 250 10.43 34.51 - 26.51 152.7 .634       | 300 9.78 34.51 - 26.63 142.1 .711  | 400 8.01 34.39 - 26.81 124.3 .851        | 500 7.34 34.46 - 26.97 109.8 .975  | 600 6.71 34.47 - 27.06 100.8 1.089       |                                    |  |                                    |  |                                    |                                      |                                   |                                      |                                   |                                      |                                    |                                     |                                     |                                     |

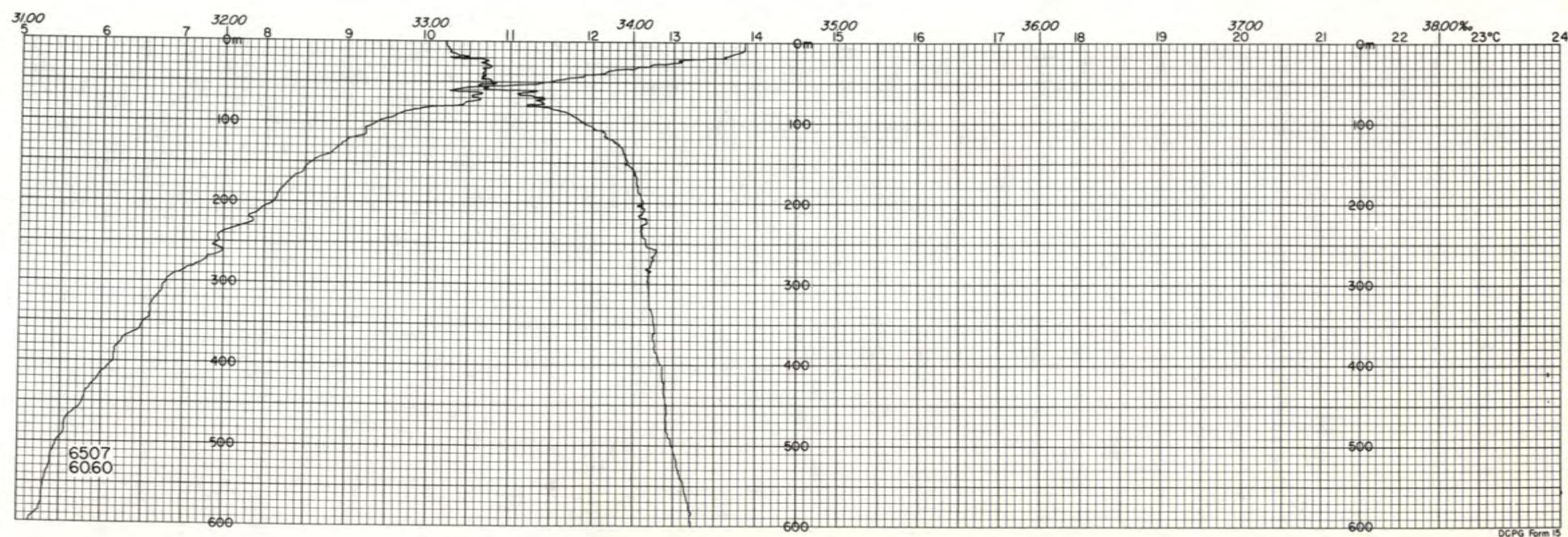
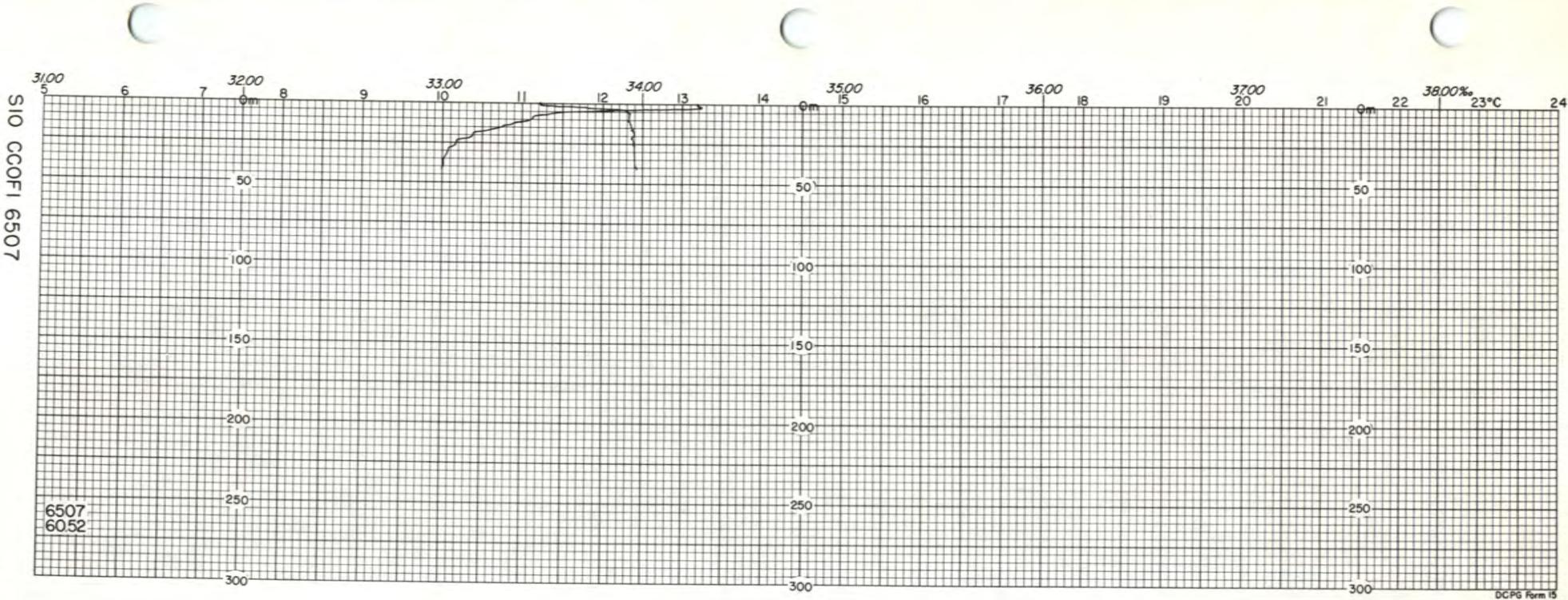
| OBSERVED LEVELS OF DEPTH   |         |       |                 |          |                 |       | STANDARD LEVELS CF DEPTH |                            |         |                 |                 |       |       |               |      |
|--|---------|-------|-----------------|----------|-----------------|-------|--------------------------|----------------------------|---------|-----------------|-----------------|-------|-------|---------------|------|
| INPUT  |         |       |                 | COMPUTED |                 |       | INPUT                    |                            |         |                 | COMPUTED        |       |       |               |      |
| Z  | T       | S     | OXY             | PHO      | SIL             | NIT   | D*T                      | Z                          | T       | S               | OXY             | SIG*T | D*T   | EE            |      |
| <b>130.50</b>  |         |       |                 |          |                 |       |                          |                            |         |                 |                 |       |       | <b>130.50</b> |      |
| ALEXANDER AGASSIZ, AUGUST 7 1965, 1229 1202 GCT, 25 49N 114 46W, SOUNDING 1855 FM, WIND 360 FORCE 2, WEATHER PARTLY CLOUDY, SEA MODERATE, WIRE ANGLE 10. |         |       |                 |          |                 |       |                          |                            |         |                 |                 |       |       |               |      |
| 0 21.56 34.233 5.45 0.29   | 1 0.00  | 413.1 | 0 21.57 34.23   | -        | 23.77           | 413.6 | 0                        | 10 21.56 34.223 5.04 0.30  | 1 0.00  | 413.8           | 10 21.57 34.22  | -     | 23.77 | 414.3         | .041 |
| 35 20.34 34.211 5.38 0.30  | 1 0.00  | 383.3 | 20 20.18 34.10  | -        | 24.05           | 387.3 | .082                     | 99 14.40 33.746 5.13 0.69  | 3 0.15  | 282.0           | 30 20.36 34.20  | -     | 24.08 | 384.6         | .120 |
| 50 19.90 34.30   | -       | 24.27 | 365.8           | .196     | 75 17.14 33.81  | -     | 24.59                    | 335.8                      | .284    | 100 14.49 33.75 | -               | 25.14 | 283.5 | .362          |      |
| 125 12.10 33.77  | -       | 25.64 | 236.2           | .427     | 150 11.08 33.95 | -     | 25.96                    | 205.0                      | .483    | 200 10.07 34.21 | -               | 26.34 | 169.0 | .579          |      |
| 250 9.74 34.36   | -       | 26.52 | 152.6           | .662     | 300 9.53 34.45  | -     | 26.62                    | 142.6                      | .738    | 400 8.26 34.43  | -               | 26.81 | 124.9 | .879          |      |
| 500 7.08 34.41   | -       | 26.96 | 110.1           | 1.003    | 600 6.34 34.43  | -     | 27.08                    | 99.1                       | 1.116   |                 |                 |       |       |               |      |
| <b>130.60</b>  |         |       |                 |          |                 |       |                          |                            |         |                 |                 |       |       | <b>130.60</b> |      |
| ALEXANDER AGASSIZ, AUGUST 7 1965, 0630 0547 GCT, 25 29N 115 24W, SOUNDING 2032 FM, WIND 340 FORCE 3, WEATHER CLOUDY, SEA MISSING, WIRE ANGLE 12.         |         |       |                 |          |                 |       |                          |                            |         |                 |                 |       |       |               |      |
| 0 20.68 33.822 5.35 -  | 1 0.00  | 420.1 | 0 20.73 33.85   | -        | 23.71           | 419.3 | 0                        | 10 20.46 33.835 5.43 -     | 1 0.00  | 413.5           | 10 19.98 33.78  | -     | 23.86 | 405.5         | .041 |
| 29 18.74 33.786 5.68 -   | 1 0.00  | 374.8 | 20 19.29 33.86  | -        | 24.10           | 382.7 | .081                     | 39 17.82 33.706 5.77 -     | 1 0.00  | 358.9           | 30 18.28 33.78  | -     | 24.29 | 364.3         | .118 |
| 53 17.28 33.764 5.90 -   | 1 0.00  | 342.4 | 50 17.25 33.75  | -        | 24.52           | 342.7 | .189                     | 68 15.98 33.650 5.67 -     | 1 0.00  | 321.9           | 75 15.31 33.57  | -     | 24.82 | 313.5         | .272 |
| 93 14.21 33.644 5.45 -   | 3 0.19  | 285.6 | 100 13.15 33.67 | -        | 25.35           | 263.0 | .344                     | 113 12.64 33.765 4.07 -    | 9 0.03  | 246.5           | 125 11.86 33.88 | -     | 25.77 | 223.8         | .406 |
| 133 11.48 33.850 3.55 -  | 15 0.00 | 219.3 | 150 10.71 33.98 | -        | 26.05           | 196.5 | .459                     | 152 10.88 33.952 3.02 -    | 20 0.00 | 201.4           | 200 10.69 34.42 | -     | 26.40 | 163.7         | .551 |
| 182 10.59 34.184 2.01 -  | 27 0.00 | 179.4 | 250 10.21 34.50 | -        | 26.55           | 149.8 | .632                     | 216 10.68 34.441 1.23 -    | 32 0.00 | 162.0           | 300 9.72 34.50  | -     | 26.63 | 141.9         | .708 |
| 245 10.30 34.472 .85 -   | 34 0.00 | 153.3 | 400 8.37 34.45  | -        | 26.81           | 125.0 | .848                     | 294 9.78 34.489 .75 -      | 39 0.00 | 143.6           | 500 7.14 34.42  | -     | 26.96 | 110.1         | .973 |
| 348 9.00 34.441 .67 -  | 41 0.00 | 135.0 | 600 6.44 34.44  | -        | 27.07           | 99.6  | 1.086                    | 431 7.91 34.407 .43 -      | 52 0.00 | 121.6           |                 |       |       |               |      |
| 515 6.78 34.396 .44 -  | 58 0.00 | 107.2 |                 |          |                 |       |                          | 598 6.23 34.435 .37 -      | 72 0.01 | 97.4            |                 |       |       |               |      |
| <b>130.70</b>  |         |       |                 |          |                 |       |                          |                            |         |                 |                 |       |       | <b>130.70</b> |      |
| ALEXANDER AGASSIZ, AUGUST 7 1965, 0108 0034 GCT, 25 09N 116 01.5W, SOUNDING 2042 FM, WIND 340 FORCE 1, WEATHER CLOUDY, SEA SLIGHT, WIRE ANGLE 02.        |         |       |                 |          |                 |       |                          |                            |         |                 |                 |       |       |               |      |
| 0 21.22 34.008 5.34 0.31   | 0 0.00  | 420.5 | 0 21.26 34.04   | -        | 23.71           | 419.2 | 0                        | 10 20.76 34.017 5.42 0.28  | 0 0.00  | 408.0           | 10 20.73 34.06  | -     | 23.87 | 404.1         | .041 |
| 35 20.42 34.236 5.45 0.29  | 0 0.00  | 383.5 | 20 20.78 34.27  | -        | 24.02           | 390.2 | .081                     | 100 15.38 33.773 5.74 0.38 | 1 0.00  | 300.2           | 30 20.62 34.29  | -     | 24.08 | 384.6         | .120 |
| 50 19.26 34.08   | -       | 24.27 | 366.0           | .195     | 75 18.02 33.91  | -     | 24.45                    | 348.7                      | .285    | 100 15.92 33.75 | -               | 24.82 | 313.3 | .368          |      |
| 125 13.27 33.76  | -       | 25.40 | 258.7           | .441     | 150 11.52 33.83 | -     | 25.79                    | 221.5                      | .502    | 150 9.97 34.17  | -               | 26.33 | 170.3 | .601          |      |
| 200 9.87 34.38   | -       | 26.51 | 153.2           | .685     | 250 9.34 34.48  | -     | 26.68                    | 137.4                      | .760    | 300 8.29 34.46  | -               | 26.83 | 123.1 | .897          |      |
| 400 7.42 34.45   | -       | 26.95 | 111.6           | 1.022    | 500 6.54 34.45  | -     | 27.07                    | 100.1                      | 1.136   | 600 6.54 34.45  | -               |       |       |               |      |
| <b>130.80</b>  |         |       |                 |          |                 |       |                          |                            |         |                 |                 |       |       | <b>130.80</b> |      |
| ALEXANDER AGASSIZ, AUGUST 6 1965, 2004 1935 GCT, 24 49N 116 39W, SOUNDING 2082 FM, WIND 360 FORCE 2, WEATHER PARTLY CLOUDY, SEA SLIGHT, WIRE ANGLE 05.   |         |       |                 |          |                 |       |                          |                            |         |                 |                 |       |       |               |      |
| 0 21.75 34.365 5.25 0.18   | 0 0.00  | 408.5 | 0 21.82 34.39   | -        | 23.83           | 408.6 | 0                        | 10 21.48 34.361 5.33 0.15  | 1 0.00  | 401.7           | 10 21.54 34.40  | -     | 23.91 | 400.5         | .040 |
| 50 20.44 34.329 5.46 0.17  | 0 0.00  | 377.2 | 20 21.43 34.40  | -        | 23.94           | 397.6 | .080                     | 75 18.28 34.044 - -        | 0 0.00  | 345.1           | 30 21.00 34.39  | -     | 24.05 | 387.2         | .120 |
| 90 17.74 34.035 - -  | - -     | 333.2 | 50 20.70 34.37  | -        | 24.12           | 380.9 | .197                     | 100 16.78 33.962 5.60 0.26 | 0 0.00  | 316.7           | 75 18.51 34.09  | -     | 24.47 | 347.2         | .288 |
| 100 17.30 34.00  | -       | 24.70 | 325.6           | .373     | 125 14.80 33.78 | -     | 25.10                    | 287.6                      | .451    | 150 12.63 33.80 | -               | 25.56 | 243.7 | .518          |      |
| 200 10.76 34.13  | -       | 26.16 | 186.3           | .628     | 250 9.87 34.20  | -     | 26.37                    | 166.5                      | .718    | 300 9.38 34.36  | -               | 26.58 | 146.9 | .799          |      |
| 400 8.17 34.42   | -       | 26.81 | 124.3           | .941     | 500 7.42 34.47  | -     | 26.96                    | 110.2                      | 1.066   | 600 6.54 34.47  | -               | 27.09 | 98.6  | 1.179         |      |

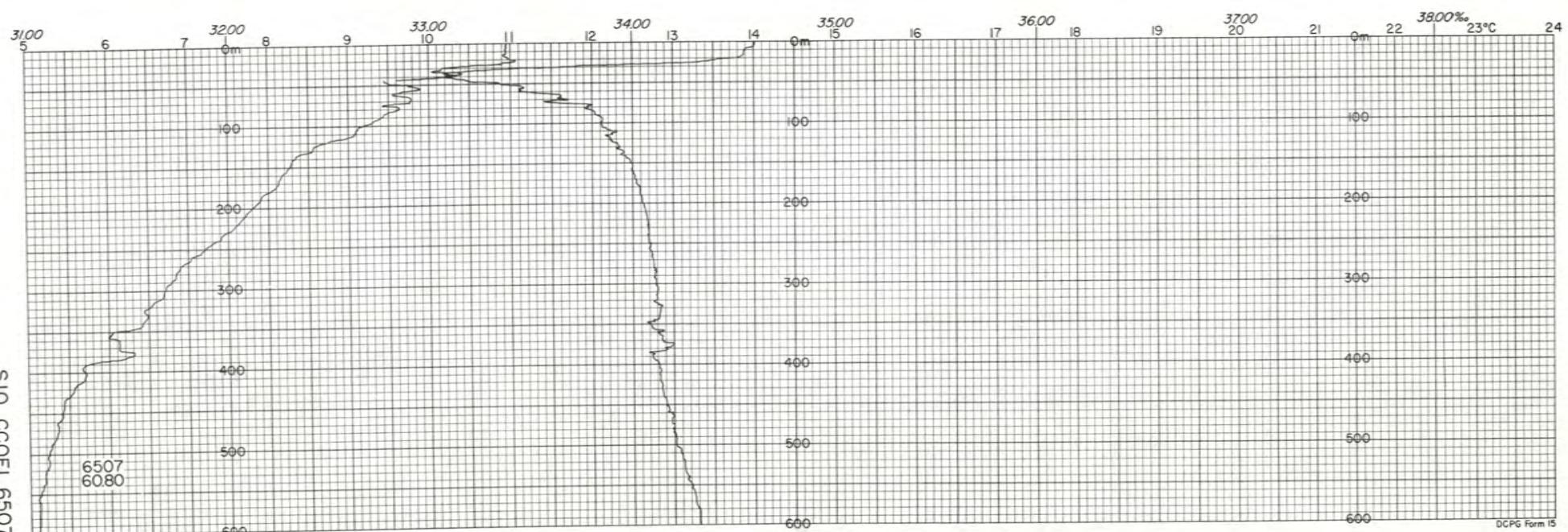
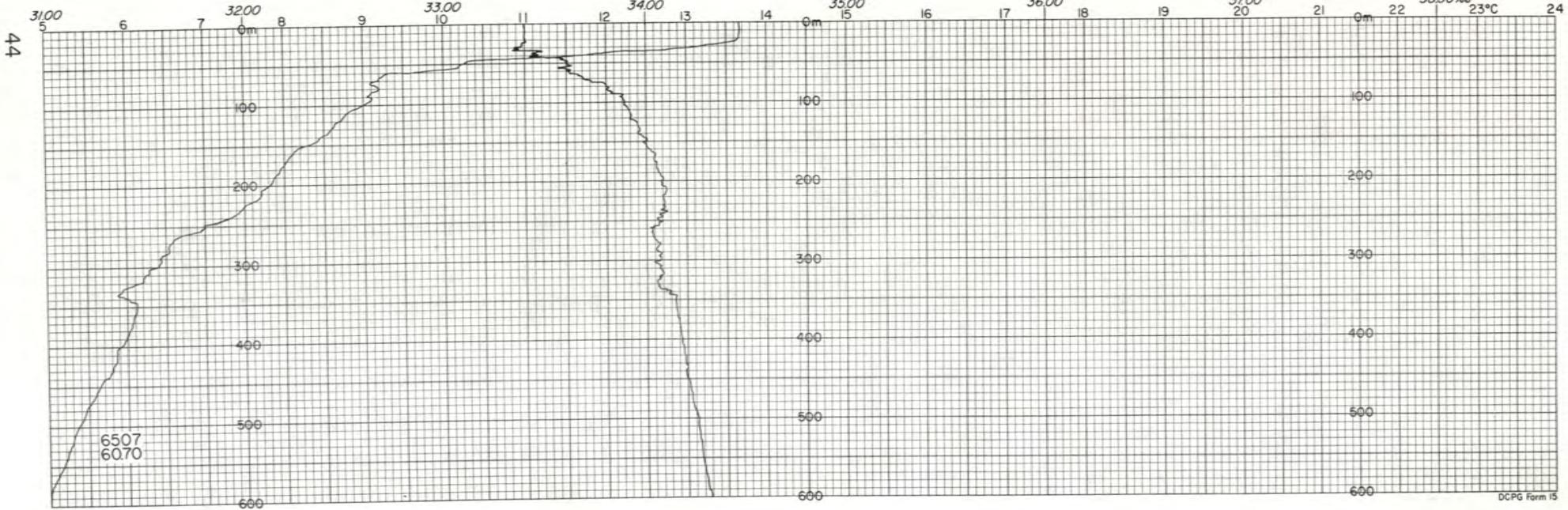
| O B S E R V E D L E V E L S O F D E P T H  |       |        |                 |       |       | S T A N D A R D L E V E L S C F D E P T H |       |     |                 |       |       |         |       |       |
|--|-------|--------|-----------------|-------|-------|---|-------|-----|-----------------|-------|-------|---------|-------|-------|
| I N P U T  |       |        | C O M P U T E D |       |       | I N P U T                                 |       |     | C O M P U T E D |       |       |         |       |       |
| Z  | T     | S      | O X Y           | P H O | S I L | N I T                                     | D * T | Z   | T               | S     | O X Y | S I G T | D * T | D D   |
| <b>130.90</b>  |       |        |                 |       |       |   |       |     |                 |       |       |         |       |       |
| ALEXANDER AGASSIZ, AUGUST 6 1965, 1518 1451 GCT, 24 29N 117 18W, SOUNDING 2075 FM, WIND 360 FORCE 2, WEATHER PARTLY CLOUDY, SEA MODERATE, WIRE ANGLE 01. |       |        |                 |       |       |   |       |     |                 |       |       |         |       |       |
| 0  | 21.87 | 34.332 | 5.17            | 0.24  | 1     | 0.00                                      | 414.1 | 0   | 21.94           | 34.34 | -     | 23.75   | 415.4 | 0     |
| 10   | 21.87 | 34.333 | 5.28            | 0.27  | 1     | 0.00                                      | 414.0 | 10  | 21.94           | 34.35 | -     | 23.76   | 414.7 | .042  |
| 25   | 20.88 | 34.307 | 5.37            | 0.30  | 1     | 0.00                                      | 390.1 | 20  | 21.25           | 34.30 | -     | 23.91   | 400.1 | .082  |
| 100  | 16.41 | 33.817 | 5.82            | 0.38  | 2     | 0.00                                      | 319.1 | 30  | 20.82           | 34.30 | -     | 24.03   | 389.0 | .122  |
|  |       |        |                 |       |       |   |       | 50  | 19.18           | 34.04 | -     | 24.26   | 366.9 | .198  |
|  |       |        |                 |       |       |   |       | 75  | 18.26           | 34.00 | -     | 24.46   | 347.8 | .288  |
|  |       |        |                 |       |       |   |       | 100 | 16.46           | 33.81 | -     | 24.75   | 320.7 | .372  |
|  |       |        |                 |       |       |   |       | 125 | 14.34           | 33.75 | -     | 25.17   | 280.5 | .448  |
|  |       |        |                 |       |       |   |       | 150 | 12.86           | 33.96 | -     | 25.64   | 236.3 | .513  |
|  |       |        |                 |       |       |   |       | 200 | 11.92           | 34.49 | -     | 26.23   | 180.0 | .619  |
|  |       |        |                 |       |       |   |       | 250 | 10.97           | 34.55 | -     | 26.45   | 158.8 | .707  |
|  |       |        |                 |       |       |   |       | 300 | 9.44            | 34.53 | -     | 26.70   | 135.2 | .783  |
|  |       |        |                 |       |       |   |       | 400 | 8.44            | 34.47 | -     | 26.81   | 124.5 | .920  |
|  |       |        |                 |       |       |   |       | 500 | 7.48            | 34.47 | -     | 26.95   | 111.0 | 1.045 |
|  |       |        |                 |       |       |   |       | 600 | 6.68            | 34.46 | -     | 27.06   | 101.1 | 1.160 |
| <b>130.100</b>   |       |        |                 |       |       |   |       |     |                 |       |       |         |       |       |
| ALEXANDER AGASSIZ, AUGUST 6 1965, 1022 0944 GCT, 24 09N 117 55W, SOUNDING 2080 FM, WIND 360 FORCE 3, WEATHER OVERCAST, SEA MISSING, WIRE ANGLE 03.       |       |        |                 |       |       |   |       |     |                 |       |       |         |       |       |
| 0  | 22.12 | 34.247 | 5.20            | 0.30  | 1     | 0.00                                      | 426.9 | 0   | 22.15           | 34.27 | -     | 23.64   | 426.0 | 0     |
| 10   | 22.13 | 34.240 | 5.29            | 0.31  | 1     | 0.00                                      | 427.7 | 10  | 21.95           | 34.24 | -     | 23.68   | 422.9 | .042  |
| 35   | 20.88 | 34.248 | 5.56            | 0.28  | 1     | 0.00                                      | 394.3 | 20  | 21.12           | 34.27 | -     | 23.93   | 398.9 | .084  |
| 100  | 16.59 | 34.000 | 5.70            | 0.32  | 3     | 0.00                                      | 309.7 | 30  | 21.12           | 34.28 | -     | 23.93   | 398.2 | .124  |
|  |       |        |                 |       |       |   |       | 50  | 19.33           | 34.09 | -     | 24.26   | 366.9 | .200  |
|  |       |        |                 |       |       |   |       | 75  | 17.67           | 34.01 | -     | 24.61   | 333.4 | .288  |
|  |       |        |                 |       |       |   |       | 100 | 16.45           | 33.95 | -     | 24.86   | 310.3 | .370  |
|  |       |        |                 |       |       |   |       | 125 | 13.37           | 33.76 | -     | 25.38   | 260.6 | .442  |
|  |       |        |                 |       |       |   |       | 150 | 11.73           | 33.78 | -     | 25.71   | 228.9 | .504  |
|  |       |        |                 |       |       |   |       | 200 | 9.98            | 34.10 | -     | 26.27   | 175.6 | .607  |
|  |       |        |                 |       |       |   |       | 250 | 9.46            | 34.26 | -     | 26.48   | 155.5 | .692  |
|  |       |        |                 |       |       |   |       | 300 | 8.76            | 34.34 | -     | 26.66   | 138.9 | .768  |
|  |       |        |                 |       |       |   |       | 400 | 7.83            | 34.39 | -     | 26.84   | 121.8 | .905  |
|  |       |        |                 |       |       |   |       | 500 | 7.08            | 34.45 | -     | 27.00   | 107.1 | 1.026 |
|  |       |        |                 |       |       |   |       | 600 | 6.36            | 34.46 | -     | 27.10   | 97.1  | 1.137 |
| <b>130.120</b>   |       |        |                 |       |       |   |       |     |                 |       |       |         |       |       |
| ALEXANDER AGASSIZ, AUGUST 6 1965, 0115 0035 GCT, 23 30N 119 10W, SOUNDING 2170 FM, WIND 360 FORCE 3, WEATHER CLOUDY, SEA MODERATE, WIRE ANGLE 15.        |       |        |                 |       |       |   |       |     |                 |       |       |         |       |       |
| 0  | 21.16 | 34.089 | 5.41            | 0.30  | 1     | 0.00                                      | 413.1 | 0   | 21.23           | 34.12 | -     | 23.78   | 412.7 | 0     |
| 10   | 21.16 | 34.081 | 5.49            | 0.32  | 1     | 0.00                                      | 413.7 | 10  | 21.20           | 34.12 | -     | 23.79   | 411.9 | .041  |
| 29   | 20.36 | 34.080 | 5.65            | 0.30  | 0     | 0.00                                      | 393.3 | 20  | 21.06           | 34.11 | -     | 23.82   | 409.0 | .082  |
| 39   | 20.10 | 34.084 | 5.67            | 0.29  | 0     | 0.00                                      | 386.4 | 30  | 20.45           | 34.12 | -     | 23.99   | 392.6 | .123  |
| 53   | 18.82 | 33.962 | 5.83            | 0.29  | 1     | 0.00                                      | 363.9 | 50  | 19.43           | 34.04 | -     | 24.20   | 373.0 | .199  |
| 68   | 17.76 | 33.838 | 6.08            | 0.30  | 1     | 0.00                                      | 348.0 | 75  | 17.62           | 33.88 | -     | 24.53   | 341.7 | .289  |
| 92   | 16.84 | 33.882 | 6.01            | 0.30  | 1     | 0.00                                      | 323.9 | 100 | 15.73           | 33.80 | -     | 24.91   | 305.6 | .371  |
| 112  | 15.04 | 33.746 | 5.72            | 0.41  | 2     | 0.01                                      | 295.0 | 125 | 13.61           | 33.72 | -     | 25.30   | 268.2 | .443  |
| 131  | 13.32 | 33.703 | 5.27            | 0.80  | 5     | 0.02                                      | 263.9 | 150 | 11.88           | 33.81 | -     | 25.71   | 229.3 | .506  |
| 150  | 11.94 | 33.787 | 4.19            | 1.31  | 11    | 0.02                                      | 232.1 | 200 | 10.22           | 34.11 | -     | 26.24   | 178.8 | .610  |
| 180  | 10.55 | 33.926 | 3.41            | 1.79  | 19    | 0.00                                      | 197.8 | 250 | 9.89            | 34.34 | -     | 26.48   | 156.4 | .696  |
| 214  | 9.94  | 34.145 | 2.40            | 2.23  | 27    | 0.00                                      | 171.7 | 300 | 9.13            | 34.36 | -     | 26.62   | 143.0 | .774  |
| 243  | 9.84  | 34.288 | -               | 2.50  | 31    | -   | 159.5 | 400 | 7.61            | 34.32 | -     | 26.82   | 123.9 | .914  |
| 292  | 9.18  | 34.337 | 1.25            | 2.70  | 37    | -   | 145.5 | 500 | 6.85            | 34.40 | -     | 26.99   | 107.8 | 1.037 |
| 346  | 8.04  | 34.281 | 1.11            | 2.85  | 41    | -   | 132.8 | 600 | 6.31            | 34.45 | -     | 27.10   | 97.2  | 1.147 |
| 430  | 7.29  | 34.350 | .69             | 3.14  | 54    | -   | 117.3 |     |                 |       |       |         |       |       |
| 514  | 6.58  | 34.388 | .50             | 3.27  | 63    | -   | 105.2 |     |                 |       |       |         |       |       |
| 599  | 6.16  | 34.435 | .45             | 3.32  | 67    | -   | 96.5  |     |                 |       |       |         |       |       |
| <b>137.23</b>  |       |        |                 |       |       |   |       |     |                 |       |       |         |       |       |
| ALEXANDER AGASSIZ, AUGUST 8 1965, 1308 1255 GCT, 25 34.5N 112 19W, SOUNDING 40 FM, WIND CALM, WEATHER OVERCAST, SEA SLIGHT, WIRE ANGLE 01.               |       |        |                 |       |       |   |       |     |                 |       |       |         |       |       |
| 0  | 25.42 | 34.778 | 5.33            | 0.45  | 1     | 0.00                                      | 481.0 | 0   | 25.61           | 34.82 | -     | 23.04   | 483.6 | 0     |
| 10   | 25.42 | 34.776 | 4.92            | 0.51  | 1     | 0.00                                      | 481.2 | 10  | 25.54           | 34.81 | -     | 23.05   | 482.3 | .048  |
| 20   | 24.94 | 34.780 | 5.16            | 0.50  | 1     | 0.00                                      | 466.9 | 20  | 25.03           | 34.82 | -     | 23.22   | 466.6 | .096  |
| 60   | 18.23 | 34.598 | 3.25            | 1.54  | 8     | 0.00                                      | 303.6 | 30  | 21.85           | 34.41 | -     | 23.83   | 407.9 | .140  |
|  |       |        |                 |       |       |   |       | 50  | 18.83           | 34.60 | -     | 24.78   | 317.8 | .212  |

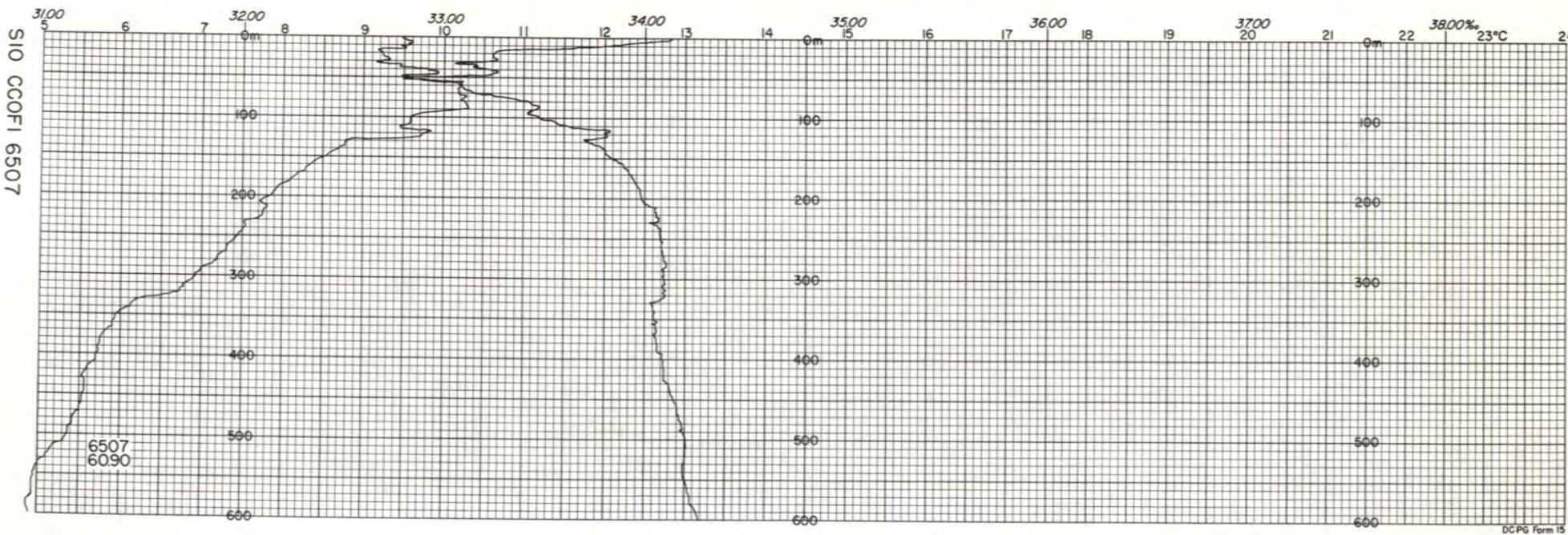
| O B S E R V E D    L E V E L S    O F    D E P T H  |                                 |  |                                     |  |                                     |  | S T A N D A R D    L E V E L S    O F    D E P T H |  |                                     |  |                                      |   |                                      |   |                                      |  |                                      |  |                                      |  |                                      |  |                                     |                                      |                                     |                                      |                                     |                                      |                                     |                                     |  |                                     |  |                                     |  |
|---|---------------------------------|--|-------------------------------------|--|-------------------------------------|--|--|--|-------------------------------------|--|--------------------------------------|---|--------------------------------------|---|--------------------------------------|--|--------------------------------------|--|--------------------------------------|--|--------------------------------------|--|-------------------------------------|--------------------------------------|-------------------------------------|--------------------------------------|-------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|--|-------------------------------------|--|-------------------------------------|--|
| I N P U T   |                                 |  |                                     | C O M P U T E D                        |                                     |  | I N P U T  |  |                                     |  | C O M P U T E D                      |   |                                      |   |                                      |  |                                      |  |                                      |  |                                      |  |                                     |                                      |                                     |                                      |                                     |                                      |                                     |                                     |  |                                     |  |                                     |  |
| Z   | T                               | S                                      | O X Y                               | P H O                                  | S I L                               | N I T                                    | D * T  | Z                                      | T                                   | S  | O X Y                                | S I G * T                               | D * T                                | C C                                     |                                      |  |                                      |  |                                      |  |                                      |  |                                     |                                      |                                     |                                      |                                     |                                      |                                     |                                     |  |                                     |  |                                     |  |
| 137.30  |                                 |  |                                     |  |                                     |  | CCOFI CRUISE 6507                                  |  |                                     |  |                                      |   |                                      | 137.30                                  |                                      |  |                                      |  |                                      |  |                                      |  |                                     |                                      |                                     |                                      |                                     |                                      |                                     |                                     |  |                                     |  |                                     |  |
| ALEXANDER AGASSIZ, AUGUST 8 1965, 1641 1622 GCT, 25 20N 112 46W, SOUNDING 181 FM, WIND 090 FORCE 1, WEATHER CLOUDY, SEA MODERATE, WIRE ANGLE 02.  |                                 |  |                                     |  |                                     |  |  |  |                                     |  |                                      |   |                                      |   |                                      |  |                                      |  |                                      |  |                                      |  |                                     |                                      |                                     |                                      |                                     |                                      |                                     |                                     |  |                                     |  |                                     |  |
| 0 21.86 33.935 5.66 0.20 1 0.00 442.6   | 0 21.88 33.95 - - 23.48 442.0 0 | 10 21.41 33.939 5.74 0.21 2 0.00 430.4 | 10 21.28 33.82 - - 23.54 435.7 .044 | 30 17.46 33.879 5.59 0.44 3 0.00 338.1 | 20 18.65 33.88 - - 24.27 365.8 .084 | 100 12.76 34.280 1.60 2.29 23 0.00 210.9 | 30 17.37 33.88 - - 24.59 336.0 .119                | 50 15.20 33.98 - - 25.16 281.3 .161    | 50 15.20 33.98 - - 25.65 235.1 .246 | 75 13.07 34.03 - - 25.89 212.4 .303      | 100 12.88 34.29 - - 25.98 203.5 .355 | 125 12.68 34.36 - - 26.15 187.5 .405    | 150 12.61 34.56 - - 26.25 178.1 .499 | 200 12.42 34.64 - - 26.35 168.0 .588    | 250 11.99 34.67 - - 26.47 156.8 .673 | 300 11.28 34.65 - - 26.47 156.8 .673     |                                      |  |                                      |  |                                      |  |                                     |                                      |                                     |                                      |                                     |                                      |                                     |                                     |  |                                     |  |                                     |  |
| 137.40  |                                 |  |                                     |  |                                     |  | CCOFI CRUISE 6507                                  |  |                                     |  |                                      |   |                                      | 137.40                                  |                                      |  |                                      |  |                                      |  |                                      |  |                                     |                                      |                                     |                                      |                                     |                                      |                                     |                                     |  |                                     |  |                                     |  |
| ALEXANDER AGASSIZ, AUGUST 8 1965, 2244 2200 GCT, 25 00N 113 23.5W, SOUNDING 1605 FM, WIND 180 FORCE 1, WEATHER CLOUDY, SEA ROUGH, WIRE ANGLE 02.  |                                 |  |                                     |  |                                     |  |  |  |                                     |  |                                      |   |                                      |   |                                      |  |                                      |  |                                      |  |                                      |  |                                     |                                      |                                     |                                      |                                     |                                      |                                     |                                     |  |                                     |  |                                     |  |
| 0 23.52 33.997 5.73 0.20 2 0.00 483.1   | 0 23.47 33.99 - - 23.05 482.2 0 | 10 22.32 33.983 5.30 0.19 2 0.00 451.3 | 10 22.42 34.02 - - 23.38 451.4 .047 | 50 15.28 33.875 4.79 0.79 4 0.83 290.6 | 20 20.05 33.86 - - 23.90 401.4 .089 | 80 12.84 33.949 - - - 0.05 236.7         | 30 18.00 34.04 - - 24.56 338.8 .126                | 90 12.56 34.044 - - - 0.01 224.5       | 50 15.35 33.87 - - 25.04 292.5 .190 | 100 12.88 34.225 1.88 2.18 18 0.00 217.2 | 75 13.72 34.01 - - 25.50 249.1 .258  | 100 12.97 34.24 - - 25.83 217.8 .317    | 125 12.34 34.42 - - 26.09 192.8 .369 | 150 12.77 34.73 - - 26.25 178.0 .416    | 200 11.95 34.72 - - 26.40 163.6 .504 | 250 11.39 34.66 - - 26.46 158.0 .587     | 300 11.19 34.72 - - 26.54 150.1 .667 | 400 9.88 34.60 - - 26.68 137.0 .818      | 500 8.23 34.52 - - 26.88 117.8 .955  | 600 6.80 34.45 - - 27.03 103.4 1.074     |                                      |  |                                     |                                      |                                     |                                      |                                     |                                      |                                     |                                     |  |                                     |  |                                     |  |
| 137.50  |                                 |  |                                     |  |                                     |  | CCOFI CRUISE 6507                                  |  |                                     |  |                                      |   |                                      | 137.50                                  |                                      |  |                                      |  |                                      |  |                                      |  |                                     |                                      |                                     |                                      |                                     |                                      |                                     |                                     |  |                                     |  |                                     |  |
| ALEXANDER AGASSIZ, AUGUST 9 1965, 0418 0346 GCT, 24 40N 114 02W, SOUNDING 2060 FM, WIND 200 FORCE 3, WEATHER FOG, SEA ROUGH, WIRE ANGLE 00.       |                                 |  |                                     |  |                                     |  |  |  |                                     |  |                                      |   |                                      |   |                                      |  |                                      |  |                                      |  |                                      |  |                                     |                                      |                                     |                                      |                                     |                                      |                                     |                                     |  |                                     |  |                                     |  |
| 0 21.72 33.965 5.72 0.28 1 0.00 436.7   | 0 21.55 34.00 - - 23.60 429.7 0 | 10 20.89 33.962 5.26 0.32 2 0.00 415.3 | 10 20.93 33.98 - - 23.76 415.0 .042 | 50 16.76 33.826 5.90 0.37 2 0.00 326.2 | 20 20.48 33.98 - - 23.88 403.5 .083 | 80 13.50 33.857 - - - 0.05 256.0         | 30 19.58 33.96 - - 24.10 382.5 .123                | 90 12.62 33.911 - - - 0.03 235.4       | 50 16.68 33.76 - - 24.66 329.2 .194 | 100 12.32 33.991 2.83 1.81 18 0.01 224.0 | 75 14.07 33.85 - - 25.30 267.7 .269  | 100 12.50 33.99 - - 25.73 227.3 .332    | 125 11.83 34.26 - - 26.07 195.3 .385 | 150 11.67 34.40 - - 26.20 182.1 .433    | 200 11.32 34.63 - - 26.45 159.0 .520 | 250 10.67 34.62 - - 26.56 148.6 .600     | 300 10.07 34.62 - - 26.66 138.6 .675 | 400 8.77 34.56 - - 26.83 122.8 .812      | 500 7.96 34.54 - - 26.94 112.4 .938  | 600 6.77 34.49 - - 27.07 100.1 1.053     |                                      |  |                                     |                                      |                                     |                                      |                                     |                                      |                                     |                                     |  |                                     |  |                                     |  |
| 137.60  |                                 |  |                                     |  |                                     |  | CCOFI CRUISE 6507                                  |  |                                     |  |                                      |   |                                      | 137.60                                  |                                      |  |                                      |  |                                      |  |                                      |  |                                     |                                      |                                     |                                      |                                     |                                      |                                     |                                     |  |                                     |  |                                     |  |
| ALEXANDER AGASSIZ, AUGUST 9 1965, 1013 0933 GCT, 24 20N 114 39.5W, SOUNDING 1950 FM, WIND 060 FORCE 1, WEATHER DRIZZLE, SEA ROUGH, WIRE ANGLE 28. |                                 |  |                                     |  |                                     |  |  |  |                                     |  |                                      |   |                                      |   |                                      |  |                                      |  |                                      |  |                                      |  |                                     |                                      |                                     |                                      |                                     |                                      |                                     |                                     |  |                                     |  |                                     |  |
| 1 21.10 33.937 5.72 0.36 1 0.00 422.5   | 0 21.35 33.96 - - 23.63 427.4 0 | 9 20.80 33.935 5.36 0.31 2 0.00 415.0  | 10 20.68 33.93 - - 23.79 412.3 .042 | 26 19.83 33.894 5.79 0.34 2 0.00 393.5 | 20 20.41 33.91 - - 23.84 406.8 .083 | 35 18.55 33.866 5.90 0.34 2 0.00 364.4   | 30 19.78 33.88 - - 23.99 393.3 .123                | 43 16.14 33.761 5.97 0.42 3 0.00 317.3 | 50 15.70 33.74 - - 24.87 309.4 .194 | 57 14.32 33.740 5.19 0.80 5 0.23 280.8   | 75 13.14 33.90 - - 25.53 246.0 .263  | 67 13.74 33.948 3.69 1.49 11 0.03 254.0 | 100 11.80 33.95 - - 25.83 217.6 .322 | 85 12.65 34.015 2.66 1.84 17 0.03 228.3 | 125 10.63 34.11 - - 26.17 185.6 .373 | 105 10.90 33.971 3.13 1.84 20 0.01 200.4 | 150 10.62 34.31 - - 26.33 170.6 .418 | 120 10.55 34.075 2.66 2.07 23 0.01 186.8 | 200 10.51 34.50 - - 26.49 154.8 .502 | 144 10.20 34.206 2.33 2.30 29 0.00 171.4 | 250 10.32 34.58 - - 26.59 145.7 .579 | 166 11.02 34.509 1.10 2.65 31 0.00 162.7 | 300 9.71 34.55 - - 26.67 138.0 .653 | 190 10.96 34.588 .62 2.76 30 - 155.9 | 400 8.48 34.54 - - 26.86 119.9 .789 | 222 10.46 34.579 .60 2.83 36 - 148.1 | 500 7.27 34.51 - - 27.02 105.2 .909 | 271 10.03 34.613 .45 3.01 39 - 138.5 | 600 6.36 34.49 - - 27.12 94.9 1.017 | 334 9.09 34.546 .37 3.12 45 - 128.6 |  | 400 8.30 34.514 .36 3.17 49 - 119.2 |  | 474 7.32 34.477 .43 3.17 59 - 108.3 |  |

| O B S E R V E D   L E V E L S   O F   D E P T H   |   |   |       |                 |       |       | S T A N D A R D   L E V E L S   O F   D E P T H |   |   |   |                 |         |        |     |
|---|---|---|-------|-----------------|-------|-------|---|---|---|---|-----------------|---------|--------|-----|
| I N P U T   |   |   |       | C O M P L T E D |       |       | I N P U T                                       |   |   |   | C O M P L T E D |         |        |     |
| Z   | T | S | C X Y | P H O           | S I L | N I T | D * T   | Z | T | S | C X Y           | S I G T | D * T  | D C |
| 137.70  |   |   |       |                 |       |       | CCOFI CRUISE 6507                               |   |   |   |                 |         | 137.70 |     |
| ALEXANDER AGASSIZ, AUGUST 9 1965, 19 1506 GCT, 23 55.5N 115 18W, SOUNDING 2030 FM, WIND 310 FORCE 1, WEATHER CLOUDY, SEA MISSING, WIRE ANGLE 01.        |   |   |       |                 |       |       |   |   |   |   |                 |         |        |     |
| 0 22.48 34.014 5.67 0.21 2 0.00 453.4   |   |   |       |                 |       |       | C 22.50 34.03 - 23.36 452.8 0                   |   |   |   |                 |         |        |     |
| 10 22.27 34.029 4.42 0.18 2 0.00 446.7  |   |   |       |                 |       |       | 10 22.38 34.04 - 23.40 448.8 .045               |   |   |   |                 |         |        |     |
| 25 18.52 33.849 5.85 0.24 2 0.00 364.9  |   |   |       |                 |       |       | 20 21.45 33.98 - 23.62 428.5 .089               |   |   |   |                 |         |        |     |
| 100 12.21 34.306 1.58 2.22 23 0.00 198.8  |   |   |       |                 |       |       | 30 16.87 33.60 - 24.49 345.1 .128               |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 50 14.19 33.90 - 25.32 266.5 .189               |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 75 13.14 34.14 - 25.72 228.3 .251               |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 100 12.30 34.34 - 26.04 197.9 .305              |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 125 12.33 34.60 - 26.23 179.3 .353              |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 150 11.96 34.67 - 26.36 167.4 .397              |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 200 11.36 34.68 - 26.48 156.0 .480              |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 250 10.67 34.65 - 26.58 146.4 .559              |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 300 10.07 34.62 - 26.66 138.6 .633              |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 400 8.92 34.55 - 26.80 125.8 .772               |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 500 7.60 34.48 - 26.95 111.9 .859               |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 600 6.66 34.47 - 27.07 100.1 1.014              |   |   |   |                 |         |        |     |
| 137.80  |   |   |       |                 |       |       | CCOFI CRUISE 6507                               |   |   |   |                 |         | 137.80 |     |
| ALEXANDER AGASSIZ, AUGUST 9 1965, 2013 1946 GCT, 23 40N 115 55.5W, SOUNDING 2082 FM, WIND 220 FORCE 1, WEATHER CLEAR, SEA MODERATE, WIRE ANGLE 03.      |   |   |       |                 |       |       |   |   |   |   |                 |         |        |     |
| 0 23.19 34.072 5.55 0.20 2 0.00 468.6   |   |   |       |                 |       |       | 0 21.94 34.09 - 23.56 433.5 0                   |   |   |   |                 |         |        |     |
| 10 21.16 34.059 5.21 0.20 2 0.00 415.3  |   |   |       |                 |       |       | 10 21.42 34.09 - 23.71 419.8 .043               |   |   |   |                 |         |        |     |
| 50 19.22 34.104 5.67 0.20 2 0.00 363.2  |   |   |       |                 |       |       | 20 21.24 34.08 - 23.75 415.8 .085               |   |   |   |                 |         |        |     |
| 100 14.63 33.731 5.44 0.47 6 0.05 287.7   |   |   |       |                 |       |       | 30 20.82 34.16 - 23.92 399.2 .125               |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 50 19.51 34.13 - 24.25 368.5 .202               |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 75 17.88 33.89 - 24.47 346.9 .292               |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 100 14.85 33.74 - 25.05 291.6 .373              |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 125 12.63 33.92 - 25.65 234.9 .439              |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 150 10.73 33.94 - 26.02 199.8 .494              |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 200 9.80 34.19 - 26.37 166.1 .588               |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 250 9.90 34.42 - 26.54 150.7 .669               |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 300 9.38 34.45 - 26.65 140.2 .745               |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 400 8.27 34.44 - 26.81 124.3 .884               |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 500 - 34.45 - 26.97 109.6 1.008                 |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 600 - 1 34.46 - 27.08 99.0 1.121                |   |   |   |                 |         |        |     |
| 140.30  |   |   |       |                 |       |       | CCOFI CRUISE 6507                               |   |   |   |                 |         | 140.30 |     |
| ALEXANDER AGASSIZ, AUGUST 10 1965, 2011 1955 GCT, 24 45.5N 112 24W, SOUNDING 57 FM, WIND 270 FORCE 1, WEATHER PARTLY CLOUDY, SEA SLIGHT, WIRE ANGLE 07. |   |   |       |                 |       |       |   |   |   |   |                 |         |        |     |
| 0 27.21 34.981 4.96 0.34 2 0.00 520.1   |   |   |       |                 |       |       | 0 27.36 35.02 - 22.64 521.9 0                   |   |   |   |                 |         |        |     |
| 10 26.68 34.968 4.97 0.43 1 0.00 504.9  |   |   |       |                 |       |       | 10 26.65 34.96 - 22.82 504.6 .051               |   |   |   |                 |         |        |     |
| 50 19.28 34.465 4.80 0.97 5 - 338.5   |   |   |       |                 |       |       | 20 25.24 34.80 - 23.14 474.2 .100               |   |   |   |                 |         |        |     |
| 94 16.48 34.940 1.90 2.25 18 - 238.7  |   |   |       |                 |       |       | 30 24.93 34.70 - 23.16 472.4 .148               |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 50 19.78 34.37 - 24.36 357.7 .231               |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 75 16.82 34.69 - 25.34 264.5 .309               |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 100 16.20 34.71 - 25.50 249.3 .374              |   |   |   |                 |         |        |     |
| 140.40  |   |   |       |                 |       |       | CCOFI CRUISE 6507                               |   |   |   |                 |         | 140.40 |     |
| ALEXANDER AGASSIZ, AUGUST 10 1965, 1437 1402 GCT, 24 25.5N 113 02W, SOUNDING MISSING, WIND 250 FORCE 1, WEATHER CLOUDY, SEA SLIGHT, WIRE ANGLE 00.      |   |   |       |                 |       |       |   |   |   |   |                 |         |        |     |
| 0 23.31 34.173 5.78 0.29 2 0.00 464.6   |   |   |       |                 |       |       | C 23.37 34.17 - 23.22 466.5 0                   |   |   |   |                 |         |        |     |
| 10 22.22 34.130 5.12 0.33 2 0.00 438.0  |   |   |       |                 |       |       | 10 22.34 34.13 - 23.48 441.3 .045               |   |   |   |                 |         |        |     |
| 55 14.86 33.674 5.71 0.43 4 - 296.6   |   |   |       |                 |       |       | 20 21.35 34.00 - 23.66 424.5 .089               |   |   |   |                 |         |        |     |
| 100 13.29 34.405 1.52 2.29 22 - 211.8   |   |   |       |                 |       |       | 30 19.04 33.92 - 24.21 372.2 .129               |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 50 15.28 33.68 - 24.91 304.9 .197               |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 75 13.80 34.06 - 25.52 247.0 .266               |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 100 13.13 34.39 - 25.91 209.8 .324              |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 125 12.75 34.50 - 26.07 194.5 .375              |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 150 12.40 34.54 - 26.17 185.0 .423              |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 200 11.89 34.69 - 26.39 164.7 .513              |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 250 10.52 34.52 - 26.51 153.4 .595              |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 300 10.30 34.59 - 26.60 144.6 .673              |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 400 9.01 34.56 - 26.79 126.4 .815               |   |   |   |                 |         |        |     |
|   |   |   |       |                 |       |       | 500 7.76 34.50 - 26.94 112.6 .943               |   |   |   |                 |         |        |     |
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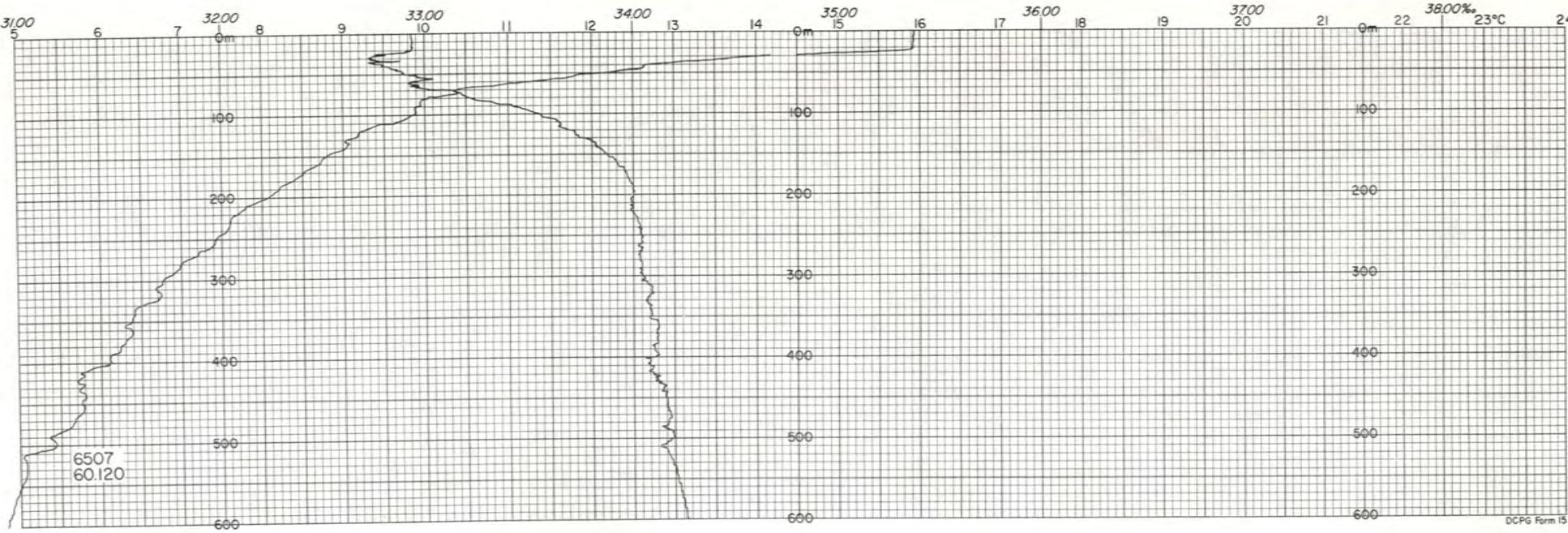
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|---|-------|--------|------|-------------------|-----|------|---|-----|-------|-------|----------|-------|-------|--------|
| INPUT   |       |        |      | COMPUTED          |     |      | INPUT   |     |       |       | COMPUTED |       |       |        |
| Z   | T     | S      | OXY  | PHO               | SIL | NIT  | D*T   | Z   | T     | S     | OXY      | SIG*T | D*T   | DD     |
| 140.50  |       |        |      | CCDFI CRUISE 6507 |     |      |   |     |       |       |          |       |       | 140.50 |
| ALEXANDER AGASSIZ, AUGUST 10 1965, 0843 0807 GCT, 24 05N 113 40W, SOUNDING 1925 FM, WIND 320 FORCE 1, WEATHER PARTLY CLOUDY, SEA MODERATE, WIRE ANGLE 07. |       |        |      |                   |     |      |   |     |       |       |          |       |       |        |
| 0   | 23.39 | 34.209 | 5.42 | 0.25              | 2   | 0.00 | 464.2   | 0   | 23.54 | 34.23 | -        | 23.22 | 466.8 | 0      |
| 10  | 22.67 | 34.190 | 5.09 | 0.26              | 1   | 0.00 | 445.8   | 10  | 22.81 | 34.20 | -        | 23.40 | 448.9 | .046   |
| 40  | 19.10 | 33.888 | 5.73 | 0.27              | 1   | 0.00 | 376.0   | 20  | 22.40 | 34.20 | -        | 23.52 | 437.8 | .090   |
| 60  | 16.62 | 33.770 | -    | -                 | -   | 0.00 | 327.1   | 30  | 21.33 | 34.07 | -        | 23.72 | 418.9 | .133   |
| 80  | 15.36 | 33.759 | -    | -                 | -   | 0.12 | 300.8   | 50  | 17.40 | 33.78 | -        | 24.50 | 343.9 | .210   |
| 99  | 13.20 | 33.721 | 4.67 | 1.00              | 8   | 0.03 | 260.2   | 75  | 15.52 | 33.77 | -        | 24.93 | 303.3 | .291   |
|   |       |        |      |                   |     |      |   | 100 | 13.28 | 33.75 | -        | 25.39 | 259.6 | .362   |
|   |       |        |      |                   |     |      |   | 125 | 11.97 | 33.86 | -        | 25.73 | 227.2 | .424   |
|   |       |        |      |                   |     |      |   | 150 | 11.10 | 34.06 | -        | 26.05 | 197.2 | .477   |
|   |       |        |      |                   |     |      |   | 200 | 11.46 | 34.58 | -        | 26.38 | 165.1 | .570   |
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|   |       |        |      |                   |     |      |   | 400 | 8.68  | 34.50 | -        | 26.80 | 125.9 | .872   |
|   |       |        |      |                   |     |      |   | 500 | 7.50  | 34.46 | -        | 26.94 | 112.0 | .999   |
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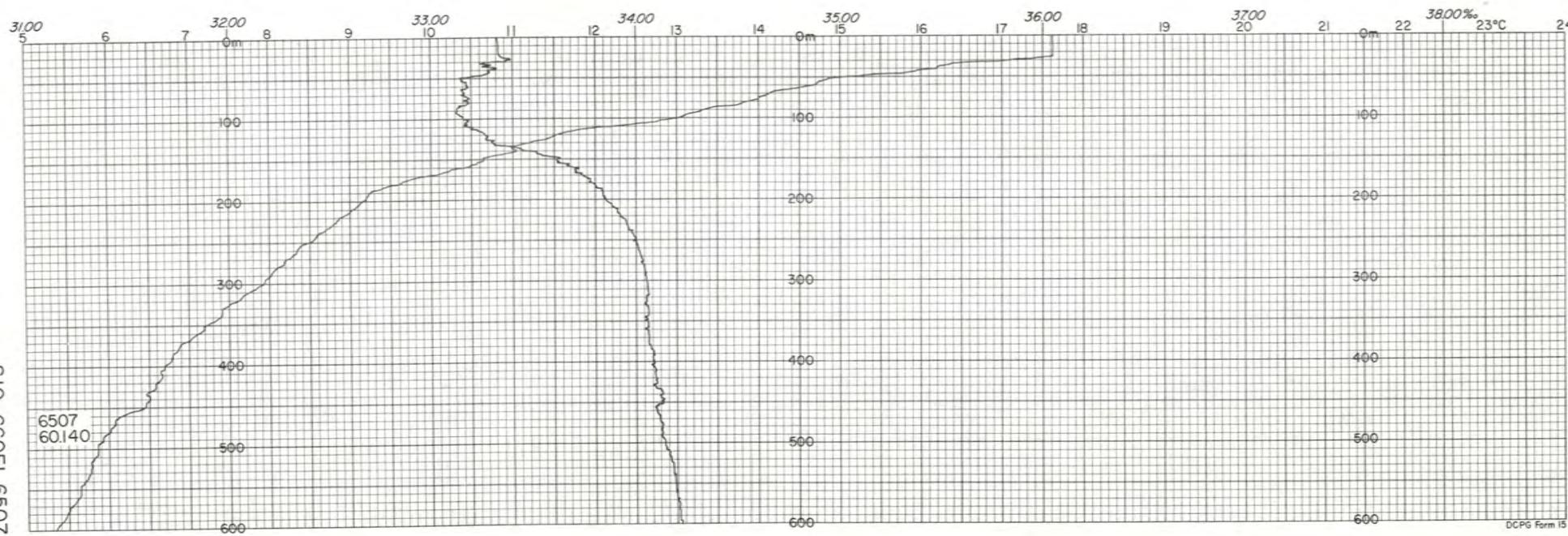


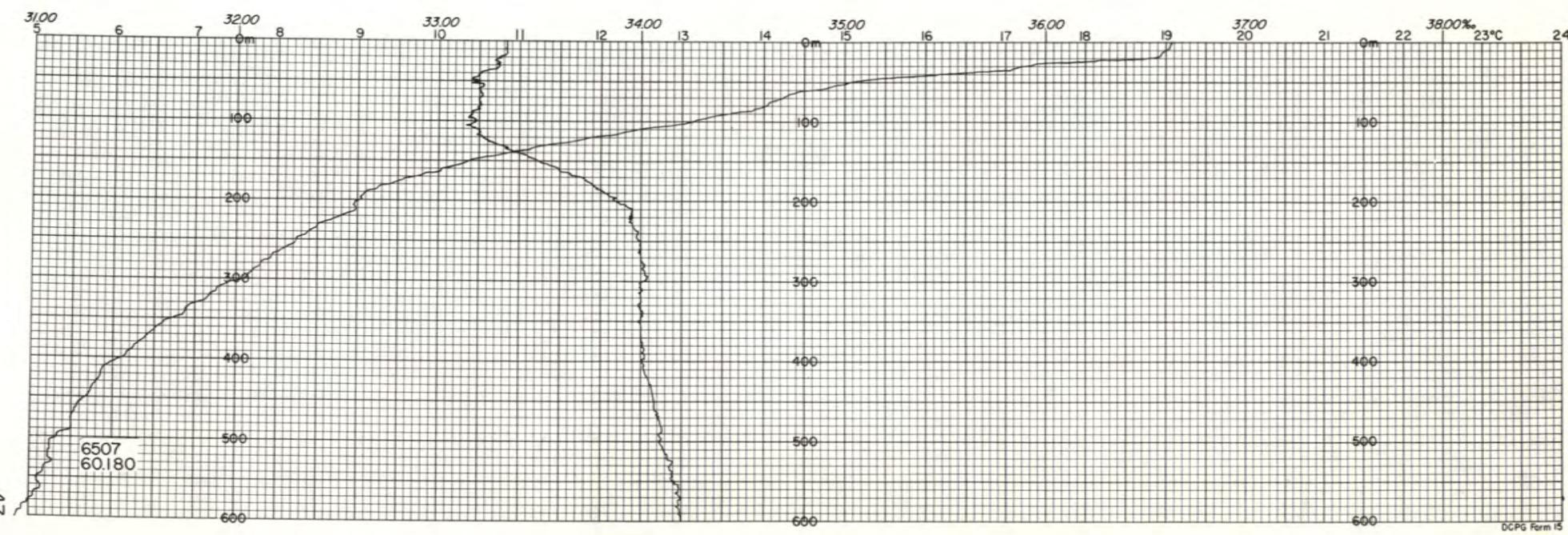
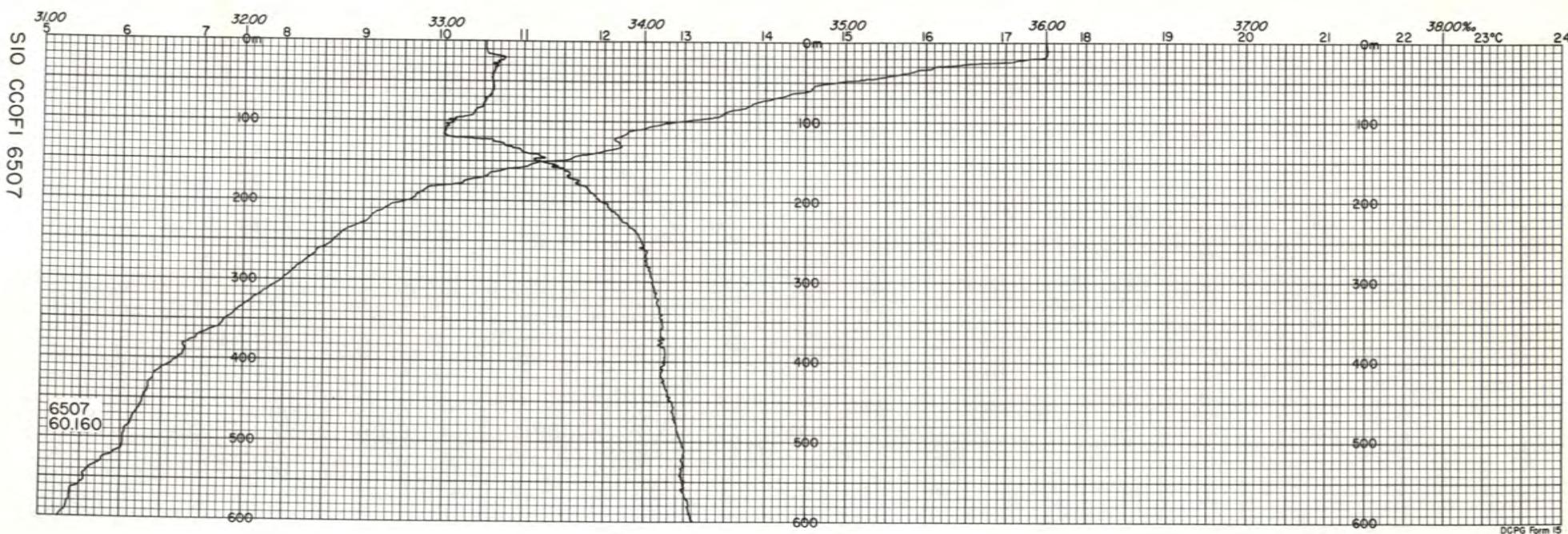


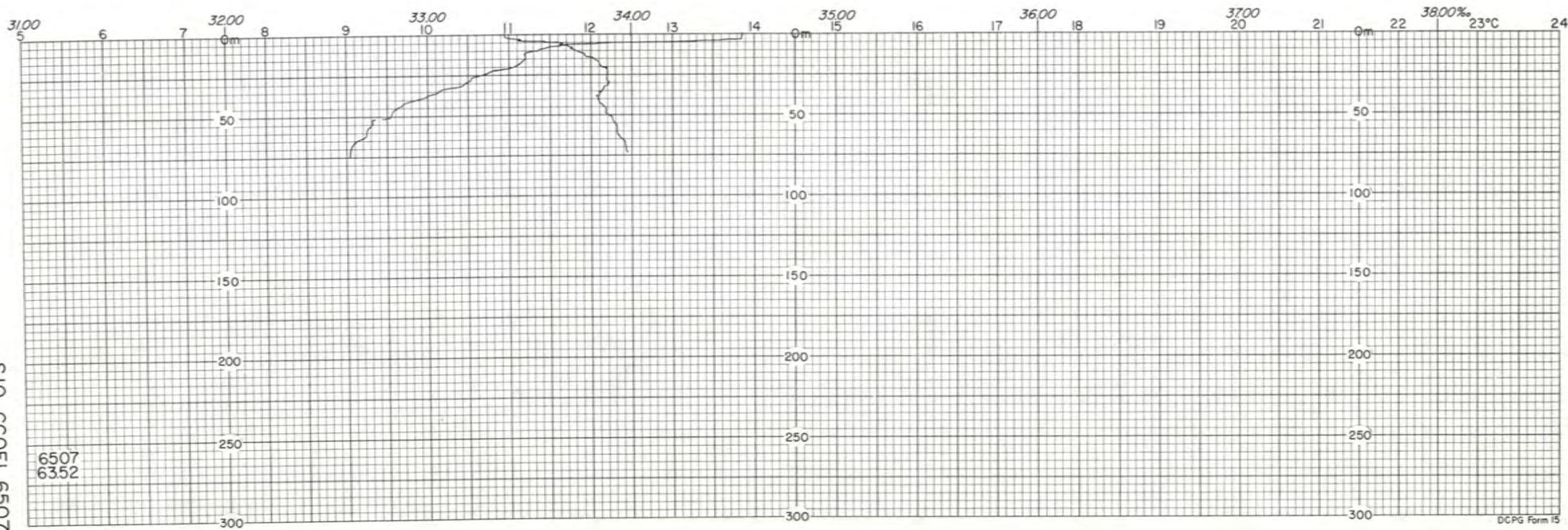
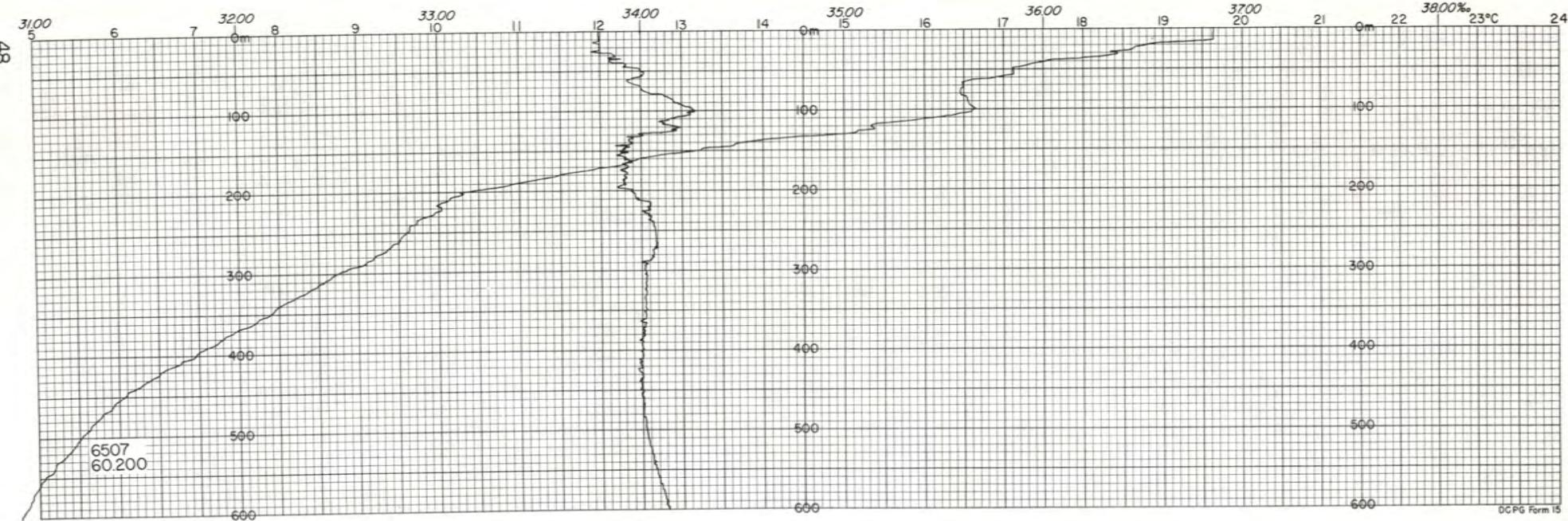
46



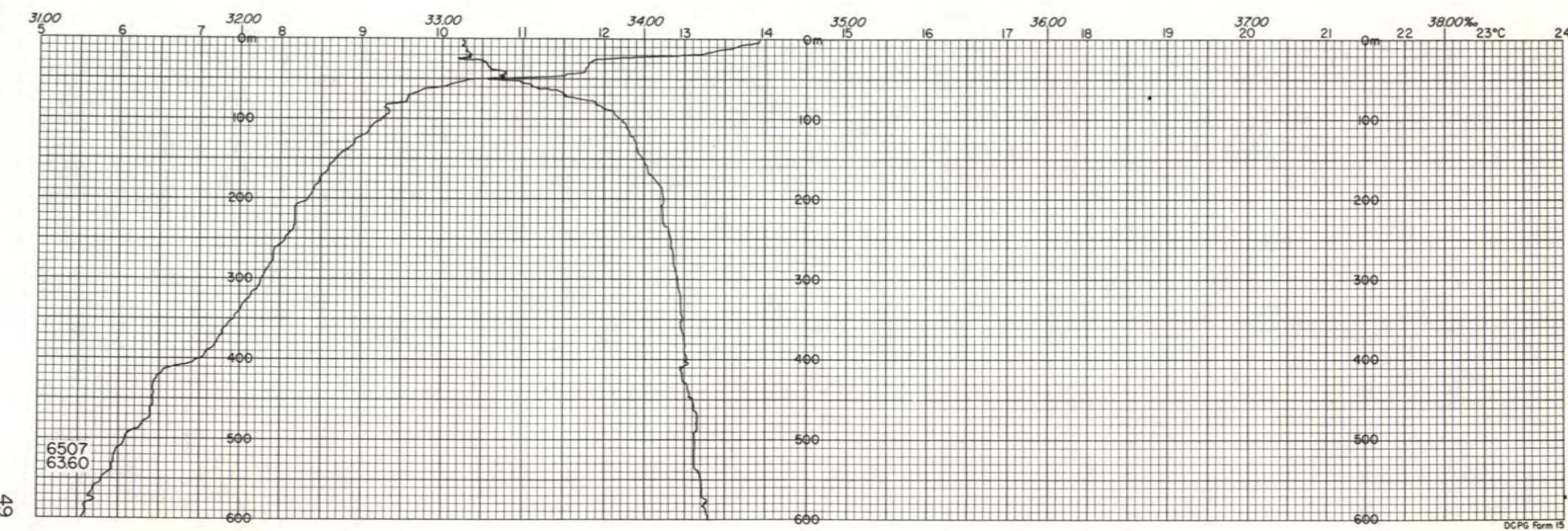
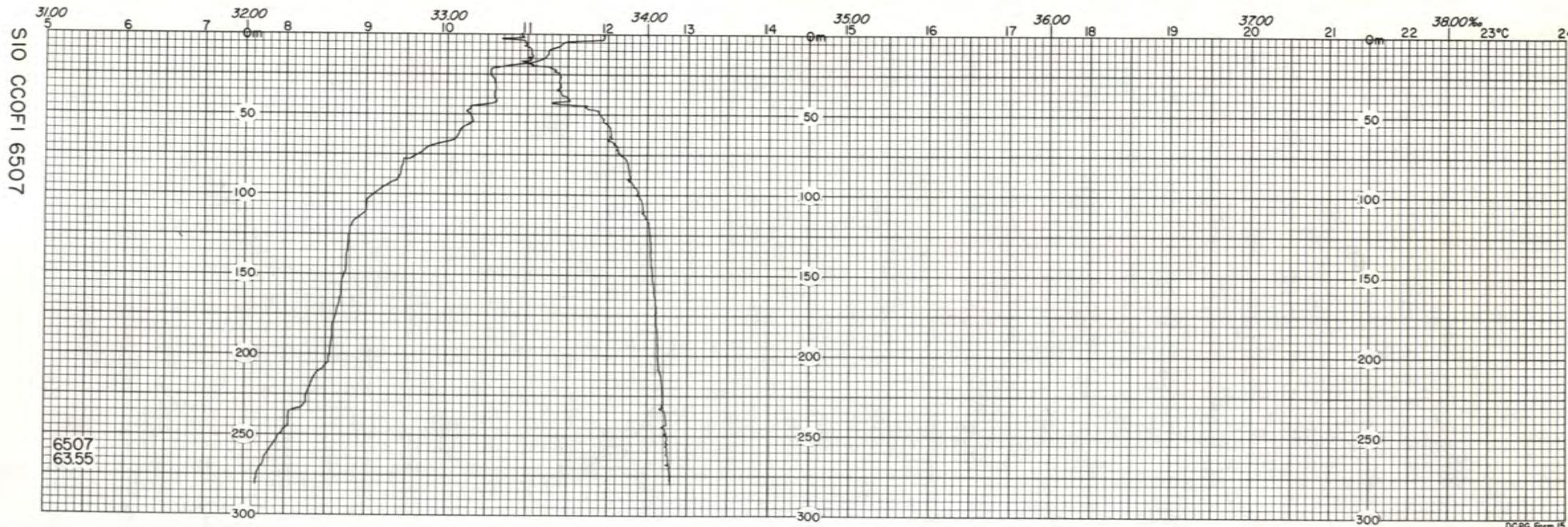
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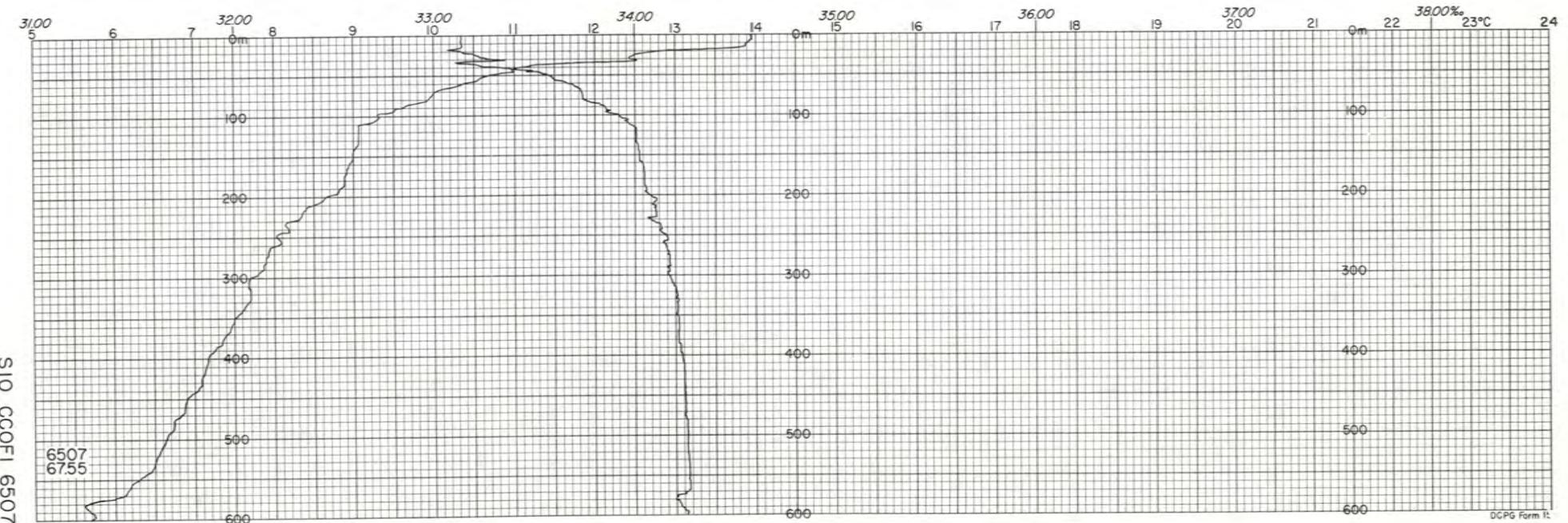
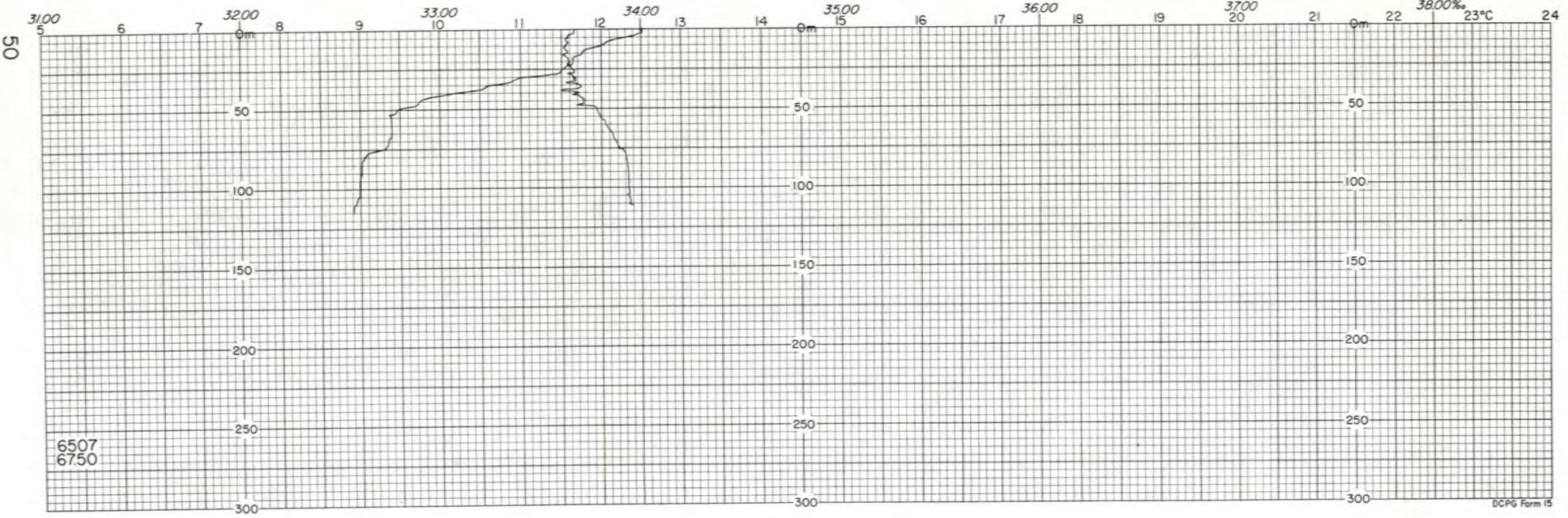




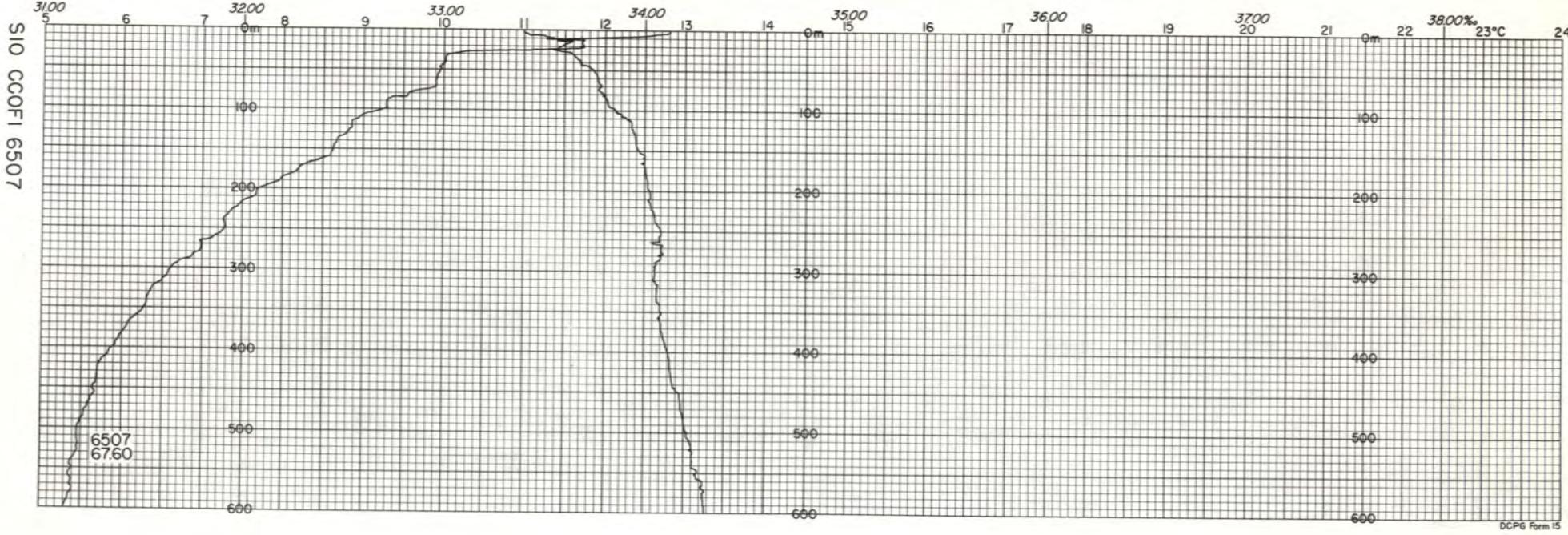
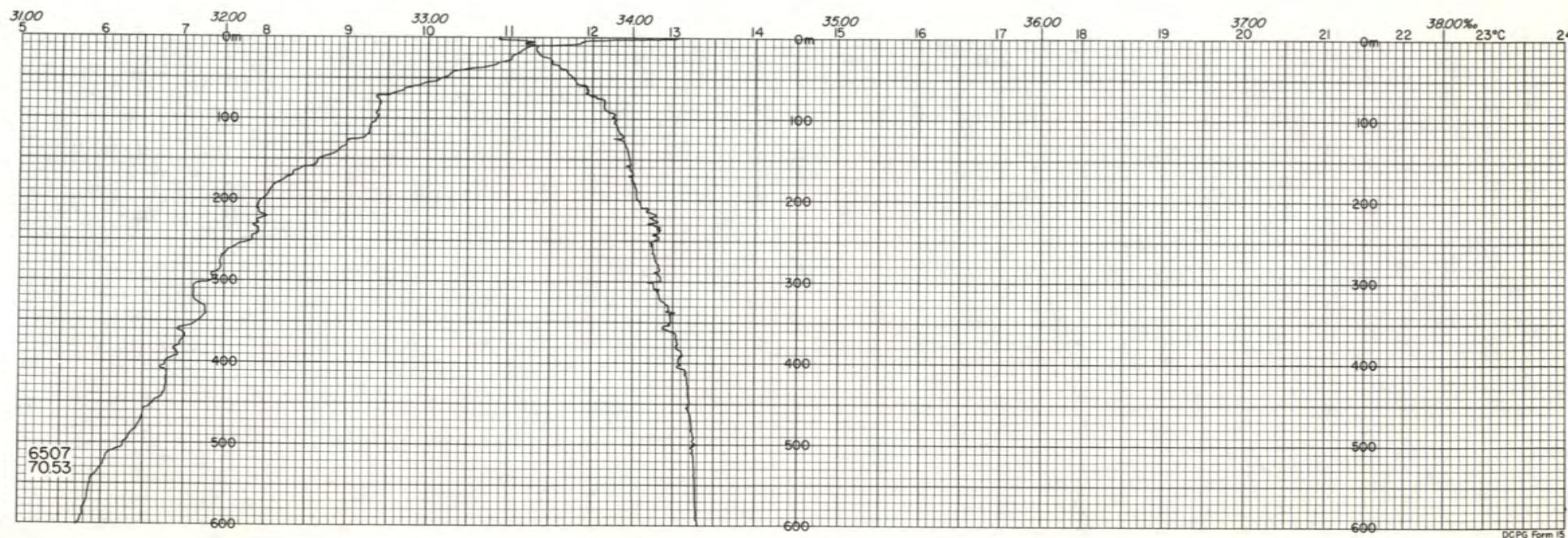


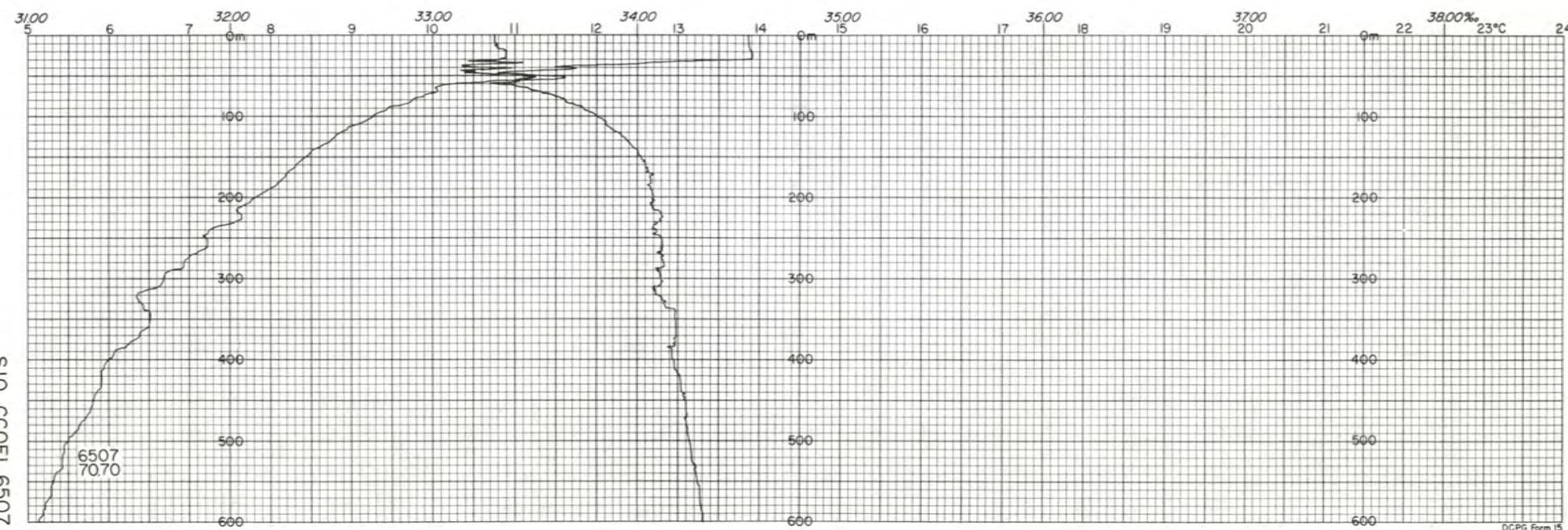
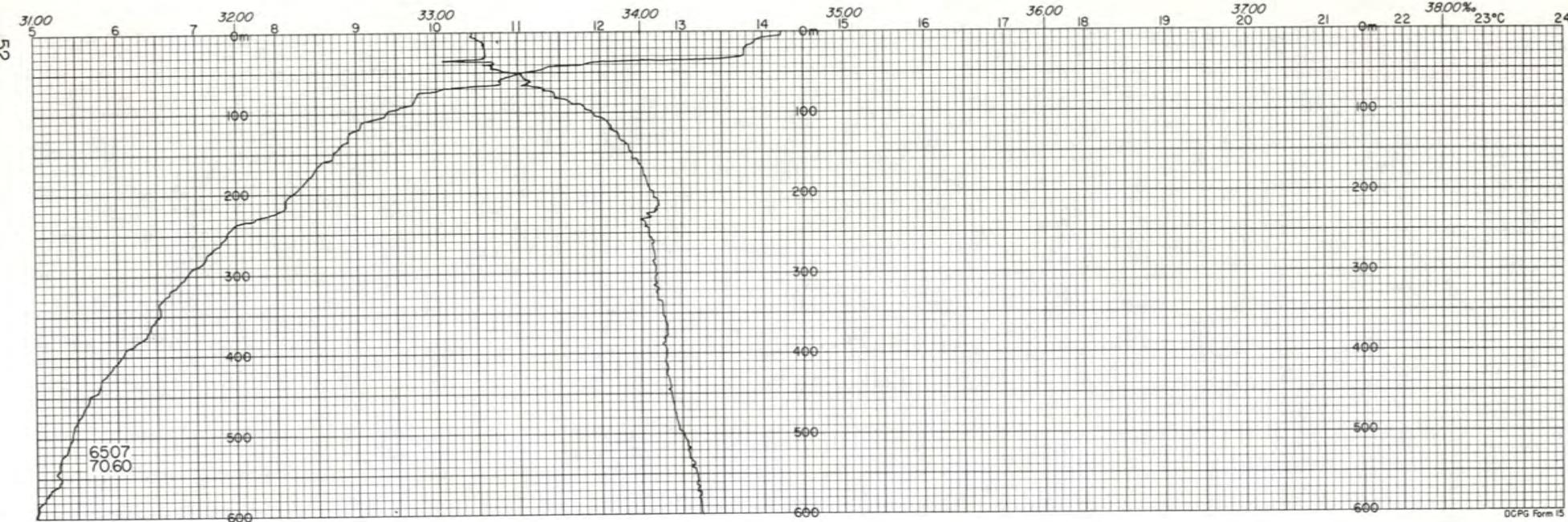
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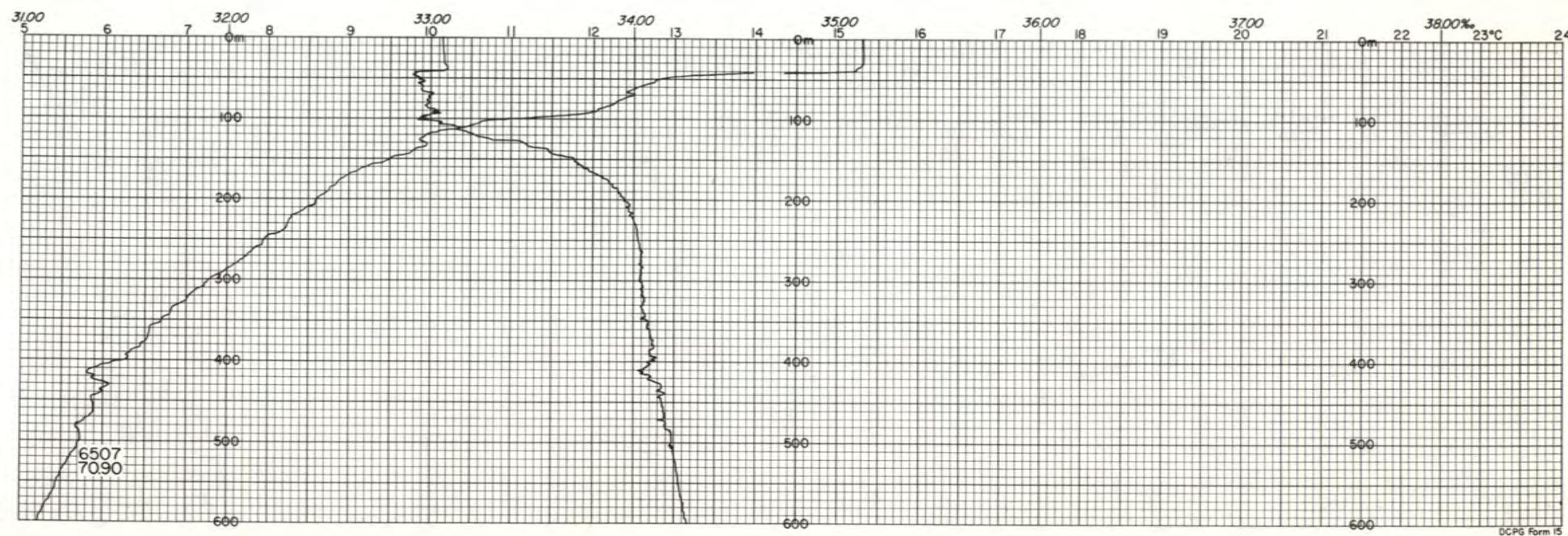
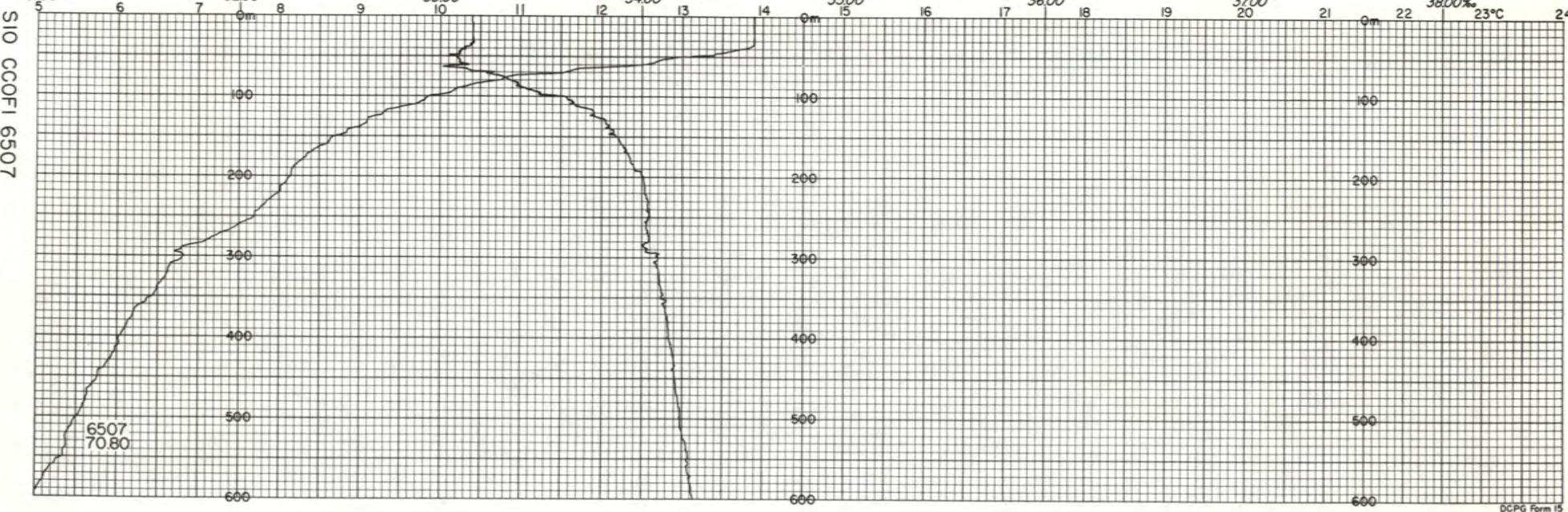


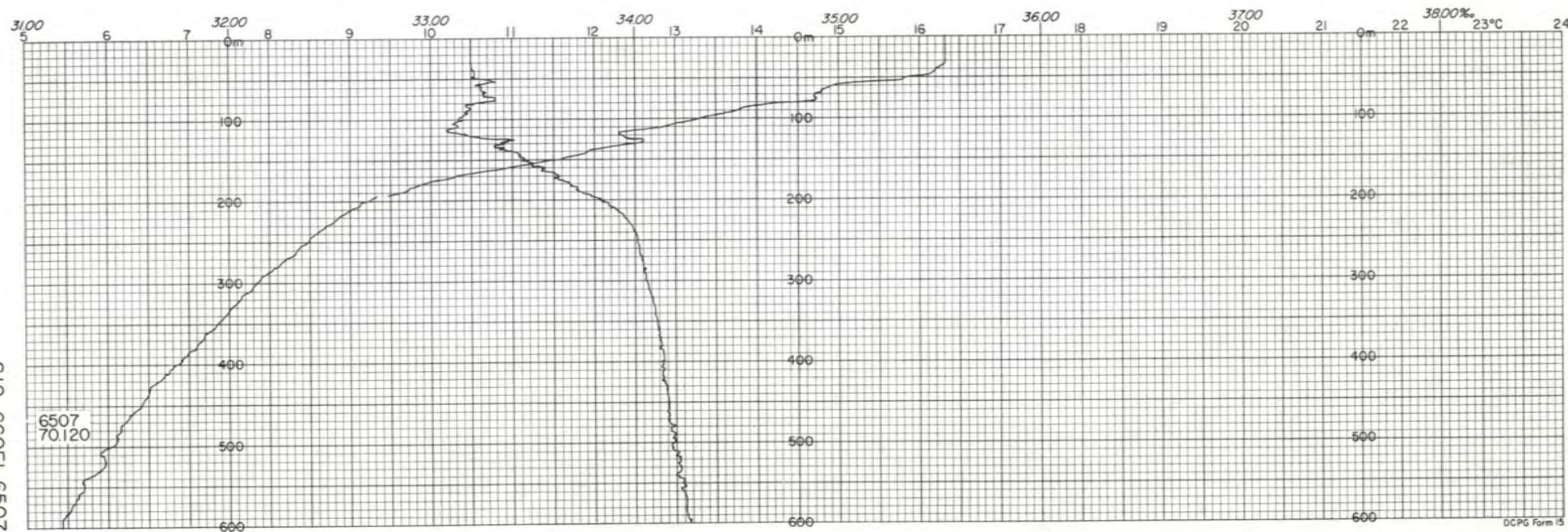


15

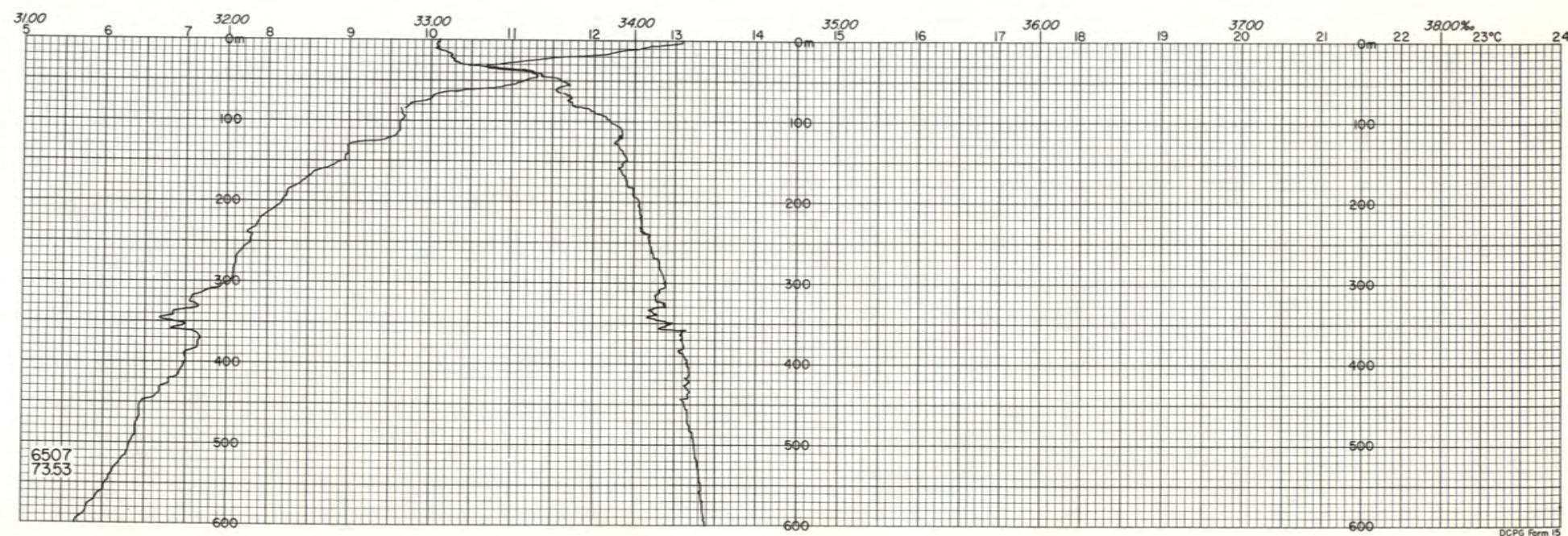
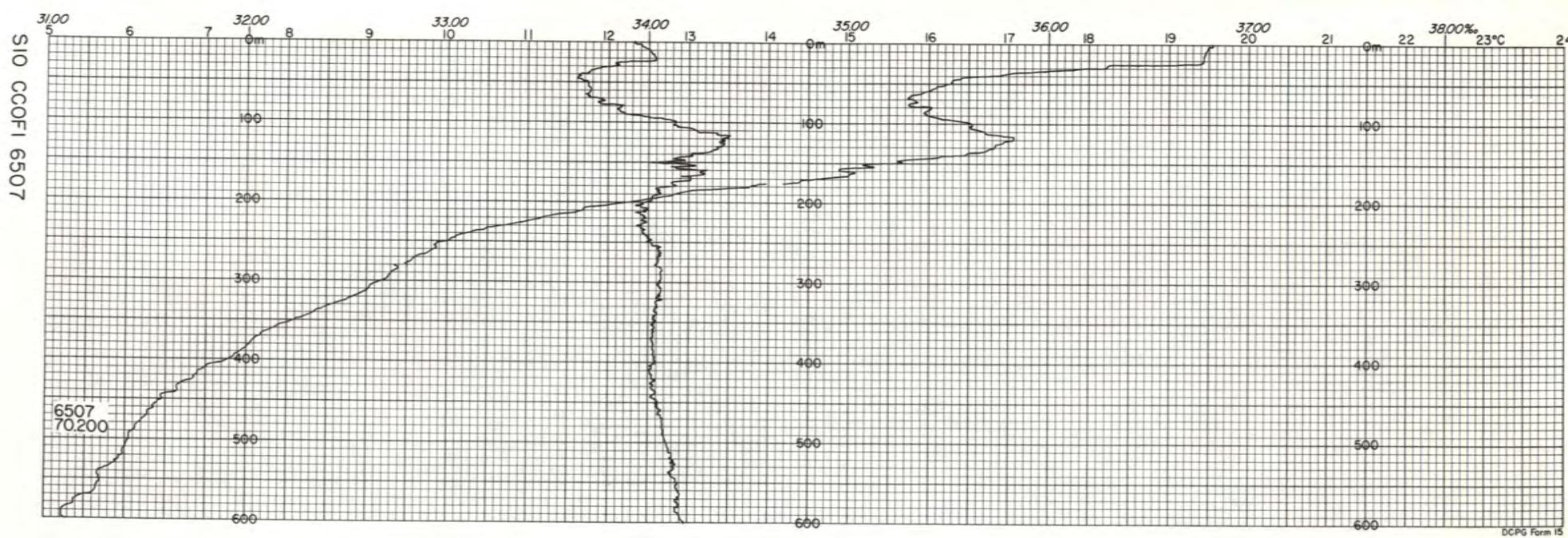


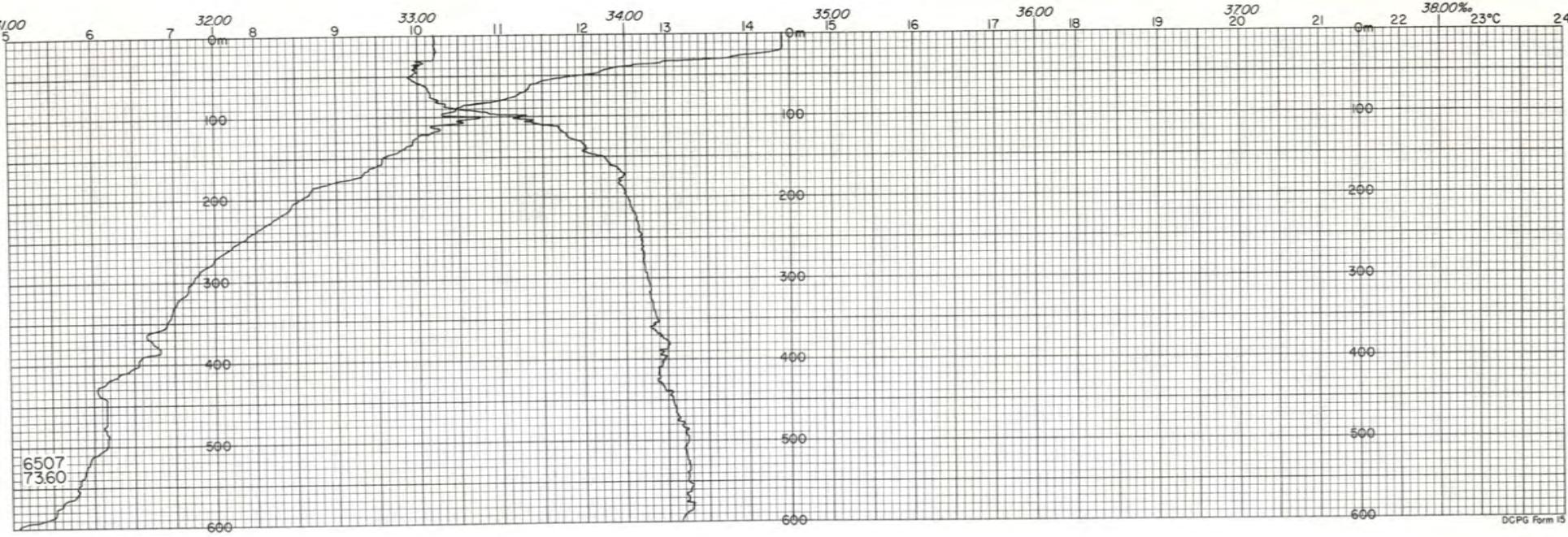


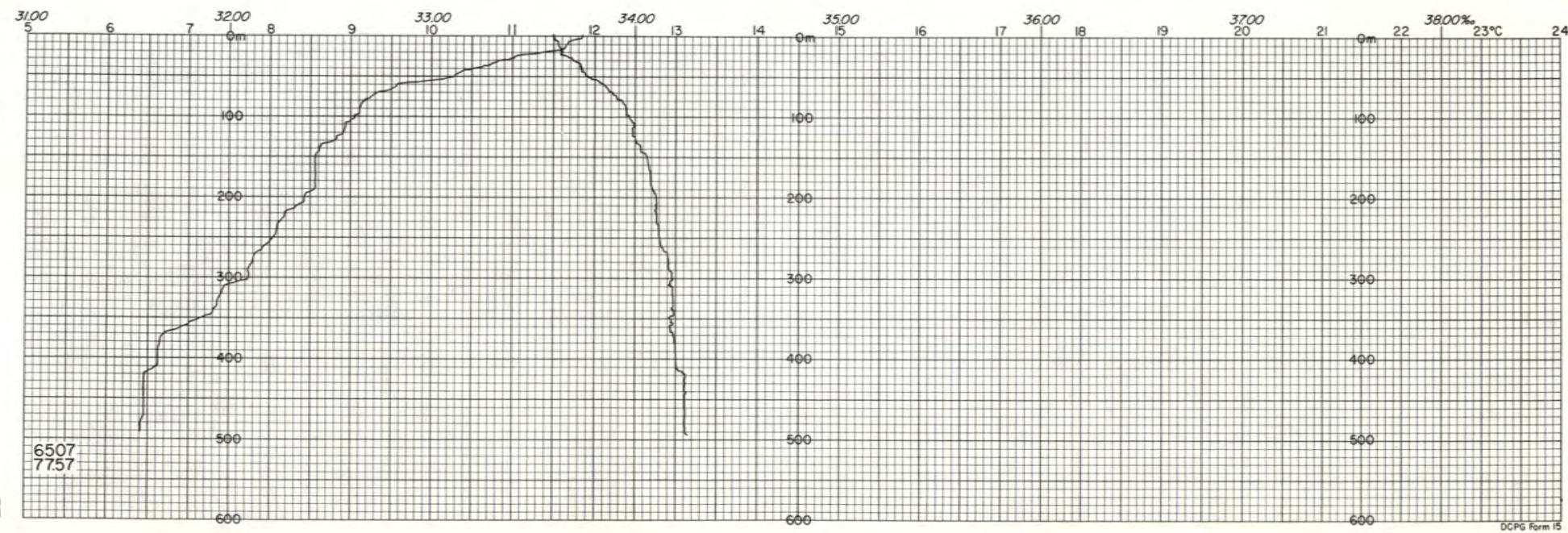
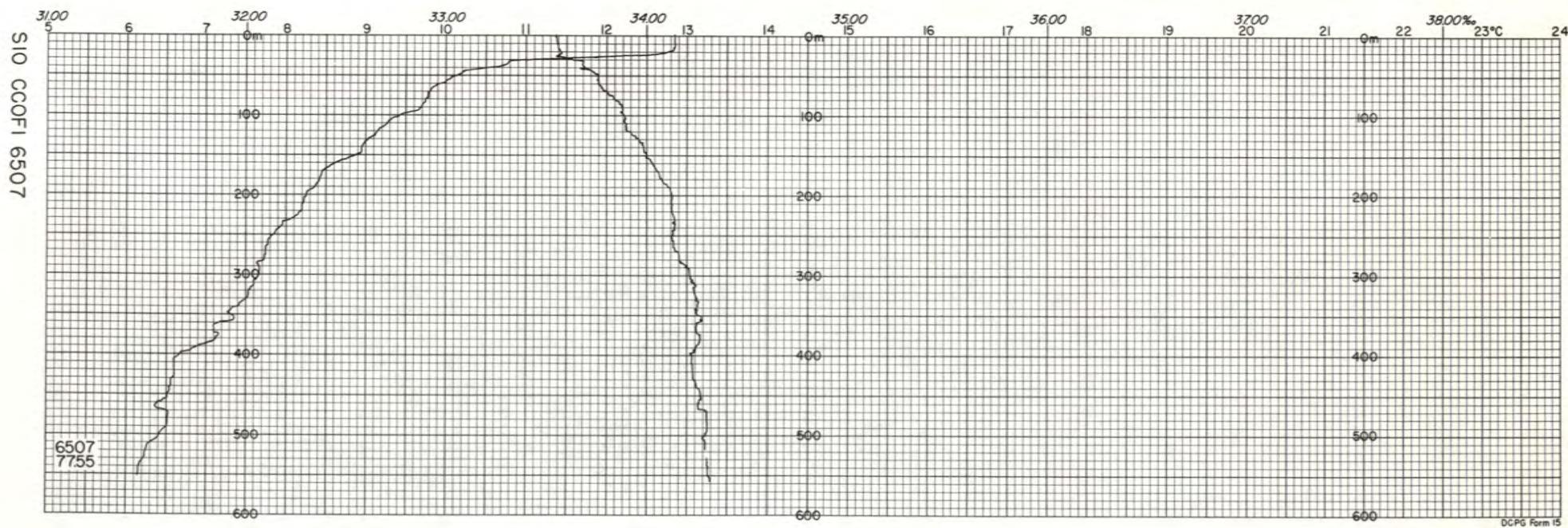


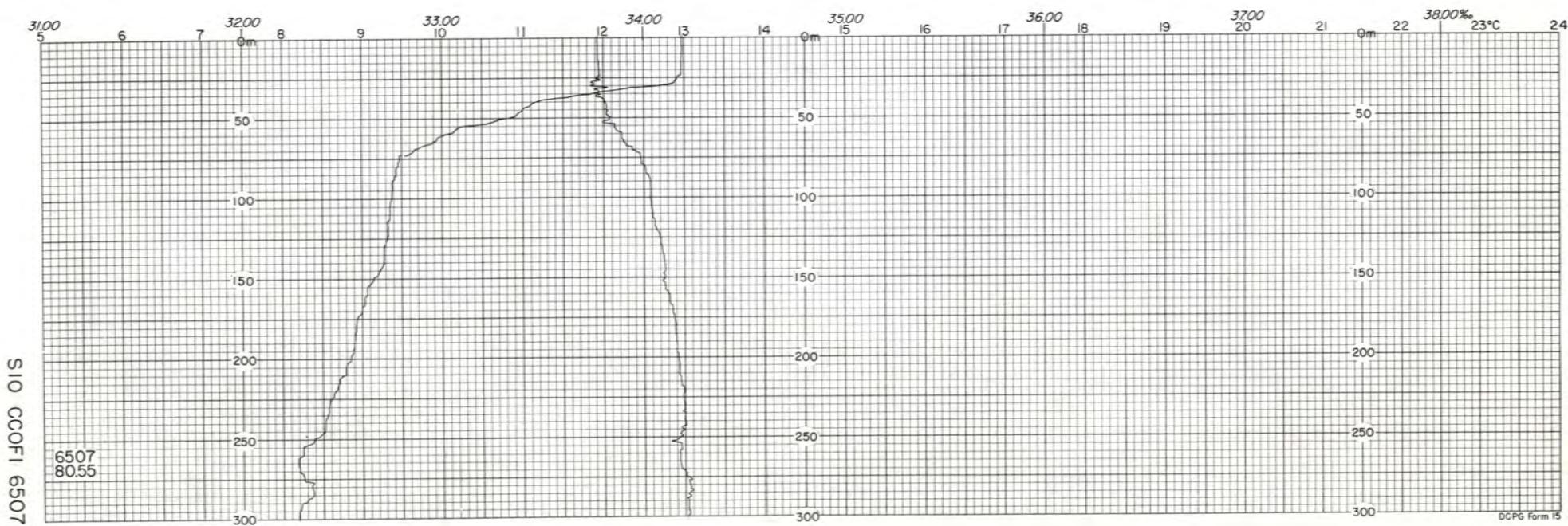
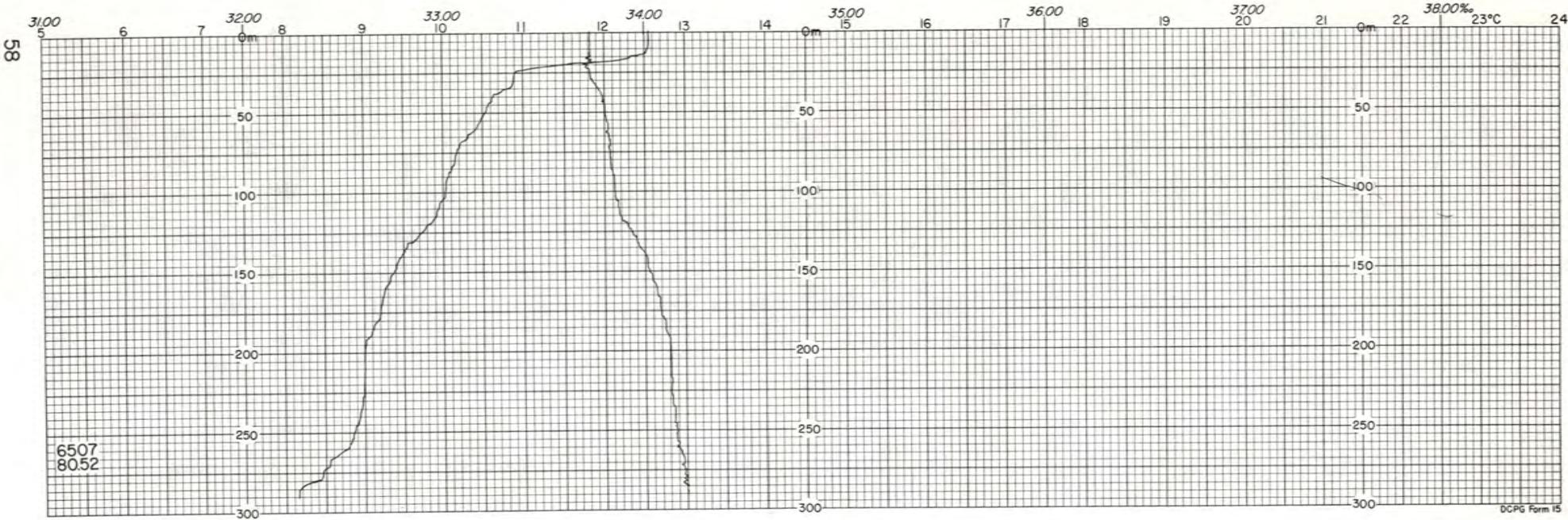


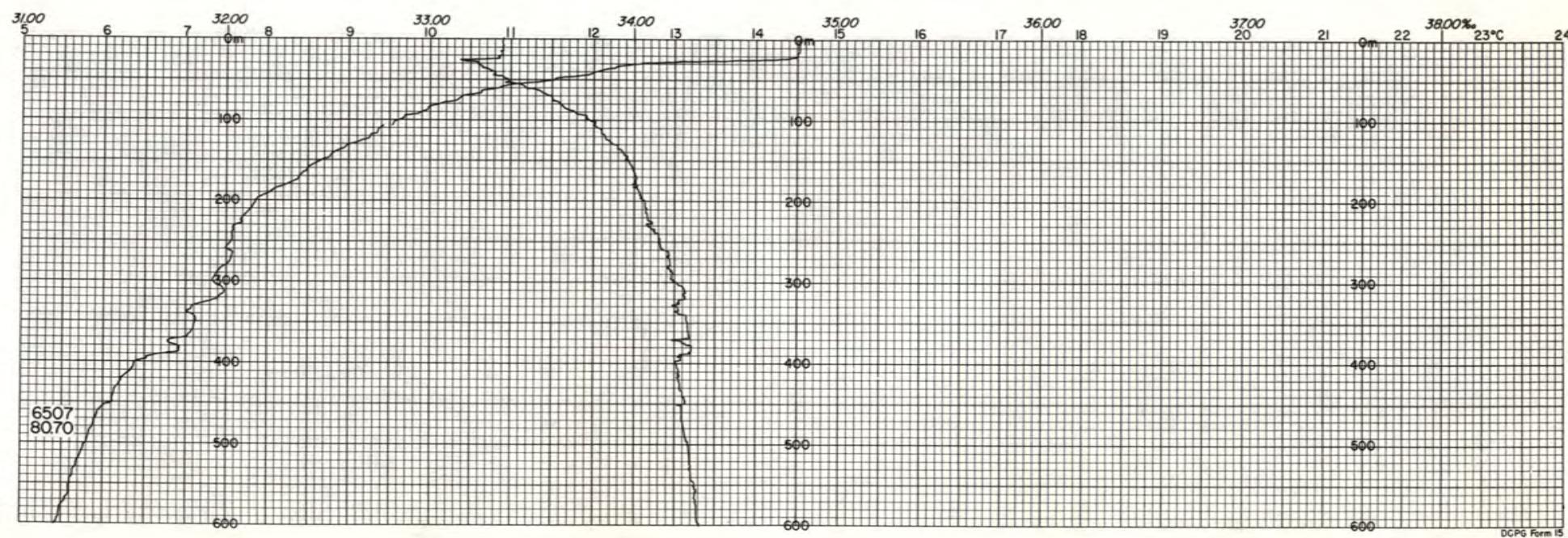
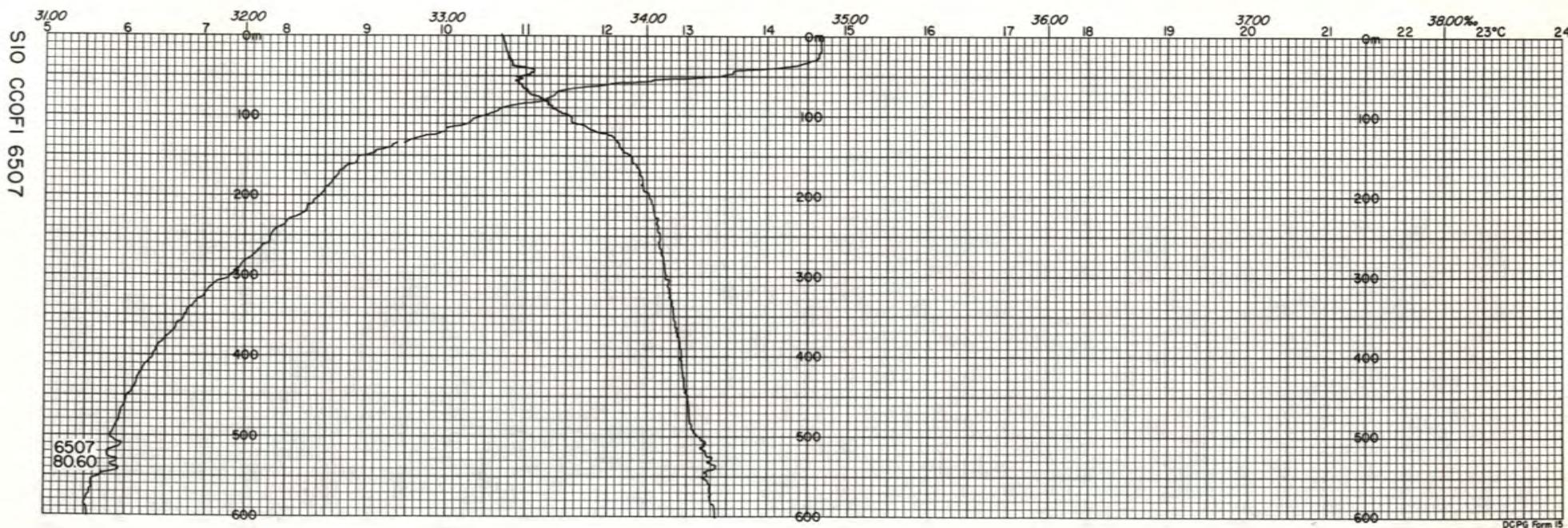
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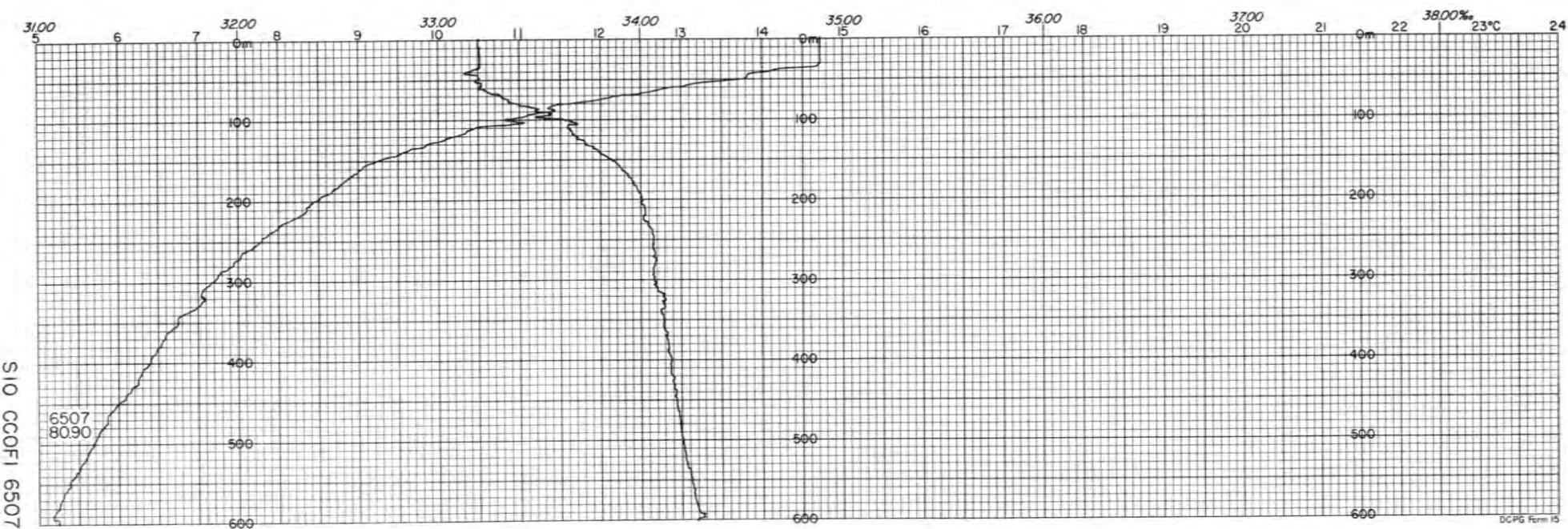
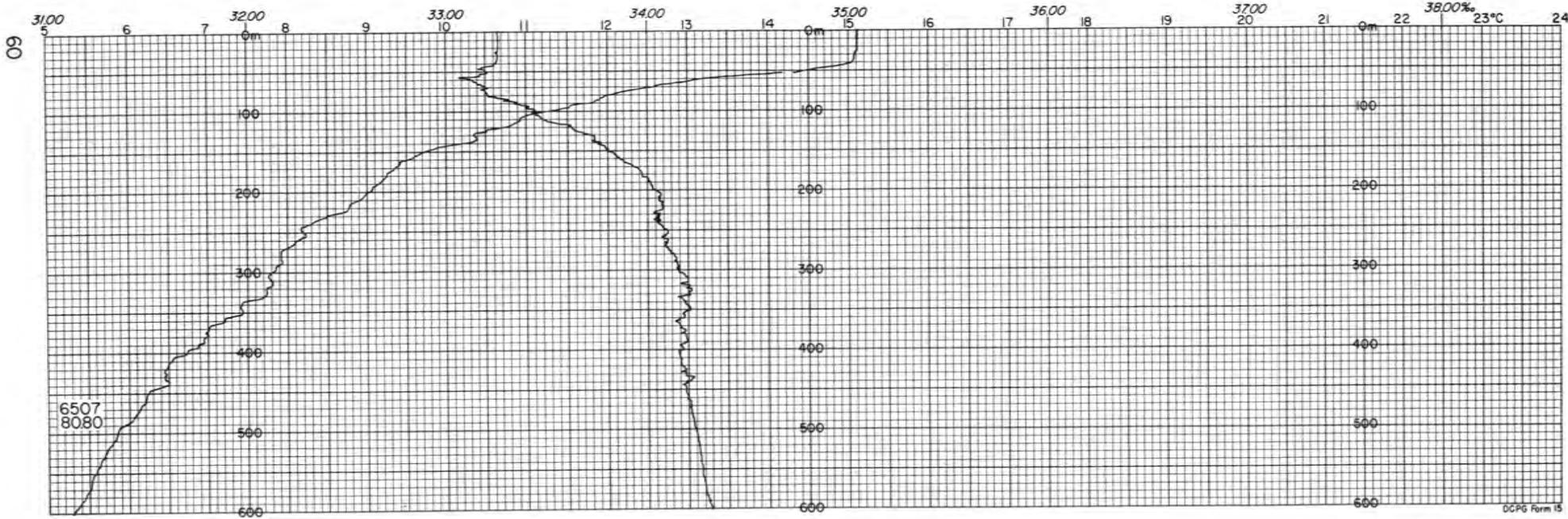


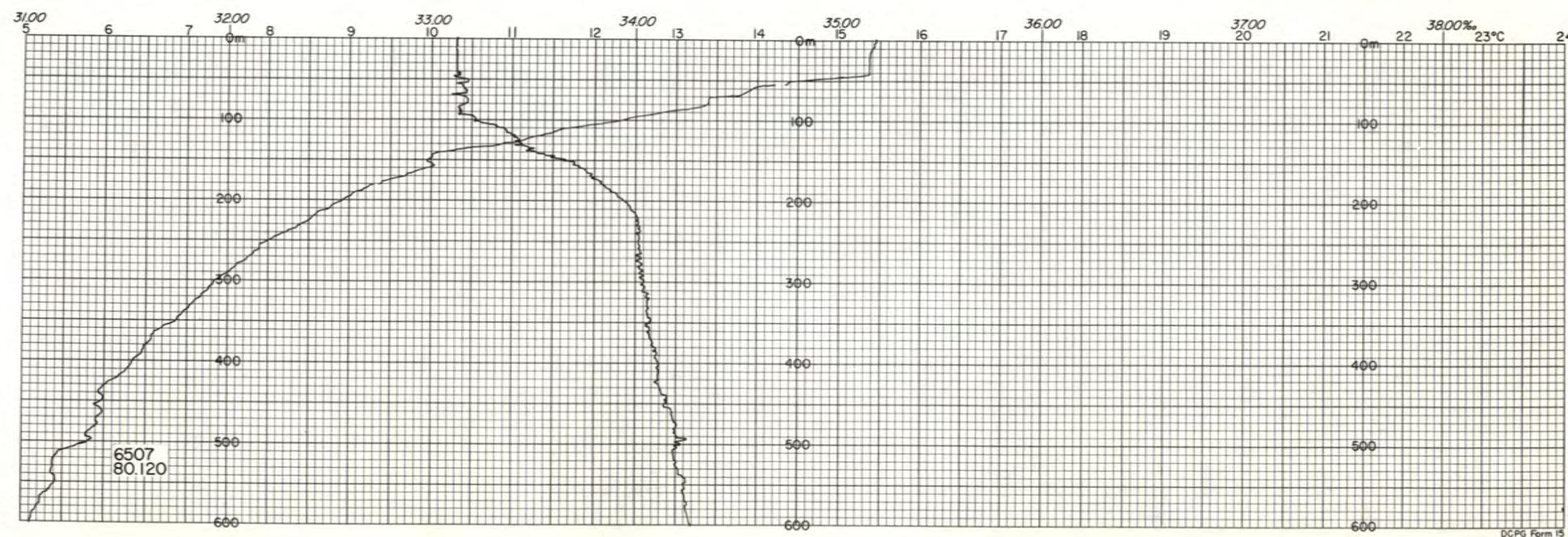
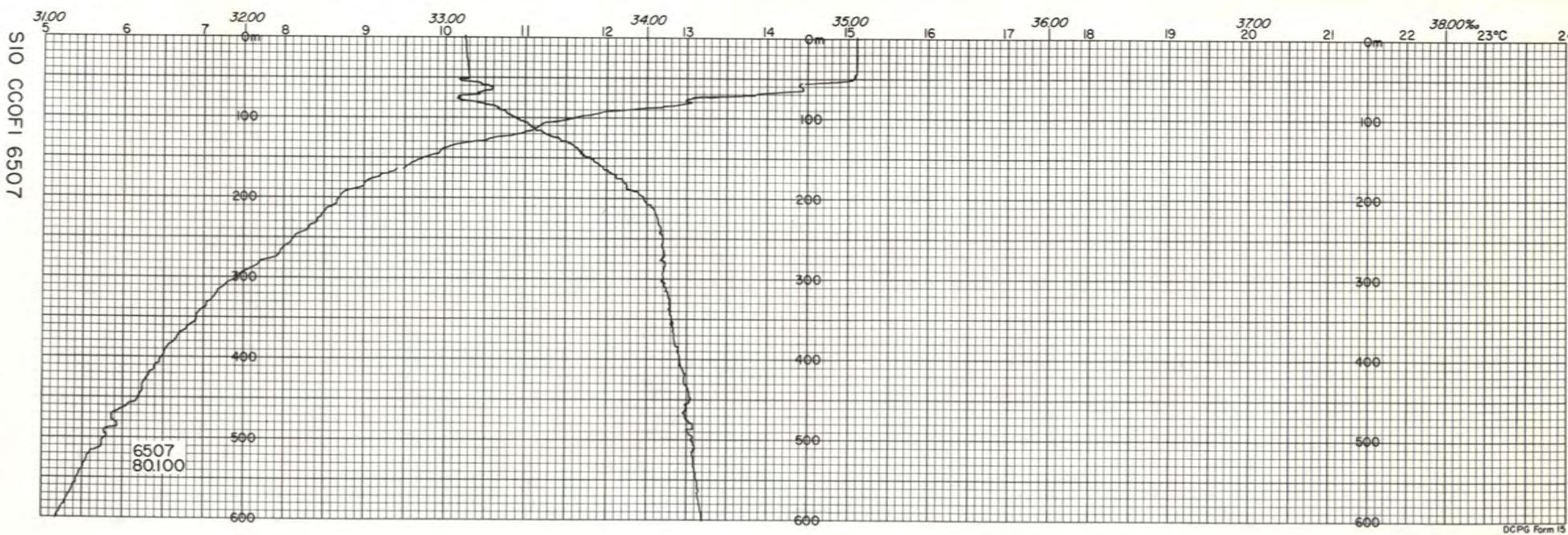


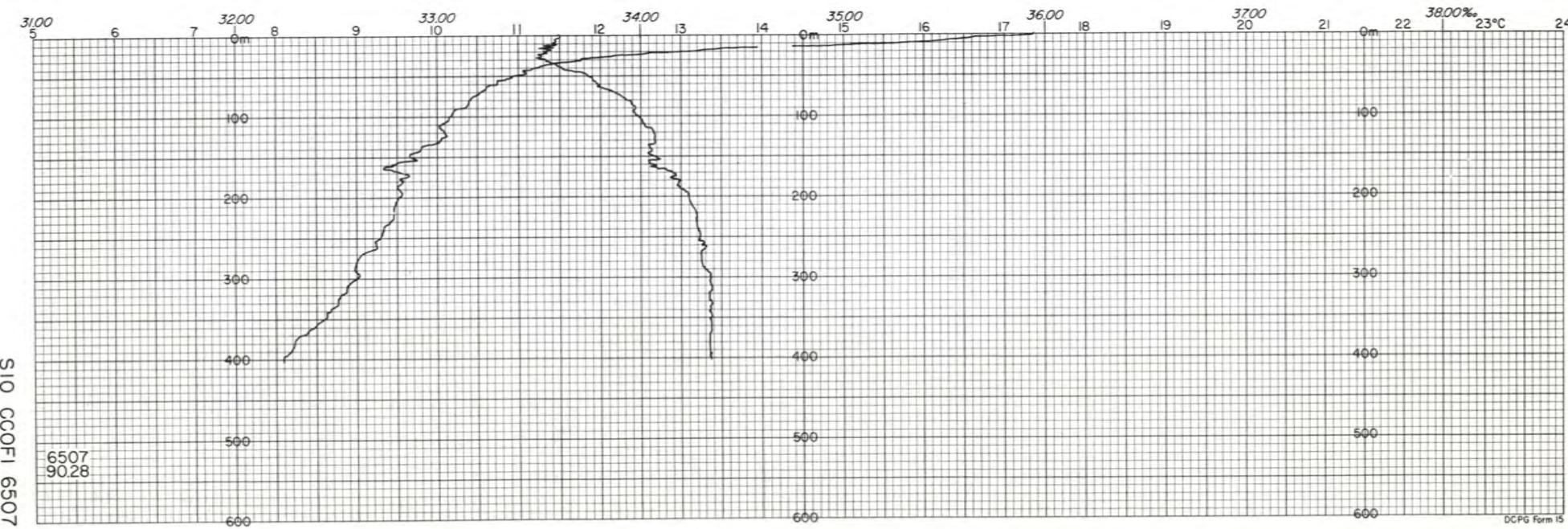
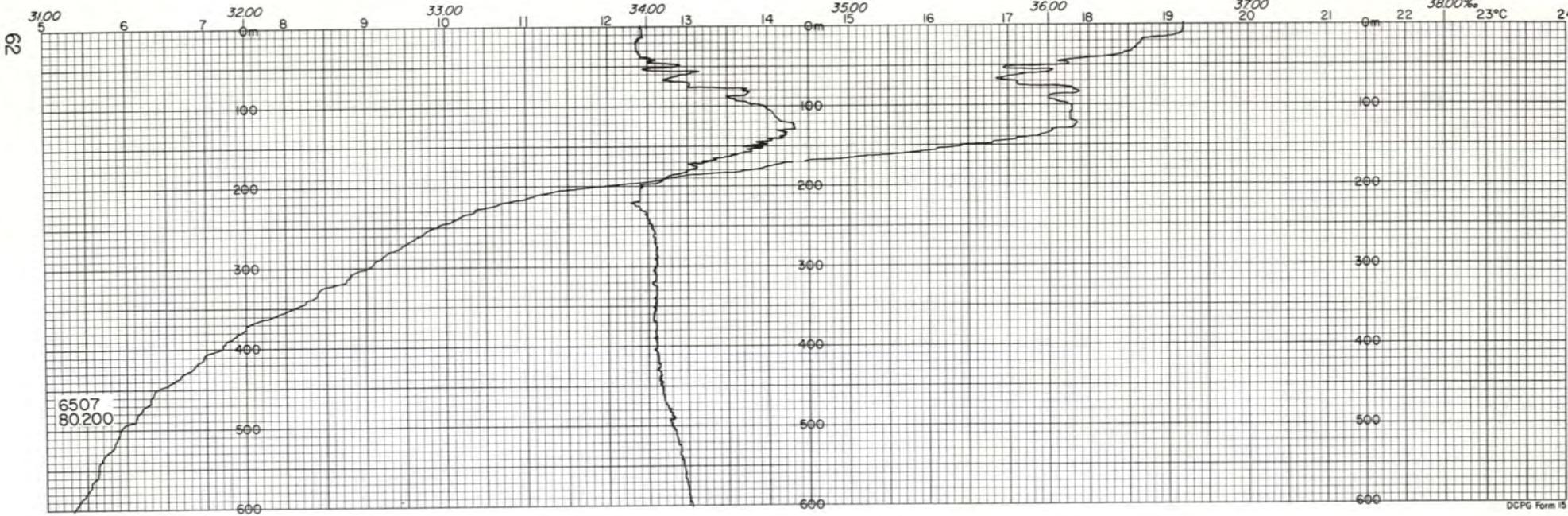


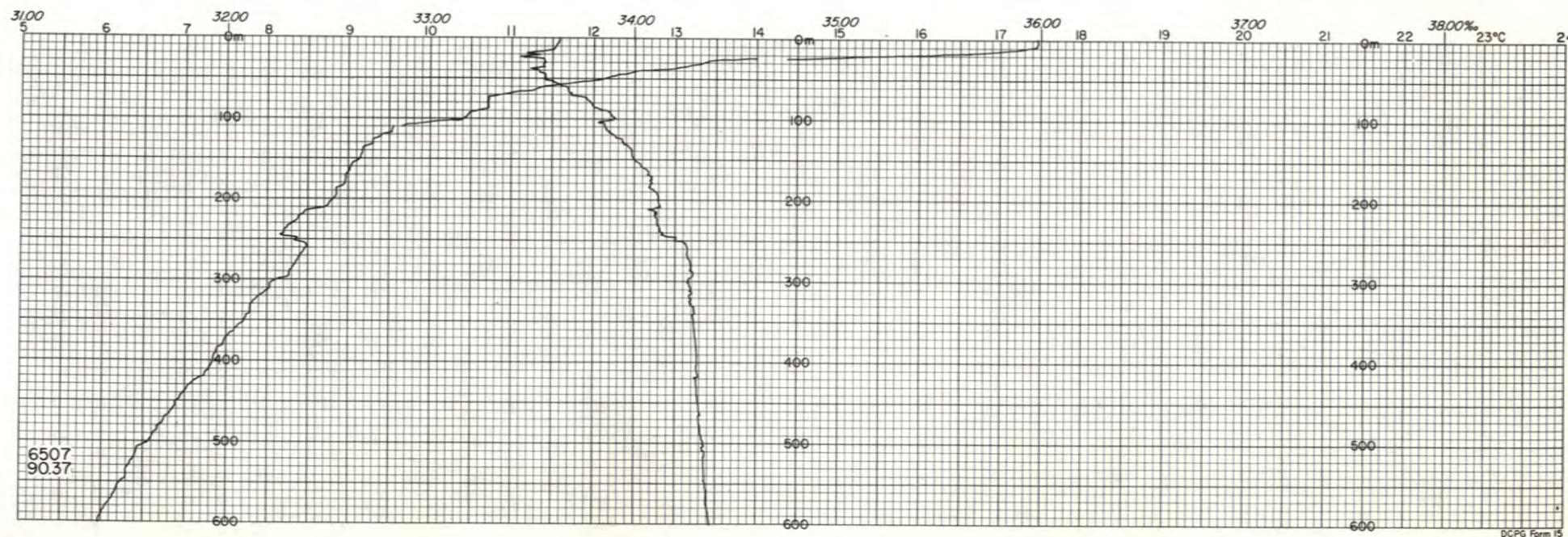
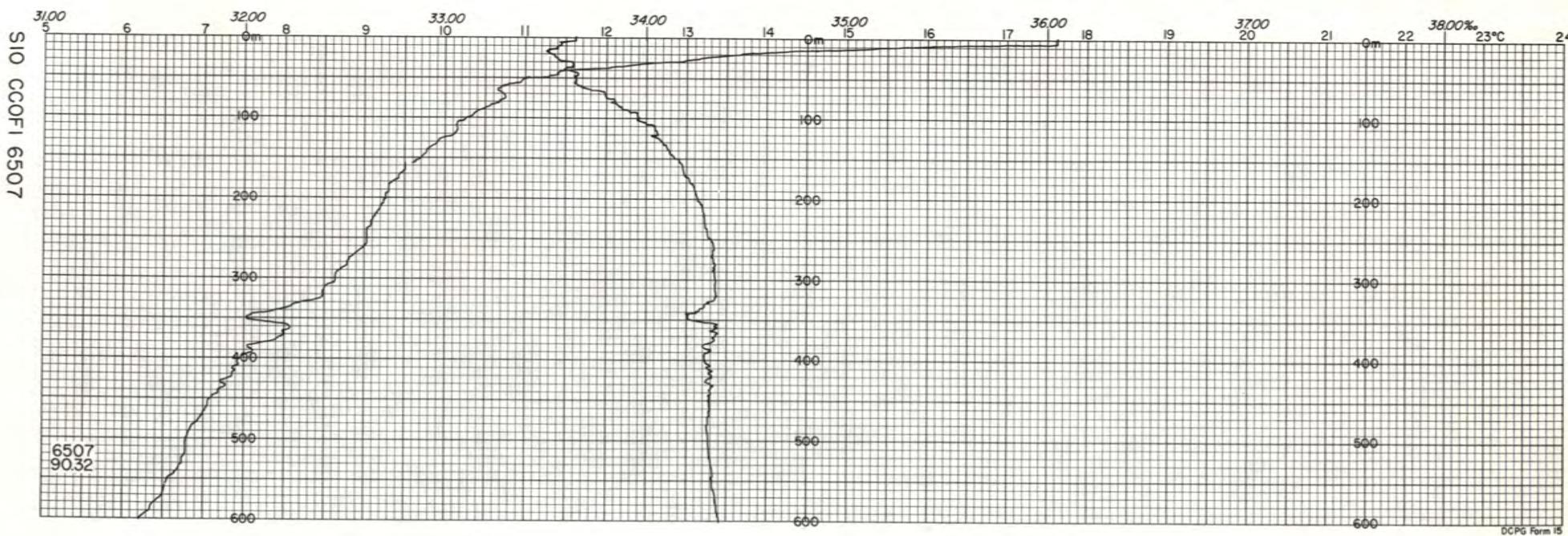


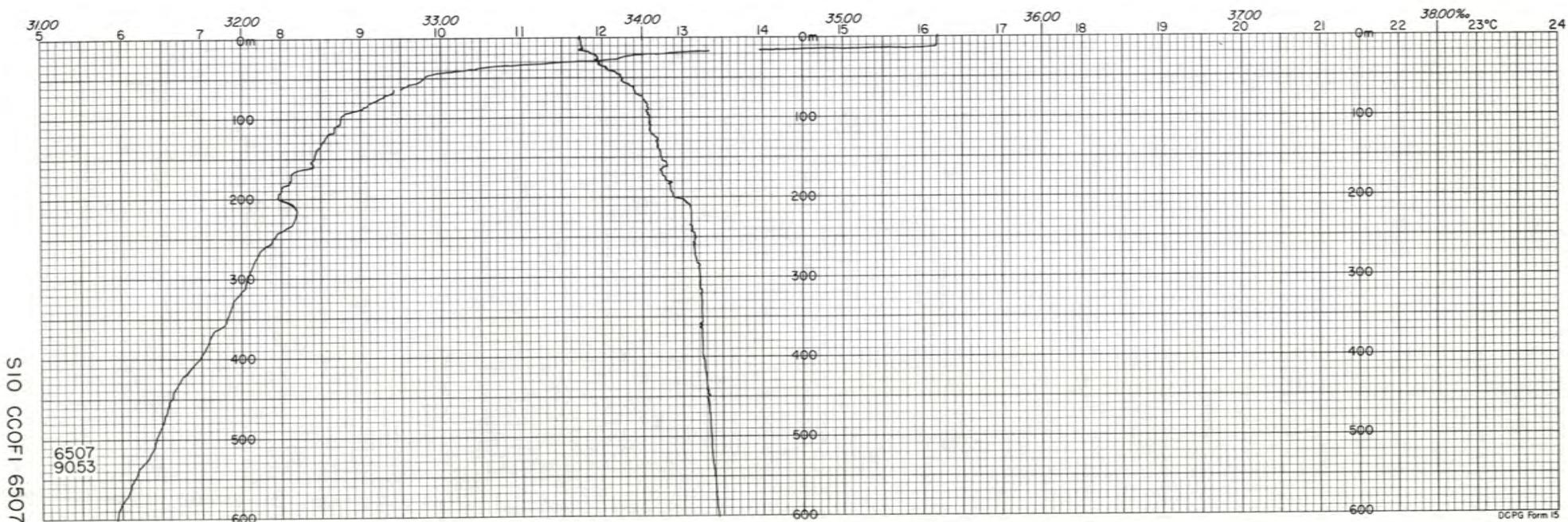
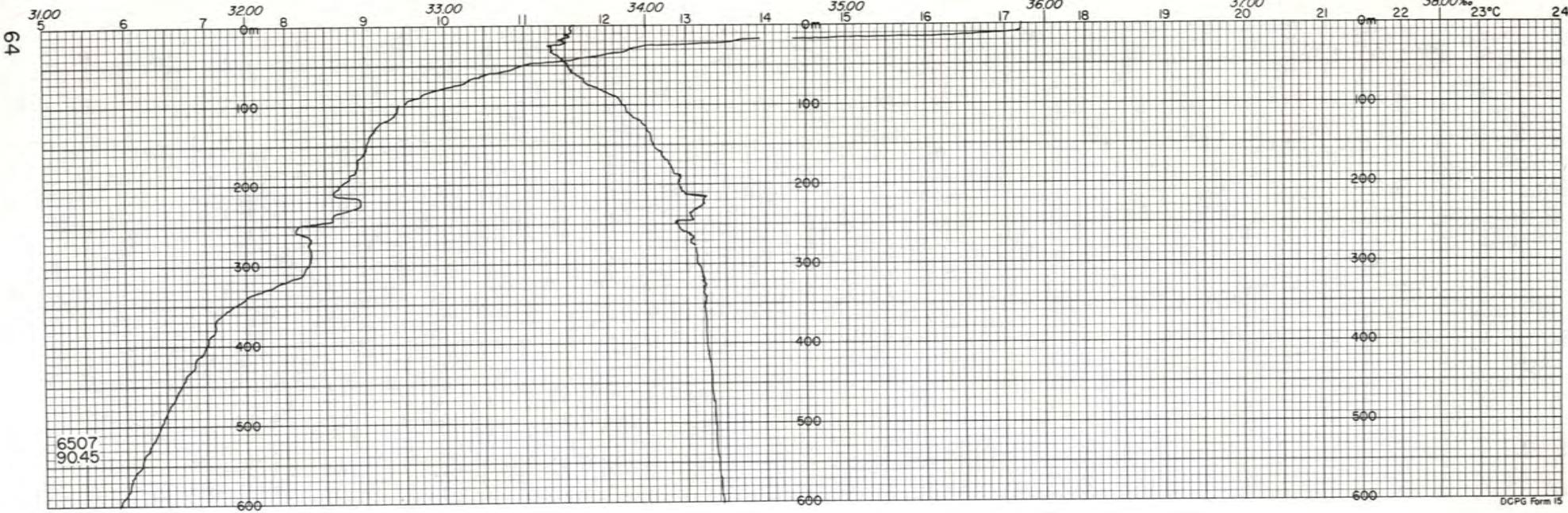


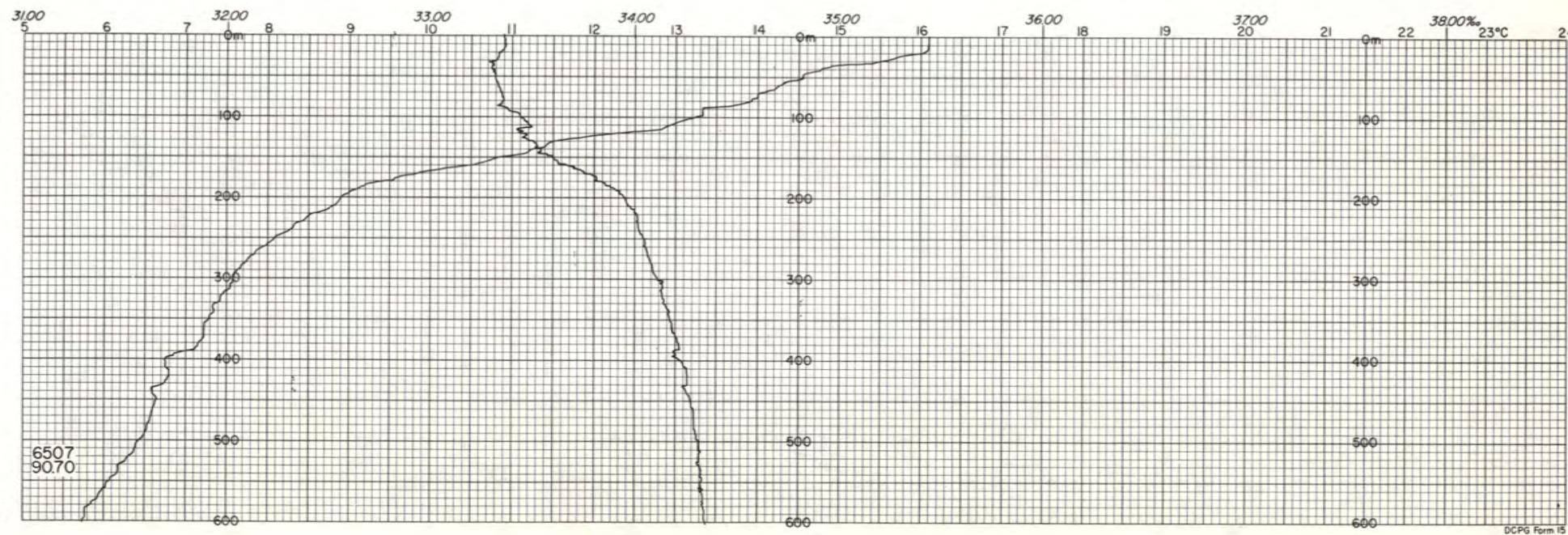
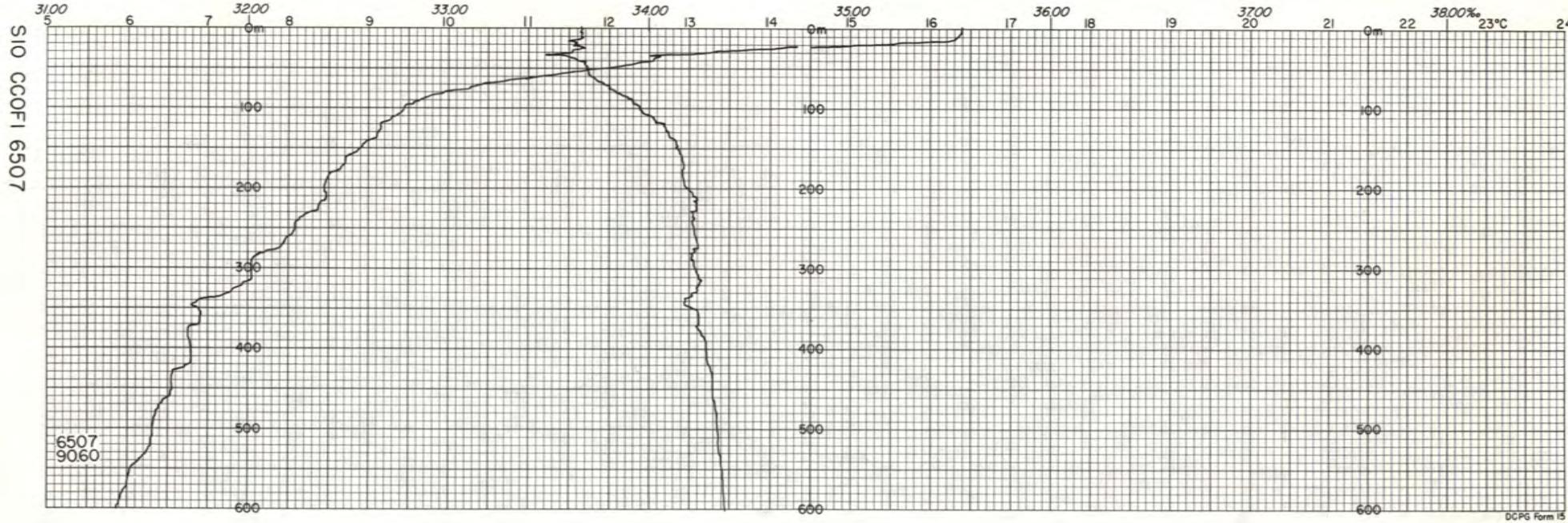


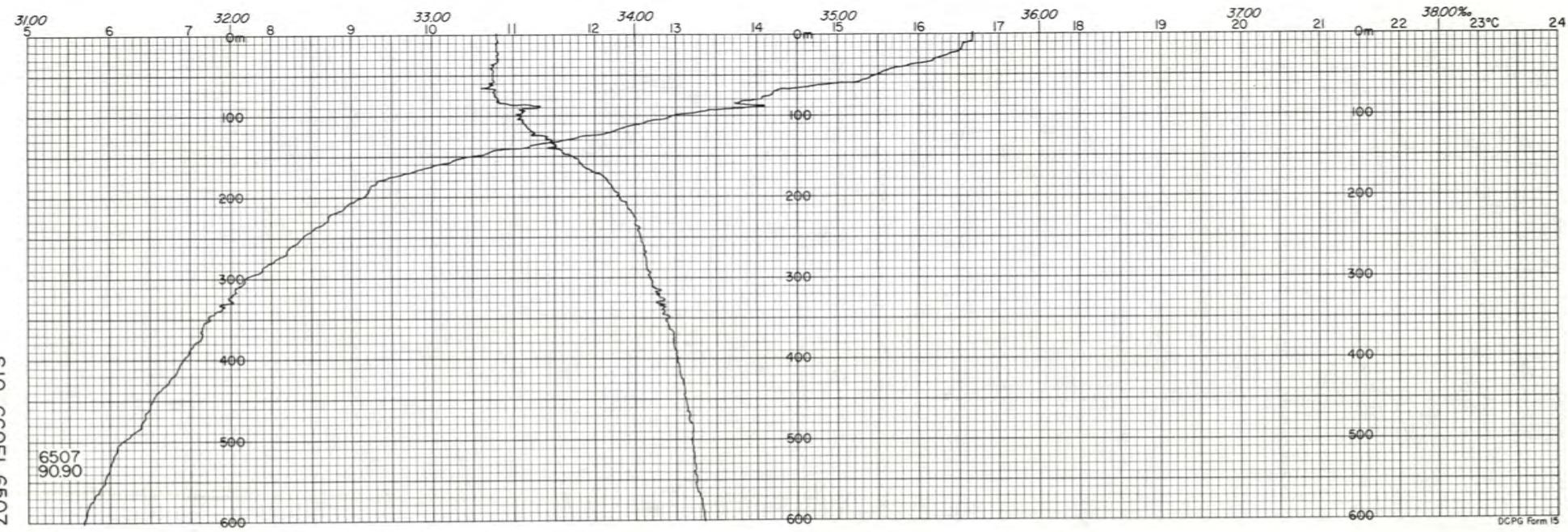
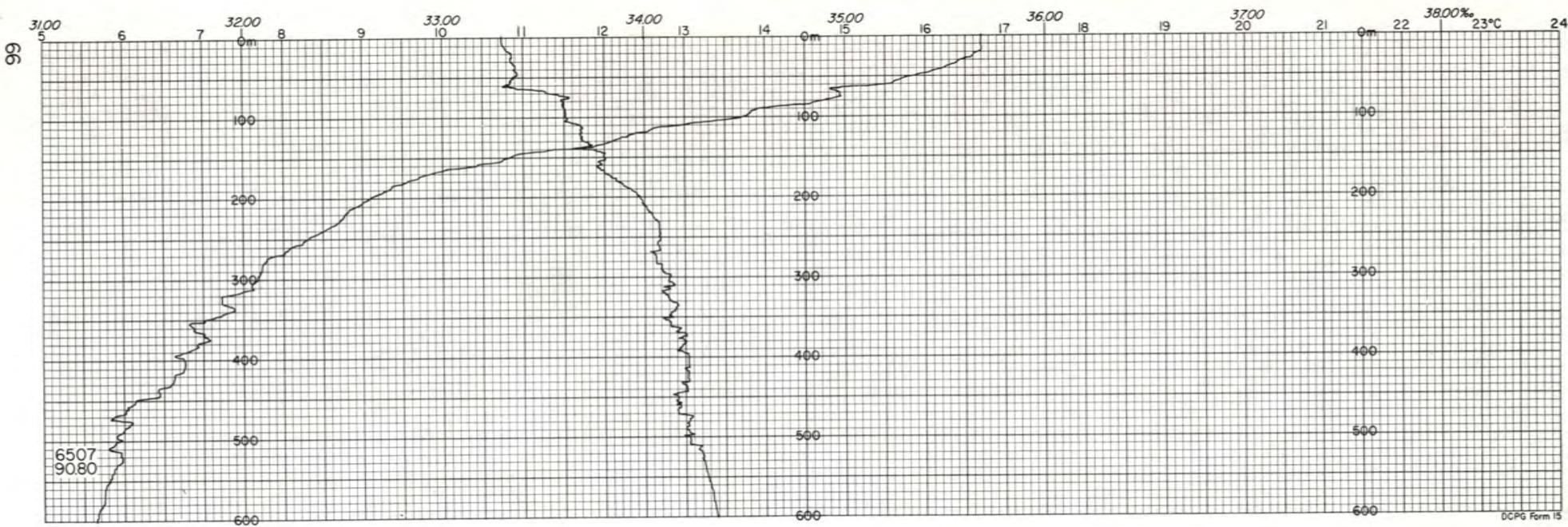


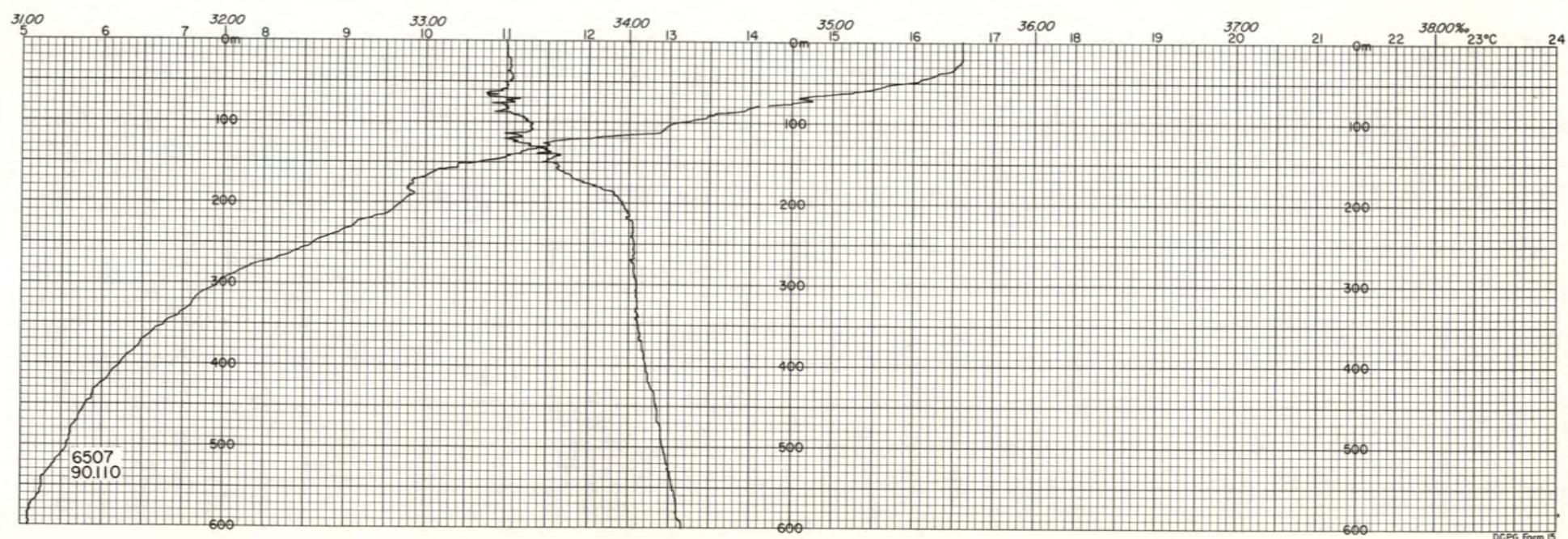
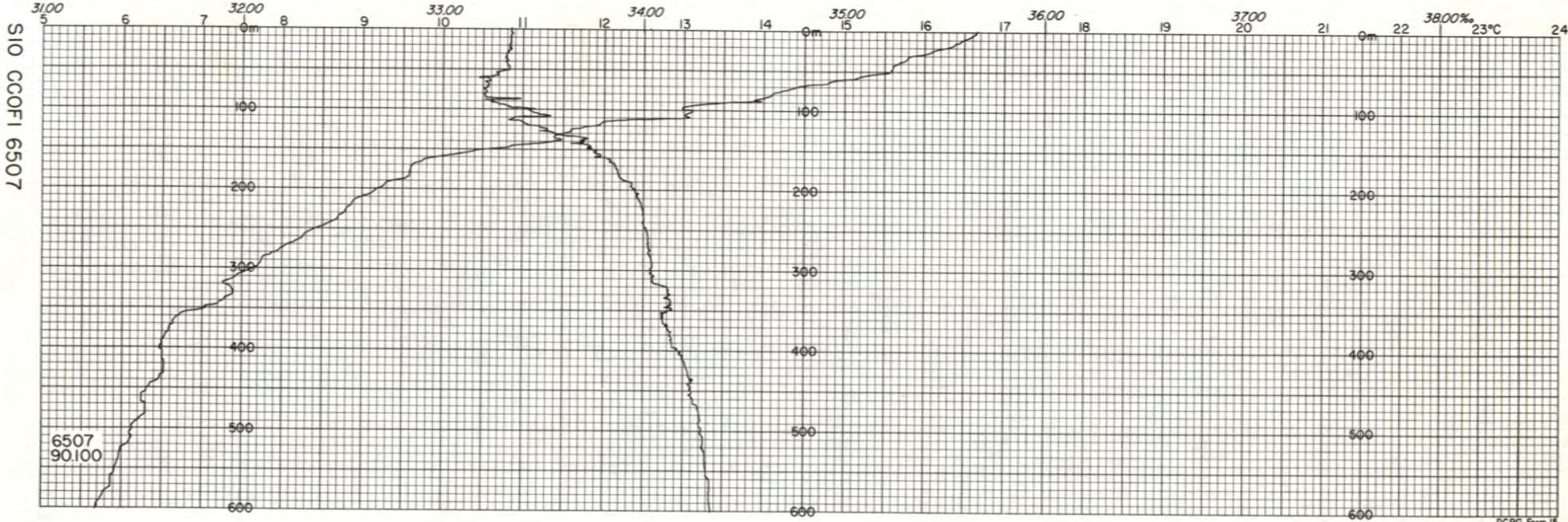


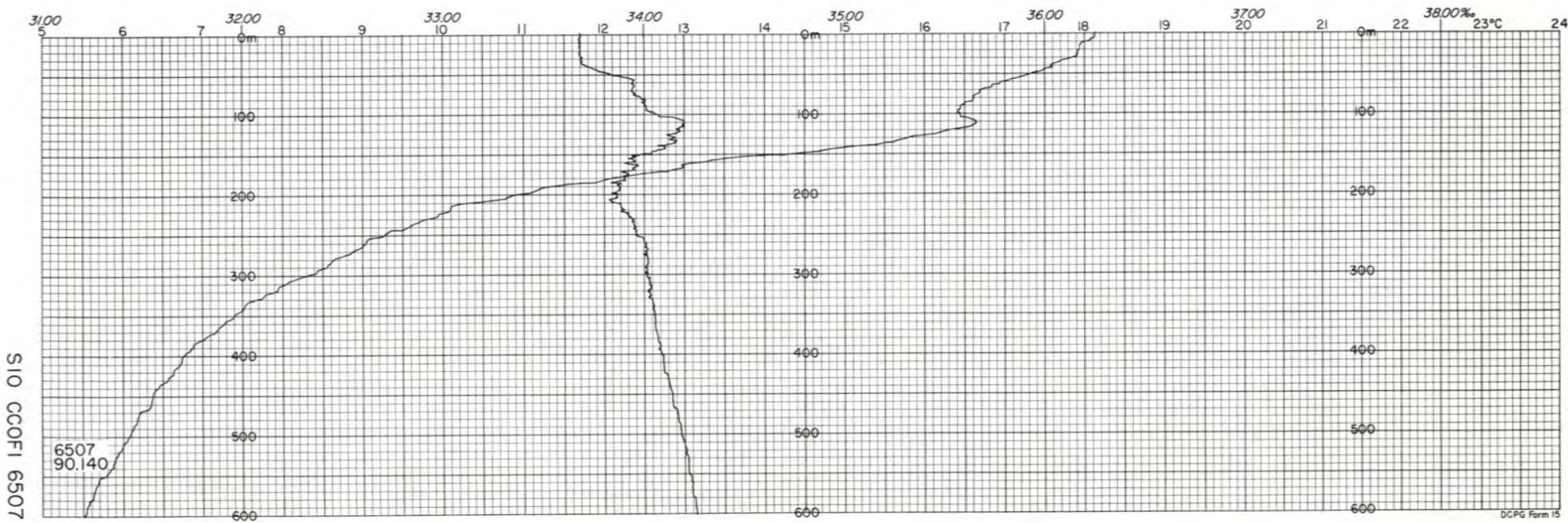
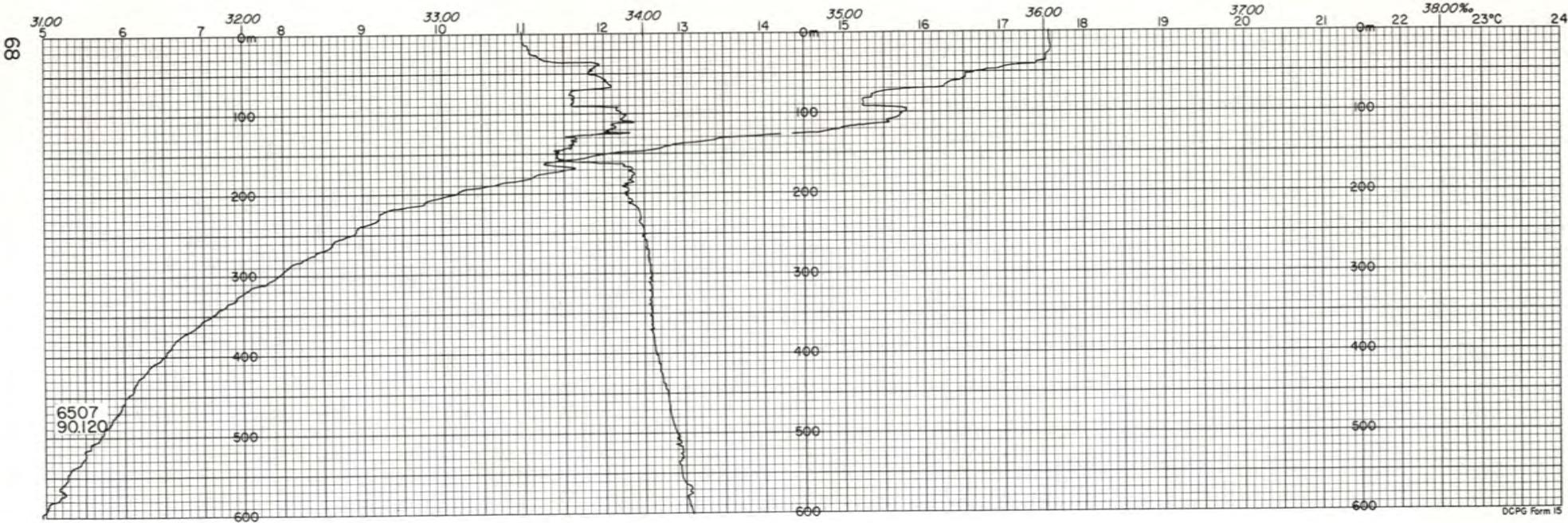


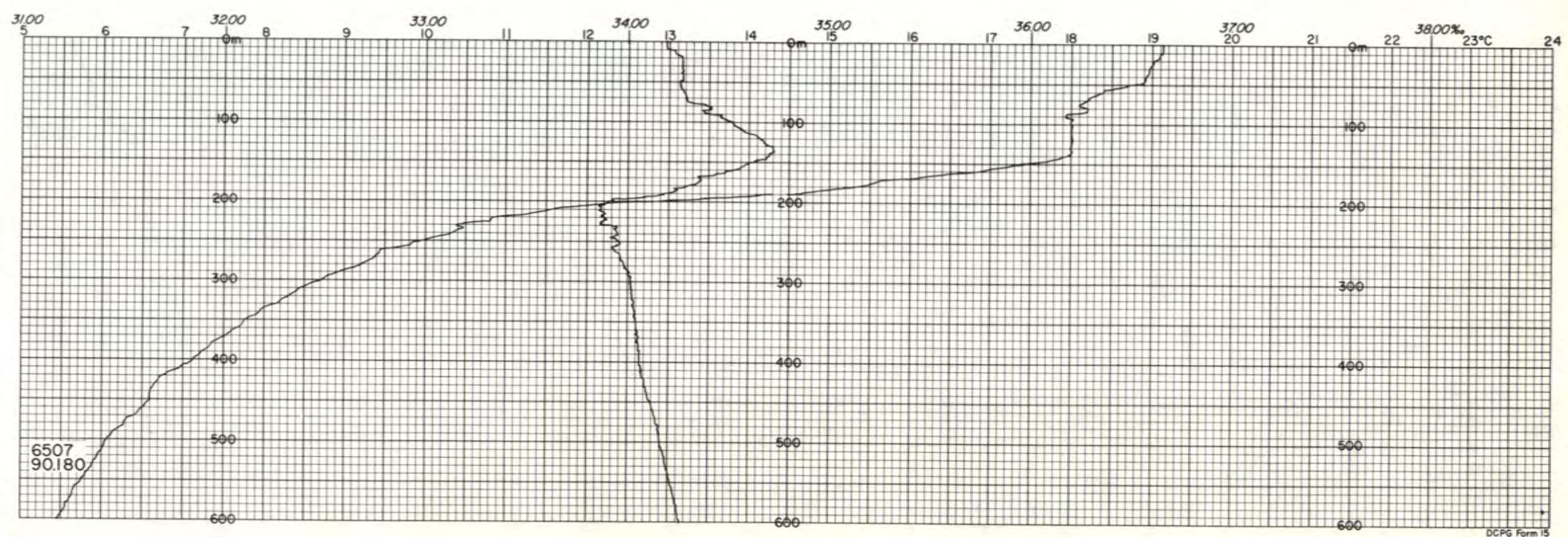
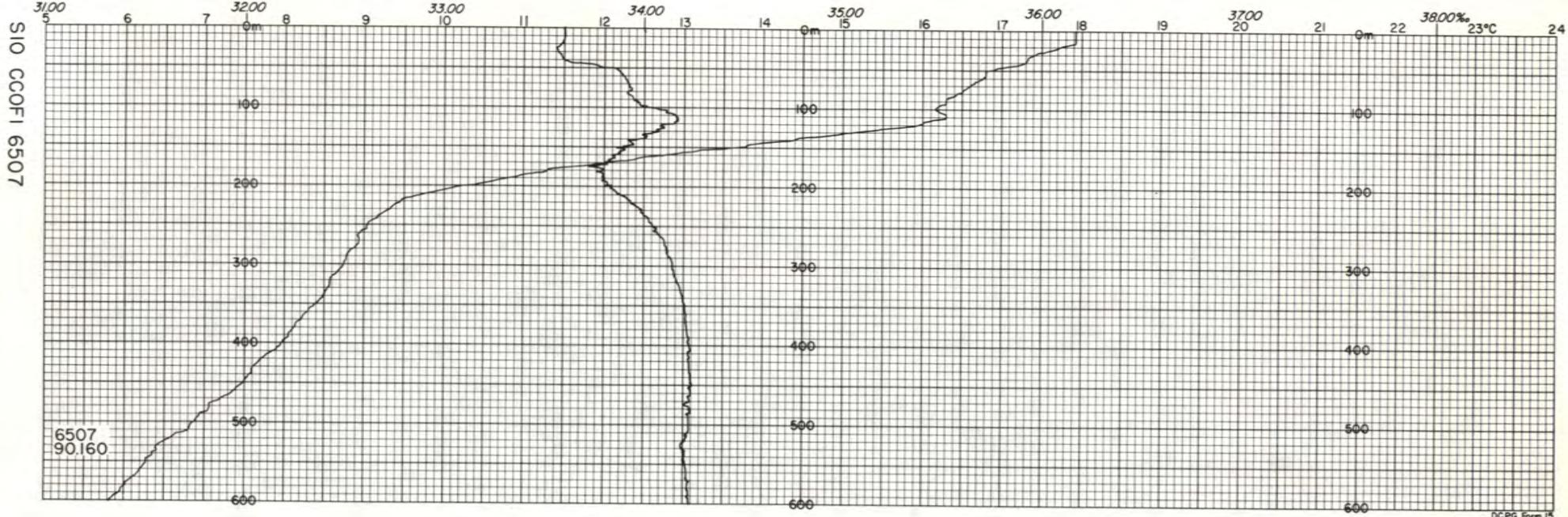


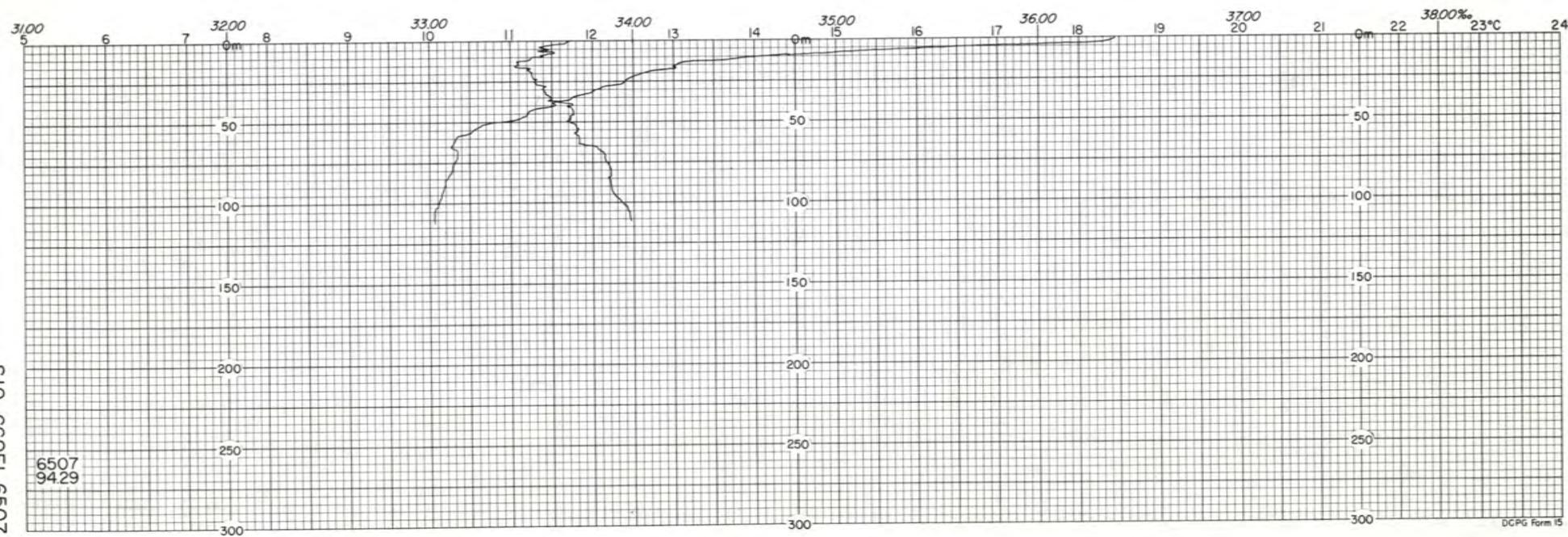
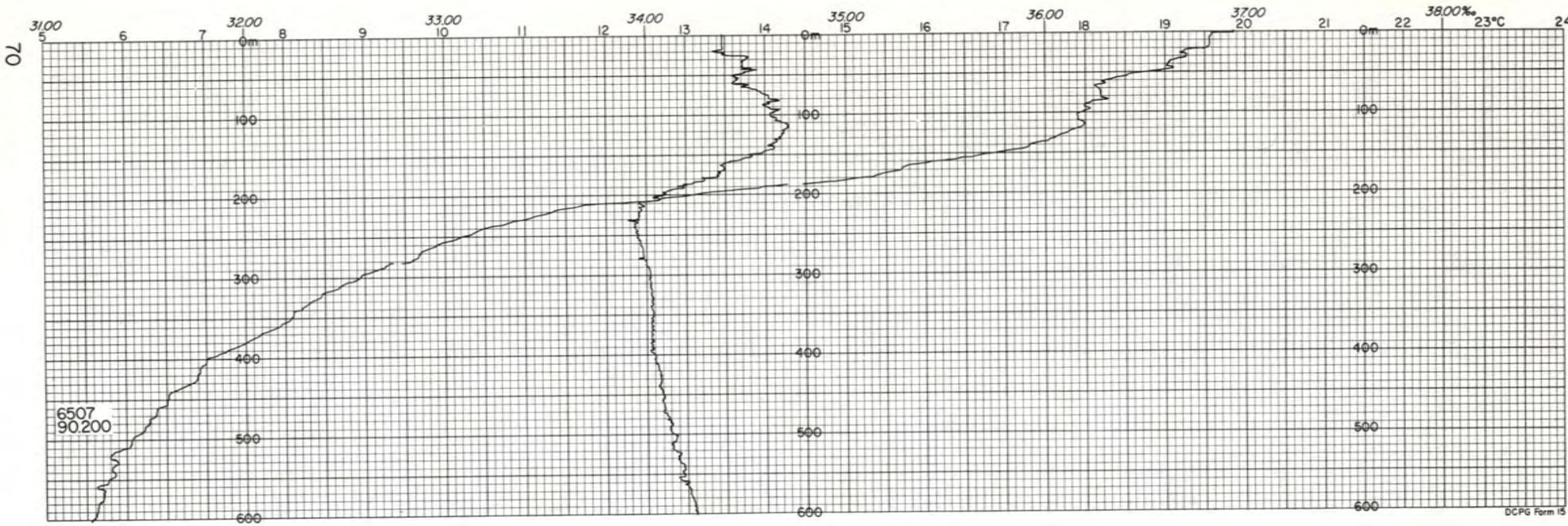




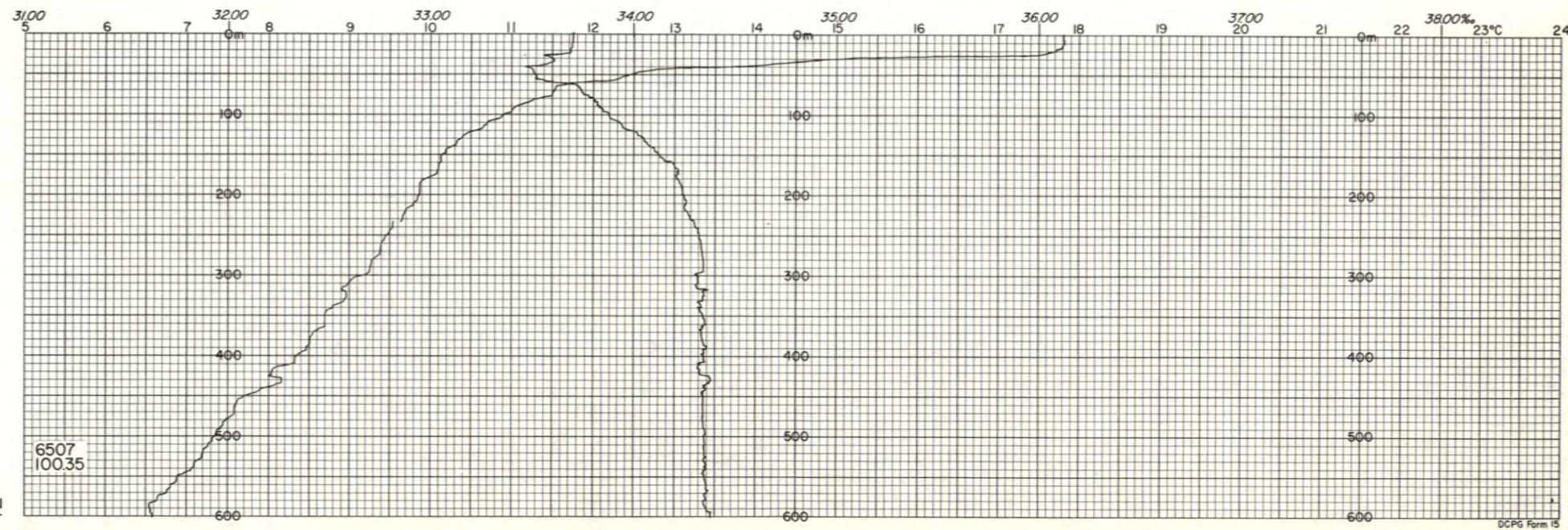
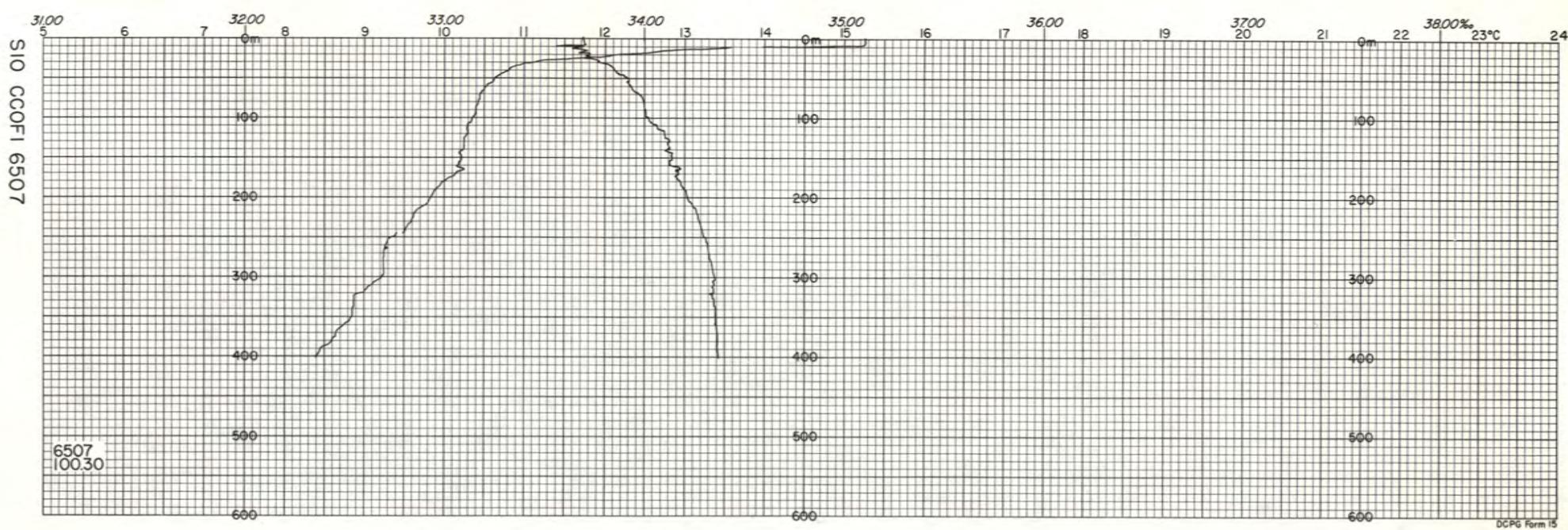


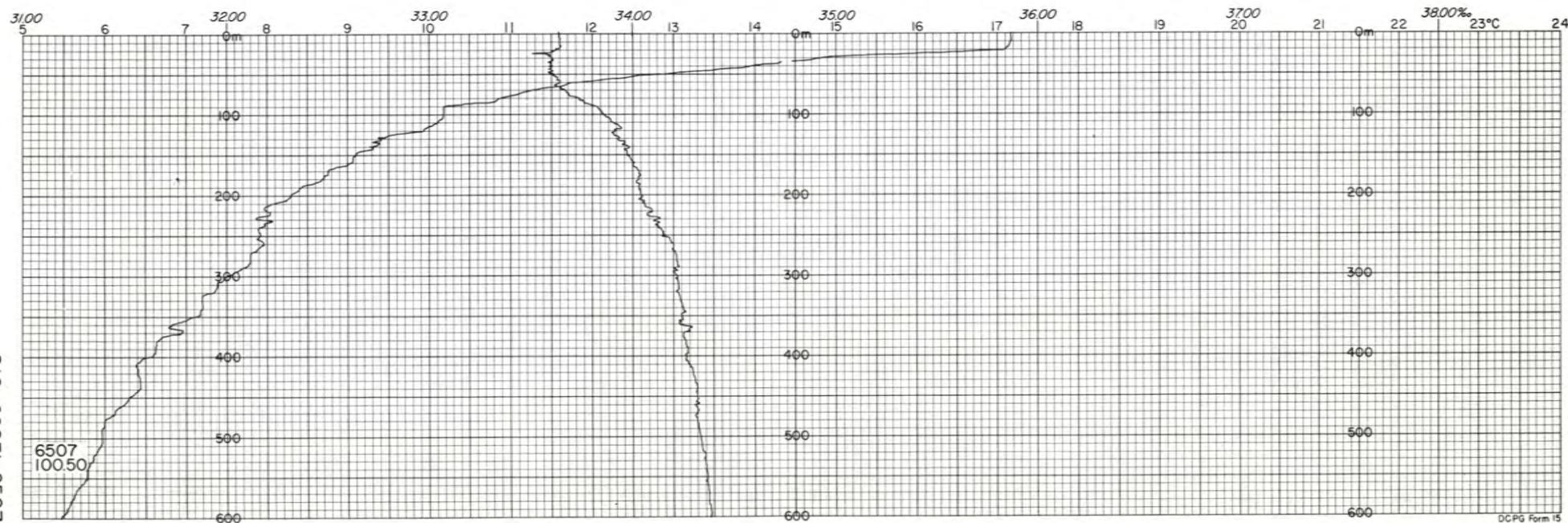
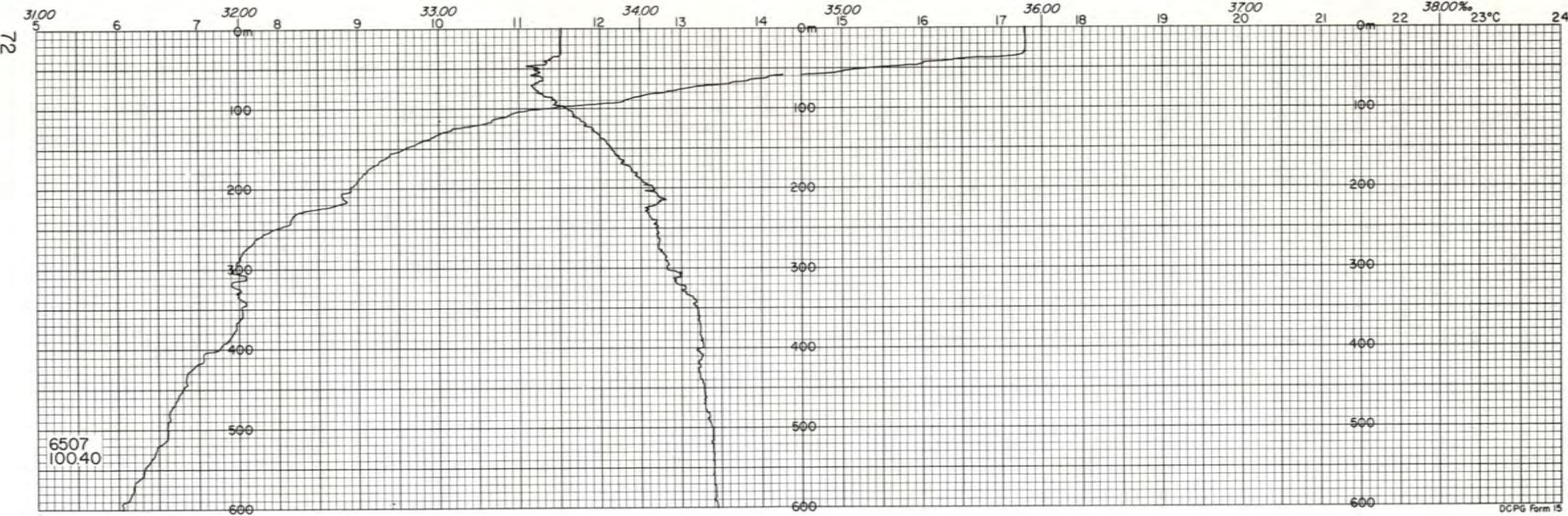


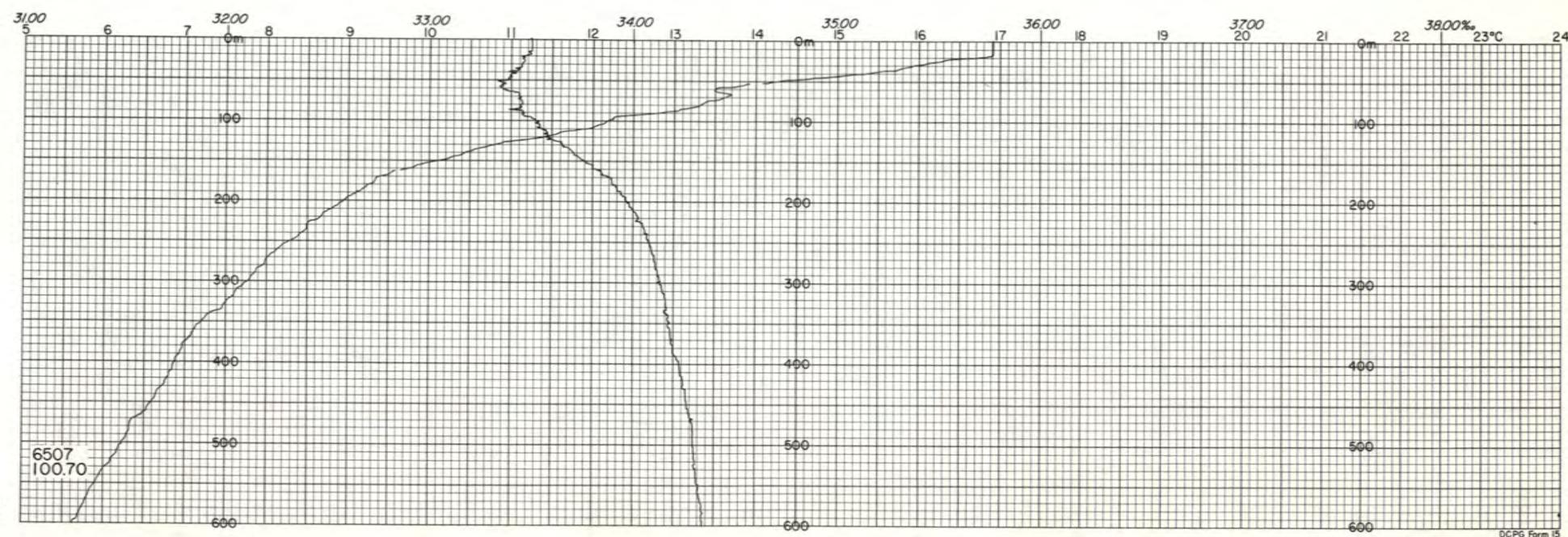
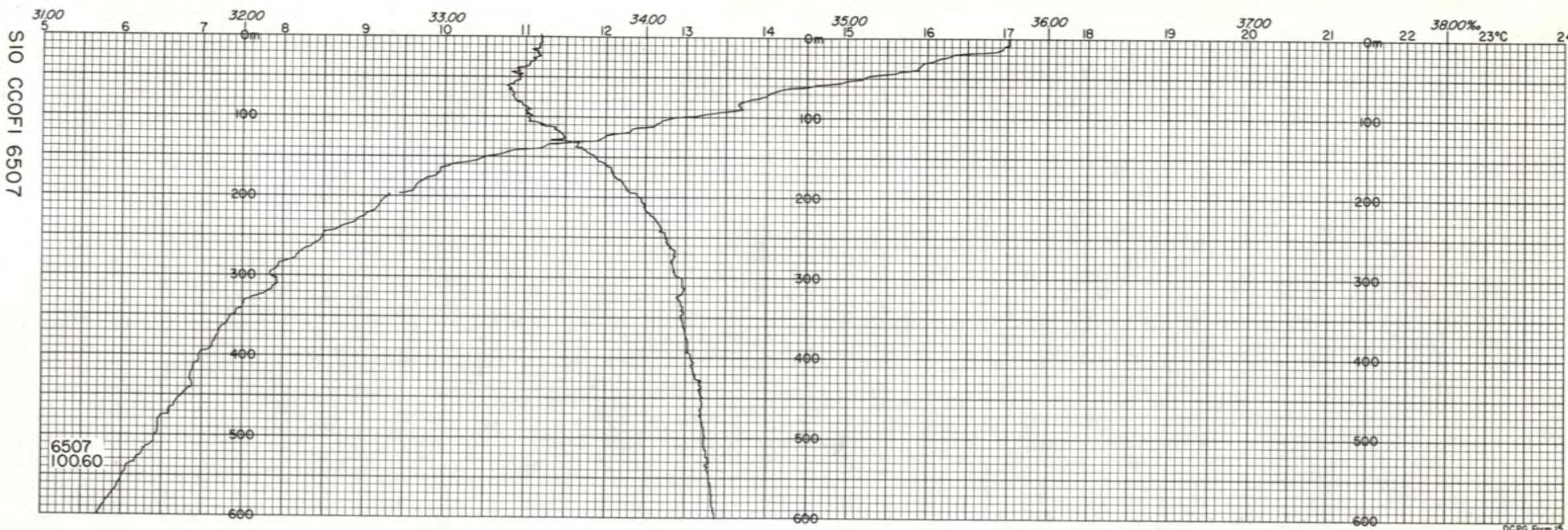


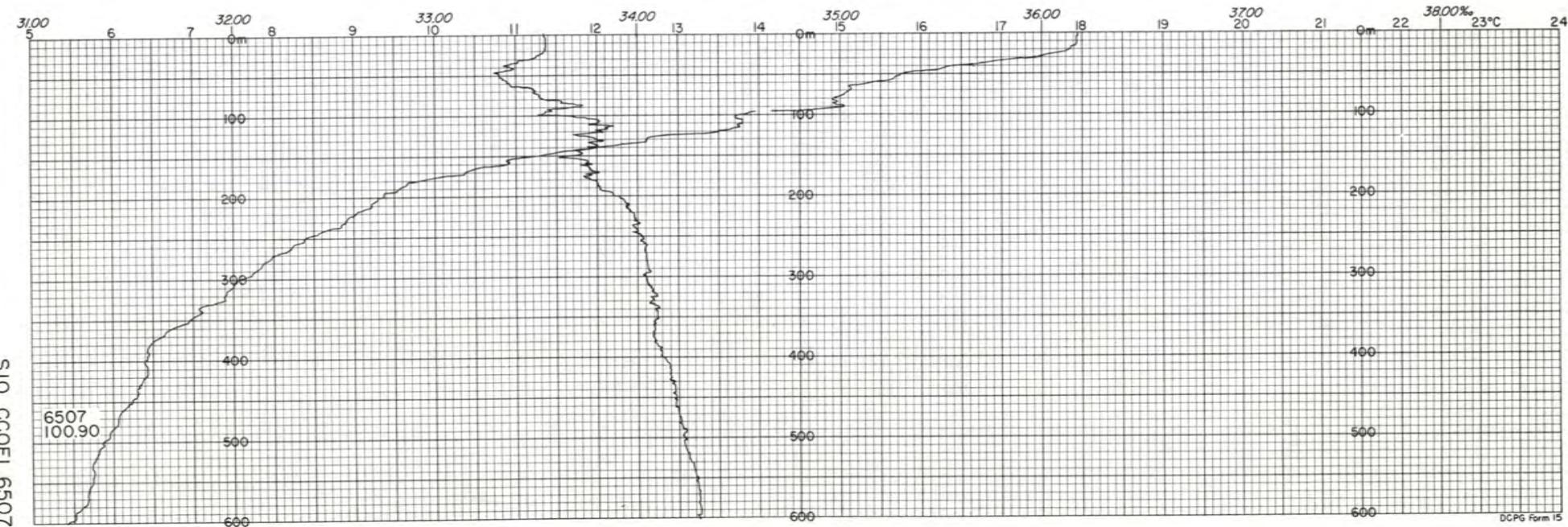
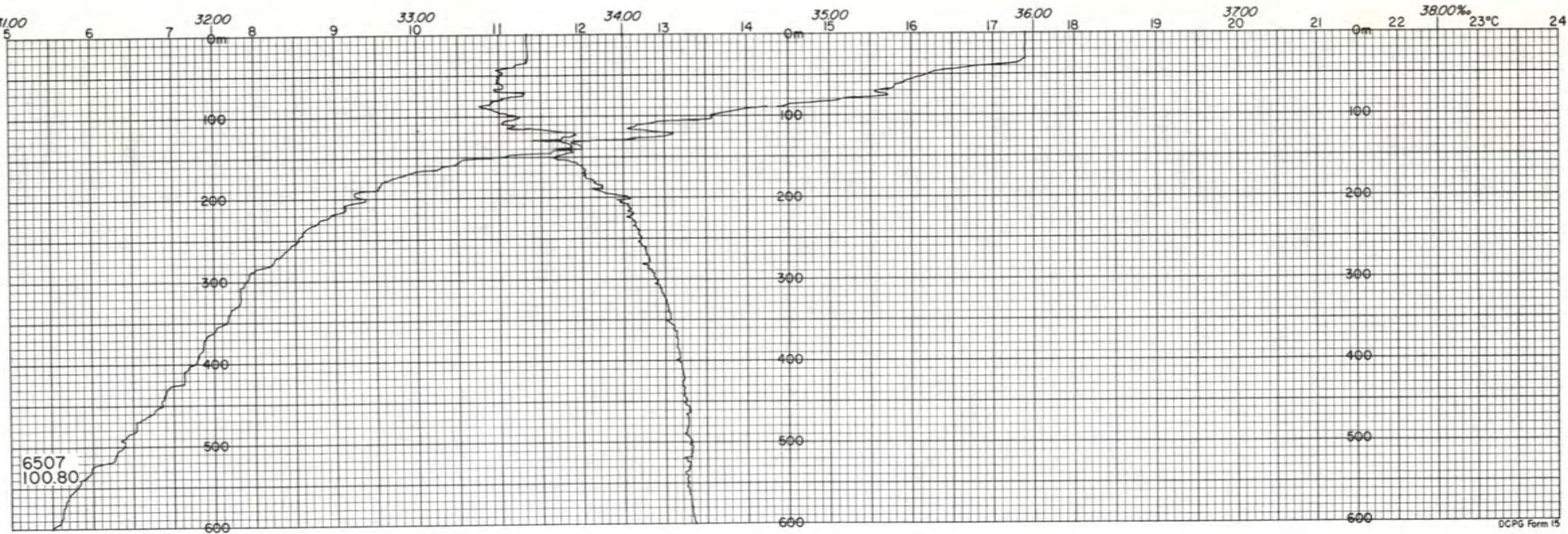


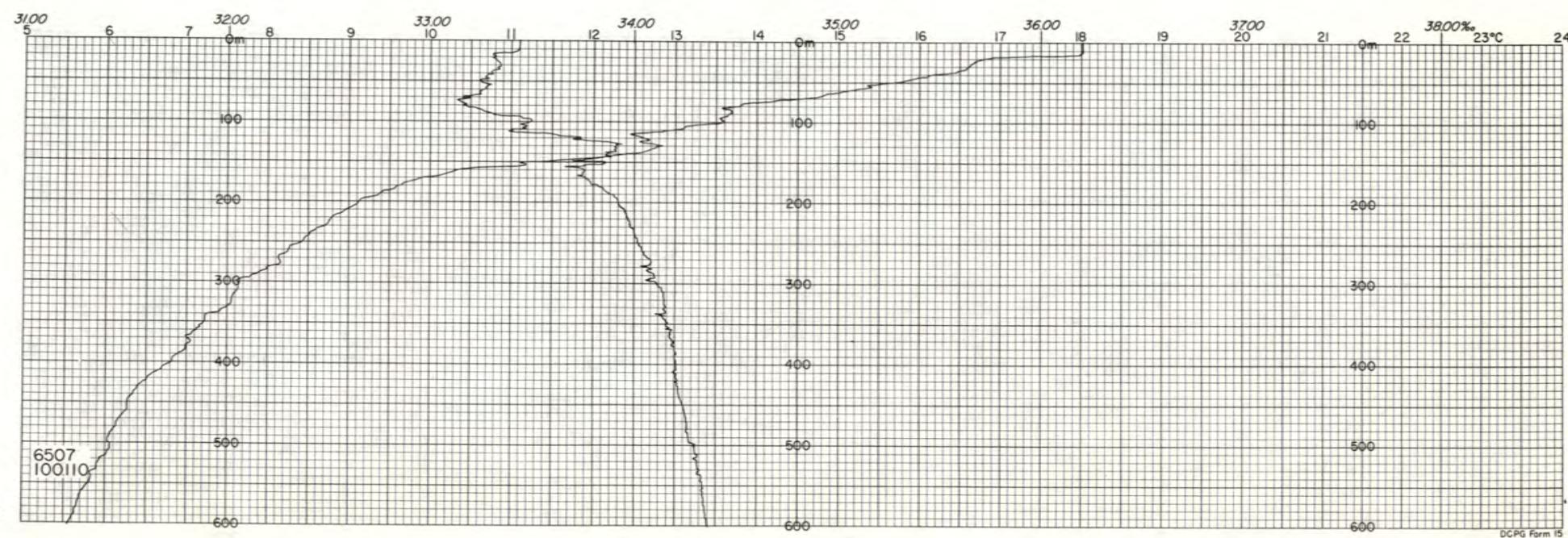
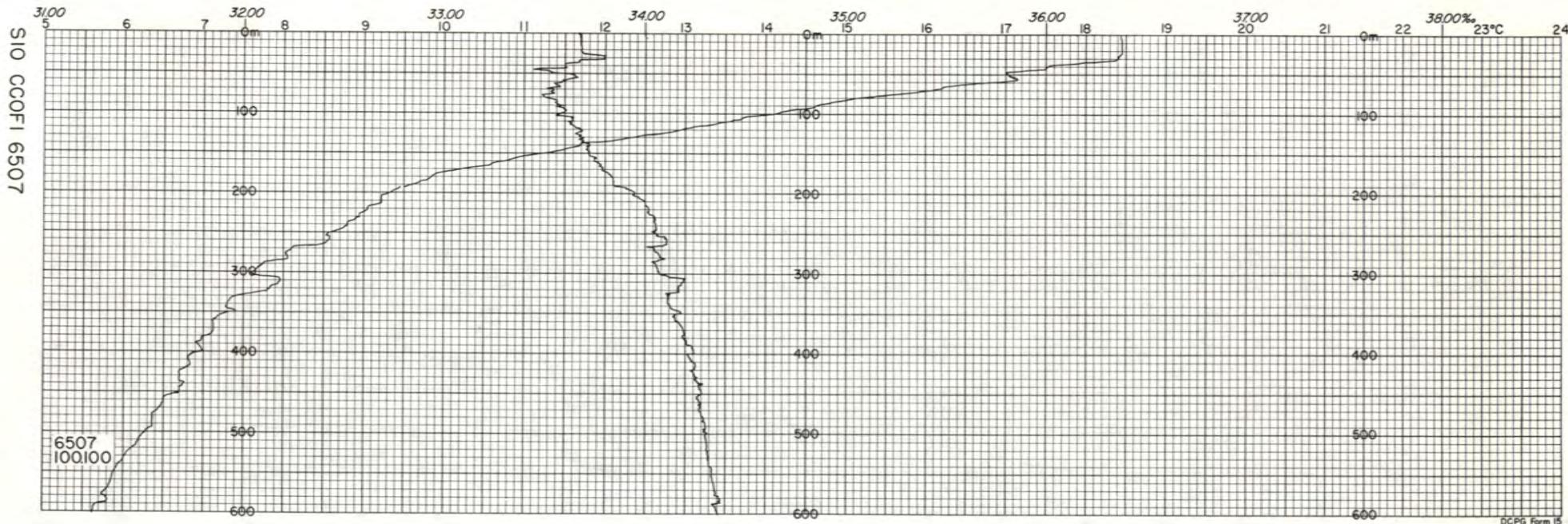
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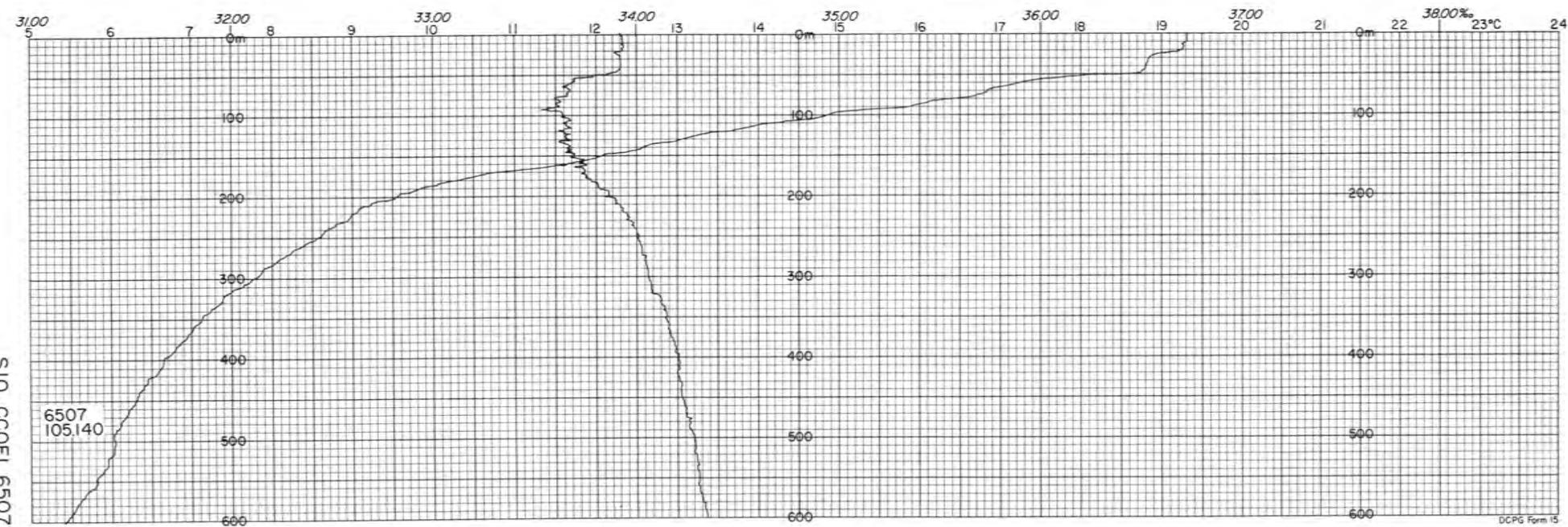
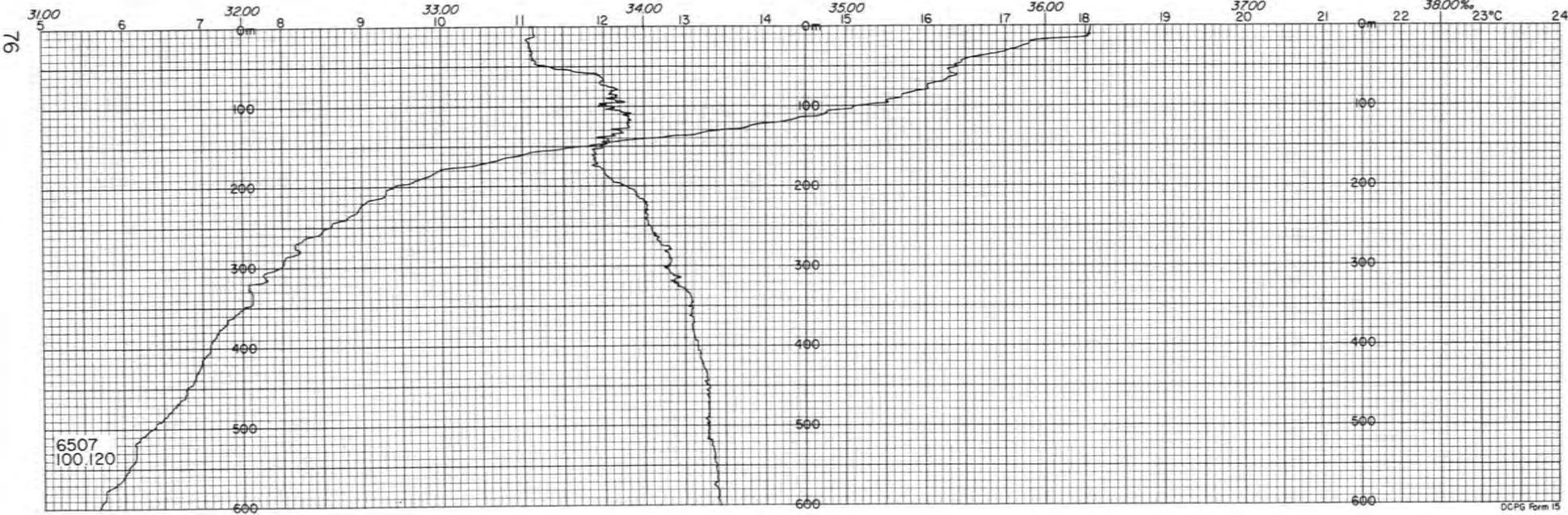




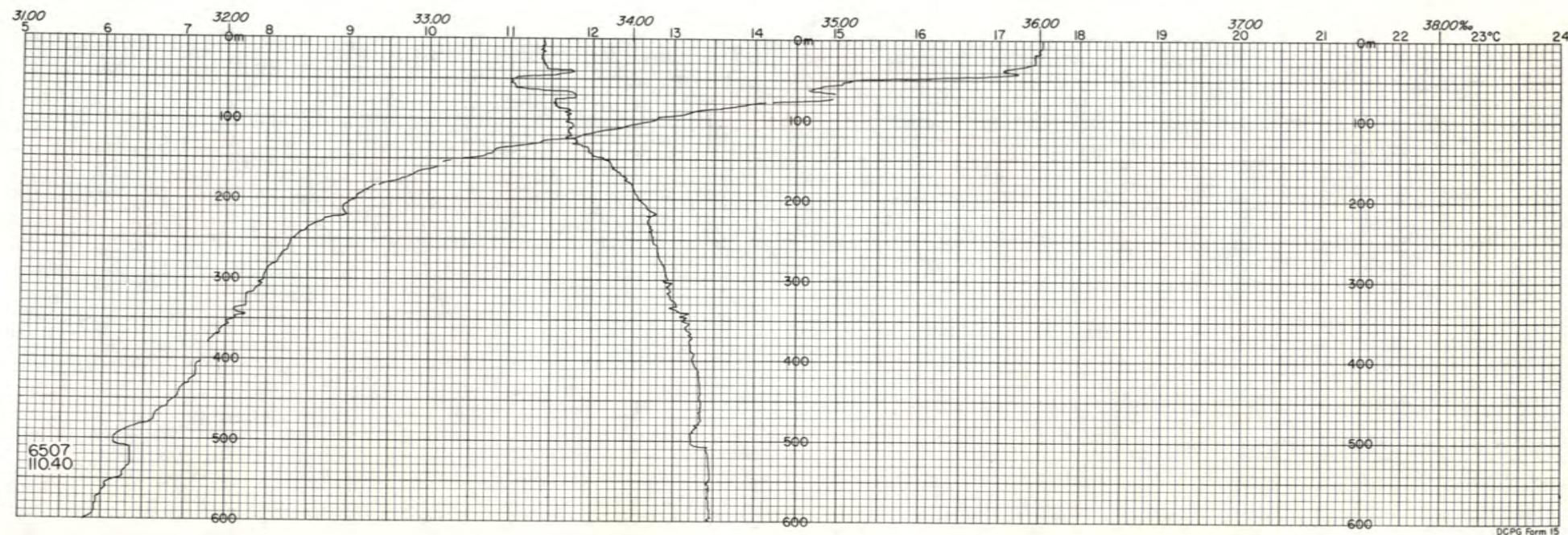
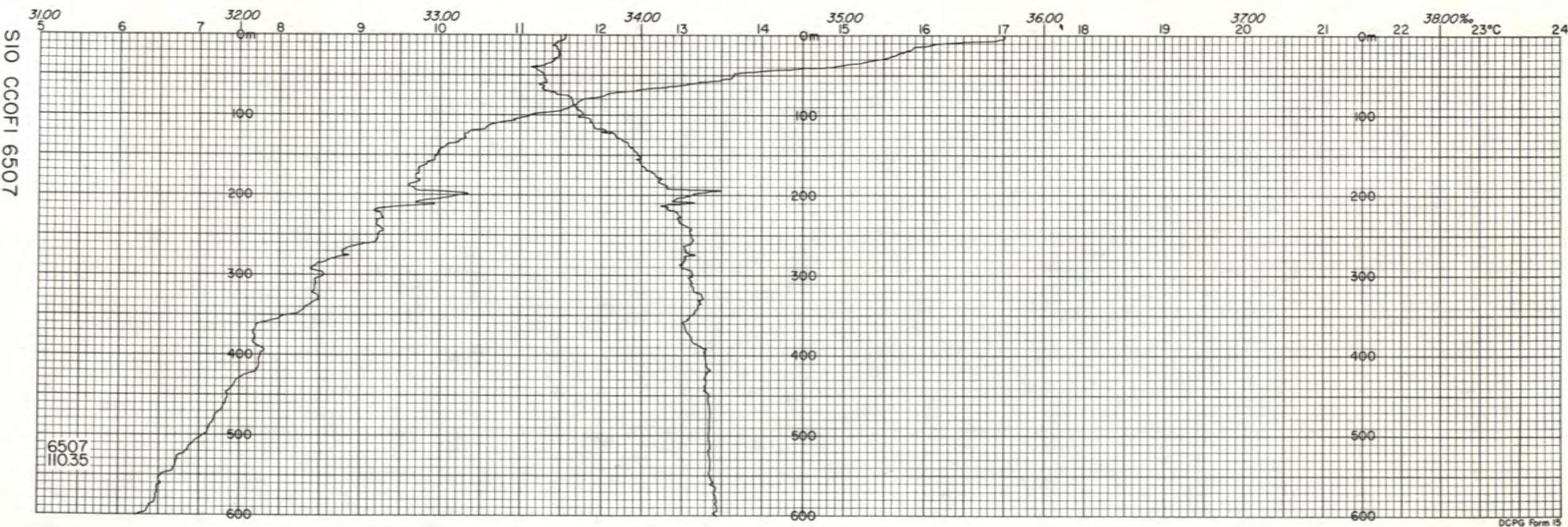


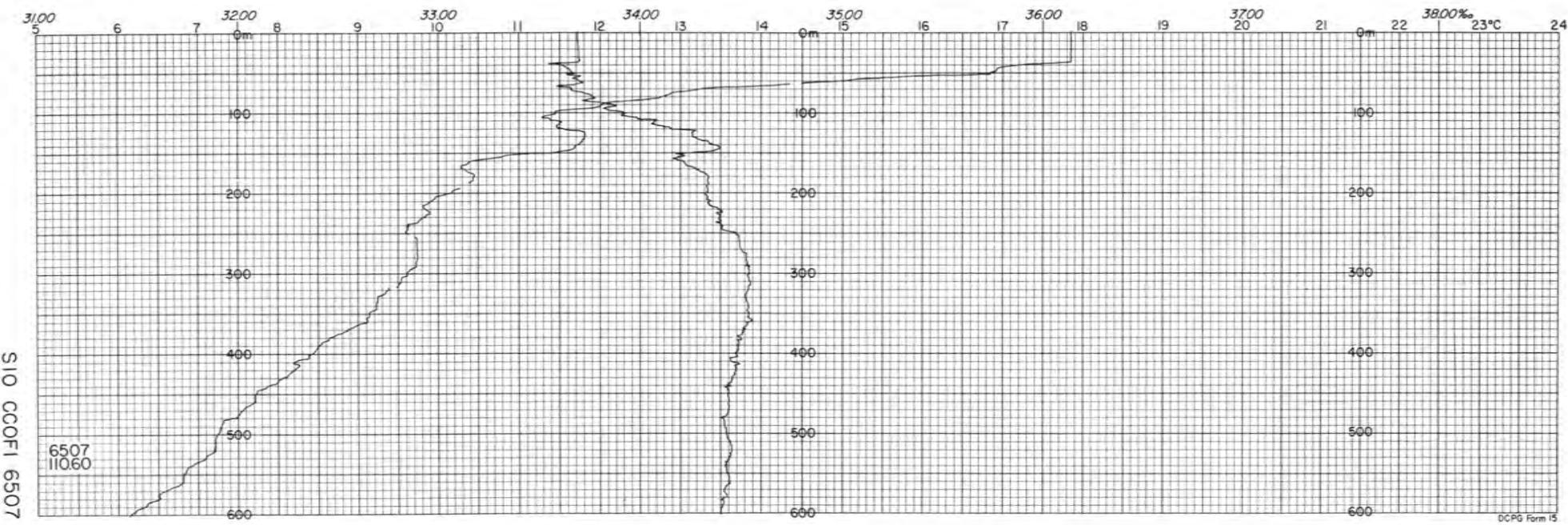
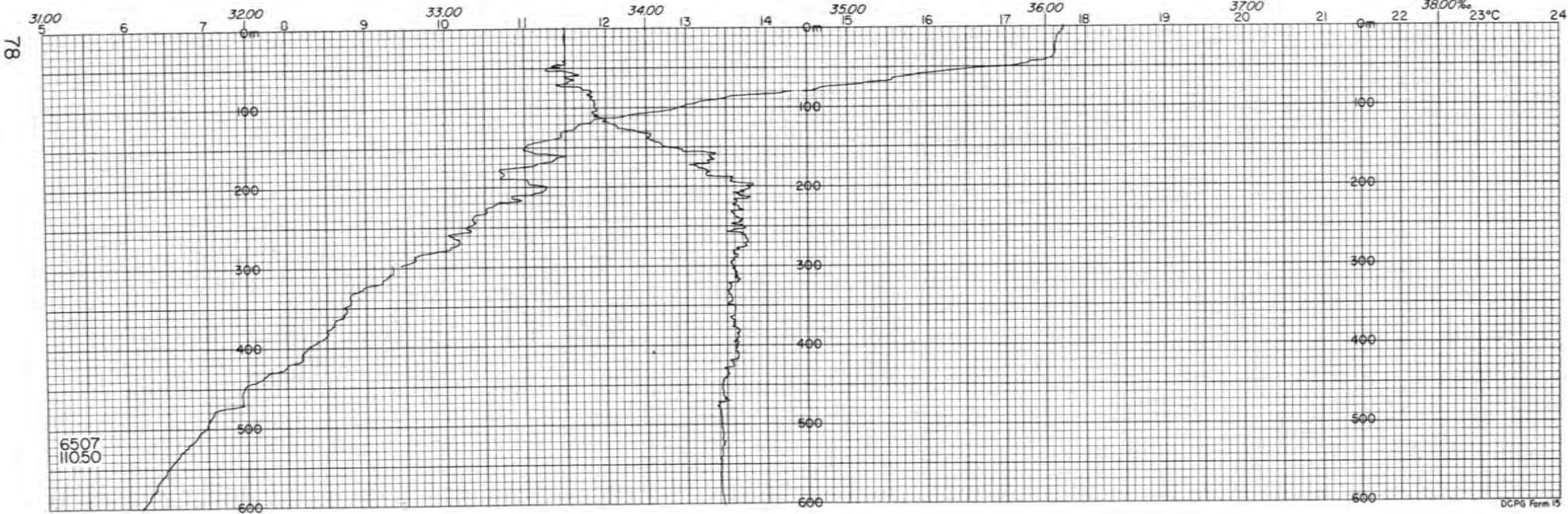






77

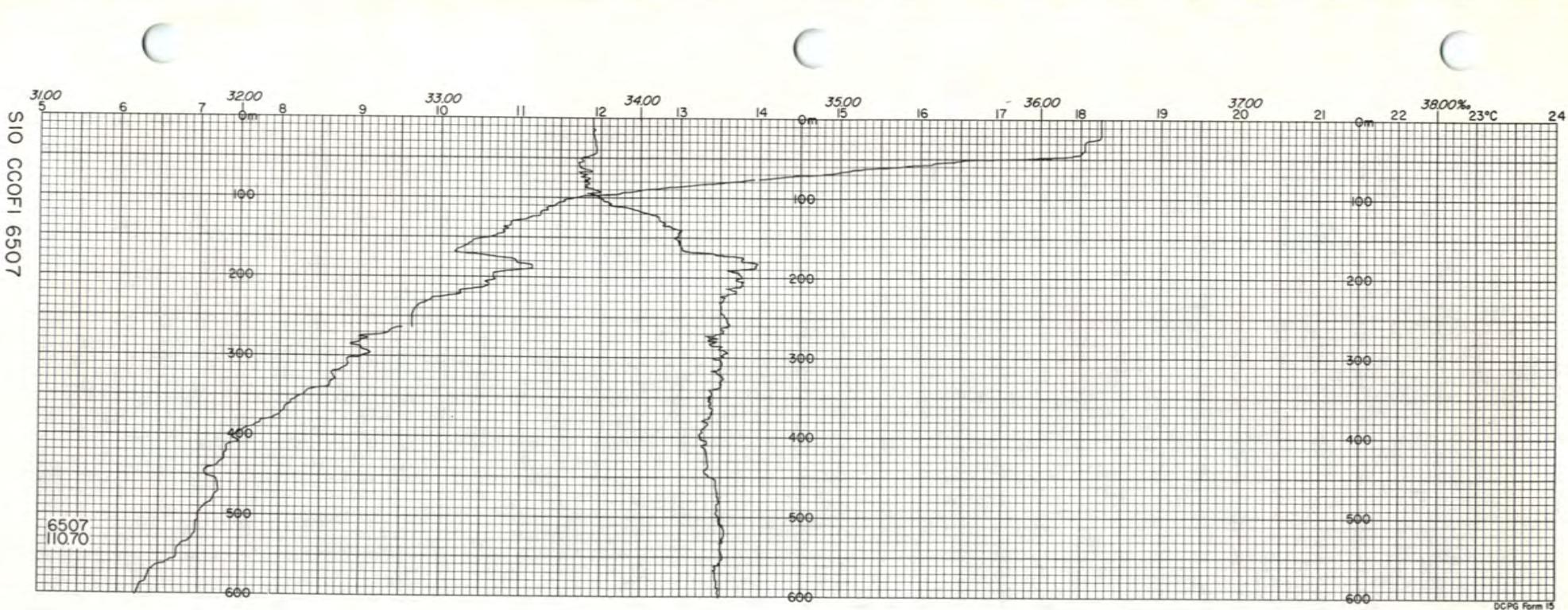


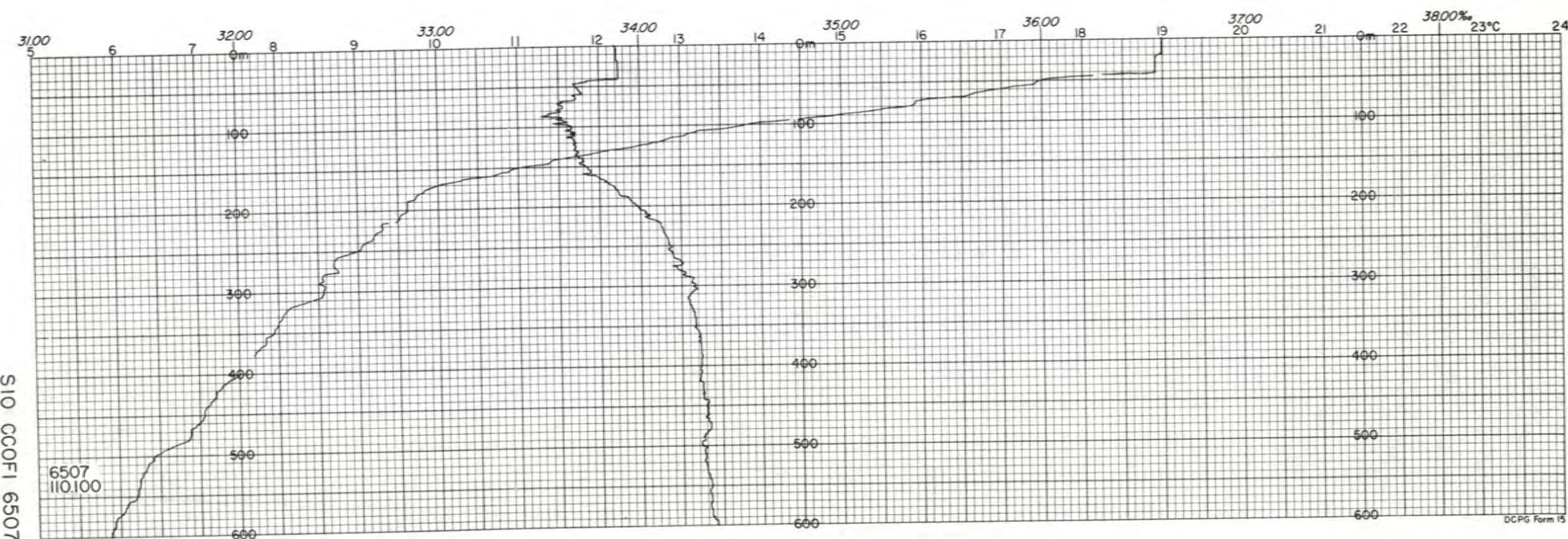
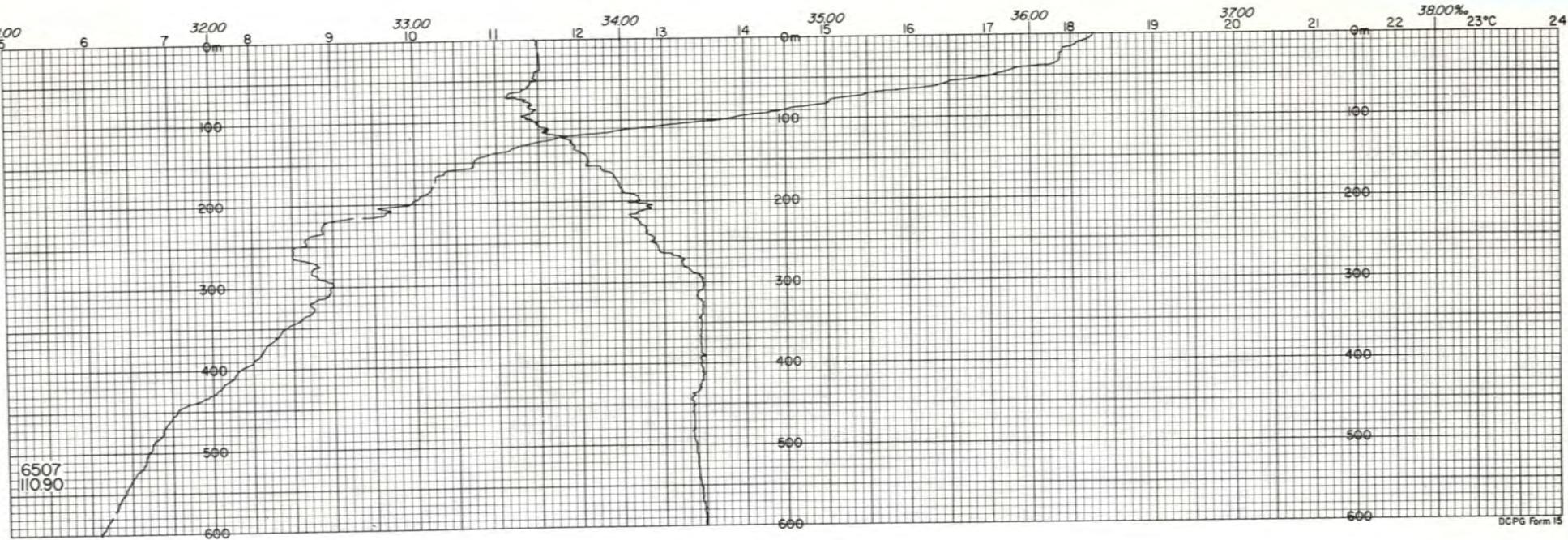


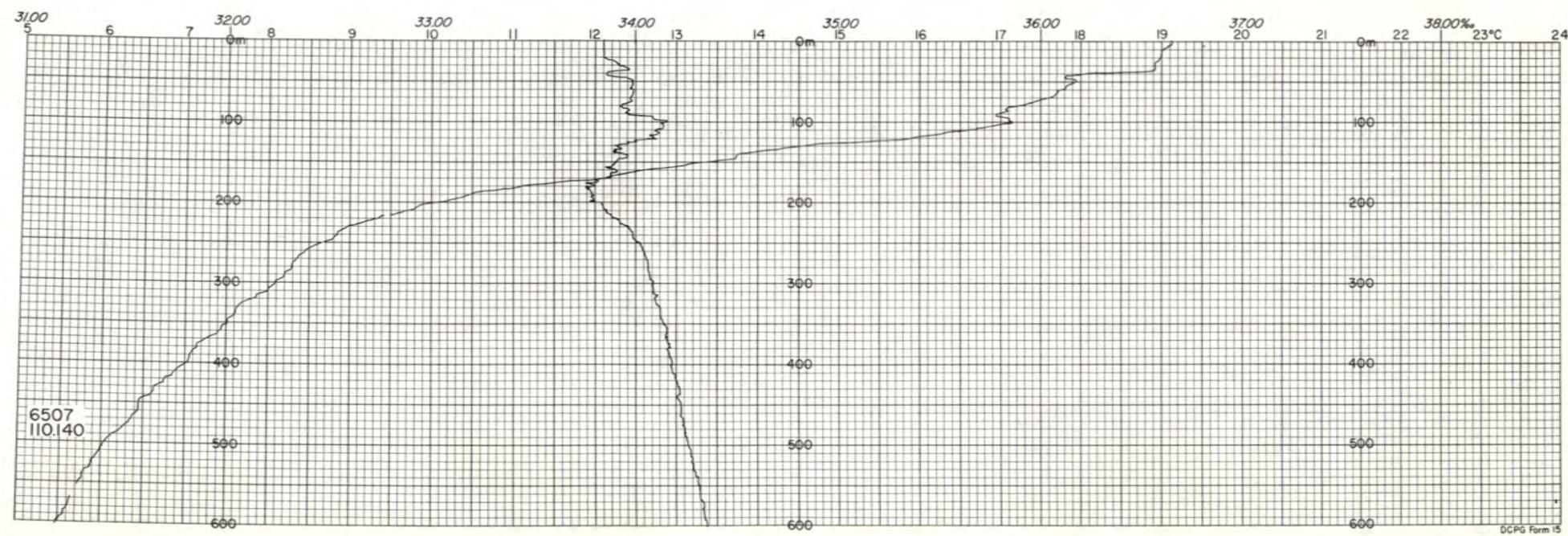
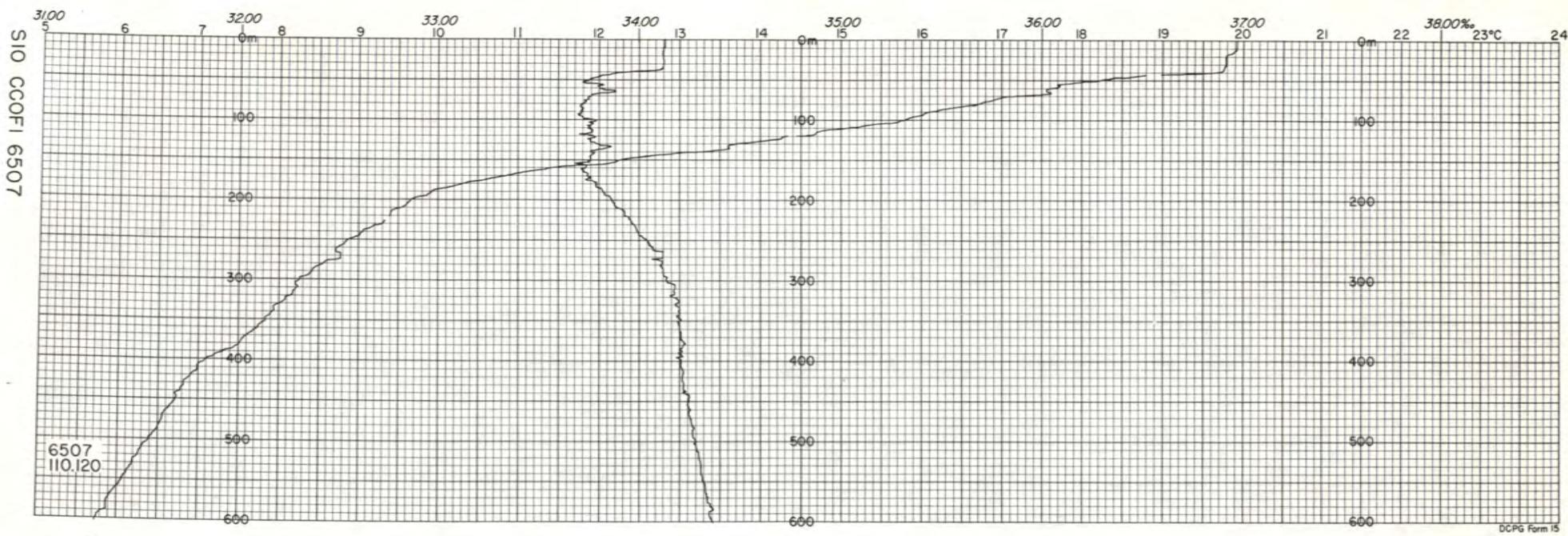
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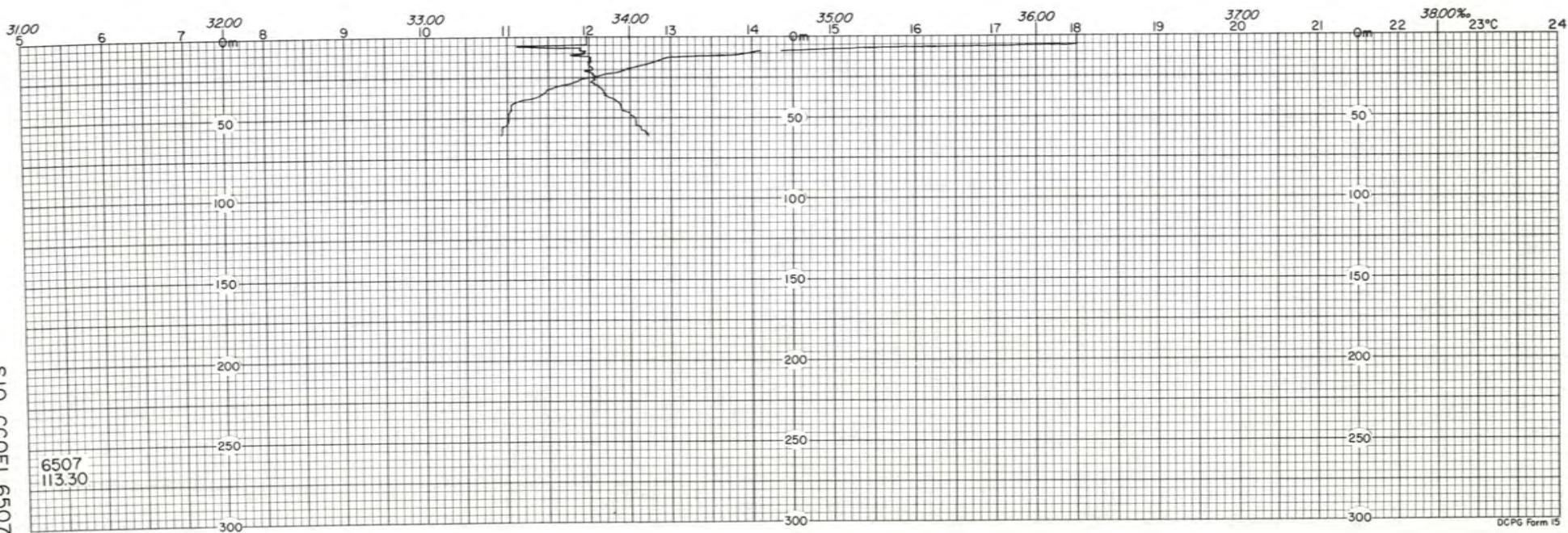
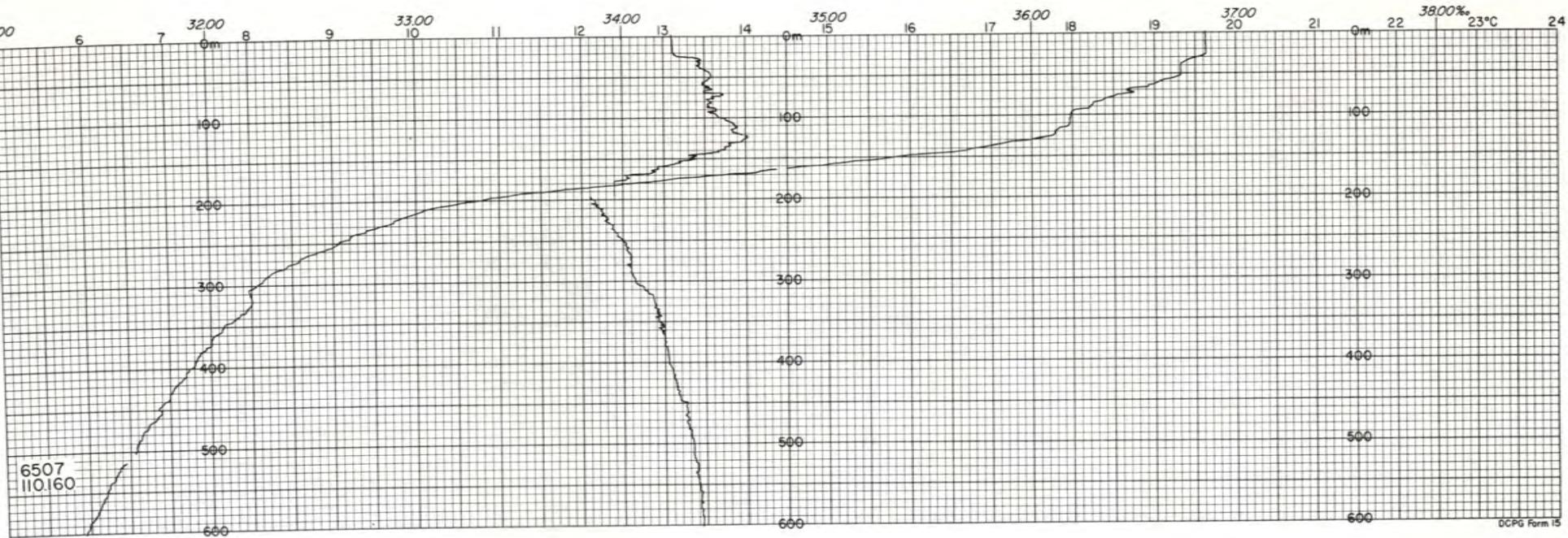
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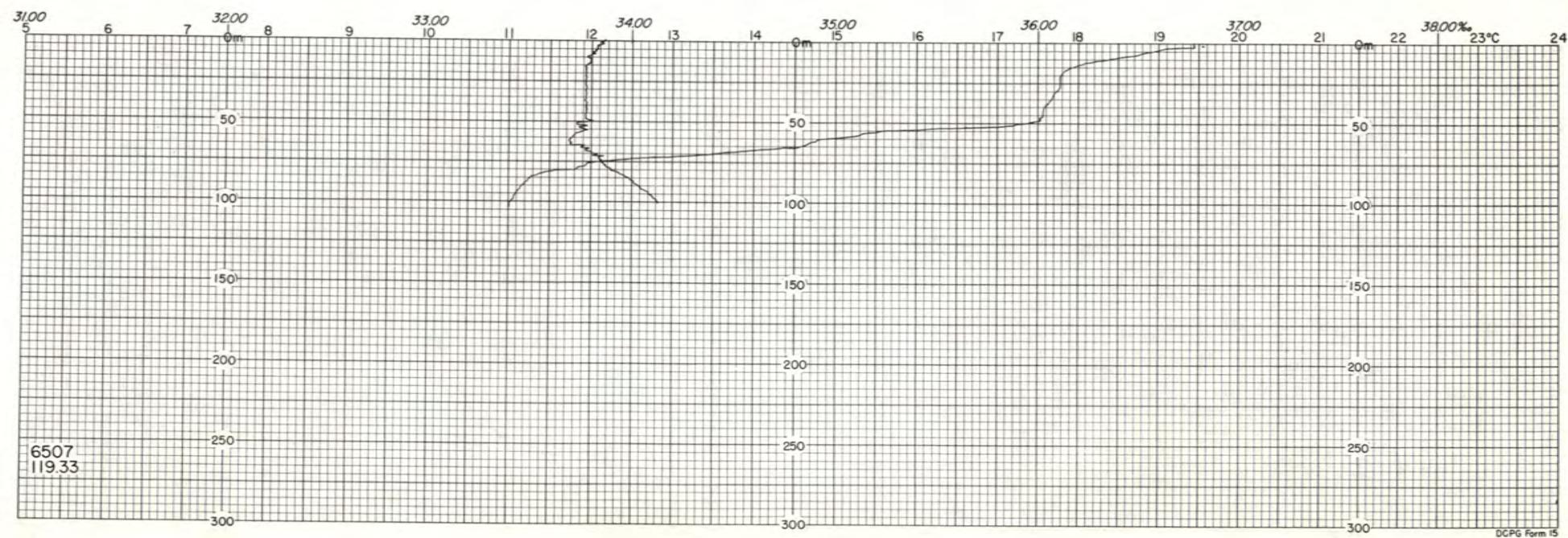
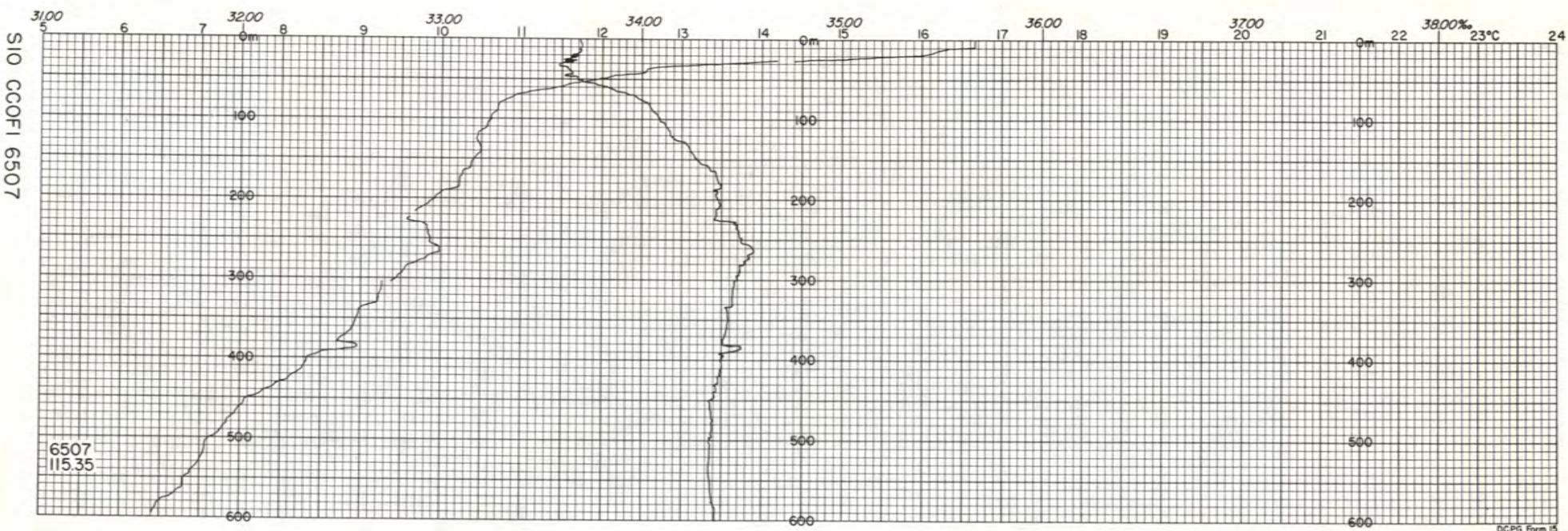
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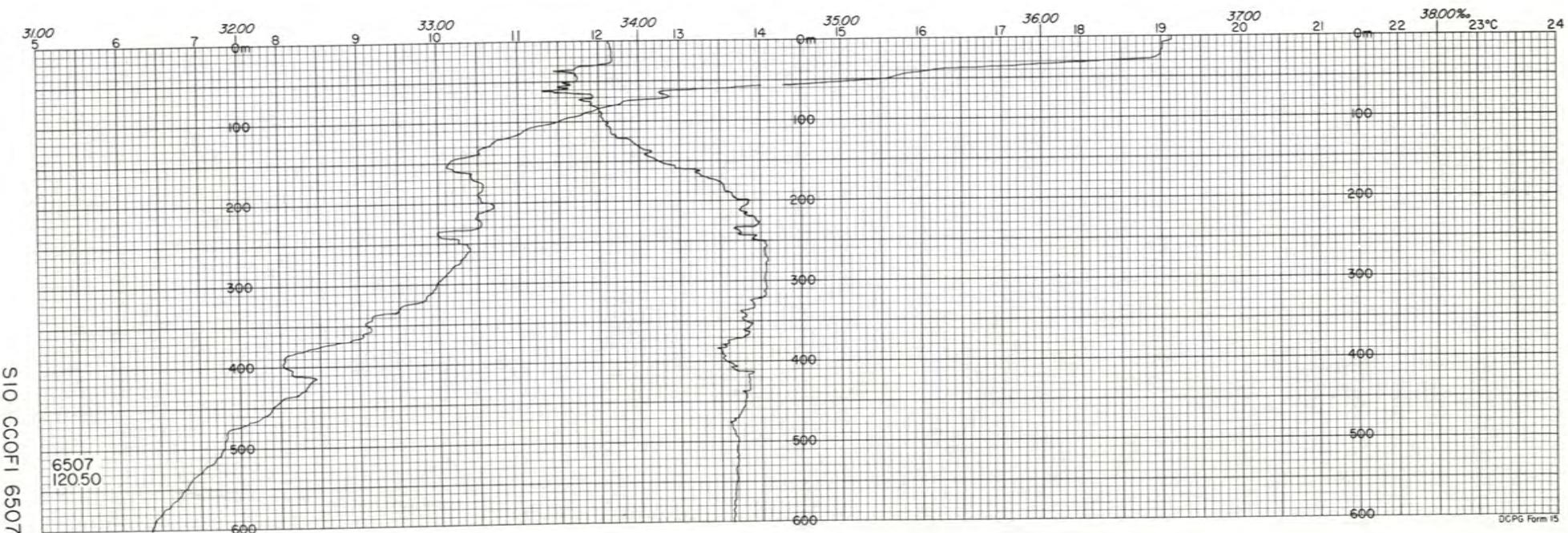
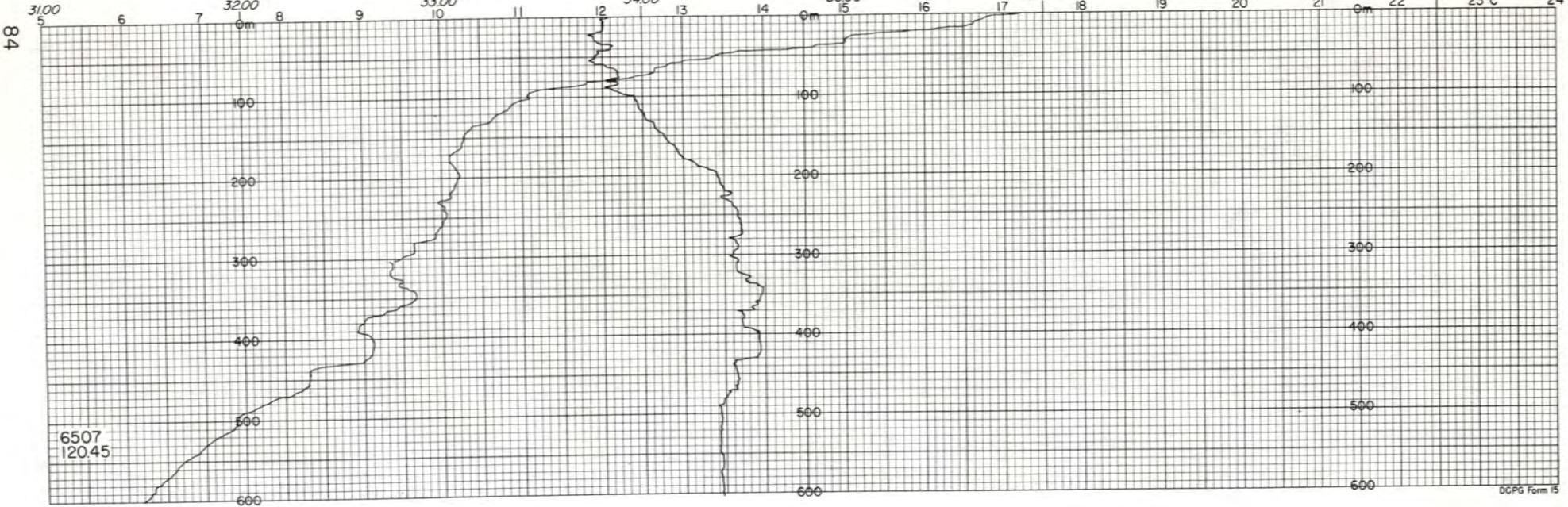


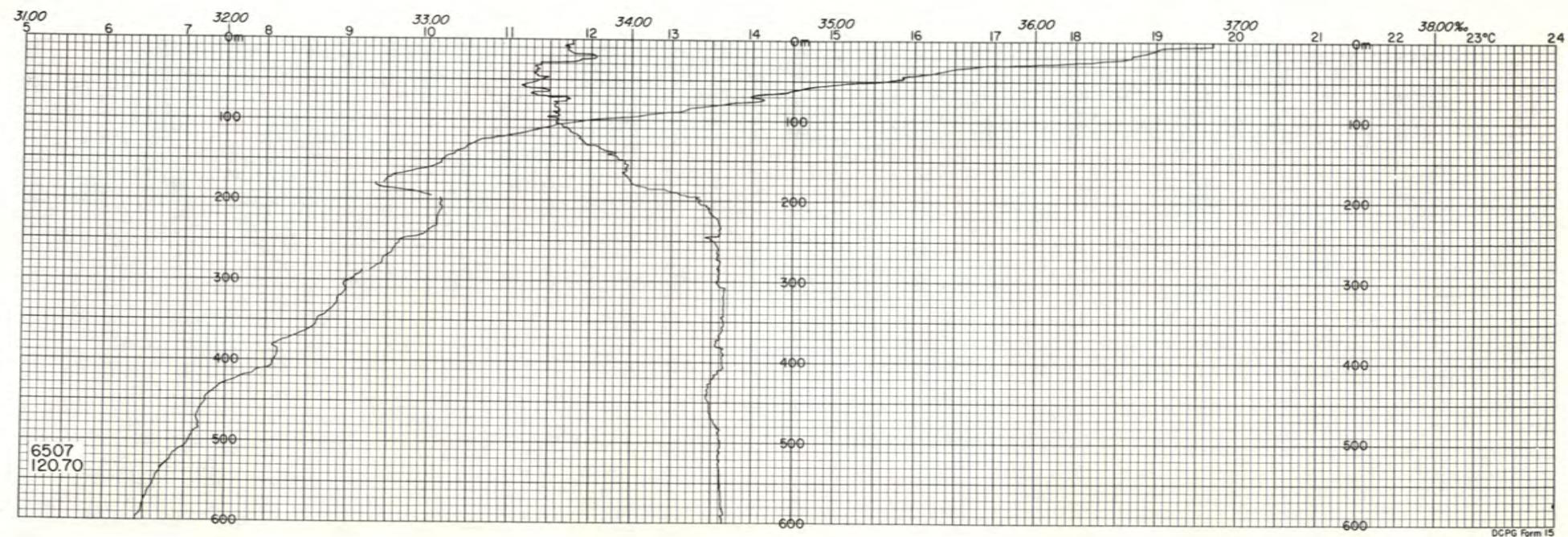
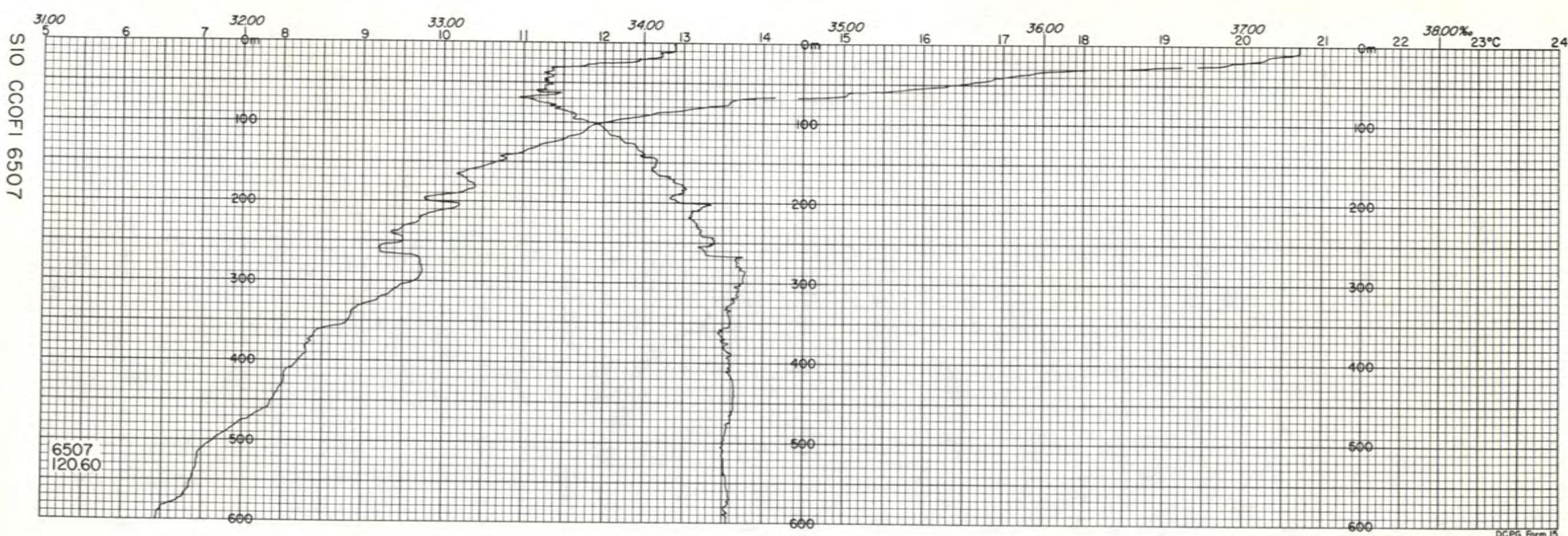


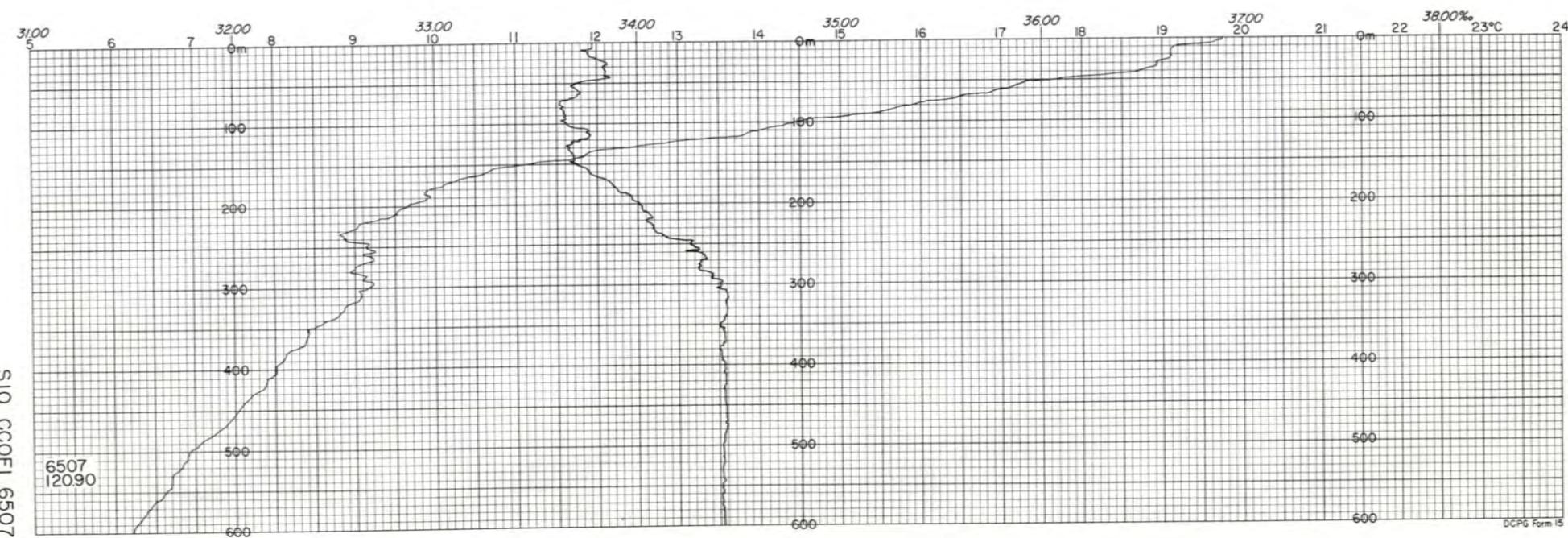
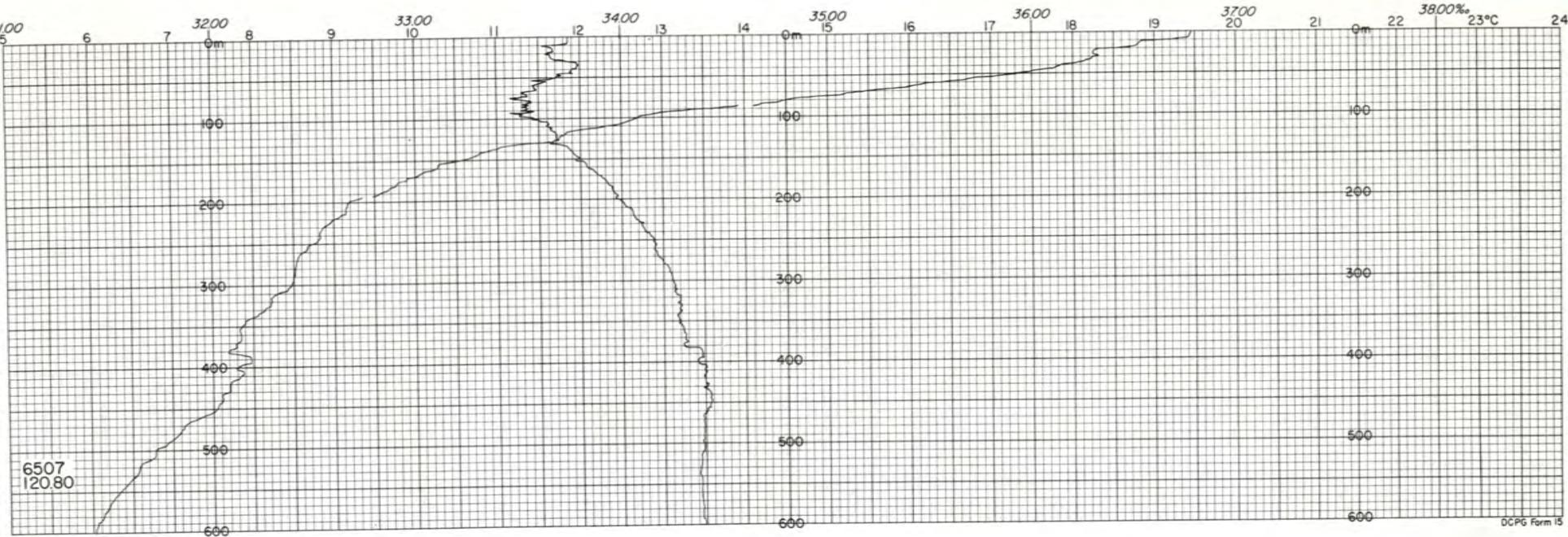


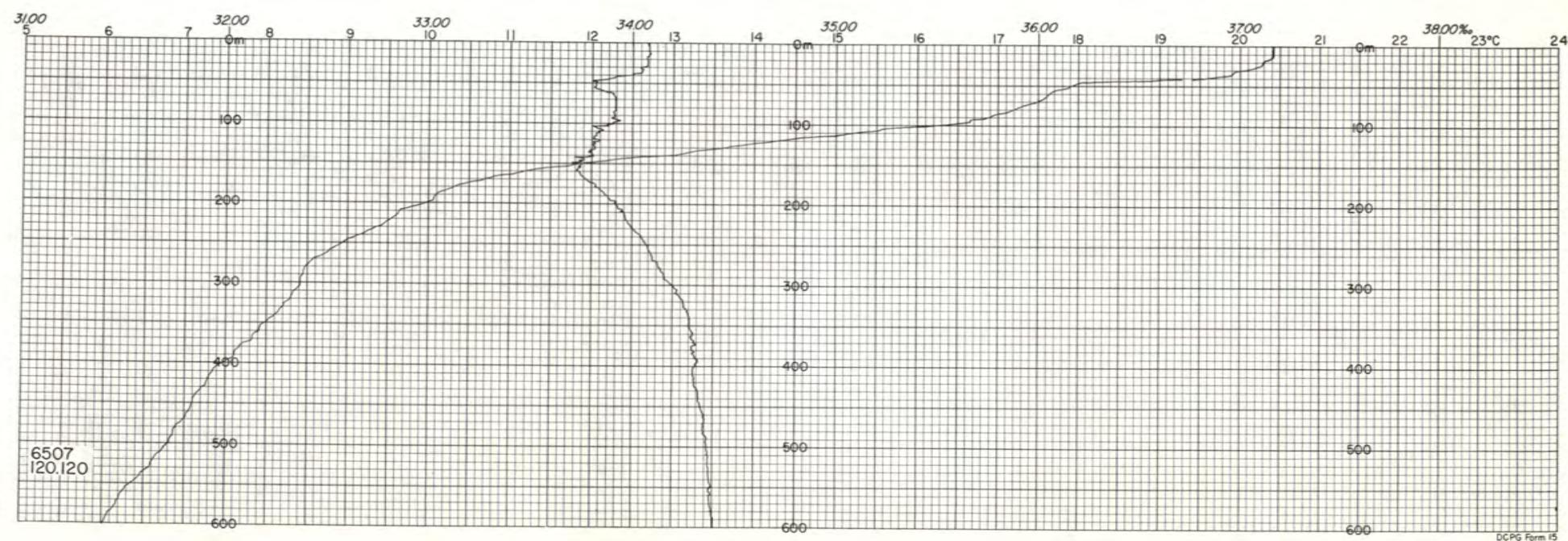
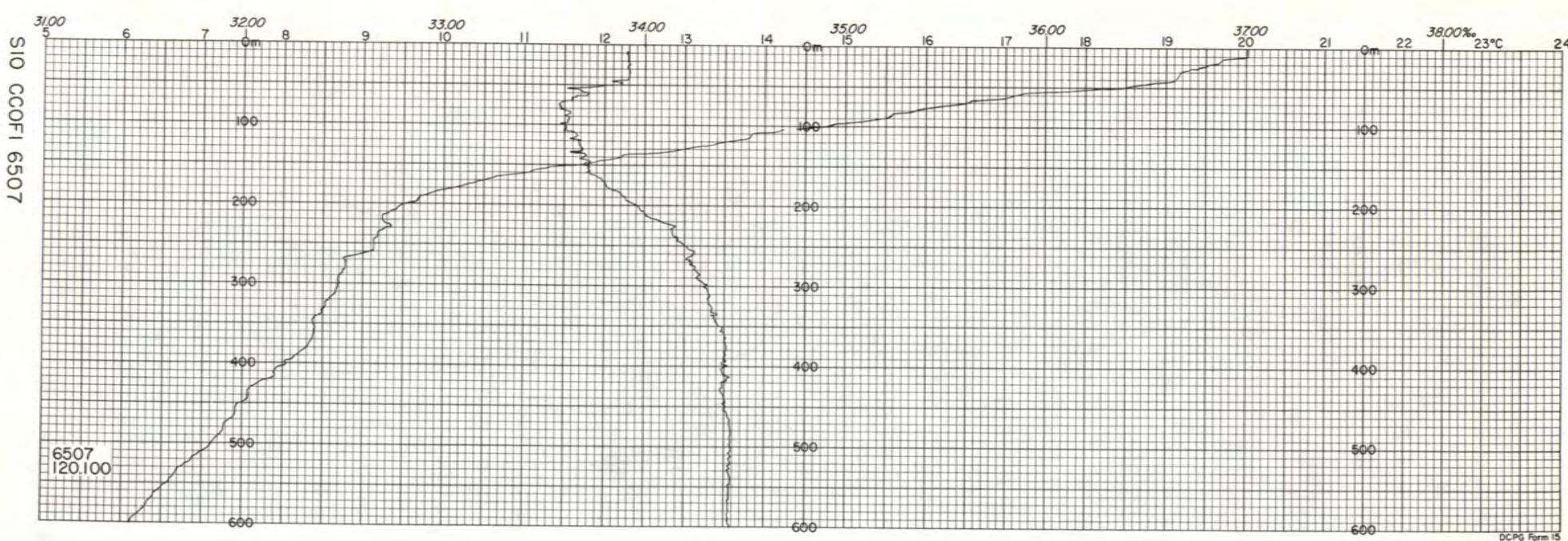


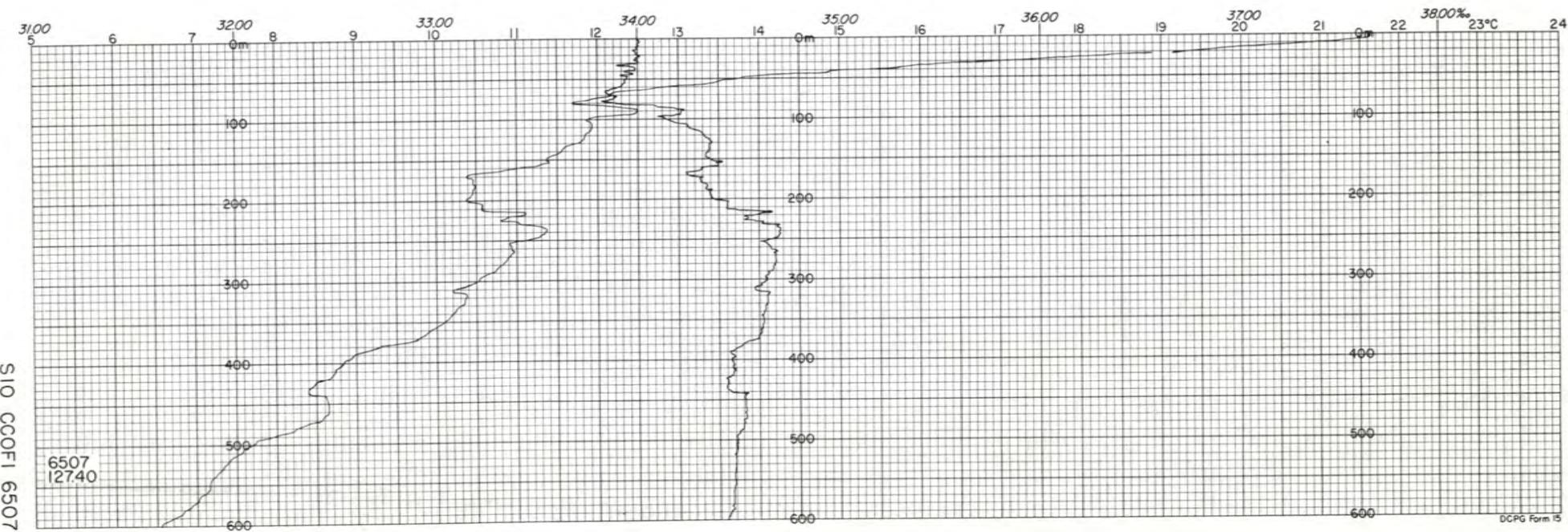
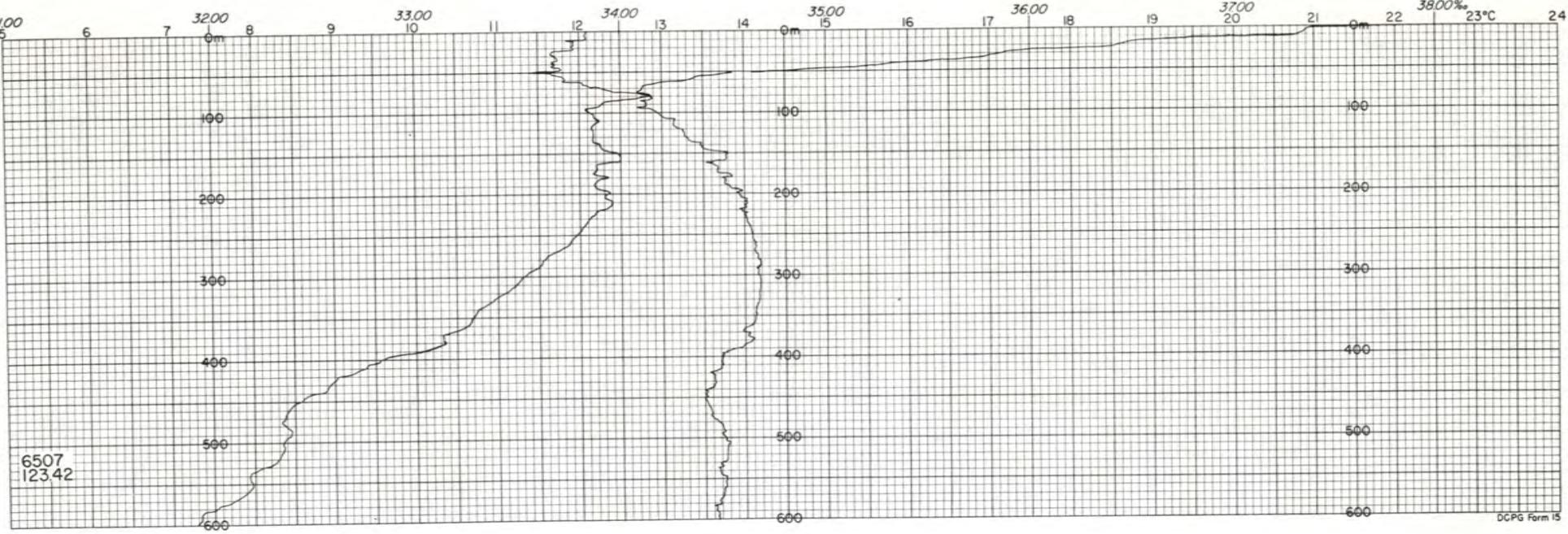






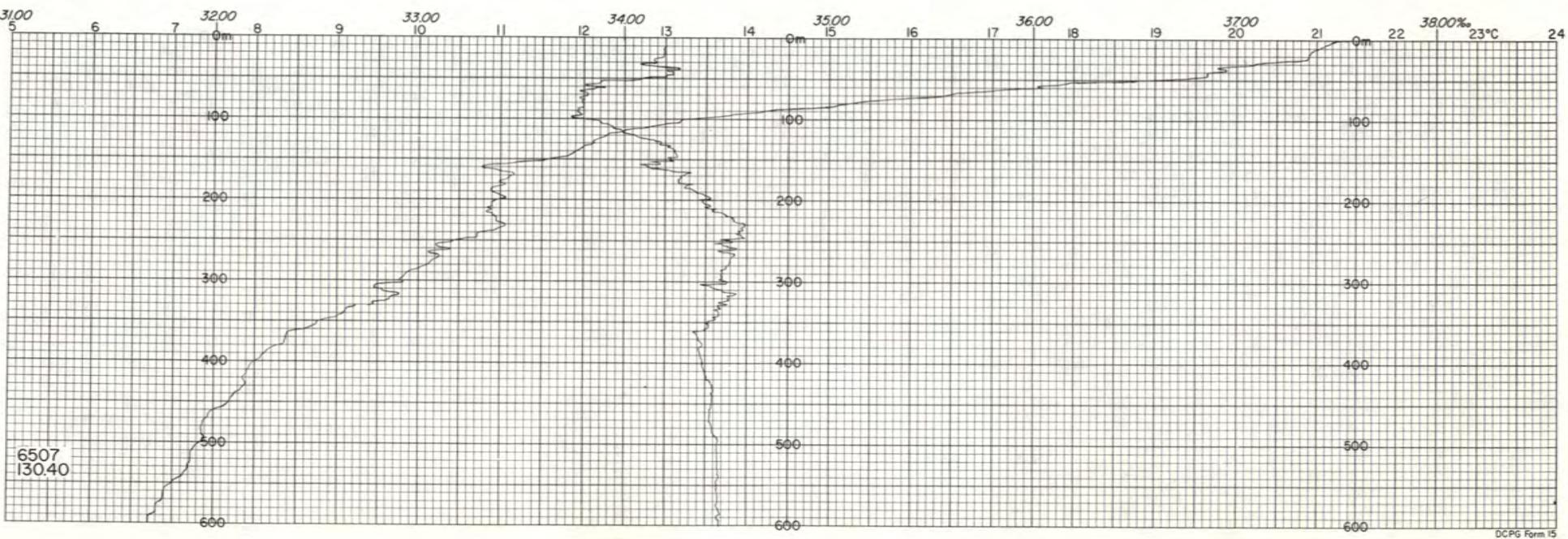
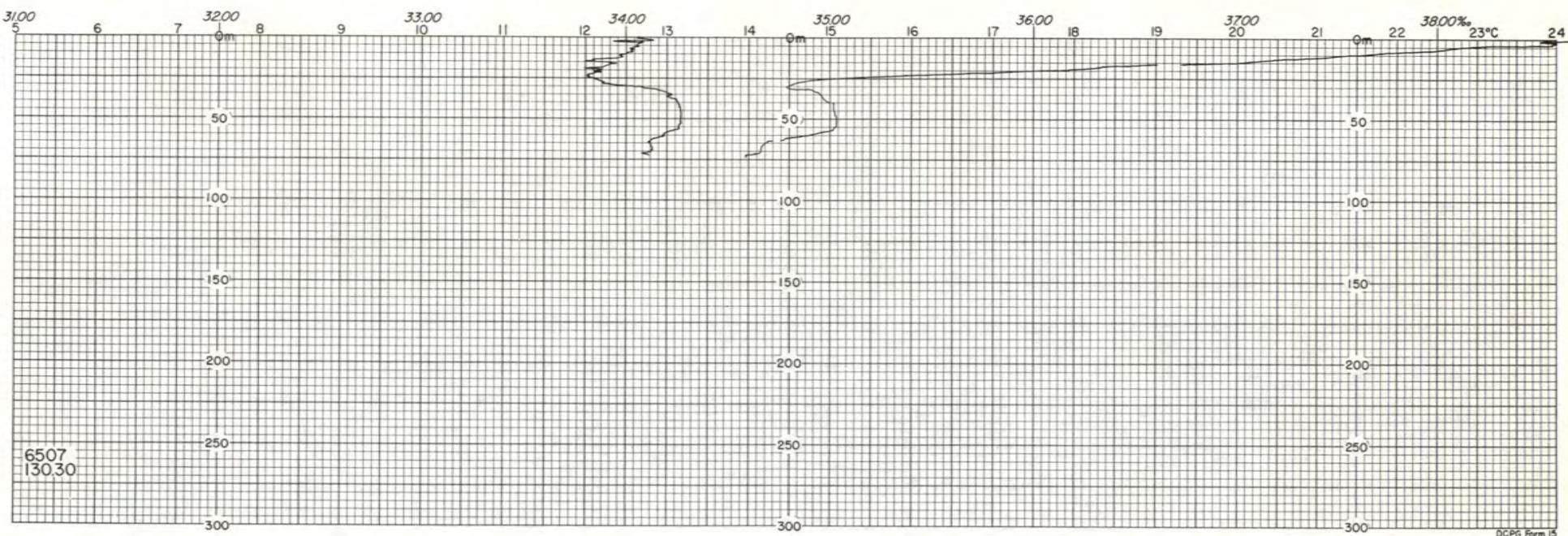


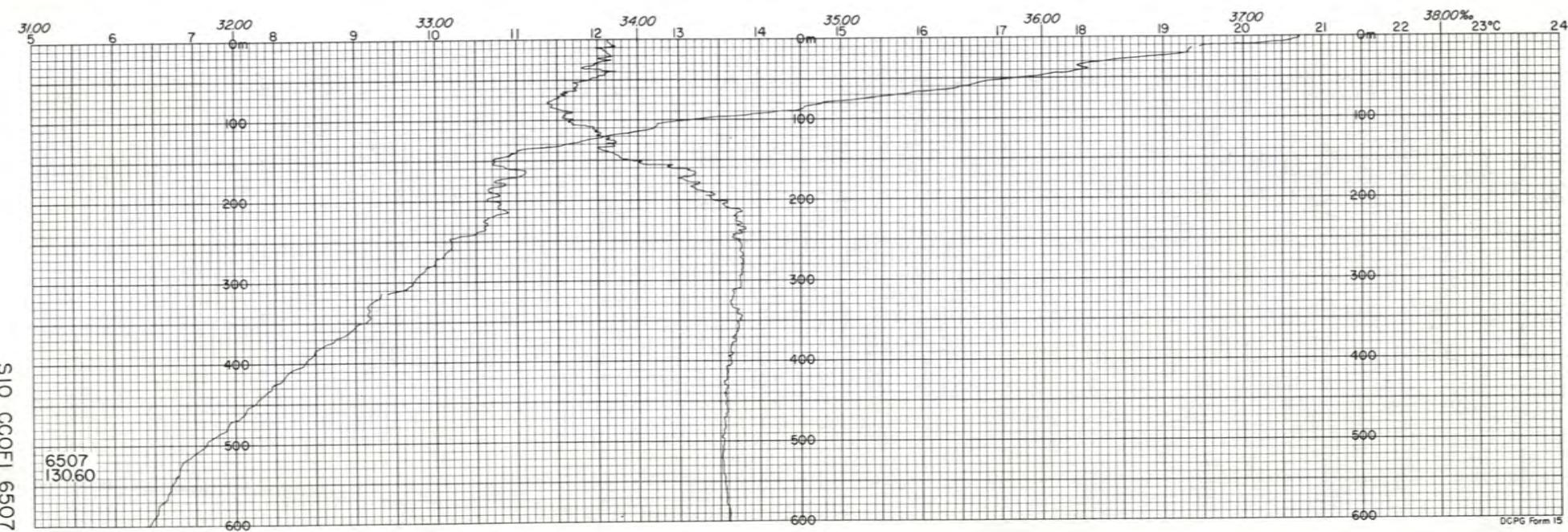
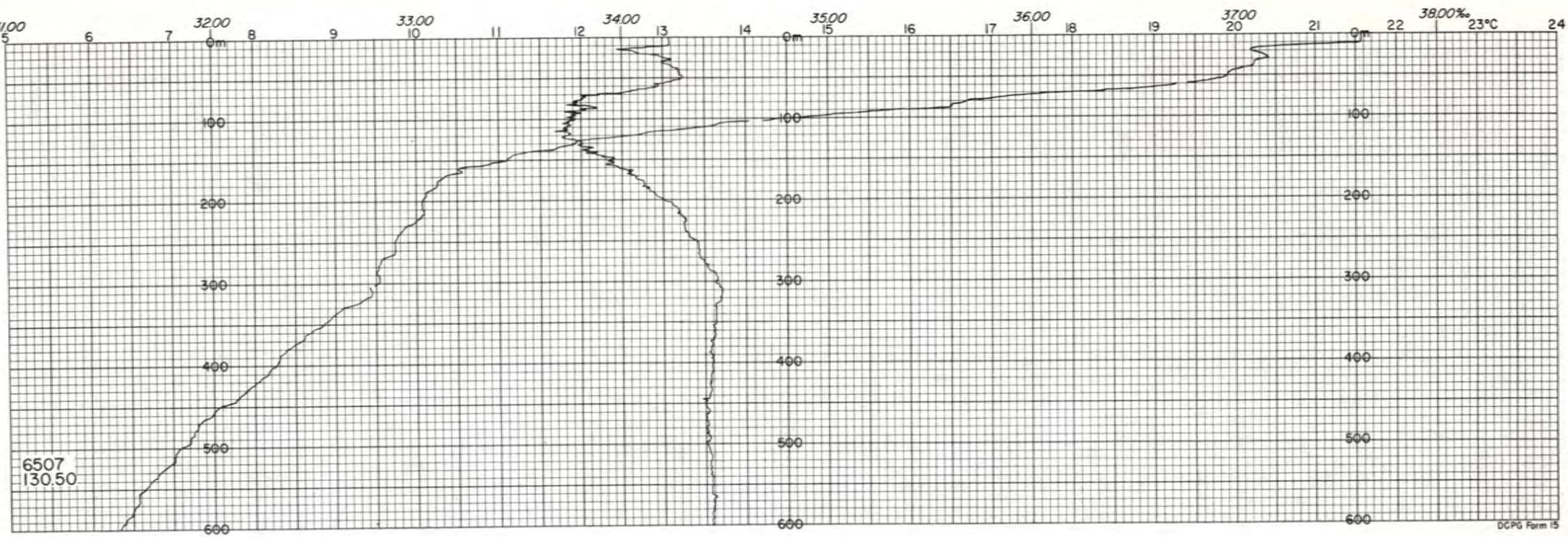


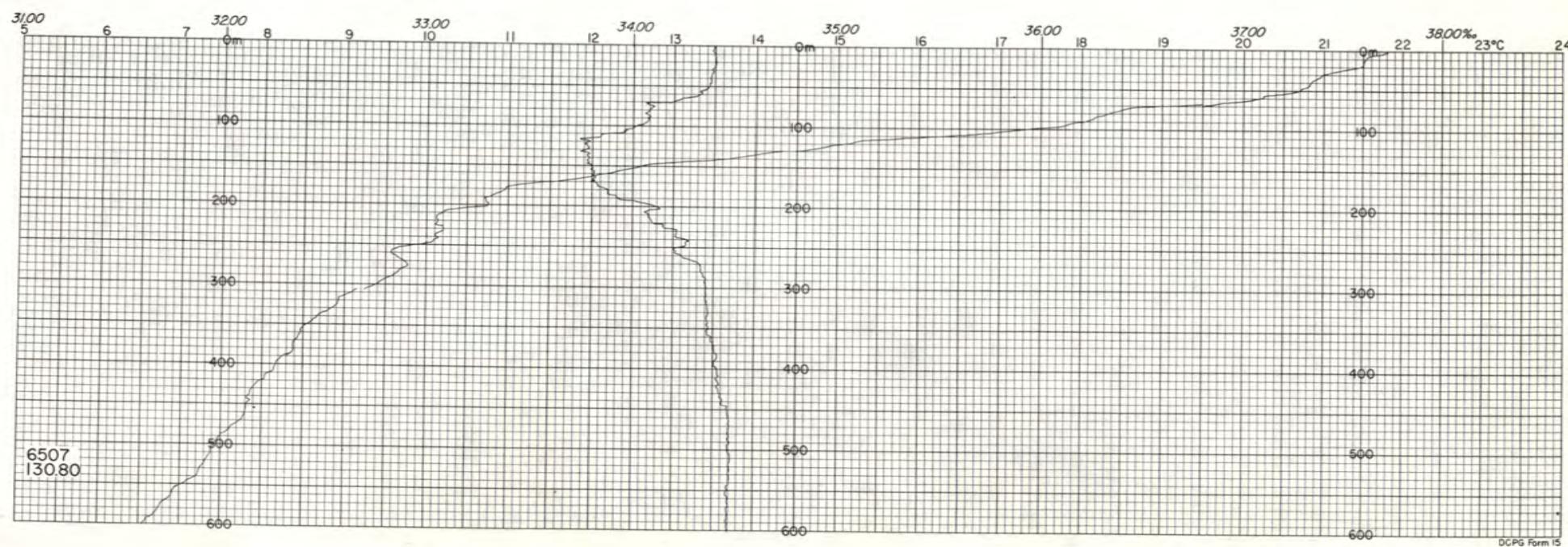
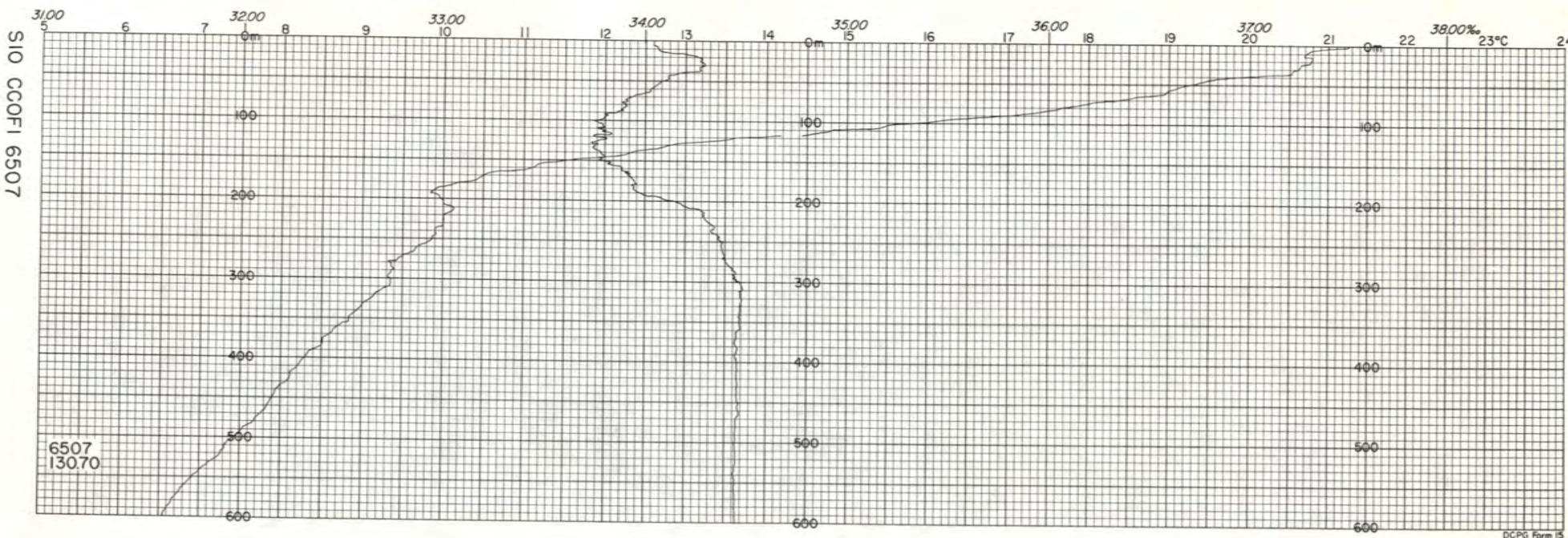


89

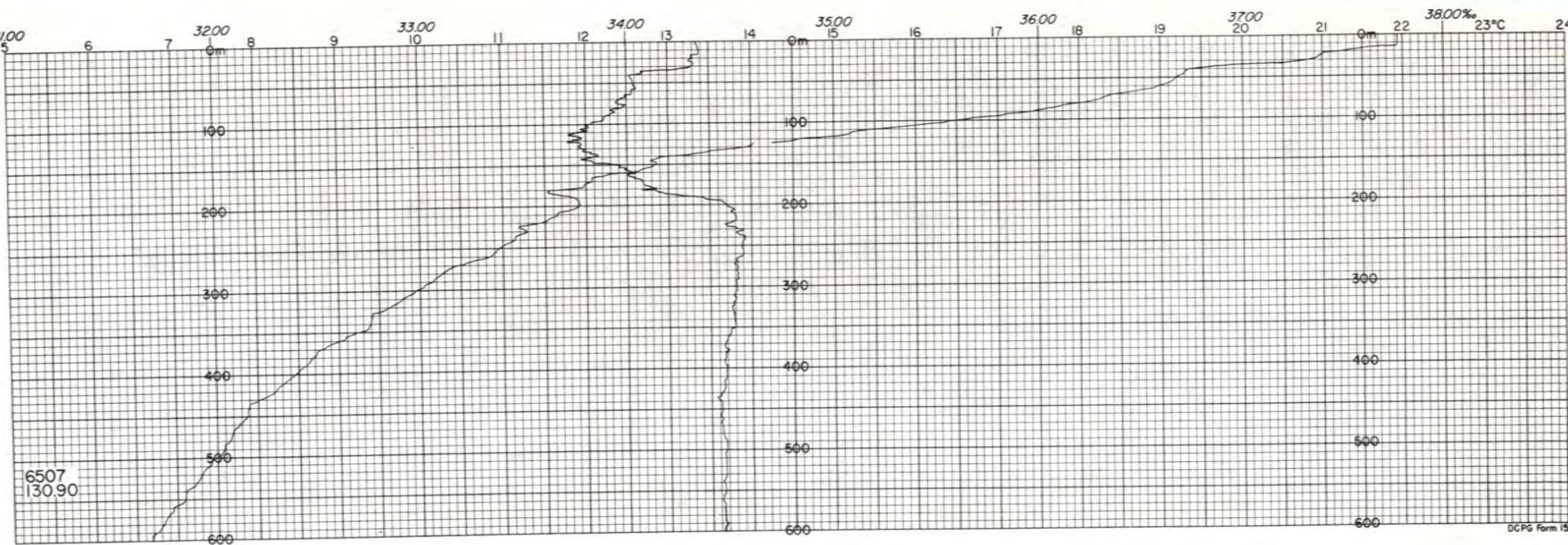
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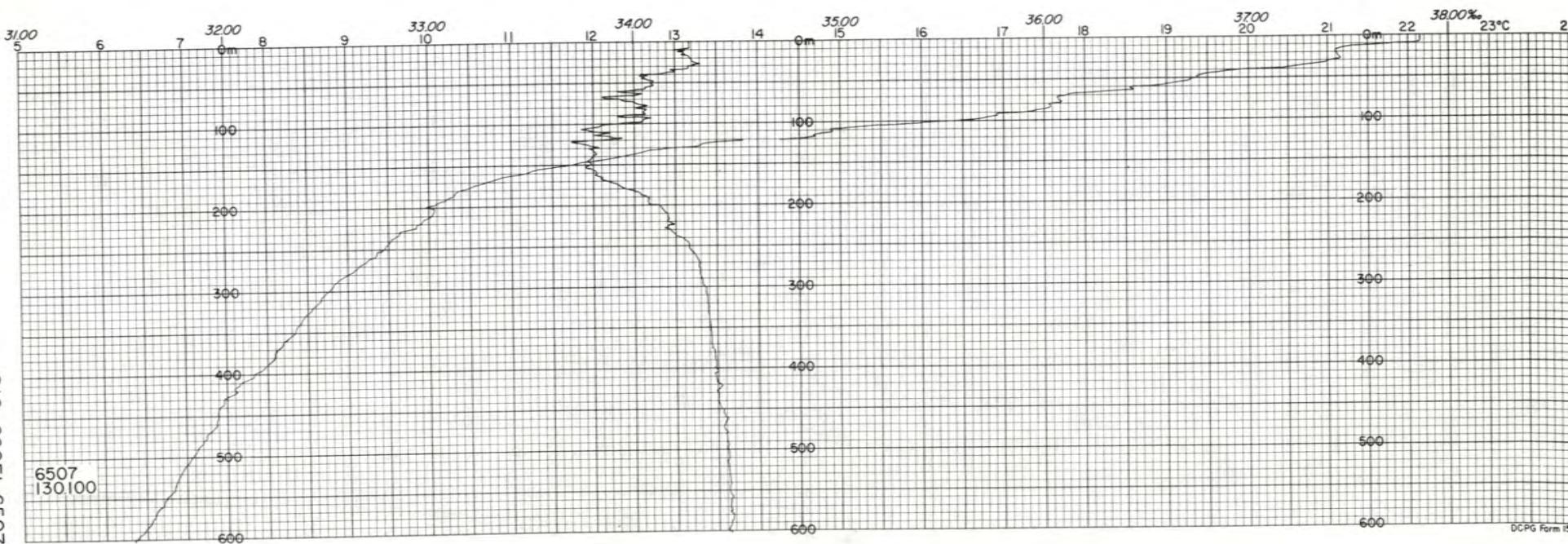


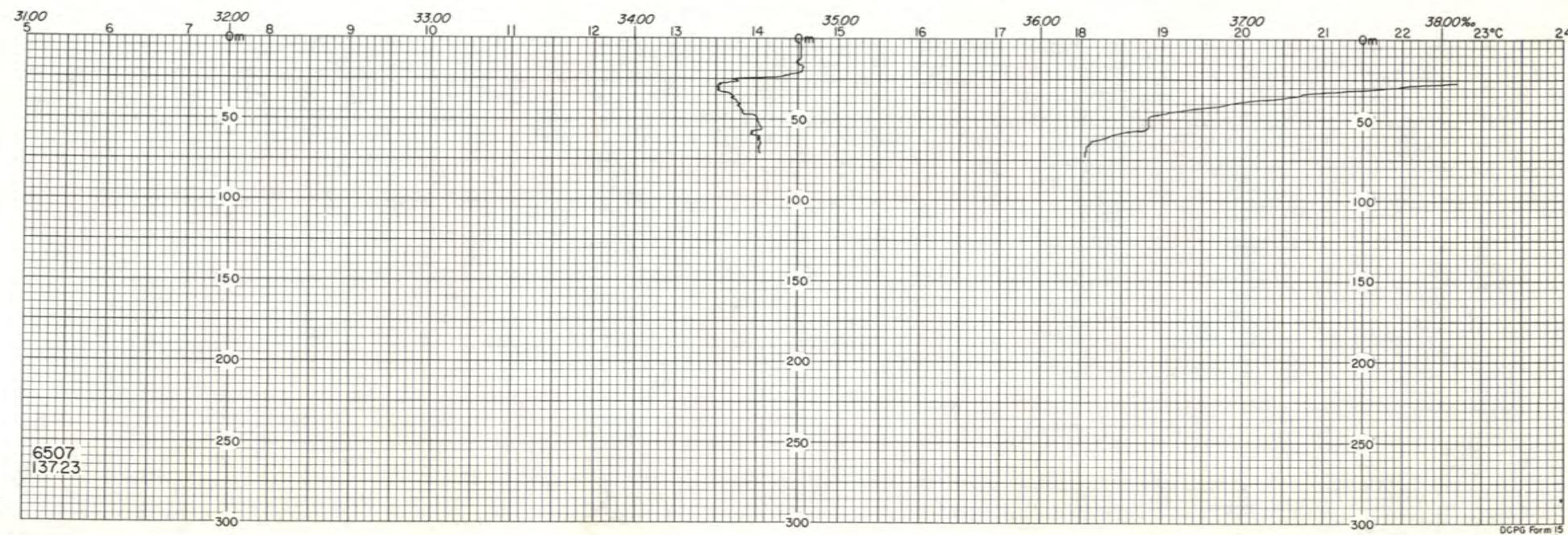
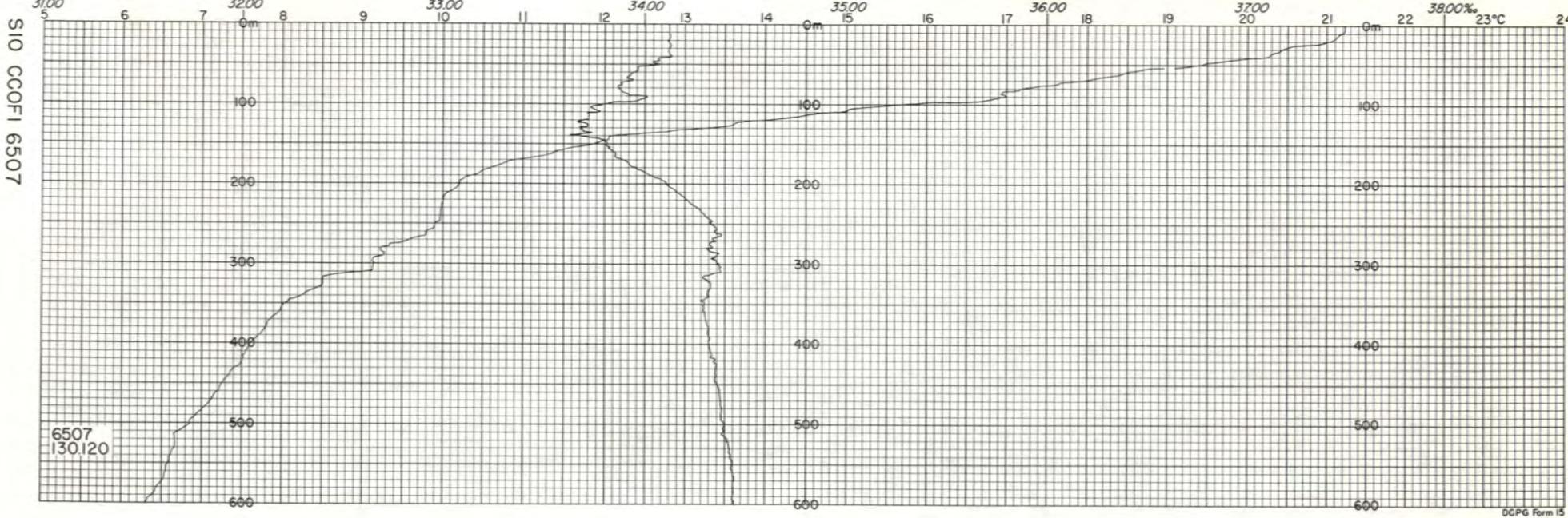


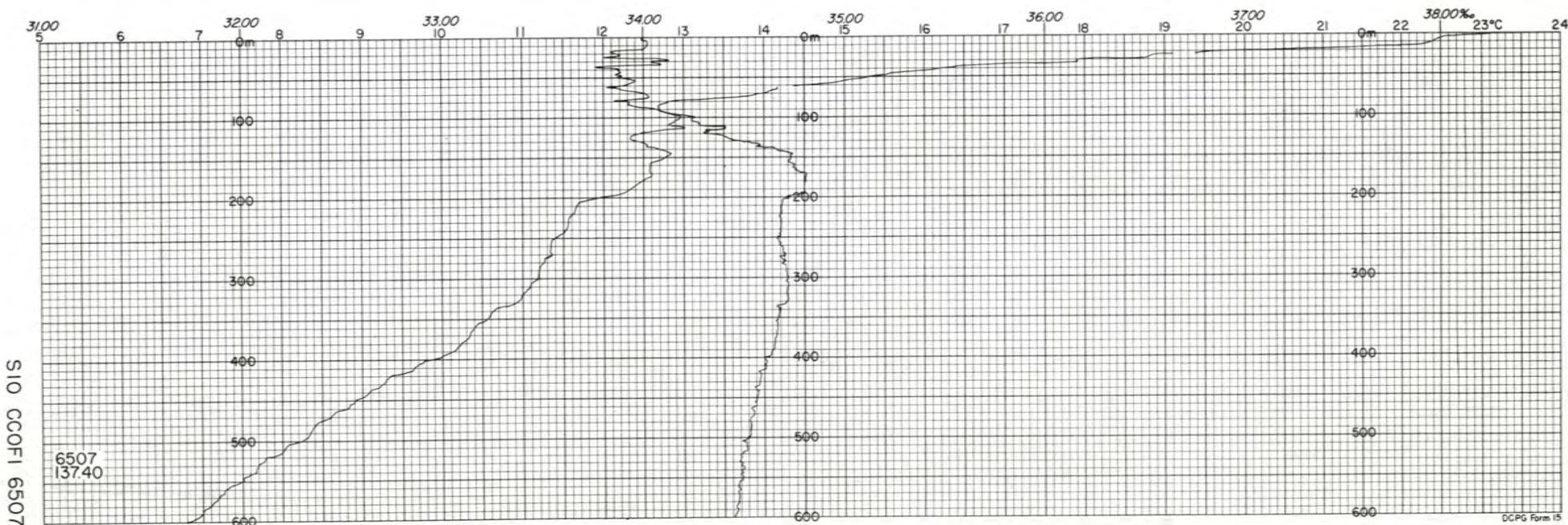
92

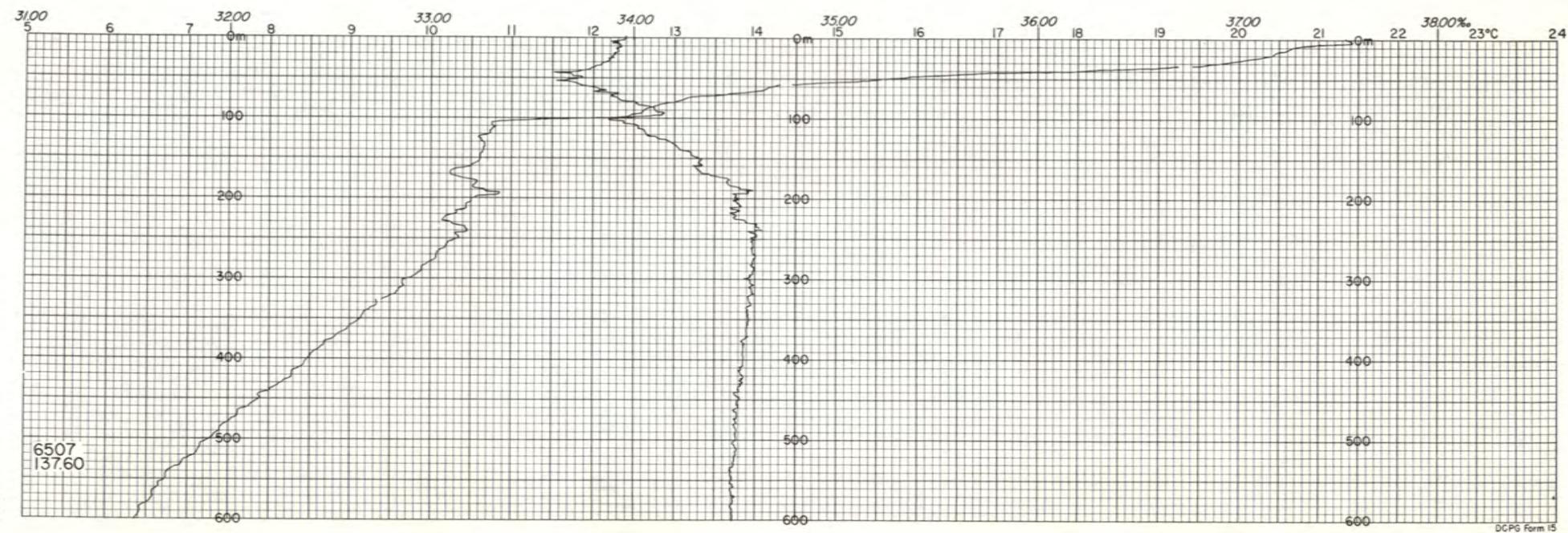
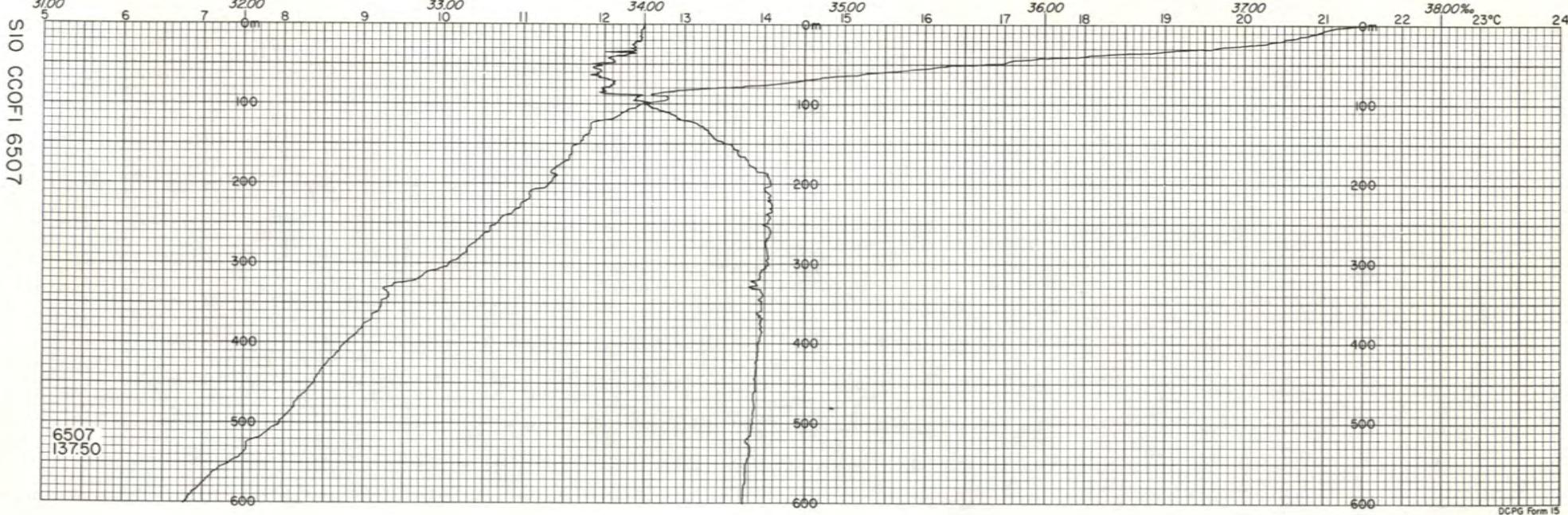


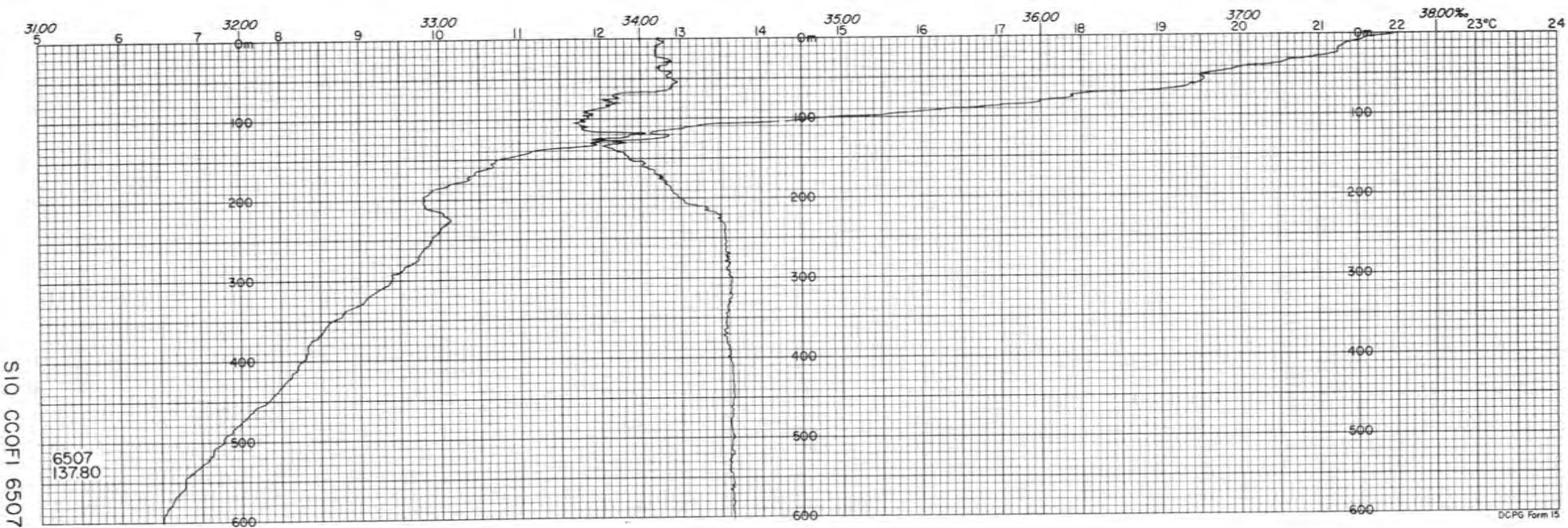
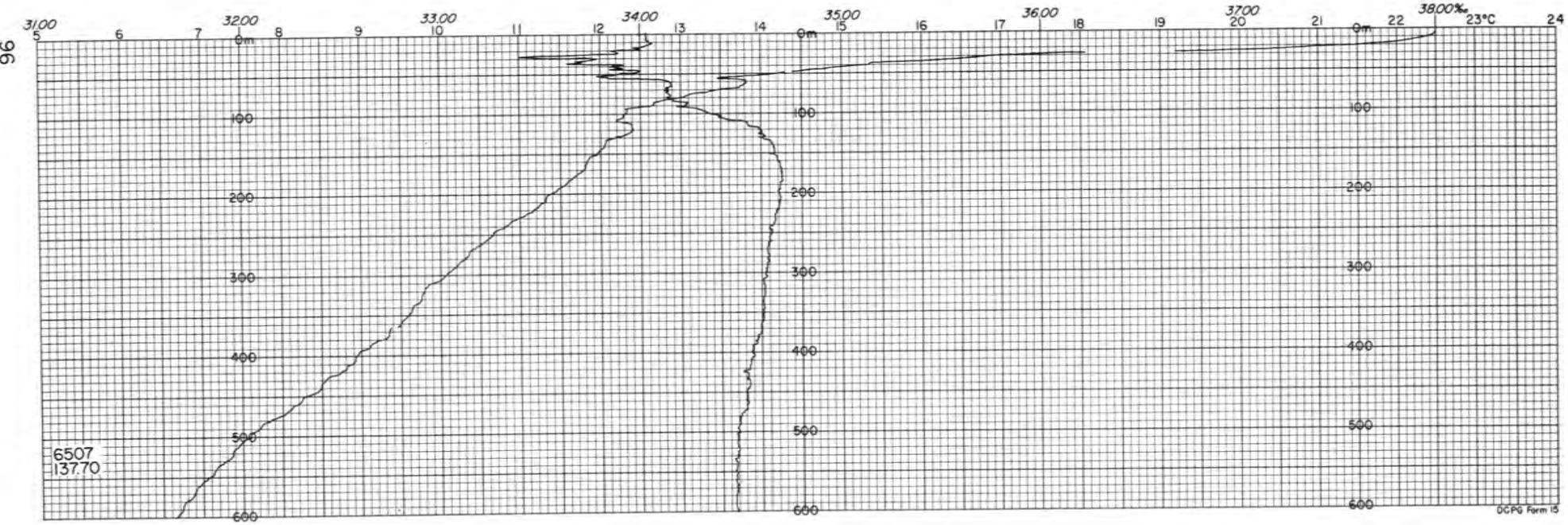
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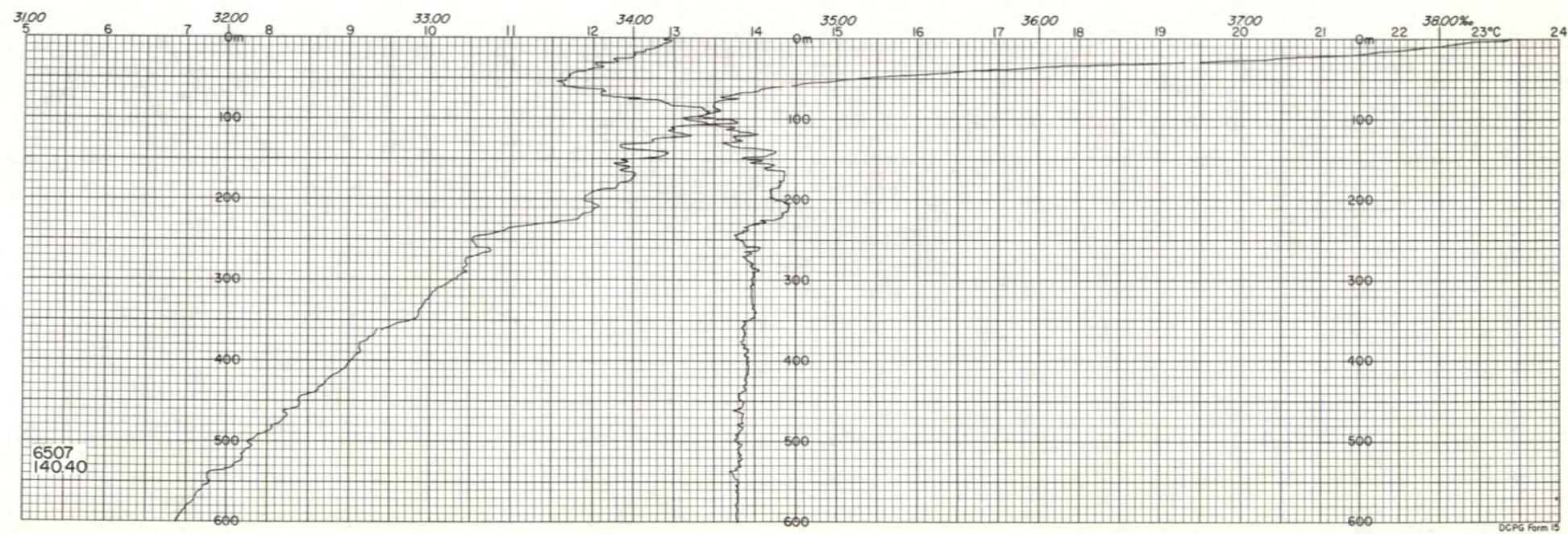
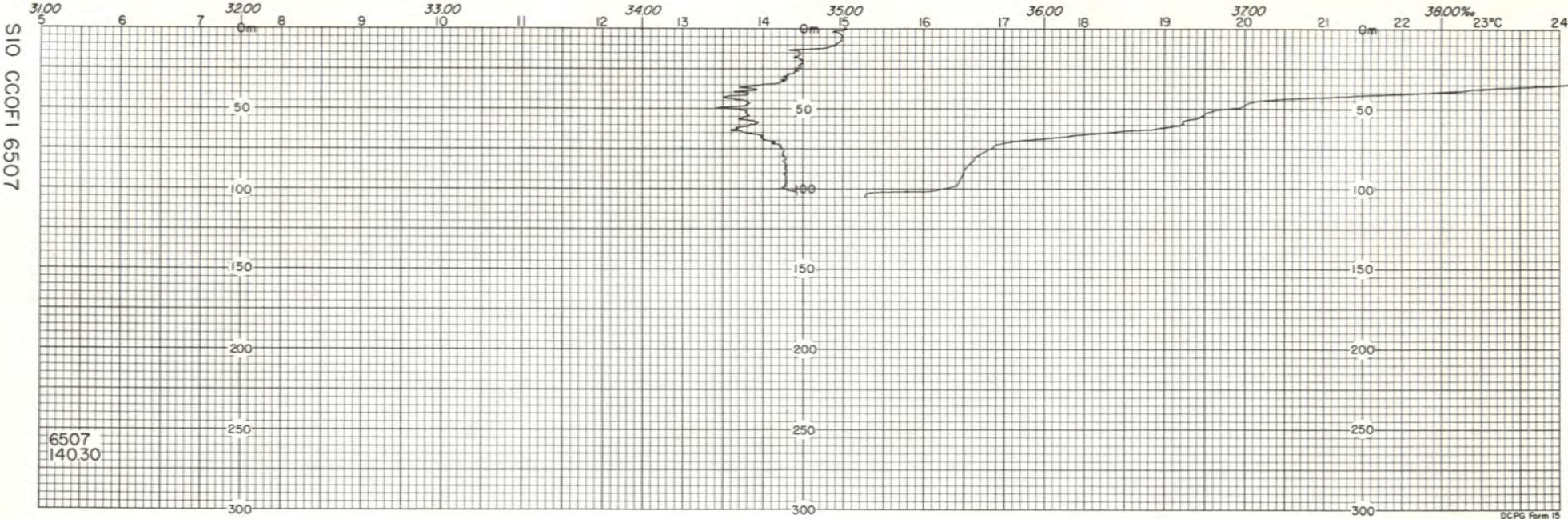


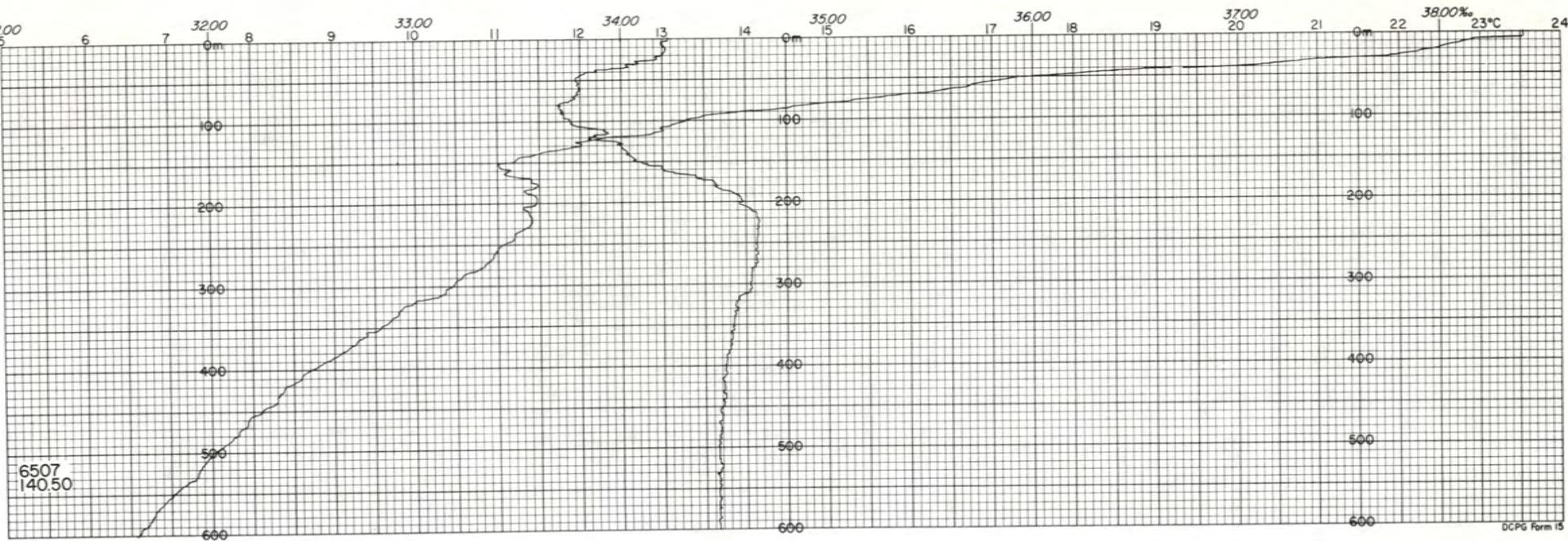












| Station | Date   | Time<br>GCT | DATA AT NET TOW STATIONS |                   |                  |             |         |          | 10 METERS     |         |              |        |     |
|---------|--------|-------------|--------------------------|-------------------|------------------|-------------|---------|----------|---------------|---------|--------------|--------|-----|
|         |        |             | Latitude<br>North        | Longitude<br>West | Sounding<br>(fm) | Wind<br>Dir | Weather | Sea      | T<br>°C       | S<br>%  | δT<br>cl/ton |        |     |
| 60.49-G | VII-17 | 0428        | 37°59.0'                 | 122°49.5'         | 12               | 180°        | 1       | overcast | slight        | 12.95   | 32.737       | 254    |     |
| 60.50-G |        | 17          | 37°57.5'                 | 122°53.5'         | 25               | 170°        | 1       | overcast | missing       | 9.93    | 33.853       | 193    |     |
| 60.51-G |        | 17          | 0555                     | 37°55.5'          | 122°57.5'        | 34          | 190°    | 1        | overcast      | missing | 10.41        | 33.924 | 196 |
| 60.55-G |        | 17          | 0850                     | 37°47.5'          | 123°15.0'        | 62          | 240°    | 2        | overcast      | missing | 12.42        | 33.369 | 272 |
| 63.50-G |        | 15          | 0415                     | 37°27.0'          | 122°28.0'        | 15          | 300°    | 1        | missing       | 10.86   | 33.770       | 215    |     |
| 63.51-G |        | 15          | 0320                     | 37°23.5'          | 122°34.0'        | 34          | 310°    | 1        | missing       | 10.88   | 33.813       | 212    |     |
| 67.47-G |        | 14          | 0730                     | 36°54.5'          | 121°53.0'        | 10          | 270°    | 1        | overcast      | smooth  | 11.62        | 33.766 | 228 |
| 67.48-G |        | 14          | 0810                     | 36°53.0'          | 121°56.0'        | 20          | 260°    | 3        | overcast      | slight  | 12.02        | 33.755 | 236 |
| 67.49-G |        | 14          | 0855                     | 36°51.0'          | 122°00.5'        | 44          | 280°    | 4        | missing       | slight  | 11.58        | 33.755 | 228 |
| 70.50-G |        | 14          | 0215                     | 36°11.0'          | 121°44.0'        | 110         | 290°    | 1        | cloudy        | slight  | 10.93        | 33.600 | 228 |
| 70.51-G |        | 14          | 0130                     | 36°10.5'          | 121°46.0'        | 204         | 290°    | 1        | partly cloudy | slight  | 11.15        | 33.538 | 237 |
| 70.52-G |        | 14          | 0010                     | 36°09.0'          | 121°50.0'        | 350         | 300°    | 2        | overcast      | slight  | 12.28        | 33.376 | 268 |
| 73.49-G | 8      | 2322        | 35°38.0'                 | 121°14.5'         | 18               | 290°        | 3       | cloudy   | moderate      | 11.18   | 33.617       | 231    |     |
| 73.50-G | 9      | 0045        | 35°37.5'                 | 121°17.0'         | 52               | 300°        | 4       | cloudy   | moderate      | 12.02   | 33.369       | 264    |     |
| 73.51-G | 9      | 0135        | 35°35.5'                 | 121°21.5'         | 202              | 320°        | 4       | cloudy   | rough         | 12.35   | 33.381       | 270    |     |
| 77.49-G | 9      | 2008        | 35°06.5'                 | 120°48.0'         | 38               | 290°        | 3       | clear    | rough         | 10.20   | 33.860       | 197    |     |
| 77.48-G | 9      | 2110        | 35°08.0'                 | 120°43.5'         | 15               | 290°        | 5       | clear    | rough         | 10.11   | 33.868       | 195    |     |
| 77.48-G | 9      | 2155        | 35°09.0'                 | 120°42.0'         | 7                | 250°        | 3       | clear    | moderate      | 10.15   | 33.835       | 198    |     |
| 80.50-G | 10     | 0233        | 34°28.0'                 | 120°29.5'         | 10               | 330°        | 4       | clear    | rough         | 13.52   | 33.721       | 266    |     |

| Station | Date   | Time<br>GCT | DATA AT NET TOW STATIONS |                   |                  |             |               |               | 10 METERS  |          |        |              |     |
|---------|--------|-------------|--------------------------|-------------------|------------------|-------------|---------------|---------------|------------|----------|--------|--------------|-----|
|         |        |             | Latitude<br>North        | Longitude<br>West | Sounding<br>(fm) | Wind<br>Dir | Wind<br>Force | Weather       | Sea        | T<br>°C  | S<br>‰ | δT<br>cl/ton |     |
| 80.51-G | VII-10 | 0320        | 34°26.5'                 | 120°33.0'         | 50               | 320°        | 6             | clear         | very rough | 11.94    | 33.731 | 236          |     |
| 80.65-G |        | 10          | 33°58.5'                 | 121°33.0'         | 2240             | 340°        | 6             | partly cloudy | very rough | 15.04    | 33.320 | 326          |     |
| 83.39-B | VI-16  | 1440        | 34°15.5'                 | 119°17.5'         | 9                | 270°        | 3             | overcast      | moderate   | 14.26    | 33.686 | 283          |     |
| 83.40-B |        | 16          | 34°13.5'                 | 119°21.5'         | 12               | 270°        | 3             | overcast      | moderate   | 12.33    | 33.668 | 248          |     |
| 83.65-B |        | 17          | 33°24.0'                 | 121°06.0'         | 1900             | 300°        | 1             | missing       | rough      | 13.94    | 33.342 | 302          |     |
| 87.32-B |        | 19          | 33°54.0'                 | 118°27.0'         | 11               | 240°        | 1             | cloudy        | slight     | 15.54    | 33.630 | 314          |     |
| 87.33-B |        | 19          | 33°54.0'                 | 118°29.5'         | 27               | 240°        | 1             | cloudy        | slight     | 16.28    | 33.639 | 330          |     |
| 87.34-B |        | 19          | 33°52.0'                 | 118°33.5'         | 39               | 240°        | 1             | overcast      | slight     | 14.50    | 33.527 | 300          |     |
| 87.55-B |        | 19          | 33°10.0'                 | 120°01.0'         | 550              | 300°        | 3             | cloudy        | moderate   | 13.64    | 33.350 | 296          |     |
| 87.65-B |        | 18          | 32°49.0'                 | 120°42.5'         | 2000+            | 300°        | 3             | cloudy        | rough      | 15.04    | 33.288 | 329          |     |
| 90.28-G | VII-25 | 1746        | 33°27.5'                 | 117°44.0'         | 15               | 210°        | 1             | overcast      | smooth     | 15.71    | 33.570 | 322          |     |
| 90.65-G |        | 24          | 1730                     | 34°14.5'          | 120°18.0'        | 2045        | 310°          | 5             | overcast   | rough    | 16.05  | 33.333       | 346 |
| 93.27-B | VI-20  | 0500        | 32°57.0'                 | 117°16.5'         | 11               | 270°        | 2             | cloudy        | slight     | 17.04    | 33.642 | 346          |     |
| 93.27-B |        | 20          | 0550                     | 32°56.0'          | 117°19.0'        | 40          | 270°          | 2             | cloudy     | slight   | 16.76  | 33.616       | 342 |
| 93.35-B |        | 20          | 1155                     | 32°40.5'          | 117°51.5'        | 350         | 320°          | 1             | missing    | slight   | 16.45  | 33.685       | 330 |
| 93.45-B |        | 20          | 1750                     | 32°20.0'          | 118°31.0'        | 600         | 270°          | 3             | cloudy     | slight   | 14.52  | 33.699       | 288 |
| 93.55-B |        | 20          | 2355                     | 32°00.0'          | 119°10.0'        | 850         | 290°          | 3             | cloudy     | moderate | 14.53  | 33.335       | 315 |
| 93.65-B |        | 21          | 0600                     | 31°39.0'          | 119°53.0'        | 2200+       | 270°          | 4             | overcast   | moderate | 16.30  | 33.596       | 333 |
| 97.29-B |        | 24          | 2205                     | 32°19.5'          | 117°04.0'        | -           | -             | -             | missing    | missing  | 11.42  | 33.716       | 228 |

| Station  | Date   | Time<br>GCT | DATA AT NET TOW STATIONS |                   |                  |             |       |               | 10 METERS |         |          |                      |
|----------|--------|-------------|--------------------------|-------------------|------------------|-------------|-------|---------------|-----------|---------|----------|----------------------|
|          |        |             | Latitude<br>North        | Longitude<br>West | Sounding<br>(fm) | Wind<br>Dir | Force | Weather       | Sea       | T<br>°C | S<br>‰   | $\delta_T$<br>cl/ton |
| 97.29-B  | VI-24  | 2245        | 32°17.5'                 | 117°04.5'         | 29               | 320°        | 4     | cloudy        | moderate  | 13.76   | 33.727   | 271                  |
| 97.30-B  | 24     | 2345        | 32°16.0'                 | 117°07.0'         | 32               | 320°        | 4     | cloudy        | moderate  | 14.14   | 33.713   | 279                  |
| 97.32-B  | 25     | 0100        | 32°12.0'                 | 117°15.0'         | 600              | 300°        | 4     | partly cloudy | moderate  | 14.43a) | 33.727   | -                    |
| 97.45-B  | 23     | 0330        | 31°46.5'                 | 118°09.5'         | 800              | 330°        | 2     | cloudy        | slight    | 14.82   | 33.364   | 319                  |
| 97.55-B  | 22     | 2130        | 31°25.5'                 | 118°50.0'         | 600              | 320°        | 2     | cloudy        | slight    | 16.14   | 33.608   | 328                  |
| 97.65-B  | 22     | 1535        | 31°10.0'                 | 119°31.5'         | 1900             | 320°        | 3     | overcast      | moderate  | 16.03   | 33.541   | 331                  |
| 100.29-G | VII-27 | 0500        | 31°42.5'                 | 116°43.5'         | 60               | 350°        | 4     | clear         | missing   | 11.32   | 33.690   | 228                  |
| 100.45-G | 27     | 1330        | 31°11.0'                 | 117°47.0'         | 852              | 320°        | 4     | partly cloudy | rough     | 16.90   | 33.527   | 351                  |
| 100.55-G | 27     | 2028        | 30°50.0'                 | 118°27.5'         | 1380             | 320°        | 5     | cloudy        | rough     | 16.84   | 33.437   | 357                  |
| 100.65-G | 28     | 0220        | 30°31.0'                 | 119°08.0'         | 1560             | 320°        | 5     | clear         | rough     | 16.93   | 33.461   | 357                  |
| 103.29-B | VI-25  | 0940        | 31°08.0'                 | 116°19.0'         | -                | -           | -     | missing       | missing   | 13.70   | 33.823   | 262                  |
| 103.29-B | 25     | 1025        | 31°07.0'                 | 116°21.0'         | -                | -           | -     | missing       | missing   | 13.83   | 33.821   | 265                  |
| 103.30-B | 25     | 1120        | 31°06.0'                 | 116°24.5'         | 38               | 300°        | 5     | missing       | rough     | 13.91   | 33.684   | 276                  |
| 103.35-B | 25     | 1400        | 30°56.0'                 | 116°46.5'         | 1100             | 300°        | 4     | cloudy        | rough     | 15.94   | 33.570   | 327                  |
| 103.40-B | 25     | 1640        | 30°47.0'                 | 117°07.5'         | 900              | 300°        | 5     | cloudy        | rough     | 15.96   | 33.632   | 323                  |
| 103.45-B | 25     | 1915        | 30°39.5'                 | 117°24.0'         | 800              | 300°        | 4     | cloudy        | rough     | 15.90   | 33.682b) | 318                  |
| 103.50-B | 25     | 2240        | 30°26.0'                 | 117°44.5'         | 1100             | 320°        | 5     | cloudy        | rough     | 16.58   | 33.571   | 341                  |

a) Alternate value, 14.94°C.

b) Possible evaporation.

| Station  | Date  | Time<br>GCT | DATA AT NET TOW STATIONS |                   |                  |             |               |         | 10 METERS     |            |        |                      |     |
|----------|-------|-------------|--------------------------|-------------------|------------------|-------------|---------------|---------|---------------|------------|--------|----------------------|-----|
|          |       |             | Latitude<br>North        | Longitude<br>West | Sounding<br>(fm) | Wind<br>Dir | Wind<br>Force | Weather | Sea           | T<br>°C    | S<br>‰ | $\delta_T$<br>cl/ton |     |
| 103.55-B | VI-26 | 0130        | 30°16.0'                 | 118°02.0'         | 1400             | 320°        | 6             | cloudy  | rough         | 16.46      | 33.550 | 340                  |     |
| 103.60-B |       | 26          | 0430                     | 30°06.0'          | 118°20.5'        | 900         | 320°          | 6       | cloudy        | rough      | 16.50  | 33.576               | 339 |
| 103.65-B |       | 26          | 0725                     | 29°55.0'          | 118°39.0'        | 1800        | 320°          | 6       | cloudy        | very rough | 16.34  | 33.543               | 337 |
| 103.69-B |       | 26          | 1035                     | 29°44.5'          | 118°58.0'        | 1800        | 330°          | 6       | partly cloudy | very rough | 16.74  | 33.681a)             | 336 |
| 103.80-B |       | 26          | 1700                     | 29°24.5'          | 119°44.0'        | 2000+       | 320°          | 6       | partly cloudy | very rough | 17.05  | 33.611               | 348 |
| 103.90-B |       | 26          | 2245                     | 29°03.5'          | 120°21.0'        | 2000        | 340°          | 6       | partly cloudy | very rough | 17.50  | 33.800               | 345 |
| 107.30-B |       | 28          | 1635                     | 30°30.0'          | 116°03.5'        | -           | -             | -       | missing       | missing    | 12.20  | 33.810               | 235 |
| 107.31-B |       | 28          | 1535                     | 30°28.0'          | 116°07.0'        | 24          | 320°          | 4       | missing       | rough      | 11.66  | 33.731               | 231 |
| 107.32-B |       | 28          | 1435                     | 30°26.0'          | 116°11.0'        | 420         | 320°          | 4       | missing       | rough      | 13.78  | 33.796               | 266 |
| 107.35-B |       | 28          | 1235                     | 30°21.5'          | 116°22.5'        | 900         | 330°          | 5       | cloudy        | very rough | 15.44  | 33.687               | 308 |
| 107.40-B |       | 28          | 0945                     | 30°12.5'          | 116°43.0'        | 1400        | 320°          | 5       | cloudy        | very rough | 15.41  | 33.675               | 308 |
| 107.45-B |       | 28          | 0635                     | 30°01.5'          | 117°02.0'        | 1500        | 330°          | 4       | cloudy        | very rough | 15.75  | 33.500               | 328 |
| 107.50-B |       | 28          | 0325                     | 29°50.5'          | 117°22.0'        | 1150        | 340°          | 6       | cloudy        | very rough | 16.44  | 33.548               | 340 |
| 107.55-B |       | 28          | 0025                     | 29°41.0'          | 117°42.0'        | 1600        | 340°          | 6       | cloudy        | very rough | 16.88  | 33.576               | 347 |
| 107.60-B |       | 27          | 2135                     | 29°32.0'          | 118°01.5'        | 1800        | 330°          | 5       | cloudy        | rough      | 16.77  | 33.564               | 346 |
| 107.65-B |       | 27          | 1830                     | 29°21.0'          | 118°21.0'        | 1700        | 320°          | 4       | cloudy        | very rough | 16.71  | 33.546               | 345 |
| 107.70-B |       | 27          | 1510                     | 29°11.0'          | 118°41.0'        | 1600        | 340°          | 5       | cloudy        | very rough | 16.78  | 33.511               | 350 |

a) Possible evaporation.

| Station  | Date   | Time<br>GCT | DATA AT NET TOW STATIONS |                   |                  |             |         |               | 10 METERS  |        |              |     |
|----------|--------|-------------|--------------------------|-------------------|------------------|-------------|---------|---------------|------------|--------|--------------|-----|
|          |        |             | Latitude<br>North        | Longitude<br>West | Sounding<br>(fm) | Wind<br>Dir | Weather | Sea           | T<br>°C    | S<br>‰ | δT<br>cl/ton |     |
| 107.80-B | VI-27  | 0855        | 28°50.0'                 | 119°23.5'         | 2000             | 340°        | 6       | cloudy        | very rough | 16.80  | 33.525       | 349 |
| 107.90-B | 27     | 0320        | 28°31.5'                 | 119°59.0'         | 2150             | 340°        | 5       | partly cloudy | very rough | 17.18  | 33.667       | 347 |
| 110.32-G | VIII-2 | 0910        | 29°52.0'                 | 115°48.0'         | 14               | 330°        | 3       | missing       | slight     | 13.28  | 33.640       | 268 |
| 110.45-G | 2      | 0045        | 29°26.5'                 | 116°39.0'         | 350              | 340°        | 2       | overcast      | moderate   | 17.82  | 33.624       | 365 |
| 110.55-G | 1      | 1825        | 29°06.5'                 | 117°20.0'         | 1920             | 330°        | 4       | overcast      | moderate   | 18.06  | 33.706       | 364 |
| 110.65-G | 1      | 1150        | 28°46.5'                 | 117°58.0'         | 1908             | 330°        | 3       | cloudy        | rough      | 18.38  | 33.832       | 363 |
| 113.28-B | VI-29  | 0140        | 29°25.0'                 | 115°11.5'         | -                | -           | -       | missing       | missing    | 12.46  | 33.840       | 238 |
| 113.29-B | 29     | 0215        | 29°24.0'                 | 115°13.0'         | -                | -           | -       | missing       | missing    | 12.64  | 33.861       | 239 |
| 113.30-B | 29     | 0330        | 29°22.5'                 | 115°20.0'         | 31               | 300°        | 5       | missing       | moderate   | 12.56  | 33.736       | 247 |
| 113.35-B | 29     | 0620        | 29°11.5'                 | 115°38.0'         | 600              | 320°        | 5       | missing       | rough      | 17.22  | 33.739       | 343 |
| 113.40-B | 29     | 0915        | 29°02.0'                 | 115°57.0'         | 1000             | 320°        | 5       | missing       | rough      | 17.16  | 33.746       | 341 |
| 113.45-B | 29     | 1220        | 28°52.0'                 | 116°18.0'         | 1000             | 320°        | 4       | cloudy        | rough      | 17.14  | 33.795       | 337 |
| 113.50-B | 29     | 1507        | 28°45.0'                 | 116°41.0'         | 1950             | 320°        | 4       | missing       | very rough | 16.32  | 33.636       | 330 |
| 113.55-B | 29     | 1800        | 28°37.0'                 | 117°02.0'         | 2000             | 330°        | 4       | missing       | very rough | 16.26  | 33.603       | 331 |
| 113.60-B | 29     | 2035        | 28°29.0'                 | 117°18.0'         | 1900             | 320°        | 4       | missing       | very rough | 16.25  | 33.556       | 335 |
| 113.65-B | 29     | 2345        | 28°12.0'                 | 117°36.0'         | 2000             | 340°        | 4       | partly cloudy | rough      | 16.58  | 33.593       | 339 |
| 113.70-B | 30     | 0205        | 28°02.0'                 | 117°54.5'         | 2050             | 340°        | 4       | cloudy        | rough      | 17.12  | 33.635       | 348 |
| 113.80-B | 30     | 0645        | 27°42.0'                 | 118°32.0'         | 2000+            | 320°        | 3       | cloudy        | rough      | 16.73  | 33.555       | 346 |
| 113.90-B | 30     | 1117        | 27°22.0'                 | 119°09.0'         | 2000             | 340°        | 5       | cloudy        | moderate   | 17.66  | 33.774       | 350 |

| Station  | Date  | Time<br>GCT | DATA AT NET TOW STATIONS |                   |                  |             |               |         | 10 METERS |         |        |              |
|----------|-------|-------------|--------------------------|-------------------|------------------|-------------|---------------|---------|-----------|---------|--------|--------------|
|          |       |             | Latitude<br>North        | Longitude<br>West | Sounding<br>(fm) | Wind<br>Dir | Wind<br>Force | Weather | Sea       | T<br>°C | S<br>‰ | δT<br>cl/ton |
| 117.25-B | VII-2 | 0850        | 28°58.0'                 | 114°36.5'         | 30               | 300°        | 2             | fog     | slight    | 14.24   | 33.744 | 279          |
| 117.25-B | 2     | 0920        | 28°58.0'                 | 114°36.0'         | 30               | 300°        | 2             | fog     | slight    | 14.20   | 33.749 | 277          |
| 117.26-B | 2     | 0750        | 28°56.0'                 | 114°41.5'         | 38               | 320°        | 3             | cloudy  | moderate  | 14.54   | 33.741 | 285          |
| 117.30-B | 2     | 0540        | 28°48.0'                 | 114°56.5'         | 50               | 340°        | 3             | cloudy  | moderate  | 15.37   | 33.766 | 300          |
| 117.35-B | 2     | 0250        | 28°38.0'                 | 115°16.0'         | 110              | 320°        | 4             | cloudy  | moderate  | 17.25   | 33.717 | 345          |
| 117.40-B | 1     | 2047        | 28°28.0'                 | 115°35.5'         | 400              | 320°        | 3             | cloudy  | moderate  | 17.22   | 33.685 | 347          |
| 117.45-B | 1     | 1700        | 28°18.0'                 | 115°56.0'         | 1500             | 340°        | 3             | cloudy  | moderate  | 15.16   | 33.585 | 309          |
| 117.50-B | 1     | 1335        | 28°09.0'                 | 116°15.0'         | 2010             | 360°        | 4             | cloudy  | rough     | 17.68   | 33.830 | 347          |
| 117.55-B | 1     | 1035        | 27°58.0'                 | 116°34.5'         | 2000             | 360°        | 4             | cloudy  | rough     | 18.00   | 33.866 | 352          |
| 117.60-B | 1     | 0725        | 27°48.0'                 | 116°53.0'         | 2000             | 270°        | 4             | cloudy  | rough     | 16.74   | 33.745 | 332          |
| 117.65-B | 1     | 0430        | 27°37.5'                 | 117°13.0'         | 1950             | 340°        | 4             | cloudy  | rough     | 17.80   | 33.816 | 350          |
| 117.70-B | 1     | 0135        | 27°28.0'                 | 117°32.5'         | 2010             | 360°        | 4             | cloudy  | rough     | 17.34   | 33.606 | 355          |
| 117.80-B | VI-30 | 2010        | 27°08.0'                 | 118°10.5'         | 2300             | 360°        | 4             | cloudy  | rough     | 17.02   | 33.551 | 352          |
| 117.89-B | 30    | 1540        | 26°49.0'                 | 118°42.0'         | 2050             | 360°        | 4             | cloudy  | rough     | 17.64   | 33.765 | 350          |
| 118.39-B | VII-1 | 2330        | 28°18.5'                 | 115°23.5'         | 150              | 340°        | 3             | cloudy  | moderate  | 15.70   | 33.650 | 316          |
| 120.22-B | 2     | 1425        | 28°28.0'                 | 114°04.0'         | -                | -           | -             | missing | missing   | 17.55   | 33.859 | 342          |
| 120.23-B | 2     | 1510        | 28°26.0'                 | 114°06.5'         | 12               | var.        | 1             | missing | moderate  | 17.76   | 33.861 | 346          |
| 120.24-B | 2     | 1600        | 28°24.0'                 | 114°10.5'         | 19               | 280°        | 1             | missing | rough     | 16.45   | 33.795 | 321          |
| 120.25-B | 2     | 1700        | 28°22.5'                 | 114°15.0'         | 30               | 280°        | 1             | missing | rough     | 16.05   | 33.789 | 313          |

| Station  | Date   | Time<br>GCT | DATA AT NET TOW STATIONS |                   |                  |             |               |               | 10 METERS |         |        |              |
|----------|--------|-------------|--------------------------|-------------------|------------------|-------------|---------------|---------------|-----------|---------|--------|--------------|
|          |        |             | Latitude<br>North        | Longitude<br>West | Sounding<br>(fm) | Wind<br>Dir | Wind<br>Force | Weather       | Sea       | T<br>°C | S<br>‰ | δT<br>cl/ton |
| 120.30-B | VII-2  | 1920        | 28°13.0'                 | 114°34.0'         | 50               | 300°        | 2             | missing       | moderate  | 15.98   | 33.750 | 315          |
| 120.35-B | 2      | 2200        | 28°03.0'                 | 114°54.0'         | 45               | 240°        | 3             | partly cloudy | slight    | 17.11   | 33.799 | 336          |
| 120.40-B | 3      | 0005        | 27°56.5'                 | 115°14.0'         | 21               | 320°        | 4             | partly cloudy | moderate  | 16.21   | 33.756 | 319          |
| 120.55-G | VIII-4 | 0410        | 27°23.0'                 | 116°11.0'         | 1965             | 320°        | 3             | cloudy        | missing   | 19.76   | 33.900 | 391          |
| 120.65-G | 4      | 1010        | 27°03.0'                 | 116°49.5'         | 2065             | 320°        | 2             | cloudy        | missing   | 19.64   | 33.842 | 392          |
| 123.35-B | VII-3  | 0550        | 27°24.0'                 | 114°32.0'         | -                | -           | -             | missing       | missing   | 15.65   | 33.792 | 305          |
| 123.36-B | 3      | 0635        | 27°26.0'                 | 114°36.0'         | 18               | 270°        | 1             | partly cloudy | slight    | 15.20   | 33.790 | 295          |
| 123.37-B | 3      | 0730        | 27°24.0'                 | 114°40.0'         | 35               | 270°        | 3             | partly cloudy | slight    | 15.72   | 33.753 | 309          |
| 123.42-B | 3      | 1035        | 27°14.0'                 | 114°59.0'         | 800              | 320°        | 4             | partly cloudy | moderate  | 18.04   | 33.826 | 356          |
| 123.45-B | 3      | 1230        | 27°08.0'                 | 115°11.5'         | 2200             | 320°        | 4             | partly cloudy | moderate  | 17.67   | 33.832 | 346          |
| 123.50-B | 3      | 1500        | 26°58.0'                 | 115°31.0'         | 2000             | 340°        | 3             | cloudy        | moderate  | 19.42   | 34.228 | 359          |
| 123.55-B | 3      | 1810        | 26°47.0'                 | 115°50.0'         | 2000             | 300°        | 3             | cloudy        | slight    | 17.97   | 33.719 | 360          |
| 123.60-B | 3      | 2050        | 26°35.0'                 | 116°06.0'         | 2200             | 350°        | 4             | cloudy        | moderate  | 17.85   | 33.783 | 354          |
| 123.65-B | 3      | 2330        | 26°25.0'                 | 116°28.0'         | 2000             | 340°        | 4             | cloudy        | moderate  | 18.28   | 33.808 | 362          |
| 123.70-B | 4      | 0200        | 26°19.0'                 | 116°47.0'         | 2050             | 340°        | 4             | cloudy        | moderate  | 18.74   | 33.830 | 371          |
| 123.80-B | 4      | 0630        | 26°00.5'                 | 117°22.0'         | 2000             | 320°        | 3             | partly cloudy | moderate  | 18.85   | 33.851 | 373          |
| 127.33-B | 5      | 1305        | 26°57.5'                 | 114°02.0'         | 35               | 100°        | 1             | partly cloudy | moderate  | 14.86   | 33.819 | 286          |
| 127.33-B | 5      | 1355        | 26°58.5'                 | 114°00.5'         | -                | -           | -             | missing       | missing   | 13.37   | 33.734 | 263          |
| 127.34-B | 5      | 1205        | 26°55.0'                 | 114°06.0'         | 45               | 100°        | 1             | partly cloudy | moderate  | 15.48   | 33.762 | 303          |

| Station  | Date   | Time<br>GCT | DATA AT NET TOW STATIONS |                   |                  |             |               |               | 10 METERS |         |        |                      |
|----------|--------|-------------|--------------------------|-------------------|------------------|-------------|---------------|---------------|-----------|---------|--------|----------------------|
|          |        |             | Latitude<br>North        | Longitude<br>West | Sounding<br>(fm) | Wind<br>Dir | Wind<br>Force | Weather       | Sea       | T<br>°C | S<br>‰ | $\delta_T$<br>cl/ton |
| 127.40-B | VII-5  | 0915        | 26°45.5'                 | 114°28.0'         | 1600             | 300°        | 4             | cloudy        | moderate  | 18.25   | 33.801 | 362                  |
| 127.45-B | 5      | 0615        | 26°33.5'                 | 114°48.5'         | 1900             | 330°        | 3             | cloudy        | moderate  | 17.82   | 33.797 | 353                  |
| 127.50-B | 5      | 0303        | 26°23.0'                 | 115°08.0'         | 1100             | 330°        | 4             | cloudy        | moderate  | 19.75   | 34.225 | 367                  |
| 127.55-B | 4      | 2355        | 26°13.5'                 | 115°27.0'         | 1900             | 320°        | 4             | cloudy        | rough     | 18.74   | 33.824 | 372                  |
| 127.60-B | 4      | 2105        | 26°04.5'                 | 115°45.0'         | 2000             | 320°        | 4             | partly cloudy | moderate  | 18.18   | 33.764 | 363                  |
| 127.65-B | 4      | 1820        | 25°52.5'                 | 116°05.5'         | 1950             | 320°        | 3             | cloudy        | moderate  | 19.92   | 34.267 | 368                  |
| 127.70-B | 4      | 1545        | 25°46.5'                 | 116°22.0'         | 2050             | 360°        | 3             | partly cloudy | moderate  | 20.02   | 34.273 | 371                  |
| 127.80-B | 4      | 1110        | 25°26.0'                 | 116°57.0'         | 2000             | 330°        | 4             | partly cloudy | moderate  | 20.30   | 34.250 | 379                  |
| 130.26-G | VIII-8 | 0159        | 26°37.0'                 | 113°13.0'         | 20               | 210°        | 3             | partly cloudy | moderate  | 22.41   | 34.060 | 448                  |
| 130.26-G | 8      | 0243        | 26°38.0'                 | 113°11.0'         | 10               | 210°        | 4             | partly cloudy | moderate  | 22.08   | 34.123 | 435                  |
| 130.28-G | 8      | 0055        | 26°33.5'                 | 113°20.5'         | 30               | 280°        | 2             | partly cloudy | moderate  | 20.69   | 33.975 | 409                  |
| 130.35-G | 7      | 2042        | 26°19.0'                 | 113°47.5'         | 230              | 290°        | 2             | partly cloudy | slight    | 19.14   | 33.924 | 374                  |
| 130.45-G | 7      | 1515        | 25°59.0'                 | 114°26.5'         | 1970             | 320°        | 2             | partly cloudy | moderate  | 21.36   | 34.211 | 409                  |
| 130.55-G | 7      | 0935        | 25°39.0'                 | 115°04.5'         | 1910             | 360°        | 2             | cloudy        | missing   | 20.92   | 33.988 | 414                  |
| 133.19-B | VII-6  | 0035        | 26°13.5'                 | 112°26.0'         | -                | -           | -             | missing       | missing   | 18.27   | 34.116 | 340                  |
| 133.21-B | 6      | 0140        | 26°12.5'                 | 112°32.5'         | 26               | 280°        | 2             | partly cloudy | slight    | 19.72   | 34.126 | 374                  |
| 133.23-B | 6      | 0300        | 26°08.5'                 | 112°40.0'         | 40               | 280°        | 2             | partly cloudy | slight    | 17.10   | 33.925 | 326                  |
| 133.25-B | 6      | 0430        | 26°04.5'                 | 112°48.0'         | 45               | 280°        | 2             | partly cloudy | slight    | 14.04   | 33.850 | 267                  |
| 133.30-B | 6      | 0720        | 25°54.5'                 | 113°07.5'         | 105              | calm        |               | partly cloudy | slight    | 16.28   | 33.933 | 308                  |

| Station  | Date   | Time<br>GCT | DATA AT NET TOW STATIONS |                   |                  |             |               |               | 10 METERS  |         |        |                      |
|----------|--------|-------------|--------------------------|-------------------|------------------|-------------|---------------|---------------|------------|---------|--------|----------------------|
|          |        |             | Latitude<br>North        | Longitude<br>West | Sounding<br>(fm) | Wind<br>Dir | Wind<br>Force | Weather       | Sea        | T<br>°C | S<br>% | $\delta_T$<br>cl/ton |
| 133.35-B | VII-6  | 1000        | 25°45.0'                 | 113°27.0'         | 400              | calm        |               | partly cloudy | slight     | 16.57   | 33.760 | 327                  |
| 133.40-B | 6      | 1225        | 25°36.0'                 | 113°47.0'         | 1400             | calm        |               | partly cloudy | very rough | 18.59   | 33.819 | 369                  |
| 133.45-B | 6      | 1515        | 25°24.5'                 | 114°05.0'         | 2000             | calm        |               | partly cloudy | slight     | 18.94   | 33.920 | 370                  |
| 133.50-B | 6      | 1804        | 25°13.0'                 | 114°22.5'         | 1900             | calm        |               | partly cloudy | slight     | 19.60   | 33.835 | 392                  |
| 133.55-B | 6      | 2105        | 25°02.0'                 | 114°42.0'         | 2000             | 040°        | 3             | partly cloudy | moderate   | 19.60   | 33.820 | 393                  |
| 133.60-B | 6      | 2350        | 24°54.5'                 | 115°02.0'         | 2000             | 270°        | 1             | clear         | very rough | 19.74   | 34.060 | 379                  |
| 133.65-B | 7      | 0225        | 24°44.5'                 | 115°20.5'         | 2050             | 270°        | 1             | partly cloudy | very rough | 19.34   | 34.007 | 373                  |
| 133.70-B | 7      | 0515        | 24°34.5'                 | 115°39.0'         | 2000             | calm        |               | fog           | rough      | 20.16   | 34.205 | 379                  |
| 133.80-B | 7      | 1003        | 24°14.5'                 | 116°17.0'         | 1900             | calm        |               | fog           | rough      | 20.40   | 34.029 | 398                  |
| 137.20-G | VIII-8 | 1035        | 25°40.0'                 | 112°07.5'         | 7                | 120°        | 1             | overcast      | missing    | 24.49   | 34.571 | 469                  |
| 137.21-G | 8      | 1120        | 25°38.0'                 | 112°11.0'         | 14               | 140°        | 1             | cloudy        | missing    | 23.98   | 34.615 | 451                  |
| 137.22-G | 8      | 1210        | 25°36.0'                 | 112°15.0'         | 26               | 110°        | 1             | overcast      | missing    | 24.07   | 34.668 | 450                  |
| 137.35-G | 8      | 1920        | 25°10.5'                 | 113°04.0'         | 730              | 140°        | 1             | cloudy        | moderate   | 21.77   | 33.966 | 438                  |
| 137.45-G | 9      | 0119        | 24°50.5'                 | 113°42.0'         | 1880             | 170°        | 2             | cloudy        | rough      | 22.86   | 34.167 | 453                  |
| 137.55-G | 9      | 0655        | 24°30.0'                 | 114°20.0'         | 2045             | 350°        | 1             | missing       | rough      | 20.26   | 33.921 | 402                  |
| 140.29-G | 10     | 2115        | 24°47.5'                 | 112°20.0'         | 28               | 270°        | 1             | partly cloudy | missing    | 26.56   | 34.940 | 503                  |
| 140.29-G | 10     | 2155        | 24°48.0'                 | 112°19.5'         | 6                | 270°        | 2             | partly cloudy | missing    | 26.02   | 34.878 | 492                  |
| 140.35-G | 10     | 1725        | 24°35.5'                 | 112°43.0'         | 530              | 290°        | 1             | partly cloudy | slight     | 24.88   | 34.599 | 478                  |
| 140.45-G | 10     | 1115        | 24°15.5'                 | 113°20.5'         | 1840             | 300°        | 2             | partly cloudy | moderate   | 22.06   | 34.042 | 440                  |

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