UNIVERSITY OF CALIFORNIA SCRIPPS INSTITUTION OF OCEANOGRAPHY

# data report

PHYSICAL AND CHEMICAL DATA

CCOFI Cruise 6501
6 January - 18 February 1965

SIO Reference 66-4
9 December 1965

UNIVERSITY OF CALIFORNIA

SCRIPPS INSTITUTION OF OCEANOGRAPHY

# PHYSICAL AND CHEMICAL DATA

CCOFI Cruise 6501

6 January - 18 February 1965

Sponsored by

Marine Research Committee

SIO Reference 66-4
9 December 1965

Approved for distribution:

W. A. Nierenberg

W. A. Nierenberg, Director

CONTENTS



FIGURES

## INTRODUCTION

The data presented in this report were collected by the RV Black Douglas of the Bureau of Commercial Fisheries and the RV Alexander Agassiz of the Scripps Institution of Oceanography on Cruise 6501 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 6401 (Scripps Institution report, SIO Ref. 65-7) and 6410 (SIO Ref. 65-18).

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

## TABULATED DATA

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

1. When a station consisted of a bottle cast only, the data are presented in the usual fashion, with standard depth values interpolated and computed from the bottle cast data.

2. When a station consisted of an STD lowering only, the original record (reduced from 24 x 24 cm) is reproduced on the right. Values of temperature and salinity read at selected levels appear on the left with the appropriate calculations. A tracing of the STD record with the scale changes eliminated appears on the lower part of the page.

3. When a station included both a bottle cast and an STD lowering, both sets of data are shown, as above: the standard depth and computed values are taken from the STD record. The bottle cast data are plotted on the original STD record.

## STANDARD PROCEDURES

### In situ Salinity/Temperature/Depth Recorder

The manufacturer of the STD claims for the temperature an accuracy of ±0.05°C on all ranges with repeatability of ±0.01°C and for the salinity an accuracy of

±0.03‰ on all ranges with repeatability of ±0.01‰.[1] 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 this cruise only, a calibration correction of -0.03‰ was applied to the salinity readings: this correction was determined from sample bottles placed directly on the STD wire at 10 meters depth and next to the instrument, and from the bottle casts which immediately preceded (15 to 30 minutes) the STD lowering.

Hydrographic Casts

The observed data have been plotted and then evaluated using the method described by Klein.[2] This involves consideration of their variation as functions of density or depth and their relations to each other, and comparison with concurrent bathythermogram 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 ±0.004‰ salinity at the 95 per cent probability level and a probable accuracy of ±0.01‰ salinity or better at the same level of probability."[3] The values are recorded to two decimal places when obtained by chlorinity titration, or by salinometer where only one determination per sample was obtained, or where there is doubt concerning the accuracy of a particular sample, or of all samples on a station. The accuracy of all samples obtained by salinometer and recorded to two decimal places is believed to be equal to or better than those obtained by manual titration.

Extrapolated values and values interpolated between remote observations are entered within parentheses. A hyphen is used to indicate a missing observed value. The

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

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

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

time is the time of messenger release when there was a bottle cast. The start down times for all STD lowerings are entered on the original recordings, and also in the heading when only STD values are tabulated. When more than one bottle cast was made on a station, messenger times and wire angles are given in the order of increasing depth. A line is left blank between the observed data of each cast.

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

FOOTNOTES

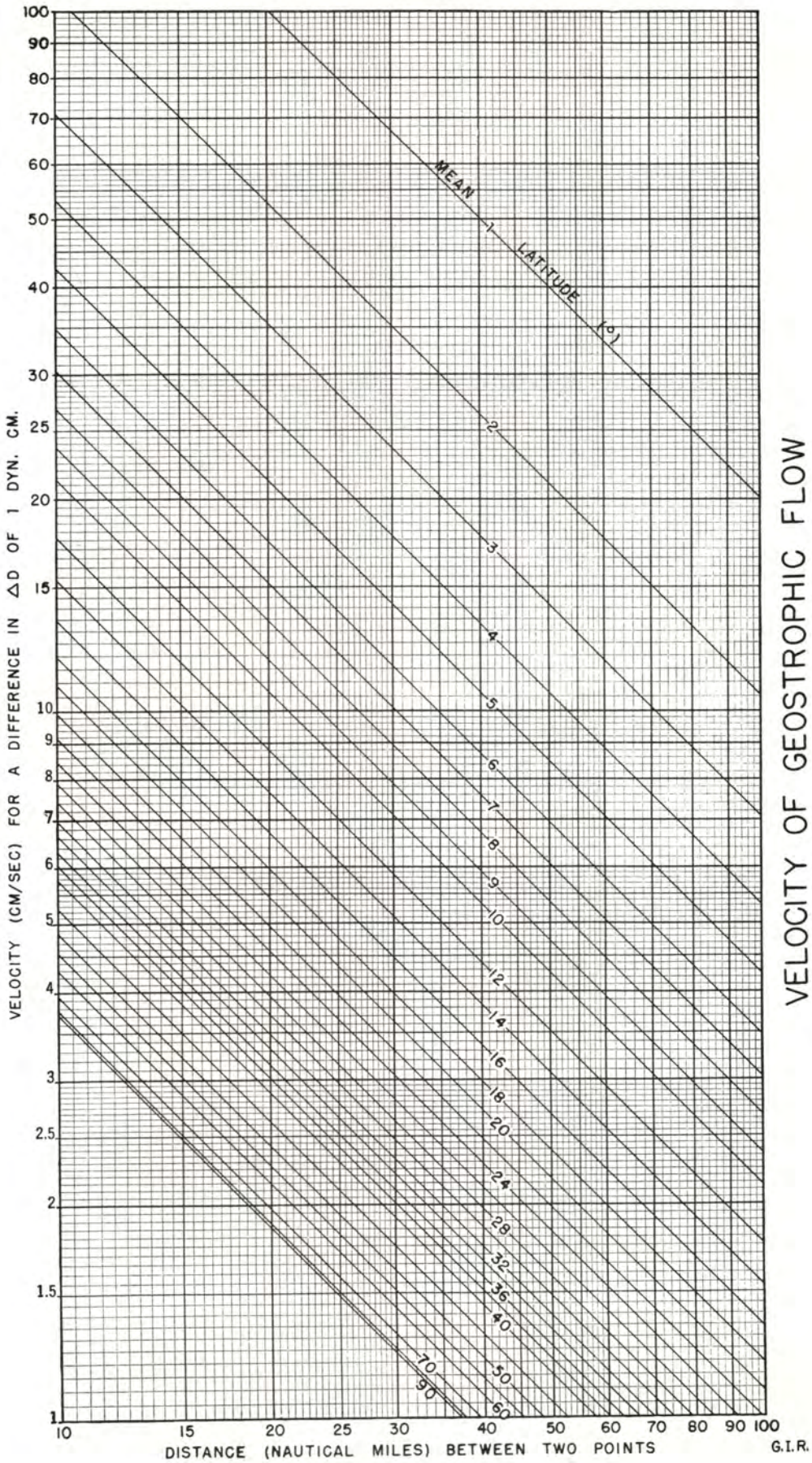
Laboratory personnel note any possible imperfections in the sealing of the sample bottles as follows:

| | |
|---|---|
| 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).


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

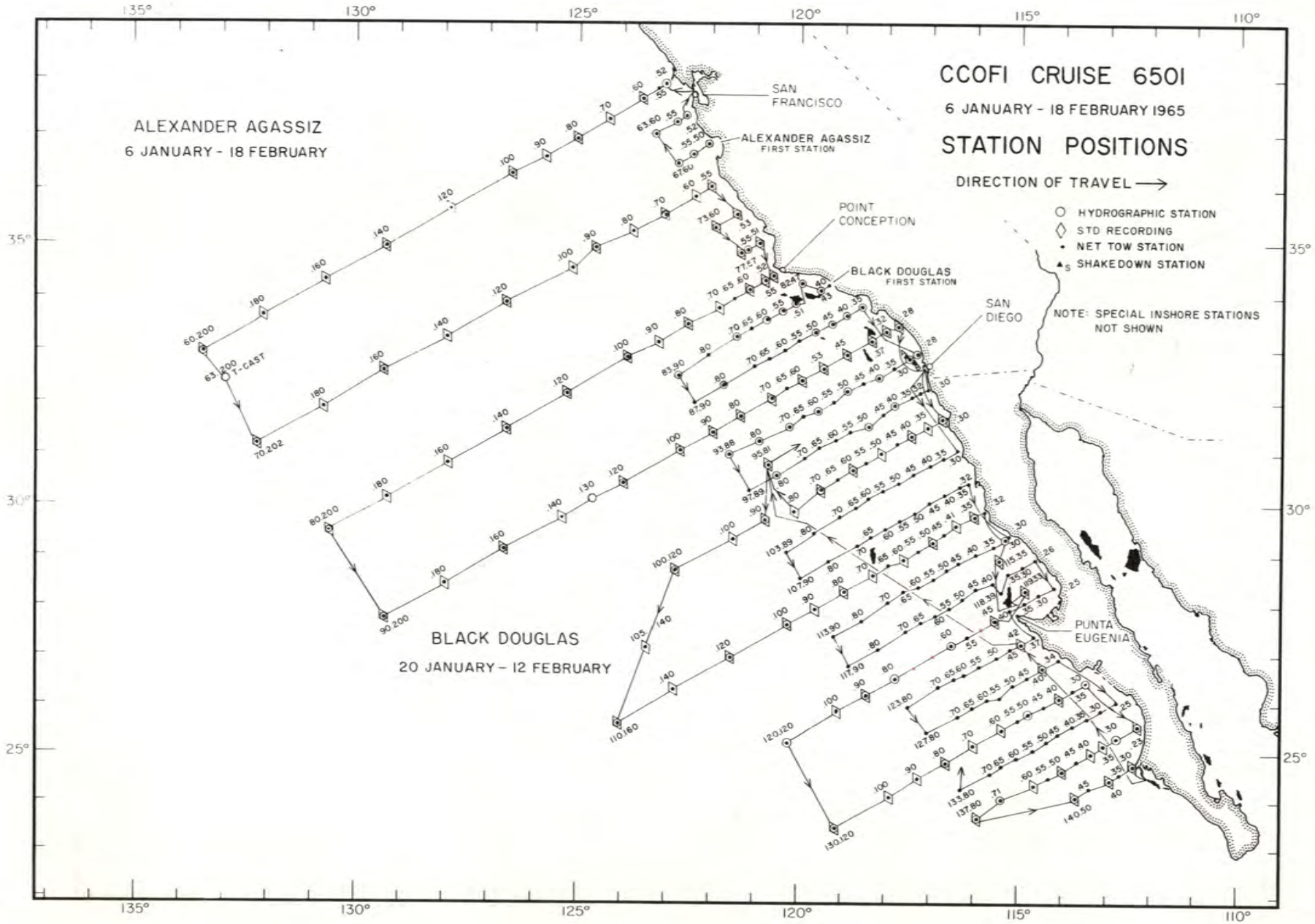

CCOFI CRUISE 6501
6 JANUARY - 18 FEBRUARY 1965
STATION POSITIONS
DIRECTION OF TRAVEL
HYDROGRAPHIC STATION
STD RECORDING
NET TOW STATION
SHAKEDOWN STATION
NOTE: SPECIAL INSHORE STATIONS NOT SHOWN
ALEXANDER AGASSIZ
6 JANUARY - 18 FEBRUARY
ALEXANDER AGASSIZ
FIRST STATION
BLACK DOUGLAS
20 JANUARY - 12 FEBRUARY
BLACK DOUGLAS
FIRST STATION
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
T-CAST
135°
130°
125°
120°
115°
110°
35°
30°
25°

FIGURE 1

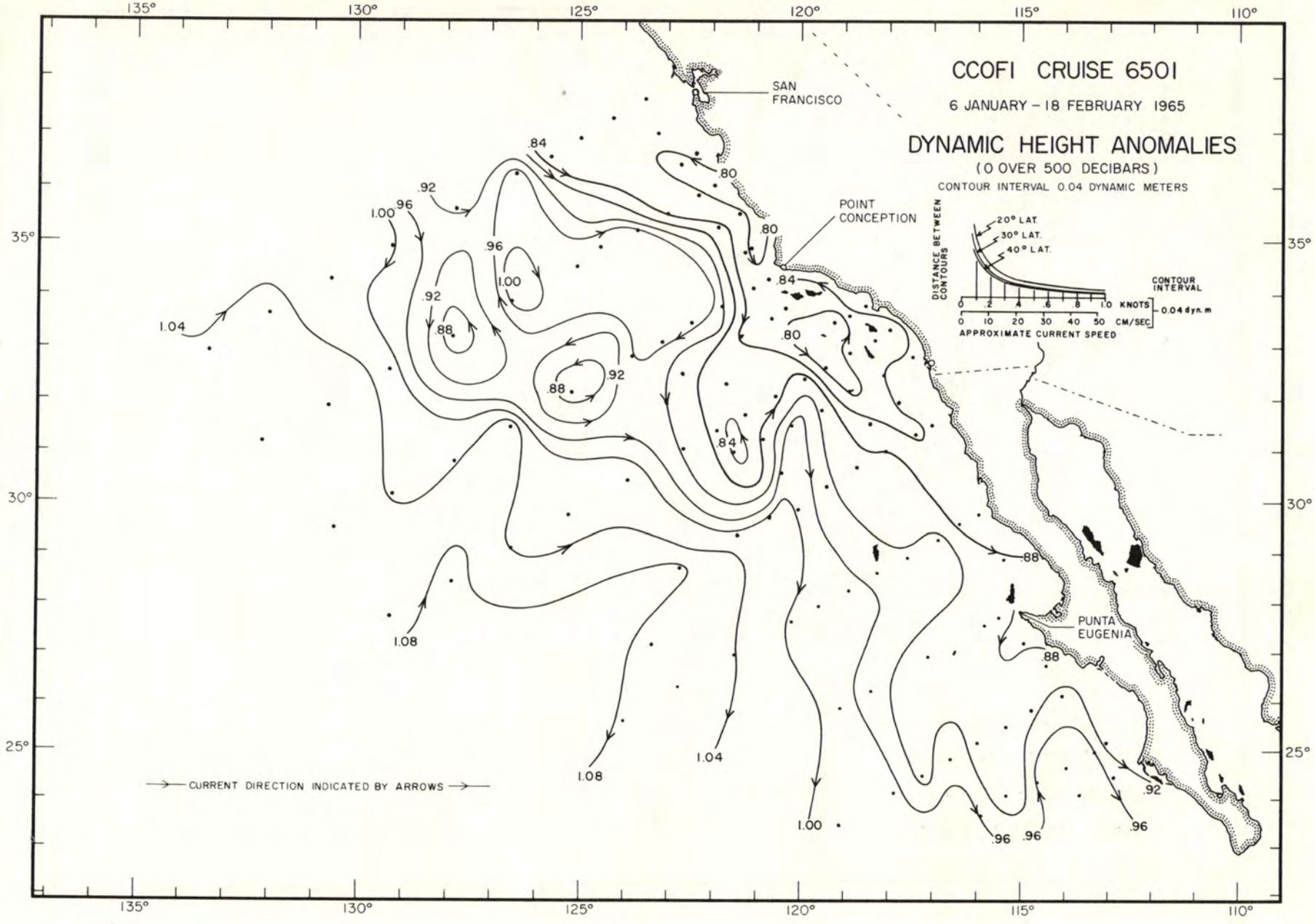

CCOFI CRUISE 6501
6 JANUARY – 18 FEBRUARY 1965
DYNAMIC HEIGHT ANOMALIES
(0 OVER 500 DECIBARS)
CONTOUR INTERVAL 0.04 DYNAMIC METERS
SAN FRANCISCO
POINT CONCEPTION
PUNTA EUGENIA
DISTANCE BETWEEN CONTOURS
20° LAT.
30° LAT.
40° LAT.
CONTOUR INTERVAL
0.04 dyn. m
KNOTS
CM/SEC
APPROXIMATE CURRENT SPEED
CURRENT DIRECTION INDICATED BY ARROWS
135°
130°
125°
120°
115°
110°
35°
30°
25°

FIGURE 2

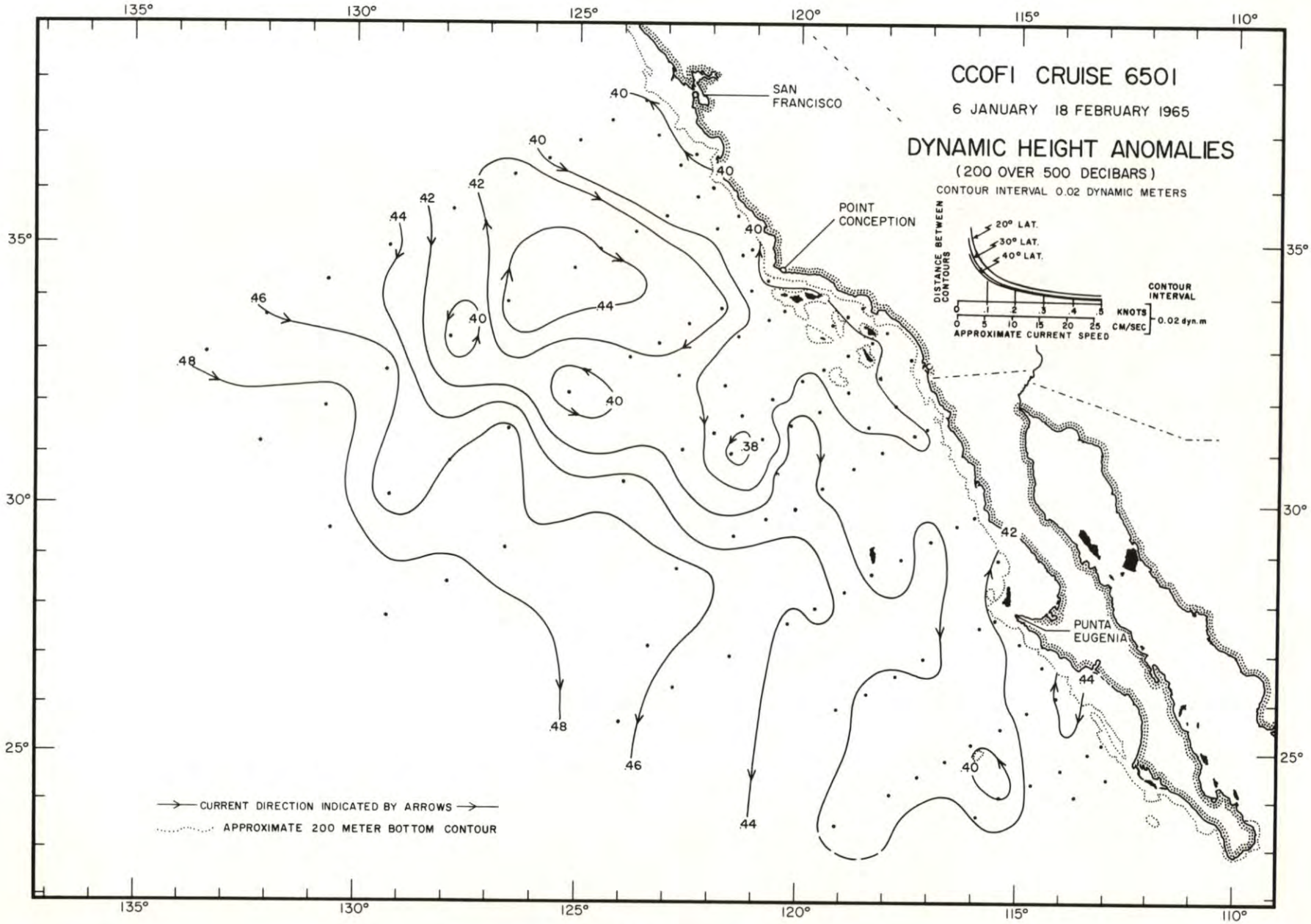

CCOFI CRUISE 6501
6 JANUARY 18 FEBRUARY 1965
DYNAMIC HEIGHT ANOMALIES
(200 OVER 500 DECIBARS)
CONTOUR INTERVAL 0.02 DYNAMIC METERS
SAN FRANCISCO
POINT CONCEPTION
PUNTA EUGENIA
DISTANCE BETWEEN CONTOURS
20° LAT.
30° LAT.
40° LAT.
CONTOUR INTERVAL
KNOTS
CM/SEC
0.02 dyn.m
APPROXIMATE CURRENT SPEED
CURRENT DIRECTION INDICATED BY ARROWS
APPROXIMATE 200 METER BOTTOM CONTOUR
135°
130°
125°
120°
115°
110°
35°
30°
25°

FIGURE 3

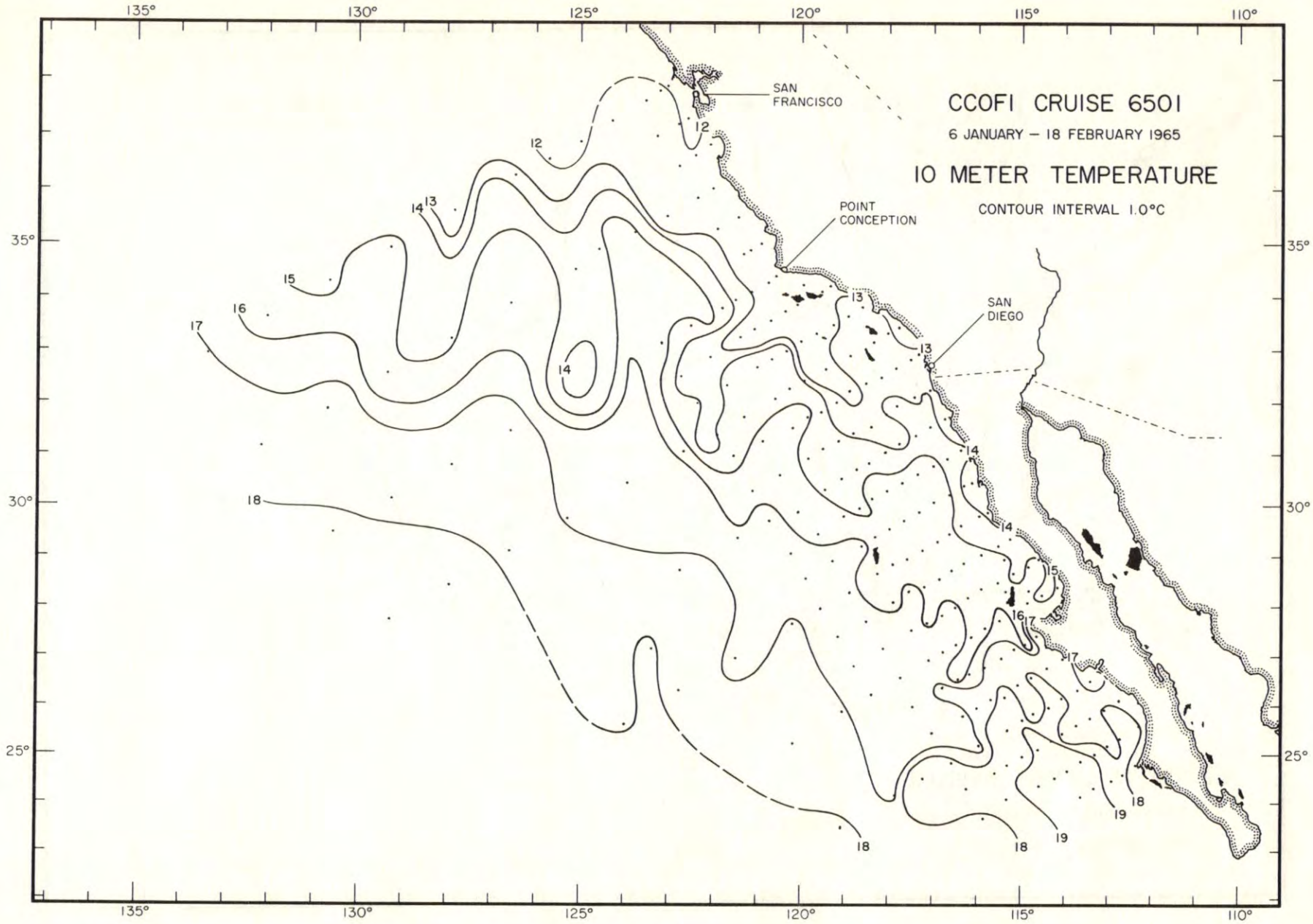

CCOFI CRUISE 6501
6 JANUARY – 18 FEBRUARY 1965
10 METER TEMPERATURE
CONTOUR INTERVAL 1.0°C
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
135°
130°
125°
120°
115°
110°
35°
30°
25°

FIGURE 4

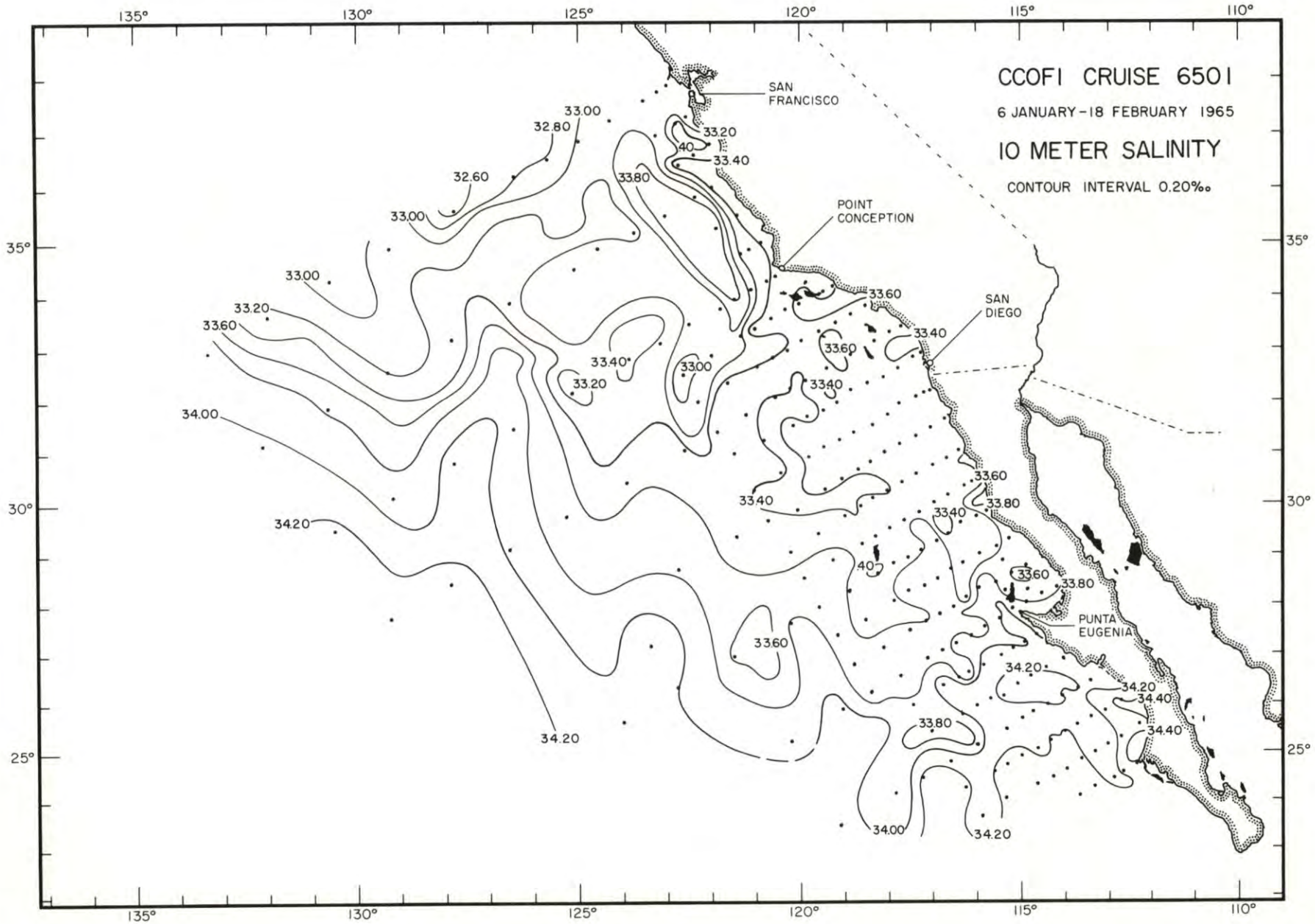

CCOFI CRUISE 6501
6 JANUARY-18 FEBRUARY 1965
10 METER SALINITY
CONTOUR INTERVAL 0.20‰
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
135°
130°
125°
120°
115°
110°
35°
30°
25°
33.00
32.80
33.20
40
33.40
32.60
33.80
33.00
33.00
33.20
33.60
33.40
33.00
33.20
34.00
34.20
33.60
33.40
33.60
33.80
33.40
40
33.60
33.80
33.60
34.20
34.20
34.40
33.80
34.40
34.00
34.20

FIGURE 5

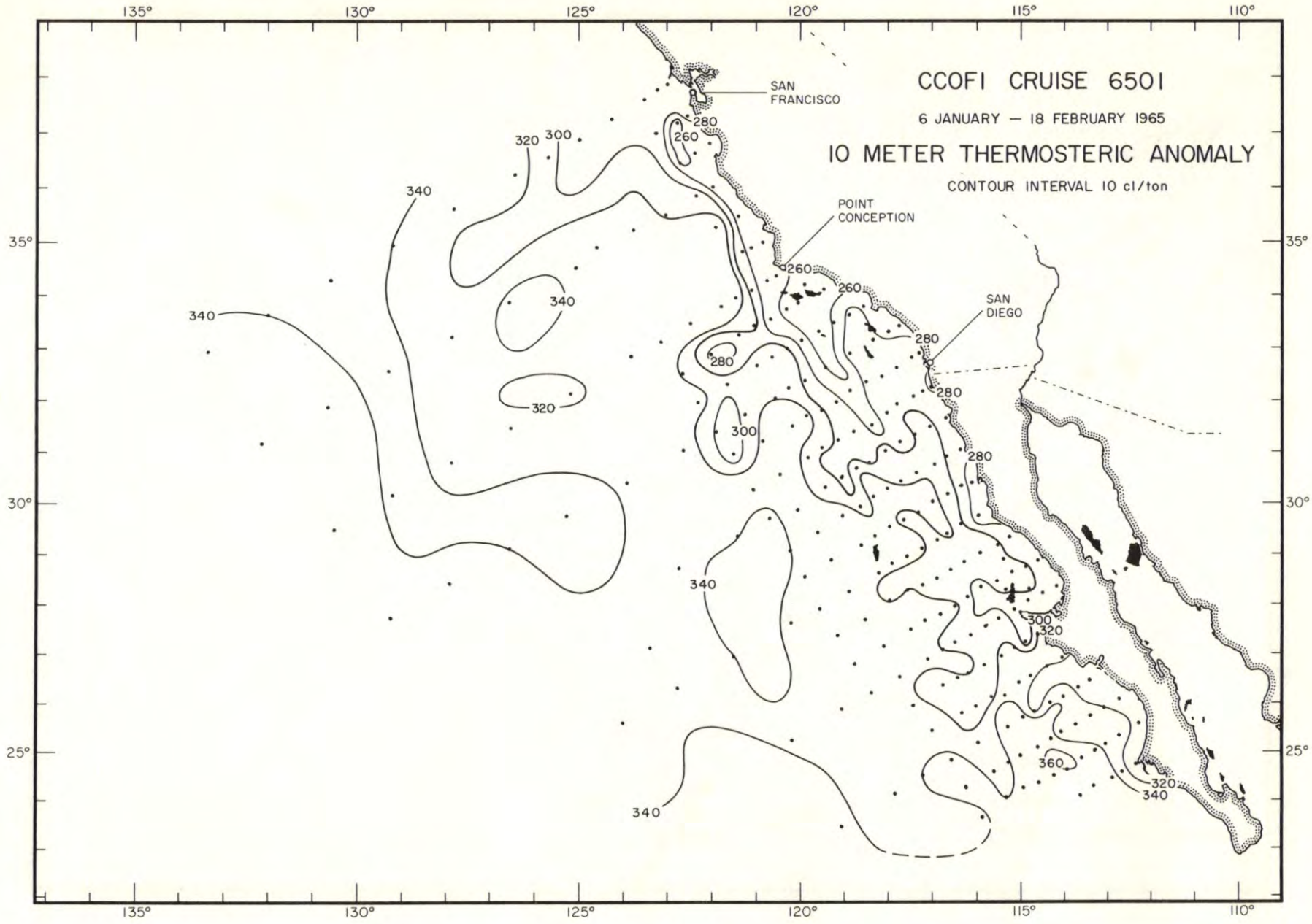

CCOFI CRUISE 6501
6 JANUARY — 18 FEBRUARY 1965
10 METER THERMOSTERIC ANOMALY
CONTOUR INTERVAL 10 cl/ton
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
135°
130°
125°
120°
115°
110°
35°
30°
25°
280
260
320
300
340
360

FIGURE 6

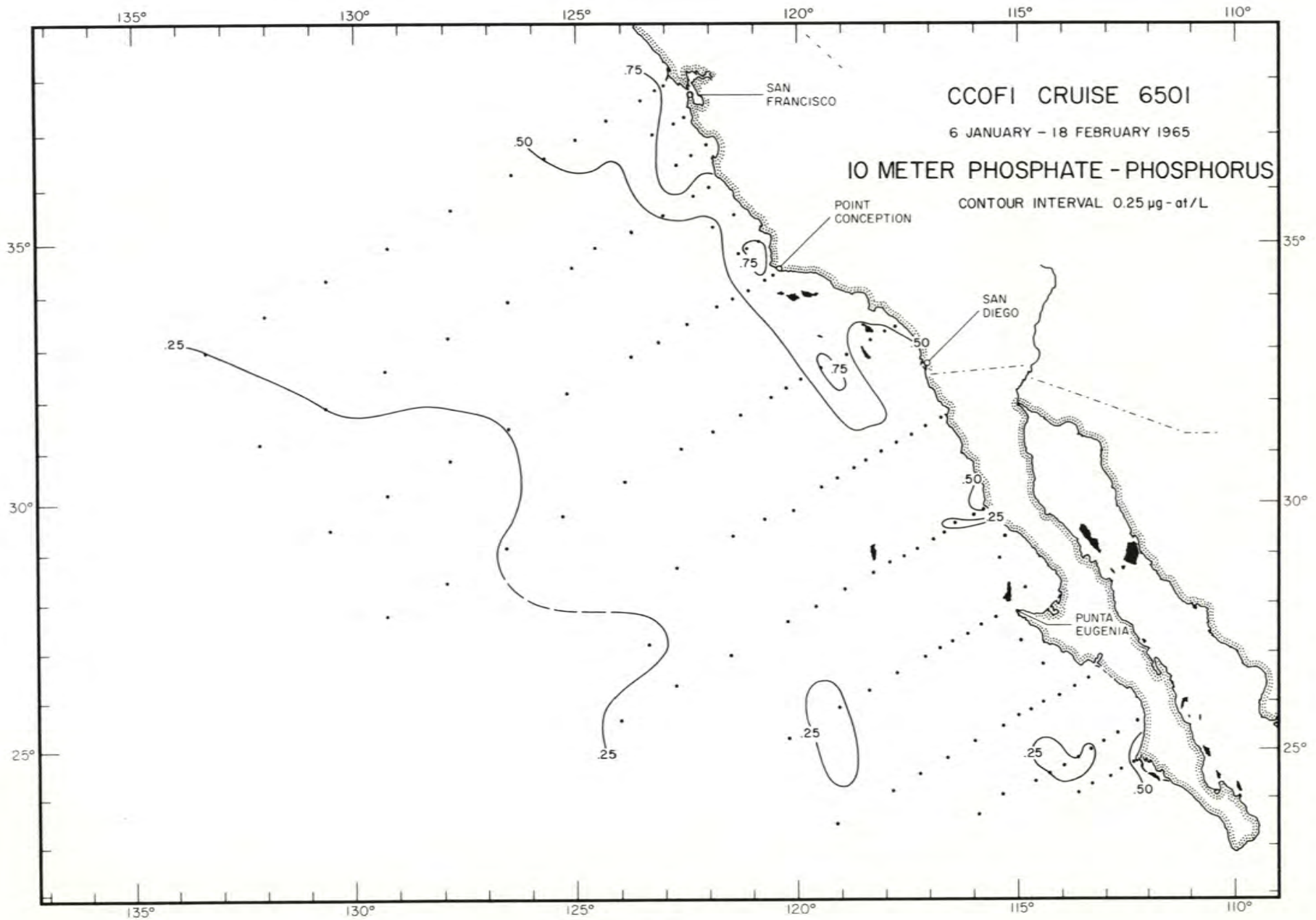

CCOFI CRUISE 6501
6 JANUARY – 18 FEBRUARY 1965
10 METER PHOSPHATE - PHOSPHORUS
CONTOUR INTERVAL 0.25 µg - at/L
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
135°
130°
125°
120°
115°
110°
35°
30°
25°
.75
.50
.25

FIGURE 7

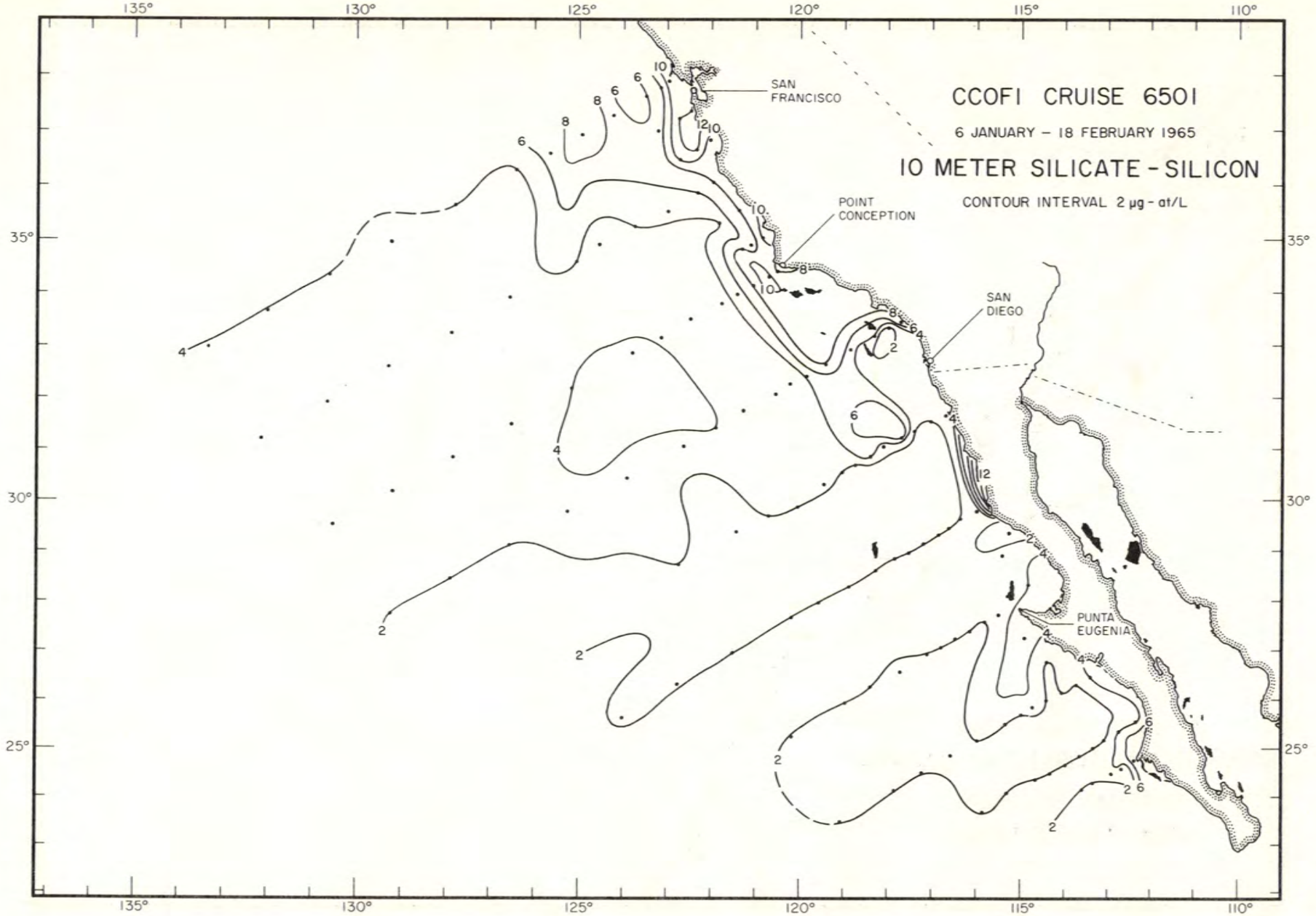

CCOFI CRUISE 6501
6 JANUARY – 18 FEBRUARY 1965
10 METER SILICATE - SILICON
CONTOUR INTERVAL 2 µg - at/L
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
135°
130°
125°
120°
115°
110°
35°
30°
25°

FIGURE 8

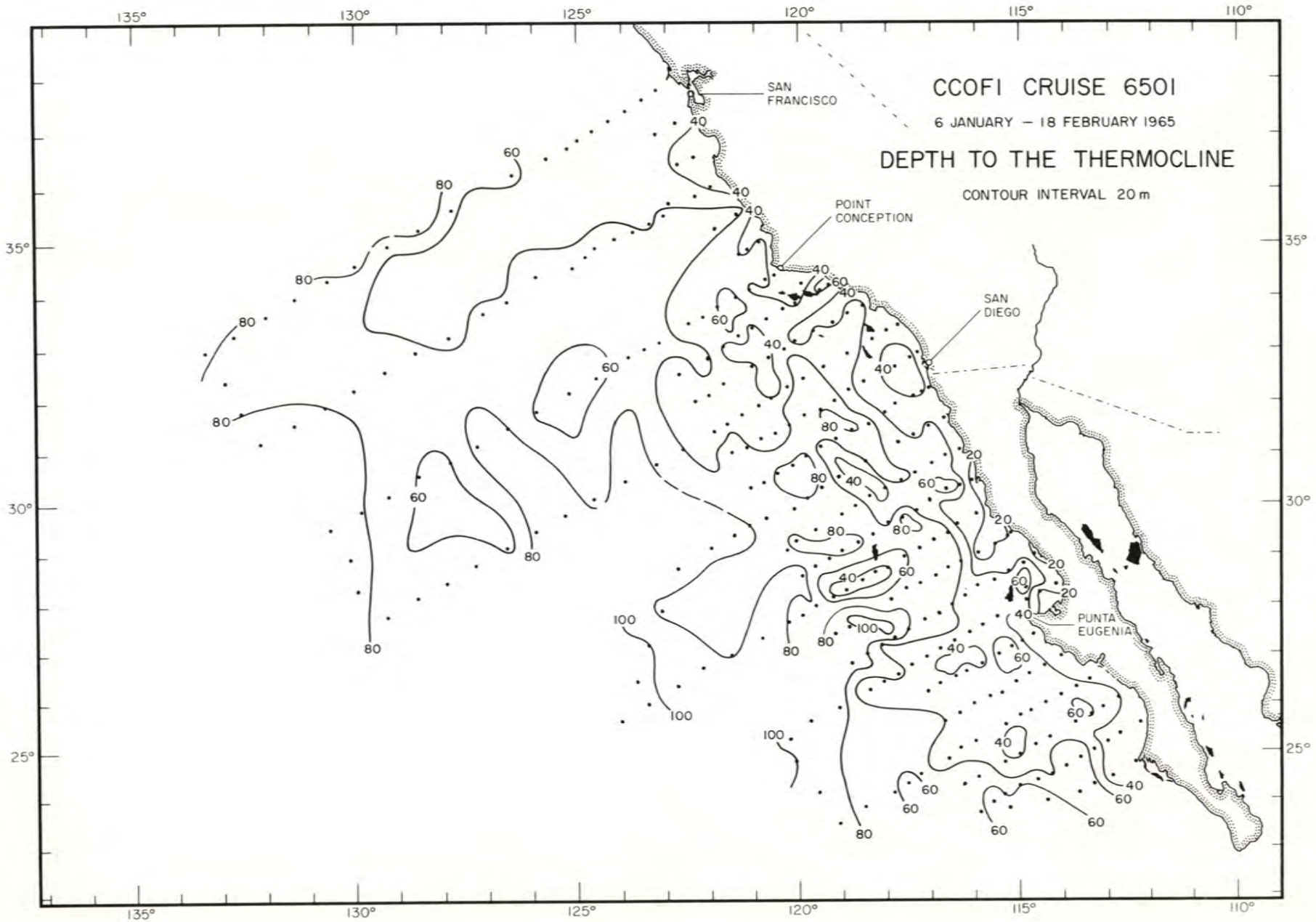

CCOFI CRUISE 6501
6 JANUARY – 18 FEBRUARY 1965
DEPTH TO THE THERMOCLINE
CONTOUR INTERVAL 20 m
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
135°
130°
125°
120°
115°
110°
35°
30°
25°

FIGURE 9

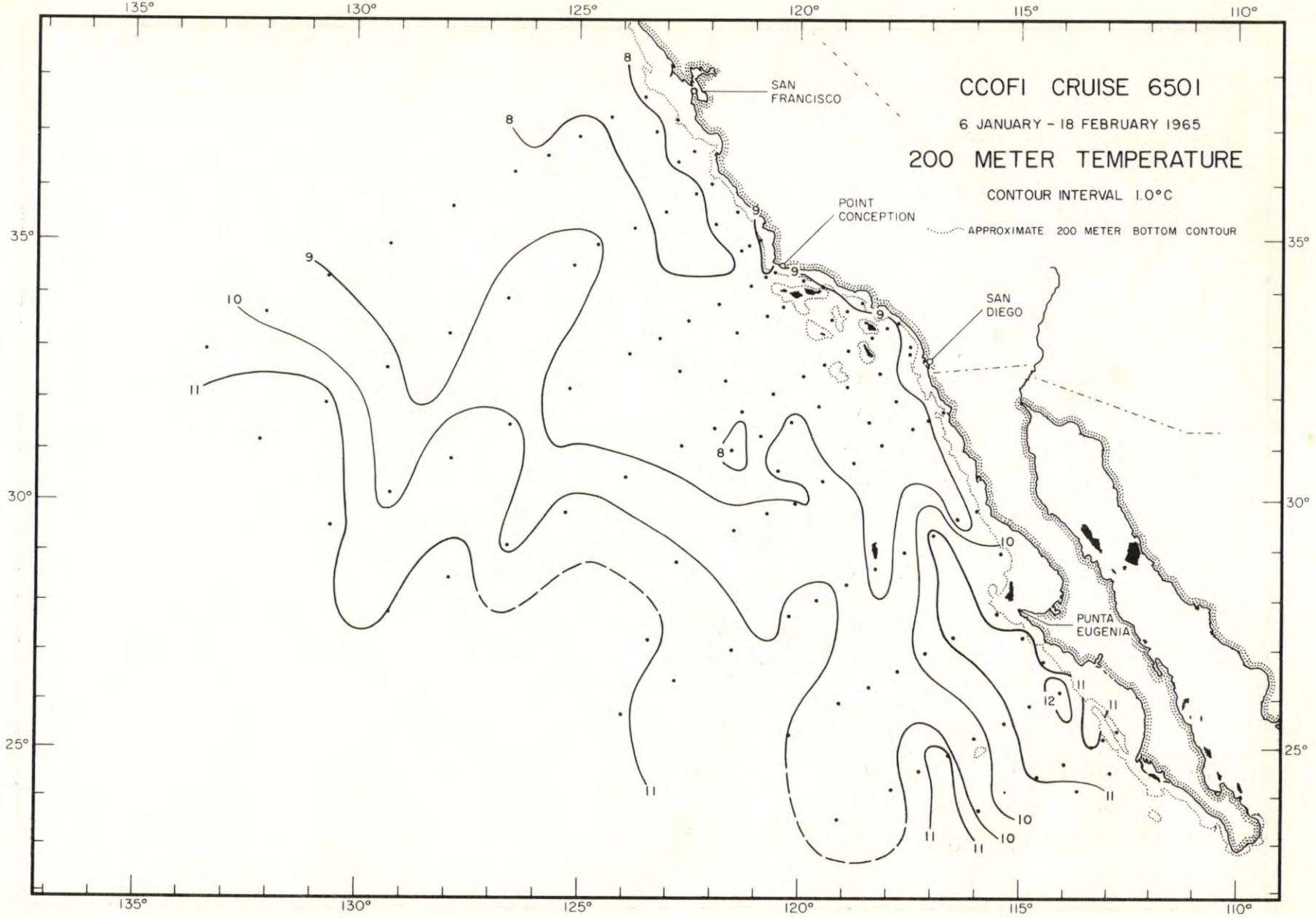

CCOFI CRUISE 6501
6 JANUARY - 18 FEBRUARY 1965
200 METER TEMPERATURE
CONTOUR INTERVAL 1.0°C
APPROXIMATE 200 METER BOTTOM CONTOUR
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
135°
130°
125°
120°
115°
110°
35°
30°
25°

FIGURE 10

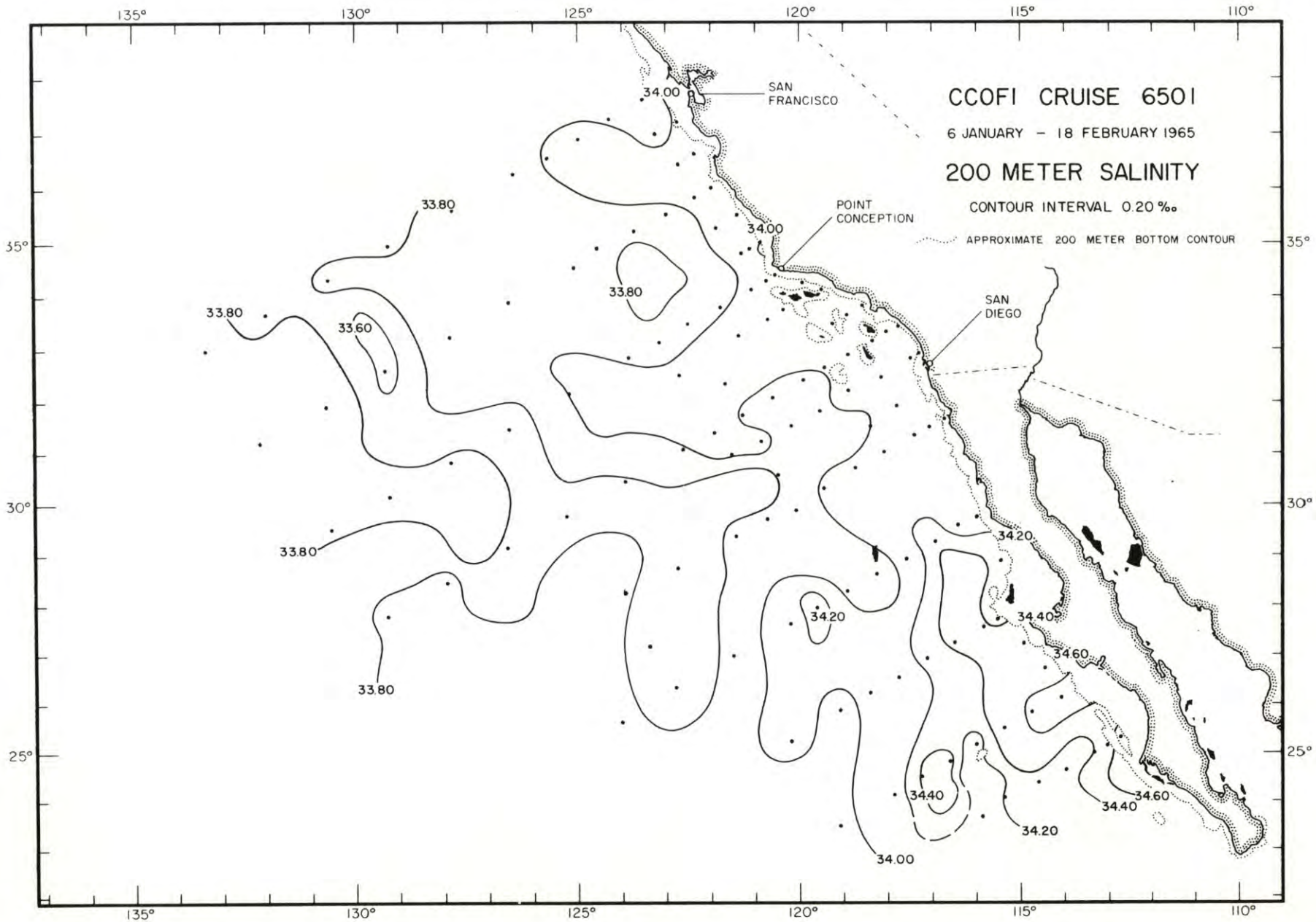

CCOFI CRUISE 6501
6 JANUARY – 18 FEBRUARY 1965
200 METER SALINITY
CONTOUR INTERVAL 0.20 ‰
APPROXIMATE 200 METER BOTTOM CONTOUR
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
135°
130°
125°
120°
115°
110°
35°
30°
25°
34.00
33.80
33.60
34.20
34.40
34.60

FIGURE 11

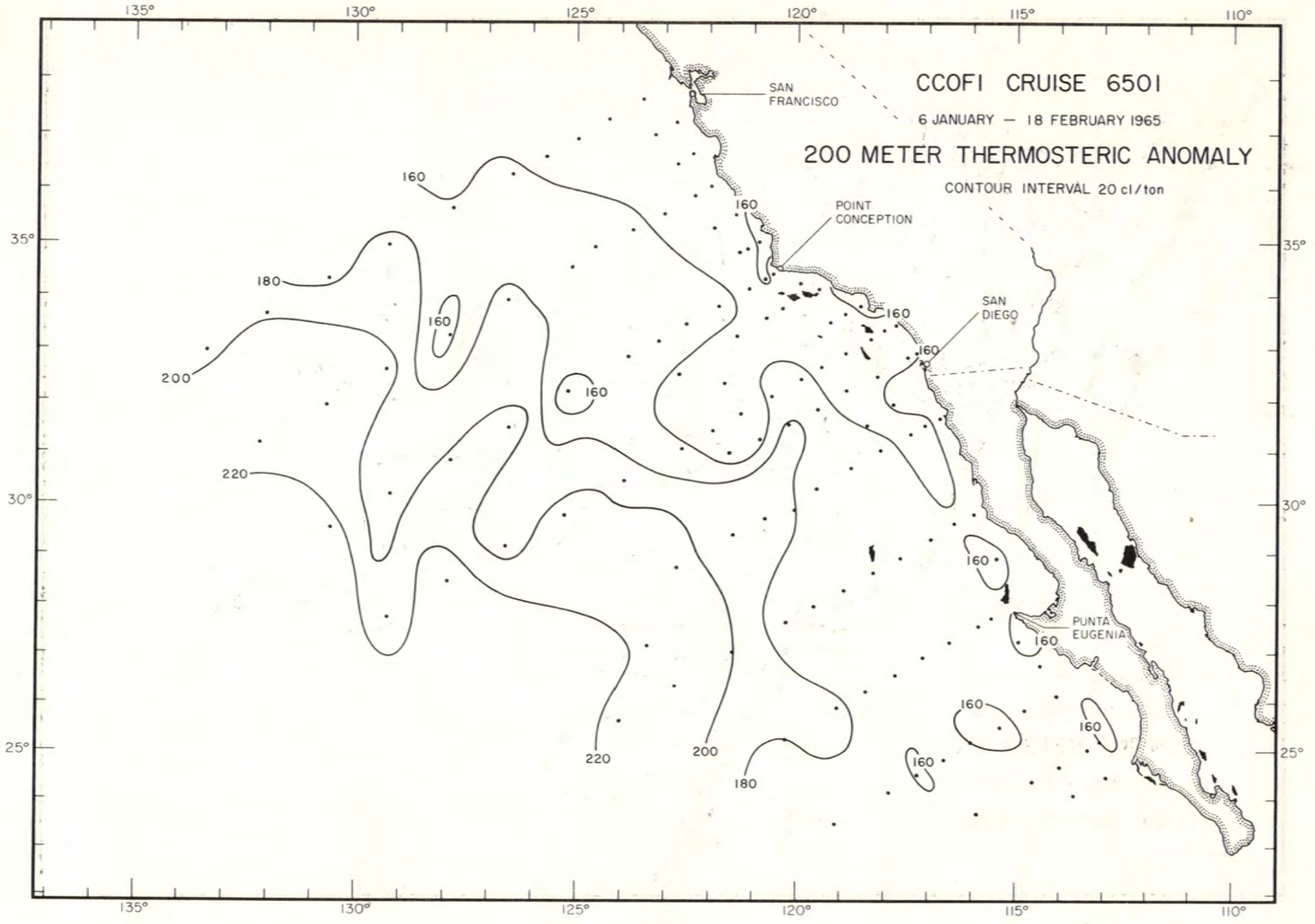

CCOFI CRUISE 6501
6 JANUARY — 18 FEBRUARY 1965
200 METER THERMOSTERIC ANOMALY
CONTOUR INTERVAL 20 cl/ton
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
135°
130°
125°
120°
115°
110°
35°
30°
25°
160
180
200
220

FIGURE 12

## PERSONNEL

### SHIPS' CAPTAINS

Miller, Frank, RV Alexander Agassiz
Forster, Charles W., RV Black Douglas

### PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

RV Alexander Agassiz

*Wyllie, John G., Laboratory Technician IV ( in charge of northern half)
**Mead, Richard V., Principal Marine Technician (in charge of southern half)
Bryan, Walter R., Senior Marine Technician
Davoll, Peter J., Marine Technician
*Fankboner, Peter V., Marine Technician
Ferreira, Simon M., Marine Technician
***Jerde, Charles E., Post-Graduate Research Biologist IV
Muus, David A., Marine Technician
Netzley, Ronald L., Marine Technician
Pine, James S., Senior Marine Technician
Wagner, Vaughn M., Fishery Technician, Bureau of Commercial Fisheries
Wilson, Warren E., Marine Technician
Wirth, David, Marine Technician

RV Black Douglas

Counts, Robert C., Fishery Research Biologist, Bureau of Commercial Fisheries
*Brennen, Robert E., Senior Marine Technician
Hart, Joe T., Laboratory Technician III
Metoyer, Jack D., Fishery Technician, Bureau of Commercial Fisheries

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*Northern half of cruise only.
**Southern half of cruise only.
***Left ship at Avila.

| BOTTLE SAMPLES | | | | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

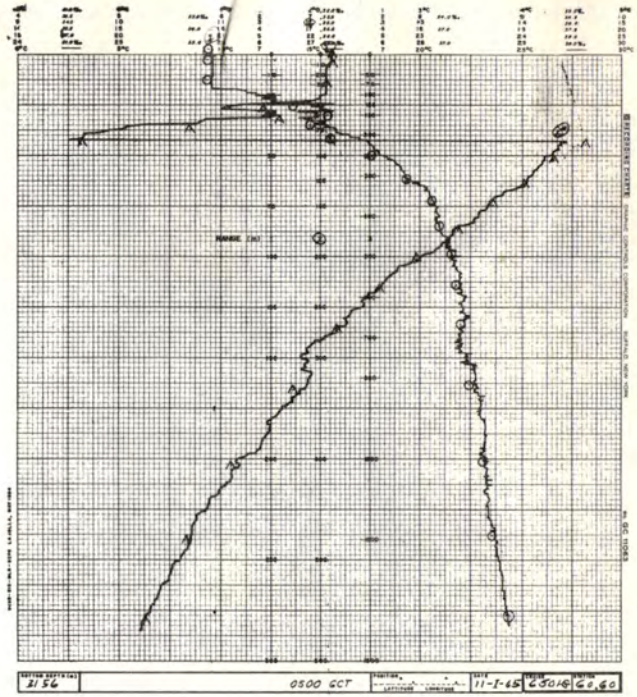
ALEXANDER AGASSIZ; January 10, 1965; 2337 GCT; 37°54'N, 123°02'W; sounding, 43 fm; wind, 150°, force 2; weather, partly cloudy; sea, slight; wire angle, 00°.

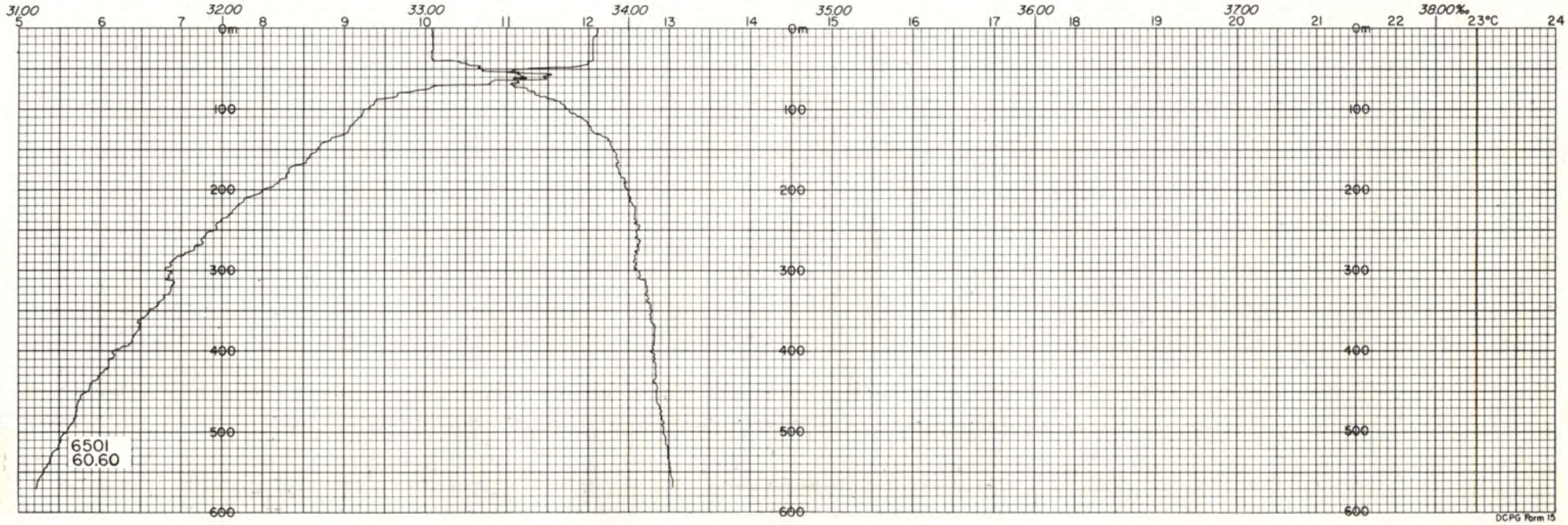
| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 11.32 | 30.592 | 6.58 | 1.06 | 30 | 457 | 0 | 11.32 | 30.59 | 23.32 | 457 | 0.00 |
| 10 | 11.91 | 32.889 | 6.16 | 0.86 | 11 | 298 | 10 | 11.91 | 32.89 | 24.99 | 298 | 0.04 |
| 20 | 11.94 | 32.998 | 6.08 | 0.81 | 9 | 290 | 20 | 11.94 | 33.00 | 25.07 | 290 | 0.07 |
| 30 | 11.90 | 33.008 | 6.07 | 0.82 | 9 | 289 | 30 | 11.90 | 33.01 | 25.08 | 289 | 0.10 |
| 40 | 11.48 | 33.316 | 4.78 | 1.48 | 26 | 259 | 50 | 11.28 | 33.38 | 25.49 | 250 | 0.15 |
| 50 | 11.28 | 33.381 | 4.77 | 1.46 | 23 | 250 | 75 | (10.50) | (33.70) | (25.87) | (214) | (0.21) |
| 60 | 10.86 | 33.507 | 4.52 | 1.58 | 23 | 234 | | | | | | |
| 70 | 10.52 | 33.629 | 3.95 | 1.82 | 29 | 219 | | | | | | |

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 11, 1965; 0443 GCT; 37°37.5'N, 123°35.5'W; sounding, 1726 fm; wind, 180°, force 3; weather, fog; sea, slight; wire angle, 07°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.12 | 33.046 | 6.32 | 0.61 | 7 | 290 | 0 | 12.12 | 33.03 | 25.06 | 291 | 0.00 |
| 10 | 12.13 | 33.046 | 6.37 | 0.62 | 6 | 290 | 10 | 12.08 | 33.04 | 25.07 | 290 | 0.03 |
| 30 | 12.06 | 33.044 | 6.26 | 0.62 | 6 | 289 | 20 | 12.06 | 33.04 | 25.08 | 289 | 0.06 |
| 55 | 11.42 | 33.388 | 5.44 | 1.17 | 12 | 252 | 30 | 12.06 | 33.04 | 25.08 | 289 | 0.09 |
| 65 | 11.58 | 33.526 | 5.21 | 1.26 | 14 | 245 | 50 | 11.18 | 33.28 | 25.43 | 256 | 0.14 |
| 75 | 10.69 | 33.458 | 5.01 | 1.43 | 16 | 235 | 75 | 9.92 | 33.50 | 25.82 | 219 | 0.20 |
| 89 | 9.63 | 33.540 | 4.78 | 1.59 | 19 | 212 | 100 | 9.28 | 33.70 | 26.08 | 194 | 0.25 |
| 105 | 9.32 | 33.704 | 3.97 | 2.07 | 26 | 195 | 125 | 9.04 | 33.81 | 26.20 | 182 | 0.30 |
| 129 | 9.02 | 33.849 | 3.30 | 2.18 | 31 | 179 | 150 | 8.67 | 33.92 | 26.35 | 169 | 0.35 |
| 149 | 8.72 | 33.931 | 3.02 | 2.16 | 34 | 169 | 200 | 8.01 | 33.99 | 26.50 | 154 | 0.43 |
| 174 | 8.38 | 33.955 | 2.86 | 2.29 | 38 | 162 | 250 | 7.42 | 34.04 | 26.63 | 142 | 0.50 |
| 203 | 7.97 | 34.015 | 2.43 | 2.45 | 42 | 152 | 300 | 6.81 | 34.05 | 26.72 | 133 | 0.57 |
| 233 | 7.60 | 34.043 | 2.16 | - | - | 144 | 400 | 6.17 | 34.11 | 26.85 | 121 | 0.71 |
| 272 | 7.16 | 34.061 | 1.98 | - | - | 137 | 500 | 5.61 | 34.18 | 26.98 | 109 | 0.83 |
| 332 | 6.72 | 34.095 | 1.57 | - | - | 129 | | | | | | |
| 407 | 6.10 | 34.151 | 0.95 | - | - | 117 | | | | | | |
| 481 | 5.67 | 34.183 | 0.71 | - | - | 110 | | | | | | |
| 560 | 5.26 | 34.231 | 0.50 | - | - | 101 | | | | | | |



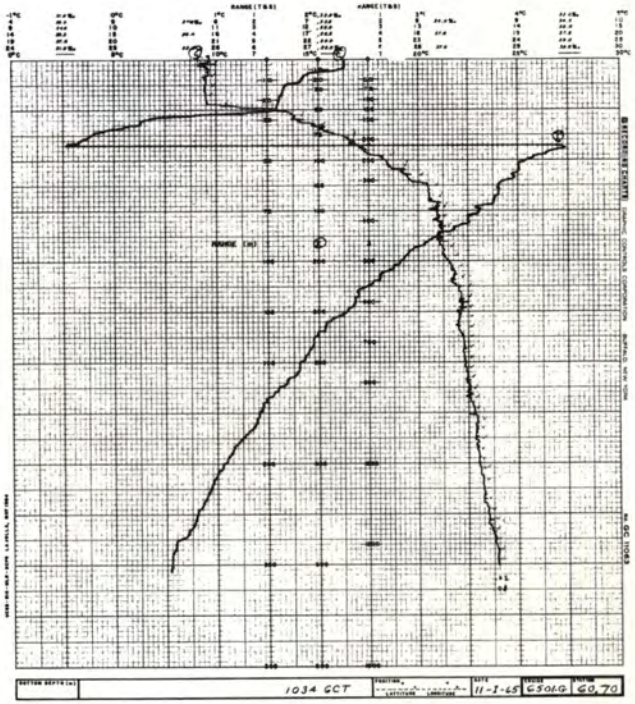



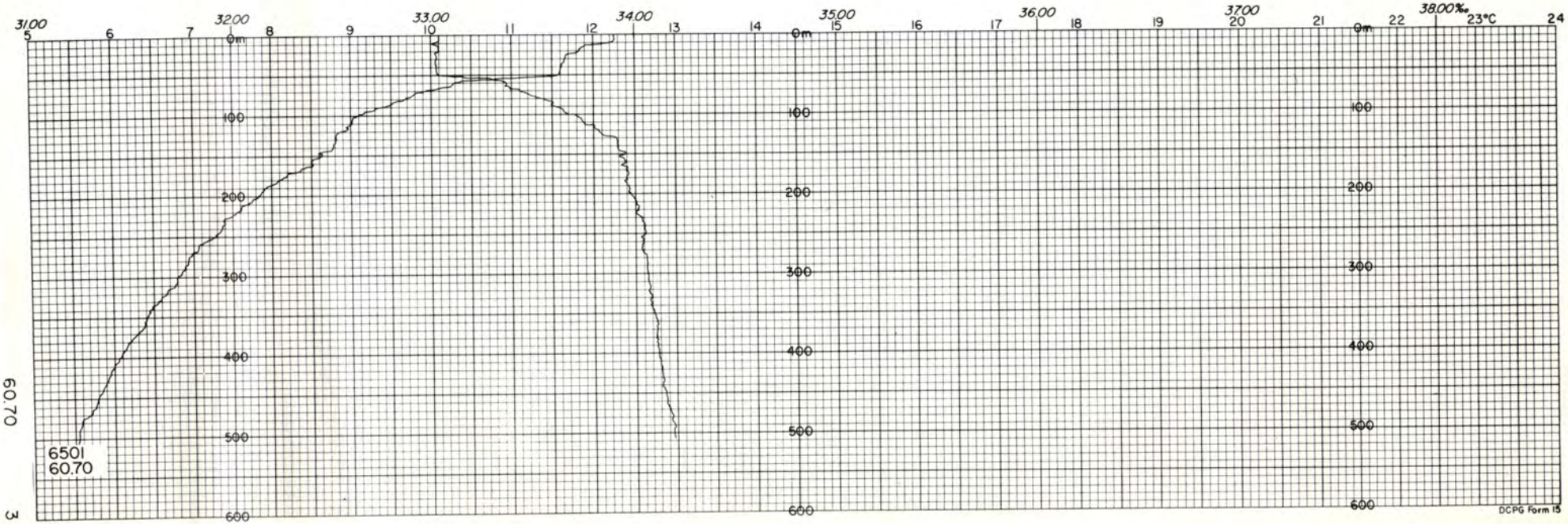
SIO CCOFI 6501

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $PO_4$-P<br>µg at/L | $SiO_3$-Si<br>µg at/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |

ALEXANDER AGASSIZ; January 11, 1965; 1034 GCT; 37°17'N, 124°20.5'W; sounding, 2125 fm; wind, 260°, force 3; weather, drizzle; sea, rough.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 12.25 | 33.04 | 25.04 | 293 | 0.00 |
| 10 | 12.20 | 33.02 | 25.04 | 293 | 0.03 |
| 20 | 11.83 | 33.04 | 25.12 | 285 | 0.06 |
| 30 | 11.66 | 33.03 | 25.14 | 283 | 0.09 |
| 50 | 11.57 | 33.07 | 25.19 | 278 | 0.14 |
| 75 | 9.78 | 33.49 | 25.83 | 218 | 0.21 |
| 100 | 9.09 | 33.68 | 26.09 | 193 | 0.26 |
| 125 | 8.81 | 33.84 | 26.26 | 177 | 0.30 |
| 150 | 8.61 | 33.94 | 26.37 | 166 | 0.35 |
| 200 | 7.82 | 33.97 | 26.51 | 153 | 0.43 |
| 250 | 7.28 | 34.04 | 26.65 | 140 | 0.50 |
| 300 | 6.81 | 34.06 | 26.73 | 133 | 0.57 |
| 400 | 6.07 | 34.11 | 26.86 | 120 | 0.71 |
| 500 | 5.55 | 34.18 | 26.98 | 108 | 0.82 |



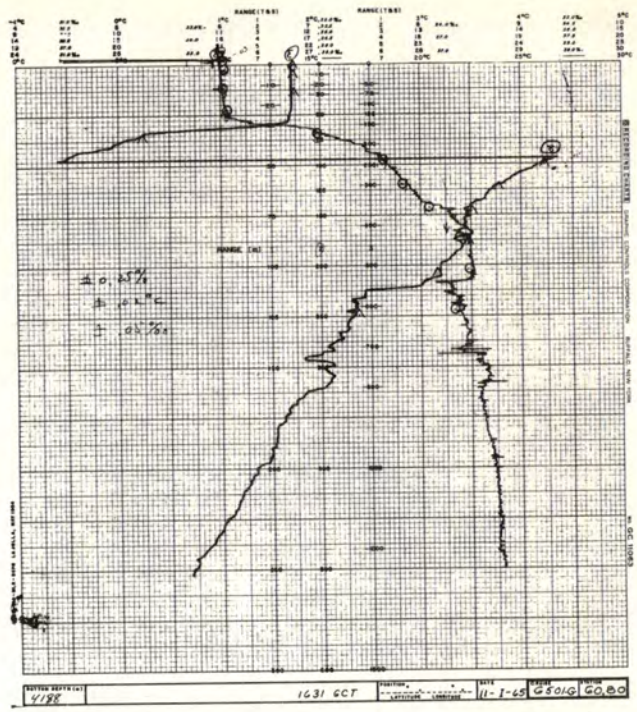

60.70

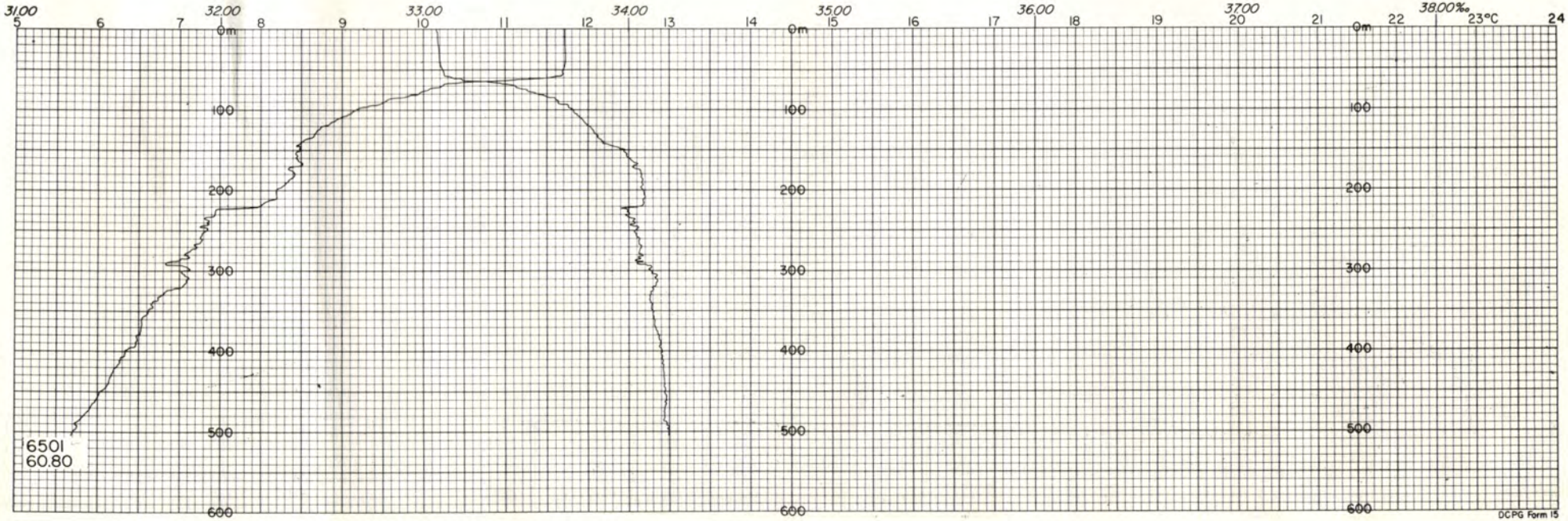
60.80

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 11, 1965; 1614 GCT; 36°56.5'N, 125°02.5'W; sounding, 2290 fm; wind, 320°, force 4; weather, drizzle; sea, rough; wire angle, 25°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 11.73 | 33.110 | 6.18 | 0.74 | 10 | 278 | 0 | 11.71 | 33.07 | 25.17 | 281 | 0.00 |
| 10 | 11.73 | 33.117 | 6.39 | 0.78 | 9 | 278 | 10 | 11.71 | 33.07 | 25.17 | 281 | 0.03 |
| 28 | 11.74 | 33.108 | 6.24 | 0.73 | 8 | 279 | 20 | 11.71 | 33.07 | 25.17 | 281 | 0.06 |
| 51 | 11.68 | 33.122 | 6.22 | 0.78 | 9 | 276 | 30 | 11.71 | 33.08 | 25.17 | 280 | 0.08 |
| 73 | 10.24 | 33.486 | 4.65 | 1.51 | 19 | 225 | 50 | 11.69 | 33.09 | 25.19 | 279 | 0.14 |
| 101 | 9.22 | 33.744 | 3.82 | 1.98 | 28 | 190 | 75 | 10.04 | 33.50 | 25.80 | 221 | 0.20 |
| 123 | 8.78 | 33.828 | 3.46 | 2.20 | 34 | 177 | 100 | 9.16 | 33.72 | 26.11 | 191 | 0.26 |
| 147 | 8.51 | 33.933 | - | 2.20 | 36 | 165 | 125 | 8.71 | 33.82 | 26.26 | 177 | 0.30 |
| 176 | 8.48 | 34.056 | 2.01 | 2.48 | 41 | 156 | 150 | 8.46 | 33.99 | 26.43 | 160 | 0.34 |
| 208 | 8.17 | 34.085 | 1.93 | 2.53 | 43 | 149 | 200 | 8.19 | 34.07 | 26.54 | 151 | 0.42 |
| 249 | 7.38 | 34.031 | 2.04 | 2.54 | 49 | 142 | 250 | 7.32 | 34.04 | 26.64 | 141 | 0.50 |
| | | | | | | | 300 | 7.04 | 34.10 | 26.73 | 133 | 0.57 |
| | | | | | | | 400 | 6.33 | 34.16 | 26.87 | 119 | 0.70 |
| | | | | | | | 500 | 5.70 | 34.19 | 26.97 | 109 | 0.82 |



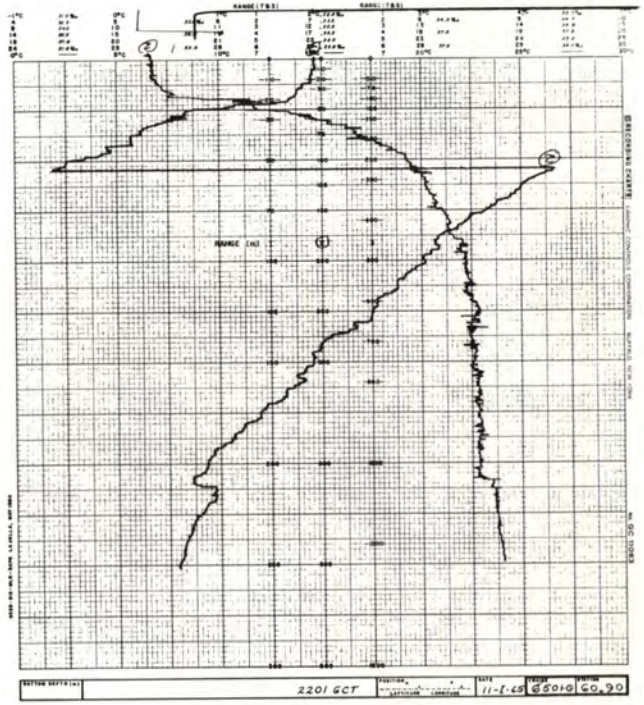



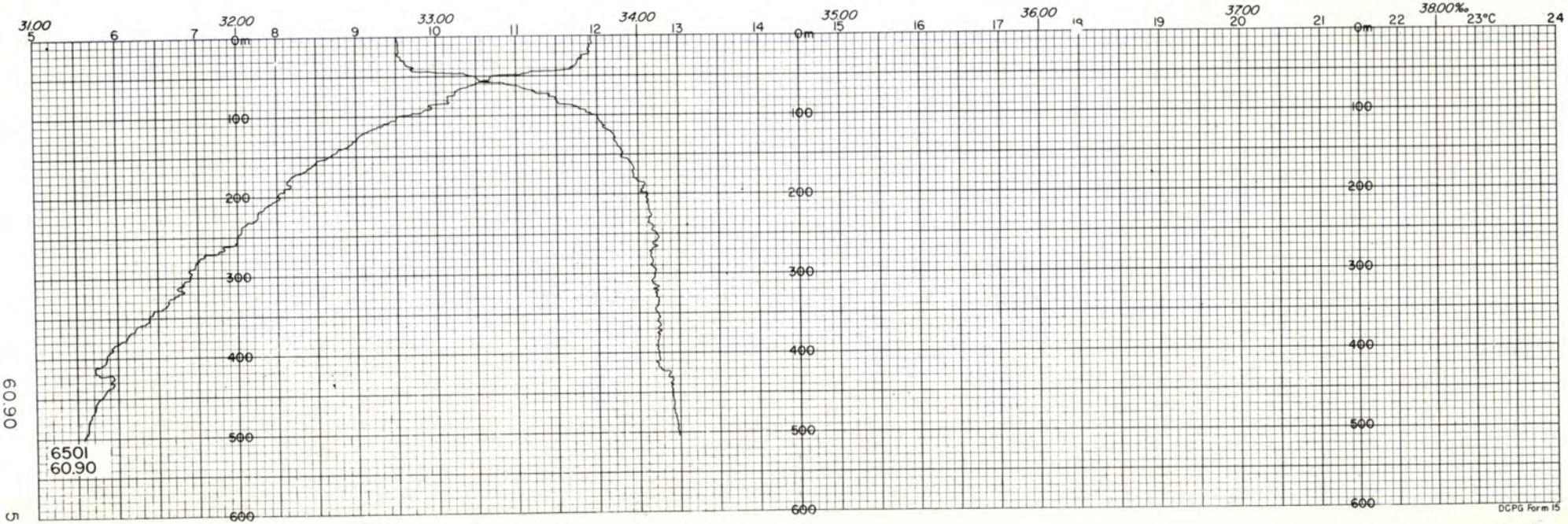
SIO CCOFI 6501

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $PO_4$-P<br>µg at/L | $SiO_3$-Si<br>µg at/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |

ALEXANDER AGASSIZ; January 11, 1965; 2201 GCT; 36°37'N, 125°46.5'W; sounding, 2404 fm; wind, 340°, force 4; weather, cloudy; sea, very rough.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 11.93 | 32.80 | 24.92 | 305 | 0.00 |
| 10 | 11.94 | 32.81 | 24.92 | 304 | 0.03 |
| 20 | 11.90 | 32.81 | 24.93 | 303 | 0.06 |
| 30 | 11.77 | 32.84 | 24.98 | 299 | 0.09 |
| 50 | 10.75 | 33.20 | 25.44 | 255 | 0.15 |
| 75 | 10.15 | 33.59 | 25.85 | 216 | 0.21 |
| 100 | 9.50 | 33.80 | 26.12 | 190 | 0.26 |
| 125 | 9.02 | 33.89 | 26.27 | 176 | 0.30 |
| 150 | 8.66 | 33.93 | 26.35 | 168 | 0.35 |
| 200 | 8.03 | 34.04 | 26.54 | 151 | 0.43 |
| 250 | 7.51 | 34.10 | 26.66 | 139 | 0.50 |
| 300 | 6.91 | 34.08 | 26.73 | 132 | 0.57 |
| 400 | 5.87 | 34.10 | 26.88 | 118 | 0.70 |
| 500 | 5.59 | 34.19 | 26.99 | 108 | 0.82 |



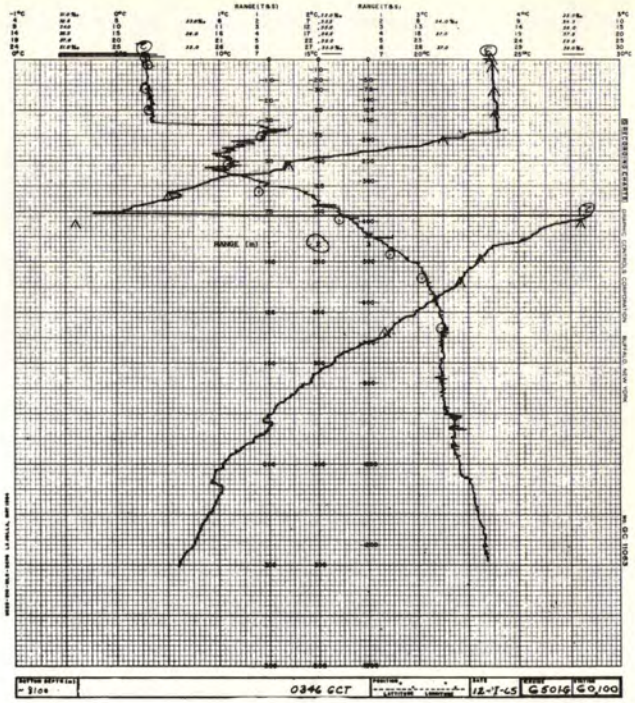



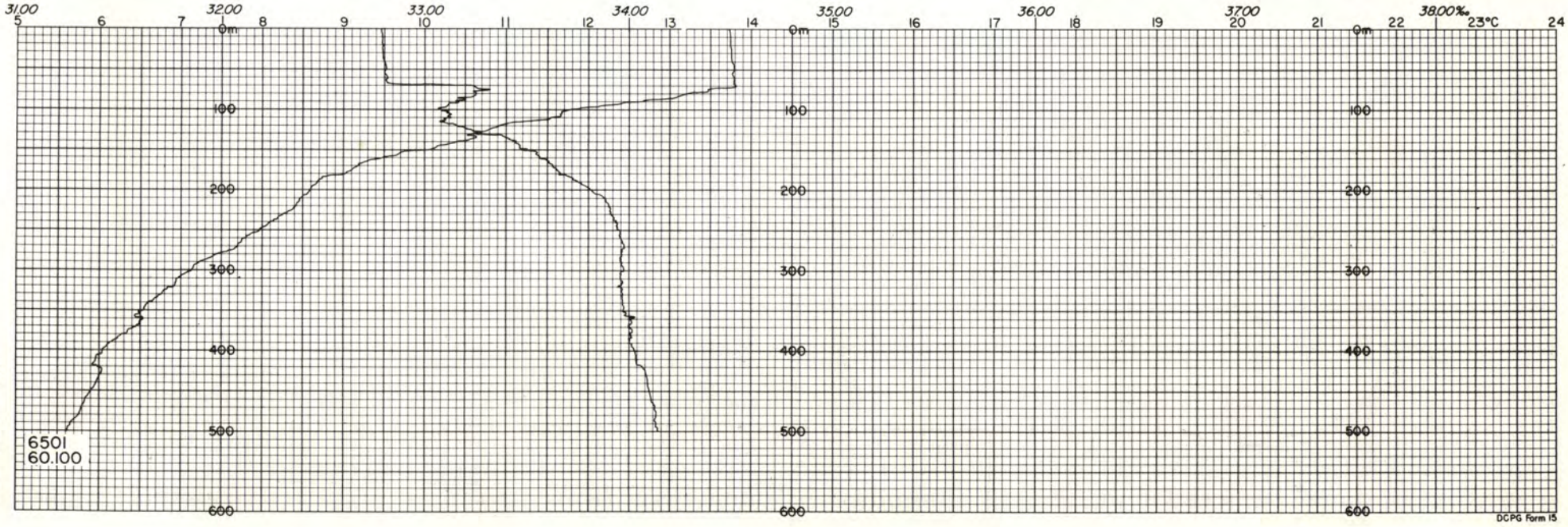

60.90

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 12, 1965; 0325 GCT; 36°17'N, 126°30'W; sounding, 2455 fm; wind, 360°, force 5; weather, overcast; sea, very rough; wire angle, 27°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.74 | 32.817 | 6.07 | 0.38 | 5 | 337 | 0 | 13.73 | 32.79 | 24.56 | 339 | 0.00 |
| 10 | 13.74 | 32.824 | 6.14 | 0.41 | 4 | 337 | 10 | 13.74 | 32.79 | 24.56 | 339 | 0.03 |
| 33 | 13.76 | 32.816 | 6.09 | 0.40 | 3 | 337 | 20 | 13.74 | 32.79 | 24.56 | 339 | 0.07 |
| 55 | 13.76 | 32.827 | 6.12 | 0.39 | 4 | 337 | 30 | 13.75 | 32.79 | 24.55 | 339 | 0.10 |
| 81 | 13.25 | 33.273 | 6.13 | 0.45 | 4 | 294 | 50 | 13.78 | 32.81 | 24.56 | 338 | 0.17 |
| 108 | 11.70 | 33.134 | 6.01 | 0.64 | 5 | 276 | 75 | 13.46 | 33.28 | 24.99 | 298 | 0.25 |
| 136 | 10.50 | 33.259 | 5.32 | 1.14 | 12 | 246 | 100 | 11.77 | 33.07 | 25.16 | 282 | 0.32 |
| 164 | 9.60 | 33.581 | 4.66 | 1.43 | 18 | 208 | 125 | 10.78 | 33.21 | 25.44 | 255 | 0.39 |
| 198 | 8.62 | 33.787 | 4.39 | 1.76 | 27 | 178 | 150 | 10.07 | 33.47 | 25.77 | 224 | 0.45 |
| 222 | 8.42 | 33.911 | 4.56 | 1.57 | 27 | 166 | 200 | 8.59 | 33.81 | 26.27 | 176 | 0.55 |
| 271 | 7.66 | 33.993 | 3.05 | 2.17 | 40 | 149 | 250 | 7.97 | 33.95 | 26.48 | 156 | 0.64 |
| | | | | | | | 300 | 7.14 | 33.97 | 26.61 | 144 | 0.71 |
| | | | | | | | 400 | 6.03 | 34.03 | 26.80 | 125 | 0.85 |
| | | | | | | | 500 | 5.61 | 34.14 | 26.94 | 112 | 0.98 |

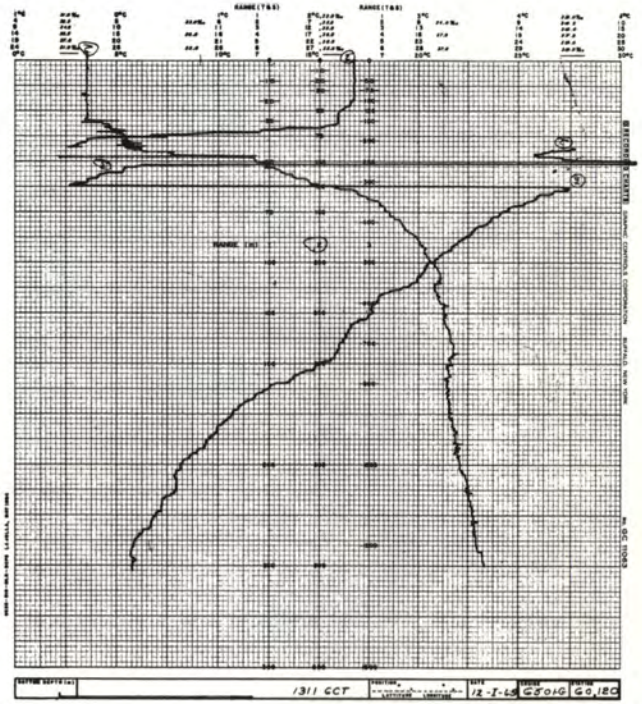


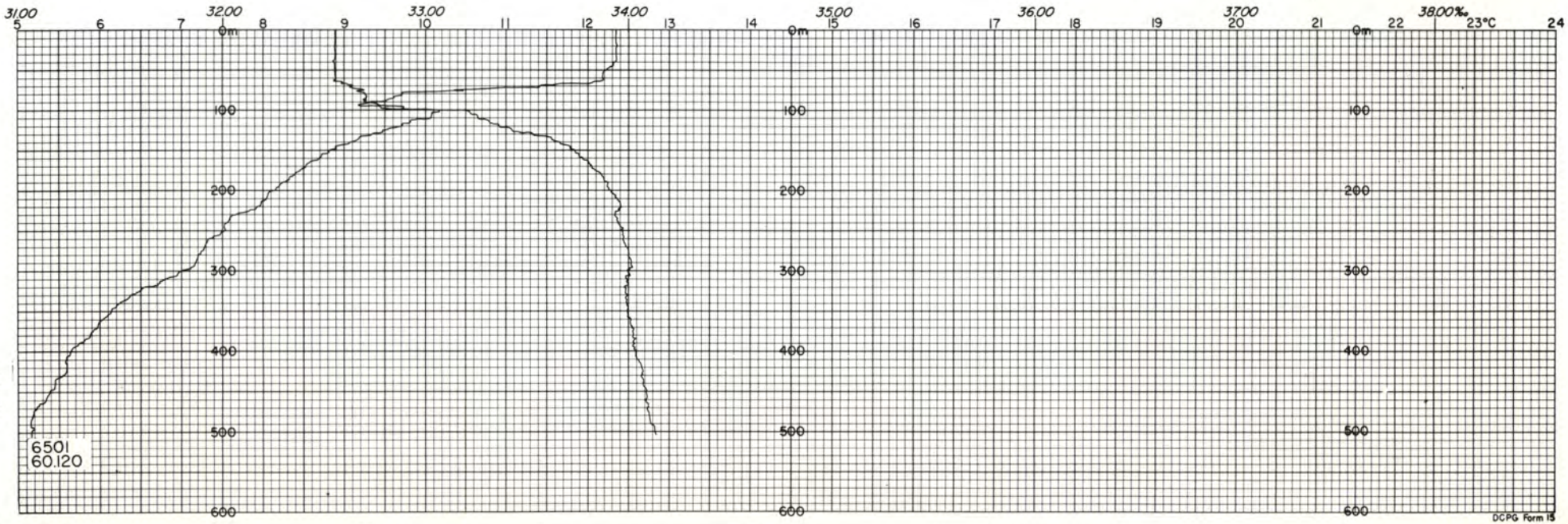



| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | μg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

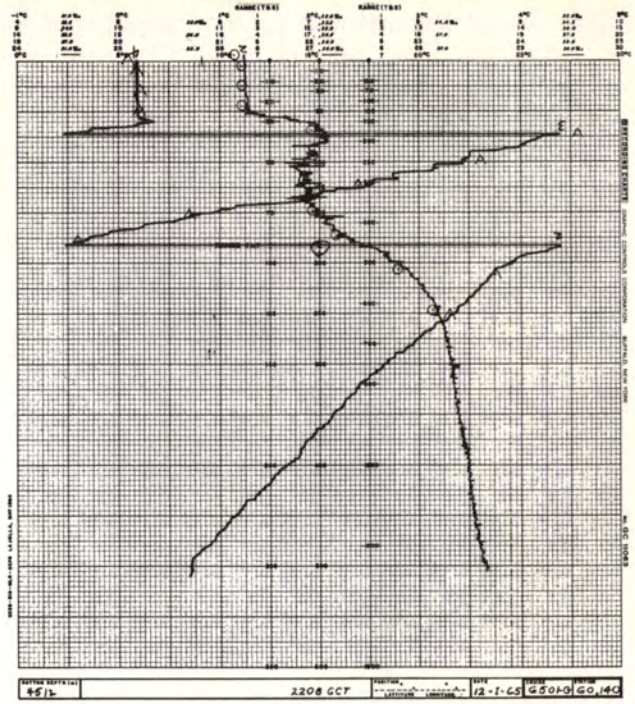
ALEXANDER AGASSIZ; January 12, 1965; 1311 GCT; 35°39'N, 127°54'W; sounding, 2550 fm; wind, 360°, force 4; weather, missing; sea, rough.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 12.34 | 32.55 | 24.65 | 330 | 0.00 |
| 10 | 12.34 | 32.55 | 24.65 | 330 | 0.03 |
| 20 | 12.36 | 32.55 | 24.64 | 331 | 0.07 |
| 30 | 12.35 | 32.55 | 24.64 | 331 | 0.10 |
| 50 | 12.22 | 32.55 | 24.67 | 328 | 0.17 |
| 75 | 10.40 | 32.66 | 25.08 | 289 | 0.24 |
| 100 | 10.10 | 33.07 | 25.45 | 254 | 0.31 |
| 125 | 9.50 | 33.43 | 25.83 | 218 | 0.37 |
| 150 | 8.83 | 33.73 | 26.17 | 185 | 0.42 |
| 200 | 8.12 | 33.91 | 26.42 | 162 | 0.51 |
| 250 | 7.53 | 33.97 | 26.55 | 149 | 0.59 |
| 300 | 7.00 | 33.99 | 26.65 | 140 | 0.66 |
| 400 | 5.63 | 34.04 | 26.86 | 120 | 0.80 |
| 500 | 5.16 | 34.13 | 26.99 | 108 | 0.92 |



| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| ALEXANDER AGASSIZ; January 12, 1965; 2155 GCT; 34°56'N, 129°19'W; sounding, 2440 fm; wind, 360°, force 3; weather, overcast; sea, rough; wire angle, 10°. | | | | | | | | | | | | |
| 0 | 15.10 | 33.157 | 6.02 | 0.36 | 4 | 339 | 0 | 15.18 | 33.17 | 24.54 | 340 | 0.00 |
| 10 | 15.18 | 33.183 | 6.09 | 0.34 | 3 | 339 | 10 | 15.18 | 33.17 | 24.54 | 340 | 0.03 |
| 30 | 15.22 | 33.185 | 5.99 | 0.35 | 3 | 340 | 20 | 15.18 | 33.17 | 24.54 | 340 | 0.07 |
| 50 | 15.21 | 33.188 | 6.04 | 0.33 | 3 | 339 | 30 | 15.18 | 33.17 | 24.54 | 340 | 0.10 |
| 74 | 14.57 | 33.469 | 6.22 | 0.36 | 4 | 306 | 50 | 15.19 | 33.18 | 24.55 | 340 | 0.17 |
| 99 | 13.62 | 33.479 | 6.06 | 0.51 | 4 | 286 | 75 | 14.21 | 33.49 | 25.00 | 297 | 0.25 |
| 123 | 12.38 | 33.431 | 5.72 | 0.80 | 8 | 266 | 100 | 13.44 | 33.42 | 25.10 | 287 | 0.32 |
| 153 | 10.70 | 33.467 | 5.17 | 1.15 | 12 | 234 | 125 | 12.44 | 33.41 | 25.29 | 269 | 0.39 |
| 178 | 9.59 | 33.569 | 4.78 | 1.44 | 18 | 209 | 150 | 10.93 | 33.45 | 25.60 | 239 | 0.46 |
| 212 | 8.76 | 33.815 | 4.16 | 1.74 | 26 | 178 | 200 | 8.91 | 33.74 | 26.17 | 186 | 0.57 |
| 252 | 8.30 | 33.953 | 3.68 | 1.96 | 33 | 161 | 250 | 8.36 | 33.94 | 26.41 | 163 | 0.66 |
| | | | | | | | 300 | 7.66 | 34.00 | 26.56 | 148 | 0.74 |
| | | | | | | | 400 | 6.67 | 34.07 | 26.75 | 130 | 0.88 |
| | | | | | | | 500 | 5.71 | 34.13 | 26.92 | 114 | 1.01 |

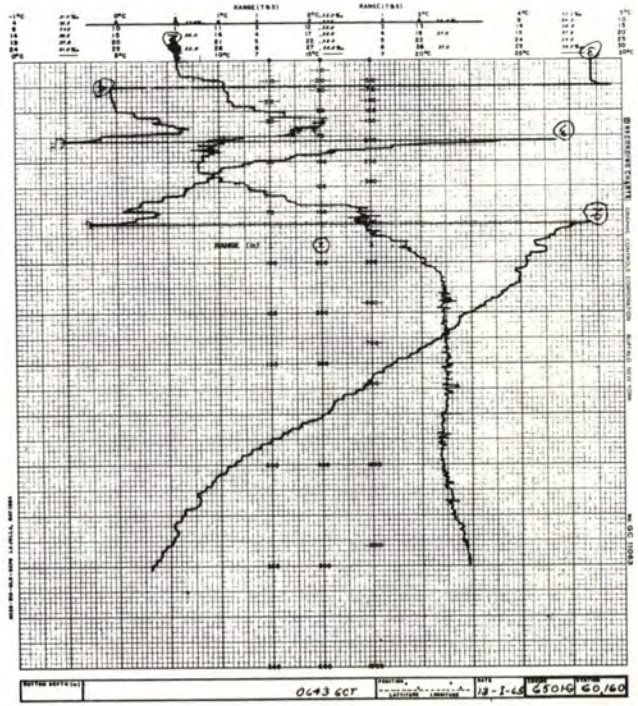


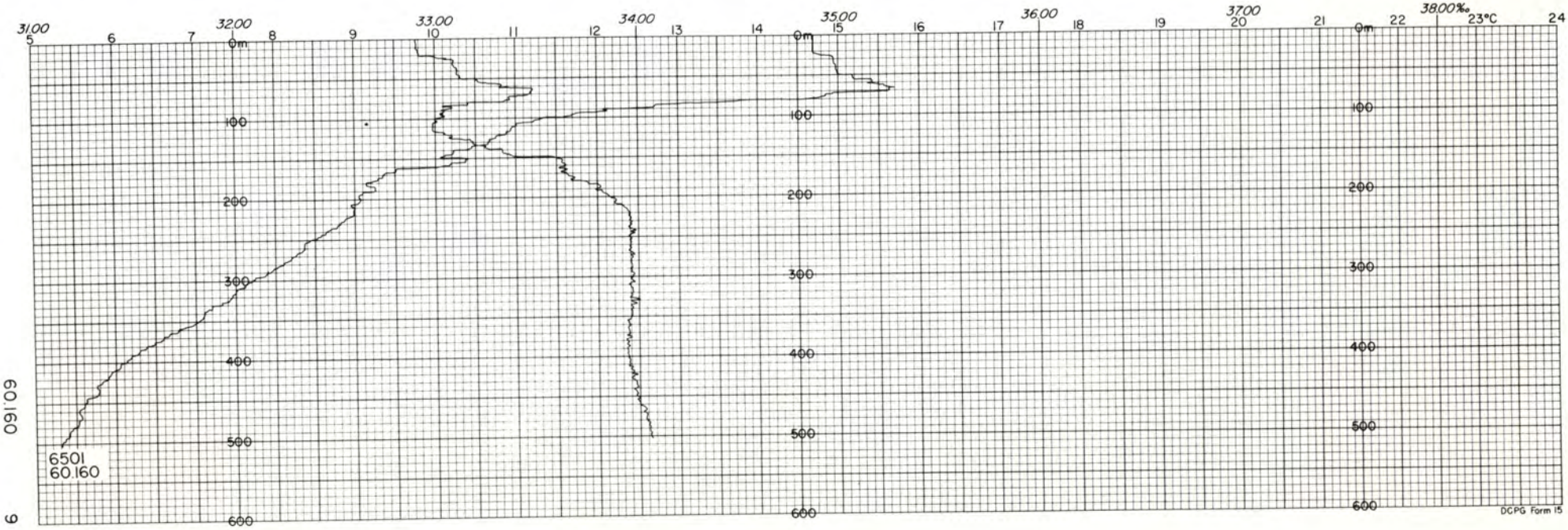

SIO CCOFI 6501

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 13, 1965; 0643 GCT; 34°18'N, 130°40.5'W; sounding, 2680 fm; wind, 040°, force 4; weather, cloudy; sea, moderate.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 14.69 | 32.90 | 24.44 | 350 | 0.00 |
| 10 | 14.69 | 32.91 | 24.45 | 349 | 0.03 |
| 20 | 14.69 | 32.92 | 24.46 | 348 | 0.07 |
| 30 | 14.94 | 33.09 | 24.53 | 341 | 0.10 |
| 50 | 15.00 | 33.20 | 24.61 | 334 | 0.17 |
| 75 | 14.84 | 33.37 | 24.77 | 318 | 0.25 |
| 100 | 11.33 | 33.00 | 25.18 | 279 | 0.33 |
| 125 | 10.73 | 33.10 | 25.37 | 262 | 0.40 |
| 150 | 10.40 | 33.60 | 25.81 | 219 | 0.46 |
| 200 | 9.06 | 33.86 | 26.24 | 179 | 0.56 |
| 250 | 8.48 | 33.98 | 26.42 | 162 | 0.65 |
| 300 | 7.71 | 33.98 | 26.54 | 151 | 0.73 |
| 400 | 6.14 | 33.95 | 26.73 | 133 | 0.87 |
| 500 | 5.32 | 34.05 | 26.91 | 115 | 1.00 |




60.160

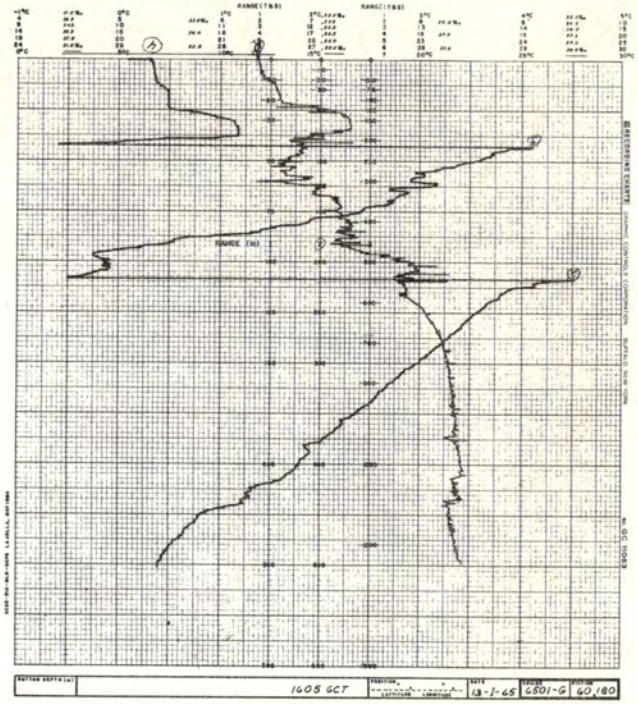
10

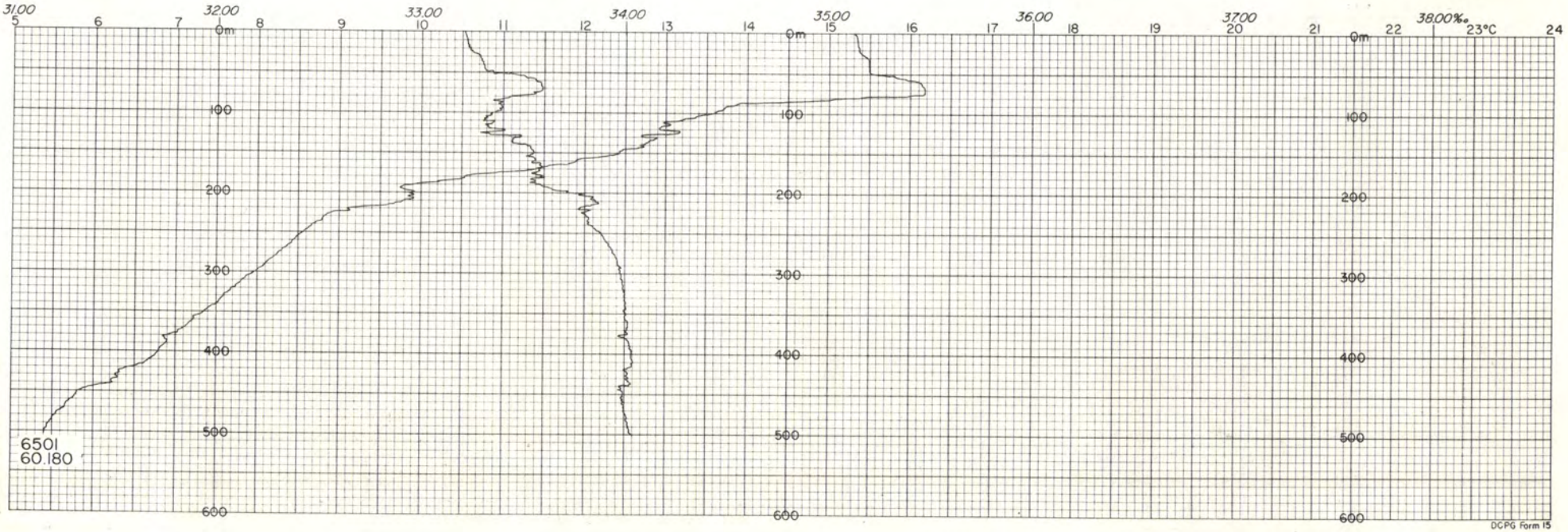
60.180

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | μg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 13, 1965; 1605 GCT; 33°38'N, 132°05'W; sounding, 2690 fm; wind, 030°, force 2; weather, overcast; sea, rough.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 15.32 | 33.21 | 24.54 | 340 | 0.00 |
| 10 | 15.35 | 33.22 | 24.55 | 340 | 0.03 |
| 20 | 15.37 | 33.24 | 24.56 | 339 | 0.07 |
| 30 | 15.47 | 33.29 | 24.57 | 337 | 0.10 |
| 50 | 15.55 | 33.37 | 24.62 | 333 | 0.17 |
| 75 | 16.17 | 33.55 | 24.61 | 333 | 0.25 |
| 100 | 13.54 | 33.37 | 25.04 | 293 | 0.33 |
| 125 | 13.10 | 33.33 | 25.10 | 287 | 0.40 |
| 150 | 12.41 | 33.55 | 25.41 | 258 | 0.47 |
| 200 | 9.91 | 33.77 | 26.03 | 199 | 0.59 |
| 250 | 8.57 | 33.88 | 26.33 | 170 | 0.68 |
| 300 | 7.98 | 33.98 | 26.50 | 154 | 0.77 |
| 400 | 6.79 | 34.03 | 26.71 | 135 | 0.92 |
| 500 | 5.39 | 34.04 | 26.89 | 117 | 1.05 |



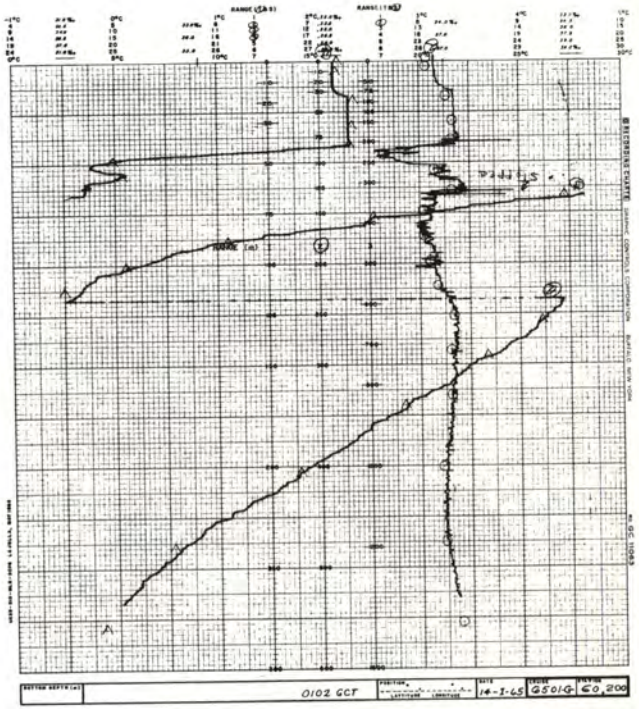

SIO CCOFI 6501

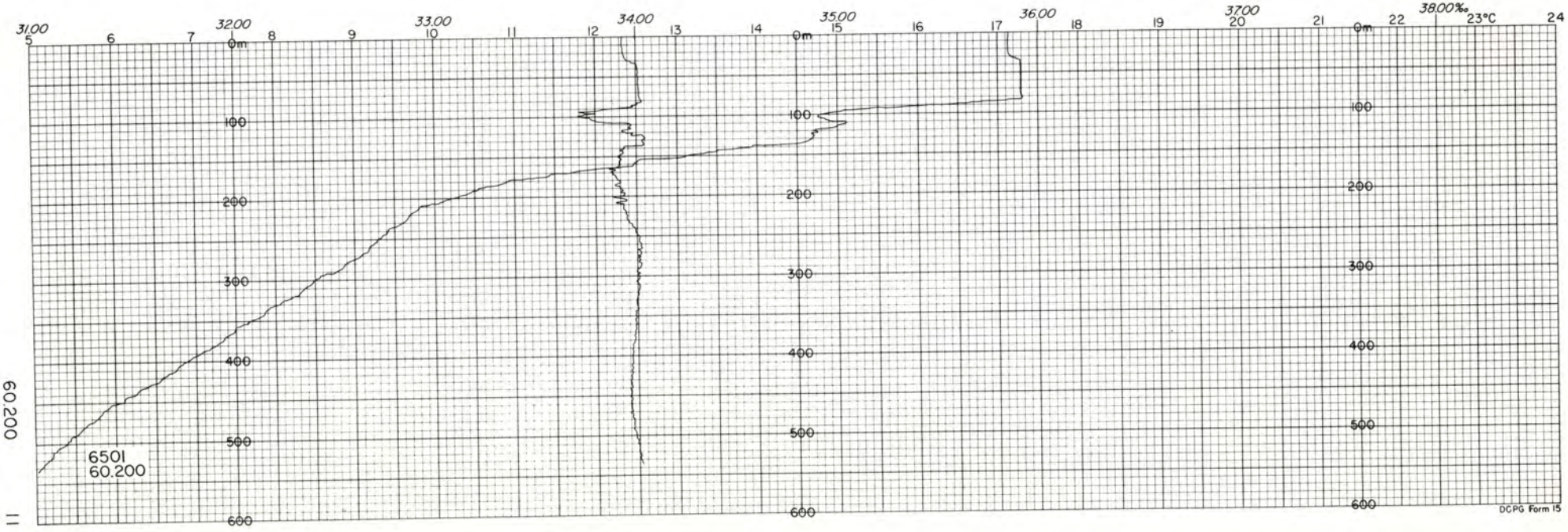
DCPG Form 15

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $PO_4$-P<br>µg at/L | $SiO_3$-Si<br>µg at/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |

ALEXANDER AGASSIZ; January 14, 1965; 0042 GCT; 32°56'N, 133°27'W; sounding, 2710 fm; wind, 080°, force 3; weather, cloudy; sea, slight; wire angle, 07°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.18 | 33.924 | 5.78 | 0.24 | 4 | 328 | 0 | 17.14 | 33.93 | 24.68 | 327 | 0.00 |
| 10 | 17.16 | 33.925 | 5.91 | 0.25 | 4 | 328 | 10 | 17.13 | 33.93 | 24.68 | 327 | 0.03 |
| 40 | 17.34 | 34.003 | 5.78 | 0.19 | 3 | 326 | 20 | 17.13 | 33.94 | 24.69 | 326 | 0.07 |
| 64 | 17.32 | 34.010 | 5.81 | 0.20 | 3 | 325 | 30 | 17.17 | 33.97 | 24.70 | 325 | 0.10 |
| 83 | 17.30 | 34.029 | 5.78 | 0.22 | 4 | 324 | 50 | 17.28 | 34.01 | 24.71 | 324 | 0.16 |
| 98 | 14.98 | 33.757 | 6.13 | 0.27 | 4 | 293 | 75 | 17.29 | 34.01 | 24.71 | 325 | 0.24 |
| 113 | 15.06 | 33.959 | 5.93 | 0.30 | 4 | 280 | 100 | 14.79 | 33.74 | 25.07 | 290 | 0.32 |
| 133 | 14.44 | 34.029 | 5.74 | 0.34 | 5 | 262 | 125 | 14.70 | 34.04 | 25.32 | 267 | 0.39 |
| 153 | 12.54 | 33.917 | 5.41 | 0.72 | 8 | 233 | 150 | 13.12 | 33.90 | 25.54 | 246 | 0.46 |
| 178 | 11.10 | 33.915 | 5.29 | 0.91 | 12 | 208 | 200 | 10.24 | 33.90 | 26.07 | 195 | 0.57 |
| 202 | 10.10 | 33.943 | 5.26 | 1.11 | 14 | 189 | 250 | 9.30 | 34.01 | 26.32 | 172 | 0.66 |
| 227 | 9.50 | 33.971 | 5.24 | 1.21 | 17 | 178 | 300 | 8.50 | 34.01 | 26.44 | 160 | 0.75 |
| 257 | 9.22 | 34.035 | 5.25 | 1.24 | 20 | 169 | 400 | 6.89 | 33.97 | 26.64 | 140 | 0.90 |
| 291 | 8.67 | 34.021 | 4.98 | 1.42 | 24 | 161 | 500 | 5.39 | 33.99 | 26.85 | 121 | 1.04 |
| 340 | 7.83 | 34.021 | 4.36 | 1.78 | 34 | 149 | | | | | | |
| 406 | 6.78 | 33.984 | 3.68 | 2.18 | 46 | 138 | | | | | | |
| 480 | 5.54 | 33.995 | 2.57 | 2.63 | 64 | 122 | | | | | | |
| 560 | 4.86 | 34.057 | 1.53 | 2.93 | 83 | 110 | | | | | | |



| BOTTLE SAMPLES | | | | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| ALEXANDER AGASSIZ; January 9, 1965; 1339 GCT; 37°19.5'N, 122°36.5'W; sounding, 47 fm; wind, 030°, force 3; weather, overcast; sea, moderate; wire angle, 00°. | | | | | | | | | | | | |
| 0 | 11.58 | 32.980 | 6.24 | 0.81 | 13 | 285 | 0 | 11.58 | 32.98 | 25.12 | 285 | 0.00 |
| 10 | 11.61 | 32.984 | 6.38 | 0.83 | 12 | 285 | 10 | 11.61 | 32.98 | 25.12 | 286 | 0.03 |
| 20 | 11.68 | 33.028 | 6.23 | 0.80 | 12 | 283 | 20 | 11.68 | 33.03 | 25.14 | 283 | 0.06 |
| 30 | 11.81 | 33.163 | 6.20 | 0.83 | 11 | 276 | 30 | 11.81 | 33.16 | 25.22 | 276 | 0.09 |
| 50 | 11.84 | 33.171 | 6.16 | 0.86 | 12 | 276 | 50 | 11.84 | 33.17 | 25.22 | 276 | 0.14 |
| 75 | 11.38 | 33.429 | 5.19 | 1.28 | 18 | 249 | 75 | 11.38 | 33.43 | 25.51 | 249 | 0.21 |
| ALEXANDER AGASSIZ; January 9, 1965; 1115 GCT; 37°12.5'N, 122°49.5'W; sounding, 150 fm; wind, 350°, force 4; weather, overcast; sea, moderate; wire angle, 06°. | | | | | | | | | | | | |
| 0 | 12.10 | 33.468 | 6.00 | | | 258 | 0 | 12.10 | 33.47 | 25.40 | 258 | 0.00 |
| 10 | 12.12 | 33.478 | 6.12 | | | 258 | 10 | 12.12 | 33.48 | 25.41 | 258 | 0.03 |
| 30 | 12.14 | 33.470 | 5.97 | | | 259 | 20 | 12.13 | 33.47 | 25.40 | 259 | 0.05 |
| 45 | 12.06 | 33.490 | 5.78 | | | 256 | 30 | 12.14 | 33.47 | 25.40 | 259 | 0.08 |
| 55 | 11.50 | 33.644 | 4.67 | | | 235 | 50 | 11.91 | 33.53 | 25.49 | 250 | 0.13 |
| 70 | 10.92 | 33.690 | 4.18 | | | 221 | 75 | 10.82 | 33.70 | 25.82 | 219 | 0.19 |
| 85 | 10.63 | 33.716 | 3.87 | | | 215 | 100 | 10.01 | 33.78 | 26.02 | 200 | 0.24 |
| 105 | 9.71 | 33.806 | 3.37 | | | 193 | 125 | 9.20 | 33.88 | 26.23 | 180 | 0.29 |
| 130 | 9.13 | 33.906 | 2.96 | | | 177 | 150 | 9.04 | 33.99 | 26.34 | 169 | 0.33 |
| 149 | 9.06 | 33.982 | 2.49 | | | 170 | 200 | 8.42 | 34.02 | 26.46 | 158 | 0.42 |
| 179 | 8.55 | 34.013 | 2.49 | | | 160 | | | | | | |
| 204 | 8.40 | 34.026 | 2.26 | | | 157 | | | | | | |

| BOTTLE SAMPLES | | | | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| ALEXANDER AGASSIZ; January 9, 1965; 0649 GCT; 37°01'N, 123°17'W; sounding, 1358 fm; wind, 320°, force 2; weather, clear; sea, rough; wire angle, 07°. | | | | | | | | | | | | |
| 0 | 12.34 | 33.020 | 6.30 | 0.58 | 9 | 296 | 0 | 12.34 | 33.02 | 25.01 | 296 | 0.00 |
| 10 | 12.34 | 33.020 | 6.36 | 0.65 | 7 | 296 | 10 | 12.34 | 33.02 | 25.01 | 296 | 0.03 |
| 30 | 12.34 | 33.019 | 6.21 | 0.60 | 7 | 296 | 20 | 12.34 | 33.02 | 25.01 | 296 | 0.06 |
| 55 | 10.73 | 33.201 | 5.56 | 1.05 | 13 | 254 | 30 | 12.34 | 33.02 | 25.01 | 296 | 0.09 |
| 65 | 11.31 | 33.656 | 4.52 | 1.47 | 19 | 231 | 50 | 11.40 | 33.15 | 25.29 | 270 | 0.15 |
| 75 | 10.88 | 33.672 | 4.23 | 1.65 | 22 | 222 | 75 | 10.88 | 33.67 | 25.78 | 222 | 0.21 |
| 90 | 10.17 | 33.733 | 3.74 | 1.94 | 25 | 206 | 100 | 9.77 | 33.77 | 26.05 | 197 | 0.26 |
| 105 | 9.60 | 33.776 | 3.61 | 1.96 | 29 | 194 | 125 | 9.37 | 33.88 | 26.20 | 182 | 0.31 |
| 129 | 9.34 | 33.896 | 2.94 | 2.43 | 36 | 181 | 150 | 9.12 | 33.97 | 26.31 | 172 | 0.35 |
| 149 | 9.14 | 33.965 | 2.66 | 2.16 | 39 | 172 | 200 | 7.97 | 33.97 | 26.49 | 155 | 0.44 |
| 174 | 8.54 | 33.972 | 2.93 | 2.19 | 39 | 163 | 250 | 7.36 | 34.02 | 26.62 | 143 | 0.51 |
| 204 | 7.89 | 33.968 | 3.51 | 2.03 | 40 | 154 | 300 | 6.97 | 34.07 | 26.71 | 134 | 0.58 |
| 234 | 7.49 | 33.993 | 3.15 | - | - | 147 | 400 | 6.12 | 34.13 | 26.87 | 119 | 0.72 |
| 273 | 7.18 | 34.051 | - | - | - | 138 | 500 | 5.49 | 34.19 | 27.00 | 107 | 0.83 |
| 332 | 6.70 | 34.081 | 1.61 | - | - | 130 | | | | | | |
| 408 | 6.06 | 34.127 | 1.10 | - | - | 118 | | | | | | |
| 482 | 5.58 | 34.168 | 0.85 | - | - | 110 | | | | | | |
| 562 | 5.26 | 34.227 | 0.56 | - | - | 102 | | | | | | |
| ALEXANDER AGASSIZ; January 13, 1965; 2217 GCT;[a] 32°23.5'N, 132°58.5'W; sounding, 2630 fm; wind, 050°, force 3; weather, cloudy; sea, moderate; wire angle, 11°. | | | | | | | | | | | | |
| 334 | 8.26 | 34.017 | 4.40 | | | 156 | | | | | | |
| 337 | 8.20 | 34.017 | 4.42 | | | 155 | | | | | | |
| 340 | 8.16 | 34.014 | 4.33 | | | 154 | | | | | | |
| 366 | 7.63 | 34.002 | 4.01 | | | 148 | | | | | | |
| 369 | 7.64 | 34.003 | 3.98 | | | 148 | | | | | | |
| 372 | 7.62 | 34.004 | 3.96 | | | 148 | | | | | | |
| 396 | 7.08 | 33.986 | 3.58 | | | 142 | | | | | | |
| 399 | 7.04 | 33.985 | 3.56 | | | 141 | | | | | | |
| 403 | 6.97 | 33.984 | 3.49 | | | 140 | | | | | | |
| 427 | 6.68 | 33.977 | 3.33 | | | 137 | | | | | | |
| 430 | 6.54 | 33.977 | 3.24 | | | 135 | | | | | | |
| 433 | 6.48 | 33.980 | 3.20 | | | 134 | | | | | | |
| 458 | 6.20 | 33.984 | 2.87 | | | 131 | | | | | | |
| 460 | 6.18 | 33.986 | 2.78 | | | 130 | | | | | | |
| 464 | 6.14 | 33.986 | 2.76 | | | 130 | | | | | | |
| 489 | 5.78 | 33.994 | 2.37 | | | 125 | | | | | | |
| 492 | 5.76 | 33.996 | 2.42 | | | 125 | | | | | | |
| 495 | 5.74 | 33.997 | 2.24 | | | 124 | | | | | | |

a) Test cast.

| BOTTLE SAMPLES | | | | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| ALEXANDER AGASSIZ; January 8, 1965; 1845 GCT; 36°49'N, 122°04.5'W; sounding, 50 fm; wind, 050°, force 3; weather, missing; sea, moderate; wire angle, 02°. | | | | | | | | | | | | |
| 67.50 | | | | | | | | | | | | |
| 0 | 12.14 | 33.263 | 6.15 | 0.92 | 13 | 274 | 0 | 12.14 | 33.26 | 25.23 | 274 | 0.00 |
| 10 | 12.48 | 33.401 | 6.05 | 0.95 | 9 | 270 | 10 | 12.48 | 33.40 | 25.28 | 270 | 0.03 |
| 20 | 12.67 | 33.452 | 5.99 | 0.82 | 9 | 270 | 20 | 12.67 | 33.45 | 25.28 | 270 | 0.05 |
| 30 | 12.60 | 33.488u | 6.26 | 0.88 | 9 | | 30 | 12.60 | 33.46 | 25.30 | 268 | 0.08 |
| 40 | 12.65 | 33.470 | 6.02 | 0.80 | 9 | 268 | 50 | 12.64 | 33.47 | 25.30 | 268 | 0.14 |
| 50 | 12.64 | 33.470 | 5.99 | 1.03 | 9 | 268 | 75 | 12.52 | 33.47 | 25.32 | 266 | 0.20 |
| 60 | 12.54 | 33.470 | 5.90 | 0.92 | 9 | 266 | | | | | | |
| 70 | 12.53 | 33.470 | 5.89 | 1.02 | 10 | 266 | | | | | | |
| 80 | 12.50 | 33.475 | 5.75 | 1.30 | 12 | 265 | | | | | | |
| ALEXANDER AGASSIZ; January 8, 1965; 2150 GCT; 36°39'N, 122°26'W; sounding, 1170 fm; wind, 010°, force 2; weather, partly cloudy; sea, moderate; wire angle, 02°. | | | | | | | | | | | | |
| 67.55 | | | | | | | | | | | | |
| 0 | 12.02 | 33.270 | 6.18 | | | 272 | 0 | 12.02 | 33.27 | 25.26 | 272 | 0.00 |
| 10 | 12.01 | 33.283 | 6.32 | | | 270 | 10 | 12.01 | 33.28 | 25.27 | 271 | 0.03 |
| 30 | 11.82 | 33.408 | 5.69 | | | 258 | 20 | 12.28 | 33.38 | 25.30 | 268 | 0.05 |
| 60 | 10.54 | 33.716 | 3.69 | | | 213 | 30 | 11.82 | 33.41 | 25.41 | 258 | 0.08 |
| 70 | 10.32 | 33.727 | 3.65 | | | 209 | 50 | 10.90 | 33.64 | 25.76 | 225 | 0.13 |
| 86 | 10.02 | 33.770 | 3.44 | | | 201 | 75 | 10.23 | 33.74 | 25.95 | 206 | 0.18 |
| 100 | 9.78 | 33.846 | 2.98 | | | 191 | 100 | 9.78 | 33.85 | 26.11 | 191 | 0.23 |
| 116 | 9.54 | 33.883 | 2.91 | | | 185 | 125 | 9.43 | 33.90 | 26.21 | 182 | 0.28 |
| 141 | 9.24 | 33.935 | 2.63 | | | 176 | 150 | 9.13 | 33.96 | 26.30 | 173 | 0.33 |
| 161 | 9.00 | 33.995 | 2.38 | | | 168 | 200 | 8.53 | 34.06 | 26.48 | 156 | 0.41 |
| 190 | 8.64 | 34.051 | 2.29 | | | 159 | 250 | 8.21 | 34.08 | 26.54 | 150 | 0.49 |
| 220 | 8.35 | 34.080 | 2.05 | | | 152 | 300 | 7.52 | 34.12 | 26.67 | 138 | 0.56 |
| 250 | 8.21 | 34.101 | 1.85 | | | 149 | 400 | 6.36 | 34.14 | 26.85 | 121 | 0.70 |
| 300 | 7.52 | 34.124 | 1.65 | | | 137 | 500 | 5.89 | 34.24 | 26.99 | 108 | 0.82 |
| 355 | 6.85 | 34.137 | 1.38 | | | 127 | 600 | 5.35 | 34.30 | 27.10 | 97 | 0.93 |
| 441 | 6.00 | 34.151 | 0.97 | | | 116 | | | | | | |
| 526 | 5.84 | 34.274 | 0.56 | | | 105 | | | | | | |
| 611 | 5.26 | 34.303 | 0.44 | | | 96 | | | | | | |

| BOTTLE SAMPLES | | | | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

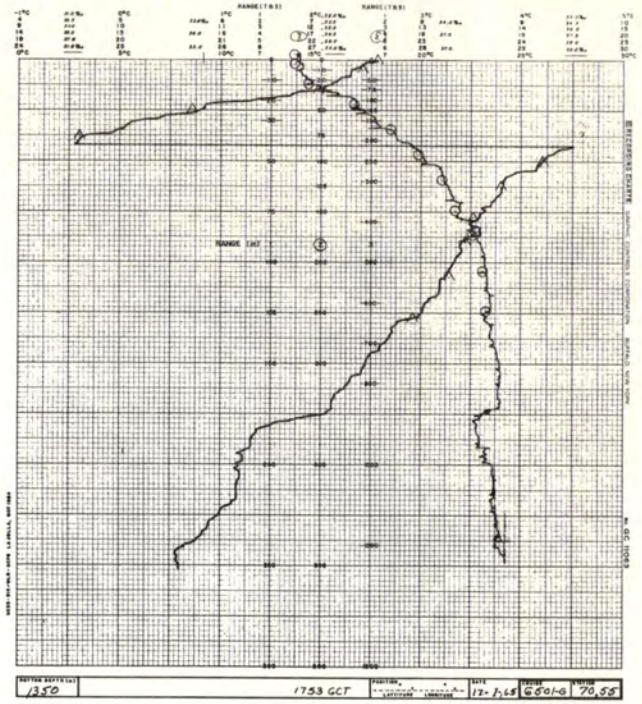
ALEXANDER AGASSIZ; January 9, 1965; 0135 GCT; 36°29'N, 122°47.5'W; sounding, 1620 fm; wind, 350°, force 2; weather, cloudy; sea, moderate; wire angle, 06°.

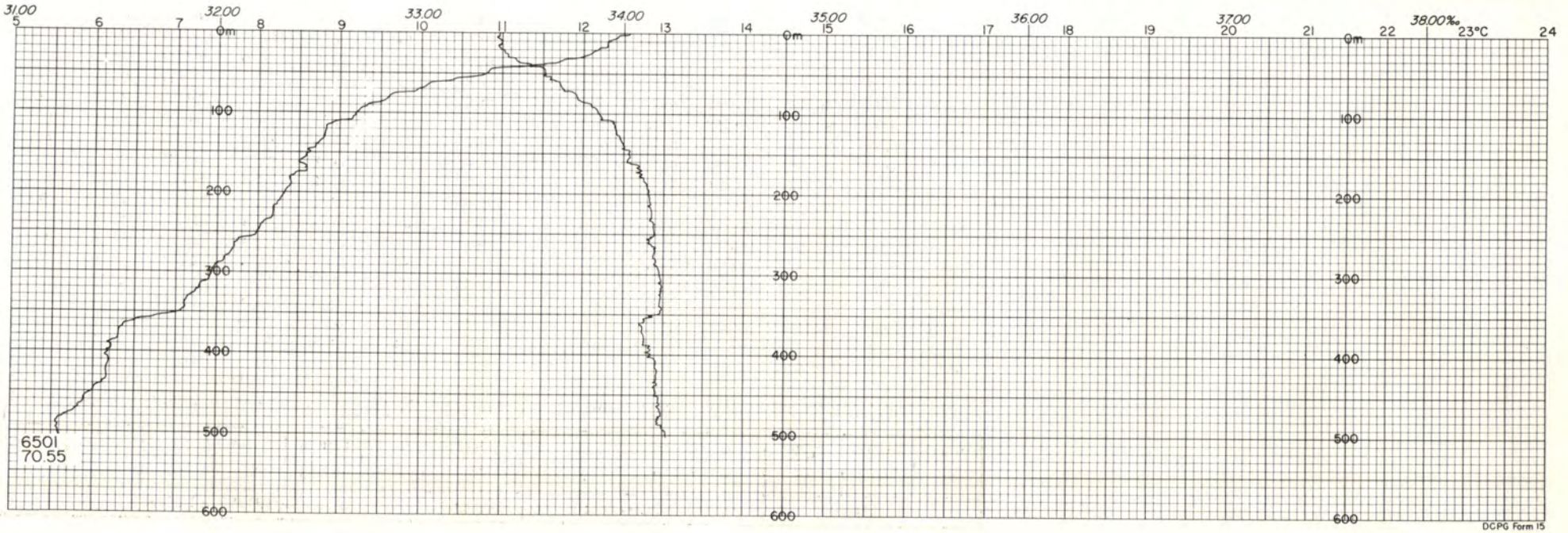
| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.38 | 33.532 | 6.17 | 0.92 | 11 | 259 | 0 | 12.38 | 33.53 | 25.40 | 259 | 0.00 |
| 10 | 12.40 | 33.531 | 6.16 | 0.97 | 10 | 259 | 10 | 12.40 | 33.53 | 25.39 | 259 | 0.03 |
| 30 | 12.46 | 33.527 | 6.00 | 0.89 | 9 | 261 | 20 | 12.33 | 33.53 | 25.41 | 258 | 0.05 |
| 55 | 10.56 | 33.647 | 4.18 | 1.71 | 21 | 219 | 30 | 12.46 | 33.53 | 25.38 | 260 | 0.08 |
| 65 | 9.95 | 33.718 | 3.79 | 1.85 | 25 | 203 | 50 | 10.80 | 33.63 | 25.77 | 224 | 0.13 |
| 75 | 9.55 | 33.779 | 3.50 | 2.06 | 28 | 193 | 75 | 9.55 | 33.78 | 26.10 | 193 | 0.18 |
| 91 | 9.46 | 33.865 | 3.05 | 2.36 | 30 | 185 | 100 | 9.52 | 33.92 | 26.21 | 182 | 0.23 |
| 104 | 9.54 | 33.945 | 2.55 | 2.29 | 33 | 180 | 125 | 9.40 | 33.99 | 26.28 | 175 | 0.27 |
| 129 | 9.34 | 33.991 | 2.39 | 2.76 | 36 | 174 | 150 | 9.00 | 33.98 | 26.34 | 169 | 0.31 |
| 149 | 9.02 | 33.980 | 2.59 | 2.24 | 37 | 170 | 200 | 8.18 | 34.08 | 26.55 | 150 | 0.40 |
| 174 | 8.56 | 34.013 | 2.57 | 2.34 | 38 | 160 | 250 | 7.75 | 34.12 | 26.64 | 141 | 0.47 |
| 204 | 8.12 | 34.066 | 2.32 | 2.48 | 44 | 150 | 300 | 7.30 | 34.16 | 26.74 | 132 | 0.54 |
| 234 | 7.86 | 34.091 | 1.93 | 2.62 | 44 | 144 | 400 | 6.45 | 34.19 | 26.88 | 118 | 0.67 |
| 273 | 7.60 | 34.152 | 1.40 | 2.82 | 52 | 136 | 500 | 5.79 | 34.22 | 26.98 | 108 | 0.79 |
| 333 | 6.93 | 34.160 | 1.25 | 2.92 | 60 | 127 | | | | | | |
| 409 | 6.40 | 34.193 | 0.90 | 3.14 | 70 | 118 | | | | | | |
| 484 | 5.89 | 34.215 | 0.73 | 3.26 | 81 | 110 | | | | | | |
| 564 | 5.49 | 34.294 | 0.53 | 3.29 | 93 | 99 | | | | | | |

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 17, 1965; 1724 GCT; 36°02.5'N, 122°02'W; sounding, 740 fm; wind, 020°, force 1; weather, cloudy; sea, smooth; wire angle, 02°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.56 | 33.391 | 6.62 | 0.57 | 10 | 273 | 0 | 12.56 | 33.39 | 25.25 | 273 | 0.00 |
| 10 | 12.41 | 33.396 | 6.67 | 0.63 | 8 | 269 | 10 | 12.30 | 33.40 | 25.31 | 267 | 0.03 |
| 30 | 11.96 | 33.446 | 5.85 | 0.96 | 11 | 258 | 20 | 12.17 | 33.40 | 25.34 | 265 | 0.05 |
| 50 | 10.72 | 33.630 | 4.31 | 1.60 | 22 | 223 | 30 | 11.97 | 33.45 | 25.41 | 257 | 0.08 |
| 75 | 9.60 | 33.777 | 3.59 | 1.92 | 28 | 194 | 50 | 10.79 | 33.61 | 25.75 | 225 | 0.13 |
| 100 | 9.20 | 33.887 | 3.14 | 2.09 | 34 | 179 | 75 | 9.67 | 33.76 | 26.06 | 196 | 0.18 |
| 125 | 8.80 | 33.982 | 2.78 | 2.21 | 36 | 166 | 100 | 9.20 | 33.87 | 26.22 | 180 | 0.23 |
| 155 | 8.52 | 34.037 | 2.32 | 2.37 | 40 | 158 | 125 | 8.82 | 33.96 | 26.35 | 168 | 0.27 |
| 180 | 8.44 | 34.104 | 1.98 | 2.50 | 43 | 152 | 150 | 8.63 | 34.02 | 26.43 | 161 | 0.31 |
| 215 | 8.28 | 34.148 | 1.70 | 2.60 | 48 | 146 | 200 | 8.33 | 34.12 | 26.55 | 149 | 0.39 |
| 255 | - | 34.160 | 1.61 | 2.72 | 50 | | 250 | 8.01 | 34.16 | 26.63 | 141 | 0.47 |
| | | | | | | | 300 | 7.44 | 34.19 | 26.74 | 131 | 0.54 |
| | | | | | | | 400 | 6.17 | 34.14 | 26.87 | 119 | 0.67 |
| | | | | | | | 500 | 5.58 | 34.22 | 27.01 | 106 | 0.79 |





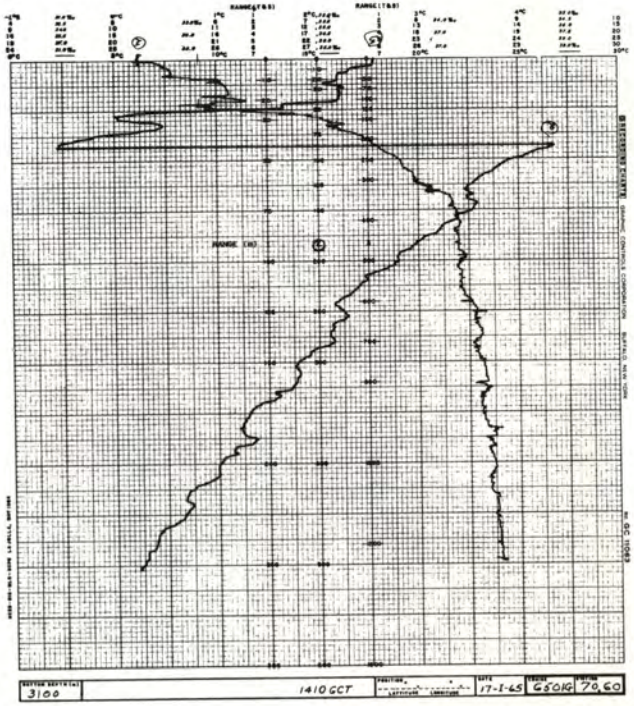

DCPG Form 15

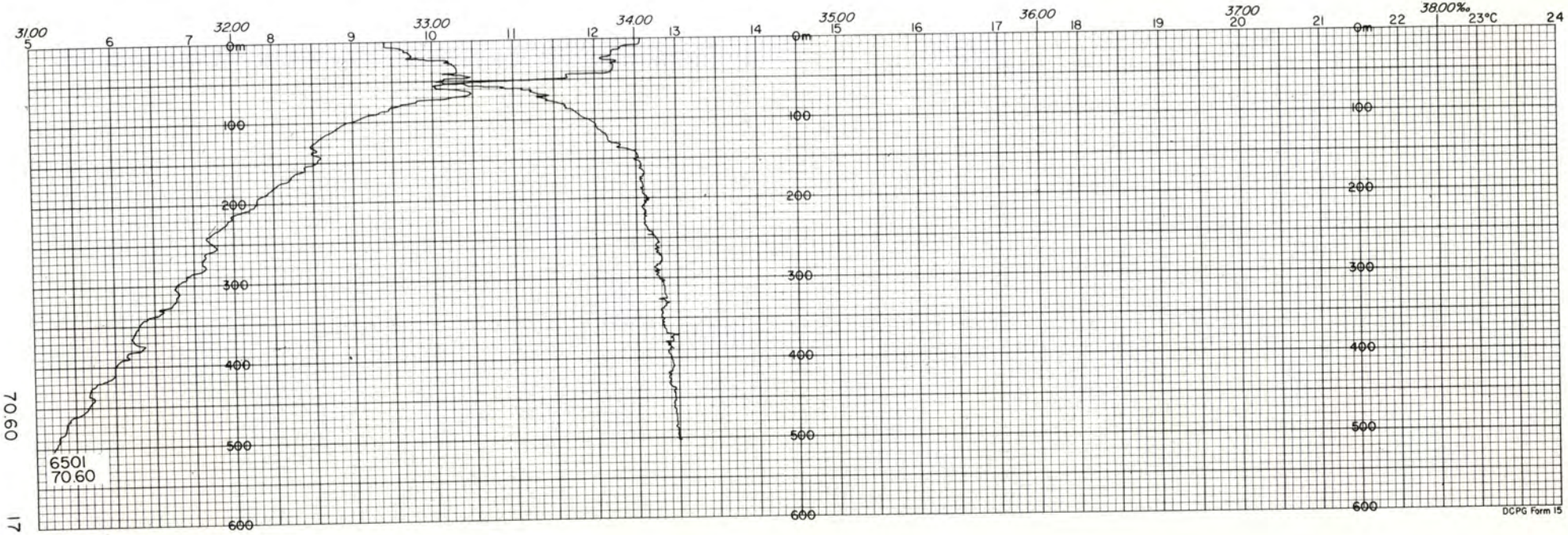
SIO CCOFI 6501

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 17, 1965; 1410 GCT; 35°53'N, 122°24'W; sounding, 1700 fm; wind, direction missing, force 1; weather, overcast; sea, smooth.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 12.55 | 32.76 | 24.77 | 319 | 0.00 |
| 10 | 12.32 | 32.85 | 24.88 | 308 | 0.03 |
| 20 | 12.20 | 32.89 | 24.94 | 303 | 0.06 |
| 30 | 12.21 | 33.10 | 25.10 | 288 | 0.09 |
| 50 | 11.00 | 33.06 | 25.29 | 269 | 0.15 |
| 75 | 9.80 | 33.56 | 25.88 | 213 | 0.21 |
| 100 | 8.95 | 33.76 | 26.18 | 185 | 0.26 |
| 125 | 8.53 | 33.86 | 26.32 | 171 | 0.30 |
| 150 | 8.54 | 34.00 | 26.43 | 161 | 0.35 |
| 200 | 7.80 | 34.05 | 26.58 | 147 | 0.42 |
| 250 | 7.25 | 34.09 | 26.69 | 136 | 0.50 |
| 300 | 6.78 | 34.11 | 26.77 | 129 | 0.56 |
| 400 | 6.00 | 34.16 | 26.91 | 115 | 0.69 |
| 500 | 5.25 | 34.19 | 27.03 | 104 | 0.81 |



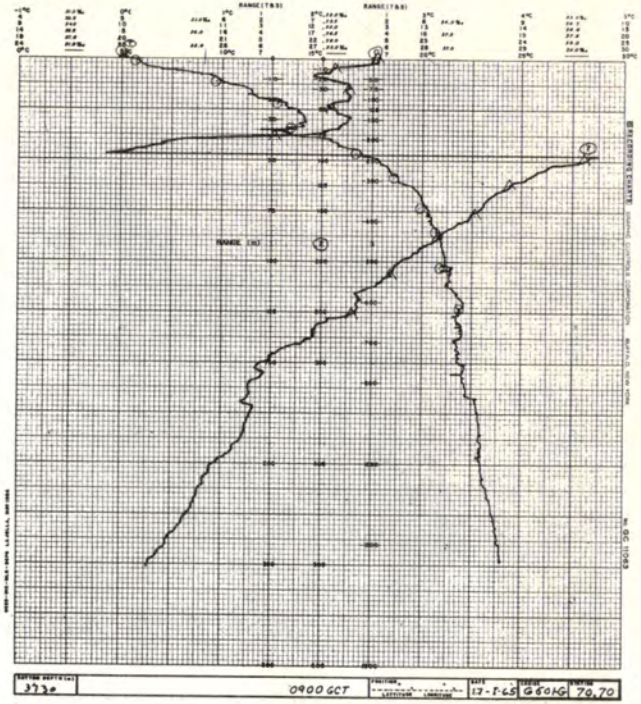

70.60

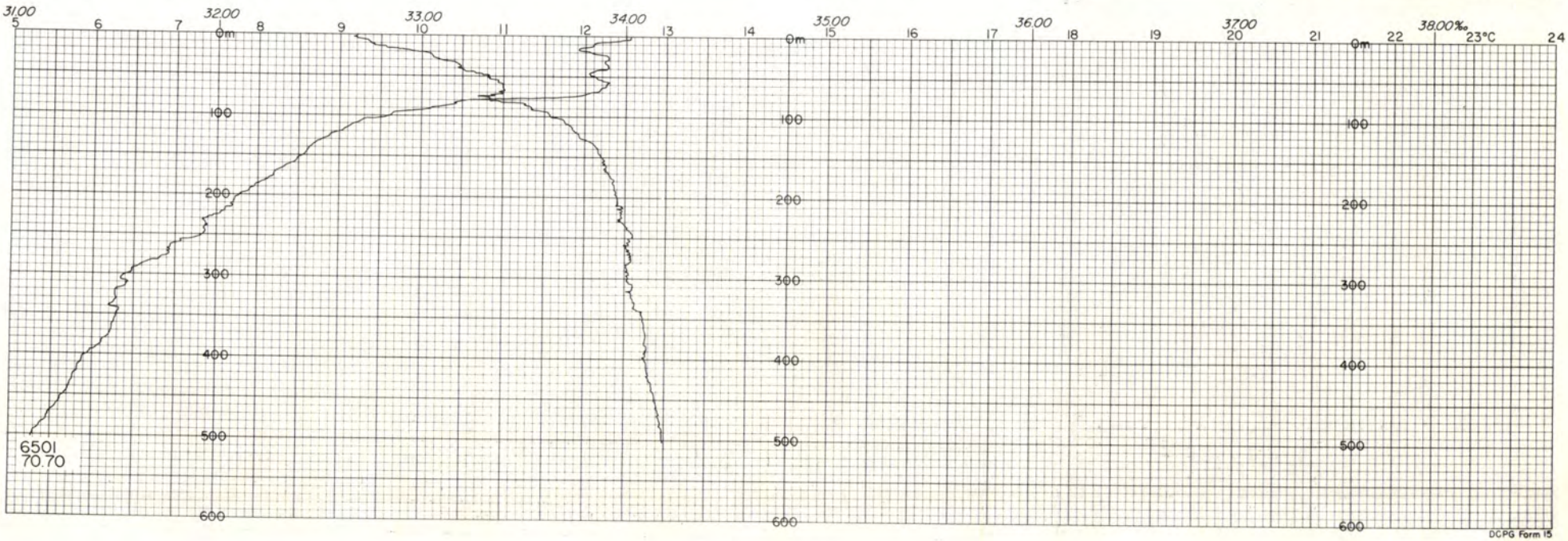
17

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 17, 1965; 0847 GCT; 35°32'N, 123°05.5'W; sounding, 2040 fm; wind, 350°, force 3; weather, overcast; sea, slight; wire angle, 04°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.54 | 32.693 | 6.40 | 0.46 | 5 | 323 | 0 | 12.55 | 32.69 | 24.71 | 324 | 0.00 |
| 10 | 12.12 | 32.757 | 6.47 | 0.51 | 5 | 311 | 10 | 12.10 | 32.75 | 24.85 | 311 | 0.03 |
| 30 | 12.26 | 33.077 | 6.32 | 0.64 | 6 | 290 | 20 | 12.06 | 32.98 | 25.03 | 294 | 0.06 |
| 50 | 12.09 | 33.321 | 6.14 | 0.76 | 8 | 269 | 30 | 12.25 | 33.09 | 25.08 | 289 | 0.09 |
| 75 | 11.52 | 33.377 | 5.78 | 1.09 | 11 | 255 | 50 | 12.10 | 33.32 | 25.29 | 269 | 0.15 |
| 100 | 9.60 | 33.632 | 4.09 | 1.93 | 27 | 204 | 75 | 11.82 | 33.36 | 25.37 | 261 | 0.21 |
| 127 | 8.87 | 33.783 | 3.54 | 2.12 | 32 | 182 | 100 | 9.60 | 33.63 | 25.97 | 204 | 0.27 |
| 154 | 8.52 | 33.888 | 3.34 | 2.12 | 36 | 169 | 125 | 8.88 | 33.77 | 26.20 | 183 | 0.32 |
| 178 | 8.14 | 33.955 | 3.49 | 2.06 | 36 | 158 | 150 | 8.55 | 33.89 | 26.34 | 169 | 0.37 |
| 213 | 7.68 | 33.968 | 3.49 | 2.10 | 41 | 151 | 200 | 7.77 | 33.96 | 26.51 | 153 | 0.45 |
| 253 | 7.30 | 34.044 | 2.10 | 2.65 | 52 | 140 | 250 | 7.33 | 34.03 | 26.63 | 142 | 0.52 |
| | | | | | | | 300 | 6.40 | 34.02 | 26.75 | 130 | 0.59 |
| | | | | | | | 400 | 5.93 | 34.10 | 26.87 | 119 | 0.72 |
| | | | | | | | 500 | 5.28 | 34.19 | 27.02 | 105 | 0.84 |



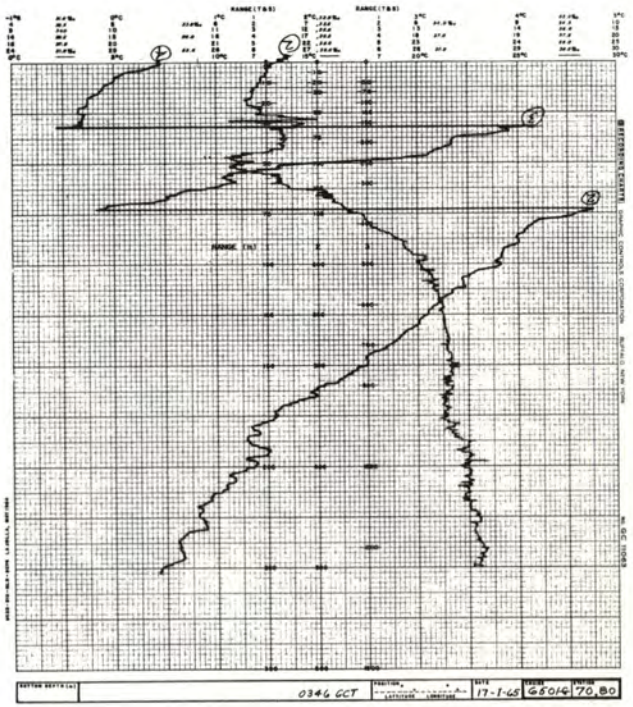



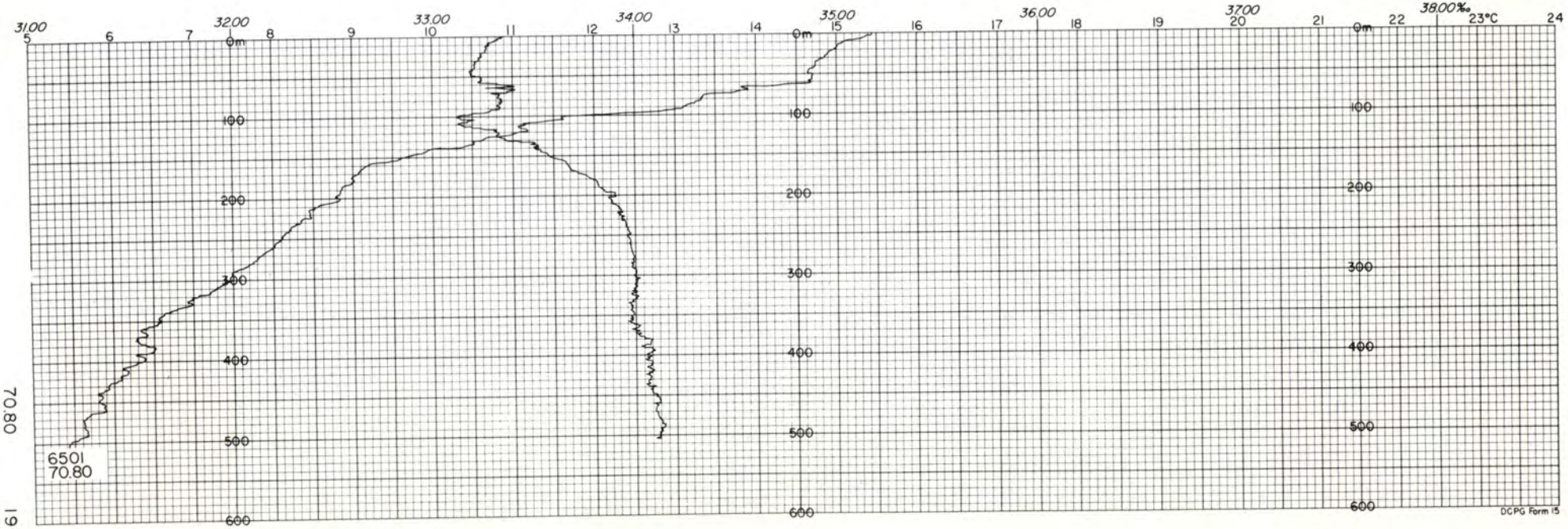
SIO CCOFI 6501

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 17, 1965; 0346 GCT; 35°13'N, 123°47'W; sounding, 2175 fm; wind, 050°, force 1; weather, partly cloudy; sea, slight.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 15.44 | 33.35 | 24.63 | 332 | 0.00 |
| 10 | 15.10 | 33.28 | 24.65 | 330 | 0.03 |
| 20 | 14.96 | 33.25 | 24.65 | 330 | 0.07 |
| 30 | 14.85 | 33.22 | 24.65 | 330 | 0.10 |
| 50 | 14.68 | 33.24 | 24.71 | 325 | 0.16 |
| 75 | 13.37 | 33.33 | 25.05 | 292 | 0.24 |
| 100 | 11.83 | 33.13 | 25.19 | 279 | 0.31 |
| 125 | 10.89 | 33.33 | 25.52 | 248 | 0.38 |
| 150 | 9.64 | 33.58 | 25.92 | 209 | 0.44 |
| 200 | 8.82 | 33.90 | 26.31 | 172 | 0.54 |
| 250 | 8.10 | 33.96 | 26.46 | 158 | 0.62 |
| 300 | 7.48 | 34.00 | 26.59 | 146 | 0.70 |
| 400 | 6.36 | 34.07 | 26.79 | 126 | 0.84 |
| 500 | 5.44 | 34.11 | 26.94 | 112 | 0.96 |




70.80

19

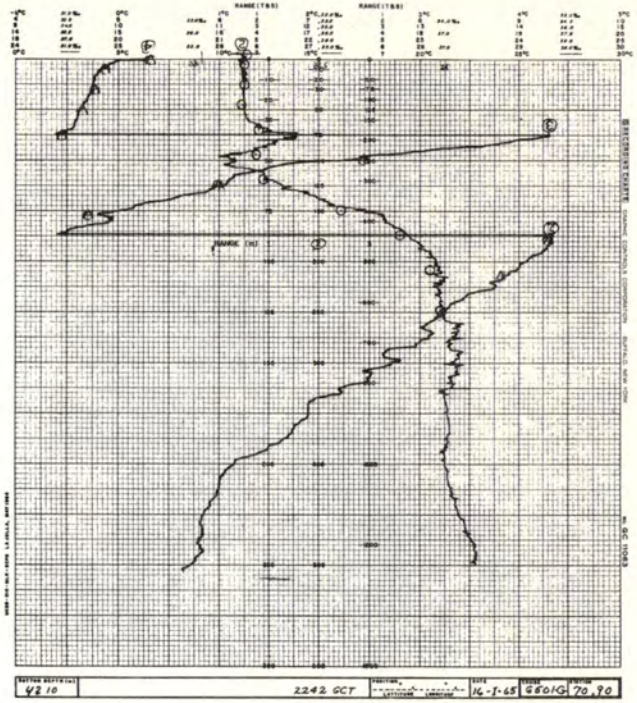
20

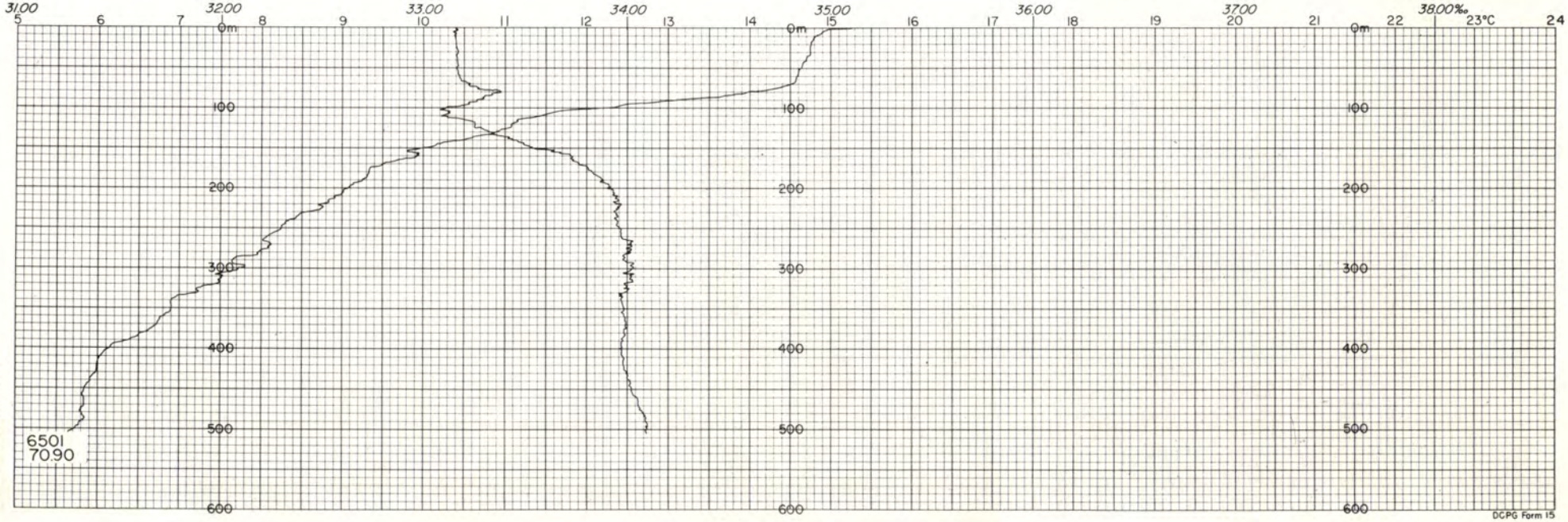
70.90

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 16, 1965; 2230 GCT; 34°54'N, 124°28'W; sounding, 2305 fm; wind, 040°, force 3; weather, partly cloudy; sea, moderate; wire angle, 07°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.32 | 33.208 | 5.91 | 0.33 | 4 | 340 | 0 | 15.27 | 33.16 | 24.52 | 343 | 0.00 |
| 10 | 14.87 | 33.203 | 6.08 | 0.36 | 3 | 331 | 10 | 14.83 | 33.15 | 24.60 | 334 | 0.03 |
| 30 | 14.77 | 33.205 | 6.05 | 0.36 | 3 | 329 | 20 | 14.77 | 33.16 | 24.62 | 332 | 0.07 |
| 50 | 14.64 | 33.193 | 6.01 | 0.39 | 3 | 327 | 30 | 14.75 | 33.17 | 24.64 | 331 | 0.10 |
| 75 | 14.45 | 33.264 | 6.01 | 0.37 | 3 | 318 | 50 | 14.63 | 33.17 | 24.66 | 329 | 0.17 |
| 99 | 12.44 | 33.253 | 5.93 | 0.52 | 5 | 280 | 75 | 14.31 | 33.27 | 24.81 | 315 | 0.25 |
| 124 | 10.99 | 33.284 | 5.37 | 1.02 | 11 | 253 | 100 | 12.22 | 33.10 | 25.09 | 288 | 0.32 |
| 154 | 9.71 | 33.592 | 4.51 | 1.53 | 20 | 209 | 125 | 11.05 | 33.29 | 25.46 | 253 | 0.39 |
| 179 | 9.30 | 33.822 | 3.38 | 1.94 | 28 | 186 | 150 | 10.00 | 33.54 | 25.83 | 217 | 0.45 |
| 213 | 8.83 | 33.938 | 3.24 | 2.01 | 32 | 170 | 200 | 9.07 | 33.91 | 26.27 | 175 | 0.55 |
| 253 | 8.20 | 33.975 | 3.52 | 2.00 | 35 | 158 | 250 | 8.25 | 33.96 | 26.44 | 160 | 0.64 |
| | | | | | | | 300 | 7.72 | 34.03 | 26.57 | 147 | 0.72 |
| | | | | | | | 400 | 6.15 | 33.96 | 26.73 | 132 | 0.86 |
| | | | | | | | 500 | 5.71 | 34.09 | 26.89 | 117 | 0.99 |



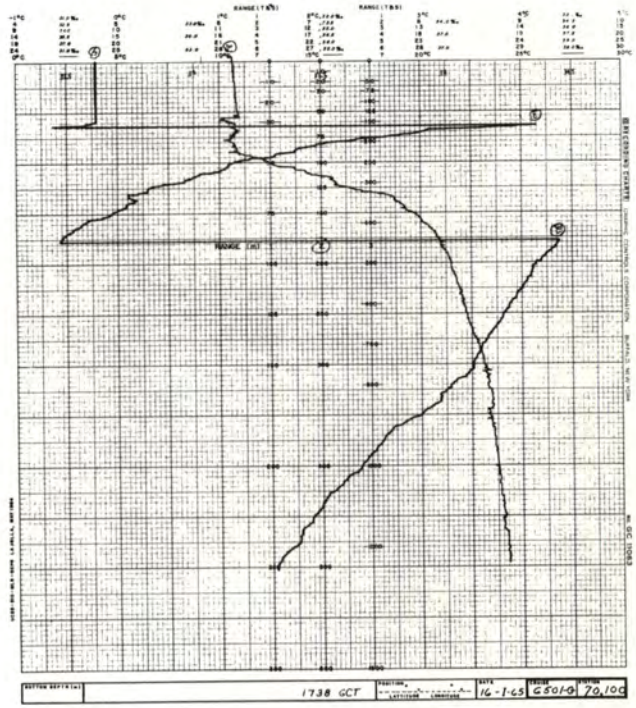



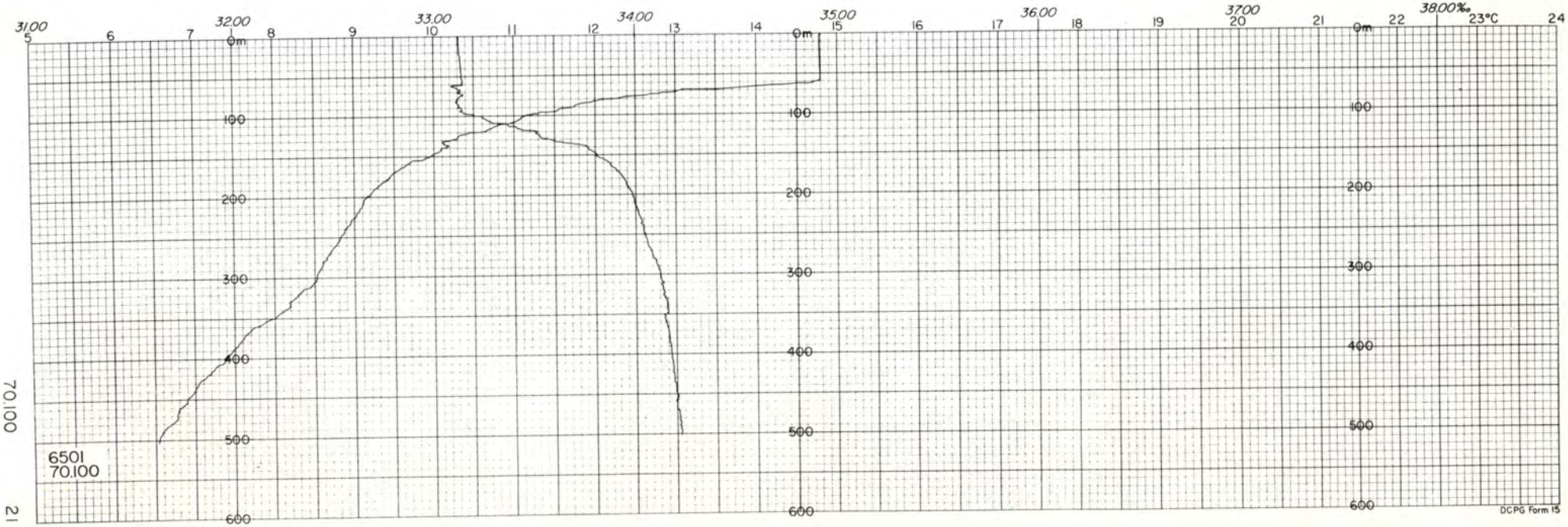

SIO CCOFI 6501

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 16, 1965; 1738 GCT; 34°33'N, 125°09.5'W; sounding, 2420 fm; wind, 090°, force 4; weather, cloudy; sea, moderate.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 14.79 | 33.13 | 24.60 | 335 | 0.00 |
| 10 | 14.78 | 33.13 | 24.60 | 335 | 0.03 |
| 20 | 14.78 | 33.13 | 24.60 | 335 | 0.07 |
| 30 | 14.78 | 33.14 | 24.61 | 334 | 0.10 |
| 50 | 14.79 | 33.14 | 24.61 | 334 | 0.17 |
| 75 | 12.65 | 33.13 | 25.03 | 293 | 0.25 |
| 100 | 11.14 | 33.22 | 25.39 | 260 | 0.32 |
| 125 | 10.31 | 33.53 | 25.77 | 223 | 0.38 |
| 150 | 9.94 | 33.81 | 26.05 | 196 | 0.43 |
| 200 | 9.14 | 33.98 | 26.32 | 171 | 0.52 |
| 250 | 8.82 | 34.05 | 26.42 | 161 | 0.61 |
| 300 | 8.52 | 34.12 | 26.53 | 152 | 0.69 |
| 400 | 7.39 | 34.18 | 26.74 | 131 | 0.84 |
| 500 | 6.54 | 34.22 | 26.89 | 117 | 0.97 |

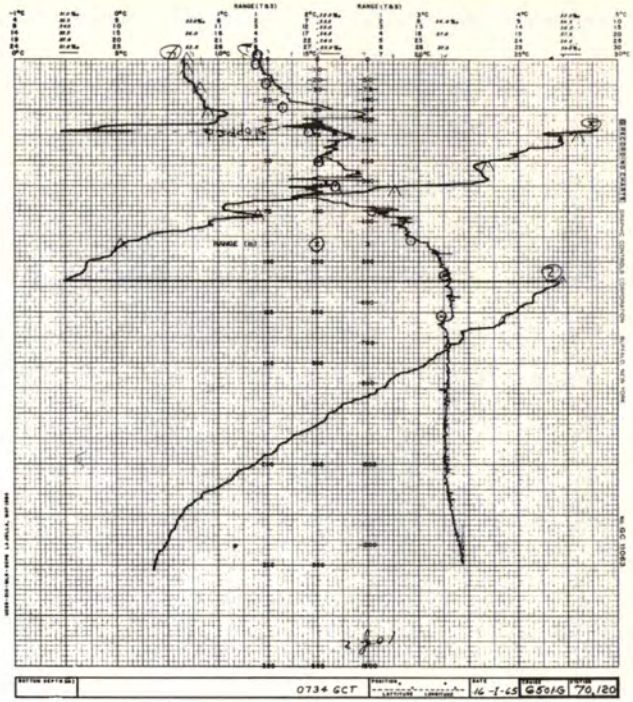


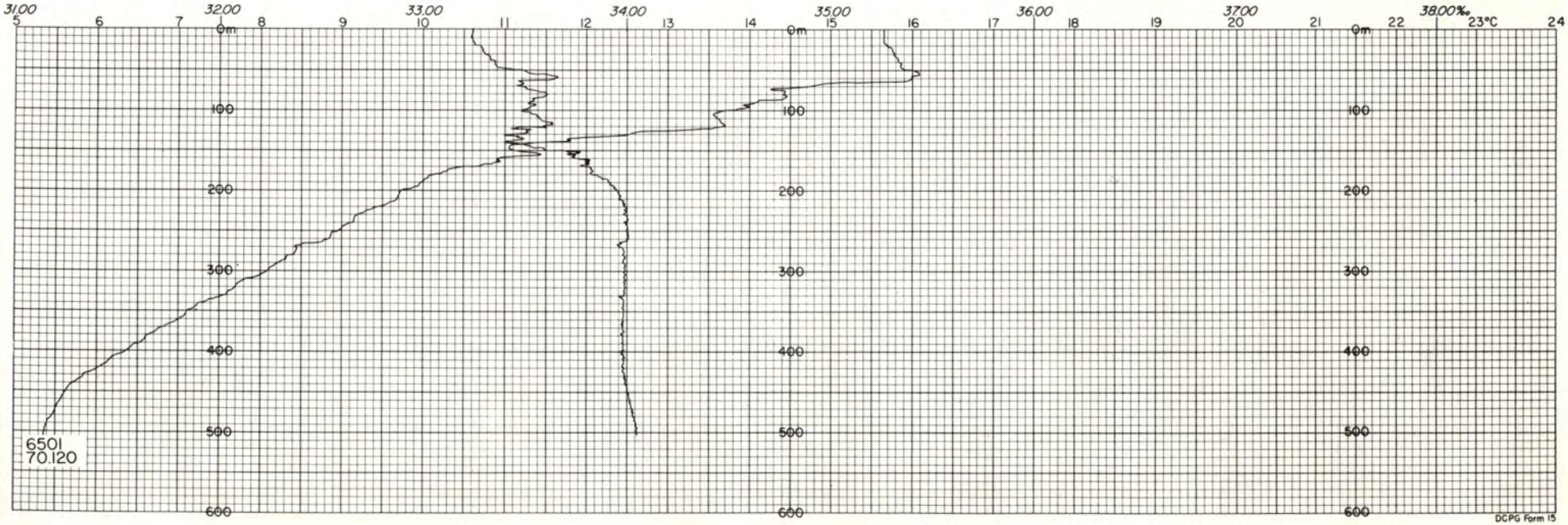



| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 16, 1965; 0716 GCT; 33°54'N, 126°36'W; sounding, 2500+ fm; wind, 120°, force 4; weather, cloudy; sea, moderate; wire angle, 15°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.69 | 33.257 | 5.96 | 0.37 | 4 | 344 | 0 | 15.66 | 33.24 | 24.49 | 345 | 0.00 |
| 10 | 15.69 | 33.252 | 6.01 | 0.36 | 3 | 345 | 10 | 15.66 | 33.24 | 24.49 | 345 | 0.03 |
| 29 | 15.82 | 33.294 | 5.93 | 0.36 | 3 | 345 | 20 | 15.69 | 33.26 | 24.50 | 344 | 0.07 |
| 53 | 15.90 | 33.361 | 5.88 | 0.38 | 3 | 341 | 30 | 15.78 | 33.30 | 24.51 | 343 | 0.10 |
| 77 | 14.60 | 33.466 | 6.15 | 0.39 | 4 | 307 | 50 | 15.96 | 33.47 | 24.60 | 335 | 0.17 |
| 106 | 13.69 | 33.506 | 6.00 | 0.41 | 4 | 285 | 75 | 14.30 | 33.54 | 25.02 | 295 | 0.25 |
| 131 | 12.76 | 33.572 | 5.65 | 0.64 | 6 | 263 | 100 | 13.71 | 33.49 | 25.10 | 287 | 0.32 |
| 155 | 11.40 | 33.715 | 5.25 | 0.94 | 10 | 228 | 125 | 12.86 | 33.50 | 25.28 | 270 | 0.39 |
| 184 | 10.04 | 33.869 | 5.10 | 1.18 | 16 | 194 | 150 | 11.13 | 33.59 | 25.68 | 232 | 0.46 |
| 219 | 9.44 | 34.003 | 5.06 | 1.24 | 20 | 174 | 200 | 9.72 | 33.95 | 26.20 | 183 | 0.56 |
| 259 | 8.58 | 33.991 | 4.47 | 1.62 | 28 | 162 | 250 | 8.95 | 34.00 | 26.36 | 167 | 0.65 |
| | | | | | | | 300 | 8.08 | 33.99 | 26.49 | 155 | 0.74 |
| | | | | | | | 400 | 6.37 | 33.98 | 26.72 | 133 | 0.89 |
| | | | | | | | 500 | 5.37 | 34.05 | 26.90 | 116 | 1.02 |

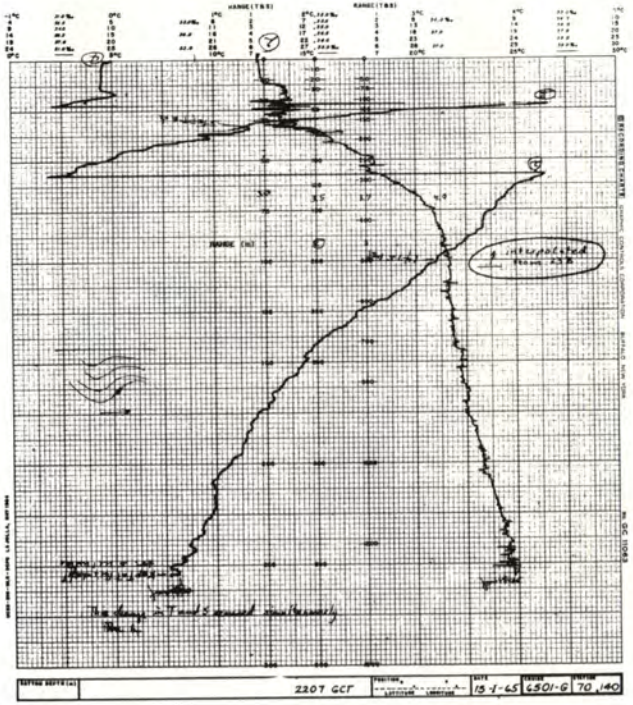


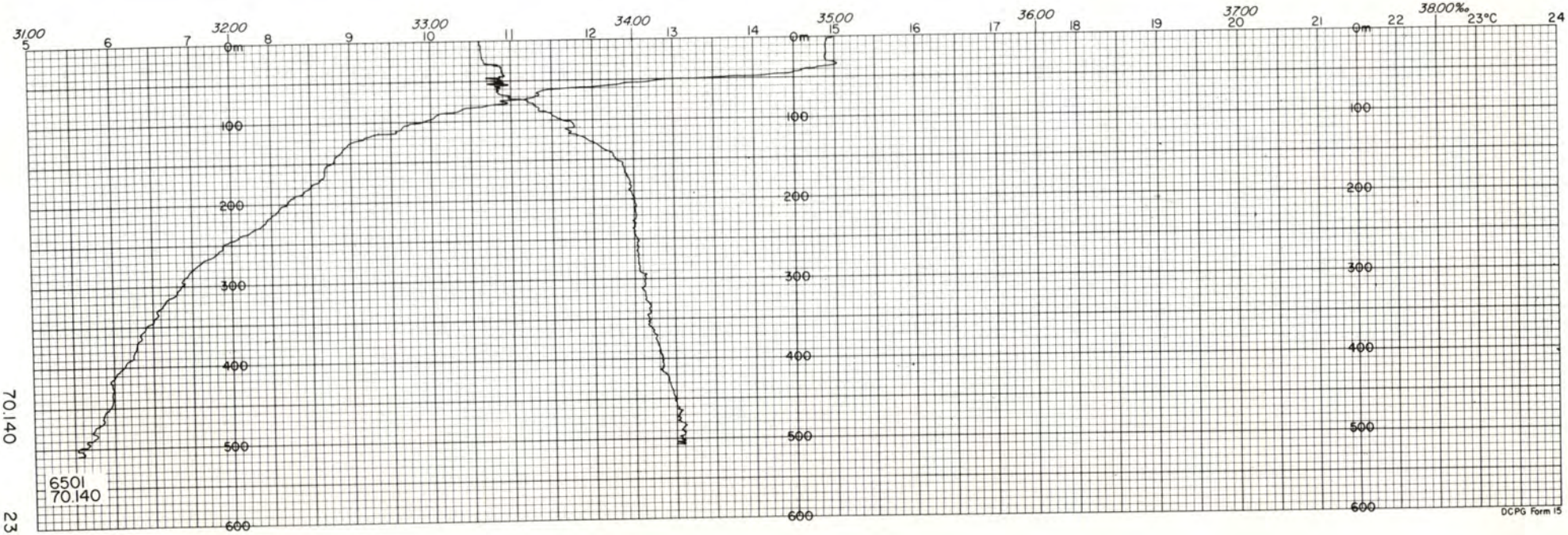



| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $PO_4$-P<br>µg at/L | $SiO_3$-Si<br>µg at/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |

ALEXANDER AGASSIZ; January 15, 1965; 2207 GCT; 33°13'N, 127°56.5'W; sounding, 2600 fm; wind, 120°, force 1; weather, clear; sea, slight.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 14.98 | 33.24 | 24.64 | 331 | 0.00 |
| 10 | 14.90 | 33.25 | 24.67 | 328 | 0.03 |
| 20 | 14.90 | 33.26 | 24.67 | 328 | 0.07 |
| 30 | 14.96 | 33.32 | 24.71 | 325 | 0.10 |
| 50 | 13.05 | 33.30 | 25.09 | 288 | 0.16 |
| 75 | 10.85 | 33.48 | 25.64 | 236 | 0.23 |
| 100 | 9.90 | 33.65 | 25.94 | 208 | 0.28 |
| 125 | 9.00 | 33.78 | 26.18 | 184 | 0.33 |
| 150 | 8.78 | 33.90 | 26.31 | 172 | 0.38 |
| 200 | 8.22 | 33.99 | 26.47 | 157 | 0.46 |
| 250 | 7.40 | 34.01 | 26.60 | 144 | 0.54 |
| 300 | 6.86 | 34.05 | 26.71 | 134 | 0.61 |
| 400 | 6.14 | 34.13 | 26.87 | 119 | 0.74 |
| 500 | 5.56 | 34.24 | 27.03 | 104 | 0.86 |



| BOTTLE SAMPLES | | | | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 15, 1965; 0922, 1120 GCT; 32°35'N, 129°21.5'W; sounding, 2145 fm; wind, 040°, force 3; weather, partly cloudy; sea, moderate; wire angle, 09°, 17°.

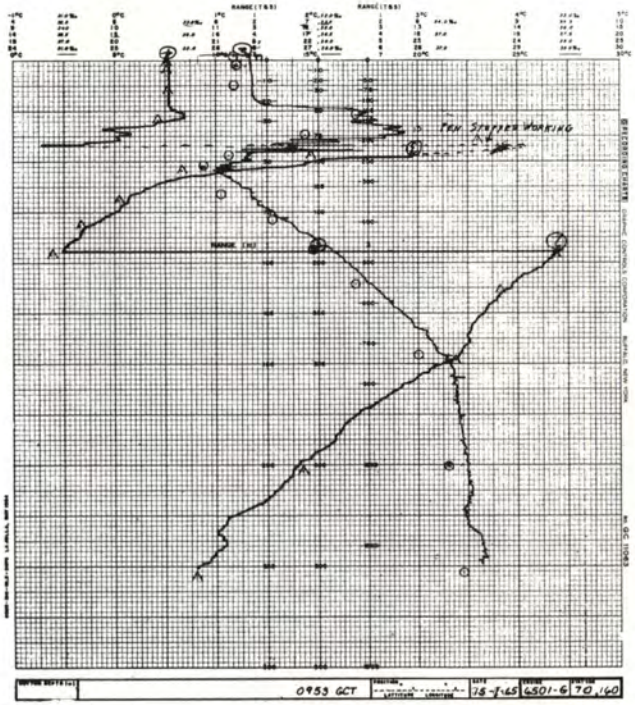
| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 0 | 15.52 | 33.171a) | 5.89 | 0.36 | 5 | 347 | 0 | 15.52 |
| 10 | 15.52 | 33.178 | 5.87 | 0.32 | 3 | 347 | 10 | 15.52 |
| 30 | 15.54 | 33.17 | 5.62 | 0.34 | 4 | 348 | 20 | 15.53 |
| 59 | 15.43 | 33.648 | 5.91 | 0.26 | 4 | 310 | 30 | 15.54 |
| 79 | 13.60 | 33.452 | 5.88 | 0.38 | 5 | 288 | 50 | 15.63 |
| 94 | 11.82 | 33.151 | 5.76 | 0.63 | 6 | 277 | 75 | 14.10 |
| 109 | 10.66 | 33.049 | 5.72 | 1.02 | 9 | 264 | 100 | 11.21 |
| 138 | 10.04 | 33.199 | 5.58 | 1.38 | 16 | 243 | 125 | 10.29 |
| 193 | 9.66 | 33.319 | 5.30 | 1.60 | 21 | 228 | 150 | 9.83 |
| 192 | 9.38 | 33.477 | 4.98 | 1.76 | 25 | 212 | 200 | 9.26 |
| 227 | 8.82 | 33.646 | 4.58 | 1.99 | 30 | 191 | 250 | 8.66 |
| 297 | 8.38 | 33.895 | 2.93 | 2.20 | 37 | 166 | 300 | 8.34 |
| 407 | 6.84 | 34.018 | 1.85 | 2.68 | 55 | 136 | 400 | 6.93 |
| 512 | 5.80 | 34.080 | 1.02 | 3.04 | 75 | 119 | 500 | 5.91 |
| 652 | 4.65 | 34.149 | 0.68 | 3.24 | 97 | 101 | 600 | 4.98 |
| 807 | 4.20 | 34.269 | 0.45 | 3.35 | 113 | 87 | 700 | 4.50 |
| 973 | 3.71 | 34.377 | 0.55 | 3.34 | 127 | 74 | 800 | 3.22 |
| 1177 | 3.24 | 34.452 | 0.88 | 3.23 | 135 | 64 | 1000 | 3.64 |
| | | | | | | | 1200 | 3.20 |
| 1113b) | 3.39 | 34.426 | - | 3.24 | 131 | 68 | 1500 | 2.68 |
| 1309 | 3.00 | 34.472 | - | 3.14 | 146 | 61 | 2000 | 2.03 |
| 1504 | 2.68 | 34.503 | - | 3.17 | 150 | 56 | 2500 | 1.72 |
| 1700 | 2.35 | 34.532 | - | 3.02 | 160 | 51 | 3000 | 1.55 |
| 1895 | 2.14 | 34.549 | - | 3.07 | 167 | 48 | 4000 | 1.53 |
| 2090 | 1.94 | 34.566 | - | 2.94 | 169 | 45 | | |
| 2285 | 1.82 | 34.577 | - | 2.93 | 168 | 43 | | |
| 2482 | 1.75 | 34.589 | - | 2.93 | 170 | 42 | | |
| 2677 | 1.66 | 34.605 | - | 2.89 | 168 | 40 | | |
| 2823 | 1.58 | 34.603 | - | 2.81 | 172 | 40 | | |
| 2971 | 1.56 | 34.608 | - | 2.87 | 170 | 39 | | |
| 3118 | 1.57 | 34.608 | - | 2.60 | 168 | 39 | | |
| 3266 | 1.53 | 34.613 | - | 2.76 | 168 | 39 | | |
| 3414 | 1.50 | 34.618 | - | 2.64 | 166 | 38 | | |
| 3562 | 1.51 | 34.623 | - | 2.71 | 164 | 38 | | |
| 3710 | 1.51 | 34.620 | - | 2.76 | 161 | 38 | | |
| 3858 | 1.52 | 34.624 | - | 2.85 | 165 | 38 | | |
| 4007 | 1.53 | 34.620 | - | 2.69 | 164 | 38 | | |

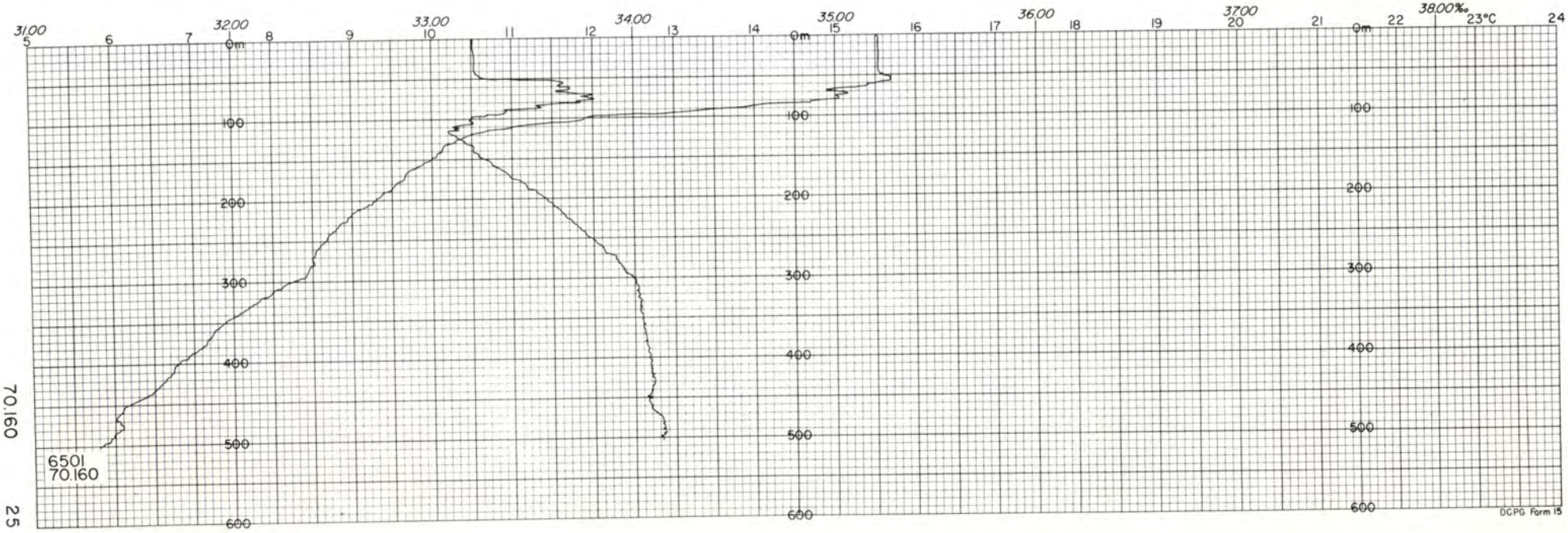
a) All salinity values for this station appear 0.06‰ too low.
b) Overlapping casts; reconciliation of property curves when necessary.

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $PO_4$-P<br>µg at/L | $SiO_3$-Si<br>µg at/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |

ALEXANDER AGASSIZ; January 15, 1965; 0953 GCT; 32°35'N, 129°21.5'W; sounding, 2145 fm; wind, 040°, force 3; weather, partly cloudy; sea, moderate.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 15.51 | 33.21 | 24.50 | 344 | 0.00 |
| 10 | 15.54 | 33.21 | 24.50 | 345 | 0.03 |
| 20 | 15.54 | 33.22 | 24.50 | 344 | 0.07 |
| 30 | 15.54 | 33.22 | 24.50 | 344 | 0.10 |
| 50 | 15.61 | 33.30 | 24.55 | 340 | 0.17 |
| 75 | 15.03 | 33.77 | 25.04 | 293 | 0.25 |
| 100 | 11.95 | 33.20 | 25.22 | 276 | 0.32 |
| 125 | 10.37 | 33.15 | 25.47 | 252 | 0.39 |
| 150 | 10.00 | 33.26 | 25.62 | 238 | 0.45 |
| 200 | 9.27 | 33.57 | 25.98 | 204 | 0.56 |
| 250 | 8.67 | 33.79 | 26.24 | 178 | 0.66 |
| 300 | 8.24 | 34.00 | 26.47 | 157 | 0.75 |
| 400 | 6.80 | 34.07 | 26.74 | 132 | 0.90 |
| 500 | 5.81 | 34.13 | 26.91 | 115 | 1.03 |



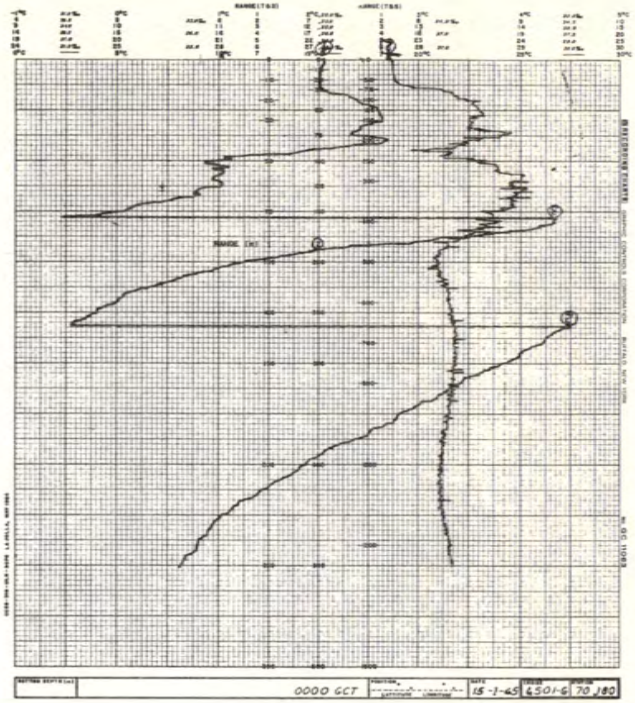
26

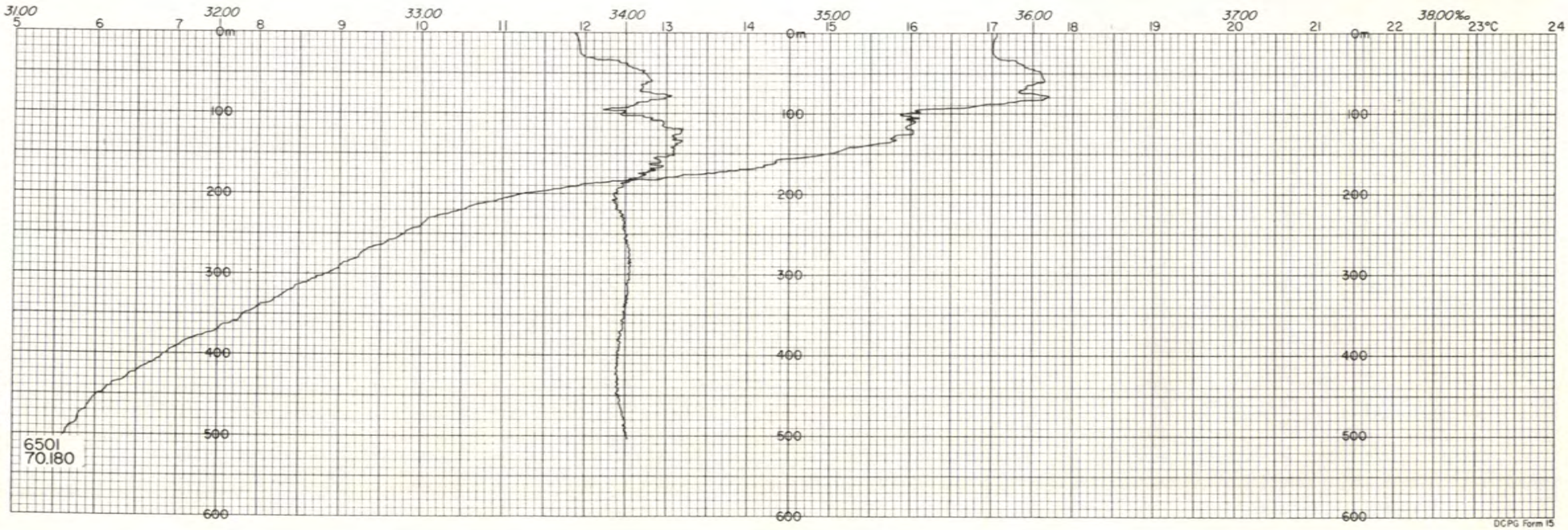
70.180

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 15, 1965; 0000 GCT; 31°54'N, 130°43'W; sounding, 1990 fm; wind, 080°, force 3; weather, partly cloudy; sea, moderate.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 17.05 | 33.75 | 24.56 | 338 | 0.00 |
| 10 | 17.02 | 33.77 | 24.59 | 336 | 0.03 |
| 20 | 17.01 | 33.77 | 24.59 | 336 | 0.07 |
| 30 | 17.04 | 33.80 | 24.60 | 334 | 0.10 |
| 50 | 17.59 | 34.09 | 24.70 | 326 | 0.17 |
| 75 | 17.40 | 34.13 | 24.77 | 318 | 0.25 |
| 100 | 15.95 | 33.97 | 24.99 | 298 | 0.33 |
| 125 | 16.02 | 34.25 | 25.19 | 279 | 0.40 |
| 150 | 14.98 | 34.24 | 25.41 | 258 | 0.47 |
| 200 | 11.25 | 33.95 | 25.93 | 208 | 0.59 |
| 250 | 9.80 | 34.00 | 26.23 | 180 | 0.68 |
| 300 | 8.83 | 34.02 | 26.40 | 164 | 0.77 |
| 400 | 6.88 | 33.96 | 26.64 | 141 | 0.93 |
| 500 | 5.63 | 34.00 | 26.83 | 123 | 1.07 |

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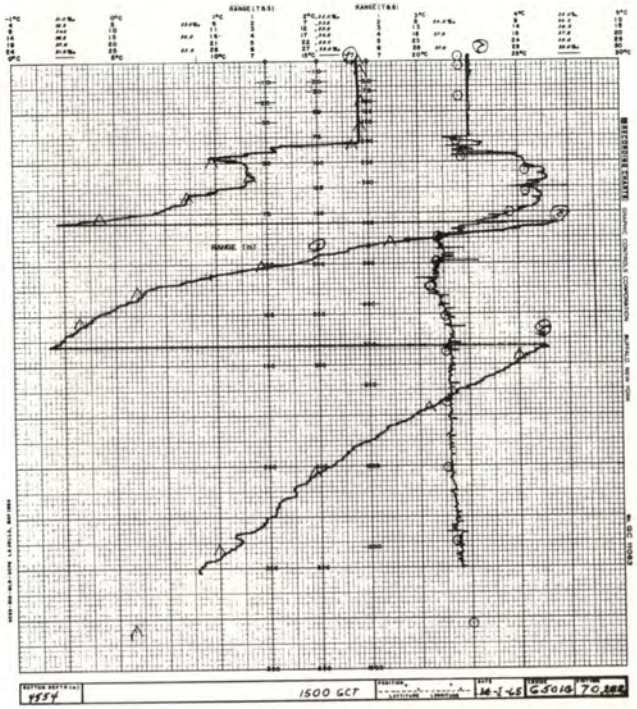
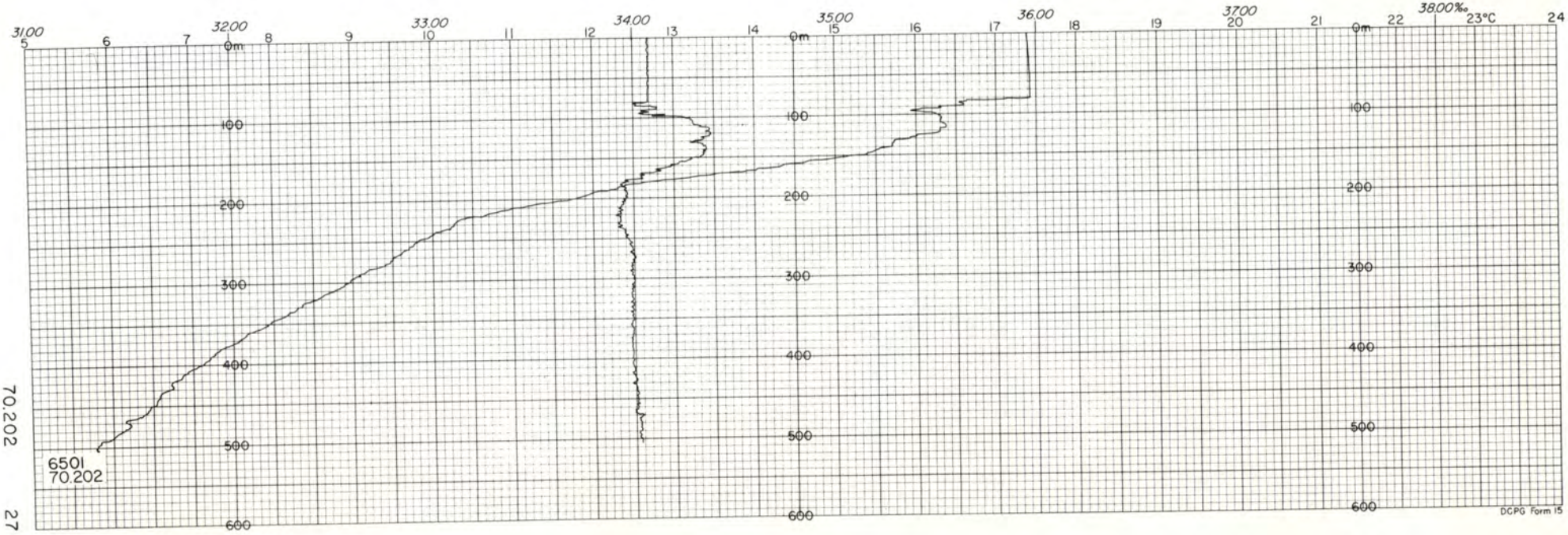
ALEXANDER AGASSIZ; January 14, 1965; 1438 GCT; 31°10.5'N, 132°12'W; sounding, 2490 fm; wind, 070°, force 1; weather, overcast; sea, slight; wire angle, 04°.

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| 0 | 17.41 | 34.064 | 5.75 | 0.22 | 4 | 323 | 0 | 17.39 | 34.08 | 24.74 | 322 | 0.00 |
| 10 | 17.43 | 34.064 | 5.87 | 0.18 | 3 | 324 | 10 | 17.40 | 34.08 | 24.73 | 322 | 0.03 |
| 40 | 17.44 | 34.061 | 5.76 | 0.19 | 3 | 324 | 20 | 17.41 | 34.08 | 24.73 | 322 | 0.06 |
| 65 | 17.42 | 34.061 | 5.82 | 0.18 | 4 | 324 | 30 | 17.41 | 34.08 | 24.73 | 322 | 0.10 |
| 85 | 17.34 | 34.057 | 5.78 | 0.19 | 3 | 322 | 50 | 17.42 | 34.08 | 24.73 | 323 | 0.16 |
| 100 | 15.97 | 34.072 | 5.95 | 0.21 | 4 | 291 | 75 | 17.42 | 34.08 | 24.73 | 323 | 0.24 |
| 114 | 16.34 | 34.325 | 5.78 | 0.24 | 4 | 280 | 100 | 16.27 | 34.26 | 25.14 | 284 | 0.32 |
| 134 | 15.72 | 34.330 | 5.68 | 0.28 | 4 | 267 | 125 | 16.15 | 34.34 | 25.23 | 275 | 0.39 |
| 155 | 14.85 | 34.265 | 5.46 | 0.42 | 6 | 253 | 150 | 15.35 | 34.31 | 25.38 | 260 | 0.46 |
| 179 | 12.71 | 33.980 | 5.29 | 0.69 | 9 | 232 | 200 | 11.76 | 33.97 | 25.85 | 215 | 0.58 |
| 203 | 11.44 | 33.973 | 5.29 | 0.88 | 11 | 210 | 250 | 9.83 | 33.98 | 26.20 | 182 | 0.68 |
| 228 | 10.21 | 33.943 | 5.19 | 1.09 | 15 | 191 | 300 | 8.97 | 34.00 | 26.36 | 167 | 0.77 |
| 257 | 9.64 | 34.001 | 5.10 | 1.24 | 18 | 178 | 400 | 7.12 | 33.99 | 26.63 | 142 | 0.93 |
| 292 | 9.00 | 34.004 | 4.69 | 1.46 | 24 | 167 | 500 | 5.81 | 34.03 | 26.83 | 123 | 1.07 |
| 342 | 8.08 | 34.003 | 4.02 | 1.84 | 33 | 154 | | | | | | |
| 407 | 6.94 | 34.004 | 3.06 | 2.32 | 47 | 139 | | | | | | |
| 482 | 6.00 | 34.040 | 2.10 | 2.73 | 63 | 124 | | | | | | |
| 562 | 5.16 | 34.100 | 1.23 | 3.01 | 84 | 110 | | | | | | |



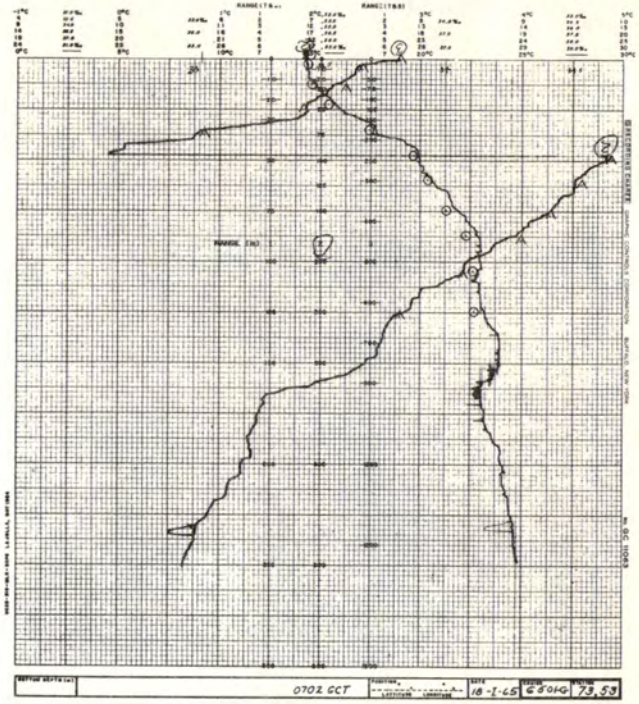



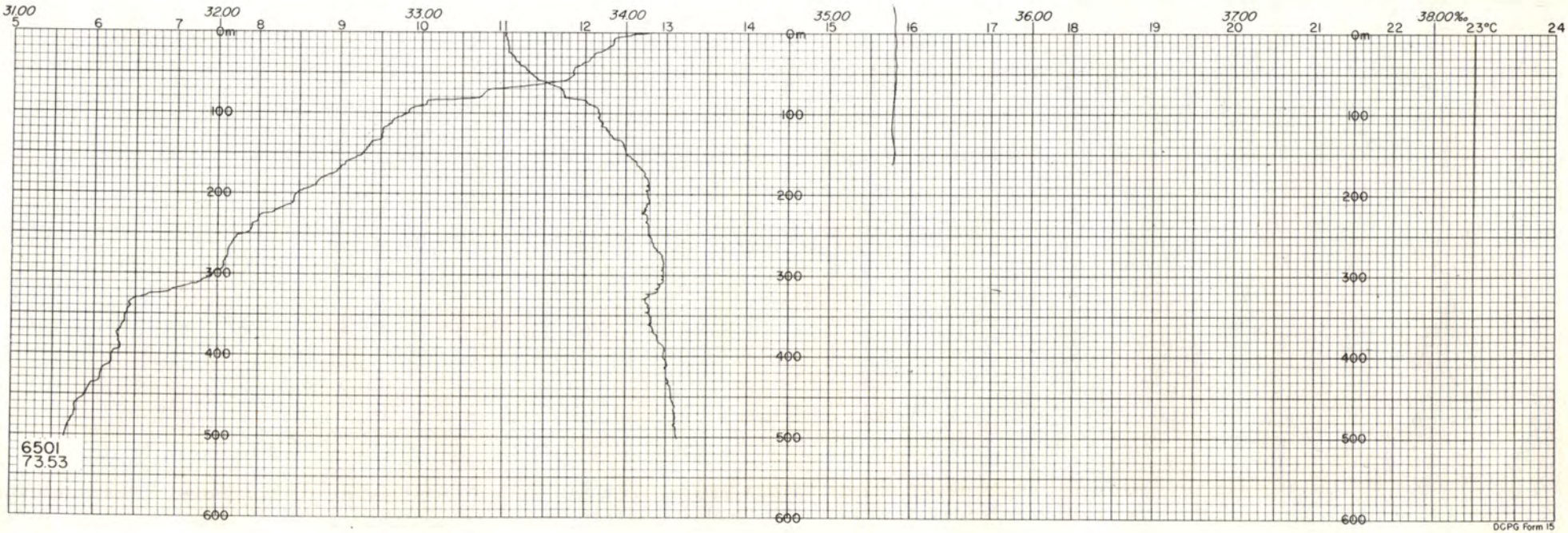

70.202

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 18, 1965; 0650 GCT; 35°31.5'N, 121°28.5'W; sounding, 400 fm; wind, 080°, force 3; weather, cloudy; sea, slight; wire angle, 06°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.79 | 33.458 | 6.30 | 0.69 | 9 | 272 | 0 | 12.78 | 33.40 | 25.22 | 276 | 0.00 |
| 10 | 12.41 | 33.446 | 6.33 | 0.70 | 8 | 266 | 10 | 12.35 | 33.41 | 25.31 | 267 | 0.03 |
| 30 | 12.24 | 33.460 | 6.10 | 0.82 | 9 | 262 | 20 | 12.26 | 33.42 | 25.33 | 265 | 0.05 |
| 50 | 11.82 | 33.528 | 5.47 | 1.11 | 13 | 249 | 30 | 12.08 | 33.45 | 25.39 | 259 | 0.08 |
| 75 | 10.84 | 33.693 | 3.97 | 1.63 | 20 | 220 | 50 | 11.86 | 33.53 | 25.49 | 250 | 0.13 |
| 100 | 9.88 | 33.868 | 2.83 | 2.06 | 32 | 191 | 75 | 10.76 | 33.69 | 25.82 | 219 | 0.19 |
| 124 | 9.58 | 33.927 | 2.65 | 2.14 | 32 | 182 | 100 | 9.83 | 33.86 | 26.11 | 191 | 0.24 |
| 154 | 9.27 | 34.002 | 2.37 | 2.25 | 34 | 172 | 125 | 9.52 | 33.91 | 26.20 | 182 | 0.29 |
| 179 | 8.98 | 34.082 | 1.94 | 2.42 | 39 | 161 | 150 | 9.27 | 34.00 | 26.31 | 172 | 0.33 |
| 214 | 8.42 | 34.110 | 1.79 | 2.53 | 43 | 151 | 200 | 8.46 | 34.11 | 26.53 | 152 | 0.42 |
| 254 | 7.79 | 34.115 | 1.67 | 2.65 | 49 | 142 | 250 | 7.83 | 34.11 | 26.62 | 143 | 0.49 |
| | | | | | | | 300 | 7.44 | 34.18 | 26.73 | 132 | 0.56 |
| | | | | | | | 400 | 6.22 | 34.20 | 26.91 | 115 | 0.69 |
| | | | | | | | 500 | 5.65 | 34.25 | 27.03 | 104 | 0.81 |



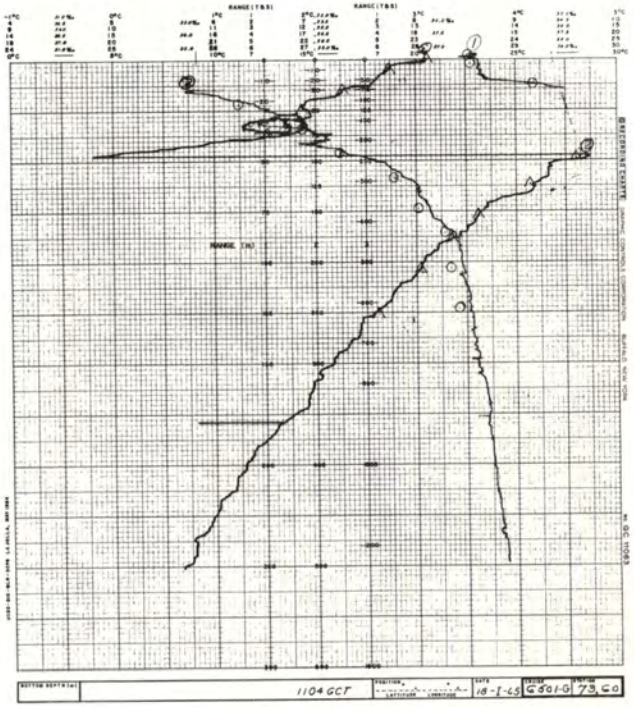



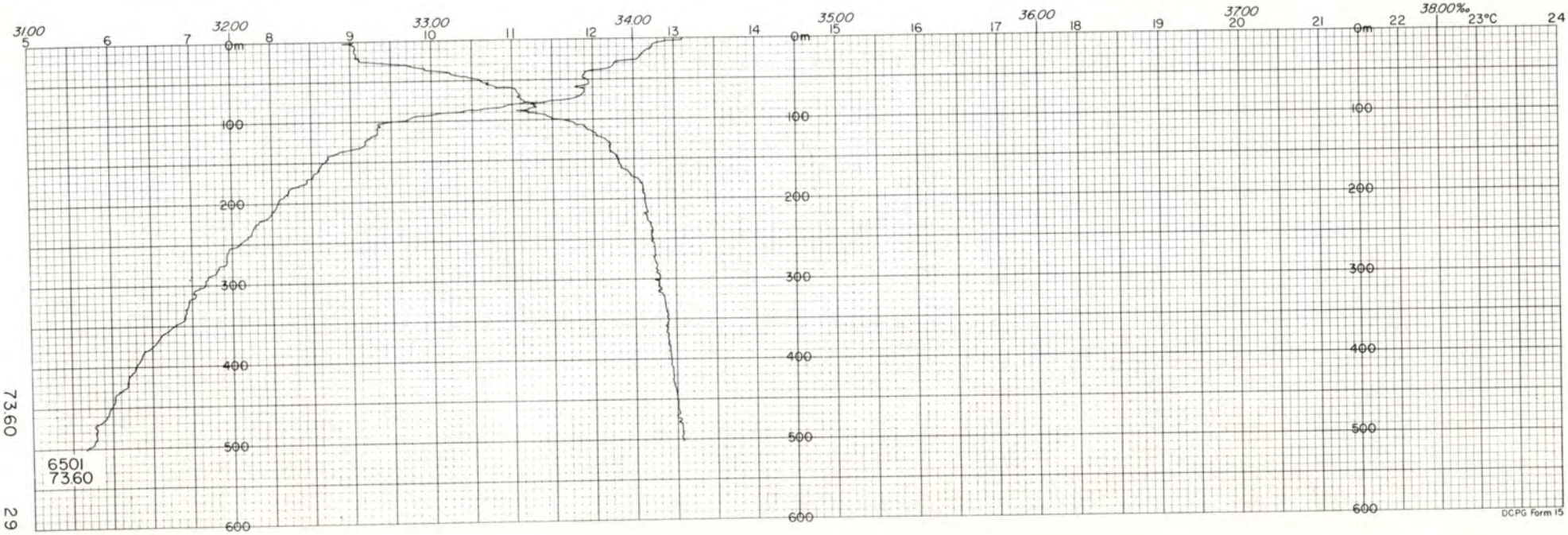
SIO CCOFI 6501

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 18, 1965; 1050 GCT; 35°18'N, 121°57.5'W; sounding, 1345 fm; wind, 040°, force 2; weather, cloudy; sea, slight; wire angle, 10°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.12 | 32.608 | 6.32 | 0.42 | 5 | 341 | 0 | 13.10 | 32.62 | 24.55 | 339 | 0.00 |
| 10 | 12.74 | 32.619 | 6.44 | 0.44 | 4 | 333 | 10 | 12.72 | 32.62 | 24.63 | 332 | 0.03 |
| 30 | 12.27 | 32.873 | 6.43 | 0.52 | 6 | 305 | 20 | 12.61 | 32.63 | 24.66 | 329 | 0.07 |
| 50 | 11.86 | 33.199 | 6.05 | 0.77 | 10 | 274 | 30 | 12.26 | 32.88 | 24.92 | 305 | 0.10 |
| 74 | 11.53 | 33.441 | 5.57 | 1.12 | 13 | 250 | 50 | 11.93 | 33.24 | 25.26 | 272 | 0.16 |
| 98 | 9.60 | 33.596 | 4.31 | 1.73 | 26 | 207 | 75 | 11.65 | 33.45 | 25.47 | 252 | 0.22 |
| 123 | 9.14 | 33.814 | 3.42 | 2.00 | 30 | 184 | 100 | 9.55 | 33.65 | 25.99 | 202 | 0.28 |
| 153 | 8.62 | 33.904 | 2.90 | 2.20 | 37 | 169 | 125 | 9.17 | 33.86 | 26.22 | 181 | 0.33 |
| 177 | 8.36 | 34.011 | 2.18 | 2.42 | 41 | 157 | 150 | 8.65 | 33.92 | 26.35 | 168 | 0.37 |
| 212 | 8.04 | 34.036 | 2.00 | 2.47 | 45 | 151 | 200 | 8.07 | 34.05 | 26.54 | 150 | 0.45 |
| 252 | 7.62 | 34.067 | 1.80 | 2.62 | 51 | 143 | 250 | 7.59 | 34.09 | 26.64 | 141 | 0.53 |
| | | | | | | | 300 | 7.17 | 34.12 | 26.72 | 133 | 0.60 |
| | | | | | | | 400 | 6.29 | 34.17 | 26.88 | 118 | 0.73 |
| | | | | | | | 500 | 5.67 | 34.23 | 27.01 | 106 | 0.85 |




73.60

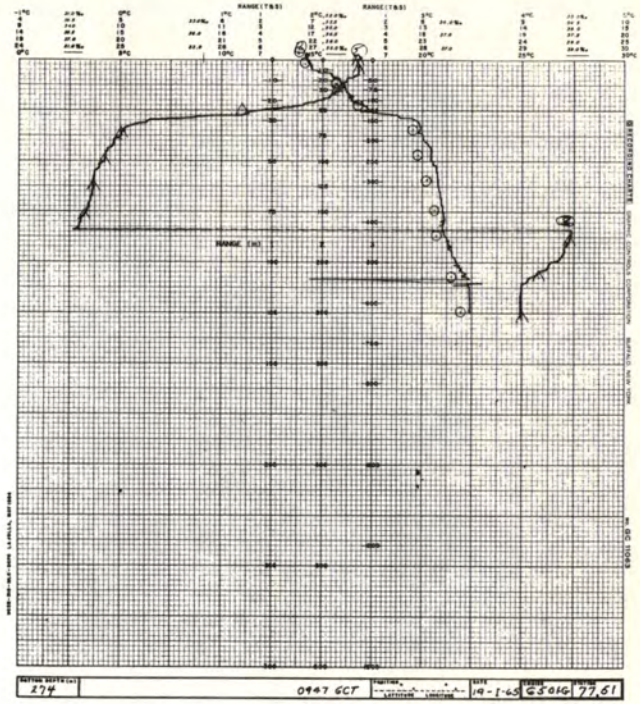
30

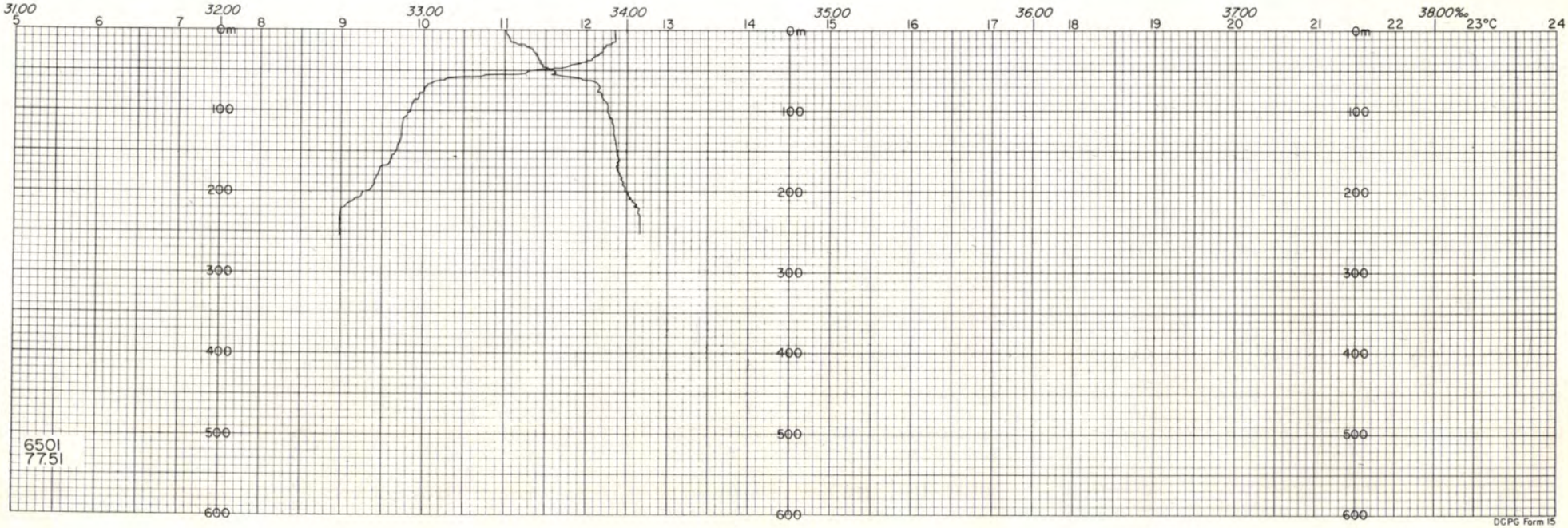
77.51

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 19, 1965; 0925 GCT; 35°02'N, 120°56.5'W; sounding, 150 fm; wind, 230°, force 2; weather, cloudy; sea, slight; wire angle, 00°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.35 | 33.401 | 6.36 | 0.67 | 10 | 268 | 0 | 12.35 | 33.41 | 25.31 | 267 | 0.00 |
| 10 | 12.36 | 33.429 | 6.40 | 0.75 | 10 | 266 | 10 | 12.36 | 33.42 | 25.31 | 267 | 0.03 |
| 30 | 12.14 | 33.549 | 6.05 | 0.84 | 10 | 253 | 20 | 12.24 | 33.51 | 25.41 | 258 | 0.05 |
| 50 | 11.20 | 33.641 | 4.52 | 1.41 | 18 | 230 | 30 | 12.16 | 33.55 | 25.45 | 253 | 0.08 |
| 75 | 10.01 | 33.862 | 2.94 | 1.98 | 29 | 194 | 50 | 11.37 | 33.63 | 25.66 | 234 | 0.13 |
| 100 | 9.84 | 33.877 | 2.78 | 2.04 | 31 | 190 | 75 | 10.01 | 33.86 | 26.08 | 194 | 0.18 |
| 125 | 9.74 | 33.917 | 2.73 | 2.12 | 31 | 185 | 100 | 9.84 | 33.91 | 26.15 | 187 | 0.23 |
| 155 | 9.64 | 33.947 | 2.56 | 2.17 | 34 | 182 | 125 | 9.73 | 33.94 | 26.19 | 183 | 0.28 |
| 180 | 9.45 | 33.953 | 2.55 | 2.20 | 34 | 178 | 150 | 9.66 | 33.95 | 26.21 | 182 | 0.32 |
| 215 | 9.16 | 34.018 | 2.22 | 2.35 | 38 | 169 | 200 | 9.27 | 34.00 | 26.31 | 172 | 0.41 |
| 255 | 9.00 | 34.055 | 1.98 | 2.45 | 42 | 164 | 250 | 8.98 | 34.06 | 26.41 | 163 | 0.50 |




SIO CCOFI 6501

| BOTTLE SAMPLES | | | | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 18, 1965; 2005 GCT; 34°54'N, 121°13'W; sounding, 305 fm; wind, 350°, force 2; weather, partly cloudy; sea, slight; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.12 | 33.126 | 6.41 | 302 | 0 | 13.12 | 33.13 | 24.94 | 302 | 0.00 |
| 10 | 12.32 | 33.284 | 6.28 | 276 | 10 | 12.32 | 33.28 | 25.21 | 276 | 0.03 |
| 30 | 11.20 | 33.452 | 5.29 | 244 | 20 | 12.31 | 33.36 | 25.28 | 270 | 0.06 |
| 45 | 10.90 | 33.545 | 4.80 | 232 | 30 | 11.20 | 33.45 | 25.55 | 244 | 0.08 |
| 55 | 10.68 | 33.635 | 4.27 | 221 | 50 | 10.80 | 33.59 | 25.73 | 227 | 0.13 |
| 69 | 9.98 | 33.704 | 3.89 | 205 | 75 | 9.84 | 33.72 | 26.00 | 202 | 0.18 |
| 85 | 9.66 | 33.730 | 3.77 | 198 | 100 | 9.14 | 33.82 | 26.19 | 183 | 0.23 |
| 100 | 9.14 | 33.825 | 3.49 | 183 | 125 | 8.95 | 33.90 | 26.29 | 174 | 0.28 |
| 124 | 8.96 | 33.896 | 3.17 | 175 | 150 | 8.85 | 34.05 | 26.42 | 162 | 0.32 |
| 145 | 8.88 | 34.029 | 2.41 | 164 | 200 | 8.43 | 34.14 | 26.55 | 149 | 0.40 |
| 175 | 8.64 | 34.098 | 1.91 | 155 | 250 | 8.20 | 34.19 | 26.63 | 142 | 0.47 |
| 204 | 8.40 | 34.149 | 1.55 | 148 | 300 | 7.80 | 34.21 | 26.70 | 135 | 0.55 |
| 234 | 8.28 | 34.182 | 1.30 | 144 | 400 | 6.68 | 34.25 | 26.89 | 117 | 0.68 |
| 274 | 8.02 | 34.200 | 1.17 | 139 | 500 | 5.91 | 34.27 | 27.01 | 106 | 0.79 |
| 333 | 7.46 | 34.215 | 1.04 | 130 | | | | | | |
| 390 | 6.76 | 34.240 | 0.81 | 119 | | | | | | |
| 449 | - | 34.254 | 0.62 | | | | | | | |
| 510 | 5.83 | 34.269 | 0.49 | 105 | | | | | | |

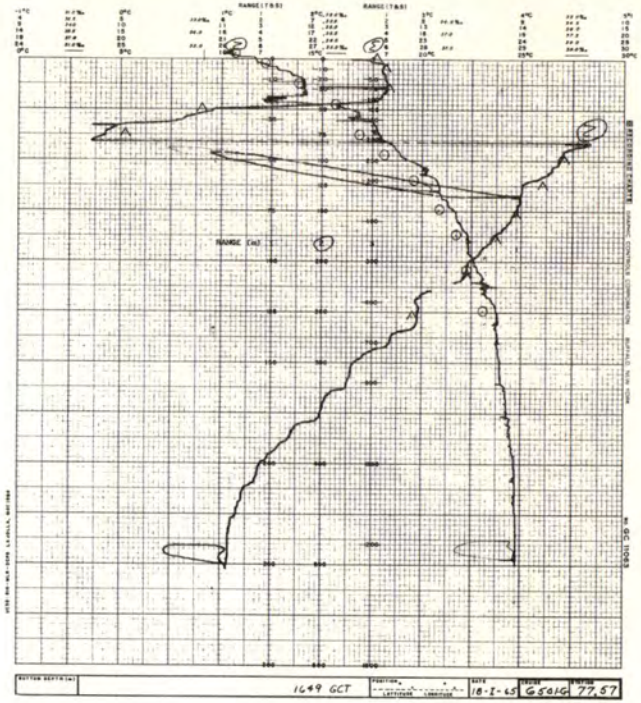
32

77.57

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

ALEXANDER AGASSIZ; January 18, 1965; 1626 GCT; 34°50'N, 121°21'W; sounding, 253 fm; wind, 170°, force 2; weather, cloudy; sea, slight; wire angle, 05°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.54 | 33.151 | 6.38 | 0.58 | 7 | 290 | 0 | 12.48 | 33.11 | 25.05 | 292 | 0.00 |
| 10 | 12.63 | 33.273 | 6.45 | 0.57 | 8 | 282 | 10 | 12.59 | 33.22 | 25.12 | 286 | 0.03 |
| 30 | 12.66 | 33.401 | 6.24 | 0.66 | 8 | 274 | 20 | 12.63 | 33.35 | 25.21 | 277 | 0.06 |
| 50 | 10.80 | 33.550 | 4.65 | 1.44 | 19 | 230 | 30 | 12.64 | 33.40 | 25.25 | 273 | 0.08 |
| 75 | 10.04 | 33.646 | 4.10 | 1.73 | 23 | 210 | 50 | 10.96 | 33.49 | 25.63 | 237 | 0.14 |
| 100 | 9.42 | 33.745 | 3.70 | 1.92 | 29 | 193 | 75 | 9.85 | 33.69 | 25.98 | 204 | 0.19 |
| 125 | 9.21 | 33.864 | 3.03 | 2.09 | 32 | 181 | 100 | 9.37 | 33.78 | 26.12 | 190 | 0.24 |
| 154 | 8.94 | 33.966 | 2.61 | 2.27 | 36 | 169 | 125 | 9.02 | 33.93 | 26.30 | 173 | 0.29 |
| 179 | 8.74 | 34.036 | 2.25 | 2.36 | 40 | 161 | 150 | 8.96 | 33.98 | 26.35 | 169 | 0.33 |
| 124 | 8.44 | 34.080 | 2.03 | 2.49 | 45 | 154 | 200 | 8.47 | 34.07 | 26.49 | 155 | 0.41 |
| 254 | 7.90 | 34.142 | 1.54 | 2.69 | 51 | 141 | 250 | 7.96 | 34.17 | 26.65 | 140 | 0.49 |
| | | | | | | | 300 | 7.32 | 34.18 | 26.75 | 130 | 0.56 |
| | | | | | | | 400 | 6.39 | 34.24 | 26.92 | 114 | 0.69 |
| | | | | | | | 500 | 6.07 | 34.26 | 26.98 | 108 | 0.80 |





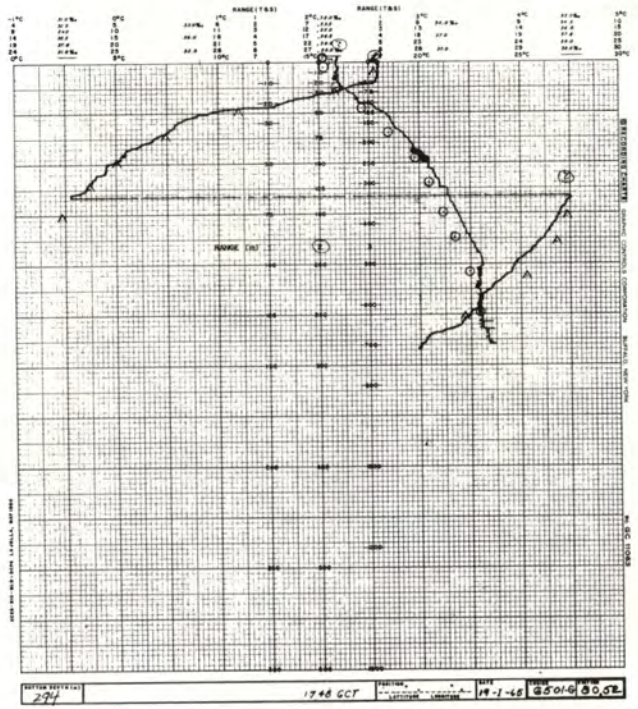
DCPG Form 15

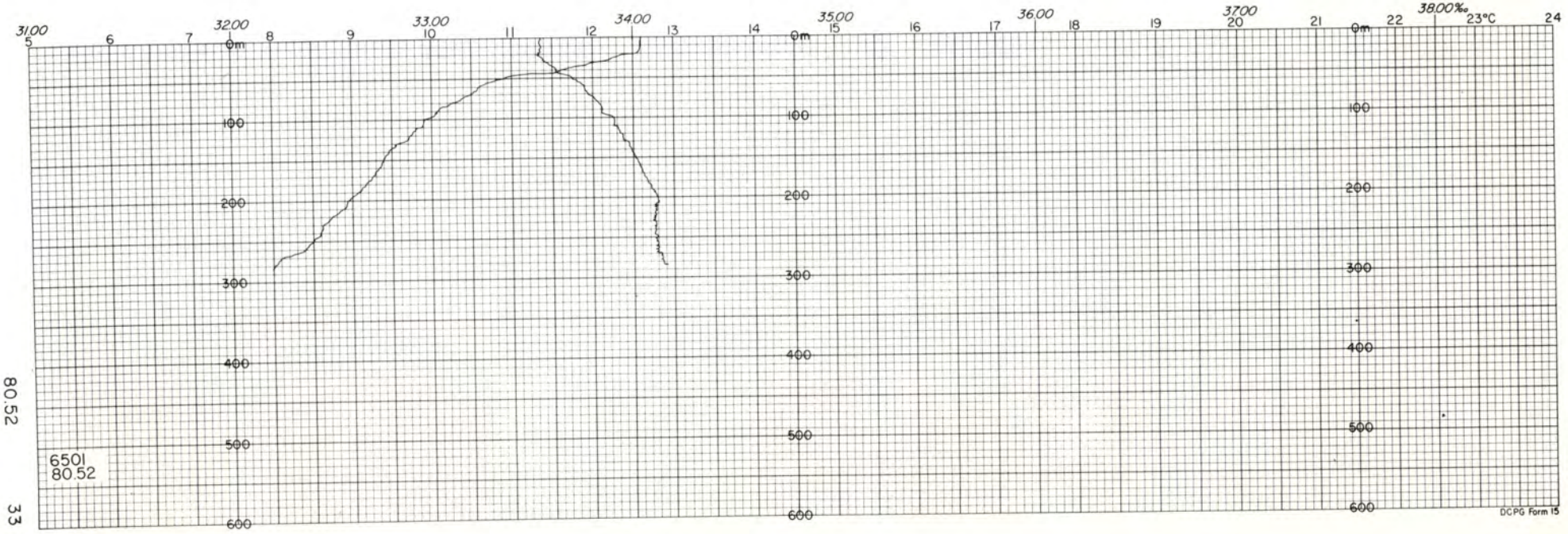
SIO CCOFI 6501

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 19, 1965; 1729 GCT; 34°24.5'N, 120°36.5'W; sounding, 175 fm; wind, 300°, force 4; weather, partly cloudy; sea, rough; wire angle, 10°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.54 | 33.514 | 6.54 | 0.64 | 9 | 263 | 0 | 12.60 | 33.54 | 25.36 | 262 | 0.00 |
| 10 | 12.55 | 33.519 | 6.48 | 0.67 | 8 | 263 | 10 | 12.59 | 33.54 | 25.36 | 262 | 0.03 |
| 30 | 12.16 | 33.570 | 5.69 | 0.96 | 10 | 252 | 20 | 12.56 | 33.54 | 25.37 | 262 | 0.05 |
| 50 | 11.20 | 33.670 | 3.99 | 1.64 | 19 | 228 | 30 | 12.15 | 33.57 | 25.47 | 252 | 0.08 |
| 75 | 10.49 | 33.777 | 3.26 | 1.92 | 26 | 208 | 50 | 10.91 | 33.70 | 25.80 | 221 | 0.13 |
| 100 | 10.01 | 33.882 | 2.80 | 2.09 | 30 | 192 | 75 | 10.37 | 33.80 | 25.97 | 204 | 0.18 |
| 124 | 9.74 | 33.939 | 2.51 | 2.28 | 34 | 184 | 100 | 9.91 | 33.90 | 26.13 | 189 | 0.23 |
| 154 | 9.47 | 33.995 | 2.32 | 2.31 | 35 | 175 | 125 | 9.71 | 33.95 | 26.20 | 182 | 0.28 |
| 179 | 9.36 | 34.037 | 2.21 | 2.30 | 37 | 171 | 150 | 9.40 | 34.01 | 26.30 | 173 | 0.32 |
| 213 | 9.06 | 34.096 | 2.00 | 2.44 | 39 | 162 | 200 | 8.94 | 34.11 | 26.45 | 159 | 0.41 |
| 253 | 8.38 | 34.133 | 1.69 | 2.64 | 47 | 149 | 250 | 8.49 | 34.11 | 26.52 | 152 | 0.49 |





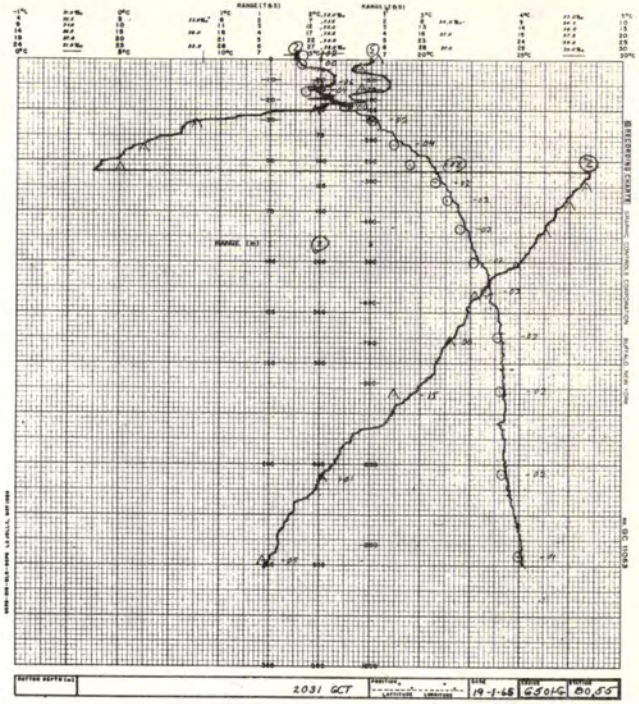
34

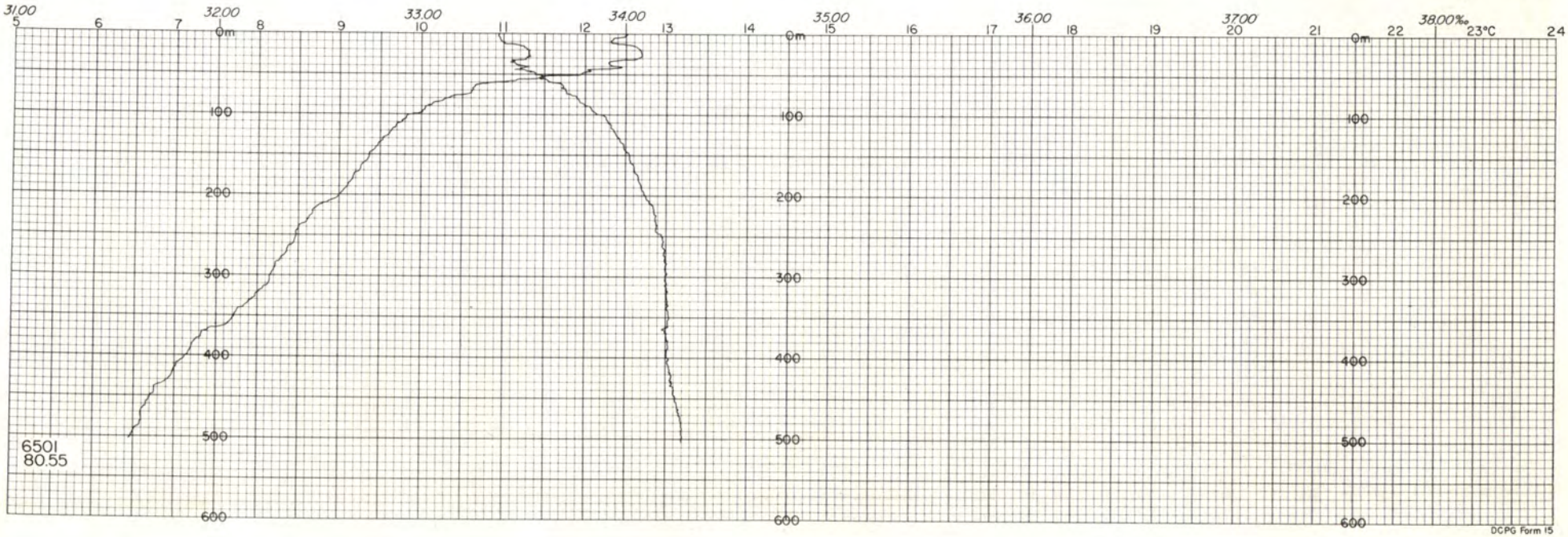
80.55

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 19, 1965; 2014 GCT; 34°19'N, 120°48.5'W; sounding, 430 fm; wind, 240°, force 4; weather, partly cloudy; sea, moderate; wire angle, 21°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.56 | 33.430 | 6.49 | 270 | 0 | 12.50 | 33.38 | 25.26 | 272 | 0.00 |
| 9 | 12.38 | 33.421 | 6.31 | 267 | 10 | 12.31 | 33.39 | 25.30 | 268 | 0.03 |
| 28 | 12.40 | 33.488 | 6.31 | 262 | 20 | 12.66 | 33.52 | 25.33 | 265 | 0.05 |
| 37 | 12.08 | 33.439 | 5.99 | 260 | 30 | 12.65 | 33.51 | 25.33 | 265 | 0.08 |
| 51 | 11.94 | 33.591 | 5.23 | 247 | 50 | 11.94 | 33.56 | 25.50 | 249 | 0.13 |
| 65 | 10.76 | 33.701 | 3.78 | 218 | 75 | 10.55 | 33.73 | 25.89 | 212 | 0.19 |
| 89 | 10.24 | 33.790 | 3.40 | 203 | 100 | 9.90 | 33.88 | 26.12 | 191 | 0.24 |
| 108 | 10.01 | 33.853 | 3.11 | 194 | 125 | 9.61 | 33.95 | 26.22 | 181 | 0.29 |
| 126 | 9.66 | 33.957 | 2.75 | 181 | 150 | 9.36 | 34.02 | 26.31 | 172 | 0.33 |
| 144 | 9.50 | 34.001 | 2.55 | 175 | 200 | 8.99 | 34.10 | 26.44 | 160 | 0.42 |
| 172 | 9.26 | 34.053 | 2.17 | 168 | 250 | 8.47 | 34.18 | 26.58 | 147 | 0.50 |
| 205 | 8.95 | 34.110 | 1.92 | 159 | 300 | 8.15 | 34.20 | 26.64 | 140 | 0.57 |
| 233 | 8.54 | 34.160 | 1.68 | 149 | 400 | 7.14 | 34.21 | 26.80 | 126 | 0.71 |
| 279 | 8.28 | 34.204 | 1.42 | 142 | 500 | 6.47 | 34.28 | 26.94 | 112 | 0.83 |
| 332 | 7.73 | 34.219 | 1.12 | 133 | | | | | | |
| 414 | 7.02 | 34.227 | 1.02 | 123 | | | | | | |
| 496 | 6.43 | 34.296 | 0.70 | 110 | | | | | | |
| 579 | 5.84 | 34.329 | 0.55 | 101 | | | | | | |



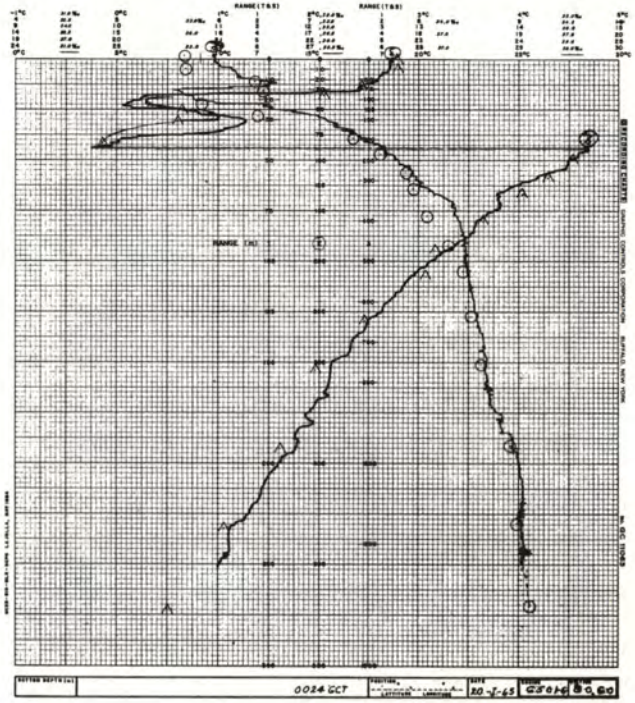

SIO CCOFI 6501

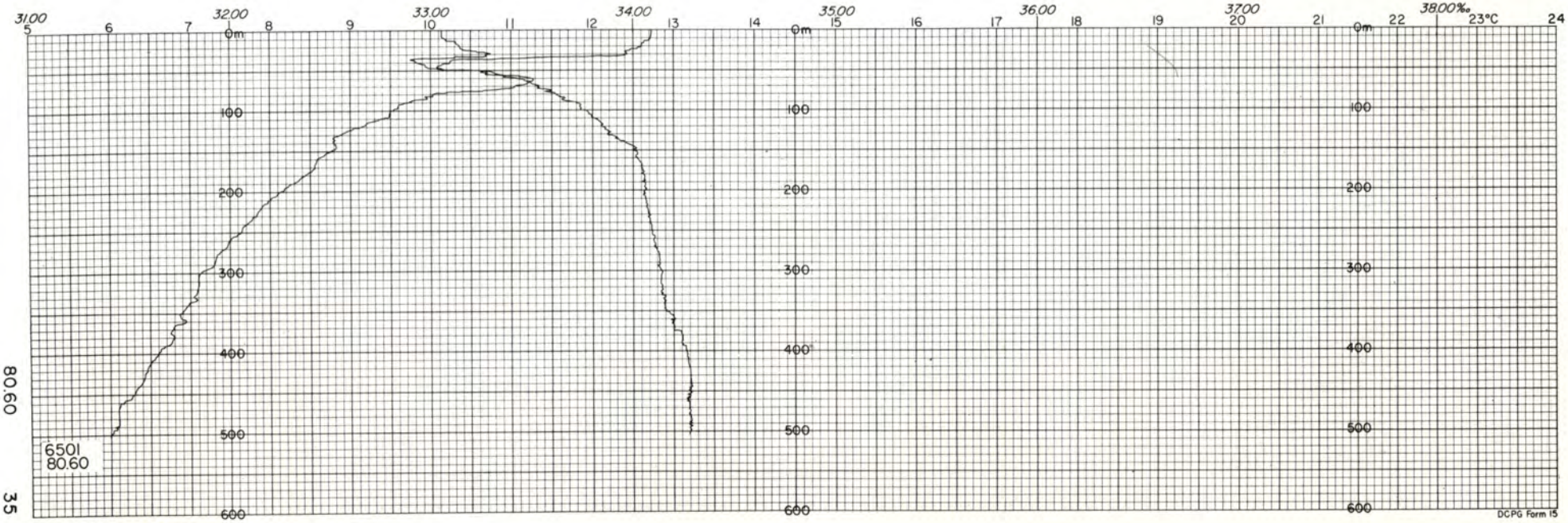
SIO CCOFI 6501

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

ALEXANDER AGASSIZ; January 19, 1965; 2356 GCT; 34°08.5'N, 121°09'W; sounding, 1170 fm; wind, 280°, force 4; weather, cloudy; sea, rough; wire angle, 27°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.78 | 32.964 | 6.76 | 0.45 | 7 | 308 | 0 | 12.72 | 33.06 | 24.97 | 300 | 0.00 |
| 9 | 12.79 | 32.971 | 6.50 | 0.56 | 8 | 308 | 10 | 12.71 | 33.07 | 24.98 | 299 | 0.03 |
| 27 | 12.42 | 33.242 | 6.53 | 0.68 | 8 | 281 | 20 | 12.59 | 33.14 | 25.05 | 292 | 0.06 |
| 36 | 12.04 | 33.277 | 6.05 | 0.86 | 8 | 271 | 30 | 12.42 | 33.25 | 25.17 | 280 | 0.09 |
| 49 | 10.64 | 33.033 | 5.95 | 1.00 | 9 | 265 | 50 | 10.62 | 33.26 | 25.51 | 248 | 0.14 |
| 61 | 10.60 | 33.255 | 5.47 | 1.28 | 14 | 248 | 75 | 10.65 | 33.59 | 25.76 | 224 | 0.20 |
| 83 | 9.86 | 33.636 | 4.40 | 1.75 | 22 | 208 | 100 | 9.49 | 33.77 | 26.10 | 192 | 0.25 |
| 99 | 9.53 | 33.744 | 3.93 | 1.97 | 26 | 195 | 125 | 8.96 | 33.86 | 26.25 | 178 | 0.30 |
| 117 | 9.28 | 33.848 | 3.24 | 2.17 | 34 | 183 | 150 | 8.75 | 34.00 | 26.40 | 164 | 0.34 |
| 133 | 9.03 | 33.879 | 3.37 | 2.22 | 34 | 177 | 200 | 8.12 | 34.06 | 26.54 | 150 | 0.42 |
| 160 | 8.64 | 33.934 | 2.97 | 2.32 | 36 | 167 | 250 | 7.64 | 34.09 | 26.63 | 141 | 0.50 |
| 189 | 8.16 | 34.020 | 2.56 | 2.46 | 42 | 154 | 300 | 7.12 | 34.14 | 26.75 | 131 | 0.57 |
| 215 | 8.07 | 34.079 | 2.16 | 2.62 | 48 | 148 | 400 | 6.59 | 34.27 | 26.92 | 114 | 0.70 |
| 259 | 7.46 | 34.108 | 1.83 | 2.81 | 54 | 138 | 500 | 6.01 | 34.28 | 27.00 | 106 | 0.81 |
| 307 | 6.96 | 34.149 | 1.34 | 3.02 | 62 | 128 | | | | | | |
| 385 | 6.61 | 34.262 | 0.79 | 3.28 | 72 | 115 | | | | | | |
| 464 | 6.06 | 34.291 | 0.74 | 3.49 | 83 | 106 | | | | | | |
| 546 | 5.50 | 34.342 | 0.51 | 3.51 | 97 | 96 | | | | | | |





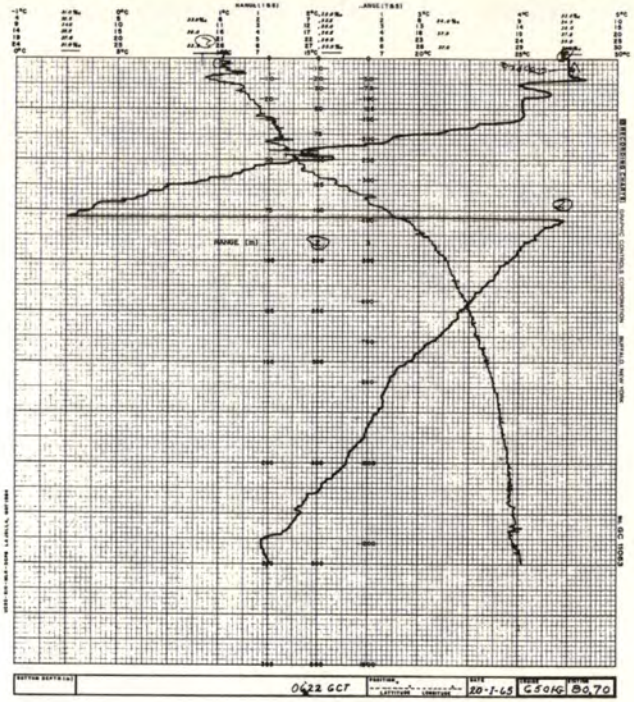

80.60

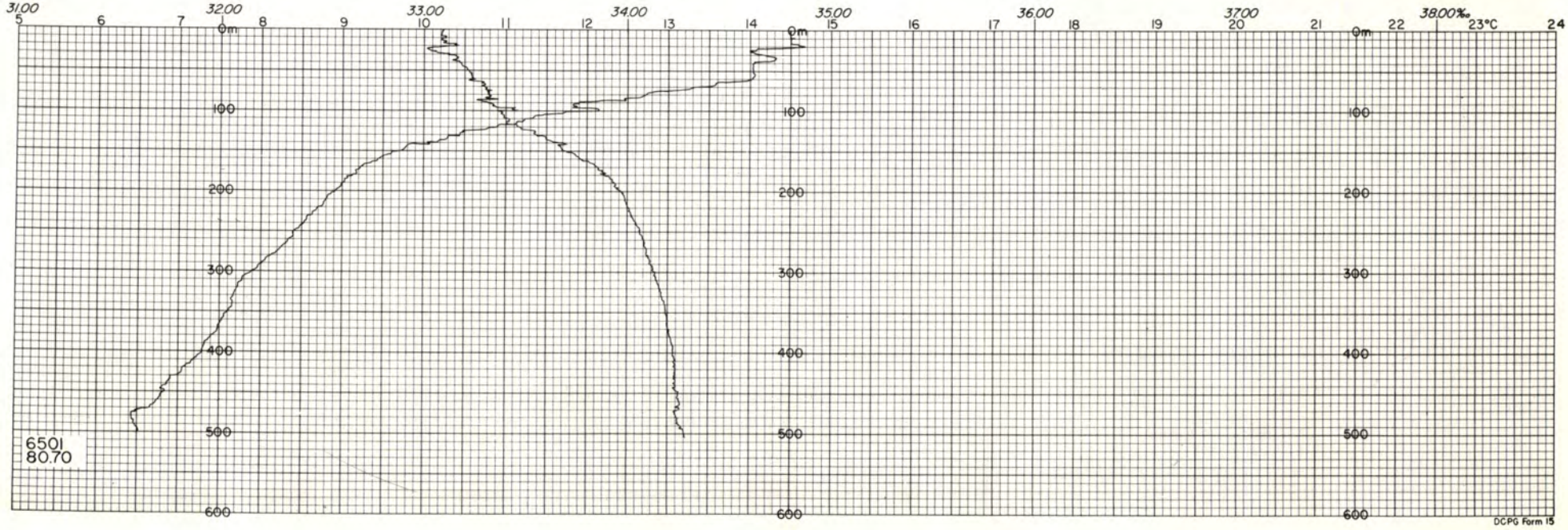
35

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 20, 1965; 0622 GCT; 33°48'N, 121°51'W; sounding, 1932 fm; wind, 310°, force 4; weather, rain; sea, rough.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 14.51 | 33.09 | 24.63 | 332 | 0.00 |
| 10 | 14.54 | 33.10 | 24.63 | 332 | 0.03 |
| 20 | 14.67 | 33.17 | 24.65 | 330 | 0.07 |
| 30 | 14.17 | 33.12 | 24.72 | 323 | 0.10 |
| 50 | 14.04 | 33.21 | 24.82 | 314 | 0.16 |
| 75 | 12.93 | 33.31 | 25.12 | 285 | 0.24 |
| 100 | 12.11 | 33.37 | 25.32 | 266 | 0.31 |
| 125 | 10.49 | 33.54 | 25.75 | 225 | 0.37 |
| 150 | 9.73 | 33.70 | 26.00 | 201 | 0.42 |
| 200 | 8.90 | 33.97 | 26.35 | 168 | 0.52 |
| 250 | 8.40 | 34.07 | 26.50 | 154 | 0.60 |
| 300 | 7.88 | 34.14 | 26.64 | 141 | 0.68 |
| 400 | 7.29 | 34.23 | 26.79 | 126 | 0.82 |
| 500 | 6.50 | 34.28 | 26.94 | 112 | 0.94 |

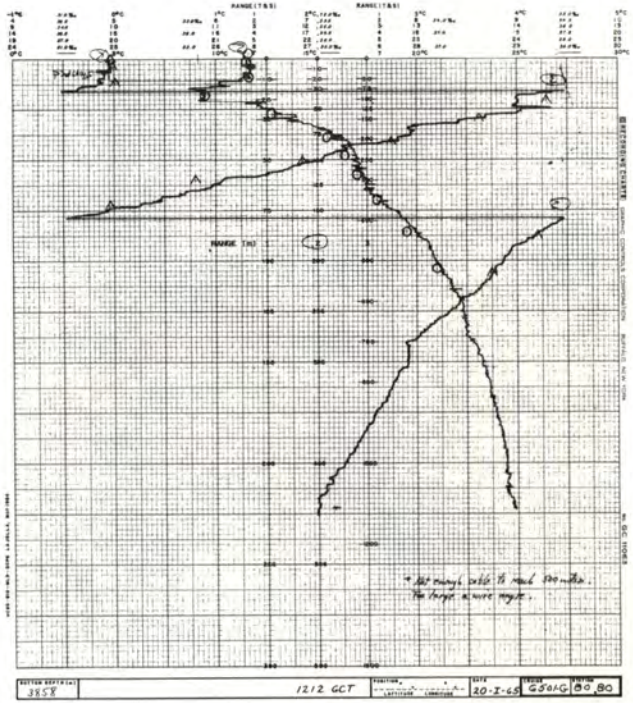


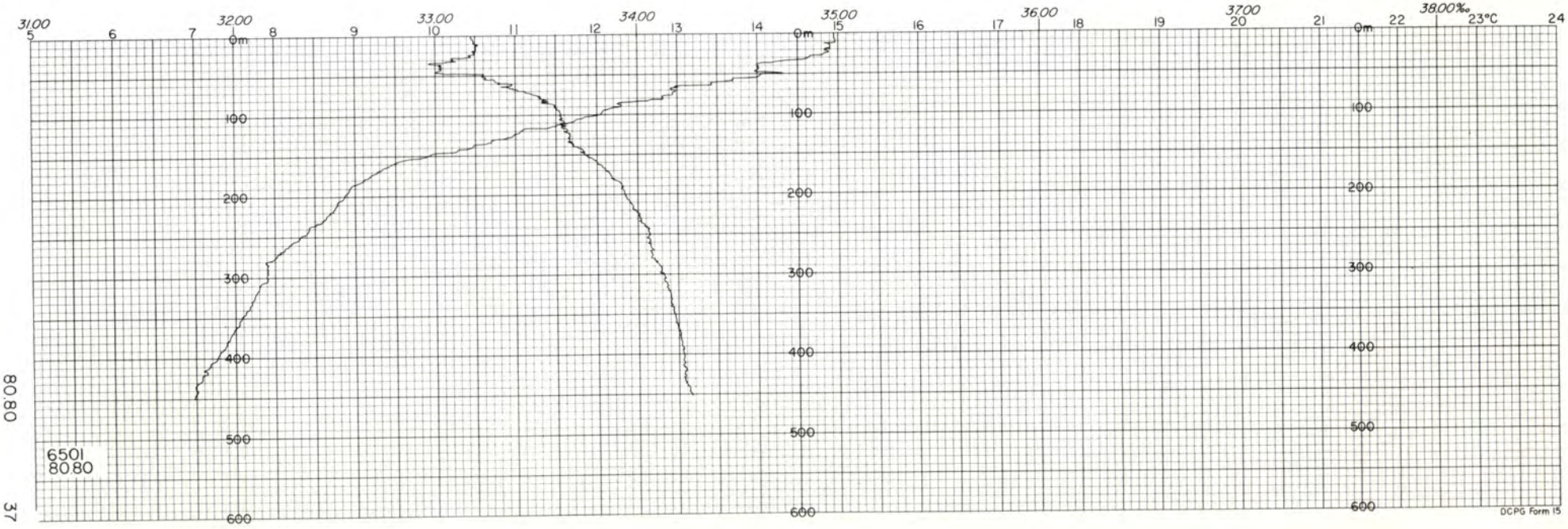



| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | μg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 20, 1965; 1209 GCT; 33°30'N, 122°33'W; sounding, 2110 fm; wind, 330°, force 5; weather, overcast; sea, rough; wire angle, 40°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.96 | 33.230 | 5.91 | 0.36 | 4 | 331 | 0 | 14.95 | 33.18 | 24.60 | 335 | 0.00 |
| 8 | 14.98 | 33.219 | 5.86 | 0.34 | 3 | 332 | 10 | 14.96 | 33.19 | 24.61 | 334 | 0.03 |
| 24 | 15.01 | 33.228 | 5.86 | 0.35 | 3 | 332 | 20 | 14.85 | 33.19 | 24.63 | 332 | 0.07 |
| 42 | 14.29 | 33.055 | 5.93 | 0.39 | 4 | 330 | 30 | 14.64 | 33.09 | 24.60 | 335 | 0.10 |
| 60 | 13.62 | 33.320 | 5.93 | 0.51 | 5 | 298 | 50 | 14.04 | 33.23 | 24.83 | 313 | 0.17 |
| 83 | 12.74 | 33.539 | 5.49 | 0.73 | 7 | 265 | 75 | 12.94 | 33.49 | 25.26 | 272 | 0.24 |
| 101 | 11.85 | 33.614 | 5.19 | 0.95 | 10 | 243 | 100 | 12.05 | 33.62 | 25.53 | 246 | 0.30 |
| 120 | 10.80 | 33.659 | 4.76 | 1.28 | 17 | 222 | 125 | 10.97 | 33.67 | 25.77 | 224 | 0.36 |
| 145 | 9.96 | 33.741 | 4.29 | 1.46 | 21 | 202 | 150 | 9.93 | 33.75 | 26.01 | 201 | 0.42 |
| 176 | 9.20 | 33.860 | 4.29 | 1.59 | 26 | 181 | 200 | 8.86 | 33.94 | 26.33 | 170 | 0.51 |
| 213 | 8.74 | 33.982 | 3.32 | 1.95 | 35 | 165 | 250 | 8.32 | 34.05 | 26.50 | 154 | 0.59 |
| | | | | | | | 300 | 7.91 | 34.13 | 26.63 | 142 | 0.67 |
| | | | | | | | 400 | 7.26 | 34.23 | 26.80 | 126 | 0.81 |





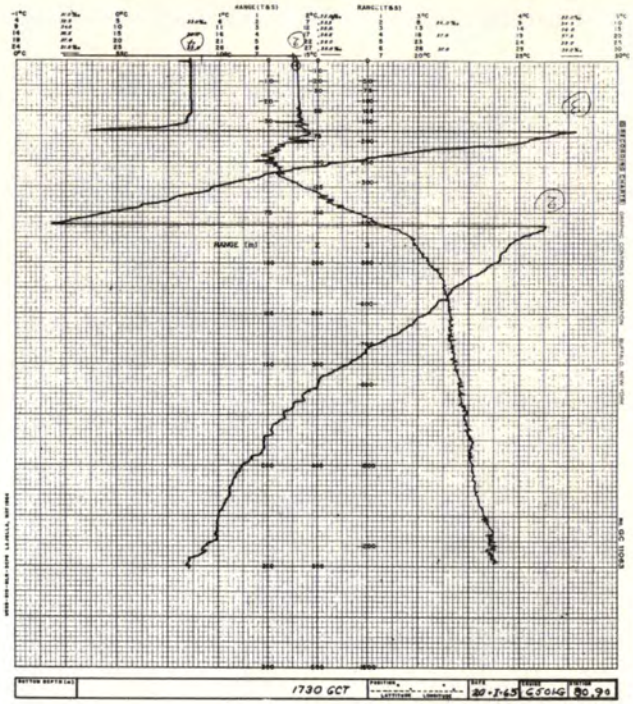
DCPG Form 15

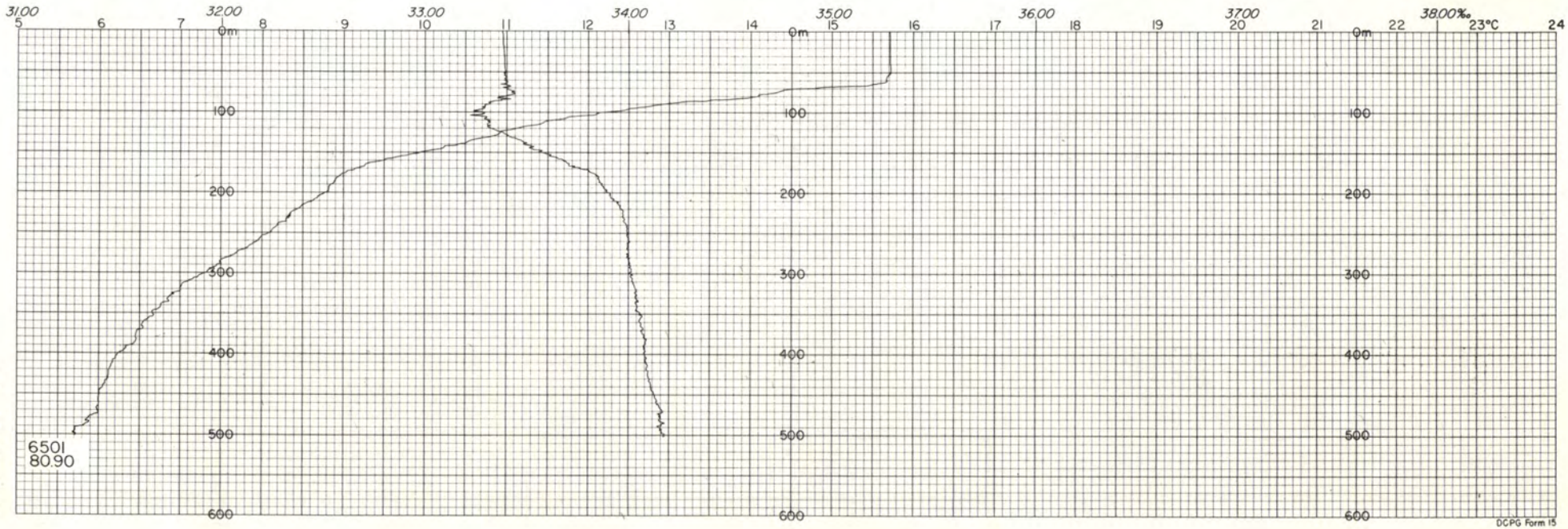
80.90

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 20, 1965; 1730 GCT; 33°08'N, 123°13'W; sounding, 2267 fm; wind, 330°, force 6; weather, cloudy; sea, rough.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 15.71 | 33.38 | 24.59 | 336 | 0.00 |
| 10 | 15.72 | 33.39 | 24.59 | 335 | 0.03 |
| 20 | 15.72 | 33.39 | 24.59 | 335 | 0.07 |
| 30 | 15.72 | 33.39 | 24.59 | 335 | 0.10 |
| 50 | 15.72 | 33.40 | 24.60 | 335 | 0.17 |
| 75 | 14.29 | 33.43 | 24.93 | 303 | 0.25 |
| 100 | 12.28 | 33.27 | 25.21 | 276 | 0.32 |
| 125 | 10.93 | 33.38 | 25.55 | 245 | 0.39 |
| 150 | 9.93 | 33.56 | 25.86 | 215 | 0.44 |
| 200 | 8.75 | 33.90 | 26.32 | 171 | 0.54 |
| 250 | 8.09 | 33.99 | 26.49 | 155 | 0.63 |
| 300 | 7.31 | 34.01 | 26.62 | 143 | 0.70 |
| 400 | 6.24 | 34.08 | 26.82 | 124 | 0.84 |
| 500 | 5.71 | 34.17 | 26.95 | 111 | 0.97 |



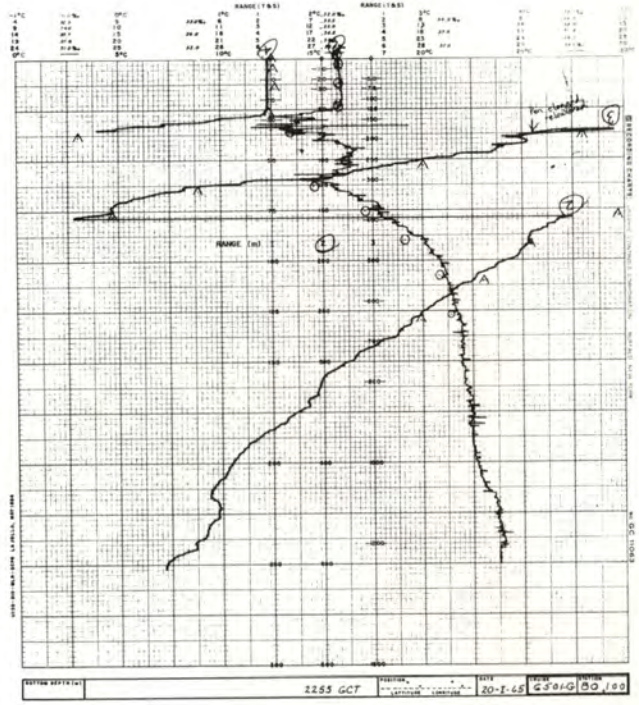

SIO CCOFI 6501

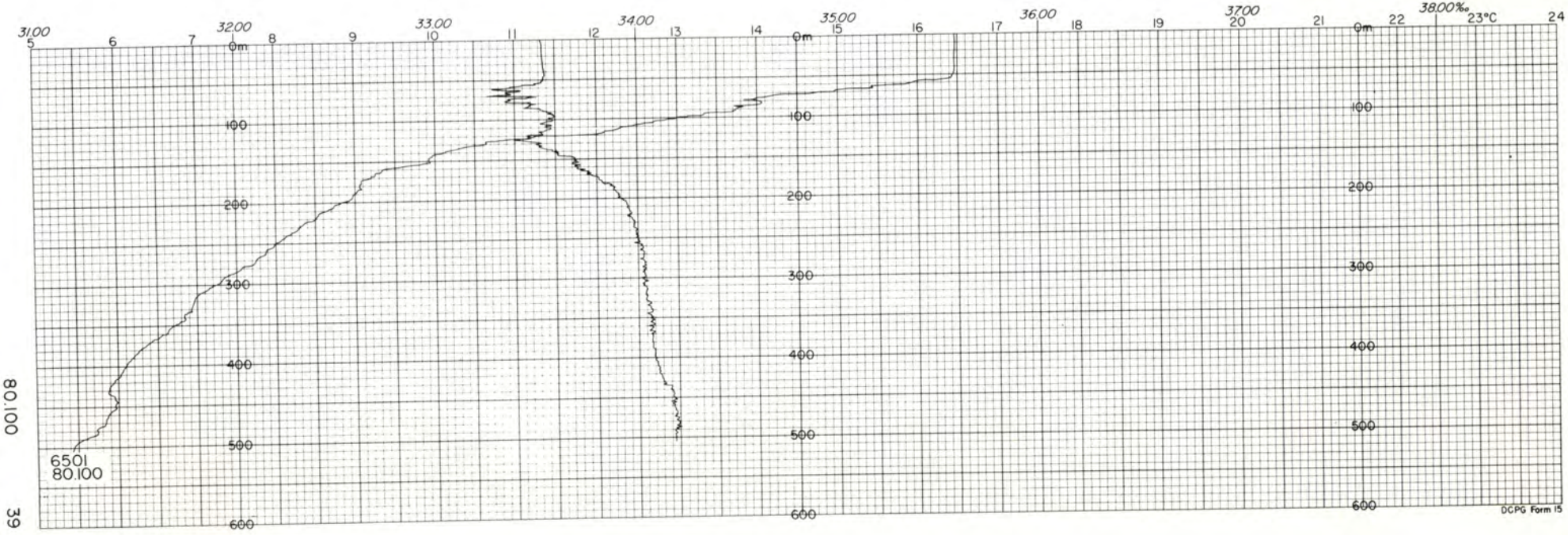
SIO CCOFI 6501

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 20, 1965; 2243 GCT; 32°50'N, 123°53'W; sounding, 2350 fm; wind, 290°, force 4; weather, cloudy; sea, very rough; wire angle, 16°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.50 | 33.562 | 5.79 | 340 | 0 | 16.47 | 33.53 | 24.53 | 341 | 0.00 |
| 10 | 16.52 | 33.568 | 5.78 | 340 | 10 | 16.47 | 33.54 | 24.54 | 341 | 0.03 |
| 29 | 16.53 | 33.569 | 5.85 | 340 | 20 | 16.46 | 33.54 | 24.54 | 340 | 0.07 |
| 53 | 16.48 | 33.568 | 5.80 | 339 | 30 | 16.46 | 33.54 | 24.54 | 340 | 0.10 |
| 77 | 14.60 | 33.377 | 6.10 | 313 | 50 | 16.45 | 33.54 | 24.54 | 340 | 0.17 |
| 106 | 13.01 | 33.590 | 5.59 | 266 | 75 | 14.30 | 33.37 | 24.89 | 307 | 0.25 |
| 131 | 10.78 | 33.461 | 5.00 | 236 | 100 | 13.00 | 33.58 | 25.31 | 267 | 0.32 |
| 156 | 9.94 | 33.666 | 4.35 | 207 | 125 | 10.83 | 33.40 | 25.58 | 241 | 0.39 |
| 185 | 9.08 | 33.828 | 4.17 | 182 | 150 | 9.94 | 33.70 | 25.97 | 205 | 0.44 |
| 220 | 8.61 | 33.964 | 3.54 | 165 | 200 | 8.83 | 33.92 | 26.32 | 171 | 0.54 |
| 259 | 7.98 | 34.013 | 3.10 | 152 | 250 | 8.00 | 34.00 | 26.51 | 153 | 0.62 |
| | | | | | 300 | 7.25 | 34.02 | 26.63 | 141 | 0.70 |
| | | | | | 400 | 6.09 | 34.08 | 26.84 | 122 | 0.84 |
| | | | | | 500 | 5.44 | 34.18 | 27.00 | 107 | 0.96 |




80.100

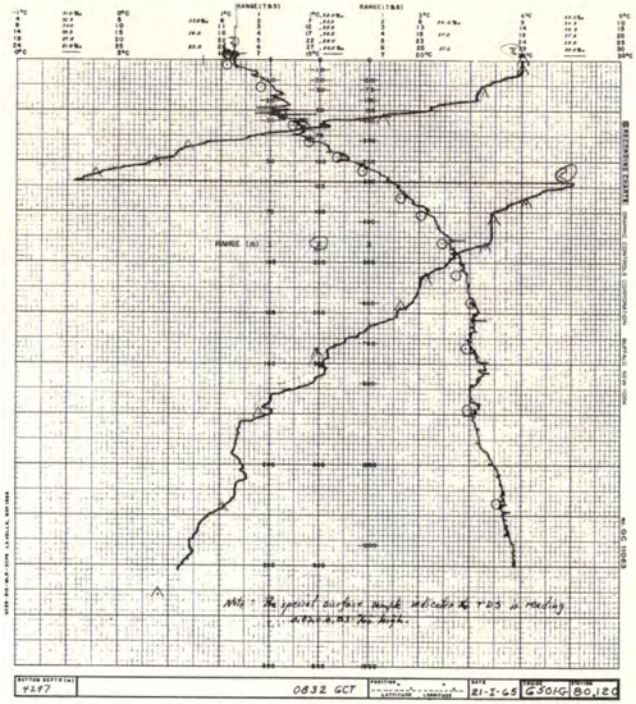
40

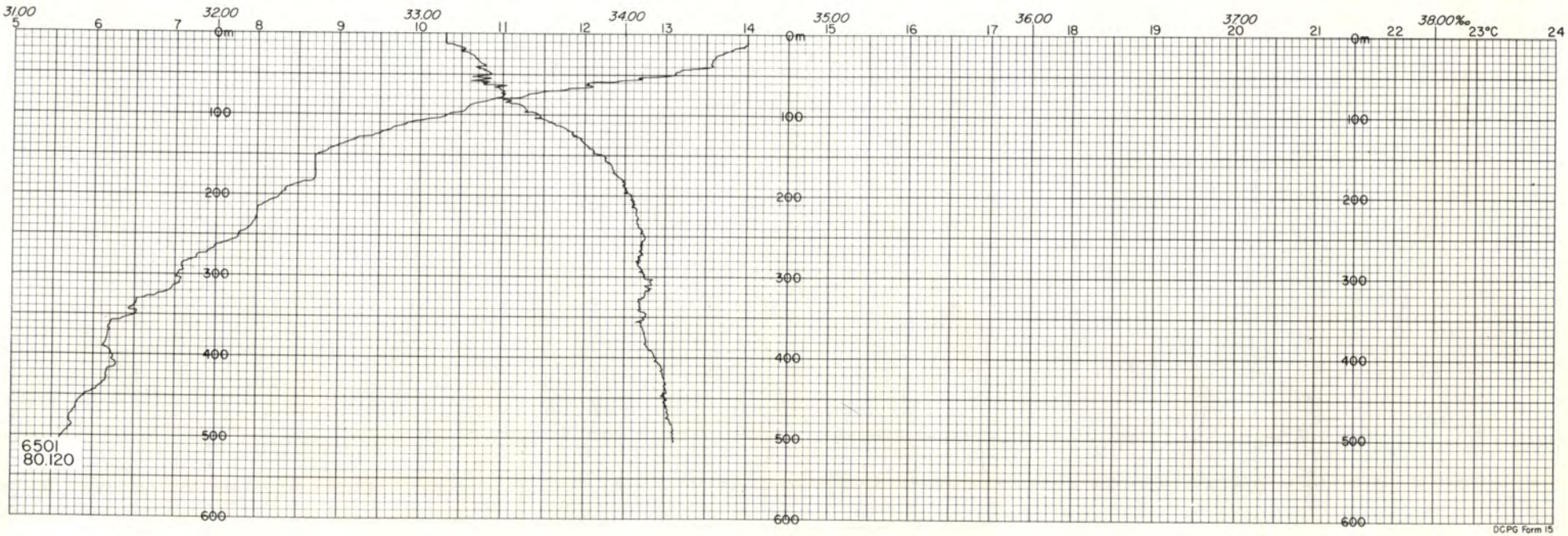
80.120

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | μg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 21, 1965; 0805 GCT; 32°09'N, 125°15'W; sounding, 2350 fm; wind, 310°, force 3; weather, cloudy; sea, moderate; wire angle, 21°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.02 | 33.124 | 6.29 | 0.34 | 5 | 320 | 0 | 14.00 | 33.12 | 24.76 | 320 | 0.00 |
| 9 | 14.01 | 33.122 | 6.30 | 0.34 | 4 | 320 | 10 | 14.00 | 33.13 | 24.76 | 319 | 0.03 |
| 32 | 13.62 | 33.260 | 6.41 | 0.37 | 5 | 302 | 20 | 13.80 | 33.20 | 24.86 | 310 | 0.06 |
| 60 | 12.64 | 33.347 | 5.86 | 0.69 | 7 | 277 | 30 | 13.58 | 33.27 | 24.96 | 301 | 0.09 |
| 69 | 11.88 | 33.390 | 5.27 | 1.01 | 10 | 260 | 50 | 13.09 | 33.34 | 25.11 | 286 | 0.15 |
| 86 | 10.68 | 33.457 | 4.80 | 1.32 | 18 | 235 | 75 | 11.33 | 33.40 | 25.49 | 250 | 0.22 |
| 101 | 10.36 | 33.570 | 4.45 | 1.60 | 21 | 221 | 100 | 10.34 | 33.58 | 25.81 | 220 | 0.28 |
| 114 | 9.78 | 33.672 | 4.02 | 1.76 | 25 | 204 | 125 | 9.43 | 33.76 | 26.10 | 192 | 0.33 |
| 141 | 9.04 | 33.822 | 3.81 | 1.88 | 32 | 182 | 150 | 8.73 | 33.89 | 26.31 | 172 | 0.38 |
| 158 | 8.74 | 33.904 | 3.51 | 1.98 | 36 | 171 | 200 | 8.29 | 34.03 | 26.49 | 155 | 0.46 |
| 186 | 8.70 | 33.988 | 2.63 | 2.26 | 39 | 164 | 250 | 7.78 | 34.10 | 26.62 | 143 | 0.54 |
| 217 | 8.07 | 34.043 | 2.32 | 2.40 | 46 | 151 | 300 | 7.03 | 34.10 | 26.73 | 133 | 0.61 |
| 244 | 7.76 | 34.102 | 1.79 | 2.60 | 52 | 142 | 400 | 6.22 | 34.16 | 26.88 | 118 | 0.74 |
| 289 | 6.98 | 34.085 | 1.74 | 2.66 | 61 | 133 | 500 | 5.63 | 34.24 | 27.02 | 105 | 0.86 |
| 350 | 6.40 | 34.092 | 1.49 | 2.87 | 67 | 125 | | | | | | |
| 443 | 6.03 | 34.207 | 0.78 | 3.16 | 81 | 112 | | | | | | |
| 529 | 5.40 | 34.262 | 0.56 | 3.26 | 102 | 100 | | | | | | |
| 603 | 4.92 | 34.286 | 0.45 | 3.29 | 117 | 93 | | | | | | |



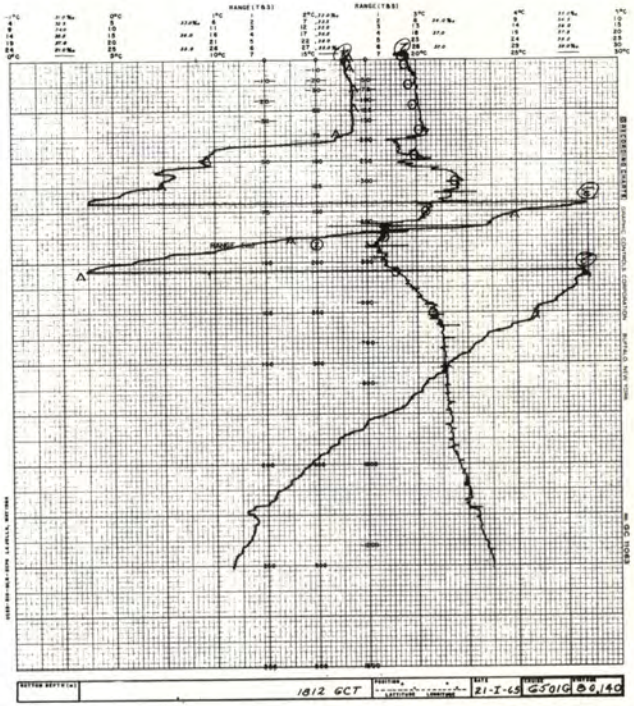

SIO CCOFI 6501

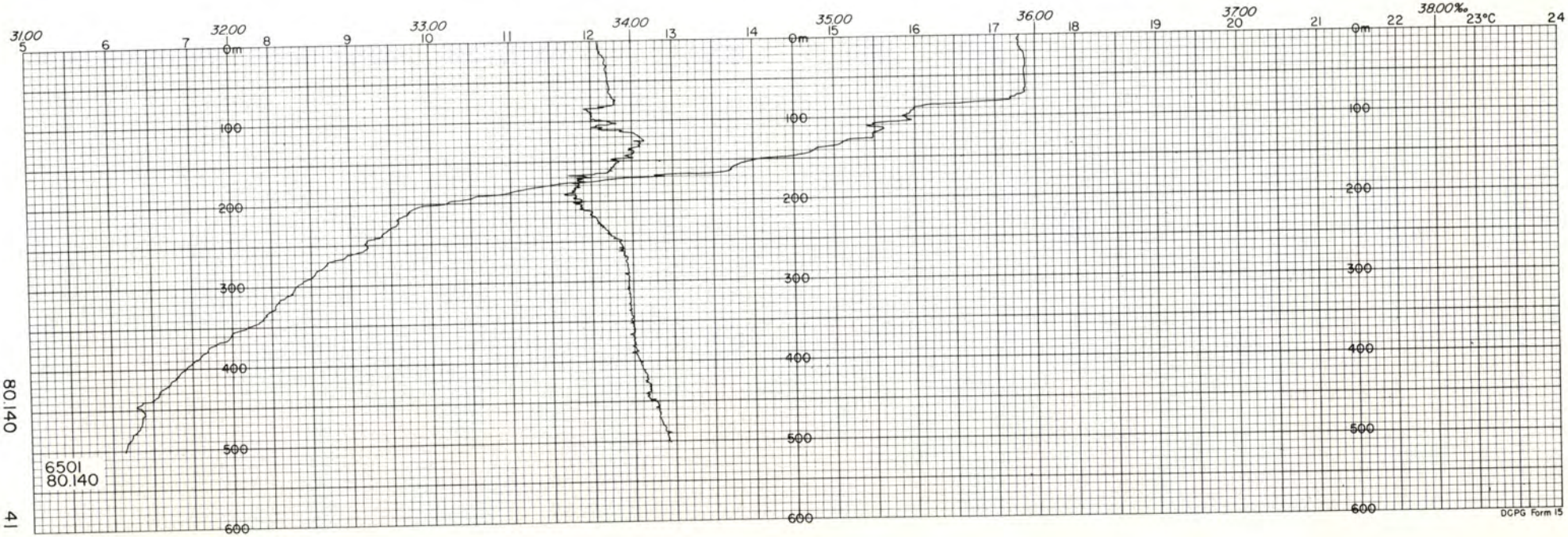
DCPG Form 15

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 21, 1965; 1754 GCT; 31°29'N, 126°36'W; sounding, 2315 fm; wind, 360°, force 1; weather, cloudy; sea, very rough; wire angle, 00°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.34 | 33.845 | 5.77 | 0.30 | 4 | 338 | 0 | 17.30 | 33.83 | 24.57 | 338 | 0.00 |
| 10 | 17.34 | 33.853 | 5.83 | 0.26 | 3 | 337 | 10 | 17.29 | 33.84 | 24.58 | 337 | 0.03 |
| 30 | 17.38 | 33.867 | 5.83 | 0.27 | 2 | 337 | 20 | 17.34 | 33.86 | 24.58 | 337 | 0.07 |
| 50 | 17.38 | 33.882 | 5.84 | 0.27 | 3 | 336 | 30 | 17.36 | 33.87 | 24.58 | 336 | 0.10 |
| 75 | 17.20 | 33.908 | 5.80 | 0.26 | 3 | 330 | 50 | 17.36 | 33.88 | 24.59 | 336 | 0.17 |
| 100 | 15.93 | 33.890 | 5.94 | 0.25 | 4 | 303 | 75 | 17.26 | 33.91 | 24.64 | 331 | 0.25 |
| 125 | 15.48 | 34.050 | 5.68 | 0.32 | 4 | 282 | 100 | 15.86 | 33.88 | 24.94 | 303 | 0.33 |
| 155 | 13.98 | 33.939 | 5.35 | 0.52 | 7 | 259 | 125 | 15.48 | 34.03 | 25.14 | 283 | 0.41 |
| 180 | 11.74 | 33.770 | 5.19 | 0.84 | 11 | 230 | 150 | 14.08 | 33.93 | 25.36 | 262 | 0.48 |
| 125 | 9.67 | 33.810 | 4.70 | 1.37 | 20 | 192 | 200 | 10.18 | 33.73 | 25.95 | 206 | 0.59 |
| 255 | 9.18 | 33.963 | 5.02 | 1.37 | 23 | 173 | 250 | 9.20 | 33.94 | 26.28 | 175 | 0.69 |
| | | | | | | | 300 | 8.31 | 33.98 | 26.45 | 159 | 0.78 |
| | | | | | | | 400 | 6.92 | 34.03 | 26.69 | 136 | 0.93 |
| | | | | | | | 500 | 6.16 | 34.17 | 26.90 | 116 | 1.06 |

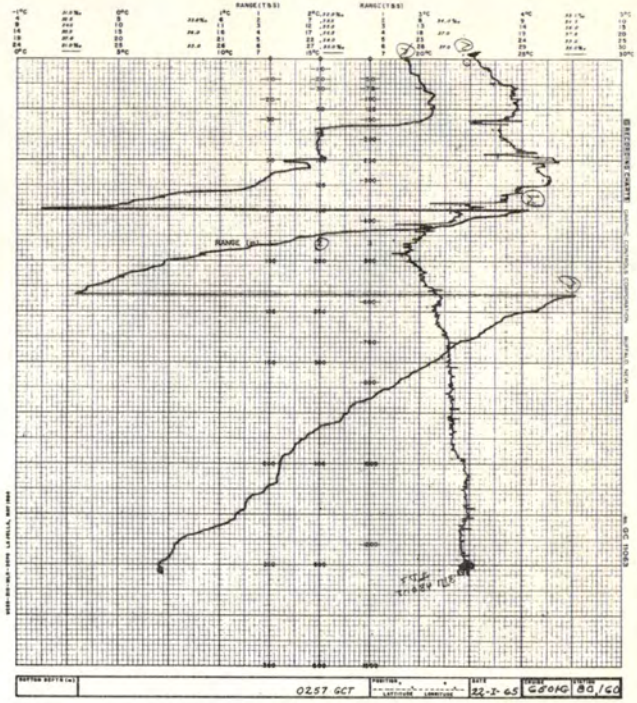


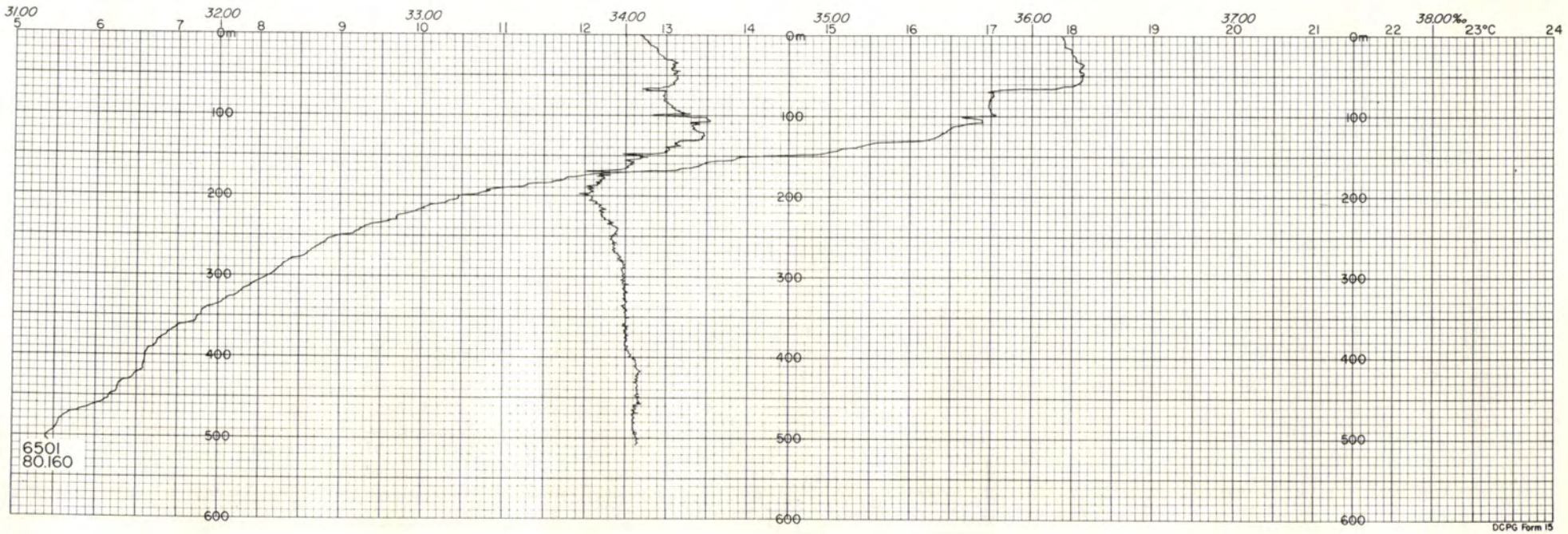



| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 22, 1965; 0257 GCT; 30°48'N, 127°56'W; sounding, 2390 fm; wind, 300°, force 2; weather, partly cloudy; sea, rough.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 17.87 | 34.07 | 24.61 | 334 | 0.00 |
| 10 | 17.90 | 34.11 | 24.64 | 331 | 0.03 |
| 20 | 17.99 | 34.15 | 24.64 | 331 | 0.07 |
| 30 | 18.05 | 34.19 | 24.66 | 329 | 0.10 |
| 50 | 18.12 | 34.25 | 24.69 | 326 | 0.17 |
| 75 | 17.02 | 34.19 | 24.91 | 305 | 0.24 |
| 100 | 16.74 | 34.21 | 24.99 | 298 | 0.32 |
| 125 | 16.36 | 34.38 | 25.21 | 277 | 0.39 |
| 150 | 14.03 | 34.06 | 25.47 | 252 | 0.46 |
| 200 | 10.46 | 33.83 | 25.98 | 203 | 0.58 |
| 250 | 9.01 | 33.93 | 26.30 | 173 | 0.67 |
| 300 | 8.11 | 33.99 | 26.49 | 155 | 0.76 |
| 400 | 6.60 | 34.03 | 26.73 | 132 | 0.91 |
| 500 | 5.41 | 34.05 | 26.90 | 116 | 1.04 |



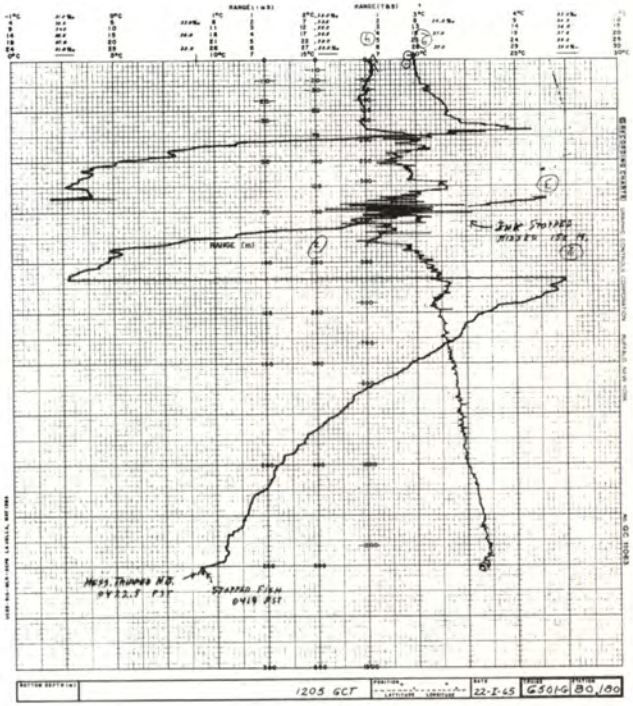



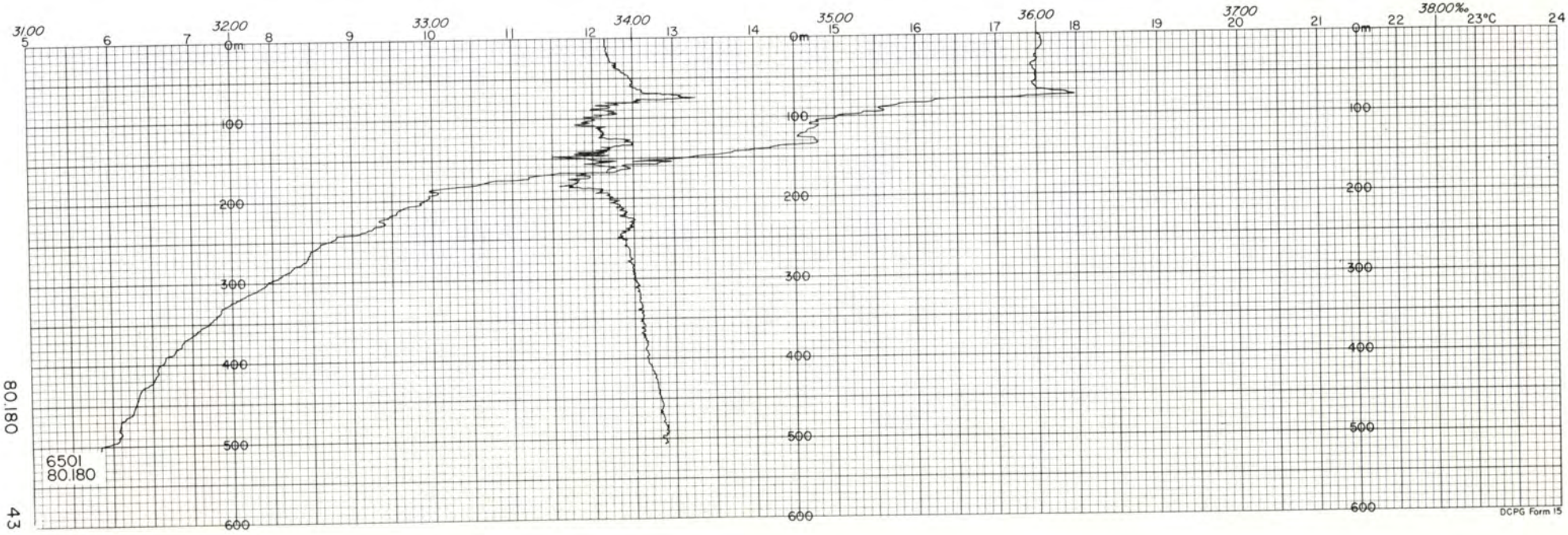
SIO CCOFI 6501

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 22, 1965; 1205 GCT; 30°08'N, 129°17'W; sounding, 2528 fm; wind, 200°, force 2; weather, cloudy; sea, moderate.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 17.55 | 33.87 | 24.54 | 341 | 0.00 |
| 10 | 17.57 | 33.87 | 24.53 | 341 | 0.03 |
| 20 | 17.52 | 33.87 | 24.54 | 340 | 0.07 |
| 30 | 17.49 | 33.89 | 24.57 | 338 | 0.10 |
| 50 | 17.49 | 33.98 | 24.64 | 331 | 0.17 |
| 75 | 17.99 | 34.23 | 24.70 | 325 | 0.25 |
| 100 | 15.03 | 33.79 | 25.05 | 292 | 0.33 |
| 125 | 14.54 | 33.85 | 25.20 | 277 | 0.40 |
| 150 | 13.50 | 33.76 | 25.35 | 263 | 0.47 |
| 200 | 9.90 | 33.88 | 26.12 | 191 | 0.59 |
| 250 | 8.68 | 33.93 | 26.35 | 168 | 0.68 |
| 300 | 7.94 | 34.00 | 26.52 | 152 | 0.76 |
| 400 | 6.61 | 34.06 | 26.75 | 130 | 0.91 |
| 500 | 5.89 | 34.13 | 26.90 | 116 | 1.04 |



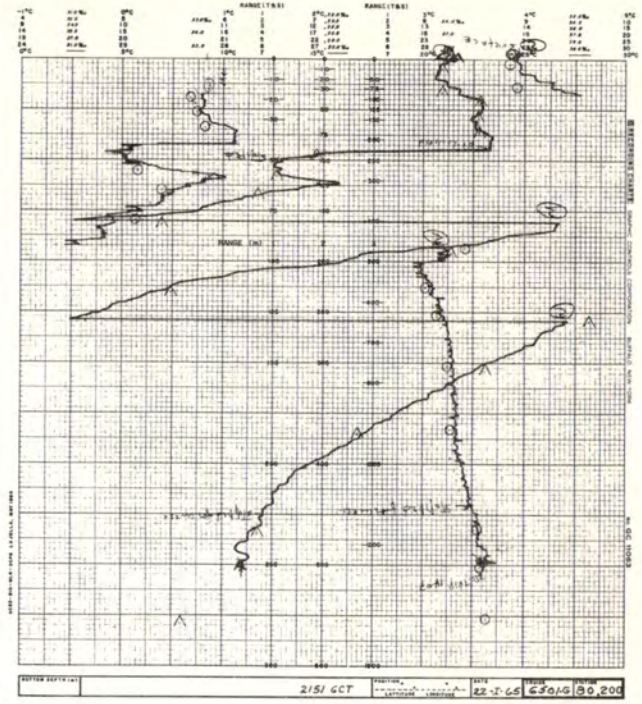



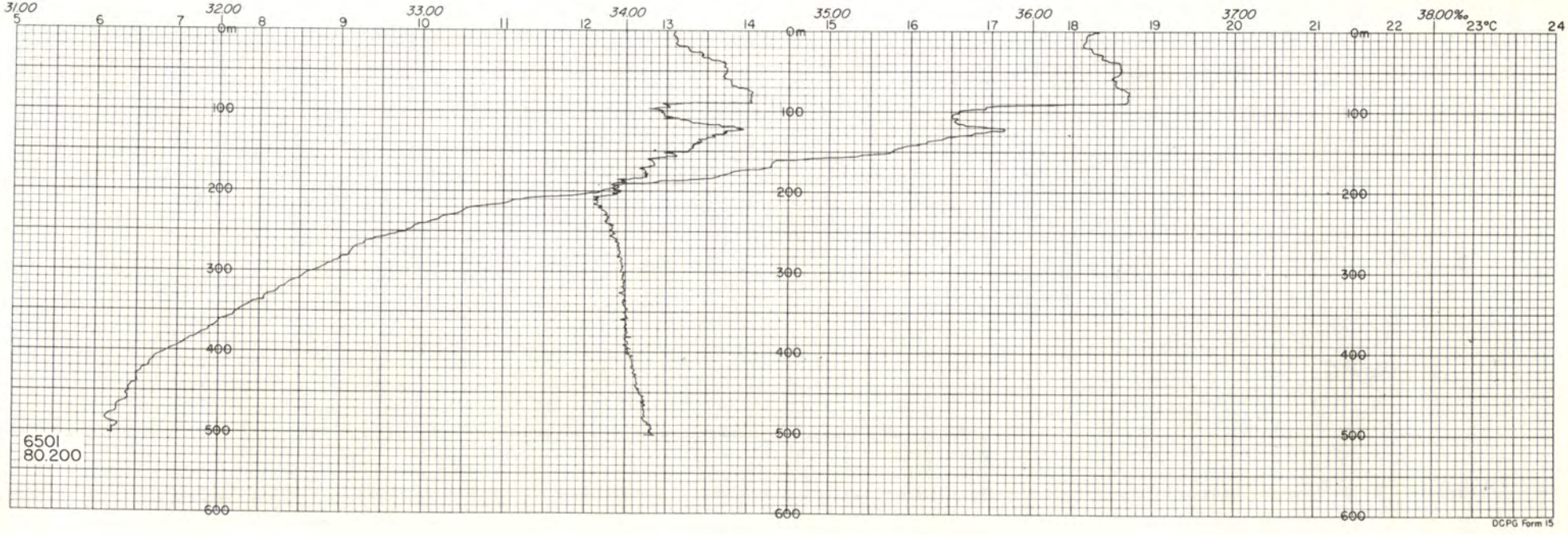

80.180

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 22, 1965; 2125 GCT; 29°29.5'N, 130°36'W; sounding, 2480 fm; wind, 140°, force 3; weather, partly cloudy; sea, very rough; wire angle, 13°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.30 | 34.251 | 5.54 | 0.18 | 4 | 331 | 0 | 18.32 | 34.25 | 24.64 | 331 | 0.00 |
| 10 | 18.18 | 34.241 | 5.53 | 0.19 | 3 | 328 | 10 | 18.16 | 34.25 | 24.68 | 327 | 0.03 |
| 34 | 18.18 | 34.266 | 5.59 | 0.20 | 2 | 327 | 20 | 18.15 | 34.30 | 24.72 | 323 | 0.07 |
| 43 | 18.57 | 34.468 | 5.55 | 0.20 | 3 | 321 | 30 | 18.36 | 34.38 | 24.73 | 323 | 0.10 |
| 58 | 18.55 | 34.495 | 5.57 | 0.17 | 4 | 319 | 50 | 18.58 | 34.49 | 24.76 | 320 | 0.16 |
| 73 | 18.56 | 34.526 | 5.61 | 0.20 | 3 | 317 | 75 | 18.67 | 34.60 | 24.82 | 314 | 0.24 |
| 96 | 16.93 | 34.215 | 5.79 | 0.22 | 3 | 302 | 100 | 16.59 | 34.17 | 24.99 | 297 | 0.32 |
| 116 | 16.53 | 34.261 | 5.69 | 0.25 | 4 | 289 | 125 | 16.92 | 34.50 | 25.17 | 281 | 0.39 |
| 135 | 16.34 | 34.357 | 5.52 | 0.24 | 4 | 278 | 150 | 15.76 | 34.31 | 25.29 | 269 | 0.46 |
| 164 | 15.39 | 34.254 | 5.45 | 0.36 | 6 | 265 | 200 | 12.19 | 33.97 | 25.77 | 223 | 0.59 |
| 192 | 13.28 | 34.066 | 5.19 | 0.56 | 8 | 236 | 250 | 9.80 | 33.94 | 26.18 | 185 | 0.69 |
| 231 | 10.48 | 33.909 | 5.06 | 1.03 | 15 | 198 | 300 | 8.63 | 33.98 | 26.40 | 164 | 0.78 |
| 259 | 9.63 | 33.957 | 4.85 | 1.25 | 21 | 181 | 400 | 6.87 | 34.01 | 26.68 | 137 | 0.94 |
| 308 | 8.62 | 33.997 | 4.32 | 1.61 | 31 | 162 | 500 | 6.21 | 34.12 | 26.85 | 121 | 1.07 |
| 371 | 7.34 | 34.008 | 3.17 | 2.17 | 46 | 143 | | | | | | |
| 469 | 6.35 | 34.120 | 1.42 | 2.86 | 68 | 122 | | | | | | |
| 558 | 5.58 | 34.157 | 0.99 | 3.03 | 83 | 110 | | | | | | |
| 633 | 5.07 | 34.226 | 0.67 | 3.13 | 98 | 99 | | | | | | |



| BOTTLE SAMPLES | | | | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

BLACK DOUGLAS; January 21, 1965; 0203 GCT; 34°15'N, 119°59'W; sounding, 260 fm; wind, 300°, force 6; weather, partly cloudy; sea, very rough; wire angle, 13°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 12.34 | 33.588 | 6.01 | 254 | 0 | (12.34) | (33.59) | (25.45) | (254) | (0.00) |
| 11 | 12.31 | 33.593 | 5.99 | 253 | 10 | 12.31 | 33.59 | 25.46 | 253 | 0.03 |
| 29 | 11.15 | 33.658 | 3.77 | 228 | 20 | 12.23 | 33.60 | 25.48 | 251 | 0.05 |
| 44 | 10.76 | 33.734 | 3.48 | 216 | 30 | 11.12 | 33.66 | 25.73 | 227 | 0.07 |
| 52 | 10.50 | 33.779 | 3.25 | 208 | 50 | 10.56 | 33.77 | 25.92 | 210 | 0.12 |
| 67 | 10.06 | 33.874 | 2.75 | 194 | 75 | 9.92 | 33.92 | 26.14 | 188 | 0.17 |
| 81 | 9.85 | 33.946 | 2.56 | 185 | 100 | 9.67 | 33.97 | 26.22 | 180 | 0.21 |
| 94 | 9.71 | 33.970 | 2.39 | 181 | 125 | 9.44 | 34.04 | 26.32 | 172 | 0.26 |
| 118 | 9.54 | 34.018 | 2.24 | 175 | 150 | 9.08 | 34.08 | 26.41 | 163 | 0.30 |
| 136 | 9.24 | 34.060 | 1.96 | 167 | 200 | 8.67 | 34.13 | 26.51 | 153 | 0.38 |
| 164 | 8.97 | 34.090 | 1.63 | 161 | 250 | 8.24 | 34.19 | 26.62 | 142 | 0.46 |
| 192 | 8.74 | 34.125 | 1.39 | 155 | 300 | 7.78 | 34.22 | 26.71 | 134 | 0.53 |
| 224 | 8.49 | 34.155 | 1.17 | 149 | | | | | | |
| 277 | 8.00 | 34.208 | 0.47 | 138 | | | | | | |
| 329 | 7.52 | 34.236 | 0.40 | 129 | | | | | | |
| 386 | 7.07 | 34.241 | 0.34 | 123 | | | | | | |

BLACK DOUGLAS; January 20, 1965; 2144 GCT; 34°08'N, 119°34'W; sounding, 135 fm; wind, 280°, force 6; weather, partly cloudy; sea, rough; wire angle, 19°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 12.37 | 33.581 | 6.04 | 255 | 0 | (12.37) | (33.58) | (25.44) | (255) | (0.00) |
| 11 | 12.39 | 33.582 | 6.05 | 255 | 10 | 12.39 | 33.58 | 25.43 | 255 | 0.03 |
| 29 | 12.36 | 33.582 | 6.06 | 255 | 20 | 12.38 | 33.58 | 25.43 | 255 | 0.05 |
| 44 | 12.33 | 33.584 | 6.06 | 254 | 30 | 12.36 | 33.58 | 25.44 | 255 | 0.08 |
| 52 | 12.30 | 33.585 | 5.82 | 253 | 50 | 12.32 | 33.58 | 25.45 | 254 | 0.13 |
| 66 | 11.71 | 33.636 | 4.25 | 239 | 75 | 11.25 | 33.68 | 25.72 | 228 | 0.19 |
| 81 | 11.04 | 33.698 | 3.57 | 223 | 100 | 10.53 | 33.79 | 25.94 | 208 | 0.24 |
| 98 | 10.56 | 33.783 | 3.12 | 209 | 125 | 10.27 | 33.83 | 26.01 | 200 | 0.29 |
| 121 | 10.34 | 33.820 | 2.92 | 202 | 150 | 9.75 | 33.97 | 26.21 | 182 | 0.34 |
| 140 | 9.82 | 33.941 | 2.50 | 185 | 200 | (9.00) | (34.14) | (26.47) | (157) | (0.43) |
| 167 | 9.64 | 34.016 | 2.31 | 176 | | | | | | |
| 190 | 9.20 | 34.103 | 1.74 | 163 | | | | | | |

| BOTTLE SAMPLES | | | | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| BLACK DOUGLAS; January 21, 1965; 0612 GCT; 33°52'N, 120°07.5'W; sounding, 60 fm; wind, 280°, force 8; weather, partly cloudy; sea, high; wire angle, 18°. | | | | | | | | | | | | |
| 1 | 12.05 | 33.610 | 5.54 | | | 247 | 0 | (12.05) | (33.61) | (25.52) | (247) | (0.00) |
| 11 | 12.06 | 33.611 | 5.54 | | | 247 | 10 | 12.06 | 33.61 | 25.52 | 247 | 0.02 |
| 23 | 12.07 | 33.606 | 5.50 | | | 248 | 20 | 12.07 | 33.61 | 25.52 | 247 | 0.05 |
| 33 | 12.02 | 33.611 | 5.45 | | | 246 | 30 | 12.04 | 33.61 | 25.52 | 247 | 0.07 |
| 43 | 11.76 | 33.619 | 4.93 | | | 241 | 50 | 11.40 | 33.66 | 25.68 | 232 | 0.12 |
| 55 | 10.93 | 33.737 | 3.78 | | | 218 | 75 | 10.04 | 33.88 | 26.09 | 193 | 0.18 |
| 71 | 10.16 | 33.862 | 2.87 | | | 196 | 100 | (9.47) | (33.98) | (26.26) | (176) | (0.22) |
| 94 | 9.58 | 33.966 | 2.39 | | | 179 | | | | | | |
| BLACK DOUGLAS; January 21, 1965; 1825 GCT; 33°44'N, 120°24.5'W; sounding, 600 fm; wind, 330°, force 6; weather, cloudy; sea, very rough; wire angle, 09°. | | | | | | | | | | | | |
| 1 | 12.49 | 33.599 | 5.81 | | | 256 | 0 | (12.49) | (33.60) | (25.43) | (256) | (0.00) |
| 11 | 12.46 | 33.587 | 5.81 | | | 256 | 10 | 12.46 | 33.59 | 25.43 | 256 | 0.03 |
| 34 | 12.44 | 33.584 | 5.78 | | | 256 | 20 | 12.45 | 33.59 | 25.43 | 256 | 0.05 |
| 63 | 11.42 | 33.640 | 4.43 | | | 234 | 30 | 12.44 | 33.58 | 25.42 | 256 | 0.08 |
| 73 | 10.68 | 33.664 | 3.93 | | | 219 | 50 | 12.09 | 33.61 | 25.51 | 248 | 0.13 |
| 92 | 10.16 | 33.747 | 3.42 | | | 205 | 75 | 10.61 | 33.67 | 25.83 | 218 | 0.19 |
| 107 | 9.84 | 33.779 | 3.32 | | | 197 | 100 | 9.97 | 33.77 | 26.02 | 200 | 0.24 |
| 121 | 9.65 | 33.869 | 2.86 | | | 187 | 125 | 9.63 | 33.89 | 26.17 | 186 | 0.29 |
| 151 | 9.40 | 33.939 | 2.55 | | | 178 | 150 | 9.41 | 33.94 | 26.24 | 178 | 0.33 |
| 169 | 9.05 | 34.011 | 2.32 | | | 168 | 200 | 8.66 | 34.09 | 26.48 | 156 | 0.42 |
| 198 | 8.68 | 34.079 | 1.93 | | | 157 | 250 | 8.16 | 34.20 | 26.64 | 141 | 0.50 |
| 232 | 8.33 | 34.155 | 1.50 | | | 146 | 300 | 7.58 | 34.23 | 26.75 | 130 | 0.57 |
| 260 | 8.08 | 34.212 | 1.15 | | | 139 | 400 | 6.83 | 34.26 | 26.88 | 118 | 0.69 |
| 308 | 7.48 | 34.226 | 0.89 | | | 129 | 500 | 6.16 | 34.30 | 27.00 | 107 | 0.81 |
| 370 | 7.04 | 34.249 | 0.70 | | | 122 | 600 | 5.72 | 34.36 | 27.10 | 97 | 0.92 |
| 466 | 6.36 | 34.278 | 0.43 | | | 111 | | | | | | |
| 551 | 5.92 | 34.339 | 0.29 | | | 101 | | | | | | |
| 625 | 5.62 | 34.379 | 0.26 | | | 94 | | | | | | |

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| BLACK DOUGLAS; January 21, 1965; 2220 GCT; 33°34'N, 120°45'W; sounding, 850 fm; wind, 320°, force 8; weather, partly cloudy; sea, very rough; wire angle, 10°. | | | | | | | | | | | | |
| 1 | 12.48 | 33.503 | 5.86 | | | 263 | 0 | (12.48) | (33.50) | (25.35) | (263) | (0.00) |
| 11 | 12.48 | 33.497 | 5.90 | | | 263 | 10 | 12.48 | 33.50 | 25.35 | 263 | 0.03 |
| 35 | 12.43 | 33.497 | 5.97 | | | 262 | 20 | 12.47 | 33.50 | 25.36 | 263 | 0.05 |
| 63 | 11.19 | 33.581 | 4.52 | | | 234 | 30 | 12.44 | 33.50 | 25.36 | 262 | 0.08 |
| 73 | 10.76 | 33.600 | 4.22 | | | 225 | 50 | 12.40 | 33.50 | 25.37 | 262 | 0.13 |
| 91 | 9.89 | 33.709 | 3.63 | | | 203 | 75 | 10.67 | 33.61 | 25.77 | 223 | 0.19 |
| 106 | 9.72 | 33.893a) | 3.06 | | | 187 | 100 | 9.90 | 33.84 | 26.08 | 194 | 0.25 |
| 119 | 9.36 | 33.922 | 2.59 | | | 179 | 125 | 9.26 | 33.94 | 26.27 | 176 | 0.29 |
| 148 | 8.96 | 34.018 | 2.26 | | | 166 | 150 | 8.93 | 34.02 | 26.38 | 165 | 0.34 |
| 165 | 8.76 | 34.058 | 2.03 | | | 160 | 200 | 8.43 | 34.12 | 26.54 | 150 | 0.42 |
| 193 | 8.50 | 34.116 | 1.77 | | | 152 | 250 | 8.07 | 34.15 | 26.62 | 143 | 0.49 |
| 226 | 8.18 | 34.140 | 1.46 | | | 145 | 300 | 7.45 | 34.22 | 26.76 | 129 | 0.56 |
| 254 | 8.04 | 34.156 | 1.34 | | | 142 | 400 | 6.76 | 34.28 | 26.91 | 116 | 0.69 |
| 301 | 7.44 | 34.223 | 0.87 | | | 129 | 500 | 6.07 | 34.31 | 27.02 | 105 | 0.81 |
| 362 | 7.00 | 34.258 | 0.62 | | | 120 | 600 | 5.50 | 34.34 | 27.11 | 96 | 0.91 |
| 457 | 6.41 | 34.319 | 0.42 | | | 108 | | | | | | |
| 544 | 5.76 | 34.307 | 0.32 | | | 101 | | | | | | |
| 617 | 5.44 | 34.368 | 0.28 | | | 93 | | | | | | |
| BLACK DOUGLAS; January 22, 1965; 0421 GCT; 33°15'N, 121°26.5'W; sounding, 2000 fm; wind, 330°, force 6; weather, clear; sea, rough; wire angle, 25°. | | | | | | | | | | | | |
| 1 | 12.41 | 33.054 | 6.16 | | | 295 | 0 | (12.41) | (33.05) | (25.02) | (295) | (0.00) |
| 10 | 12.41 | 33.091 | 6.12 | | | 292 | 10 | 12.41 | 33.09 | 25.05 | 292 | 0.03 |
| 32 | 12.54 | 33.342 | 6.16 | | | 276 | 20 | 12.46 | 33.16 | 25.09 | 288 | 0.06 |
| 58 | 11.72 | 33.267 | 5.89 | | | 266 | 30 | 12.53 | 33.33 | 25.21 | 276 | 0.09 |
| 66 | 10.85 | 33.196 | 5.59 | | | 257 | 50 | 12.59 | 33.34 | 25.21 | 277 | 0.14 |
| 85 | 9.82 | 33.255 | 4.96 | | | 236 | 75 | 10.81 | 33.22 | 25.45 | 254 | 0.21 |
| 99 | 9.62 | 33.588 | 4.42 | | | 208 | 100 | 9.61 | 33.60 | 25.95 | 207 | 0.27 |
| 110 | 9.44 | 33.645 | 4.26 | | | 201 | 125 | 9.04 | 33.72 | 26.13 | 189 | 0.32 |
| 136 | 8.80 | 33.790 | 4.17 | | | 180 | 150 | 8.62 | 33.89 | 26.33 | 170 | 0.36 |
| 151 | 8.61 | 33.897 | 3.59 | | | 170 | 200 | 8.33 | 34.08 | 26.52 | 152 | 0.44 |
| 176 | 8.44 | 34.007 | 2.47 | | | 159 | 250 | 7.83 | 34.12 | 26.63 | 142 | 0.52 |
| 204 | 8.29 | 34.079 | 2.05 | | | 151 | 300 | 7.28 | 34.16 | 26.74 | 131 | 0.59 |
| 228 | 8.04 | 34.097 | 1.81 | | | 147 | 400 | 6.55 | 34.24 | 26.90 | 116 | 0.72 |
| 270 | 7.61 | 34.138 | 1.48 | | | 137 | 500 | 6.04 | 34.31 | 27.02 | 104 | 0.84 |
| 323 | 7.02 | 34.177 | 1.03 | | | 127 | | | | | | |
| 411 | 6.50 | 34.251 | 0.52 | | | 114 | | | | | | |
| 491 | 6.08 | 34.301 | 0.36 | | | 106 | | | | | | |
| 560 | 5.66 | 34.361 | 0.29 | | | 96 | | | | | | |

a) Possible evaporation; value falls on property curve.

| BOTTLE SAMPLES | | | | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| BLACK DOUGLAS; January 22, 1965; 1456 GCT; 32°31.5'N, 122°46'W; sounding, 2200 fm; wind, 320°, force 3; weather, fog; sea, rough; wire angle, 04°. | | | | | | | | | | | | |
| 0 | 13.14 | 32.926 | 6.20 | | | 362 | 0 | 13.14 | 32.93 | 24.78 | 317 | 0.00 |
| 10 | 13.16 | 32.926 | 6.21 | | | 362 | 10 | 13.16 | 32.93 | 24.78 | 318 | 0.03 |
| 28 | 13.03 | 33.032 | 6.17 | | | 308 | 20 | 13.16 | 32.94 | 24.79 | 317 | 0.06 |
| 57 | 12.18 | 33.162 | 5.82 | | | 282 | 30 | 12.99 | 33.04 | 24.90 | 306 | 0.09 |
| 68 | 11.02 | 32.994 | 5.83 | | | 282 | 50 | 12.82 | 33.10 | 24.98 | 299 | 0.16 |
| 78 | 11.36 | 33.136 | 5.23 | | | 270 | 75 | 11.18 | 33.06 | 25.26 | 272 | 0.23 |
| 82 | 11.79 | 33.310 | 5.56 | | | 265 | 100 | 10.80 | 33.33 | 25.53 | 246 | 0.29 |
| 96 | 10.50 | 33.238 | 5.28 | | | 248 | 125 | 9.84 | 33.62 | 25.92 | 209 | 0.35 |
| 111 | 10.18 | 33.487 | 4.69 | | | 224 | 150 | 9.23 | 33.80 | 26.16 | 186 | 0.40 |
| 134 | 9.60 | 33.683 | 3.98 | | | 200 | 200 | 8.41 | 34.02 | 26.46 | 158 | 0.49 |
| 153 | 9.14 | 33.820 | 3.39 | | | 183 | 250 | 7.94 | 34.11 | 26.61 | 144 | 0.56 |
| 183 | 8.58 | 33.970 | 3.02 | | | 164 | 300 | 7.54 | 34.16 | 26.70 | 135 | 0.64 |
| 211 | 8.30 | 34.042 | 2.34 | | | 154 | 400 | 6.72 | 34.21 | 26.86 | 120 | 0.77 |
| 239 | 8.04 | 34.092 | 1.79 | | | 147 | 500 | 5.80 | 34.24 | 27.00 | 107 | 0.89 |
| 286 | 7.64 | 34.141 | 1.41 | | | 138 | 600 | (5.14) | (34.31) | (27.13) | (94) | (1.00) |
| 339 | 7.25 | 34.190 | 1.03 | | | 129 | | | | | | |
| 420 | 6.54 | 34.220 | 0.66 | | | 117 | | | | | | |
| 501 | 5.79 | 34.239 | 0.49 | | | 107 | | | | | | |
| 584 | 5.22 | 34.296 | 0.32 | | | 96 | | | | | | |
| BLACK DOUGLAS; January 24, 1965; 0550 GCT; 33°50'N, 118°37.5'W; sounding, 360 fm; wind, 360°, force 2; weather, drizzle; sea, missing; wire angle, missing. | | | | | | | | | | | | |
| 0 | 13.48 | 33.533 | 6.72 | | | 279 | 0 | 13.48 | 33.53 | 25.18 | 280 | 0.00 |
| 10 | 13.45 | 33.532 | 6.68 | | | 279 | 10 | 13.45 | 33.53 | 25.18 | 279 | 0.03 |
| 29 | 13.06 | 33.529 | 5.97 | | | 272 | 20 | 13.40 | 33.53 | 25.20 | 278 | 0.06 |
| 53 | 11.46 | 33.552 | 4.38 | | | 241 | 30 | 13.05 | 33.53 | 25.27 | 271 | 0.08 |
| 63 | 10.92 | 33.649 | 3.92 | | | 224 | 50 | 11.54 | 33.55 | 25.57 | 242 | 0.13 |
| 73 | 10.80 | 33.715 | 3.45 | | | 218 | 75 | 10.78 | 33.72 | 25.84 | 217 | 0.19 |
| 87 | 10.52 | 33.738 | 3.34 | | | 211 | 100 | 10.44 | 33.82 | 25.98 | 204 | 0.25 |
| 102 | 10.42 | 33.827 | 2.94 | | | 203 | 125 | 10.12 | 33.87 | 26.07 | 195 | 0.30 |
| 127 | 10.10 | 33.876 | 2.84 | | | 194 | 150 | 9.86 | 33.93 | 26.16 | 186 | 0.34 |
| 147 | 9.90 | 33.923 | 2.77 | | | 187 | 200 | 9.21 | 34.12 | 26.42 | 162 | 0.43 |
| 171 | 9.45 | 33.990 | 2.59 | | | 175 | 250 | 8.60 | 34.19 | 26.57 | 148 | 0.51 |
| 200 | 9.21 | 34.123 | 2.01 | | | 162 | 300 | 8.13 | 34.25 | 26.69 | 136 | 0.59 |
| 228 | 8.88 | 34.142 | 1.84 | | | 155 | 400 | 7.21 | 34.27 | 26.84 | 122 | 0.72 |
| 266 | 8.40 | 34.225 | 1.11 | | | 142 | 500 | 6.43 | 34.30 | 26.97 | 110 | 0.84 |
| 324 | 7.96 | 34.254 | 0.88 | | | 134 | | | | | | |
| 395 | 7.25 | 34.272 | 0.62 | | | 123 | | | | | | |
| 466 | 6.70 | 34.275 | 0.38 | | | 115 | | | | | | |
| 545 | 6.01 | 34.353 | 0.22 | | | 101 | | | | | | |

| BOTTLE SAMPLES | | | | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

BLACK DOUGLAS; January 24, 1965; 0222 GCT; 33°40'N, 118°58'W; sounding, 480 fm; wind, direction missing, force 1; weather, overcast; sea, missing; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.46 | 33.502 | 6.07 | 281 | 0 | (13.46) | (33.50) | (25.16) | (281) | (0.00) |
| 11 | 13.46 | 33.508 | 6.03 | 281 | 10 | 13.46 | 33.51 | 25.17 | 281 | 0.03 |
| 30 | 13.36 | 33.511 | 5.98 | 279 | 20 | 13.44 | 33.51 | 25.17 | 280 | 0.06 |
| 54 | 11.50 | 33.505 | 4.79 | 245 | 30 | 13.36 | 33.51 | 25.19 | 279 | 0.08 |
| 64 | 10.80 | 33.595 | 4.15 | 226 | 50 | 11.70 | 33.51 | 25.51 | 248 | 0.14 |
| 74 | 10.68 | 33.626 | 3.96 | 222 | 75 | 10.67 | 33.63 | 25.79 | 222 | 0.20 |
| 88 | 10.62 | 33.655 | 3.80 | 219 | 100 | 10.37 | 33.75 | 25.93 | 208 | 0.25 |
| 103 | 10.28 | 33.769 | 3.32 | 205 | 125 | 9.95 | 33.87 | 26.10 | 192 | 0.30 |
| 128 | 9.89a) | 33.887 | 2.91 | 190 | 150 | 9.23 | 33.96 | 26.29 | 174 | 0.35 |
| 147 | 9.30 | 33.949 | 2.81 | 176 | 200 | 8.87 | 34.13 | 26.48 | 156 | 0.43 |
| 171 | 8.93 | 34.004 | 2.64 | 166 | 250 | 8.41 | 34.21 | 26.61 | 143 | 0.51 |
| 199 | 8.88 | 34.121 | 2.02 | 157 | 300 | 7.94 | 34.24 | 26.71 | 134 | 0.58 |
| 228 | 8.66 | 34.186 | 1.50 | 149 | 400 | 7.11 | 34.28 | 26.86 | 120 | 0.71 |
| 266 | 8.24 | 34.221 | 1.13 | 140 | 500 | 6.35 | 34.34 | 27.01 | 106 | 0.83 |
| 324 | 7.73 | 34.255 | 0.83 | 130 | | | | | | |
| 396 | 7.13 | 34.275 | 0.59 | 121 | | | | | | |
| 468 | 6.62 | 34.319 | 0.37 | 111 | | | | | | |
| 546 | 5.94 | 34.359 | 0.22 | 100 | | | | | | |

BLACK DOUGLAS; January 23, 1965; 2243 GCT; 33°30'N, 119°19'W; sounding, 900 fm; wind, 240°, force 2; weather, overcast; sea, slight; wire angle, 02°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.90 | 33.568 | 6.13 | 266 | 0 | 12.90 | 33.57 | 25.33 | 266 | 0.00 |
| 10 | 12.74 | 33.587 | 6.11 | 261 | 10 | 12.74 | 33.59 | 25.37 | 261 | 0.03 |
| 29 | 12.64 | 33.574 | 5.95 | 261 | 20 | 12.70 | 33.58 | 25.37 | 261 | 0.05 |
| 39 | 11.97 | 33.605 | 5.22 | 246 | 30 | 12.63 | 33.57 | 25.38 | 261 | 0.08 |
| 49 | 10.85 | 33.656 | 4.20 | 223 | 50 | 10.78 | 33.66 | 25.79 | 221 | 0.13 |
| 63 | 10.21 | 33.740 | 3.55 | 206 | 75 | 9.92 | 33.82 | 26.07 | 195 | 0.18 |
| 78 | 9.85 | 33.841 | 3.06 | 193 | 100 | 9.50 | 33.94 | 26.23 | 180 | 0.23 |
| 98 | 9.51 | 33.932 | 2.66 | 181 | 125 | 9.26 | 34.00 | 26.31 | 172 | 0.27 |
| 120 | 9.32 | 33.984 | 2.45 | 174 | 150 | 9.10 | 34.04 | 26.37 | 166 | 0.31 |
| 141 | 9.15 | 34.021 | 2.30 | 168 | 200 | 8.82 | 34.15 | 26.50 | 154 | 0.40 |
| 169 | 9.02 | 34.059 | 2.07 | 164 | 250 | 8.34 | 34.22 | 26.63 | 142 | 0.47 |
| 198 | 8.83 | 34.149 | 1.69b) | 154 | 300 | 7.75 | 34.25 | 26.74 | 131 | 0.54 |
| 227 | 8.58 | 34.189 | 1.57 | 147 | 400 | 6.91 | 34.29 | 26.89 | 117 | 0.67 |
| 265 | 8.16 | 34.233 | 1.02 | 138 | 500 | 6.34 | 34.34 | 27.01 | 106 | 0.79 |
| 323 | 7.50 | 34.260 | 0.60 | 127 | | | | | | |
| 394 | 6.94 | 34.291 | 0.48 | 117 | | | | | | |
| 466 | 6.56 | 34.325 | 0.34 | 110 | | | | | | |
| 545 | 6.04 | 34.349 | 0.25 | 101 | | | | | | |

a) Alternate value, 9.73°C, not used in interpolation.
b) Alternate value, 1.54 ml/L.

50

87.50

| BOTTLE SAMPLES | | | | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| BLACK DOUGLAS; January 23, 1965; 1936 GCT; 33°20'N, 119°39.5'W; sounding, 40 fm; wind, 270°, force 3; weather, overcast; sea, moderate; wire angle, 02°. | | | | | | | | | | | | |
| 0 | 12.41 | 33.564 | 5.75 | | | 257 | 0 | 12.41 | 33.56 | 25.41 | 257 | 0.00 |
| 10 | 12.36 | 33.569 | 5.73 | | | 256 | 10 | 12.36 | 33.57 | 25.43 | 256 | 0.03 |
| 19 | 12.36 | 33.579 | 5.69 | | | 255 | 20 | 12.36 | 33.58 | 25.44 | 255 | 0.05 |
| 29 | 12.32 | 33.604 | 5.63 | | | 252 | 30 | 12.33 | 33.61 | 25.47 | 252 | 0.08 |
| 49 | 11.31 | 33.637 | 4.58 | | | 232 | 50 | 11.24 | 33.64 | 25.69 | 231 | 0.13 |
| 63 | 10.34 | 33.728 | 3.77 | | | 209 | | | | | | |

87.80

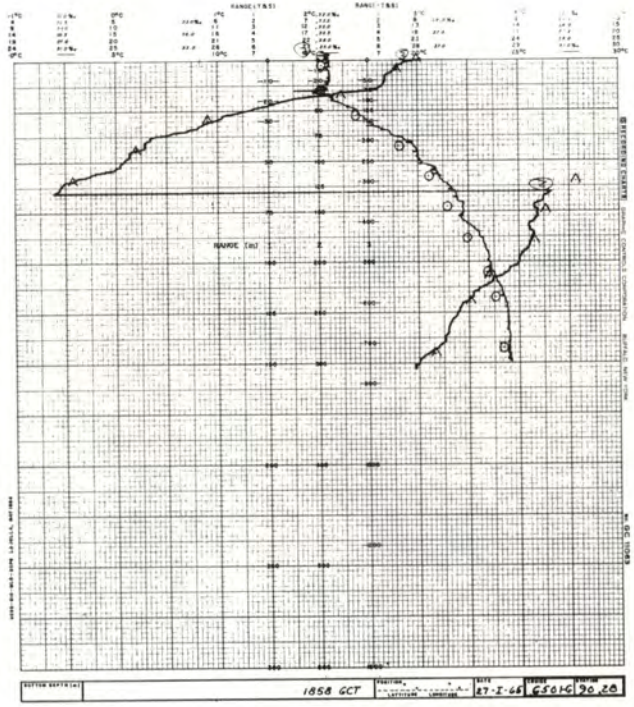
| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BLACK DOUGLAS; January 23, 1965; 0126 GCT; 32°20'N, 121°43'W; sounding, 2200 fm; wind, 320°, force 5; weather, cloudy; sea, rough; wire angle, 08°. | | | | | | | | | | | | |
| 0 | 14.65 | 33.525 | 5.86 | | | 303 | 0 | 14.65 | 33.52 | 24.93 | 304 | 0.00 |
| 10 | 14.64 | 33.517 | 5.88 | | | 304 | 10 | 14.64 | 33.52 | 24.93 | 303 | 0.03 |
| 29 | 14.60 | 33.514 | 5.89 | | | 303 | 20 | 14.63 | 33.52 | 24.93 | 303 | 0.06 |
| 58 | 13.75 | 33.462 | 5.89 | | | 290 | 30 | 14.59 | 33.51 | 24.93 | 303 | 0.09 |
| 66 | 13.48 | 33.454 | 5.79 | | | 285 | 50 | 13.98 | 33.48 | 25.04 | 293 | 0.15 |
| 82 | 12.32 | 33.550 | 5.09 | | | 256 | 75 | 12.88 | 33.50 | 25.28 | 270 | 0.22 |
| 96 | 10.78 | 33.517 | 4.53 | | | 232 | 100 | 10.58 | 33.53 | 25.73 | 228 | 0.28 |
| 111 | 10.20 | 33.606 | 4.12 | | | 216 | 125 | 9.72 | 33.73 | 26.03 | 199 | 0.34 |
| 134 | 9.42 | 33.811 | 3.26 | | | 188 | 150 | 9.12 | 33.87 | 26.24 | 179 | 0.39 |
| 152 | 9.07 | 33.879 | 3.00 | | | 178 | 200 | 8.26 | 34.05 | 26.51 | 153 | 0.47 |
| 181 | 8.58 | 34.035 | 2.42 | | | 159 | 250 | 7.48 | 34.08 | 26.65 | 140 | 0.55 |
| 209 | 8.10 | 34.048 | 2.20 | | | 151 | 300 | 6.99 | 34.12 | 26.75 | 131 | 0.62 |
| 238 | 7.62 | 34.071 | 1.96 | | | 143 | 400 | 6.50 | 34.24 | 26.91 | 115 | 0.74 |
| 284 | 7.14 | 34.105 | 1.53 | | | 134 | 500 | 5.96 | 34.32 | 27.04 | 103 | 0.86 |
| 336 | 6.72 | 34.160 | 1.07 | | | 124 | 600 | (5.40) | (34.35) | (27.13) | (94) | (0.96) |
| 418 | 6.43 | 34.260 | 0.51 | | | 113 | | | | | | |
| 500 | 5.96 | 34.321 | 0.31 | | | 103 | | | | | | |
| 583 | 5.48 | 34.347 | 0.26 | | | 95 | | | | | | |

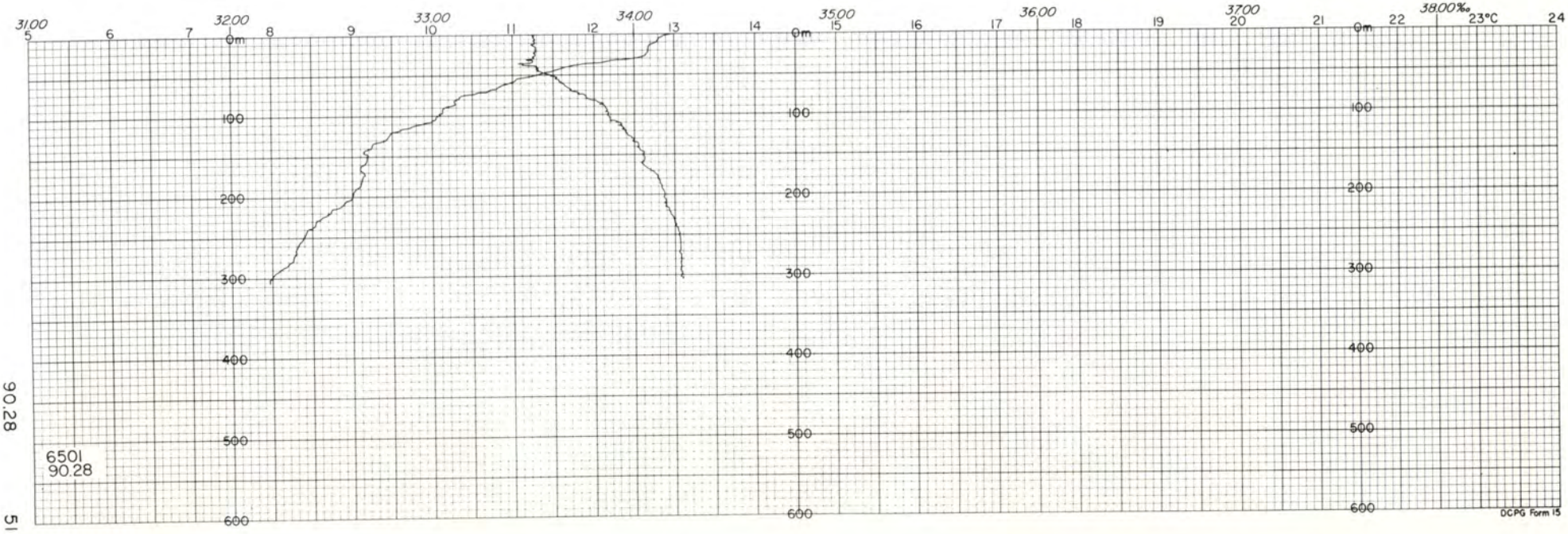
SIO CC0F1 6501

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

ALEXANDER AGASSIZ; January 27, 1965; 1815 GCT; 33°28.5'N, 117°46.5'W; sounding, 210 fm; wind, 260°, force 2; weather, overcast; sea, smooth; wire angle, 04°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.99 | 33.507 | 6.56 | 0.63 | 8 | 272 | 0 | 12.99 | 33.51 | 25.26 | 272 | 0.00 |
| 10 | 12.78 | 33.512 | 6.12 | 0.66 | 7 | 268 | 10 | 12.77 | 33.51 | 25.31 | 268 | 0.03 |
| 35 | 12.23 | 33.508 | 5.41 | 0.98 | 10 | 258 | 20 | 12.67 | 33.52 | 25.33 | 265 | 0.05 |
| 60 | 10.90 | 33.650 | 3.95 | 1.57 | 20 | 224 | 30 | 12.49 | 33.47 | 25.33 | 265 | 0.08 |
| 90 | 10.20 | 33.822 | 3.20 | 1.87 | 27 | 200 | 50 | 11.28 | 33.58 | 25.64 | 236 | 0.13 |
| 120 | 9.57 | 33.945 | 2.89 | 2.06 | 32 | 181 | 75 | 10.40 | 33.76 | 25.94 | 208 | 0.19 |
| 150 | 9.27 | 34.015 | 2.66 | 2.14 | 36 | 171 | 100 | 10.08 | 33.87 | 26.08 | 194 | 0.24 |
| 180 | 9.15 | 34.099 | 2.17 | 2.32 | 38 | 163 | 125 | 9.45 | 33.97 | 26.26 | 177 | 0.28 |
| 215 | 8.70 | 34.172 | 1.72 | 2.54 | 45 | 151 | 150 | 9.18 | 34.05 | 26.37 | 167 | 0.33 |
| 240 | 8.51 | 34.204 | 1.46 | 2.58 | 48 | 145 | 200 | 9.01 | 34.15 | 26.47 | 157 | 0.41 |
| 291 | 8.16 | 34.233 | 1.18 | 2.71 | 53 | 138 | 250 | 8.38 | 34.22 | 26.62 | 142 | 0.49 |
| | | | | | | | 300 | 8.00 | 34.23 | 26.69 | 136 | 0.56 |



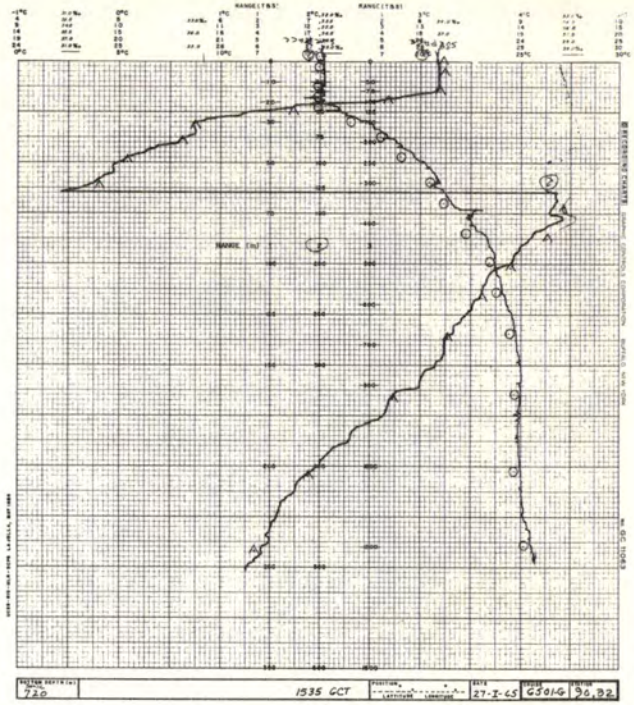

90.28

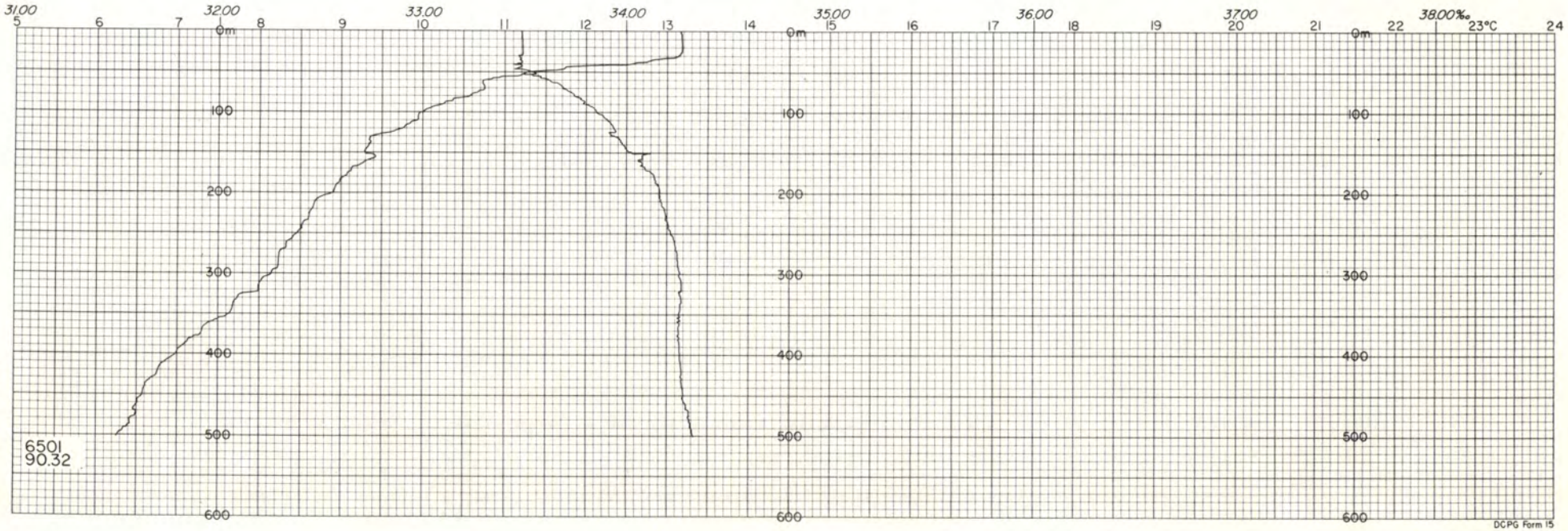
51

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

ALEXANDER AGASSIZ; January 27, 1965; 1511 GCT; 33°21'N, 118°01.5'W; sounding, 395 fm; wind, 330°, force 2; weather, cloudy; sea, slight; wire angle, 06°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.22 | 33.495 | 6.34 | 0.40 | 4 | 277 | 0 | 13.17 | 33.49 | 25.21 | 277 | 0.00 |
| 10 | 13.24 | 33.494 | 6.32 | 0.43 | 2 | 278 | 10 | 13.18 | 33.49 | 25.21 | 277 | 0.03 |
| 30 | 13.19 | 33.490 | 6.33 | 0.48 | 4 | 277 | 20 | 13.18 | 33.49 | 25.21 | 277 | 0.06 |
| 40 | 12.68 | 33.486 | 5.79 | 0.73 | 7 | 268 | 30 | 13.13 | 33.48 | 25.21 | 277 | 0.08 |
| 50 | 11.73 | 33.492 | 5.08 | 1.11 | 11 | 250 | 50 | 11.27 | 33.54 | 25.61 | 239 | 0.13 |
| 65 | 10.74 | 33.619 | 4.26 | 1.45 | 19 | 224 | 75 | 10.66 | 33.73 | 25.87 | 214 | 0.19 |
| 80 | 10.62 | 33.739 | 3.69 | 1.70 | 22 | 213 | 100 | 9.98 | 33.85 | 26.08 | 194 | 0.24 |
| 99 | 10.08 | 33.822 | 3.38 | 1.88 | 27 | 198 | 125 | 9.62 | 33.94 | 26.21 | 182 | 0.29 |
| 124 | 9.80 | 33.935 | 2.87 | 2.04 | 30 | 185 | 150 | 9.29 | 34.02 | 26.33 | 171 | 0.34 |
| 145 | 9.42 | 33.988 | 2.83 | 2.11 | 33 | 175 | 200 | 8.90 | 34.16 | 26.50 | 154 | 0.42 |
| 175 | 9.26 | 34.080 | 2.29 | 2.23 | 36 | 166 | 250 | 8.46 | 34.22 | 26.61 | 143 | 0.50 |
| 204 | 8.89 | 34.172 | 1.85 | - | - | 153 | 300 | 8.14 | 34.26 | 26.69 | 136 | 0.57 |
| 234 | 8.61 | 34.200 | 1.57 | - | - | 147 | 400 | 6.98 | 34.26 | 26.86 | 120 | 0.70 |
| 274 | 8.27 | 34.251 | 1.24 | - | - | 138 | 500 | 6.26 | 34.33 | 27.01 | 106 | 0.82 |
| 334 | 7.73 | 34.269 | 0.94 | - | - | 129 | | | | | | |
| 410 | 6.89 | 34.268 | 0.70 | - | - | 118 | | | | | | |
| 484 | 6.34 | 34.310 | 0.53 | - | - | 108 | | | | | | |
| 564 | 5.86 | 34.354 | 0.36 | - | - | 99 | | | | | | |

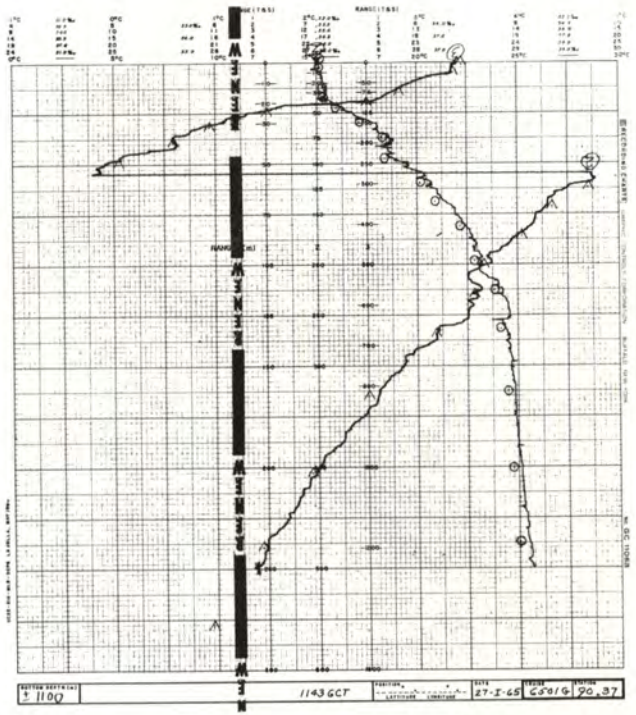


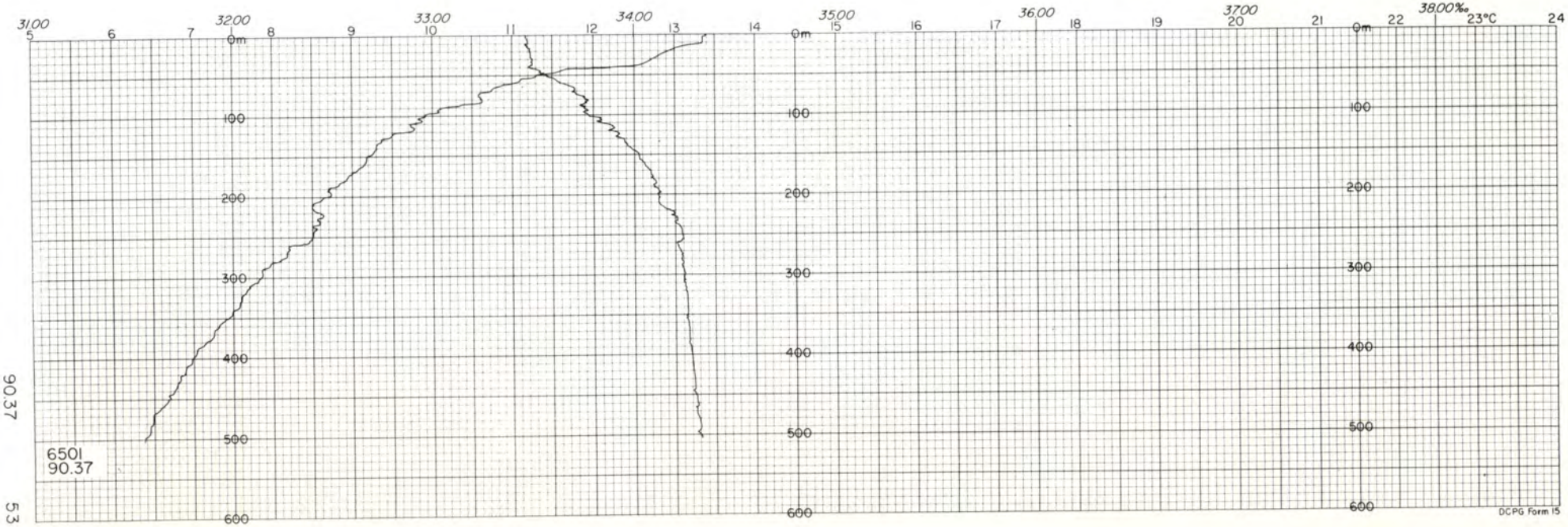



| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

ALEXANDER AGASSIZ; January 27, 1965; 1125 GCT; 33°11'N, 118°22.5'W; sounding, 600 fm; wind, 020°, force 2; weather, clear; sea, slight; wire angle, 10°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.44 | 33.512 | 6.43 | 0.37 | 2 | 280 | 0 | 13.40 | 33.47 | 25.15 | 283 | 0.00 |
| 10 | 13.36 | 33.506 | 6.56 | 0.34 | 4 | 279 | 10 | 13.34 | 33.48 | 25.17 | 281 | 0.03 |
| 30 | 12.82 | 33.521 | 6.36 | 0.55 | 4 | 268 | 20 | 12.95 | 33.49 | 25.25 | 272 | 0.06 |
| 40 | 12.49 | 33.521 | 5.87 | 0.90 | 5 | 262 | 30 | 12.73 | 33.50 | 25.31 | 268 | 0.08 |
| 50 | 11.50 | 33.572 | 4.59 | 1.26 | 14 | 240 | 50 | 11.31 | 33.58 | 25.64 | 236 | 0.13 |
| 64 | 10.94 | 33.666 | 3.85 | 1.59 | 20 | 224 | 75 | 10.58 | 33.72 | 25.87 | 214 | 0.19 |
| 79 | 10.58 | 33.759 | 3.44 | 1.79 | 23 | 211 | 100 | 9.91 | 33.78 | 26.04 | 198 | 0.24 |
| 100 | 10.04 | 33.769 | 3.59 | 1.78 | 24 | 201 | 125 | 9.49 | 33.93 | 26.22 | 180 | 0.29 |
| 124 | 9.70 | 33.913 | 2.97 | 2.00 | 31 | 185 | 150 | 9.18 | 34.02 | 26.34 | 169 | 0.33 |
| 143 | 9.34 | 33.973 | 2.94 | 2.09 | 33 | 175 | 200 | 8.70 | 34.12 | 26.50 | 154 | 0.42 |
| 172 | 9.04 | 34.073 | 2.42 | 2.26 | 38 | 163 | 250 | 8.51 | 34.24 | 26.62 | 143 | 0.49 |
| 201 | 8.66 | 34.125 | 2.08 | - | - | 153 | 300 | 7.86 | 34.25 | 26.73 | 133 | 0.56 |
| 230 | 8.57 | 34.204 | 1.46 | - | - | 146 | 400 | 7.00 | 34.28 | 26.87 | 119 | 0.70 |
| 269 | 8.18 | 34.232 | 1.21 | - | - | 138 | 500 | 6.38 | 34.32 | 26.99 | 108 | 0.82 |
| 330 | 7.50 | 34.258 | 0.86 | - | - | 127 | | | | | | |
| 406 | 6.93 | 34.280 | 0.66 | - | - | 118 | | | | | | |
| 479 | 6.44 | 34.300 | 0.63 | - | - | 110 | | | | | | |
| 557 | 5.95 | 34.351 | 0.27 | - | - | 100 | | | | | | |



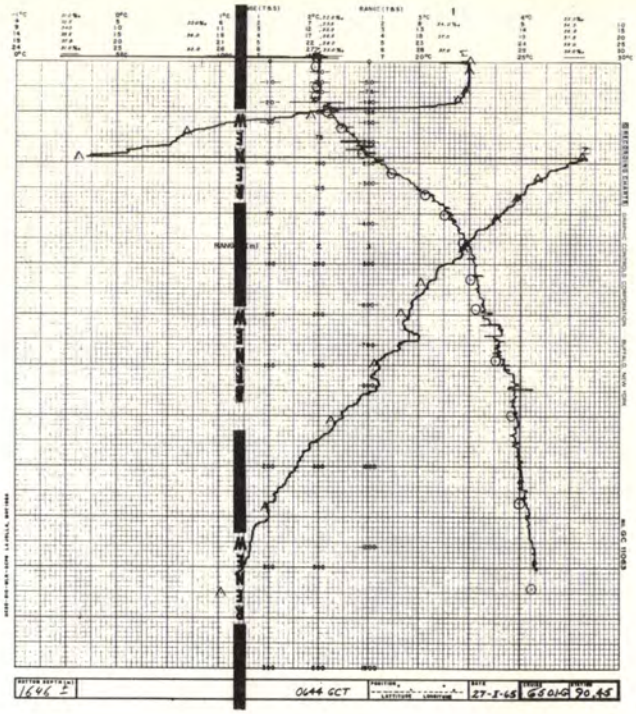



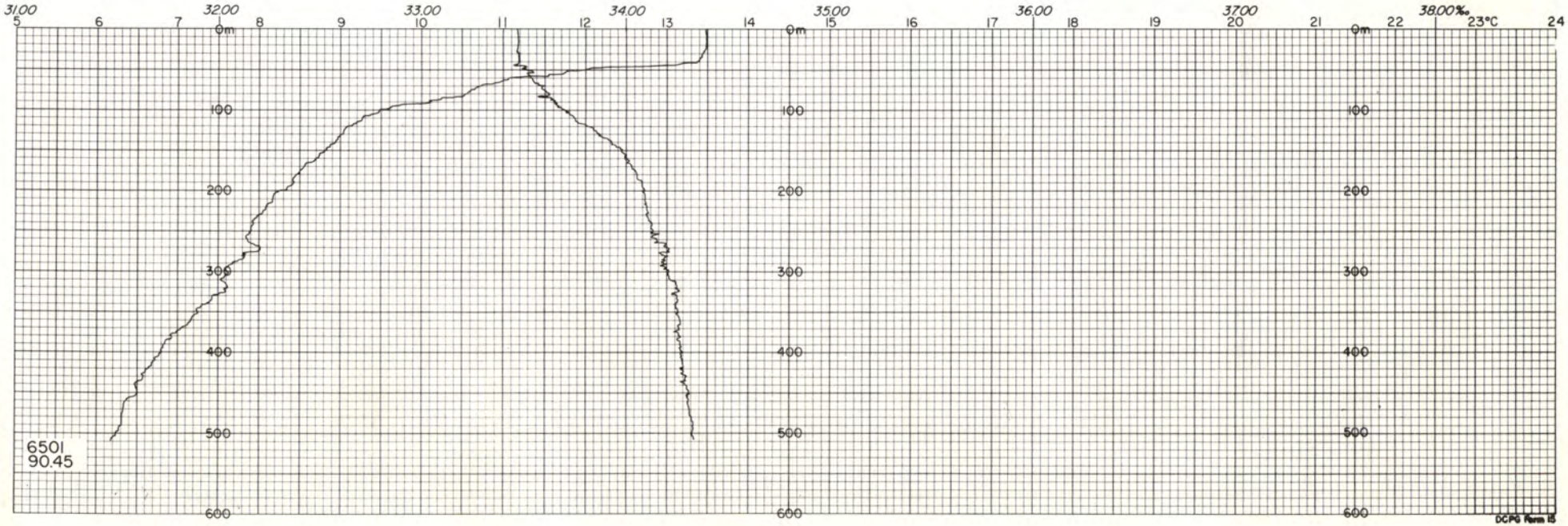
54 90.45

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 27, 1965; 0627 GCT; 32°54.5'N, 118°55.5'W; sounding, 900 fm; wind, 330°, force 4; weather, clear; sea, moderate; wire angle, 04°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.50 | 33.489 | 6.16 | 0.50 | 5 | 283 | 0 | 13.48 | 33.47 | 25.13 | 284 | 0.00 |
| 10 | 13.49 | 33.481 | 6.11 | 0.51 | 5 | 283 | 10 | 13.49 | 33.47 | 25.13 | 284 | 0.03 |
| 30 | 13.47 | 33.486 | 6.16 | 0.50 | 5 | 283 | 20 | 13.48 | 33.47 | 25.13 | 284 | 0.06 |
| 40 | 13.38 | 33.484 | 6.03 | 0.51 | 5 | 281 | 30 | 13.44 | 33.47 | 25.14 | 283 | 0.09 |
| 55 | 11.92 | 33.531 | 5.19 | 1.04 | 12 | 251 | 50 | 11.90 | 33.52 | 25.48 | 251 | 0.14 |
| 71 | 10.68 | 33.586 | 4.52 | 1.40 | 19 | 225 | 75 | 10.61 | 33.59 | 25.77 | 224 | 0.20 |
| 96 | 9.62 | 33.666 | 4.39 | 1.58 | 23 | 202 | 100 | 9.48 | 33.69 | 26.04 | 198 | 0.25 |
| 116 | 9.16 | 33.790 | 3.95 | 1.74 | 28 | 186 | 125 | 9.04 | 33.84 | 26.22 | 180 | 0.30 |
| 136 | 8.96 | 33.922 | 3.48 | 1.90 | 35 | 173 | 150 | 8.81 | 33.97 | 26.36 | 167 | 0.34 |
| 156 | 8.76 | 33.998 | 2.81 | 2.15 | 40 | 164 | 200 | 8.26 | 34.08 | 26.53 | 151 | 0.42 |
| 186 | 8.44 | 34.075 | 2.19 | 2.36 | 45 | 154 | 250 | 7.91 | 34.13 | 26.63 | 142 | 0.50 |
| 220 | 8.02 | 34.104 | 2.01 | 2.49 | 49 | 146 | 300 | 7.61 | 34.21 | 26.73 | 132 | 0.57 |
| 250 | 7.82 | 34.125 | 1.83 | - | - | 141 | 400 | 6.79 | 34.28 | 26.90 | 116 | 0.70 |
| 300 | 7.56 | 34.202 | 1.25 | - | - | 132 | 500 | 6.24 | 34.32 | 27.01 | 106 | 0.82 |
| 355 | 7.12 | 34.261 | 0.81 | - | - | 122 | | | | | | |
| 441 | 6.46 | 34.298 | 0.62 | - | - | 110 | | | | | | |
| 526 | 6.03 | 34.344 | 0.41 | - | - | 102 | | | | | | |
| 610 | 5.60 | 34.372 | 0.38 | - | - | 95 | | | | | | |



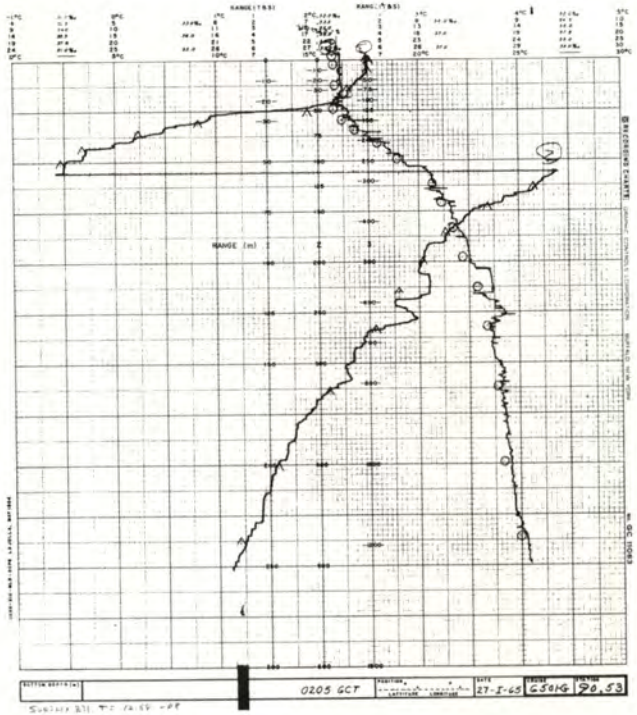



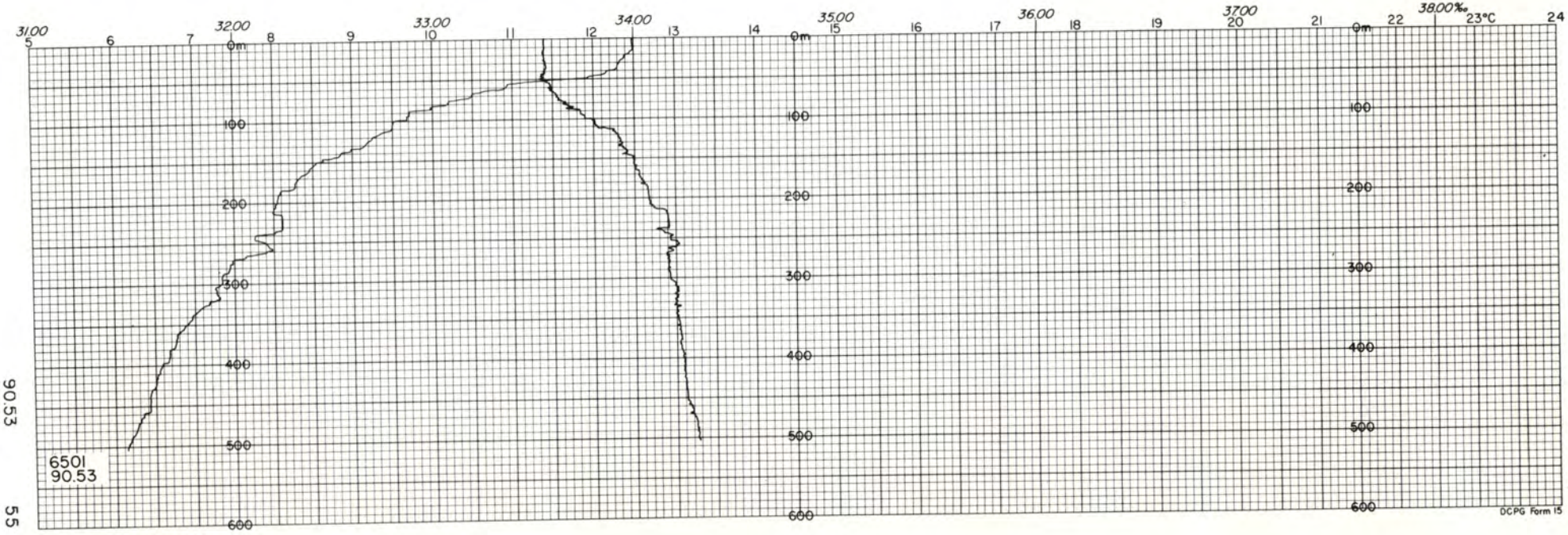

SIO CCOFI 6501

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 27, 1965; 0140 GCT; 32°39'N, 119°28'W; sounding, 740 fm; wind, 340°, force 3; weather, clear; sea, rough; wire angle, 08°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.48 | 33.559 | 6.15 | 0.75 | 9 | 259 | 0 | 12.48 | 33.56 | 25.40 | 259 | 0.00 |
| 10 | 12.49 | 33.557 | 6.16 | 0.79 | 8 | 259 | 10 | 12.48 | 33.56 | 25.40 | 259 | 0.03 |
| 30 | 12.34 | 33.564 | 6.12 | 0.79 | 8 | 256 | 20 | 12.39 | 33.56 | 25.42 | 257 | 0.05 |
| 54 | 11.89 | 33.561 | 5.49 | 0.99 | 12 | 248 | 30 | 12.31 | 33.56 | 25.43 | 255 | 0.08 |
| 64 | 10.82 | 33.594 | 5.43 | 1.35 | 18 | 227 | 50 | 11.48 | 33.52 | 25.56 | 244 | 0.13 |
| 74 | 10.23 | 33.642 | 4.30 | 1.51 | 22 | 214 | 75 | 10.23 | 33.64 | 25.87 | 214 | 0.18 |
| 88 | 9.64 | 33.736 | 3.95 | 1.71 | 25 | 197 | 100 | 9.51 | 33.80 | 26.12 | 190 | 0.24 |
| 103 | 9.46 | 33.808 | 3.59 | 1.86 | 29 | 189 | 125 | 9.18 | 33.93 | 26.27 | 176 | 0.28 |
| 128 | 9.14 | 33.949 | 2.74 | 2.11 | 37 | 174 | 150 | 8.53 | 34.00 | 26.43 | 161 | 0.32 |
| 147 | 8.68 | 33.984 | 2.80 | 2.19 | 40 | 164 | 200 | 8.03 | 34.07 | 26.56 | 148 | 0.40 |
| 172 | 8.26 | 34.029 | 2.48 | 2.30 | 43 | 155 | 250 | 7.92 | 34.19 | 26.67 | 138 | 0.48 |
| 201 | 8.03 | 34.073 | 2.18 | 2.44 | 47 | 148 | 300 | 7.30 | 34.17 | 26.74 | 131 | 0.55 |
| 230 | 7.78 | 34.124 | 1.72 | - | - | 141 | 400 | 6.57 | 34.23 | 26.89 | 117 | 0.68 |
| 269 | 7.55 | 34.169 | 1.39 | - | - | 134 | 500 | 6.13 | 34.30 | 27.00 | 106 | 0.79 |
| 328 | 7.08 | 34.204 | 1.04 | - | - | 125 | | | | | | |
| 403 | 6.58 | 34.228 | 0.82 | - | - | 117 | | | | | | |
| 477 | 6.20 | 34.297 | 0.58 | - | - | 107 | | | | | | |
| 557 | 5.76 | 34.343 | 0.38 | - | - | 99 | | | | | | |



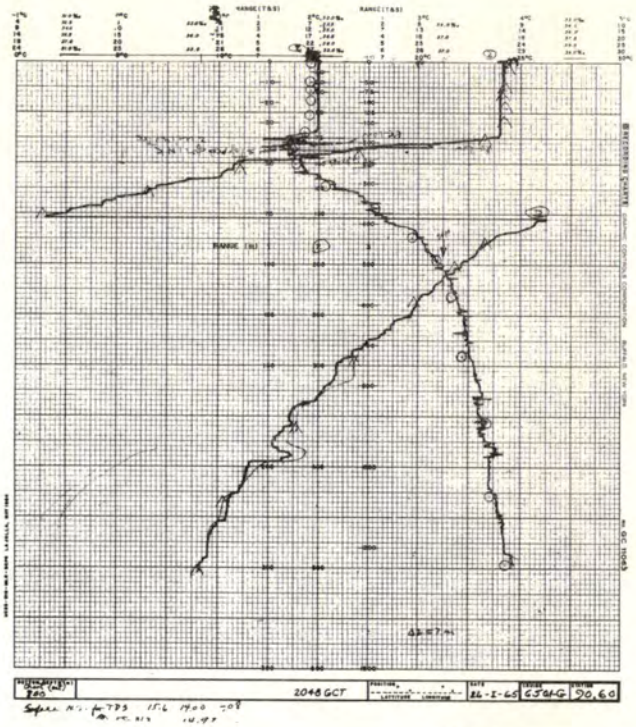
56

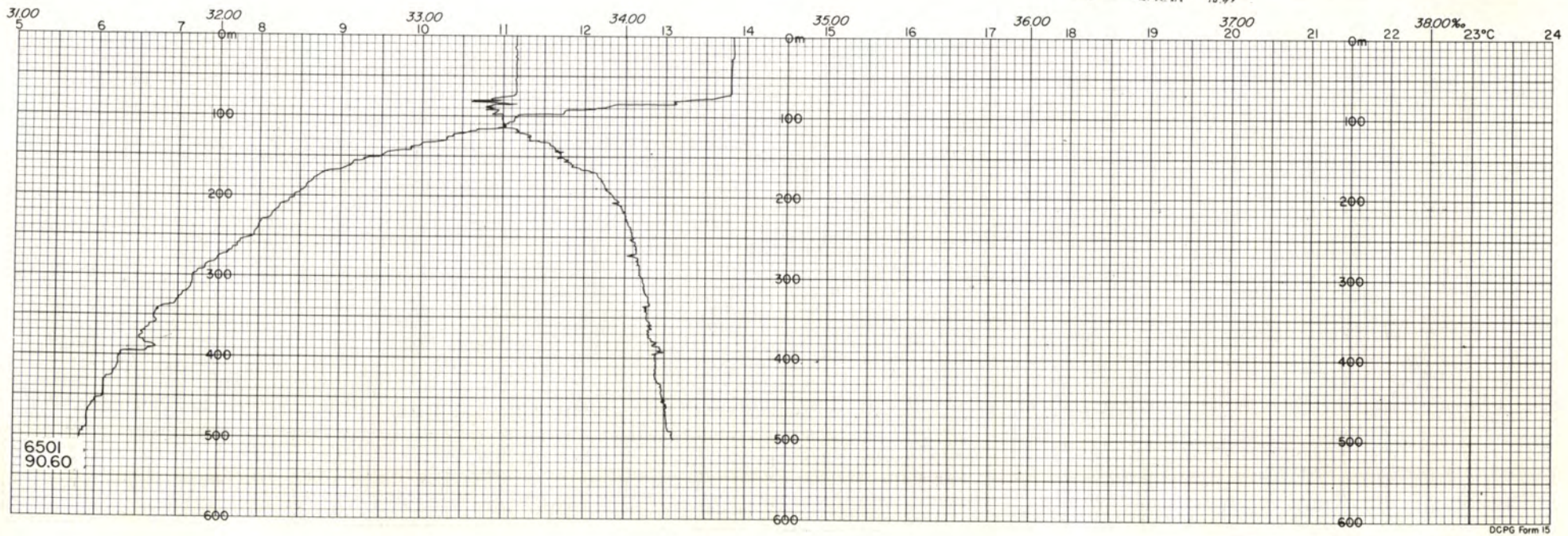
90.60

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 26, 1965; 2017 GCT; 32°24'N, 119°57'W; sounding, 457 fm; wind, 010°, force 5; weather, clear; sea, very rough; wire angle, 37°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.88 | 33.468 | 6.20 | 0.42 | 4 | 292 | 0 | 13.84 | 33.46 | 25.05 | 292 | 0.00 |
| 8 | 13.87 | 33.466 | 6.19 | 0.42 | 4 | 292 | 10 | 13.84 | 33.46 | 25.05 | 292 | 0.03 |
| 27 | 13.86 | 33.464 | 6.30 | 0.43 | 4 | 292 | 20 | 13.84 | 33.46 | 25.05 | 292 | 0.06 |
| 35 | 13.83 | 33.466 | 6.18 | 0.46 | 4 | 291 | 30 | 13.82 | 33.46 | 25.06 | 291 | 0.09 |
| 46 | 13.86 | 33.464 | 6.22 | 0.46 | 4 | 292 | 50 | 13.81 | 33.46 | 25.06 | 291 | 0.15 |
| 59 | 13.85 | 33.461 | 6.21 | 0.48 | 4 | 292 | 75 | 13.68 | 33.43 | 25.06 | 291 | 0.22 |
| 77 | 13.66 | 33.444 | 6.05 | 0.51 | 4 | 289 | 100 | 11.18 | 33.40 | 25.52 | 247 | 0.29 |
| 93 | 12.40 | 33.390 | 5.77 | 0.81 | 6 | 270 | 125 | 10.38 | 33.53 | 25.76 | 224 | 0.35 |
| 108 | 11.21 | 33.406 | 5.46 | 1.04 | 11 | 247 | 150 | 9.51 | 33.68 | 26.02 | 199 | 0.40 |
| 130 | 10.31 | 33.527 | 4.87 | 1.34 | 17 | 223 | 200 | 8.43 | 33.94 | 26.40 | 164 | 0.49 |
| 152 | 9.27 | 33.726 | 4.26 | 1.71 | 24 | 192 | 250 | 7.92 | 34.04 | 26.55 | 149 | 0.57 |
| 181 | 8.66 | 33.877 | 4.15 | - | - | 172 | 300 | 7.18 | 34.09 | 26.70 | 135 | 0.65 |
| 203 | 8.36 | 33.973 | 3.46 | - | - | 160 | 400 | 6.30 | 34.15 | 26.86 | 120 | 0.78 |
| 239 | 7.96 | 34.031 | 2.95 | - | - | 150 | 500 | 5.82 | 34.24 | 27.00 | 107 | 0.90 |
| 298 | 7.36 | 34.075 | 2.13 | - | - | 139 | | | | | | |
| 364 | 6.78 | 34.173 | 1.22 | - | - | 124 | | | | | | |
| 436 | 6.05 | 34.182 | 0.91 | - | - | 114 | | | | | | |
| 504 | 5.80 | 34.245 | 0.56 | - | - | 106 | | | | | | |



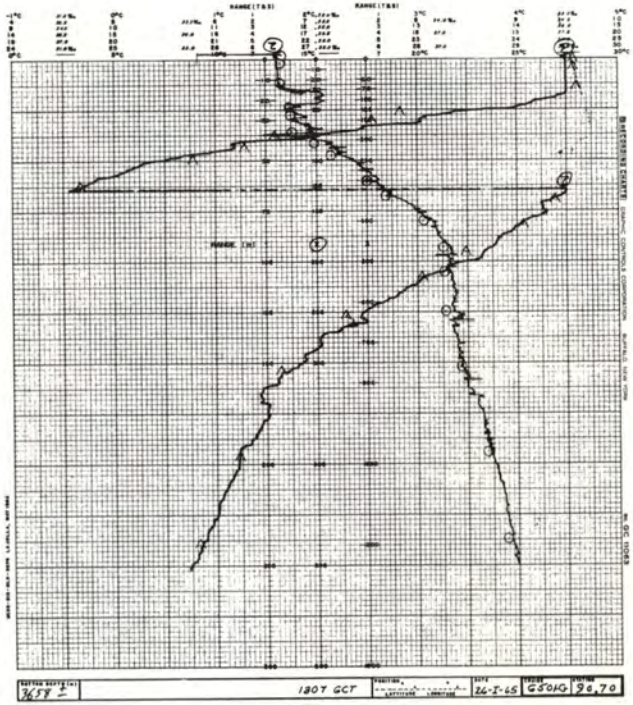

SIO CCOFI 6501

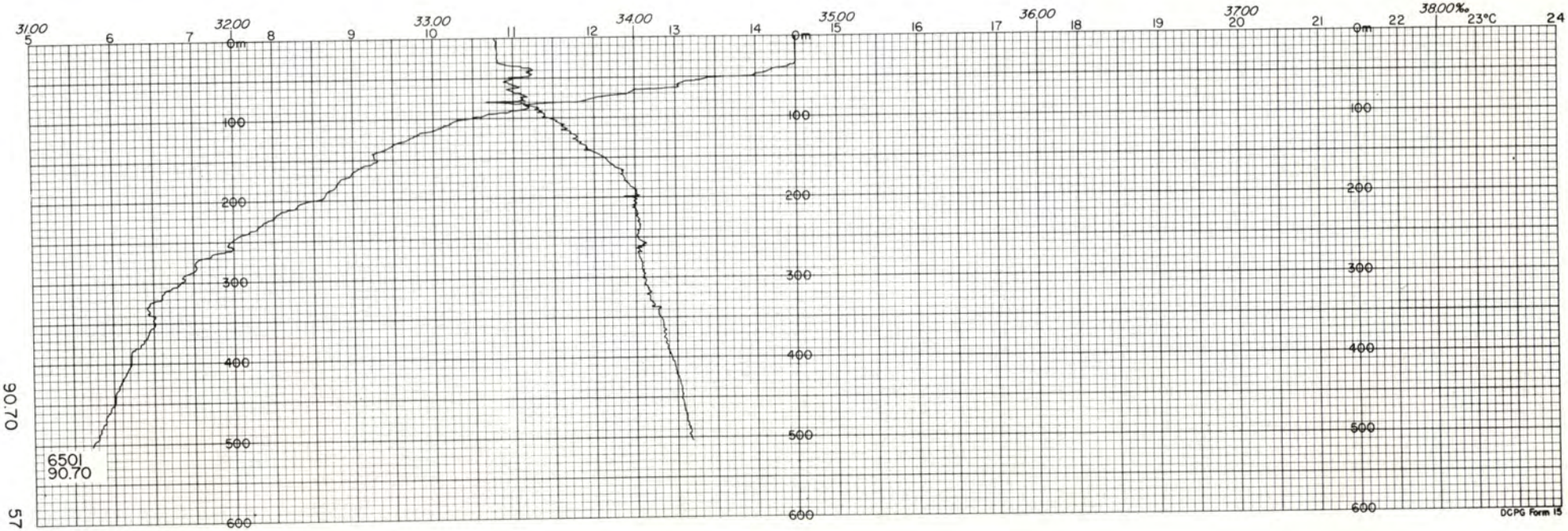
SIO CCOFI 6501

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

ALEXANDER AGASSIZ; January 26, 1965; 1240 GCT; 32°04'N, 120°39'W; sounding, 2000 fm; wind, 350°, force 6; weather, cloudy; sea, very rough; wire angle, 35°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.57 | 33.361 | 6.13 | 0.32 | 3 | 314 | 0 | 14.49 | 33.31 | 24.80 | 316 | 0.00 |
| 8 | 14.57 | 33.357 | 6.16 | 0.36 | 3 | 314 | 10 | 14.50 | 33.32 | 24.81 | 315 | 0.03 |
| 28 | 14.60 | 33.356 | 6.27 | 0.35 | 3 | 315 | 20 | 14.50 | 33.32 | 24.81 | 315 | 0.06 |
| 52 | 12.83 | 33.393 | 5.83 | 0.64 | 7 | 277 | 30 | 14.50 | 33.32 | 24.81 | 315 | 0.09 |
| 60 | 12.55 | 33.397 | 5.71 | 0.73 | 6 | 272 | 50 | 13.66 | 33.38 | 25.03 | 294 | 0.16 |
| 76 | 11.58 | 33.401 | 5.46 | 0.95 | 10 | 254 | 75 | 12.00 | 33.45 | 25.41 | 258 | 0.23 |
| 88 | 11.28 | 33.490 | 5.20 | 1.23 | 12 | 242 | 100 | 10.48 | 33.57 | 25.77 | 223 | 0.29 |
| 100 | 10.77 | 33.557 | 4.91 | 1.30 | 15 | 229 | 125 | 9.69 | 33.71 | 26.02 | 200 | 0.34 |
| 125 | 9.66 | 33.699 | 4.35 | 1.57 | 22 | 200 | 150 | 9.28 | 33.85 | 26.19 | 183 | 0.39 |
| 140 | 9.38 | 33.773 | 4.17 | 1.75 | 29 | 190 | 200 | 8.47 | 33.99 | 26.43 | 161 | 0.48 |
| 164 | 9.06 | 33.912 | 2.97 | 2.07 | 35 | 175 | 250 | 7.46 | 34.01 | 26.60 | 145 | 0.55 |
| 191 | 8.48 | 34.001 | 3.19 | - | - | 160 | 300 | 6.85 | 34.04 | 26.70 | 135 | 0.63 |
| 215 | 8.04 | 34.006 | 3.19 | - | - | 153 | 400 | 6.22 | 34.17 | 26.89 | 117 | 0.76 |
| 254 | 7.28 | 34.008 | 2.97 | - | - | 143 | 500 | 5.73 | 34.26 | 27.02 | 104 | 0.87 |
| 308 | 6.63 | 34.073 | 1.85 | - | - | 129 | | | | | | |
| 393 | 6.22 | 34.177 | 1.12 | - | - | 117 | | | | | | |
| 479 | 5.82 | 34.256 | 0.71 | - | - | 106 | | | | | | |
| 553 | 5.44 | 34.306 | 0.51 | - | - | 98 | | | | | | |




90.70

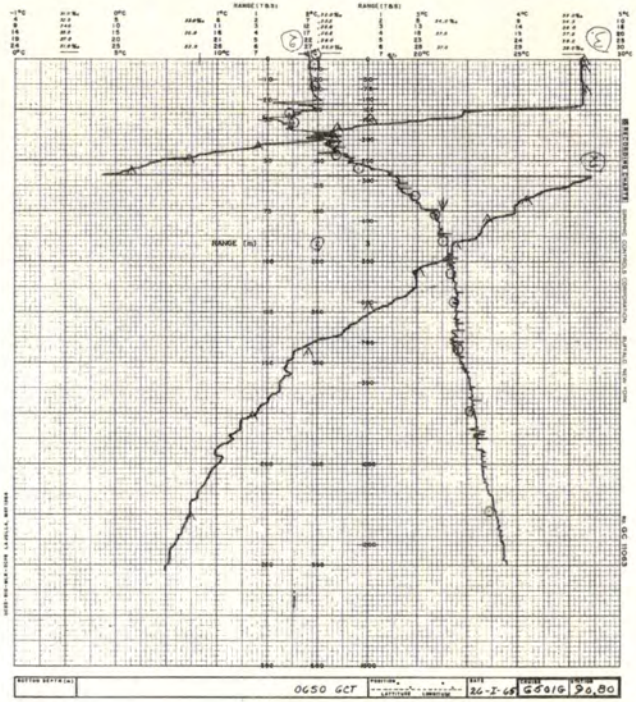
57

58 90.80

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 26, 1965; 0633 GCT; 31°45'N, 121°19.5'W; sounding, 2000 fm; wind, 330°, force 5; weather, cloudy; sea, very rough; wire angle, 27°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.64 | 33.490 | 6.12 | 0.34 | 4 | 306 | 0 | 14.61 | 33.43 | 24.87 | 309 | 0.00 |
| 10 | 14.64 | 33.484 | 6.13 | 0.37 | 3 | 306 | 10 | 14.61 | 33.44 | 24.87 | 309 | 0.03 |
| 32 | 14.66 | 33.485 | 6.13 | 0.36 | 3 | 306 | 20 | 14.61 | 33.44 | 24.87 | 309 | 0.06 |
| 59 | 12.52 | 33.345 | 5.67 | 0.73 | 8 | 275 | 30 | 14.62 | 33.45 | 24.88 | 308 | 0.09 |
| 68 | 12.19 | 33.403 | 5.57 | 0.75 | 9 | 265 | 50 | 13.75 | 33.40 | 25.02 | 294 | 0.15 |
| 87 | 11.40 | 33.564 | 4.88 | 1.24 | 17 | 239 | 75 | 12.00 | 33.37 | 25.34 | 264 | 0.22 |
| 100 | 10.72 | 33.570 | 4.52 | 1.47 | 18 | 227 | 100 | 10.45 | 33.58 | 25.79 | 222 | 0.28 |
| 113 | 10.16 | 33.661 | 4.11 | 1.70 | 23 | 211 | 125 | 9.49 | 33.80 | 26.12 | 190 | 0.34 |
| 140 | 9.08 | 33.888 | 3.41 | 1.95 | 34 | 177 | 150 | 8.97 | 33.88 | 26.27 | 176 | 0.38 |
| 158 | 8.69 | 33.968 | 3.21 | 2.03 | 38 | 165 | 200 | 8.22 | 33.99 | 26.47 | 157 | 0.47 |
| 185 | 8.38 | 34.002 | 2.86 | 2.16 | 41 | 158 | 250 | 7.54 | 34.03 | 26.60 | 145 | 0.55 |
| 217 | 8.02 | 34.032 | 2.60 | 2.31 | 46 | 151 | 300 | 6.70 | 34.04 | 26.73 | 133 | 0.62 |
| 245 | 7.50 | 34.044 | 2.33 | – | – | 143 | 400 | 6.02 | 34.13 | 26.88 | 118 | 0.75 |
| 291 | 6.90 | 34.061 | 2.01 | – | – | 134 | 500 | 5.52 | 34.22 | 27.02 | 105 | 0.86 |
| 353 | 6.35 | 34.109 | 1.33 | – | – | 123 | | | | | | |
| 452 | 5.74 | 34.187 | 0.77 | – | – | 110 | | | | | | |
| 534 | 5.32 | 34.268 | 0.57 | – | – | 99 | | | | | | |
| 607 | 5.00 | 34.319 | 0.43 | – | – | 92 | | | | | | |





SIO CCOFI 6501

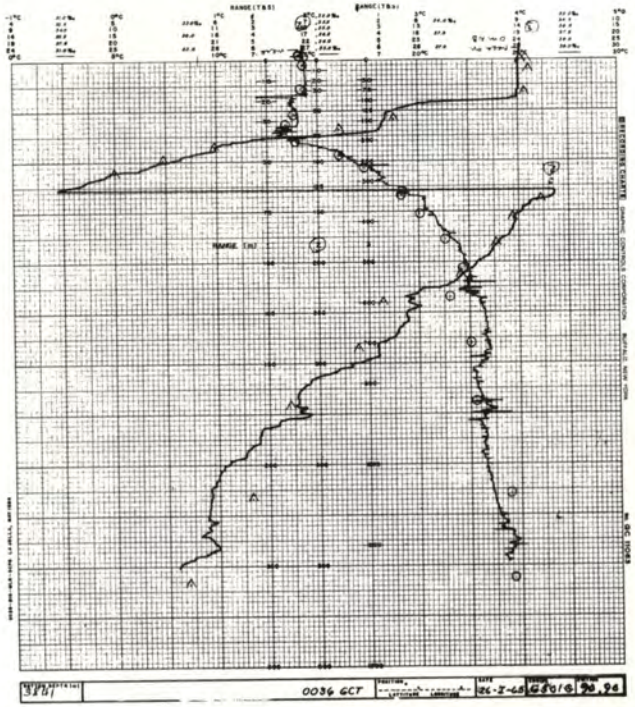
DCPG Form 15

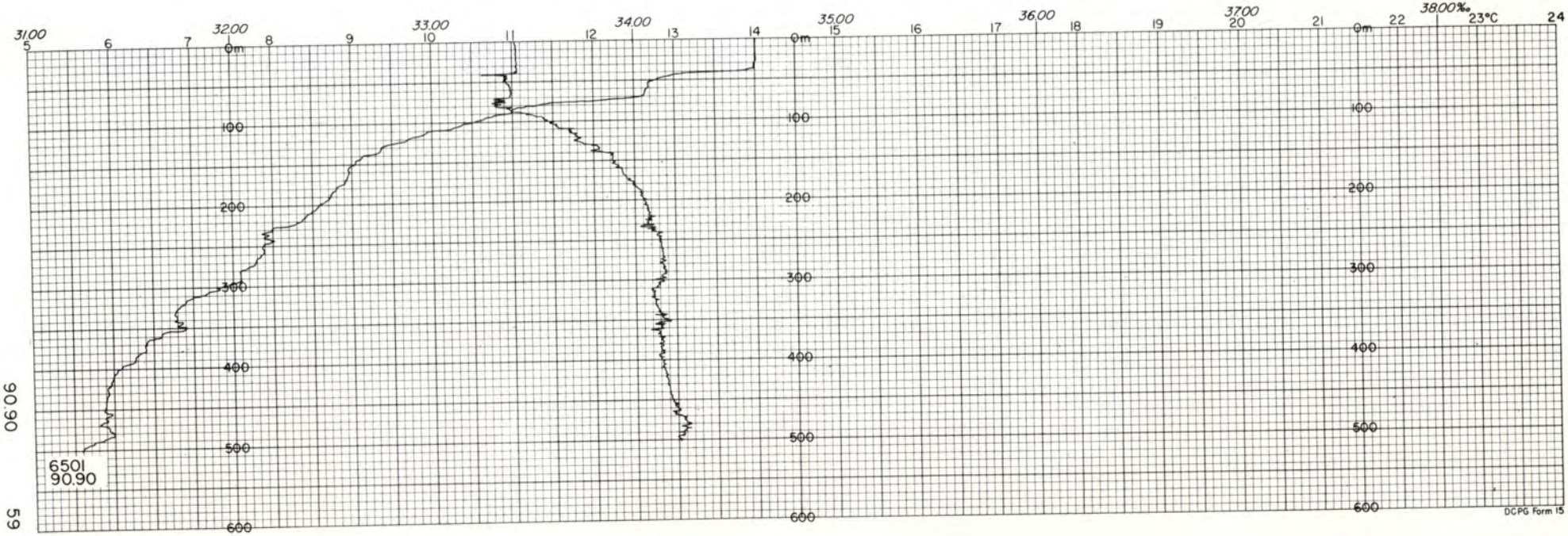
SIO CCOFI 6501

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

ALEXANDER AGASSIZ; January 26, 1965; 0005 GCT; 31°24'N, 121°59'W; sounding, 2100 fm; wind, 350°, force 5; weather, partly cloudy; sea, very rough; wire angle, 25°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.09 | 33.446 | 6.15 | 0.37 | 4 | 298 | 0 | 14.01 | 33.42 | 24.99 | 298 | 0.00 |
| 10 | 14.10 | 33.441 | 6.20 | 0.37 | 4 | 298 | 10 | 14.01 | 33.42 | 24.99 | 298 | 0.03 |
| 33 | 14.06 | 33.435 | 6.36 | 0.39 | 4 | 298 | 20 | 14.01 | 33.42 | 24.99 | 298 | 0.06 |
| 59 | 12.76 | 33.407 | 5.79 | 0.69 | 7 | 275 | 30 | 14.00 | 33.42 | 24.99 | 298 | 0.09 |
| 68 | 12.21 | 33.375 | 5.59 | 0.82 | 8 | 267 | 50 | 12.76 | 33.37 | 25.20 | 278 | 0.15 |
| 86 | 10.98 | 33.419 | 5.03 | 1.11 | 14 | 242 | 75 | 12.07 | 33.34 | 25.31 | 267 | 0.22 |
| 99 | 10.47 | 33.584 | 4.36 | 1.54 | 19 | 222 | 100 | 10.53 | 33.58 | 25.77 | 223 | 0.28 |
| 112 | 10.00 | 33.687 | 4.05 | 1.70 | 24 | 207 | 125 | 9.56 | 33.70 | 26.03 | 199 | 0.33 |
| 138 | 9.22 | 33.833 | 3.39 | 1.95 | 32 | 183 | 150 | 9.03 | 33.90 | 26.27 | 176 | 0.38 |
| 157 | 8.94 | 33.902 | 3.22 | 2.03 | 35 | 174 | 200 | 8.58 | 34.05 | 26.46 | 158 | 0.46 |
| 183 | 8.76 | 34.004 | 2.53 | 2.26 | 39 | 164 | 250 | 7.87 | 34.12 | 26.62 | 142 | 0.54 |
| 213 | 8.42 | 34.073 | 2.13 | 2.43 | 44 | 154 | 300 | 7.34 | 34.13 | 26.71 | 134 | 0.61 |
| 240 | 7.63 | 34.021 | 2.98 | - | - | 146 | 400 | 6.08 | 34.13 | 26.88 | 118 | 0.74 |
| 284 | 7.38 | 34.102 | 1.84 | - | - | 137 | 500 | 5.60 | 34.22 | 27.01 | 106 | 0.86 |
| 343 | 6.70 | 34.123 | 1.34 | - | - | 127 | | | | | | |
| 434 | 6.32 | 34.257 | 0.66 | - | - | 112 | | | | | | |
| 518 | 5.69 | 34.267 | 0.54 | - | - | 103 | | | | | | |
| 591 | 5.25 | 34.303 | 0.44 | - | - | 96 | | | | | | |



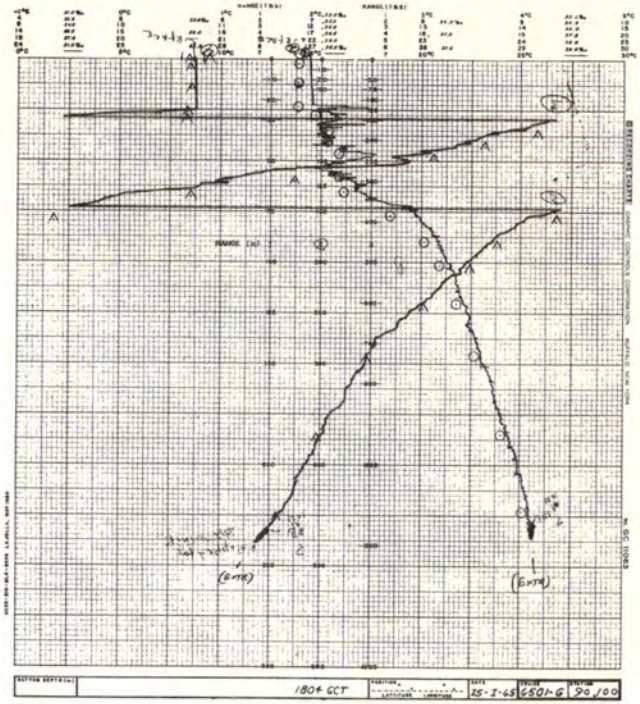

90.90

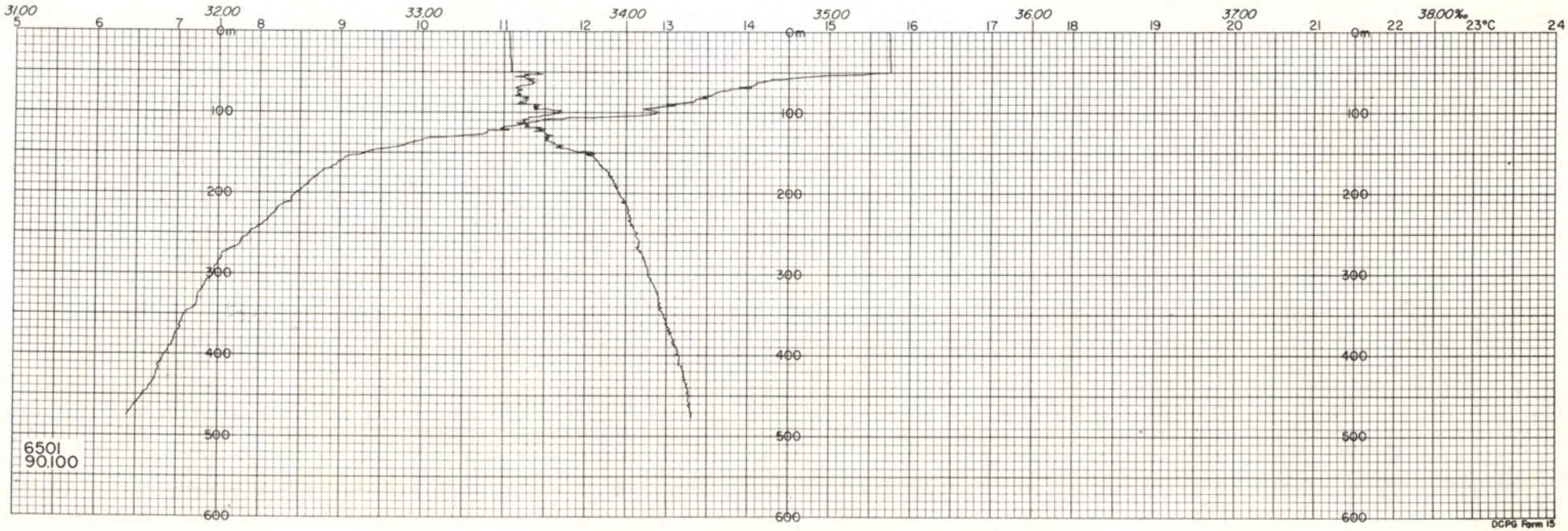
90.100

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | μg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 25, 1965; 1742 GCT; 31°04.5'N, 122°40.5'W; sounding, 2325 fm; wind, 360°, force 6; weather, partly cloudy; sea, very rough; wire angle, 38°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.68 | 33.408 | 6.00 | 0.29 | 2 | 333 | 0 | 15.73 | 33.42 | 24.61 | 333 | 0.00 |
| 9 | 15.69 | 33.409 | 6.13 | 0.30 | 3 | 333 | 10 | 15.75 | 33.43 | 24.62 | 333 | 0.03 |
| 29 | 15.70 | 33.408 | 6.03 | 0.34 | 2 | 334 | 20 | 15.75 | 33.43 | 24.62 | 333 | 0.07 |
| 52 | 15.67 | 33.408 | 6.08 | 0.30 | 3 | 333 | 30 | 15.75 | 33.43 | 24.62 | 333 | 0.10 |
| 60 | 15.66 | 33.475 | 6.05 | 0.32 | 3 | 328 | 50 | 15.73 | 33.49 | 24.67 | 328 | 0.17 |
| 75 | 14.16 | 33.529 | 6.12 | 0.38 | 4 | 293 | 75 | 13.61 | 33.46 | 25.10 | 287 | 0.24 |
| 86 | 13.63 | 33.524 | 6.02 | 0.43 | 5 | 283 | 100 | 12.87 | 33.67 | 25.41 | 258 | 0.31 |
| 98 | 13.12 | 33.568 | 5.93 | 0.52 | 5 | 270 | 125 | 10.79 | 33.60 | 25.74 | 226 | 0.37 |
| 120 | 11.74 | 33.570 | 5.35 | 0.93 | 10 | 245 | 150 | 9.30 | 33.83 | 26.18 | 185 | 0.43 |
| 136 | 10.70 | 33.591 | 4.99 | 1.21 | 15 | 225 | 200 | 8.43 | 33.97 | 26.42 | 162 | 0.51 |
| 159 | 9.35 | 33.775 | 4.06 | 1.69 | 25 | 190 | 250 | 7.87 | 34.05 | 26.57 | 148 | 0.59 |
| 185 | 8.76 | 33.913 | 3.67 | - | - | 171 | 300 | 7.44 | 34.11 | 26.68 | 137 | 0.67 |
| 208 | 8.49 | 33.973 | 3.17 | - | - | 162 | 400 | 6.84 | 34.26 | 26.88 | 118 | 0.80 |
| 246 | 8.02 | 34.041 | 2.57 | - | - | 150 | 500 | 6.20 | 34.32 | 27.01 | 106 | 0.92 |
| 297 | 7.45 | 34.111 | 1.83 | - | - | 137 | | | | | | |
| 375 | 6.96 | 34.222 | 1.04 | - | - | 123 | | | | | | |
| 451 | 6.57 | 34.307 | 0.57 | - | - | 111 | | | | | | |



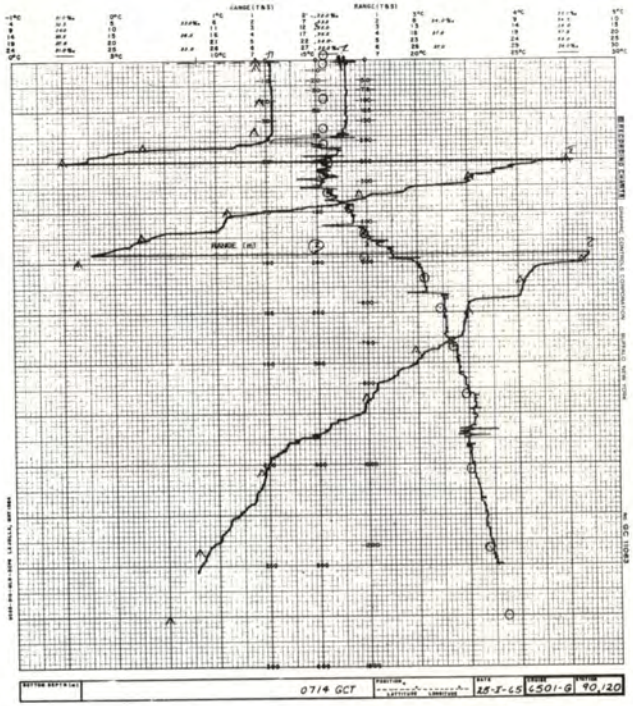



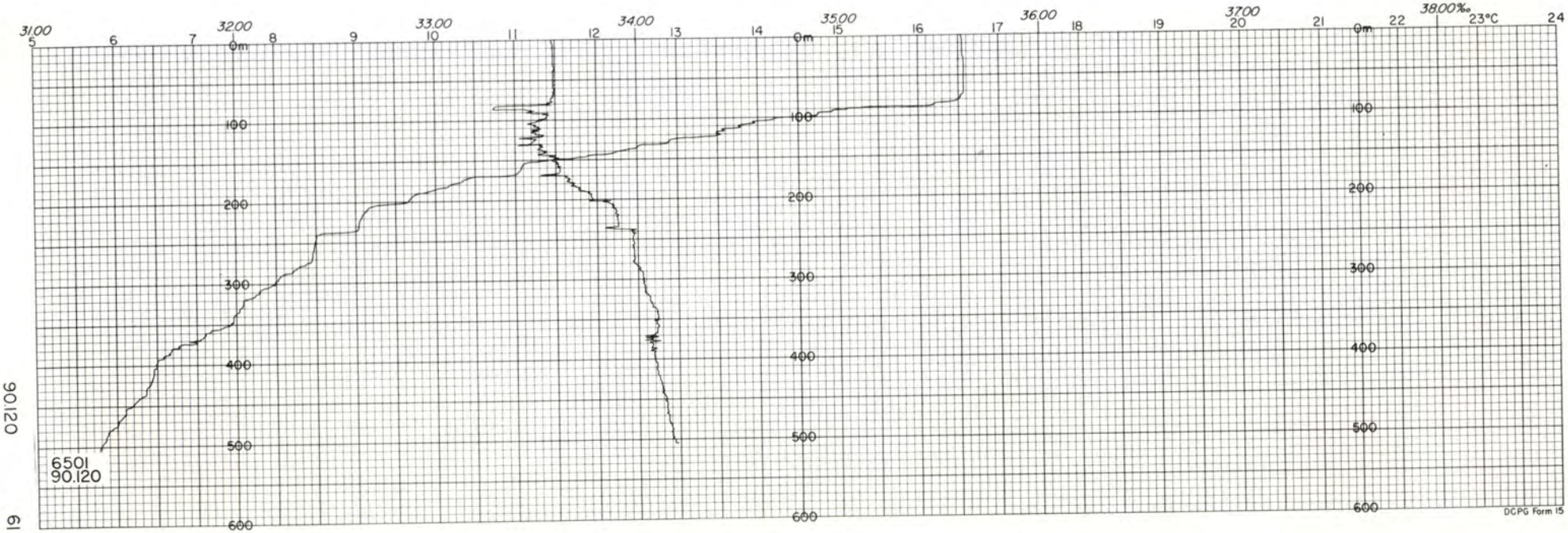

SIO CCOFI 6501

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 25, 1965; 0644 GCT; 30°24'N, 123°59'W; sounding, 2000+ fm; wind, 010°, force 5; weather, clear; sea, very rough; wire angle, 30°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.40 | 33.526 | 5.89 | 0.34 | 3 | 340 | 0 | 16.54 | 33.58 | 24.55 | 339 | 0.00 |
| 9 | 16.40 | 33.526 | 5.91 | 0.34 | 3 | 340 | 10 | 16.55 | 33.59 | 24.56 | 339 | 0.03 |
| 43 | 16.43 | 33.528 | 5.94 | 0.41 | 4 | 341 | 20 | 16.55 | 33.59 | 24.56 | 339 | 0.07 |
| 73 | 16.39 | 33.524 | 5.89 | 0.32 | 4 | 340 | 30 | 16.56 | 33.59 | 24.56 | 339 | 0.10 |
| 89 | 15.29 | 33.532 | 6.12 | 0.39 | 4 | 316 | 50 | 16.57 | 33.59 | 24.55 | 339 | 0.17 |
| 102 | 14.49 | 33.541 | 6.10 | 0.44 | 5 | 299 | 75 | 16.53 | 33.58 | 24.56 | 339 | 0.26 |
| 119 | 13.51 | 33.526 | 5.84 | 0.62 | 6 | 281 | 100 | 14.60 | 33.55 | 24.96 | 300 | 0.34 |
| 135 | 12.42 | 33.541 | 5.51 | 0.75 | 8 | 259 | 125 | 13.08 | 33.49 | 25.23 | 275 | 0.41 |
| 152 | 11.10 | 33.621 | 5.23 | 1.23 | 14 | 230 | 150 | 11.47 | 33.59 | 25.61 | 238 | 0.47 |
| 177 | 10.26 | 33.684 | 4.42 | 1.46 | 19 | 211 | 200 | 9.63 | 33.78 | 26.08 | 194 | 0.58 |
| 210 | 9.63 | 33.690 | 4.40 | 1.53 | 21 | 200 | 250 | 8.48 | 33.98 | 26.42 | 162 | 0.67 |
| 221 | 9.01 | 33.915 | 4.47 | 1.55 | 25 | 174 | 300 | 7.98 | 34.02 | 26.53 | 151 | 0.75 |
| 251 | 8.50 | 33.988 | 3.75 | 1.83 | 34 | 161 | 400 | 6.50 | 34.08 | 26.78 | 127 | 0.90 |
| 289 | 7.98 | 34.039 | 2.66 | 2.35 | 45 | 150 | 500 | 5.81 | 34.17 | 26.94 | 112 | 1.02 |
| 336 | 7.48 | 34.092 | 1.93 | 2.58 | 52 | 139 | | | | | | |
| 410 | 6.42 | 34.103 | 1.52 | 2.88 | 66 | 125 | | | | | | |
| 488 | 5.80 | 34.176 | 0.91 | 3.07 | 82 | 112 | | | | | | |
| 555 | 5.50 | 34.248 | 0.56 | 3.02 | 93 | 103 | | | | | | |



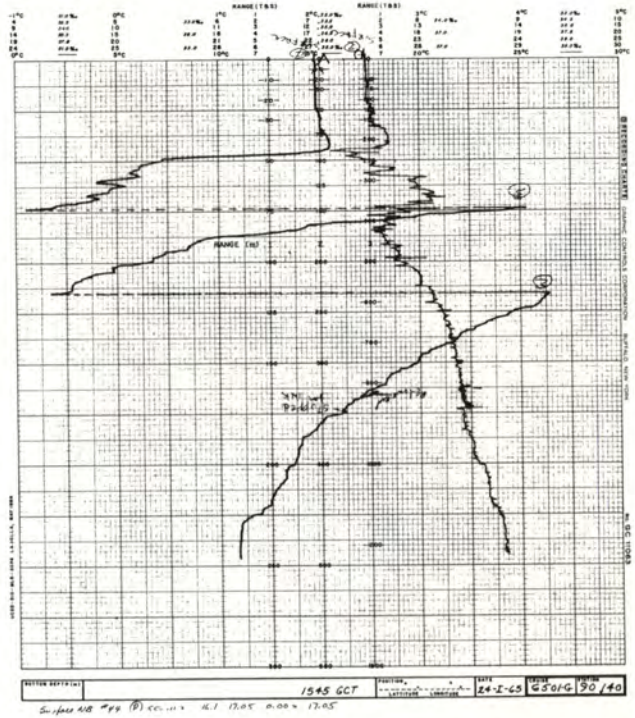



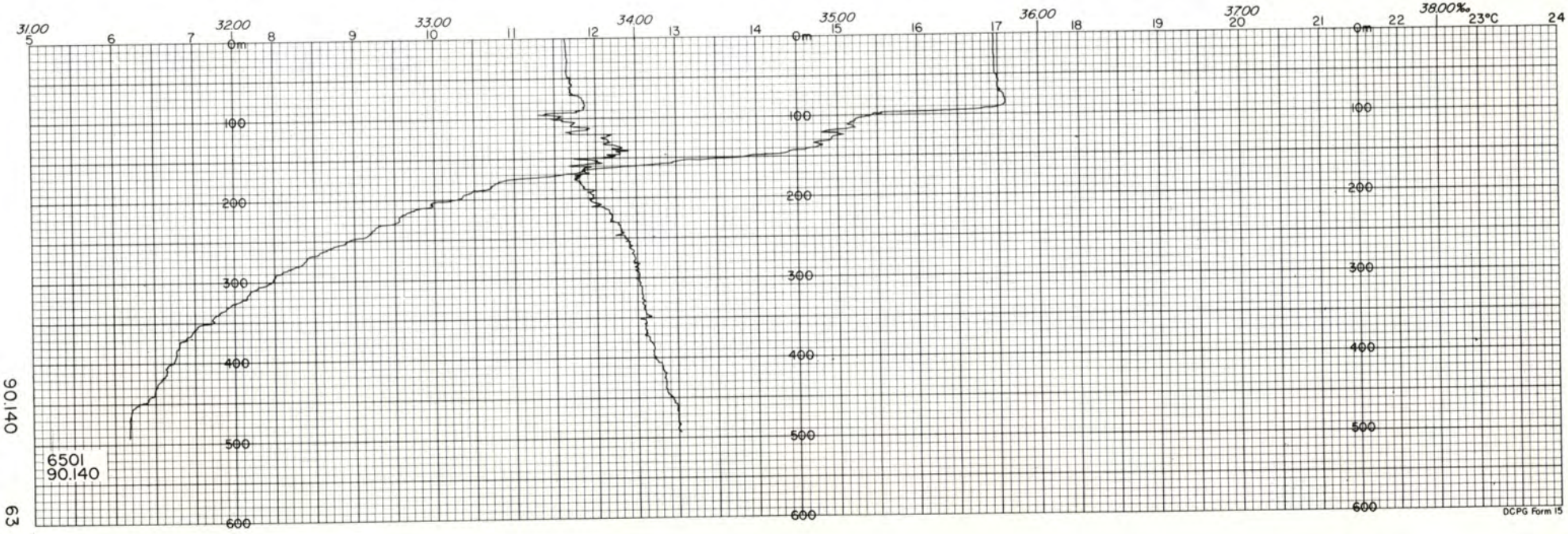
| BOTTLE SAMPLES | | | | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| ALEXANDER AGASSIZ; January 24, 1965; 2232 GCT; 30°05'N, 124°40.5'W; sounding, 2360 fm; wind, 010°, force 6; weather, cloudy; sea, high; wire angle, 43°. | | | | | | | | | | | | |
| 2094 | 2.07 | 34.638 | 2.04 | 2.97 | 172 | 41 | 2000 | 2.14 | 34.640 | 27.69 | 41 | |
| 2227 | 1.96 | 34.642 | 2.10 | 2.86 | 177 | 39 | 2500 | 1.82 | 34.650 | 27.73 | 38 | |
| 2359 | 1.90 | 34.648 | 2.19 | 2.90 | 177 | 39 | 3000 | 1.61 | 34.670 | 27.76 | 35 | |
| 2490 | 1.84 | 34.652 | 2.18 | 2.69 | 178 | 38 | 4000 | 1.54 | 34.680 | 27.77 | 34 | |
| 2623 | 1.78 | 34.654 | 2.41 | 2.74 | 182 | 37 | | | | | | |
| 2755 | 1.70 | 34.660 | 2.56 | 2.70 | 180 | 36 | | | | | | |
| 2891 | 1.65 | 34.664 | 2.72 | 2.81 | 182 | 36 | | | | | | |
| 3027 | 1.61 | 34.668 | 2.83 | 2.82 | 181 | 35 | | | | | | |
| 3165 | 1.57 | 34.671 | 2.83 | 2.65 | 184 | 34 | | | | | | |
| 3302 | 1.52 | 34.673 | 3.00 | 2.60 | 185 | 34 | | | | | | |
| 3397 | 1.52 | 34.676 | 3.07 | 2.78 | 178 | 34 | | | | | | |
| 3490 | 1.53 | 34.677 | 3.20 | 2.70 | 180 | 34 | | | | | | |
| 3585 | 1.54 | 34.677 | 3.08 | 2.70 | 182 | 34 | | | | | | |
| 3681 | 1.54 | 34.676 | 3.10 | 2.59 | 184 | 34 | | | | | | |
| 3777 | 1.54 | 34.682 | 3.19 | 2.65 | 177 | 33 | | | | | | |
| 3922 | 1.53 | 34.684 | 3.28 | 2.73 | 180 | 33 | | | | | | |
| 4072 | 1.54 | 34.681 | 3.08 | 2.46 | 180 | 33 | | | | | | |
| 4223 | 1.56 | 34.680 | 2.89 | 2.38 | 177 | 34 | | | | | | |

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | μg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 24, 1965; 1545 GCT; 29°45'N, 125°20'W; sounding, 2330 fm; wind, 010°, force 6; weather, partly cloudy; sea, very rough.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 16.95 | 33.65 | 24.51 | 343 | 0.00 |
| 10 | 16.96 | 33.66 | 24.52 | 343 | 0.03 |
| 20 | 16.96 | 33.66 | 24.52 | 343 | 0.07 |
| 30 | 16.96 | 33.66 | 24.52 | 343 | 0.10 |
| 50 | 16.96 | 33.68 | 24.53 | 341 | 0.17 |
| 75 | 17.06 | 33.73 | 24.55 | 340 | 0.26 |
| 100 | 15.43 | 33.60 | 24.82 | 314 | 0.34 |
| 125 | 15.00 | 33.83 | 25.09 | 288 | 0.42 |
| 150 | 13.85 | 33.77 | 25.29 | 269 | 0.49 |
| 200 | 10.25 | 33.78 | 25.98 | 204 | 0.61 |
| 250 | 8.92 | 33.95 | 26.33 | 170 | 0.70 |
| 300 | 7.97 | 34.01 | 26.52 | 152 | 0.79 |
| 400 | 6.73 | 34.09 | 26.76 | 129 | 0.93 |



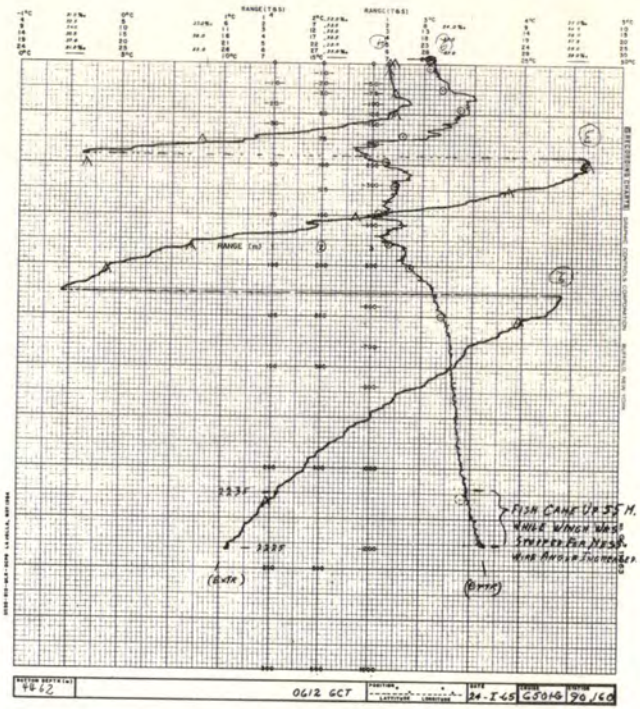



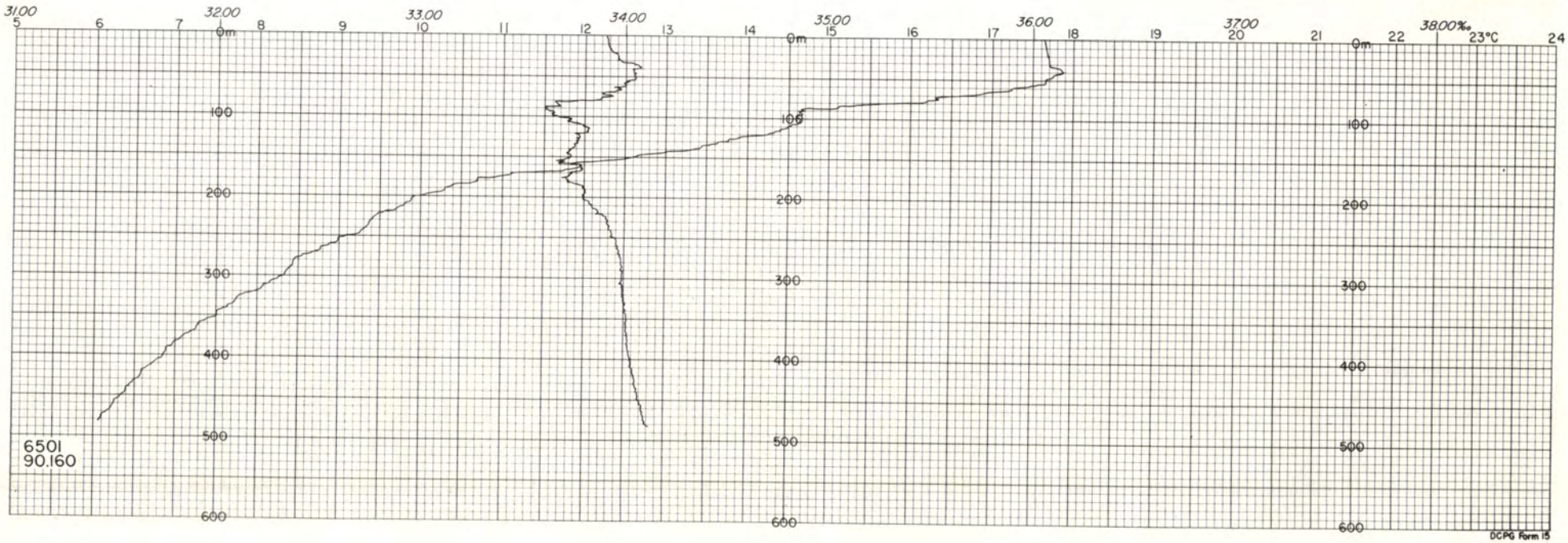
64 90.160

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 24, 1965; 0553 GCT; 29°07'N, 126°39.5'W; sounding, 2440 fm; wind, 360°, force 5; weather, overcast; sea, moderate; wire angle, 33°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 17.66 | 33.924 | 5.72 | 0.26 | 3 | 339 | 0 | 17.64 | 33.91 | 24.55 | 340 | 0.00 |
| 10 | 17.66 | 33.922 | 5.73 | 0.26 | 2 | 340 | 10 | 17.67 | 33.92 | 24.55 | 340 | 0.03 |
| 31 | 17.72 | 33.971 | 5.78 | 0.26 | 2 | 337 | 20 | 17.68 | 33.94 | 24.56 | 339 | 0.07 |
| 51 | 17.72 | 34.042 | 5.73 | 0.27 | 2 | 332 | 30 | 17.71 | 33.97 | 24.57 | 337 | 0.10 |
| 77 | 15.78 | 33.817 | 5.97 | 0.33 | 4 | 305 | 50 | 17.66 | 34.05 | 24.65 | 330 | 0.17 |
| 102 | 14.66 | 33.753 | 5.78 | 0.38 | 4 | 287 | 75 | 16.33 | 33.93 | 24.87 | 309 | 0.25 |
| 127 | 13.85 | 33.784 | 5.54 | 0.52 | 7 | 268 | 100 | 14.61 | 33.67 | 25.05 | 292 | 0.32 |
| 153 | 12.34 | 33.724 | 5.16 | 0.78 | 9 | 244 | 125 | 13.87 | 33.77 | 25.28 | 270 | 0.40 |
| 184 | 10.69 | 33.766 | 4.99 | 1.05 | 15 | 212 | 150 | 12.55 | 33.73 | 25.52 | 247 | 0.46 |
| 207 | 9.86 | 33.850 | 4.84 | 1.24 | 18 | 192 | 200 | 9.95 | 33.79 | 26.04 | 198 | 0.57 |
| 255 | 8.96 | 33.978 | 4.67 | 1.50 | 26 | 169 | 250 | 9.08 | 33.95 | 26.30 | 173 | 0.67 |
| | | | | | | | 300 | 8.33 | 33.99 | 26.45 | 159 | 0.75 |
| | | | | | | | 400 | 6.86 | 34.03 | 26.70 | 136 | 0.91 |
| | | | | | | | 500 | 5.98 | 34.13 | 26.89 | 117 | 1.04 |

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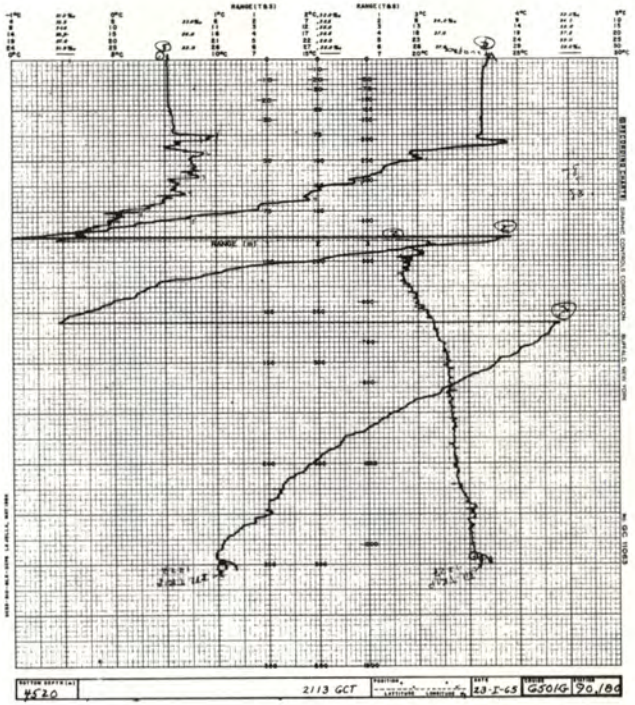
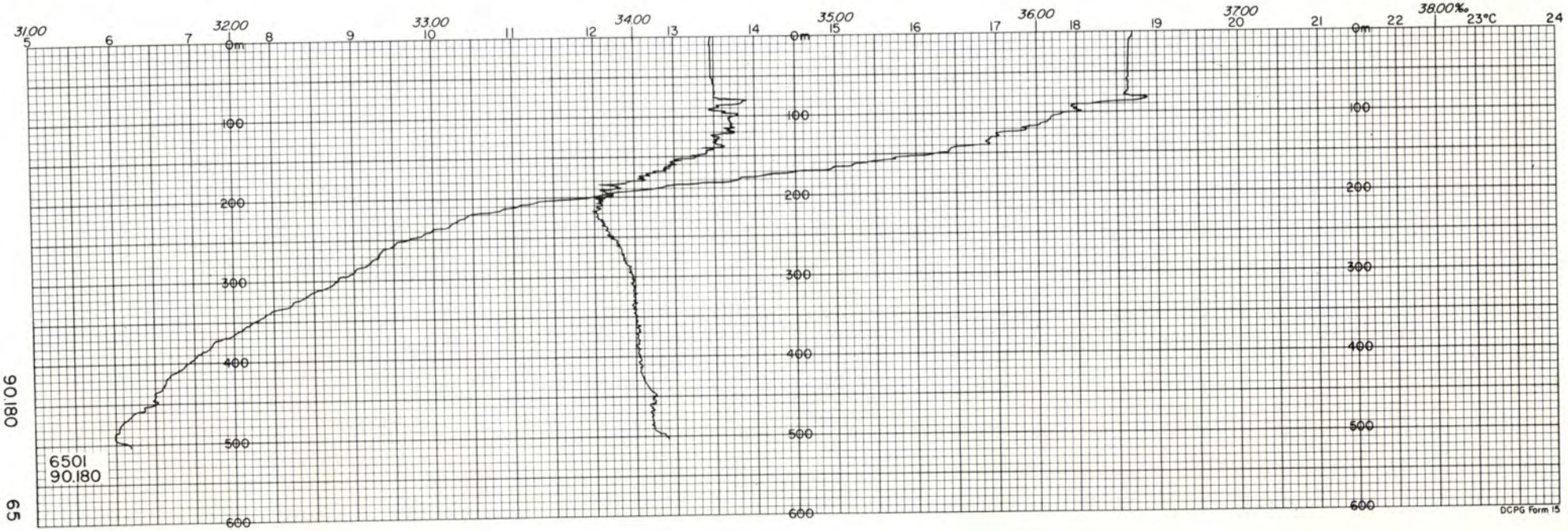
| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 23, 1965; 2113 GCT; 28°24.5'N, 127°58.5'W; sounding, 2470 fm; wind, 210°, force 3; weather, cloudy; sea, rough.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 18.70 | 34.38 | 24.64 | 331 | 0.00 |
| 10 | 18.66 | 34.38 | 24.65 | 330 | 0.03 |
| 20 | 18.65 | 34.38 | 24.66 | 329 | 0.07 |
| 30 | 18.65 | 34.38 | 24.66 | 329 | 0.10 |
| 50 | 18.64 | 34.39 | 24.67 | 328 | 0.17 |
| 75 | 18.63 | 34.40 | 24.68 | 328 | 0.25 |
| 100 | 18.00 | 34.51 | 24.92 | 305 | 0.33 |
| 125 | 17.07 | 34.40 | 25.06 | 291 | 0.40 |
| 150 | 16.22 | 34.30 | 25.18 | 280 | 0.48 |
| 200 | 11.91 | 33.86 | 25.74 | 226 | 0.60 |
| 250 | 9.70 | 33.89 | 26.16 | 187 | 0.71 |
| 300 | 8.78 | 33.99 | 26.38 | 165 | 0.80 |
| 400 | 6.93 | 34.02 | 26.68 | 137 | 0.96 |
| 500 | 6.16 | 34.14 | 26.87 | 119 | 1.09 |

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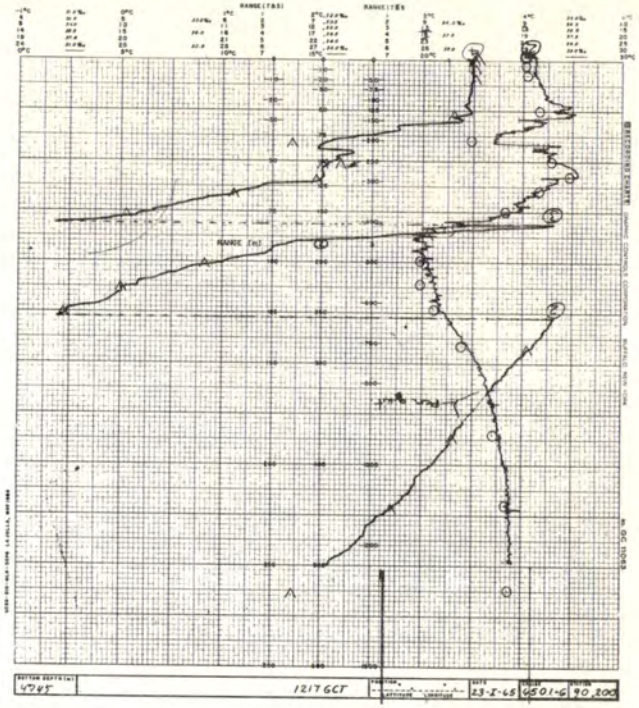
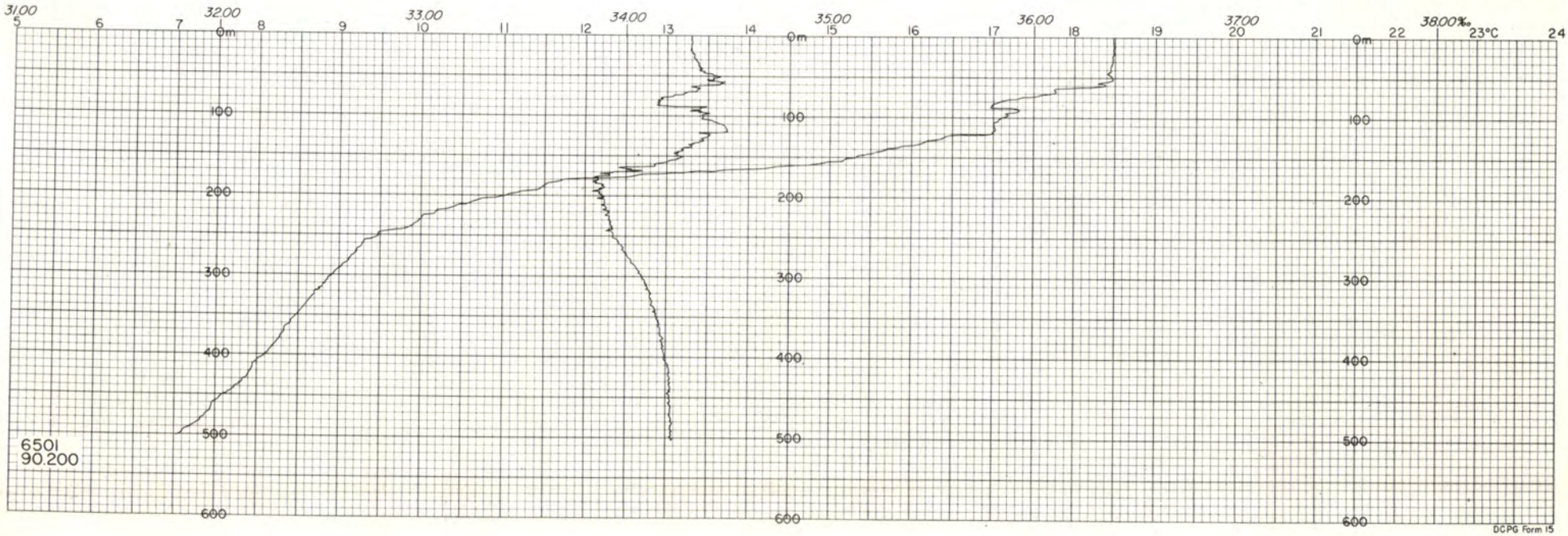
| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

ALEXANDER AGASSIZ; January 23, 1965; 1148 GCT; 27°43'N, 129°18.5'W; sounding, 2595 fm; wind, 160°, force 3; weather, drizzle; sea, moderate; wire angle, 08°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.50 | 34.305 | 5.60 | 0.21 | 4 | 331 | 0 | 18.48 | 34.31 | 24.64 | 330 | 0.00 |
| 10 | 18.51 | 34.305 | 5.70 | 0.20 | 2 | 332 | 10 | 18.48 | 34.32 | 24.65 | 330 | 0.03 |
| 20 | 18.51 | 34.314 | 5.75 | 0.23 | 2 | 331 | 20 | 18.48 | 34.32 | 24.65 | 330 | 0.07 |
| 55 | 18.30 | 34.363 | 5.70 | 0.19 | 3 | 322 | 30 | 18.47 | 34.34 | 24.67 | 328 | 0.10 |
| 84 | 16.69 | 34.089 | 5.89 | 0.22 | 4 | 305 | 50 | 18.46 | 34.46 | 24.76 | 319 | 0.16 |
| 105 | 17.00 | 34.414 | 5.59 | 0.24 | 4 | 289 | 75 | 17.35 | 34.23 | 24.86 | 310 | 0.24 |
| 119 | 16.94 | 34.485 | 5.50 | 0.23 | 4 | 282 | 100 | 17.10 | 34.38 | 25.03 | 293 | 0.32 |
| 134 | 16.11 | 34.363 | 5.42 | 0.32 | 4 | 273 | 125 | 16.38 | 34.37 | 25.20 | 278 | 0.39 |
| 154 | 15.05 | 34.229 | 5.32 | 0.41 | 6 | 260 | 150 | 15.32 | 34.26 | 25.35 | 263 | 0.46 |
| 174 | 13.04 | 34.002 | 5.23 | 0.64 | 9 | 237 | 200 | 11.02 | 33.88 | 25.92 | 209 | 0.58 |
| 203 | 10.82 | 33.890 | 5.00 | 0.98 | 14 | 205 | 250 | 9.47 | 33.94 | 26.23 | 179 | 0.68 |
| 227 | 10.00 | 33.922 | 4.87 | 1.21 | 18 | 189 | 300 | 8.92 | 34.08 | 26.43 | 161 | 0.77 |
| 252 | 9.44 | 33.946 | 4.26 | 1.52 | 24 | 178 | 400 | 8.11 | 34.20 | 26.65 | 140 | 0.92 |
| 287 | 9.04 | 34.056 | 2.05 | 2.37 | 39 | 164 | 500 | 7.05 | 34.23 | 26.83 | 123 | 1.06 |
| 375 | 8.30 | 34.181 | 1.41 | 2.67 | 48 | 144 | | | | | | |
| 445 | 7.70 | 34.231 | 1.04 | 2.91 | 58 | 132 | | | | | | |
| 529 | 6.72 | 34.246 | 0.73 | 3.06 | 72 | 118 | | | | | | |
| 613 | 5.72 | 34.233 | 0.68 | 3.13 | 90 | 106 | | | | | | |



| BOTTLE SAMPLES | | | | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| BLACK DOUGLAS; January 25, 1965; 2200 GCT; 32°54.5'N, 117°22'W; sounding, 260 fm; wind, 270°, force 3; weather, clear; sea, rough; wire angle, 05°. | | | | | | | | | | | | |
| 0 | 13.74 | 33.508 | 5.92 | | | 286 | 0 | 13.74 | 33.51 | 25.11 | 286 | 0.00 |
| 10 | 13.55 | 33.501 | 5.98 | | | 283 | 10 | 13.55 | 33.50 | 25.14 | 283 | 0.03 |
| 29 | 13.32 | 33.504 | 5.86 | | | 278 | 20 | 13.44 | 33.50 | 25.16 | 281 | 0.06 |
| 44 | 11.95 | 33.514 | 5.08 | | | 252 | 30 | 13.30 | 33.51 | 25.20 | 278 | 0.08 |
| 53 | 11.88 | 33.581 | 4.55 | | | 246 | 50 | 11.90 | 33.56 | 25.51 | 248 | 0.14 |
| 67 | 11.11 | 33.653 | 3.61 | | | 227 | 75 | 10.50 | 33.70 | 25.87 | 214 | 0.20 |
| 82 | 10.62 | 33.785 | 3.01 | | | 209 | 100 | 10.40 | 33.85 | 26.01 | 201 | 0.25 |
| 95 | 10.54 | 33.808 | 3.00 | | | 206 | 125 | 10.02 | 33.97 | 26.17 | 186 | 0.30 |
| 119 | 10.12 | 33.941 | 2.49 | | | 190 | 150 | 9.63 | 34.04 | 26.29 | 175 | 0.34 |
| 140 | 9.81 | 34.020 | 2.29 | | | 179 | 200 | 9.03 | 34.14 | 26.46 | 158 | 0.43 |
| 168 | 9.32 | 34.073 | 2.12 | | | 167 | 250 | 8.47 | 34.23 | 26.62 | 143 | 0.50 |
| 196 | 9.06 | 34.136 | 1.88 | | | 159 | 300 | 8.02 | 34.25 | 26.70 | 135 | 0.58 |
| 228 | 8.74 | 34.208 | 1.43 | | | 148 | 400 | (7.03) | (34.27) | (26.86) | (120) | (0.71) |
| 282 | 8.14 | 34.243 | 0.99 | | | 137 | | | | | | |
| 335 | 7.78 | 34.255 | 0.86 | | | 131 | | | | | | |
| 393 | 7.12 | 34.272 | 0.58 | | | 121 | | | | | | |
| ALEXANDER AGASSIZ; January 6, 1965; 2323 GCT; 32°50.5'N, 117°33.5'W; sounding, 475 fm; wind, 080°, force 2; weather, partly cloudy; sea, slight; wire angle, 09°.[a] | | | | | | | | | | | | |
| 0 | 13.68 | 33.475 | 6.19 | | | 288 | | | | | | |
| 5 | 13.68 | 33.475 | 6.36 | | | 288 | | | | | | |
| 10 | 13.58 | 33.467 | 6.32 | | | 286 | | | | | | |
| 482 | 6.42 | 34.295 | 0.61 | | | 110 | | | | | | |
| 488 | 6.46 | 34.298 | 0.64 | | | 110 | | | | | | |
| 493 | 6.42 | 34.299 | 0.67 | | | 110 | | | | | | |
| 498 | 6.39 | 34.306 | | | | 109 | | | | | | |
| 503 | 6.33 | 34.318 | 0.56 | | | 107 | | | | | | |
| 508 | 6.29 | 34.317 | 0.54 | | | 107 | | | | | | |
| 513 | 6.27 | 34.319 | 0.57 | | | 107 | | | | | | |
| 518 | 6.26 | 34.320 | 0.63 | | | 106 | | | | | | |
| 523 | 6.20 | 34.324 | 0.69 | | | 105 | | | | | | |
| 529 | 6.20 | 34.327 | 0.58 | | | 105 | | | | | | |
| 534 | 6.16 | 34.332 | 0.55 | | | 104 | | | | | | |
| 539 | 6.14 | 34.334 | 0.62 | | | 104 | | | | | | |
| 544 | 6.10 | 34.336 | | | | 103 | | | | | | |
| 549 | 6.06 | 34.336 | 0.54 | | | 103 | | | | | | |
| 553 | - | 34.342 | 0.51 | | | | | | | | | |

a) Shakedown station.

| BOTTLE SAMPLES | | | | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| BLACK DOUGLAS; January 26, 1965; 0037 GCT; 32°50'N, 117°31'W; sounding, 400 fm; wind, 300°, force 4; weather, clear; sea, moderate; wire angle, 13°. | | | | | | | | | | | | |
| 0 | 13.88 | 33.500 | 6.01 | | | 290 | 0 | 13.88 | 33.50 | 25.07 | 290 | 0.00 |
| 9 | 13.86 | 33.495 | 6.06 | | | 290 | 10 | 13.85 | 33.50 | 25.08 | 289 | 0.03 |
| 28 | 13.71 | 33.491 | 5.98 | | | 287 | 20 | 13.80 | 33.50 | 25.09 | 288 | 0.06 |
| 56 | 12.01 | 33.437 | 5.01 | | | 259 | 30 | 13.69 | 33.49 | 25.11 | 287 | 0.09 |
| 66 | 11.48 | 33.473 | 4.76 | | | 247 | 50 | 13.00 | 33.46 | 25.22 | 276 | 0.14 |
| 80 | 11.02 | 33.568 | 4.23 | | | 232 | 75 | 11.07 | 33.55 | 25.66 | 234 | 0.21 |
| 93 | 10.26 | 33.608 | 4.33 | | | 217 | 100 | 10.17 | 33.67 | 25.91 | 211 | 0.26 |
| 107 | 10.08 | 33.735 | 3.53 | | | 204 | 125 | 9.86 | 33.87 | 26.11 | 191 | 0.31 |
| 130 | 9.82 | 33.897 | 2.98 | | | 188 | 150 | 9.68 | 34.04 | 26.28 | 175 | 0.36 |
| 148 | 9.69 | 34.029 | 2.39 | | | 176 | 200 | 9.18 | 34.19 | 26.48 | 156 | 0.45 |
| 176 | 9.44 | 34.134 | 1.90 | | | 165 | 250 | 8.65 | 34.24 | 26.60 | 145 | 0.52 |
| 203 | 9.14 | 34.192 | 1.63 | | | 156 | 300 | 8.08 | 34.25 | 26.69 | 136 | 0.60 |
| 231 | 8.80 | 34.220 | 1.41 | | | 148 | 400 | 7.09 | 34.28 | 26.86 | 120 | 0.73 |
| 277 | 8.40 | 34.256 | 1.11 | | | 140 | 500 | 6.30 | 34.32 | 27.00 | 107 | 0.85 |
| 327 | 7.74 | 34.238 | 1.01 | | | 132 | | | | | | |
| 406 | 7.03 | 34.278 | 0.61 | | | 119 | | | | | | |
| 488 | 6.38 | 34.312 | 0.38 | | | 108 | | | | | | |
| 569 | 5.96 | 34.351 | 0.25 | | | 100 | | | | | | |
| BLACK DOUGLAS; January 26, 1965; 0747 GCT; 32°30'N, 118°11.5'W; sounding, 850 fm; wind, 320°, force 5; weather, clear; sea, moderate; wire angle, 06°. | | | | | | | | | | | | |
| 1 | 13.66 | 33.507 | 5.99 | | | 285 | 0 | (13.66) | (33.51) | (25.13) | (285) | (0.00) |
| 11 | 13.67 | 33.502 | 6.00 | | | 285 | 10 | 13.67 | 33.50 | 25.12 | 286 | 0.03 |
| 35 | 13.51 | 33.490 | 5.92 | | | 283 | 20 | 13.65 | 33.50 | 25.12 | 285 | 0.06 |
| 45 | 12.92 | 33.491 | 5.59 | | | 272 | 30 | 13.58 | 33.49 | 25.13 | 285 | 0.09 |
| 59 | 11.52 | 33.601 | 4.21 | | | 238 | 50 | 12.05 | 33.54 | 25.47 | 252 | 0.14 |
| 74 | 11.06 | 33.644 | 3.96 | | | 227 | 75 | 11.04 | 33.65 | 25.74 | 226 | 0.20 |
| 93 | 10.50 | 33.776 | 3.29 | | | 208 | 100 | 10.37 | 33.80 | 25.97 | 204 | 0.25 |
| 119 | 10.06 | 33.838 | 3.32 | | | 196 | 125 | 9.93 | 33.86 | 26.09 | 193 | 0.30 |
| 138 | 9.65 | 33.916 | 3.07 | | | 184 | 150 | 9.52 | 33.98 | 26.26 | 177 | 0.35 |
| 166 | 9.36 | 34.046 | 2.47 | | | 170 | 200 | 8.88 | 34.10 | 26.45 | 159 | 0.44 |
| 195 | 8.91 | 34.094 | 2.26 | | | 159 | 250 | 8.43 | 34.20 | 26.60 | 144 | 0.51 |
| 234 | 8.74 | 34.200 | 1.59 | | | 149 | 300 | 8.00 | 34.24 | 26.70 | 135 | 0.59 |
| 262 | 8.24 | 34.200 | 1.42 | | | 142 | 400 | 7.04 | 34.27 | 26.86 | 120 | 0.72 |
| 311 | 7.93 | 34.251 | 1.02 | | | 134 | 500 | 6.16 | 34.31 | 27.01 | 106 | 0.84 |
| 374 | 7.31 | 34.267 | 0.72 | | | 124 | 600 | 5.59 | 34.36 | 27.12 | 95 | 0.95 |
| 461 | 6.46 | 34.295 | 0.50 | | | 111 | | | | | | |
| 559 | 5.79 | 34.340 | 0.29 | | | 99 | | | | | | |
| 632 | 5.46 | 34.381 | 0.27 | | | 92 | | | | | | |

| BOTTLE SAMPLES | | | | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| BLACK DOUGLAS; January 26, 1965; 1443 GCT; 32°11.5'N, 118°55.5'W; sounding, 700 fm; wind, 320°, force 6; weather, partly cloudy; sea, rough; wire angle, 12°. | | | | | | | | | | | | |
| 3 | 12.84 | 33.546 | 5.94 | | | 266 | 0 | (12.84) | (33.55) | (25.32) | (266) | (0.00) |
| 13 | 12.84 | 33.525 | 5.94 | | | 268 | 10 | 12.84 | 33.53 | 25.31 | 267 | 0.03 |
| 36 | 12.84 | 33.530 | 5.93 | | | 267 | 20 | 12.84 | 33.53 | 25.31 | 267 | 0.05 |
| 64 | 10.59 | 33.650 | 3.96 | | | 219 | 30 | 12.84 | 33.53 | 25.31 | 267 | 0.08 |
| 74 | 10.45 | 33.665 | 3.84 | | | 215 | 50 | 12.60 | 33.54 | 25.36 | 262 | 0.13 |
| 92 | 9.74 | 33.700 | 3.88 | | | 201 | 75 | 10.44 | 33.67 | 25.86 | 215 | 0.19 |
| 106 | 9.76 | 33.779 | 3.41 | | | 196 | 100 | 9.75 | 33.75 | 26.04 | 198 | 0.25 |
| 118 | 9.38 | 33.855 | 3.10 | | | 184 | 125 | 9.23 | 33.88 | 26.23 | 180 | 0.29 |
| 147 | 8.87 | 33.993 | 2.83 | | | 166 | 150 | 8.82 | 34.01 | 26.39 | 164 | 0.34 |
| 164 | 8.61 | 34.071 | 2.28 | | | 157 | 200 | 8.22 | 34.14 | 26.59 | 146 | 0.42 |
| 191 | 8.34 | 34.132 | 1.82 | | | 148 | 250 | 7.76 | 34.21 | 26.71 | 134 | 0.49 |
| 222 | 7.94 | 34.168 | 1.43 | | | 140 | 300 | 7.51 | 34.23 | 26.76 | 129 | 0.56 |
| 249 | 7.77 | 34.210 | 1.15 | | | 134 | 400 | 6.63 | 34.27 | 26.92 | 115 | 0.68 |
| 294 | 7.56 | 34.227 | 0.92 | | | 130 | 500 | 6.09 | 34.34 | 27.04 | 103 | 0.80 |
| 357 | 6.94 | 34.249 | 0.66 | | | 120 | 600 | (5.57) | (34.37) | (27.13) | (94) | (0.90) |
| 450 | 6.34 | 34.304 | 0.39 | | | 109 | | | | | | |
| 535 | 5.92 | 34.353 | 0.30 | | | 100 | | | | | | |
| 599 | 5.58 | 34.371 | 0.25 | | | 94 | | | | | | |
| BLACK DOUGLAS; January 26, 1965; 2052 GCT; 31°50.5'N, 119°33.5'W; sounding, 1400 fm; wind, 330°, force 5; weather, clear; sea, rough; wire angle, 11°. | | | | | | | | | | | | |
| 1 | 14.32 | 33.444 | 5.90 | | | 302 | 0 | (14.32) | (33.44) | (24.94) | (303) | (0.00) |
| 11 | 14.32 | 33.446 | 5.89 | | | 302 | 10 | 14.32 | 33.45 | 24.94 | 302 | 0.03 |
| 34 | 14.20 | 33.446 | 5.88 | | | 300 | 20 | 14.29 | 33.45 | 24.95 | 301 | 0.06 |
| 62 | 13.82 | 33.465 | 5.84 | | | 291 | 30 | 14.23 | 33.45 | 24.96 | 300 | 0.09 |
| 72 | 13.78 | 33.455 | 5.83 | | | 291 | 50 | 14.00 | 33.46 | 25.02 | 295 | 0.15 |
| 91 | 12.26 | 33.345 | 5.45 | | | 270 | 75 | 13.76 | 33.45 | 25.06 | 291 | 0.22 |
| 106 | 11.83 | 33.407 | 5.19 | | | 258 | 100 | 12.02 | 33.37 | 25.34 | 264 | 0.29 |
| 120 | 11.06 | 33.525 | 4.61 | | | 236 | 125 | 10.85 | 33.56 | 25.70 | 230 | 0.36 |
| 150 | 10.01 | 33.686 | 3.98 | | | 207 | 150 | 10.01 | 33.69 | 25.95 | 206 | 0.41 |
| 167 | 9.08 | 33.793 | 3.81 | | | 184 | 200 | 8.76 | 33.92 | 26.33 | 170 | 0.51 |
| 195 | 8.83 | 33.900 | 3.53 | | | 173 | 250 | 7.85 | 34.03 | 26.56 | 149 | 0.59 |
| 228 | 8.13 | 34.003 | 3.00 | | | 155 | 300 | 7.23 | 34.09 | 26.69 | 136 | 0.66 |
| 256 | 7.76 | 34.036 | 2.69 | | | 147 | 400 | 6.43 | 34.16 | 26.86 | 120 | 0.80 |
| 303 | 7.20 | 34.095 | 1.88 | | | 135 | 500 | 5.79 | 34.25 | 27.01 | 106 | 0.91 |
| 364 | 6.68 | 34.128 | 1.28 | | | 126 | 600 | 5.29 | 34.33 | 27.13 | 94 | 1.02 |
| 459 | 6.07 | 34.216 | 0.66 | | | 112 | | | | | | |
| 546 | 5.50 | 34.285 | 0.41 | | | 100 | | | | | | |
| 617 | 5.24 | 34.343 | 0.30 | | | 93 | | | | | | |

| BOTTLE SAMPLES | | | | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| BLACK DOUGLAS; January 27, 1965; 0314 GCT; 31°31'N, 120°14'W; sounding, 2050 fm; wind, 340°, force 4; weather, clear; sea, very rough; wire angle, 03°. | | | | | | | | | | | | |
| 1 | 15.64 | 33.425 | 5.77 | | | 331 | 0 | (15.64) | (33.42) | (24.63) | (331) | (0.00) |
| 11 | 15.64 | 33.424 | 5.77 | | | 331 | 10 | 15.64 | 33.42 | 24.63 | 331 | 0.03 |
| 35 | 15.62 | 33.415 | 5.79 | | | 331 | 20 | 15.63 | 33.42 | 24.64 | 331 | 0.07 |
| 64 | 15.36 | 33.420 | 5.80 | | | 326 | 30 | 15.62 | 33.42 | 24.64 | 331 | 0.10 |
| 76 | 14.92 | 33.495 | 5.82 | | | 311 | 50 | 15.56 | 33.42 | 24.65 | 330 | 0.17 |
| 93 | 13.98 | 33.509 | 5.66 | | | 291 | 75 | 14.98 | 33.49 | 24.83 | 313 | 0.25 |
| 108 | 13.22 | 33.435 | 5.63 | | | 282 | 100 | 13.66 | 33.48 | 25.10 | 287 | 0.32 |
| 121 | 12.32 | 33.467 | 5.29 | | | 263 | 125 | 11.97 | 33.49 | 25.44 | 254 | 0.39 |
| 151 | 10.30 | 33.596 | 4.28 | | | 218 | 150 | 10.36 | 33.59 | 25.81 | 220 | 0.45 |
| 169 | 9.70 | 33.661 | 4.16 | | | 204 | 200 | 9.20 | 33.86 | 26.21 | 181 | 0.55 |
| 199 | 9.21 | 33.854 | 3.68 | | | 182 | 250 | 8.29 | 33.99 | 26.46 | 158 | 0.64 |
| 232 | 8.79 | 33.964 | 3.32 | | | 167 | 300 | 7.32 | 34.04 | 26.64 | 141 | 0.72 |
| 261 | 7.98 | 34.006 | 2.82 | | | 152 | 400 | 6.43 | 34.13 | 26.83 | 123 | 0.85 |
| 308 | 7.20 | 34.053 | 2.05 | | | 138 | 500 | 5.96 | 34.27 | 27.00 | 106 | 0.97 |
| 371 | 6.56 | 34.081 | 1.43 | | | 128 | 600 | 5.33 | 34.32 | 27.12 | 95 | 1.08 |
| 467 | 6.16 | 34.251 | 0.53 | | | 110 | | | | | | |
| 556 | 5.57 | 34.295 | 0.36 | | | 100 | | | | | | |
| 629 | 5.21 | 34.329 | 0.27 | | | 93 | | | | | | |
| BLACK DOUGLAS; January 27, 1965; 0904 GCT; 31°15'N, 120°53.5'W; sounding, 2000 fm; wind, 340°, force 4; weather, clear; sea, moderate; wire angle, 07°. | | | | | | | | | | | | |
| 1 | - | 33.348 | 5.81 | | | | 0 | 15.1 | (33.35) | (24.70) | (325) | (0.00) |
| 11 | 15.12 | 33.353 | 5.82 | | | 325 | 10 | 15.13 | 33.35 | 24.69 | 326 | 0.03 |
| 34 | 15.10 | 33.344 | 5.84 | | | 326 | 20 | 15.11 | 33.35 | 24.70 | 325 | 0.07 |
| 64 | 13.16 | 33.352 | 5.66 | | | 287 | 30 | 15.10 | 33.35 | 24.70 | 325 | 0.10 |
| 74 | 12.45 | 33.341 | 5.50 | | | 274 | 50 | 14.00 | 33.35 | 24.93 | 303 | 0.16 |
| 93 | 11.56 | 33.456 | 4.87 | | | 250 | 75 | 12.30 | 33.34 | 25.26 | 271 | 0.23 |
| 108 | 10.61 | 33.594 | 4.21 | | | 223 | 100 | 11.08 | 33.53 | 25.64 | 236 | 0.30 |
| 122 | 10.00 | 33.687 | 3.73 | | | 207 | 125 | 9.92 | 33.70 | 25.97 | 204 | 0.35 |
| 151 | 9.40 | 33.836 | 3.19 | | | 186 | 150 | 9.42 | 33.83 | 26.16 | 187 | 0.40 |
| 170 | 8.74 | 33.956 | 3.65 | | | 167 | 200 | 8.54 | 34.04 | 26.46 | 158 | 0.49 |
| 198 | 8.55 | 34.041 | 2.51 | | | 158 | 250 | 7.65 | 34.07 | 26.62 | 143 | 0.57 |
| 231 | 8.18 | 34.105 | 1.91 | | | 148 | 300 | 7.26 | 34.13 | 26.72 | 133 | 0.64 |
| 259 | 7.48 | 34.055 | 2.13 | | | 142 | 400 | 6.30 | 34.21 | 26.91 | 115 | 0.77 |
| 307 | 7.22 | 34.140 | 1.42 | | | 132 | 500 | 5.78 | 34.29 | 27.04 | 103 | 0.88 |
| 369 | 6.57 | 34.174 | 1.01 | | | 121 | 600 | 5.36 | 34.35 | 27.14 | 93 | 0.99 |
| 465 | 5.93 | 34.267 | 0.44 | | | 106 | | | | | | |
| 553 | 5.56 | 34.319 | 0.32 | | | 98 | | | | | | |
| 626 | 5.23 | 34.368 | 0.28 | | | 91 | | | | | | |

| BOTTLE SAMPLES | | | | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| BLACK DOUGLAS; January 27, 1965; 1430 GCT; 31°00'N, 121°31.5'W; sounding, 2050 fm; wind, 340°, force 5; weather, partly cloudy; sea, rough; wire angle, 10°. | | | | | | | | | | | | |
| 0 | 14.53 | 33.585 | 5.84 | | | 296 | 0 | 14.53 | 33.58 | 25.00 | 297 | 0.00 |
| 10 | 14.56 | 33.581 | 5.85 | | | 297 | 10 | 14.56 | 33.58 | 24.99 | 297 | 0.03 |
| 43 | 14.55 | 33.581 | 5.86 | | | 297 | 20 | 14.56 | 33.58 | 24.99 | 297 | 0.06 |
| 71 | 13.91 | 33.565 | 5.31 | | | 285 | 30 | 14.55 | 33.58 | 24.99 | 297 | 0.09 |
| 90 | 10.85 | 33.608 | 4.19 | | | 226 | 50 | 14.54 | 33.58 | 25.00 | 297 | 0.15 |
| 105 | 9.90 | 33.723 | 3.66 | | | 202 | 75 | 12.35 | 33.58 | 25.44 | 255 | 0.22 |
| 118 | 9.39 | 33.802 | 3.33 | | | 188 | 100 | 10.13 | 33.69 | 25.93 | 208 | 0.28 |
| 138 | 8.92 | 33.917 | 2.80 | | | 173 | 125 | 9.20 | 33.84 | 26.20 | 183 | 0.33 |
| 157 | 8.58 | 34.001 | 2.60 | | | 161 | 150 | 8.69 | 33.98 | 26.39 | 165 | 0.37 |
| 185 | 8.20 | 34.051 | 2.28 | | | 152 | 200 | 7.97 | 34.07 | 26.57 | 148 | 0.45 |
| 209 | 7.85 | 34.079 | 2.03 | | | 145 | 250 | 7.50 | 34.12 | 26.68 | 137 | 0.52 |
| 232 | 7.67 | 34.095 | 1.83 | | | 141 | 300 | 6.83 | 34.13 | 26.78 | 128 | 0.59 |
| 266 | 7.32 | 34.135 | 1.47 | | | 134 | 400 | 6.39 | 34.27 | 26.95 | 112 | 0.72 |
| 304 | 6.78 | 34.125 | 1.33 | | | 127 | 500 | 5.70 | 34.32 | 27.07 | 100 | 0.83 |
| 351 | 6.45 | 34.192 | 0.85 | | | 118 | 600 | (5.26) | (34.36) | (27.16) | (92) | (0.93) |
| 420 | 6.34 | 34.291 | 0.48 | | | 109 | | | | | | |
| 500 | 5.70 | 34.315 | 0.32 | | | 100 | | | | | | |
| 583 | 5.31 | 34.350a) | 0.27 | | | 93 | | | | | | |
| BLACK DOUGLAS; January 20, 1965; 0221 GCT; 32°46.5'N, 117°25'W; sounding, 200 fm; wind, 270°, force 2; weather, cloudy; sea, slight; wire angle, 00°.[b] | | | | | | | | | | | | |
| 0 | 14.27 | 33.498 | 6.05 | | | 298 | | | | | | |
| 10 | 13.98 | 33.494 | 5.86 | | | 292 | | | | | | |
| 19 | 13.50 | 33.492 | 6.13 | | | 283 | | | | | | |
| 28 | 12.85 | 33.519 | 5.79 | | | 268 | | | | | | |
| 39 | 12.17 | 33.497 | 5.21 | | | 258 | | | | | | |
| 48 | 11.98 | 33.523 | 5.04 | | | 252 | | | | | | |
| 58 | 11.32 | 33.552 | 4.51 | | | 238 | | | | | | |
| 68 | 10.92 | 33.606 | 4.09 | | | 228 | | | | | | |
| 78 | 10.48 | 33.674 | 3.85 | | | 215 | | | | | | |
| 87 | 10.39 | 33.739 | 3.51 | | | 209 | | | | | | |
| 97 | 10.11 | 33.821 | 3.18 | | | 198 | | | | | | |
| 107 | 10.00 | 33.857 | 3.05 | | | 194 | | | | | | |
| 117 | 9.92 | 33.900 | 2.90 | | | 189 | | | | | | |
| 126 | 9.88 | 33.979 | 2.51 | | | 183 | | | | | | |
| 136 | 9.90 | 33.999 | 2.50 | | | 182 | | | | | | |
| 145 | 9.90 | 34.013 | 2.42 | | | 181 | | | | | | |
| 155 | 9.79 | 34.065 | 2.09 | | | 175 | | | | | | |
| 165 | 9.64 | 34.075 | 2.04 | | | 172 | | | | | | |

a) Possible evaporation; value falls on property curve.

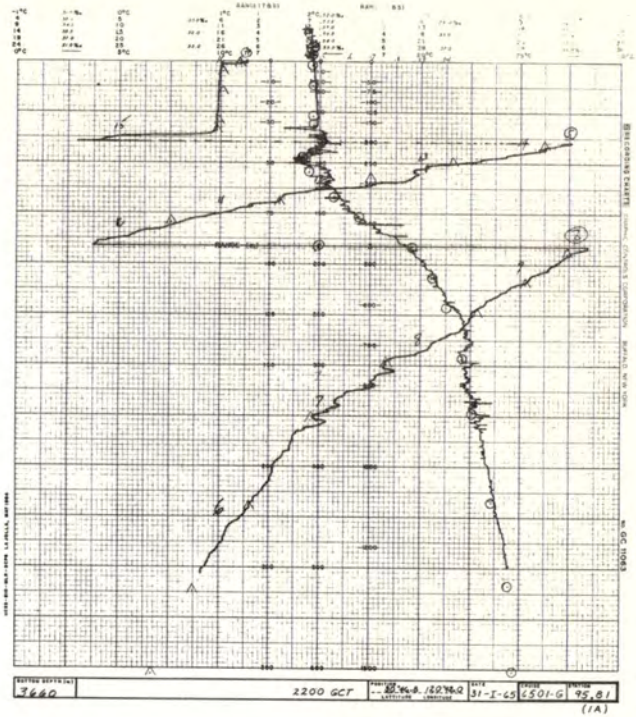
b) Shakedown station.

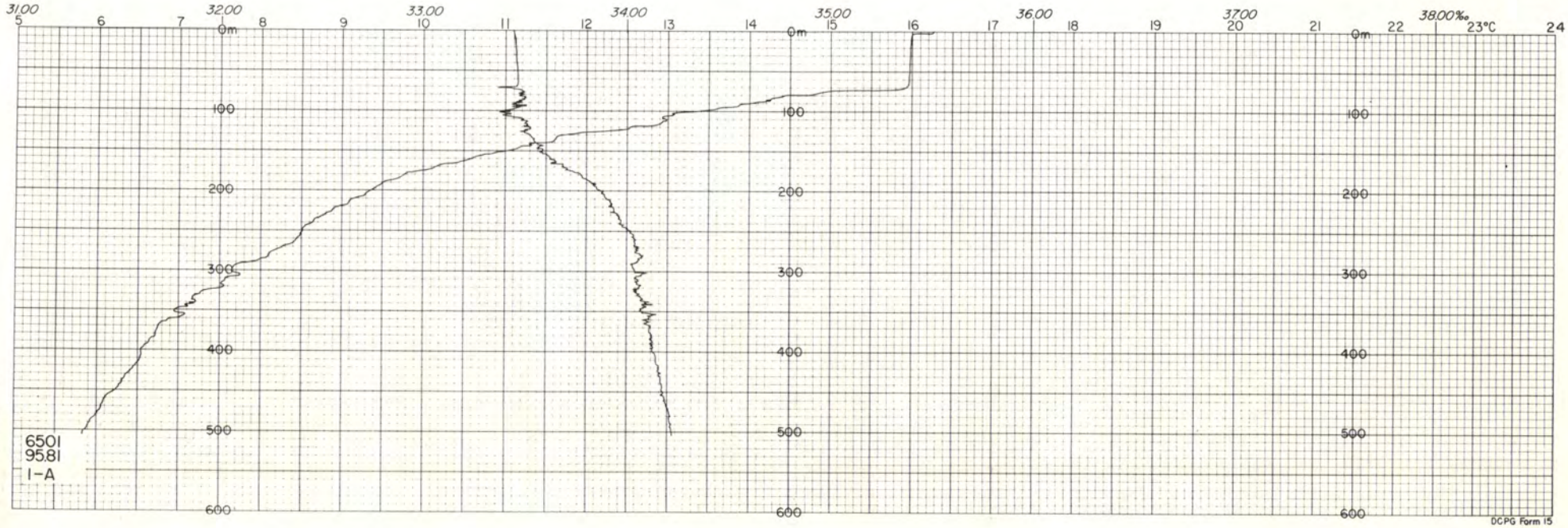
| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 31, 1965; 2200 GCT; 30°47'N, 120°42'W; sounding, 2006 fm; wind, 360°, force 3; weather, partly cloudy; sea, very rough.[a)]

| | | | | | |
|---|---|---|---|---|---|
| 0 | 16.26 | 33.44 | 24.51 | 343 | 0.00 |
| 10 | 15.99 | 33.45 | 24.58 | 337 | 0.03 |
| 20 | 15.98 | 33.45 | 24.58 | 337 | 0.07 |
| 30 | 15.98 | 33.45 | 24.58 | 337 | 0.10 |
| 50 | 15.97 | 33.46 | 24.59 | 336 | 0.17 |
| 75 | 14.96 | 33.48 | 24.83 | 313 | 0.25 |
| 100 | 13.37 | 33.39 | 25.09 | 288 | 0.33 |
| 125 | 12.18 | 33.49 | 25.40 | 258 | 0.39 |
| 150 | 11.02 | 33.58 | 25.69 | 231 | 0.46 |
| 200 | 9.36 | 33.87 | 26.20 | 183 | 0.56 |
| 250 | 8.51 | 34.02 | 26.45 | 159 | 0.65 |
| 300 | 7.64 | 34.04 | 26.59 | 145 | 0.73 |
| 400 | 6.54 | 34.13 | 26.82 | 124 | 0.87 |
| 500 | 5.85 | 34.22 | 26.98 | 109 | 0.99 |

a) This station was occupied twice during the cruise. Each occupation consisted of two 500 meter STD lowerings exactly one and one-half hours apart with a 600 meter hydrographic cast in between. The fine structure of the temperature and salinity curves of the STD was needed for comparison with a recording buoy thermometer at the same location.



| BOTTLE SAMPLES | | | | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

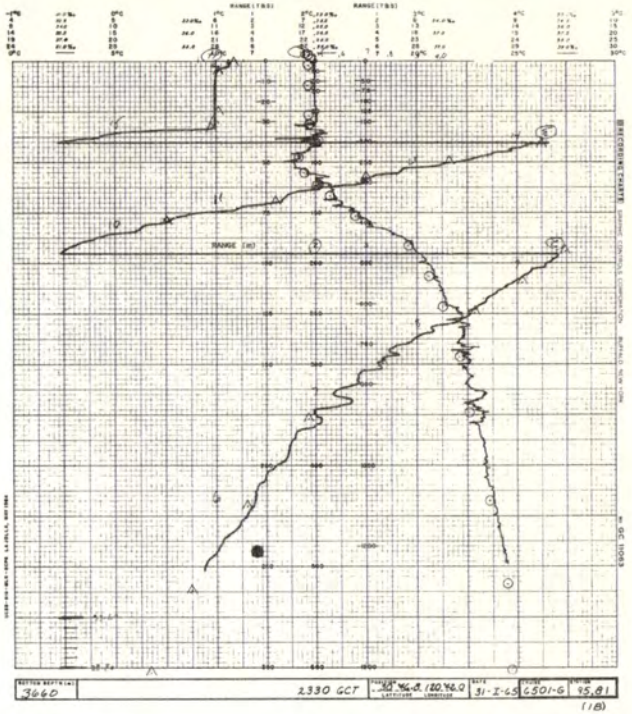
ALEXANDER AGASSIZ; January 31, 1965; 2254 GCT; 30°47'N, 120°42'W; sounding, 2006 fm; wind, 360°, force 3; weather, partly cloudy; sea, very rough; wire angle, 06°.

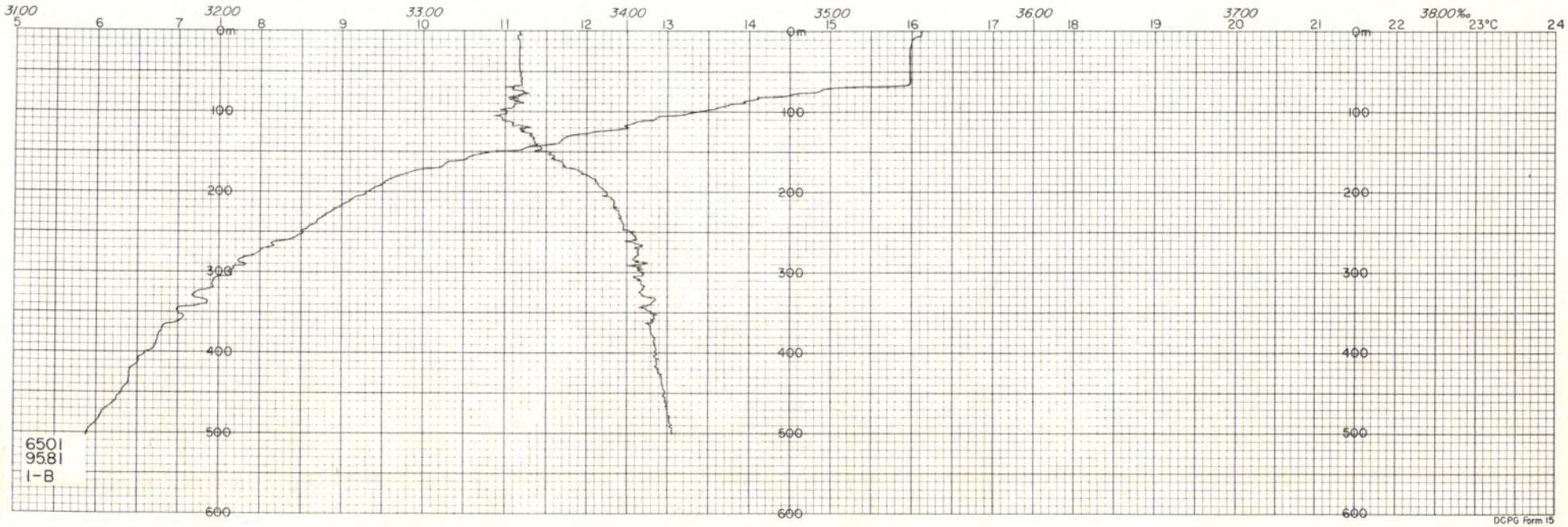
| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.18 | 33.470 | 5.78 | 0.33 | 2 | 339 | 0 | 16.18 | 33.47 | 24.55 | 339 | 0.00 |
| 10 | 16.02 | 33.470 | 5.84 | 0.34 | 2 | 336 | 10 | 16.02 | 33.47 | 24.59 | 336 | 0.03 |
| 30 | 16.02 | 33.468 | 5.91 | 0.33 | 2 | 336 | 20 | 16.02 | 33.47 | 24.59 | 336 | 0.07 |
| 60 | 15.98 | 33.470 | 5.83 | 0.33 | 2 | 335 | 30 | 16.02 | 33.47 | 24.59 | 336 | 0.10 |
| 69 | 15.96 | 33.475 | 5.87 | 0.33 | 1 | 334 | 50 | 16.00 | 33.47 | 24.59 | 336 | 0.17 |
| 84 | 14.25 | 33.508 | 5.88 | 0.41 | 3 | 296 | 75 | 14.94 | 33.50 | 24.85 | 311 | 0.25 |
| 100 | 13.32 | 33.430 | 5.75 | 0.53 | 4 | 284 | 100 | 13.32 | 33.43 | 25.13 | 284 | 0.32 |
| 115 | 12.50 | 33.455 | 5.48 | 0.77 | 6 | 267 | 125 | 12.11 | 33.50 | 25.42 | 256 | 0.39 |
| 140 | 11.60 | 33.559 | 5.04 | 1.05 | 10 | 243 | 150 | 11.13 | 33.60 | 25.68 | 232 | 0.45 |
| 160 | 10.51 | 33.658 | 4.61 | 1.30 | 15 | 217 | 200 | 9.32 | 33.90 | 26.23 | 180 | 0.56 |
| 189 | 9.48 | 33.863 | 3.53 | 1.78 | 24 | 185 | 250 | 8.57 | 34.00 | 26.42 | 161 | 0.65 |
| 220 | 9.05 | 33.946 | 3.62 | 1.81 | 28 | 173 | 300 | 7.64 | 34.06 | 26.61 | 144 | 0.73 |
| 250 | 8.57 | 34.000 | 3.37 | - | - | 161 | 400 | 6.56 | 34.15 | 26.83 | 123 | 0.86 |
| 299 | 7.66 | 34.062 | 2.50 | - | - | 144 | 500 | 5.87 | 34.24 | 26.99 | 108 | 0.99 |
| 354 | 6.92 | 34.104 | 1.72 | - | - | 131 | 600 | 5.38 | 34.27 | 27.07 | 100 | 1.10 |
| 441 | 6.30 | 34.182 | 0.95 | - | - | 117 | | | | | | |
| 524 | 5.74 | 34.254 | 0.61 | - | - | 105 | | | | | | |
| 609 | 5.34 | 34.275 | 0.65 | - | - | 99 | | | | | | |

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 31, 1965; 2330 GCT; 30°47'N, 120°42'W; sounding, 2006 fm; wind, 360°, force 3; weather, partly cloudy; sea, very rough.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 16.12 | 33.47 | 24.56 | 338 | 0.00 |
| 10 | 16.01 | 33.46 | 24.58 | 336 | 0.03 |
| 20 | 15.99 | 33.47 | 24.59 | 335 | 0.07 |
| 30 | 15.98 | 33.47 | 24.60 | 335 | 0.10 |
| 50 | 15.98 | 33.47 | 24.60 | 335 | 0.17 |
| 75 | 14.85 | 33.48 | 24.85 | 311 | 0.25 |
| 100 | 13.38 | 33.40 | 25.10 | 287 | 0.32 |
| 125 | 12.07 | 33.50 | 25.43 | 256 | 0.39 |
| 150 | 10.83 | 33.61 | 25.74 | 226 | 0.45 |
| 200 | 9.30 | 33.90 | 26.23 | 180 | 0.56 |
| 250 | 8.51 | 34.03 | 26.46 | 158 | 0.64 |
| 300 | 7.62 | 34.07 | 26.62 | 143 | 0.72 |
| 400 | 6.60 | 34.14 | 26.82 | 124 | 0.86 |
| 500 | 5.88 | 34.22 | 26.97 | 109 | 0.98 |

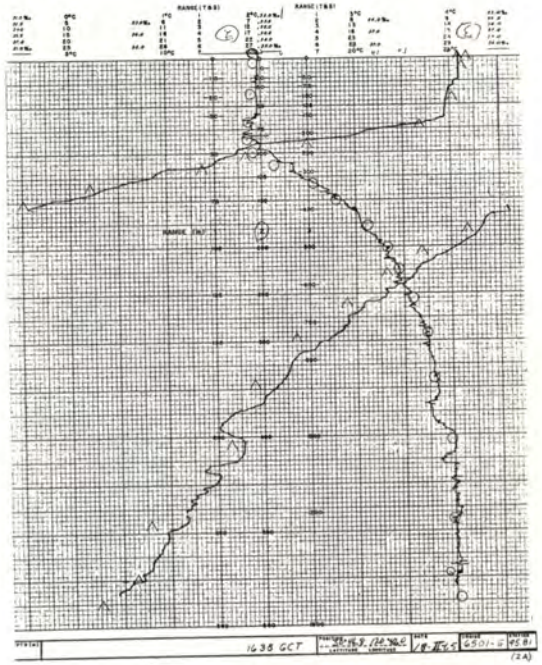


| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 18, 1965; 1638 GCT; 30°47'N, 120°42'W; sounding, 2012 fm; wind, 330°, force 3; weather, clear; sea, very rough.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 14.09 | 33.46 | 25.00 | 297 | 0.00 |
| 10 | 14.09 | 33.46 | 25.00 | 297 | 0.03 |
| 20 | 14.09 | 33.46 | 25.00 | 297 | 0.06 |
| 30 | 14.04 | 33.45 | 25.00 | 296 | 0.09 |
| 50 | 13.95 | 33.45 | 25.02 | 295 | 0.15 |
| 75 | 13.25 | 33.43 | 25.15 | 283 | 0.22 |
| 100 | 11.74 | 33.46 | 25.46 | 253 | 0.29 |
| 125 | 10.83 | 33.61 | 25.74 | 226 | 0.35 |
| 150 | 9.75 | 33.78 | 26.06 | 196 | 0.40 |
| 200 | 9.06 | 33.97 | 26.32 | 171 | 0.50 |
| 250 | 8.32 | 34.08 | 26.52 | 152 | 0.58 |
| 300 | 7.63 | 34.16 | 26.69 | 136 | 0.65 |
| 400 | 6.67 | 34.25 | 26.89 | 117 | 0.78 |
| 500 | 5.96 | 34.27 | 27.00 | 106 | 0.90 |



| BOTTLE SAMPLES | | | | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 18, 1965; 1733 GCT; 30°47'N, 120°42'W; sounding, 2006 fm; wind, 330°, force 3; weather, clear; sea, very rough; wire angle, 17°.

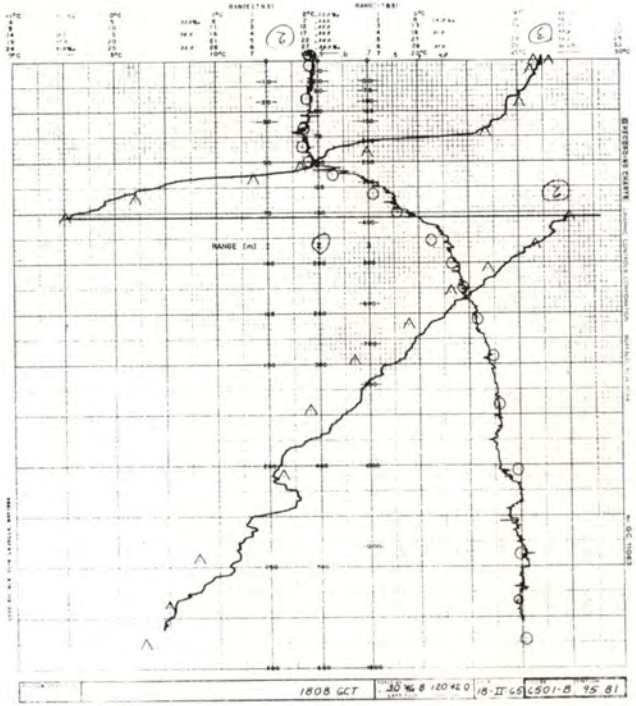
| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.16 | 33.469 | 6.12 | 297 | 0 | 14.16 | 33.47 | 24.99 | 297 | 0.00 |
| 10 | 14.12 | 33.466 | 6.17 | 297 | 10 | 14.12 | 33.47 | 25.00 | 297 | 0.03 |
| 43 | 14.02 | 33.455 | 6.15 | 296 | 20 | 14.10 | 33.46 | 25.00 | 297 | 0.06 |
| 72 | 13.67 | 33.446 | 6.01 | 289 | 30 | 14.07 | 33.46 | 25.00 | 296 | 0.09 |
| 91 | 12.48 | 33.439 | 5.46 | 267 | 50 | 14.00 | 33.45 | 25.01 | 296 | 0.15 |
| 105 | 11.82 | 33.461 | 5.11 | 254 | 75 | 13.53 | 33.44 | 25.10 | 287 | 0.22 |
| 118 | 11.36 | 33.552 | 4.79 | 239 | 100 | 12.01 | 33.45 | 25.40 | 258 | 0.29 |
| 137 | 10.20 | 33.717 | 3.90 | 208 | 125 | 11.00 | 33.61 | 25.71 | 229 | 0.35 |
| 155 | 9.50 | 33.814 | 3.70 | 189 | 150 | 9.65 | 33.79 | 26.09 | 193 | 0.41 |
| 183 | 9.16 | 33.948 | 3.25 | 174 | 200 | 8.80 | 34.01 | 26.40 | 164 | 0.50 |
| 206 | 8.68 | 34.031 | 2.79 | 161 | 250 | 8.04 | 34.11 | 26.59 | 146 | 0.58 |
| 229 | 8.31 | 34.077 | 2.48 | 152 | 300 | 7.30 | 34.19 | 26.76 | 129 | 0.65 |
| 261 | 7.89 | 34.133 | 1.86 | 142 | 400 | 6.68 | 34.28 | 26.92 | 115 | 0.77 |
| 297 | 7.34 | 34.194 | 1.28 | 130 | 500 | 5.74 | 34.29 | 27.05 | 102 | 0.89 |
| 345 | 6.90 | 34.218 | 1.00 | 122 | | | | | | |
| 410 | 6.63 | 34.286 | 0.65 | 113 | | | | | | |
| 493 | 5.79 | 34.291 | 0.55 | 103 | | | | | | |
| 577 | 5.26 | 34.313 | 0.48 | 95 | | | | | | |

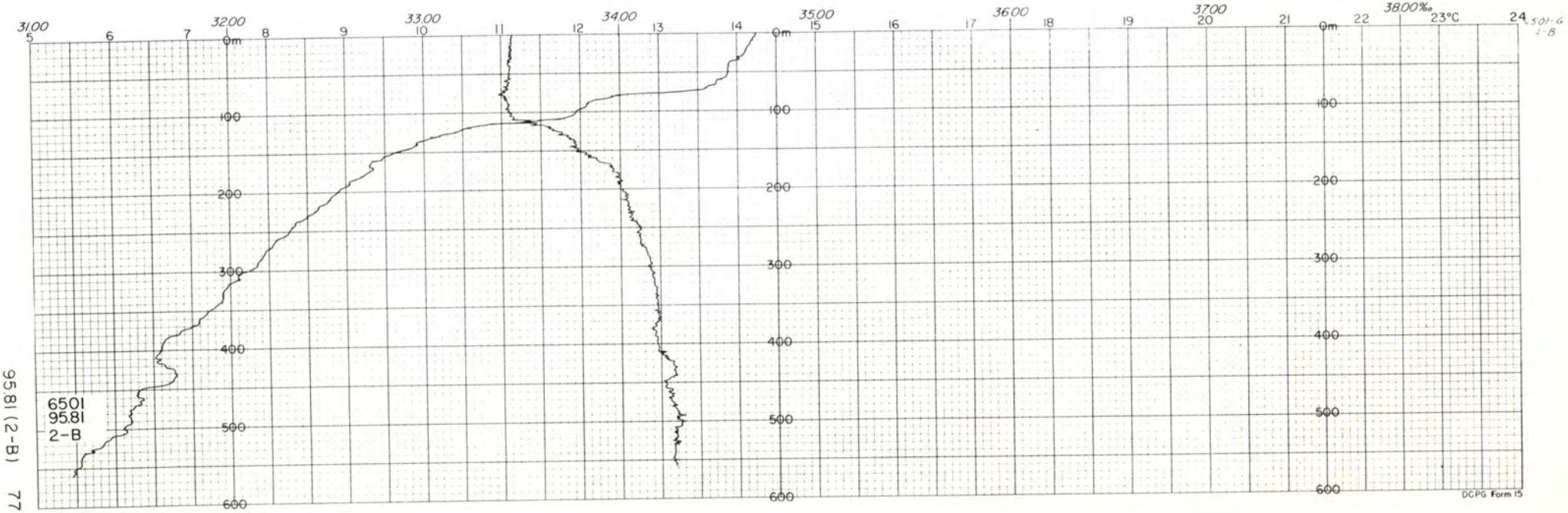
SIO CCOFI 6501

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 18, 1965; 1808 GCT; 30°47'N, 120°42'W; sounding, 2012 fm; wind 330°, force 3; weather, clear; sea, very rough.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 14.24 | 33.45 | 24.96 | 300 | 0.00 |
| 10 | 14.19 | 33.45 | 24.97 | 299 | 0.03 |
| 20 | 14.12 | 33.45 | 24.99 | 298 | 0.06 |
| 30 | 14.06 | 33.46 | 25.01 | 296 | 0.09 |
| 50 | 13.88 | 33.44 | 25.03 | 294 | 0.15 |
| 75 | 13.25 | 33.41 | 25.13 | 284 | 0.22 |
| 100 | 11.94 | 33.44 | 25.41 | 258 | 0.29 |
| 125 | 10.39 | 33.68 | 25.88 | 213 | 0.35 |
| 150 | 9.58 | 33.79 | 26.10 | 192 | 0.40 |
| 200 | 8.90 | 34.00 | 26.37 | 166 | 0.49 |
| 250 | 8.27 | 34.10 | 26.55 | 150 | 0.57 |
| 300 | 7.22 | 34.14 | 26.73 | 132 | 0.65 |
| 400 | 6.59 | 34.18 | 26.85 | 121 | 0.78 |
| 500 | 6.12 | 34.29 | 27.00 | 107 | 0.90 |




95.81 (2-B) 77

| BOTTLE SAMPLES | | | | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| BLACK DOUGLAS; January 29, 1965; 0148 GCT; 31°58'N, 117°51'W; sounding, 800 fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 11°. | | | | | | | | | | | | |
| 1 | 14.22 | 33.653u | 5.90 | | | | 0 | (14.22) | (33.56) | (25.05) | (292) | (0.00) |
| 11 | 14.16 | 33.550 | 6.02 | | | 292 | 10 | 14.17 | 33.55 | 25.05 | 292 | 0.03 |
| 30 | 13.91 | 33.526 | 5.93 | | | 288 | 20 | 14.00 | 33.54 | 25.08 | 289 | 0.06 |
| 58 | 11.57 | 33.658 | 3.53 | | | 235 | 30 | 13.91 | 33.53 | 25.09 | 288 | 0.09 |
| 67 | 11.32 | 33.727 | 3.05 | | | 226 | 50 | 12.00 | 33.60 | 25.52 | 247 | 0.14 |
| 81 | 11.14 | 33.819 | 2.55 | | | 216 | 75 | 11.21 | 33.79 | 25.82 | 219 | 0.20 |
| 95 | 11.02 | 33.848 | 2.46 | | | 211 | 100 | 11.00 | 33.86 | 25.91 | 210 | 0.25 |
| 109 | 10.96 | 33.899 | 2.28 | | | 207 | 125 | 10.86 | 33.95 | 26.00 | 201 | 0.31 |
| 132 | 10.78 | 33.969 | 2.13 | | | 198 | 150 | 10.32 | 33.99 | 26.13 | 189 | 0.36 |
| 151 | 10.28 | 33.991 | 2.40 | | | 189 | 200 | 8.91 | 34.06 | 26.42 | 162 | 0.44 |
| 180 | 9.07 | 33.982 | 2.85 | | | 170 | 250 | 8.29 | 34.17 | 26.60 | 145 | 0.52 |
| 207 | 8.84 | 34.084 | 2.38 | | | 159 | 300 | 7.88 | 34.24 | 26.72 | 134 | 0.60 |
| 236 | 8.48 | 34.150 | 1.83 | | | 149 | 400 | 7.22 | 34.31 | 26.87 | 119 | 0.73 |
| 283 | 7.98 | 34.217 | 1.26 | | | 137 | 500 | 6.25 | 34.30 | 26.99 | 108 | 0.85 |
| 335 | 7.74 | 34.280 | 0.76 | | | 129 | 600 | (5.56) | (34.35) | (27.12) | (96) | (0.96 |
| 416 | 7.05 | 34.309 | 0.52 | | | 117 | | | | | | |
| 498 | 6.26 | 34.302 | 0.35 | | | 108 | | | | | | |
| 581 | 5.64 | 34.344 | 0.32 | | | 97 | | | | | | |
| BLACK DOUGLAS; January 28, 1965; 1908 GCT; 31°32'N, 118°27'W; sounding, 1300 fm; wind, 330°, force 3; weather, clear; sea, moderate; wire angle, 02°. | | | | | | | | | | | | |
| 0 | 13.83 | 33.467 | 5.89 | | | 291 | 0 | 13.83 | 33.47 | 25.06 | 291 | 0.00 |
| 10 | 13.30 | 33.489 | 5.95 | | | 279 | 10 | 13.30 | 33.49 | 25.18 | 279 | 0.03 |
| 29 | 12.99 | 33.509 | 5.96 | | | 272 | 20 | 13.09 | 33.50 | 25.23 | 274 | 0.06 |
| 58 | 12.68 | 33.514 | 5.71 | | | 266 | 30 | 12.98 | 33.51 | 25.26 | 272 | 0.08 |
| 68 | 12.04 | 33.457 | 5.32 | | | 258 | 50 | 12.81 | 33.51 | 25.30 | 268 | 0.14 |
| 83 | 11.00 | 33.513 | 4.80 | | | 236 | 75 | 11.60 | 33.46 | 25.49 | 250 | 0.20 |
| 97 | 10.44 | 33.629 | 4.14 | | | 218 | 100 | 10.37 | 33.66 | 25.86 | 215 | 0.26 |
| 112 | 10.12 | 33.723 | 3.61 | | | 206 | 125 | 9.76 | 33.74 | 26.03 | 199 | 0.31 |
| 137 | 9.44 | 33.749 | 3.93 | | | 193 | 150 | 9.14 | 33.84 | 26.21 | 182 | 0.36 |
| 155 | 9.04 | 33.863 | 3.44 | | | 179 | 200 | 8.35 | 34.00 | 26.46 | 158 | 0.45 |
| 185 | 8.60 | 33.952 | 3.41 | | | 165 | 250 | 7.71 | 34.05 | 26.59 | 145 | 0.53 |
| 213 | 8.12 | 34.038 | 2.73 | | | 152 | 300 | 7.30 | 34.13 | 26.71 | 134 | 0.60 |
| 241 | 7.78 | 34.044 | 2.50 | | | 147 | 400 | 6.53 | 34.23 | 26.90 | 116 | 0.73 |
| 289 | 7.41 | 34.113 | 1.78 | | | 137 | 500 | 6.21 | 34.32 | 27.01 | 106 | 0.85 |
| 340 | 6.90 | 34.166 | 1.17 | | | 126 | 600 | (5.63) | (34.36) | (27.11) | (96) | (0.95) |
| 422 | 6.45 | 34.254 | 0.63 | | | 114 | | | | | | |
| 503 | 6.20 | 34.326 | 0.36 | | | 105 | | | | | | |
| 586 | 5.72 | 34.355 | 0.27 | | | 97 | | | | | | |

| BOTTLE SAMPLES | | | | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

BLACK DOUGLAS; January 28, 1965; 0110 GCT; 30°36'N, 120°30.5'W; sounding, 2100 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.88 | 33.419 | 5.71 | 337 | 0 | 15.88 | 33.42 | 24.58 | 337 | 0.00 |
| 9 | 15.90 | 33.431 | 5.73 | 336 | 10 | 15.90 | 33.43 | 24.58 | 336 | 0.03 |
| 44 | 15.78 | 33.415 | 5.72 | 335 | 20 | 15.87 | 33.42 | 24.58 | 336 | 0.07 |
| 73 | 15.74 | 33.418 | 5.73 | 334 | 30 | 15.82 | 33.42 | 24.59 | 335 | 0.10 |
| 92 | 14.14 | 33.450 | 5.73 | 298 | 50 | 15.77 | 33.42 | 24.61 | 334 | 0.17 |
| 107 | 13.10 | 33.403a) | 5.59 | 282 | 75 | 15.73 | 33.42 | 24.61 | 333 | 0.25 |
| 121 | 12.38 | 33.465 | 5.26 | 264 | 100 | 13.60 | 33.43 | 25.08 | 289 | 0.33 |
| 140 | 11.63 | 33.548 | 4.93 | 244 | 125 | 12.23 | 33.48 | 25.39 | 260 | 0.40 |
| 160 | 10.64 | 33.653 | 4.49 | 219 | 150 | 11.15 | 33.60 | 25.68 | 232 | 0.46 |
| 189 | 9.66 | 33.776 | 3.99 | 195 | 200 | 9.38 | 33.83 | 26.16 | 186 | 0.57 |
| 124 | 9.04 | 33.916 | 3.59 | 175 | 250 | 8.53 | 34.05 | 26.47 | 157 | 0.66 |
| 236 | 8.76 | 34.005 | 2.90 | 164 | 300 | 7.97 | 34.12 | 26.61 | 144 | 0.73 |
| 269 | 8.24 | 34.084 | 2.28 | 150 | 400 | 6.83 | 34.20 | 26.83 | 122 | 0.87 |
| 308 | 7.89 | 34.131 | 1.82 | 142 | 500 | 6.07 | 34.26 | 26.98 | 108 | 0.99 |
| 356 | 7.21 | 34.161 | 1.26 | 130 | 600 | (5.27) | (34.33) | (27.13) | (94) | (1.10) |
| 424 | 6.63 | 34.214 | 0.75 | 119 | | | | | | |
| 505 | 6.02 | 34.263 | 0.46 | 108 | | | | | | |
| 588 | 5.35 | 34.320 | 0.30 | 96 | | | | | | |

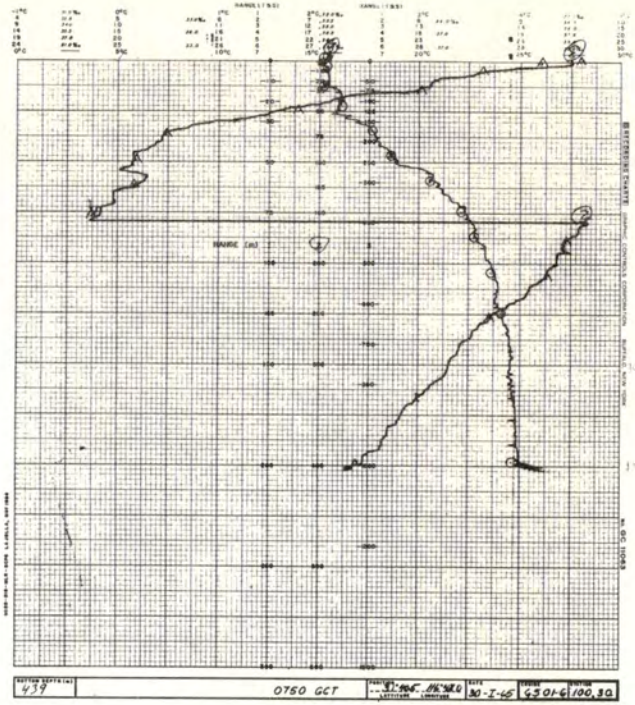
a) Possible evaporation; value falls on property curve.

80 100.30

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 30, 1965; 0727 GCT; 31°40.5'N, 116°47'W; sounding, 240 fm; wind, 040°, force 1; weather, partly cloudy; sea, slight; wire angle, 09°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.21 | 33.516 | 6.23 | 0.32 | 3 | 295 | 0 | 14.50 | 33.51 | 24.95 | 301 | 0.00 |
| 10 | 13.63 | 33.528 | 6.45 | 0.32 | 3 | 283 | 10 | 13.66 | 33.49 | 25.11 | 286 | 0.03 |
| 30 | 13.02 | 33.516 | 6.19 | 0.52 | 4 | 272 | 20 | 13.14 | 33.51 | 25.23 | 275 | 0.06 |
| 50 | 11.78 | 33.590 | 4.58 | 1.17 | 15 | 244 | 30 | 12.88 | 33.51 | 25.28 | 270 | 0.08 |
| 74 | 10.48 | 33.710 | 3.94 | 1.49 | 21 | 213 | 50 | 11.56 | 33.54 | 25.56 | 244 | 0.14 |
| 99 | 10.18 | 33.785 | 3.63 | 1.62 | 23 | 202 | 75 | 10.44 | 33.68 | 25.87 | 214 | 0.19 |
| 124 | 10.16 | 33.942 | 2.74 | 1.95 | 30 | 190 | 100 | 10.17 | 33.77 | 25.98 | 203 | 0.25 |
| 154 | 9.74 | 34.069 | 2.29 | 2.16 | 33 | 174 | 125 | 10.18 | 33.95 | 26.12 | 190 | 0.30 |
| 179 | 9.45 | 34.120 | 2.28 | 2.18 | 35 | 166 | 150 | 9.83 | 34.05 | 26.26 | 177 | 0.34 |
| 214 | 9.26 | 34.187 | 1.82 | 2.34 | 40 | 158 | 200 | 9.36 | 34.14 | 26.41 | 163 | 0.43 |
| 254 | 8.70 | 34.231 | 1.42 | 2.50 | 45 | 146 | 250 | 8.73 | 34.20 | 26.56 | 149 | 0.51 |
| | | | | | | | 300 | 8.31 | 34.24 | 26.65 | 140 | 0.58 |
| | | | | | | | 400 | 7.34 | 34.27 | 26.82 | 124 | 0.72 |





SIO CCOFI 6501

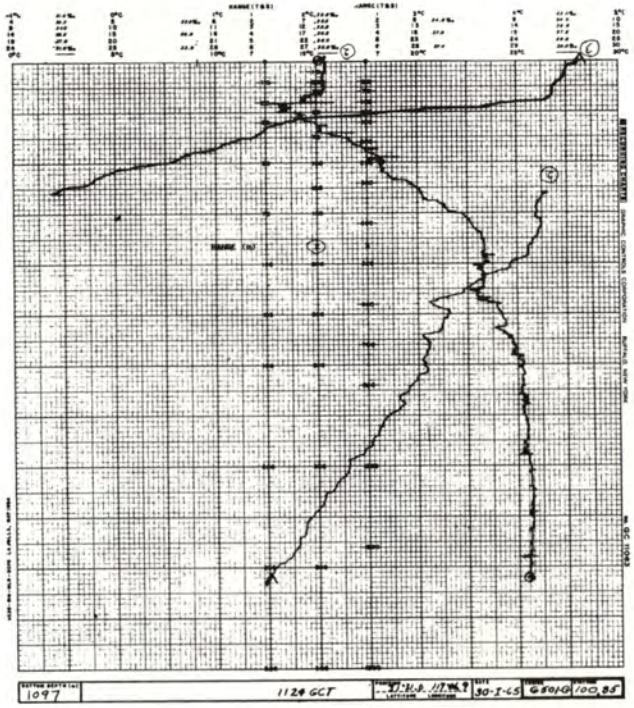
DCPG Form 15

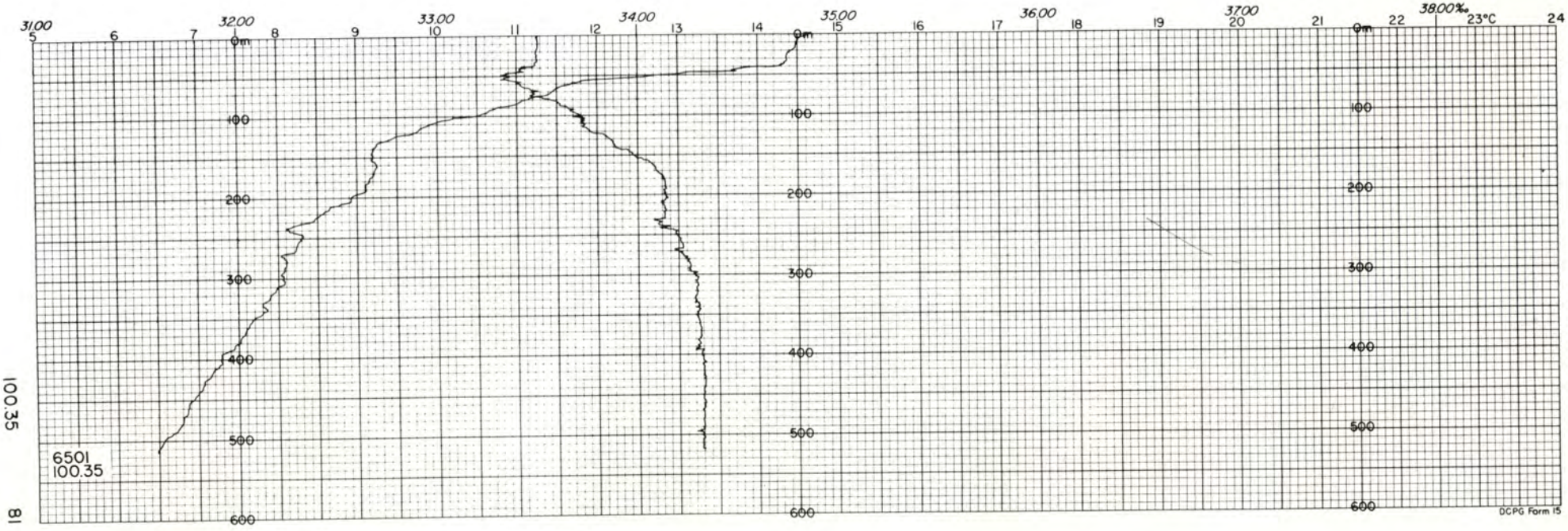
SIO CCOFI 6501

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 30, 1965; 1124 GCT; 31°31'N, 117°07'W; sounding, 600 fm; wind, 310°, force 2; weather, partly cloudy; sea, moderate.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 14.62 | 33.50 | 24.92 | 304 | 0.00 |
| 10 | 14.48 | 33.50 | 24.95 | 302 | 0.03 |
| 20 | 14.42 | 33.49 | 24.95 | 301 | 0.06 |
| 30 | 14.37 | 33.50 | 24.97 | 299 | 0.09 |
| 50 | 12.70 | 33.35 | 25.20 | 278 | 0.15 |
| 75 | 11.36 | 33.48 | 25.55 | 244 | 0.21 |
| 100 | 10.48 | 33.71 | 25.88 | 213 | 0.27 |
| 125 | 9.48 | 33.84 | 26.15 | 187 | 0.32 |
| 150 | 9.19 | 33.98 | 26.31 | 172 | 0.37 |
| 200 | 8.93 | 34.14 | 26.48 | 156 | 0.45 |
| 250 | 8.31 | 34.20 | 26.62 | 143 | 0.53 |
| 300 | 8.07 | 34.29 | 26.73 | 133 | 0.60 |
| 400 | 7.31 | 34.31 | 26.85 | 121 | 0.73 |
| 500 | 6.57 | 34.31 | 26.96 | 111 | 0.85 |



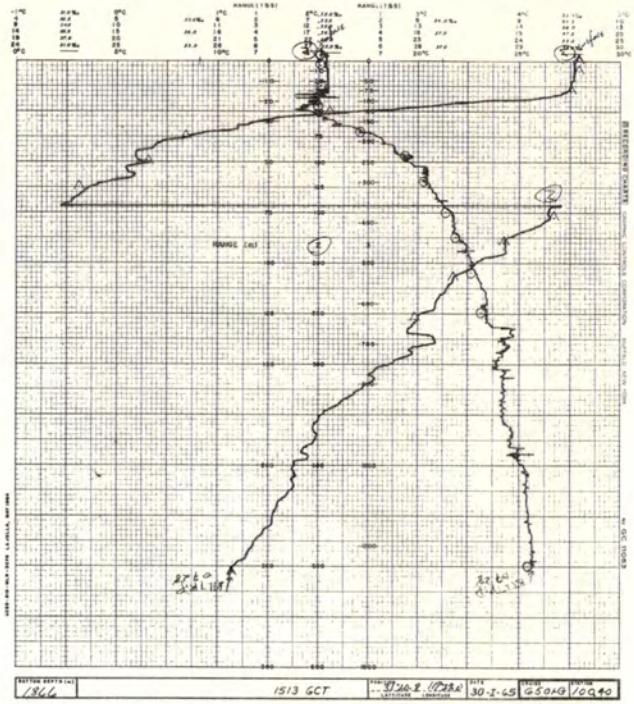



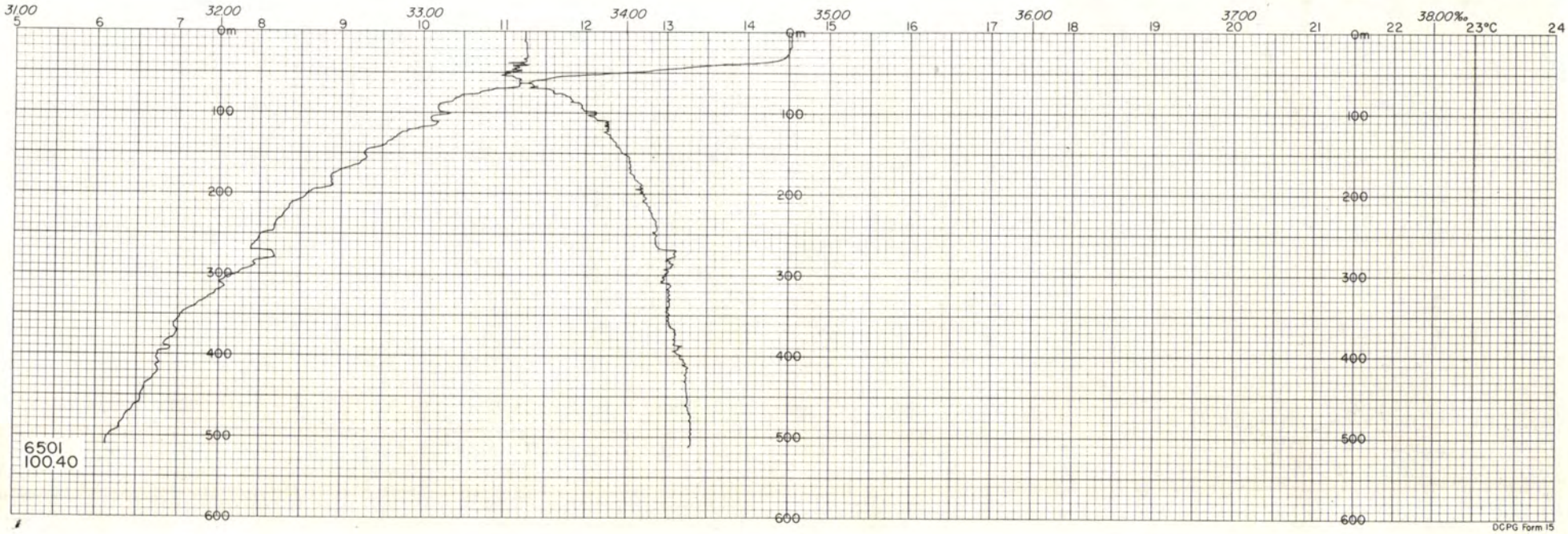

100.35

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 30, 1965; 1455 GCT; 31°21'N, 117°27'W; sounding, 1020 fm; wind, 020°, force 2; weather, partly cloudy; sea, moderate.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.58 | 33.502 | 6.04 | 0.33 | 4 | 303 | 0 | 14.54 | 33.50 | 24.94 | 303 | 0.00 |
| 10 | 14.58 | 33.504 | 6.13 | 0.33 | 2 | 303 | 10 | 14.54 | 33.50 | 24.94 | 303 | 0.03 |
| 30 | 14.51 | 33.506 | 6.18 | 0.36 | 2 | 302 | 20 | 14.52 | 33.51 | 24.95 | 302 | 0.06 |
| 50 | 12.11 | 33.448 | 5.18 | 1.01 | 9 | 260 | 30 | 14.47 | 33.51 | 24.96 | 301 | 0.09 |
| 75 | 10.68 | 33.666 | 4.02 | 1.52 | 19 | 219 | 50 | 12.38 | 33.42 | 25.31 | 267 | 0.15 |
| 100 | 10.32 | 33.846 | 3.15 | 1.89 | 25 | 200 | 75 | 10.72 | 33.64 | 25.79 | 222 | 0.21 |
| 125 | 9.62 | 33.922 | 3.09 | 1.95 | 30 | 183 | 100 | 10.33 | 33.85 | 26.02 | 200 | 0.26 |
| 155 | 9.34 | 34.013 | 2.76 | 2.04 | 32 | 172 | 125 | 9.73 | 33.91 | 26.17 | 186 | 0.31 |
| 180 | 8.86 | 34.053 | 2.60 | 2.15 | 36 | 162 | 150 | 9.28 | 33.98 | 26.30 | 174 | 0.36 |
| 215 | 8.35 | 34.113 | 2.18 | 2.37 | 43 | 150 | 200 | 8.58 | 34.08 | 26.48 | 156 | 0.44 |
| 255 | 7.97 | 34.153 | 1.71 | 2.57 | 49 | 141 | 250 | 8.02 | 34.14 | 26.62 | 143 | 0.52 |
| | | | | | | | 300 | 7.71 | 34.19 | 26.70 | 135 | 0.59 |
| | | | | | | | 400 | 6.76 | 34.27 | 26.90 | 116 | 0.72 |
| | | | | | | | 500 | 6.16 | 34.32 | 27.02 | 105 | 0.84 |



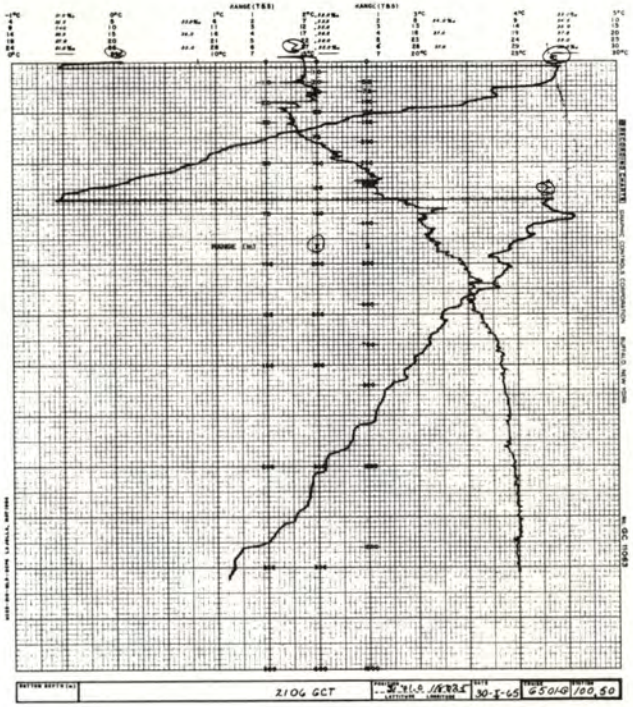



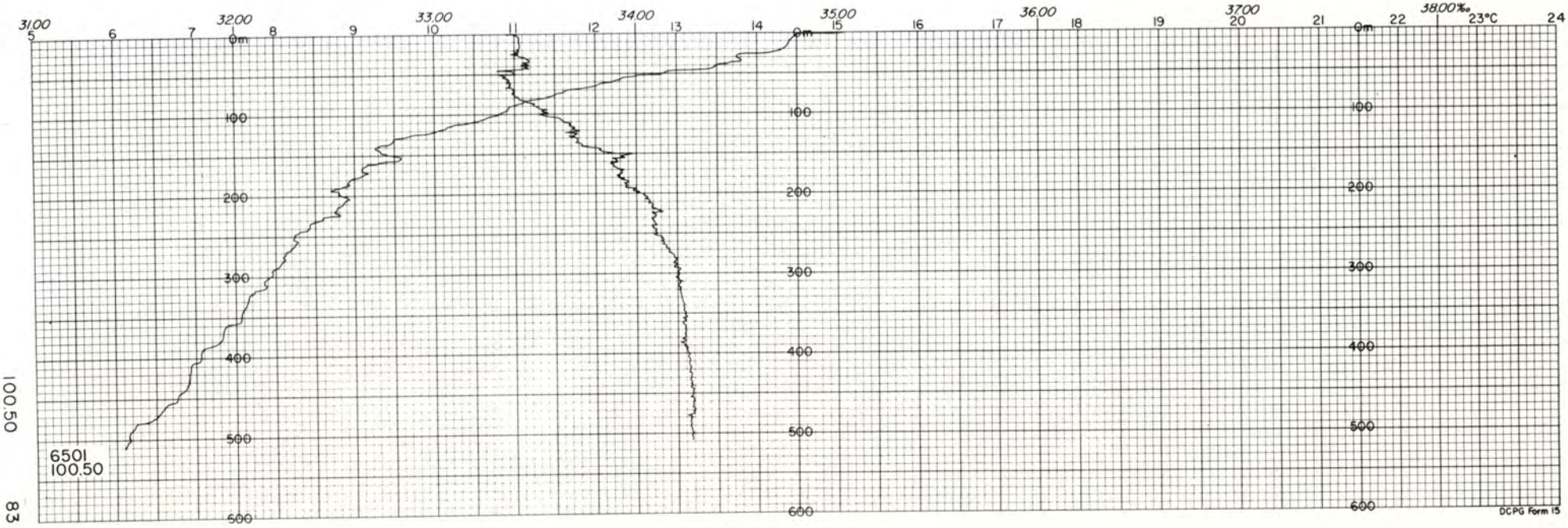
SIO CCOFI 6501

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

ALEXANDER AGASSIZ; January 30, 1965; 2106 GCT; 31°01'N, 118°07.5'W; sounding, 944 fm; wind, 320°, force 2; weather, clear; sea, rough.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 15.07 | 33.42 | 24.76 | 320 | 0.00 |
| 10 | 14.40 | 33.42 | 24.90 | 306 | 0.03 |
| 20 | 14.32 | 33.42 | 24.92 | 304 | 0.06 |
| 30 | 13.75 | 33.45 | 25.06 | 291 | 0.09 |
| 50 | 12.84 | 33.38 | 25.19 | 279 | 0.15 |
| 75 | 11.53 | 33.40 | 25.46 | 253 | 0.22 |
| 100 | 10.82 | 33.53 | 25.68 | 232 | 0.28 |
| 125 | 9.74 | 33.71 | 26.01 | 201 | 0.33 |
| 150 | 9.43 | 33.86 | 26.18 | 185 | 0.38 |
| 200 | 8.83 | 34.03 | 26.41 | 163 | 0.47 |
| 250 | 8.24 | 34.10 | 26.55 | 149 | 0.55 |
| 300 | 7.93 | 34.20 | 26.68 | 137 | 0.62 |
| 400 | 7.07 | 34.25 | 26.84 | 122 | 0.76 |
| 500 | 6.17 | 34.27 | 26.98 | 109 | 0.88 |



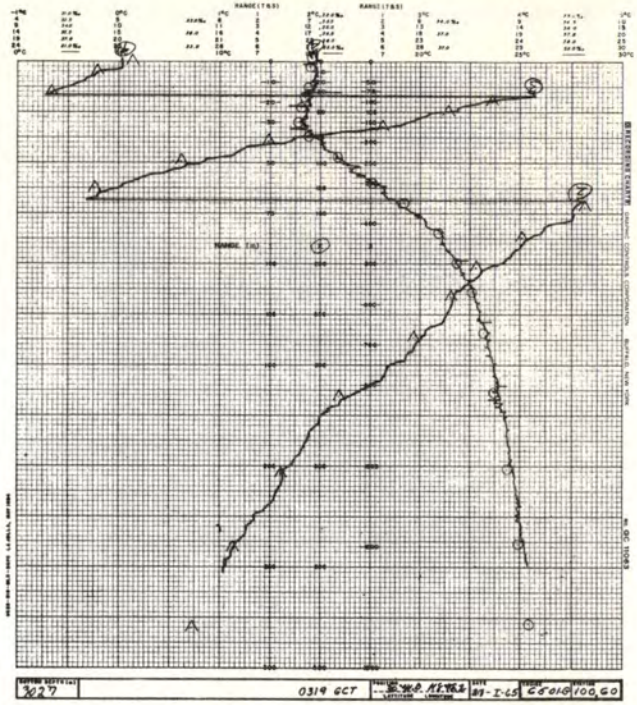

100.50

84 100.60

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

ALEXANDER AGASSIZ; January 31, 1965; 0254 GCT; 30°41'N, 118°48'W; sounding, 1655 fm; wind, 170°, force 1; weather, partly cloudy; sea, moderate; wire angle, 06°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.13 | 33.461 | 6.07 | 0.31 | 3 | 318 | 0 | 15.03 | 33.45 | 24.79 | 316 | 0.00 |
| 10 | 14.78 | 33.459 | 6.11 | 0.32 | 2 | 311 | 10 | 14.80 | 33.45 | 24.84 | 312 | 0.03 |
| 30 | 14.33 | 33.448 | 6.22 | 0.36 | 3 | 302 | 20 | 14.63 | 33.45 | 24.88 | 308 | 0.06 |
| 40 | 13.72 | 33.437 | 6.05 | 0.46 | 4 | 291 | 30 | 14.35 | 33.45 | 24.94 | 303 | 0.09 |
| 50 | 13.28 | 33.421 | 5.88 | 0.56 | 5 | 284 | 50 | 13.23 | 33.41 | 25.14 | 284 | 0.15 |
| 65 | 12.62 | 33.410 | 5.64 | 0.66 | 7 | 272 | 75 | 11.77 | 33.43 | 25.43 | 255 | 0.22 |
| 79 | 11.48 | 33.456 | 5.10 | 1.05 | 10 | 248 | 100 | 10.82 | 33.54 | 25.69 | 231 | 0.28 |
| 99 | 10.62 | 33.566 | 4.61 | 1.31 | 15 | 226 | 125 | 10.00 | 33.69 | 25.95 | 206 | 0.34 |
| 125 | 9.76 | 33.704 | 4.16 | 1.57 | 22 | 201 | 150 | 9.52 | 33.81 | 26.12 | 190 | 0.39 |
| 144 | 9.63 | 33.832 | 3.66 | 1.71 | 26 | 190 | 200 | 8.79 | 34.01 | 26.40 | 164 | 0.48 |
| 174 | 9.02 | 33.971 | 3.10 | 1.95 | 31 | 170 | 250 | 8.27 | 34.10 | 26.55 | 150 | 0.56 |
| 204 | 8.56 | 34.044 | 2.75 | 2.16 | 36 | 158 | 300 | 7.69 | 34.16 | 26.68 | 137 | 0.63 |
| 233 | 8.31 | 34.106 | 2.21 | - | - | 150 | 400 | 6.69 | 34.24 | 26.88 | 118 | 0.76 |
| 273 | 7.93 | 34.153 | 1.74 | - | - | 141 | 500 | 6.05 | 34.30 | 27.01 | 105 | 0.88 |
| 332 | 7.18 | 34.193 | 1.20 | - | - | 128 | | | | | | |
| 408 | 6.60 | 34.247 | 0.74 | - | - | 116 | | | | | | |
| 482 | 6.13 | 34.296 | 0.55 | - | - | 107 | | | | | | |
| 561 | 5.72 | 34.335 | 0.45 | - | - | 99 | | | | | | |





SIO CCOFI 6501

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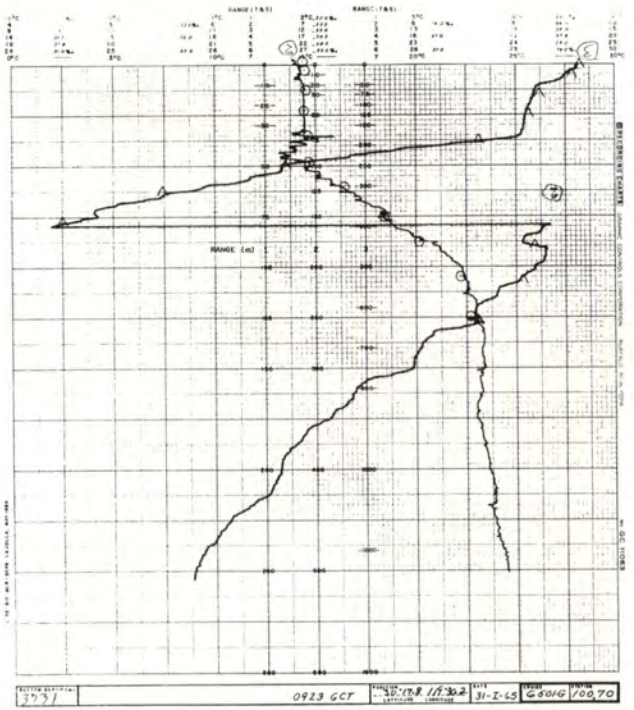
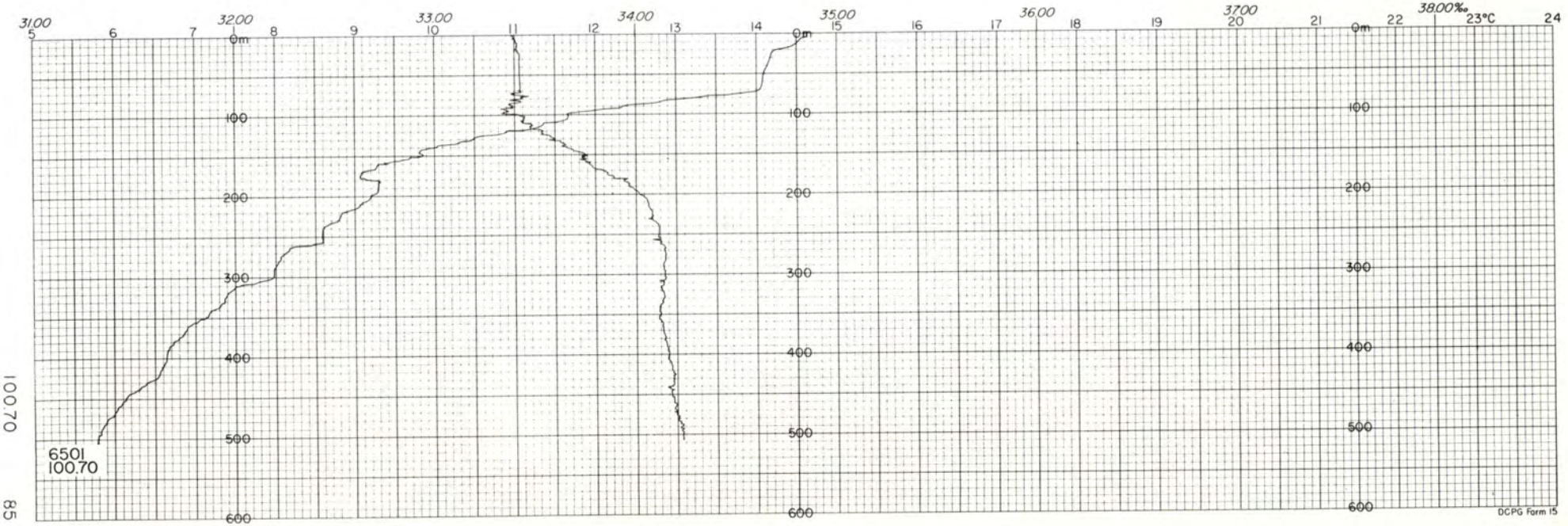
| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

ALEXANDER AGASSIZ; January 31, 1965; 0910 GCT; 30°18'N, 119°30'W; sounding, 2040 fm; wind, 160°, force 2; weather, cloudy; sea, slight; wire angle, 05°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.64 | 33.451 | 6.05 | 0.33 | 3 | 308 | 0 | 14.62 | 33.38 | 24.83 | 313 | 0.00 |
| 10 | 14.56 | 33.459 | 6.09 | 0.34 | 3 | 306 | 10 | 14.50 | 33.41 | 24.87 | 309 | 0.03 |
| 30 | 14.23 | 33.461 | 6.17 | 0.37 | 3 | 299 | 20 | 14.25 | 33.41 | 24.93 | 304 | 0.06 |
| 50 | 14.12 | 33.455 | 6.05 | 0.37 | 4 | 298 | 30 | 14.18 | 33.42 | 24.95 | 301 | 0.09 |
| 75 | 13.62 | 33.470 | 5.89 | 0.52 | 4 | 287 | 50 | 14.09 | 33.42 | 24.97 | 300 | 0.15 |
| 100 | 11.70 | 33.474 | 4.88 | 1.11 | 11 | 251 | 75 | 13.75 | 33.42 | 25.04 | 293 | 0.23 |
| 125 | 10.48 | 33.615 | 4.62 | 1.30 | 17 | 220 | 100 | 11.67 | 33.42 | 25.44 | 254 | 0.30 |
| 155 | 9.50 | 33.773 | 3.83 | 1.71 | 25 | 192 | 125 | 10.65 | 33.57 | 25.75 | 226 | 0.36 |
| 180 | 9.18 | 33.913 | 3.29 | 1.92 | 30 | 177 | 150 | 9.83 | 33.75 | 26.03 | 199 | 0.41 |
| 214 | 9.06 | 34.073 | 2.38 | 2.25 | 37 | 163 | 200 | 9.18 | 34.02 | 26.34 | 169 | 0.50 |
| 254 | 8.62 | 34.114 | 2.05 | 2.36 | 41 | 154 | 250 | 8.58 | 34.11 | 26.51 | 153 | 0.59 |
| | | | | | | | 300 | 7.97 | 34.14 | 26.62 | 142 | 0.66 |
| | | | | | | | 400 | 6.64 | 34.16 | 26.83 | 123 | 0.80 |
| | | | | | | | 500 | 5.78 | 34.23 | 26.99 | 107 | 0.92 |




100.70

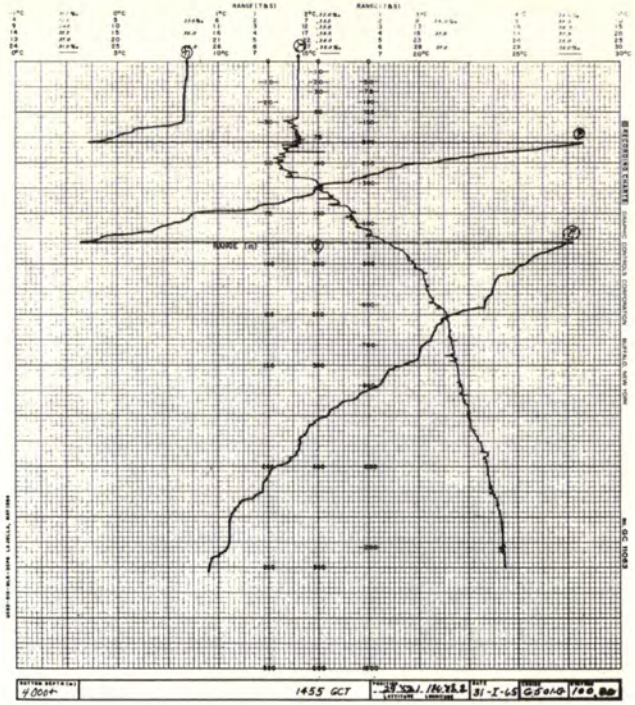
86

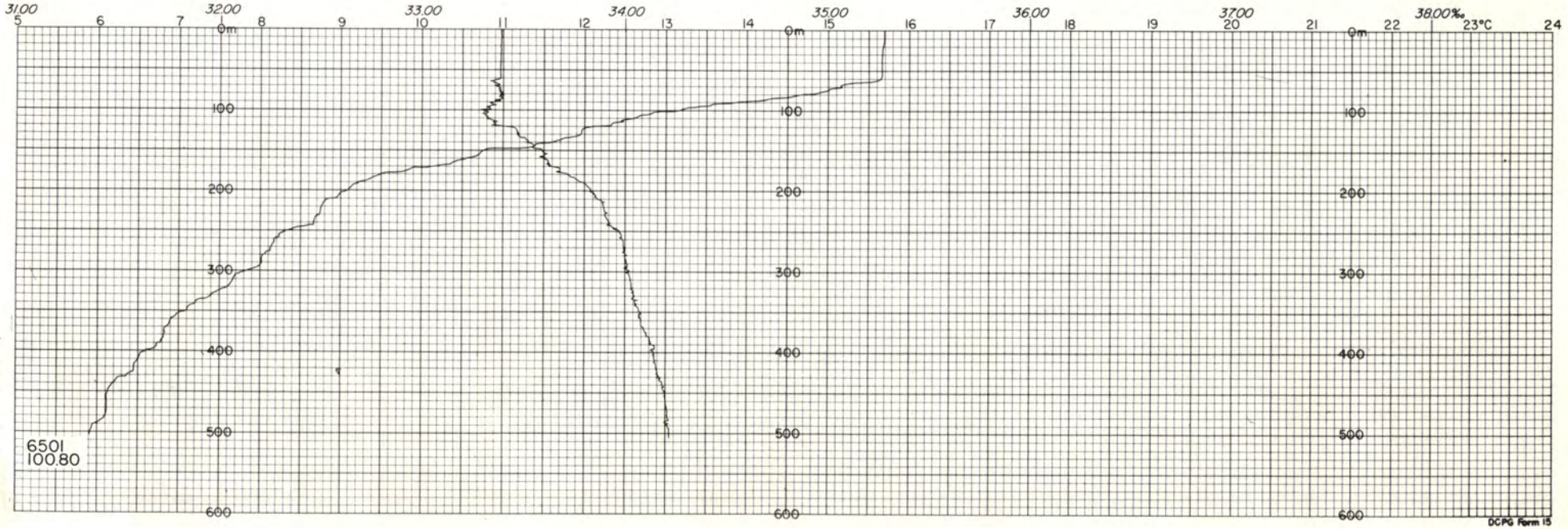
100.80

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | μg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; January 31, 1965; 1455 GCT; 29°52'N, 120°09'W; sounding, 2100 fm; wind, 030°, force 3; weather, missing; sea, rough.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 15.69 | 33.39 | 24.60 | 335 | 0.00 |
| 10 | 15.69 | 33.39 | 24.60 | 335 | 0.03 |
| 20 | 15.68 | 33.39 | 24.60 | 335 | 0.07 |
| 30 | 15.67 | 33.39 | 24.60 | 334 | 0.10 |
| 50 | 15.67 | 33.39 | 24.60 | 334 | 0.17 |
| 75 | 14.98 | 33.38 | 24.75 | 321 | 0.25 |
| 100 | 13.12 | 33.30 | 25.07 | 290 | 0.33 |
| 125 | 11.98 | 33.47 | 25.43 | 256 | 0.40 |
| 150 | 10.76 | 33.60 | 25.75 | 225 | 0.46 |
| 200 | 9.08 | 33.83 | 26.21 | 182 | 0.56 |
| 250 | 8.33 | 33.97 | 26.44 | 160 | 0.65 |
| 300 | 7.84 | 34.02 | 26.55 | 149 | 0.73 |
| 400 | 6.58 | 34.14 | 26.82 | 124 | 0.87 |
| 500 | 5.91 | 34.22 | 26.97 | 110 | 0.99 |



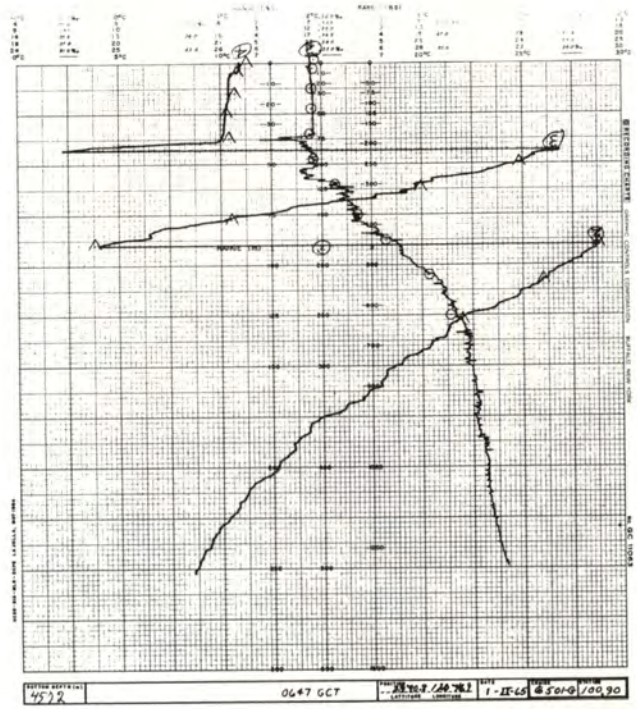

S10 CCOF1 6501

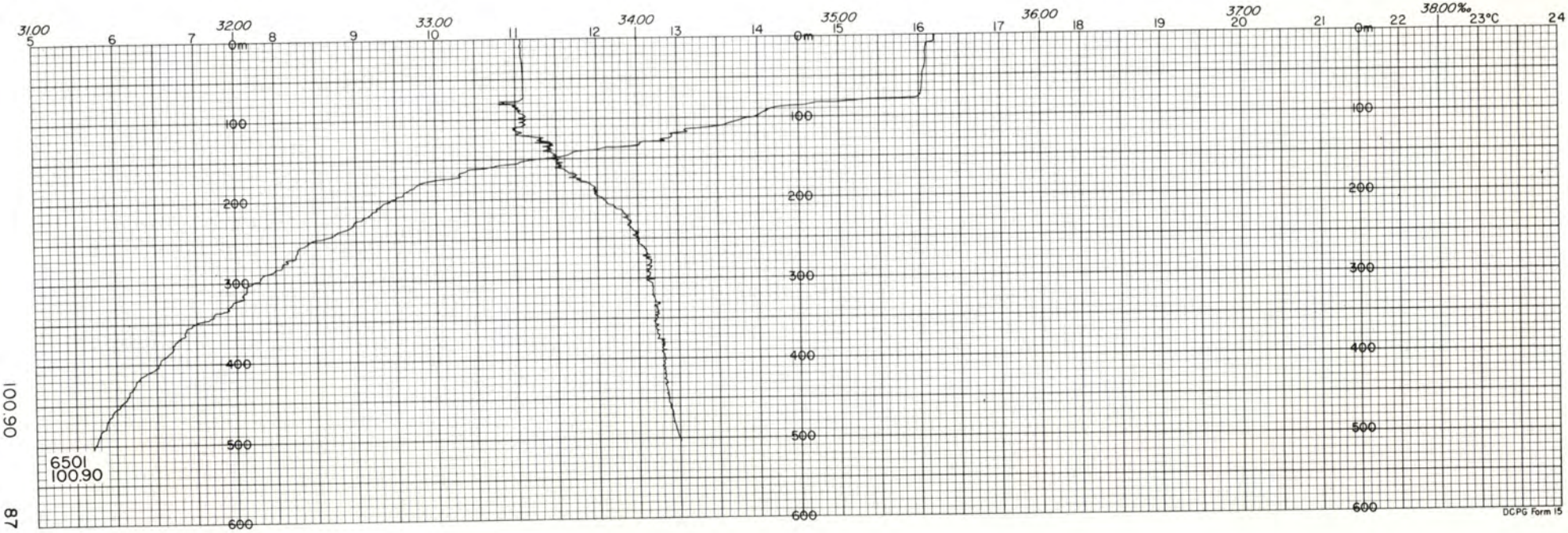
SIO CCOFI 6501

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 1, 1965; 0634 GCT; 29°41'N, 120°47'W; sounding, 2500 fm; wind, 320°, force 3; weather, cloudy; sea, slight; wire angle, 03°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.25 | 33.470 | 5.81 | 0.33 | 2 | 341 | 0 | 16.18 | 33.43 | 24.52 | 342 | 0.00 |
| 10 | 16.16 | 33.464 | 5.81 | 0.31 | 2 | 339 | 10 | 16.10 | 33.43 | 24.54 | 341 | 0.03 |
| 30 | 16.14 | 33.459 | 5.92 | 0.31 | 2 | 339 | 20 | 16.08 | 33.43 | 24.54 | 340 | 0.07 |
| 50 | 16.05 | 33.459 | 5.77 | 0.33 | 2 | 337 | 30 | 16.08 | 33.44 | 24.55 | 339 | 0.10 |
| 75 | 16.08 | 33.452 | 5.79 | 0.33 | 2 | 339 | 50 | 16.05 | 33.44 | 24.56 | 339 | 0.17 |
| 100 | 13.96 | 33.465 | 5.90 | 0.41 | 4 | 294 | 75 | 16.02 | 33.44 | 24.56 | 338 | 0.26 |
| 125 | 12.98 | 33.551 | 5.65 | 0.66 | 6 | 269 | 100 | 13.93 | 33.44 | 25.02 | 295 | 0.34 |
| 155 | 11.10 | 33.641 | 4.91 | 1.10 | 12 | 228 | 125 | 12.93 | 33.52 | 25.28 | 270 | 0.41 |
| 180 | 9.76 | 33.757 | 4.21 | 1.47 | 20 | 198 | 150 | 11.35 | 33.57 | 25.62 | 238 | 0.47 |
| 215 | 9.20 | 33.926 | 3.24 | 1.92 | 30 | 176 | 200 | 9.43 | 33.82 | 26.15 | 188 | 0.58 |
| 255 | 8.39 | 34.013 | 3.01 | 2.06 | 37 | 158 | 250 | 8.43 | 34.00 | 26.45 | 159 | 0.67 |
| | | | | | | | 300 | 7.72 | 34.05 | 26.59 | 146 | 0.75 |
| | | | | | | | 400 | 6.53 | 34.13 | 26.82 | 124 | 0.89 |
| | | | | | | | 500 | 5.73 | 34.20 | 26.98 | 109 | 1.01 |



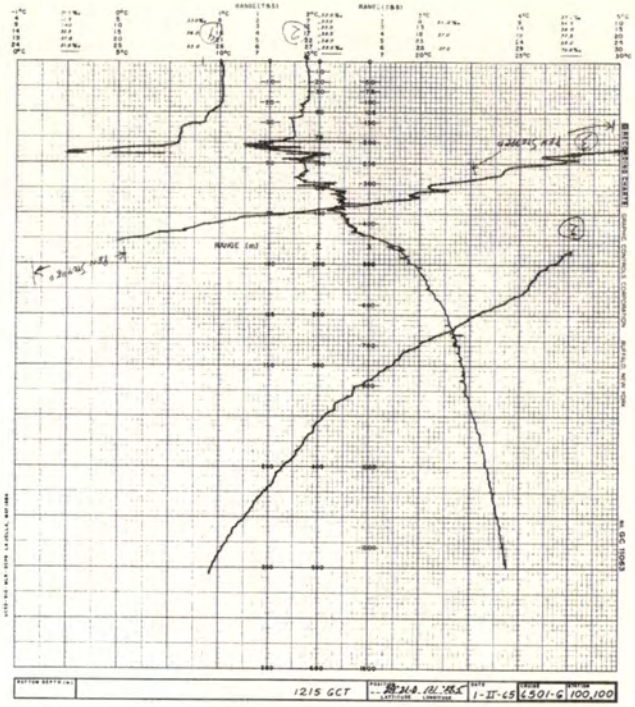



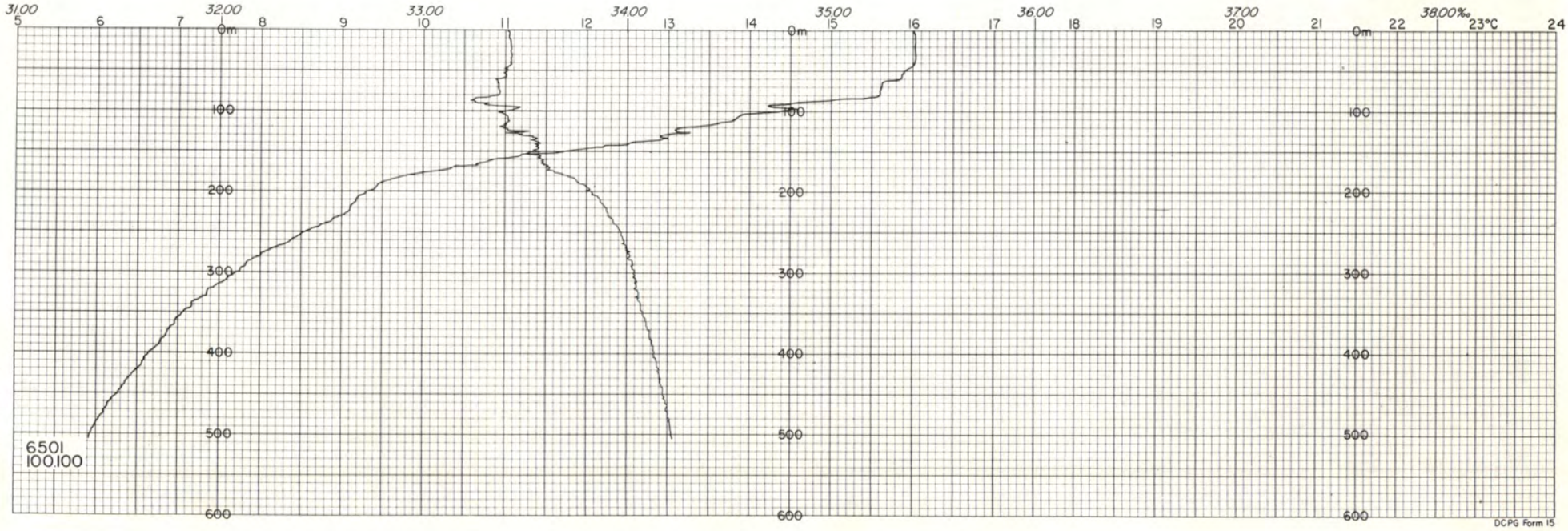

100.90

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 1, 1965; 1215 GCT; 29°21'N, 121°29.5'W; sounding, 2120 fm; wind, 200°, force 2; weather, partly cloudy; sea, moderate.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 16.01 | 33.42 | 24.55 | 339 | 0.00 |
| 10 | 16.03 | 33.42 | 24.55 | 340 | 0.03 |
| 20 | 16.02 | 33.43 | 24.56 | 339 | 0.07 |
| 30 | 16.03 | 33.43 | 24.55 | 339 | 0.10 |
| 50 | 15.89 | 33.40 | 24.56 | 338 | 0.17 |
| 75 | 15.60 | 33.37 | 24.61 | 334 | 0.25 |
| 100 | 14.32 | 33.40 | 24.91 | 306 | 0.33 |
| 125 | 13.11 | 33.50 | 25.23 | 275 | 0.41 |
| 150 | 11.69 | 33.56 | 25.55 | 244 | 0.47 |
| 200 | 9.29 | 33.82 | 26.17 | 186 | 0.58 |
| 250 | 8.56 | 33.97 | 26.40 | 163 | 0.67 |
| 300 | 7.73 | 34.03 | 26.57 | 147 | 0.75 |
| 400 | 6.66 | 34.13 | 26.80 | 126 | 0.89 |
| 500 | 5.93 | 34.22 | 26.97 | 110 | 1.02 |



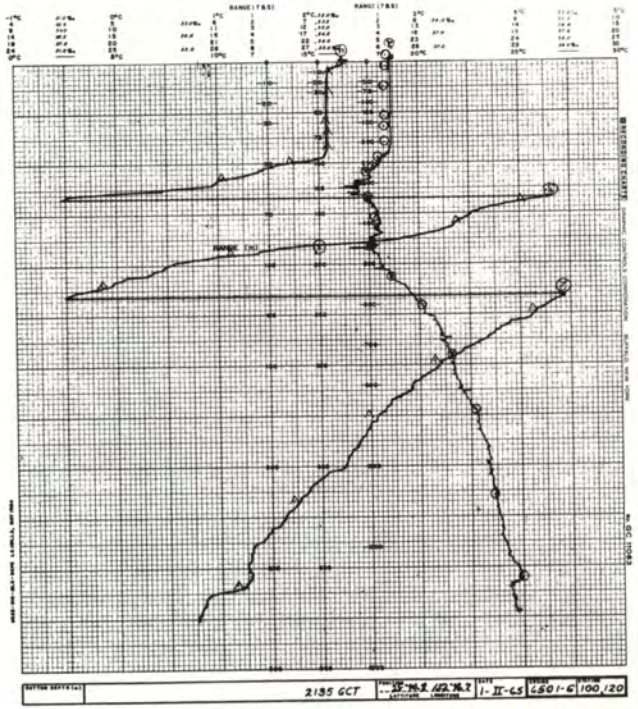



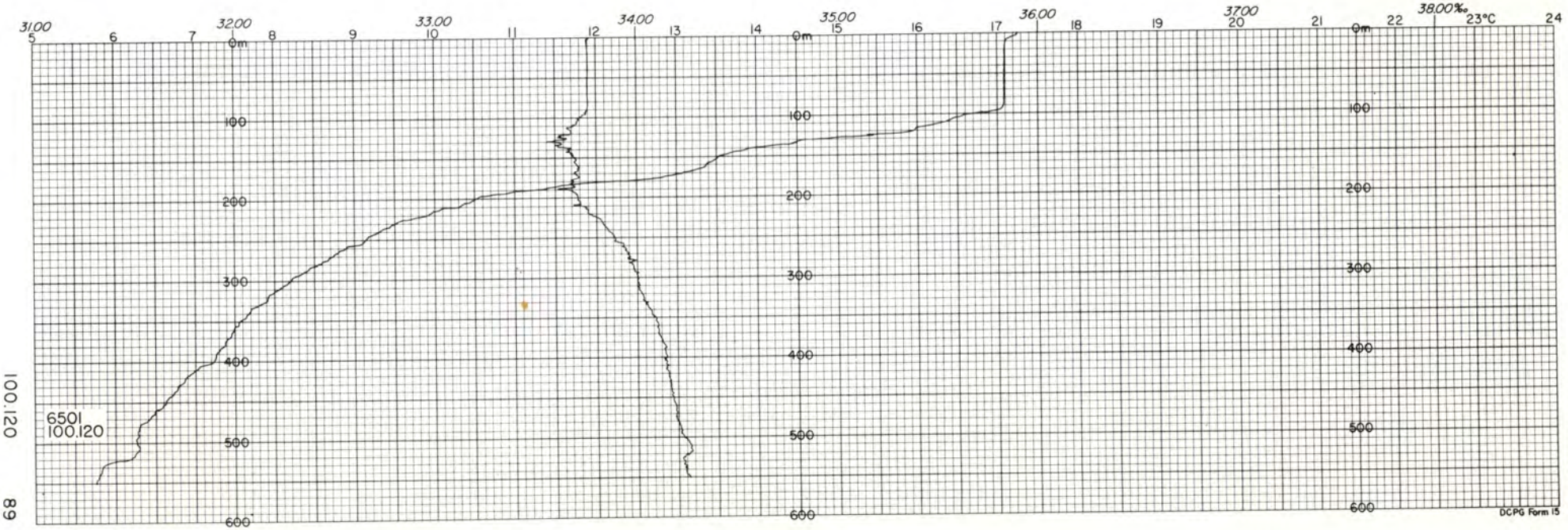
SIO CCOF I 6501

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 1, 1965; 2107 GCT; 28°41'N, 122°46.5'W; sounding, 2240 fm; wind, 330°, force 3; weather, partly cloudy; sea, moderate; wire angle, 08°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.24 | 33.767 | 5.76 | 0.27 | 3 | 341 | 0 | 17.25 | 33.76 | 24.52 | 342 | 0.00 |
| 10 | 17.10 | 33.767 | 5.74 | 0.27 | 2 | 338 | 10 | 17.10 | 33.76 | 24.56 | 339 | 0.03 |
| 30 | 17.10 | 33.761 | 5.80 | 0.28 | 2 | 339 | 20 | 17.08 | 33.76 | 24.56 | 338 | 0.07 |
| 59 | 17.07 | 33.763 | 5.75 | 0.27 | 2 | 338 | 30 | 17.08 | 33.76 | 24.56 | 338 | 0.10 |
| 70 | 17.09 | 33.763 | 5.69 | 0.27 | 2 | 338 | 50 | 17.08 | 33.76 | 24.56 | 338 | 0.17 |
| 84 | 17.09 | 33.764 | 5.78 | 0.28 | 2 | 338 | 75 | 17.08 | 33.76 | 24.56 | 338 | 0.25 |
| 100 | 16.72 | 33.737 | 5.83 | 0.28 | 2 | 332 | 100 | 16.70 | 33.72 | 24.62 | 333 | 0.34 |
| 114 | 16.04 | 33.688 | 5.89 | 0.32 | 2 | 320 | 125 | 15.52 | 33.62 | 24.81 | 314 | 0.42 |
| 139 | 14.02 | 33.694 | 5.57 | 0.51 | 5 | 278 | 150 | 13.52 | 33.70 | 25.30 | 268 | 0.49 |
| 159 | 13.37 | 33.724 | 5.38 | 0.64 | 6 | 263 | 200 | 10.52 | 33.71 | 25.88 | 213 | 0.62 |
| 189 | 11.12 | 33.704 | 4.63 | 1.09 | 13 | 224 | 250 | 9.13 | 33.89 | 26.25 | 178 | 0.72 |
| 218 | 9.85 | 33.788 | 4.34 | 1.44 | 20 | 197 | 300 | 8.19 | 34.00 | 26.48 | 156 | 0.80 |
| 247 | 9.12 | 33.908 | 3.86 | - | - | 176 | 400 | 7.23 | 34.14 | 26.73 | 132 | 0.95 |
| 296 | 8.14 | 34.026 | 3.17 | - | - | 153 | 500 | 6.27 | 34.23 | 26.93 | 113 | 1.08 |
| 350 | 7.47 | 34.118 | 1.88 | - | - | 137 | | | | | | |
| 434 | 6.72 | 34.189 | 1.10 | - | - | 122 | | | | | | |
| 517 | 6.14 | 34.291 | 0.59 | - | - | 107 | | | | | | |
| 602 | 5.40 | 34.307 | 0.49 | - | - | 97 | | | | | | |



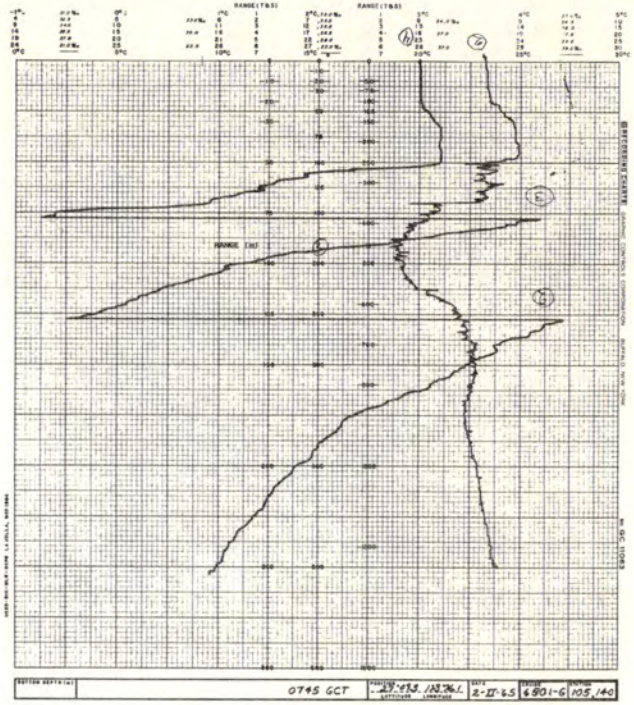



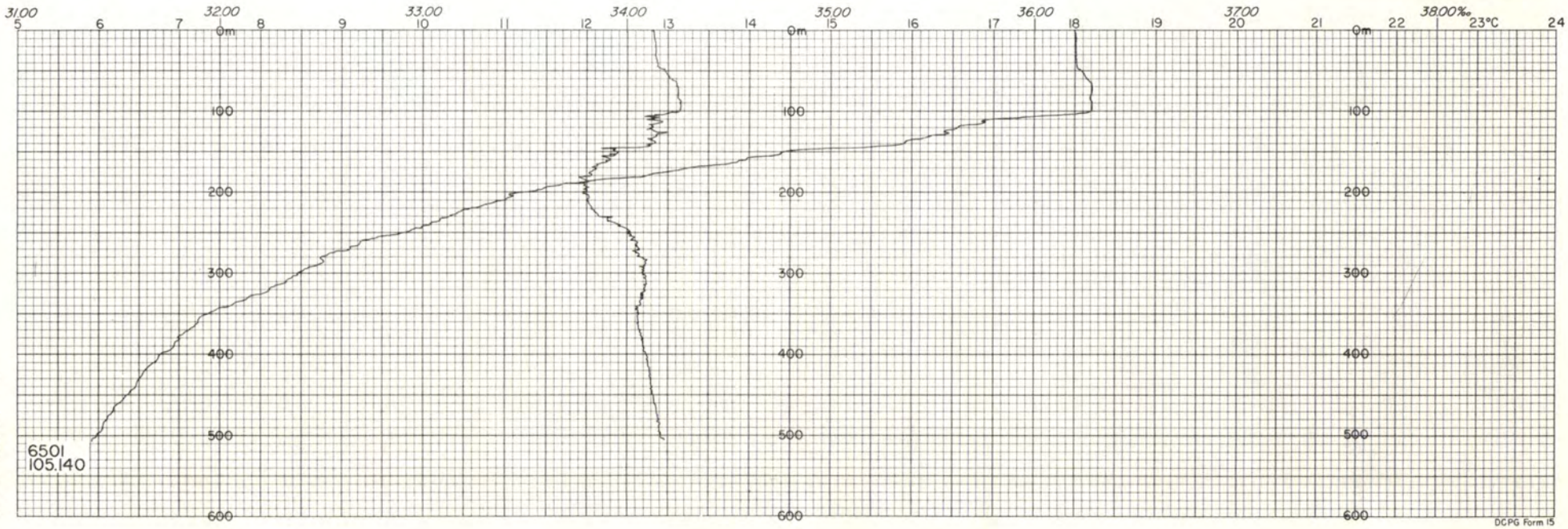

100.120

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | μg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 2, 1965; 0745 GCT; 27°09'N, 123°26'W; sounding, 2240 fm; wind, 010°, force 3; weather, clear; sea, moderate.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 18.00 | 34.12 | 24.62 | 333 | 0.00 |
| 10 | 18.02 | 34.13 | 24.62 | 333 | 0.03 |
| 20 | 18.02 | 34.14 | 24.63 | 332 | 0.07 |
| 30 | 18.02 | 34.14 | 24.63 | 332 | 0.10 |
| 50 | 18.08 | 34.18 | 24.64 | 331 | 0.17 |
| 75 | 18.21 | 34.25 | 24.67 | 328 | 0.25 |
| 100 | 18.20 | 34.25 | 24.67 | 328 | 0.33 |
| 125 | 16.40 | 34.14 | 25.01 | 295 | 0.41 |
| 150 | 14.40 | 33.95 | 25.31 | 267 | 0.48 |
| 200 | 11.23 | 33.79 | 25.81 | 219 | 0.61 |
| 250 | 9.80 | 34.01 | 26.23 | 179 | 0.71 |
| 300 | 8.45 | 34.09 | 26.51 | 153 | 0.79 |
| 400 | 6.78 | 34.10 | 26.76 | 129 | 0.94 |
| 500 | 5.98 | 34.16 | 26.91 | 115 | 1.07 |



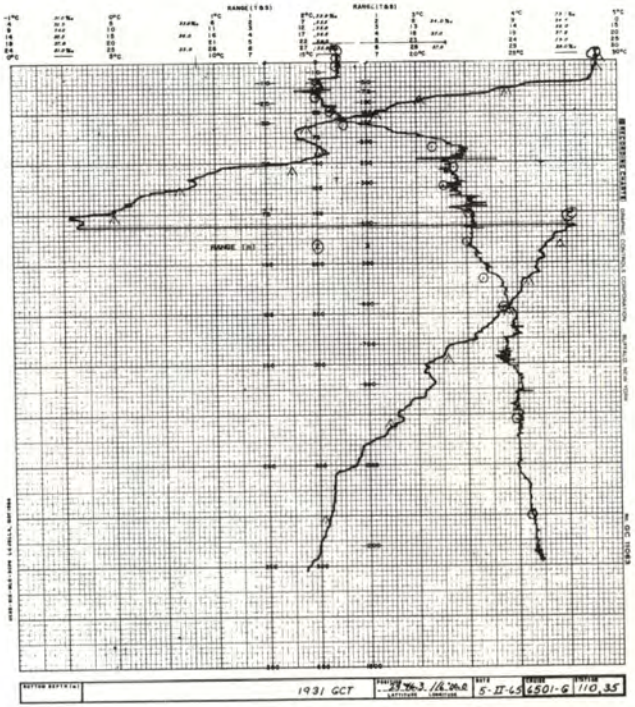



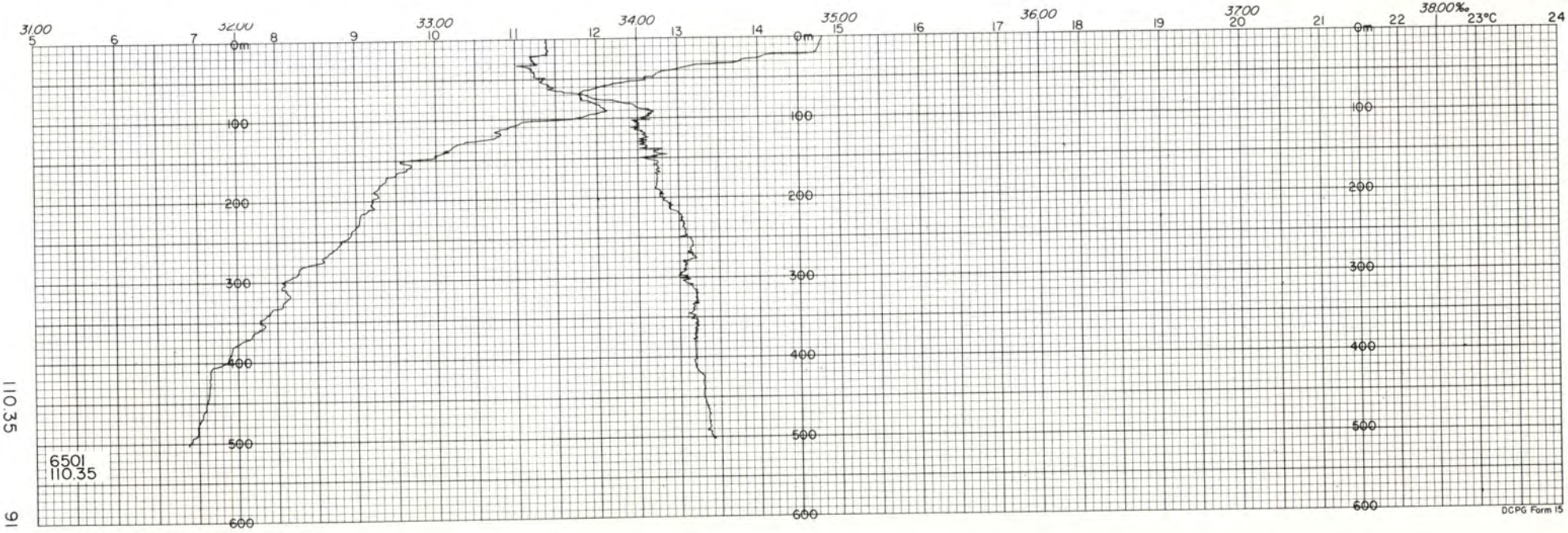
SIO CCOFI 6501

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 5, 1965; 1908 GCT; 29°46.5'N, 116°00'W; sounding, 609 fm; wind, 320°, force 5; weather, overcast; sea, very rough; wire angle, 24°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.83 | 33.579 | 6.26 | 0.32 | 3 | 303 | 0 | 14.79 | 33.56 | 24.93 | 304 | 0.00 |
| 9 | 14.80 | 33.577 | 6.26 | 0.32 | 3 | 302 | 10 | 14.77 | 33.56 | 24.93 | 303 | 0.03 |
| 32 | 13.92 | 33.502 | 6.50 | 0.33 | 2 | 290 | 20 | 14.65 | 33.55 | 24.95 | 301 | 0.06 |
| 41 | 13.03 | 33.498 | 5.53 | 0.79 | 8 | 273 | 30 | 13.76 | 33.49 | 25.09 | 288 | 0.09 |
| 55 | 12.60 | 33.558 | 5.13 | 0.98 | 11 | 261 | 50 | 12.60 | 33.54 | 25.36 | 262 | 0.15 |
| 69 | 11.90 | 33.606 | 4.59 | 1.20 | 14 | 245 | 75 | 11.81 | 33.78 | 25.70 | 230 | 0.21 |
| 91 | 12.03 | 33.962 | 3.12 | 1.77 | 21 | 221 | 100 | 11.73 | 34.05 | 25.92 | 209 | 0.26 |
| 111 | 11.76 | 34.050 | 2.75 | 1.93 | 24 | 209 | 125 | 10.68 | 34.03 | 26.10 | 192 | 0.31 |
| 129 | 10.65 | 34.006 | 2.94 | 1.90 | 27 | 194 | 150 | 9.72 | 34.10 | 26.32 | 171 | 0.36 |
| 157 | 10.00 | 34.106 | 2.58 | 2.07 | 32 | 176 | 200 | 9.20 | 34.11 | 26.41 | 163 | 0.44 |
| 185 | 9.38 | 34.100 | 2.46 | 2.18 | 34 | 166 | 250 | 8.80 | 34.24 | 26.58 | 147 | 0.52 |
| 222 | 9.12 | 34.164 | 2.16 | 2.32 | 38 | 157 | 300 | 8.08 | 34.23 | 26.68 | 137 | 0.60 |
| 251 | 8.92 | 34.245 | 1.61 | - | - | 148 | 400 | 7.37 | 34.27 | 26.81 | 124 | 0.73 |
| 298 | 8.30 | 34.254 | 1.39 | - | - | 139 | 500 | 6.87 | 34.36 | 26.95 | 111 | 0.86 |
| 361 | 7.71 | 34.288 | 0.97 | - | - | 128 | | | | | | |
| 457 | 7.04 | 34.346 | 0.59 | - | - | 114 | | | | | | |
| 545 | 6.58 | 34.383 | 0.47 | - | - | 106 | | | | | | |
| 619 | 6.04 | 34.392 | 0.39 | - | - | 98 | | | | | | |



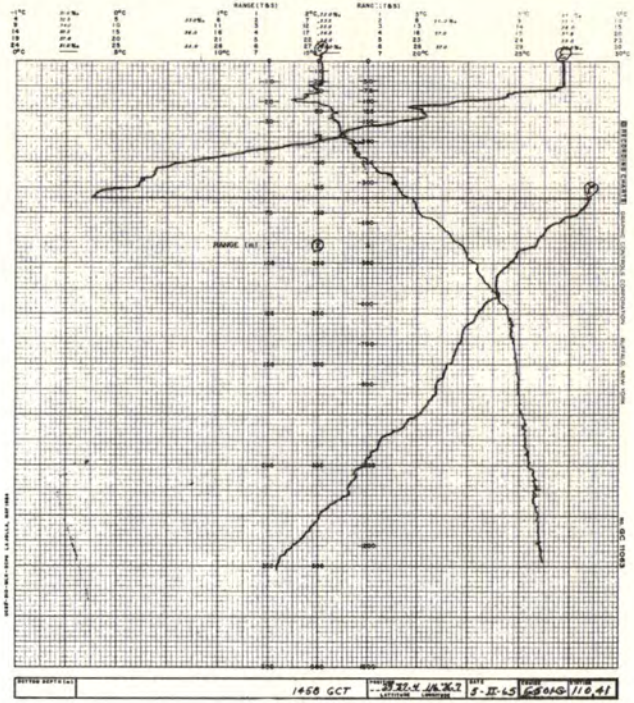




110.35

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | μg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 5, 1965; 1458 GCT; 29°37.5'N, 116°26.5'W; sounding, 1110 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough.

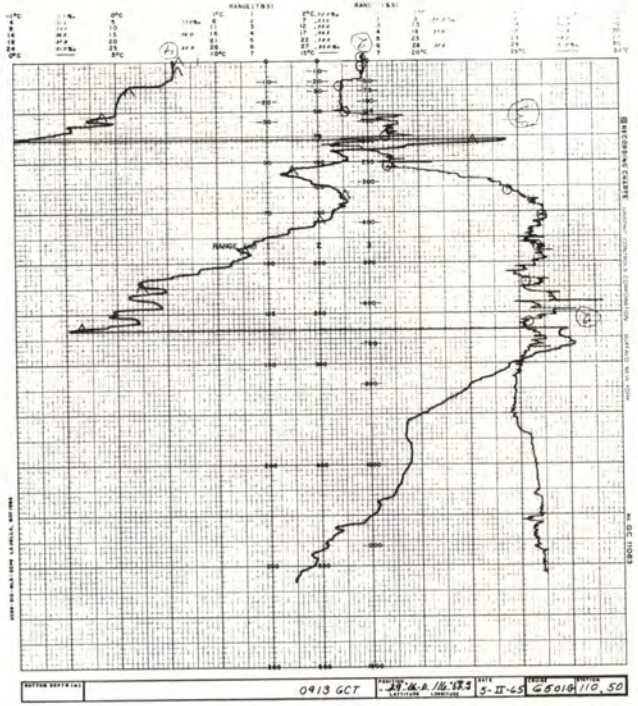
| | | | | | |
|---|---|---|---|---|---|
| 0 | 14.43 | 33.48 | 24.94 | 302 | 0.00 |
| 10 | 14.43 | 33.49 | 24.95 | 301 | 0.03 |
| 20 | 14.43 | 33.49 | 24.95 | 301 | 0.06 |
| 30 | 14.10 | 33.44 | 24.98 | 298 | 0.09 |
| 50 | 13.04 | 33.51 | 25.25 | 273 | 0.15 |
| 75 | 12.22 | 33.56 | 25.45 | 254 | 0.21 |
| 100 | 10.69 | 33.64 | 25.79 | 221 | 0.27 |
| 125 | 10.18 | 33.78 | 25.99 | 203 | 0.33 |
| 150 | 9.59 | 33.86 | 26.15 | 187 | 0.38 |
| 200 | 8.91 | 34.07 | 26.43 | 161 | 0.47 |
| 250 | 8.60 | 34.23 | 26.60 | 145 | 0.54 |
| 300 | 8.29 | 34.26 | 26.67 | 138 | 0.62 |
| 400 | 7.48 | 34.31 | 26.83 | 123 | 0.75 |
| 500 | 6.59 | 34.36 | 26.99 | 107 | 0.88 |

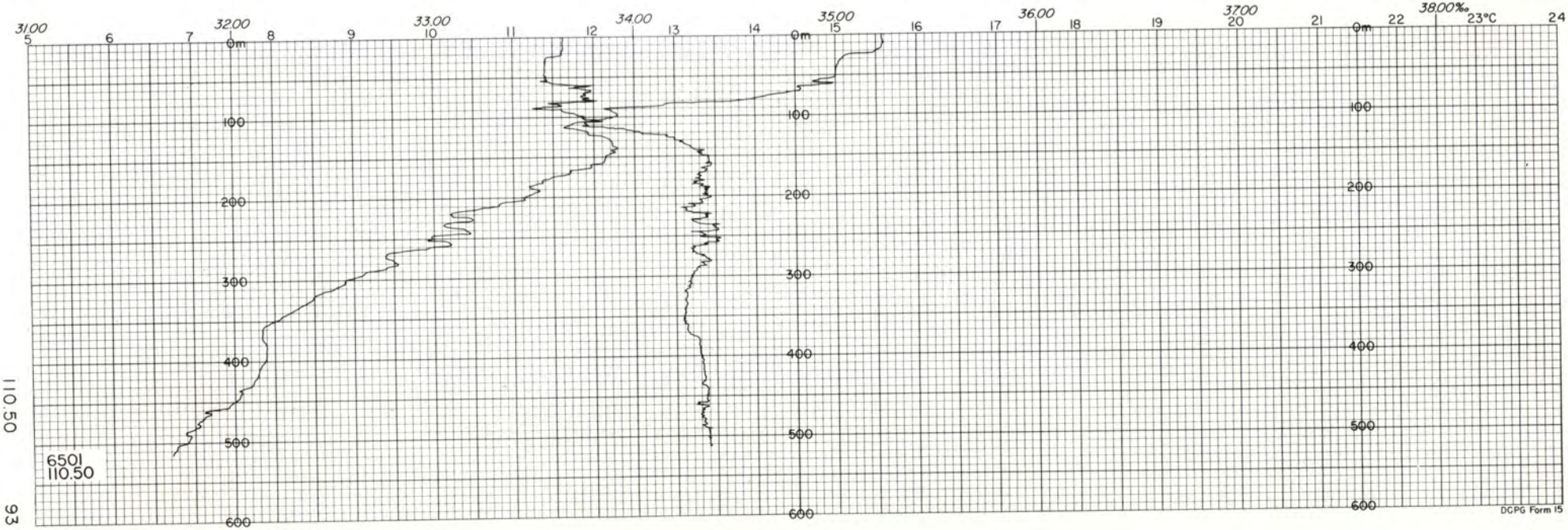



| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | μg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 5, 1965; 0900 GCT; 29°16'N, 116°59.5'W; sounding, 1640 fm; wind, 310°, force 3; weather, cloudy; sea, moderate; wire angle, 05°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.63 | 33.668 | 5.95 | 0.33 | 2 | 313 | 0 | 15.57 | 33.65 | 24.83 | 313 | 0.00 |
| 10 | 15.62 | 33.668 | 5.94 | 0.34 | 2 | 313 | 10 | 15.57 | 33.65 | 24.83 | 313 | 0.03 |
| 30 | 15.13 | 33.581 | 6.01 | 0.33 | 1 | 309 | 20 | 15.50 | 33.64 | 24.83 | 312 | 0.06 |
| 55 | 14.86 | 33.606 | 5.86 | 0.41 | 3 | 302 | 30 | 15.07 | 33.56 | 24.87 | 309 | 0.09 |
| 80 | 13.54 | 33.765 | 4.34 | 1.12 | 11 | 264 | 50 | 15.00 | 33.56 | 24.88 | 308 | 0.16 |
| 109 | 11.74 | 33.777 | 3.68 | 1.51 | 17 | 229 | 75 | 14.15 | 33.77 | 25.23 | 275 | 0.23 |
| 134 | 12.26 | 34.258 | 1.75 | 2.28 | 30 | 203 | 100 | 12.23 | 33.76 | 25.60 | 239 | 0.29 |
| 159 | 12.01 | 34.395 | 1.19 | 2.51 | 32 | 189 | 125 | 12.13 | 34.16 | 25.93 | 208 | 0.35 |
| 189 | 11.27 | 34.378 | 1.39 | 2.47 | 33 | 177 | 150 | 12.13 | 34.36 | 26.09 | 193 | 0.40 |
| 224 | 10.24 | 34.323 | 1.51 | 2.48 | 37 | 163 | 200 | 11.13 | 34.37 | 26.28 | 175 | 0.50 |
| 264 | 9.64 | 34.338 | 1.21 | 2.55 | 40 | 153 | 250 | 9.98 | 34.33 | 26.45 | 159 | 0.58 |
| | | | | | | | 300 | 8.90 | 34.28 | 26.59 | 145 | 0.66 |
| | | | | | | | 400 | 7.87 | 34.32 | 26.78 | 128 | 0.80 |
| | | | | | | | 500 | 6.91 | 34.36 | 26.95 | 112 | 0.93 |



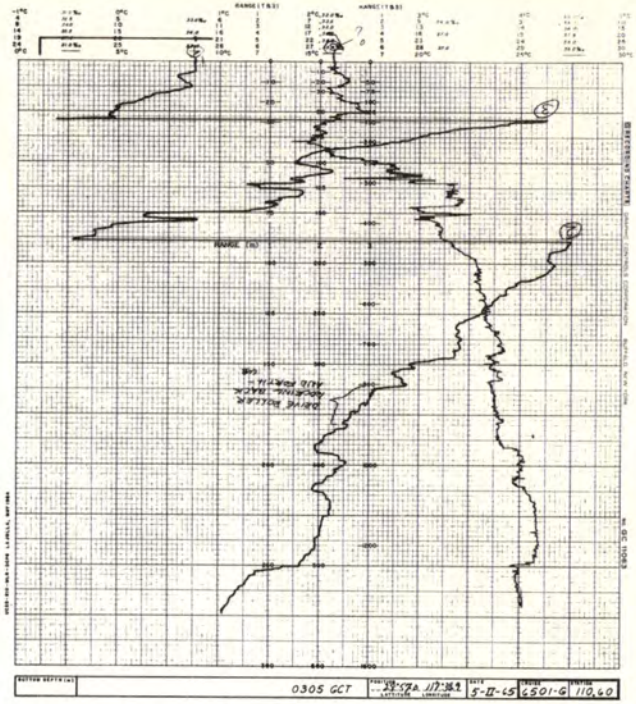
94

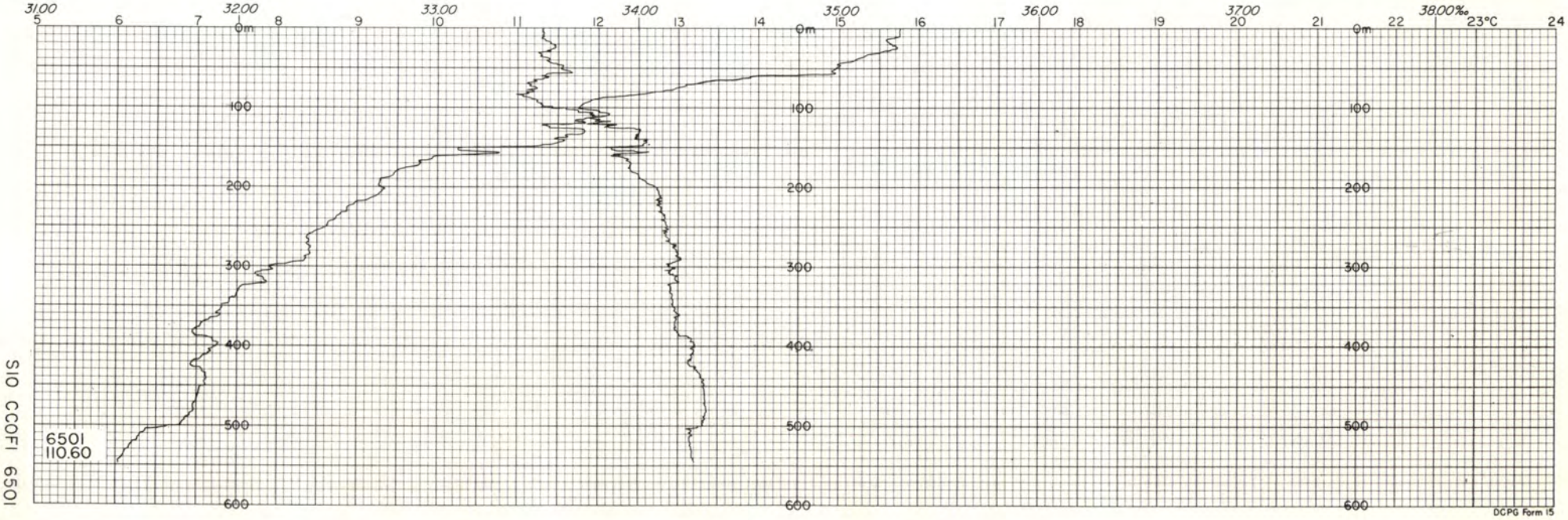
110.60

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 5, 1965; 0305 GCT; 28°57'N, 117°39'W; sounding, 1910 fm; wind, 340°, force 4; weather, partly cloudy; sea, rough.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 15.75 | 33.52 | 24.69 | 326 | 0.00 |
| 10 | 15.75 | 33.52 | 24.69 | 326 | 0.03 |
| 20 | 15.65 | 33.56 | 24.74 | 321 | 0.07 |
| 30 | 15.52 | 33.54 | 24.75 | 320 | 0.10 |
| 50 | 14.96 | 33.62 | 24.94 | 303 | 0.16 |
| 75 | 12.98 | 33.49 | 25.25 | 273 | 0.23 |
| 100 | 11.76 | 33.56 | 25.54 | 246 | 0.30 |
| 125 | 11.39 | 33.86 | 25.84 | 217 | 0.36 |
| 150 | 10.70 | 33.85 | 25.95 | 206 | 0.41 |
| 200 | 9.31 | 34.08 | 26.37 | 167 | 0.50 |
| 250 | 8.61 | 34.14 | 26.53 | 152 | 0.59 |
| 300 | 7.91 | 34.16 | 26.65 | 140 | 0.66 |
| 400 | 7.26 | 34.28 | 26.84 | 122 | 0.80 |
| 500 | 6.81 | 34.33 | 26.94 | 113 | 0.92 |




SIO CCOFI 6501

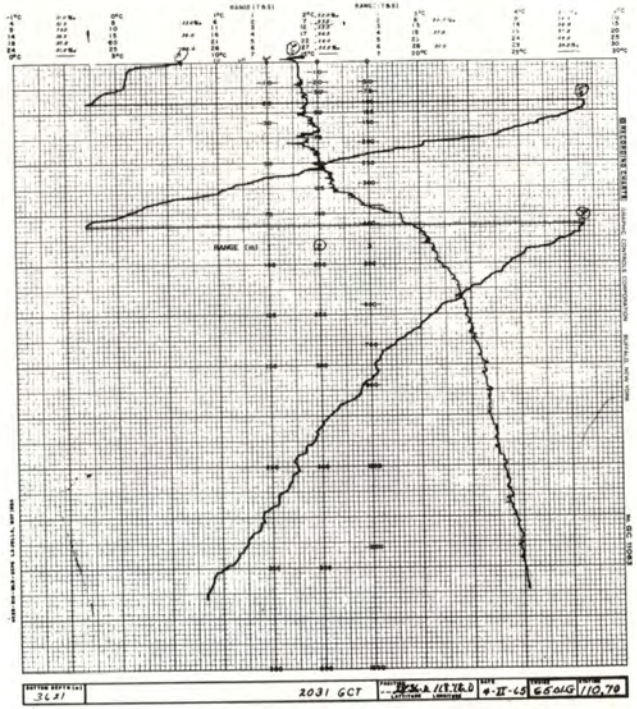
DCPG Form 15

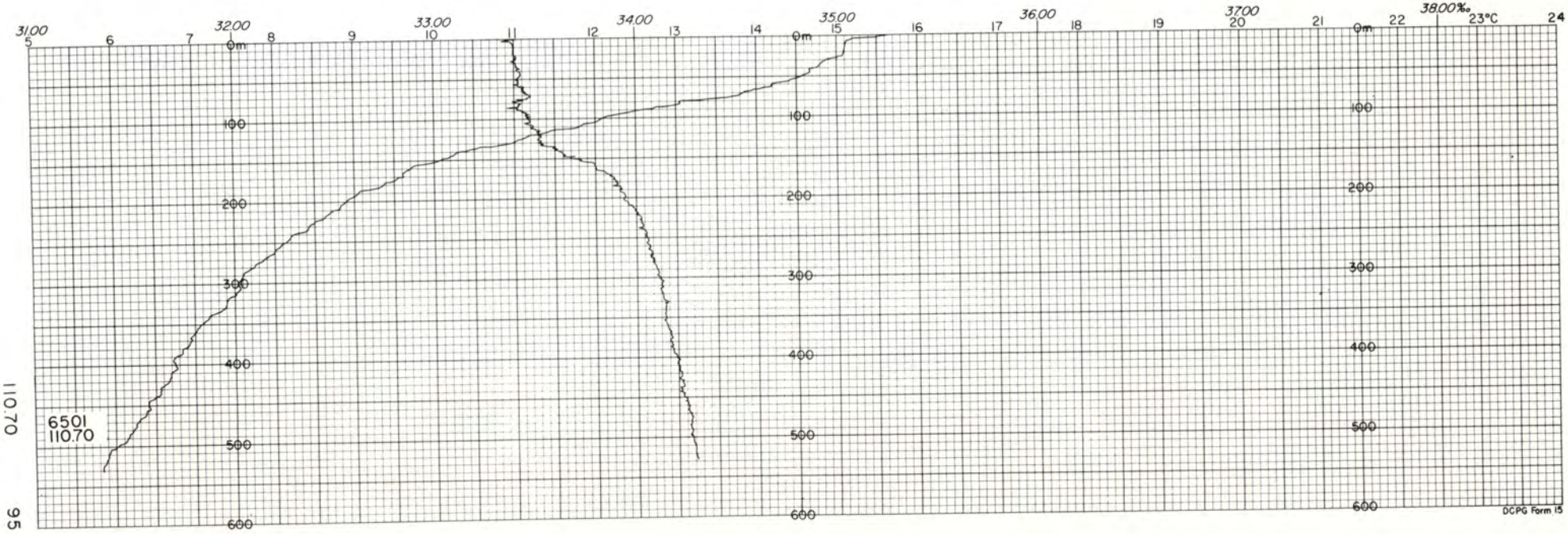
SIO CCOFI 6501

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | μg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 4, 1965; 2031 GCT; 28°36'N, 118°18'W; sounding, 1980 fm; wind, 240°, force 2; weather, cloudy; sea, moderate.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 15.63 | 33.37 | 24.60 | 335 | 0.00 |
| 10 | 15.11 | 33.40 | 24.74 | 322 | 0.03 |
| 20 | 15.09 | 33.40 | 24.74 | 321 | 0.07 |
| 30 | 14.87 | 33.40 | 24.79 | 317 | 0.10 |
| 50 | 14.56 | 33.41 | 24.86 | 310 | 0.16 |
| 75 | 13.67 | 33.45 | 25.08 | 289 | 0.24 |
| 100 | 12.08 | 33.47 | 25.41 | 258 | 0.30 |
| 125 | 11.10 | 33.52 | 25.63 | 237 | 0.37 |
| 150 | 10.09 | 33.68 | 25.93 | 208 | 0.42 |
| 200 | 8.89 | 33.94 | 26.33 | 171 | 0.52 |
| 250 | 8.13 | 34.05 | 26.53 | 151 | 0.60 |
| 300 | 7.54 | 34.11 | 26.66 | 139 | 0.68 |
| 400 | 6.75 | 34.19 | 26.84 | 122 | 0.81 |
| 500 | 6.02 | 34.27 | 27.00 | 107 | 0.93 |




110.70

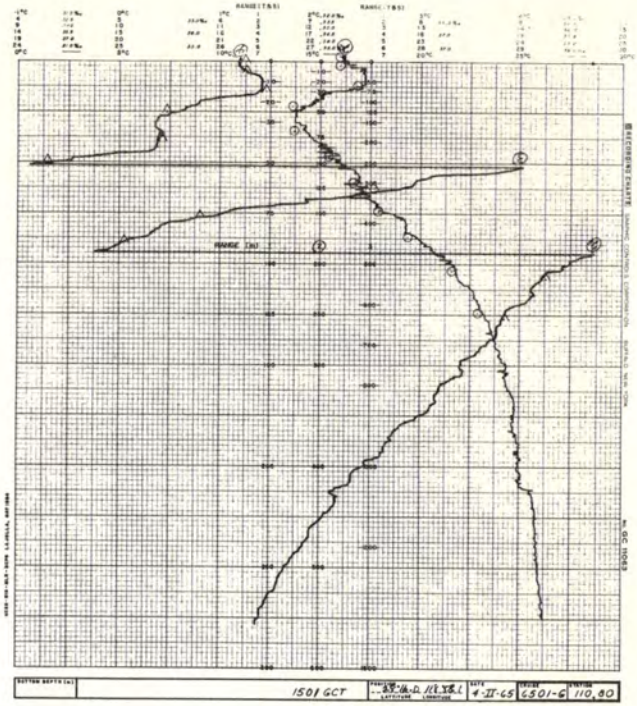
96

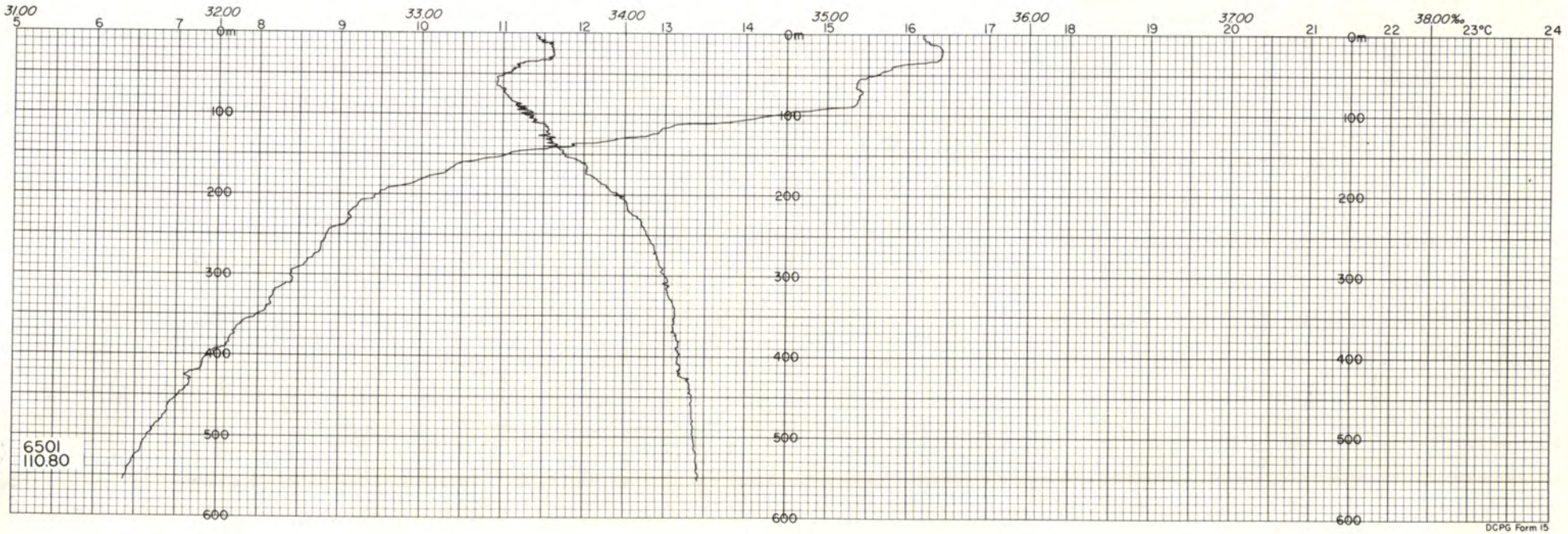
11080

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 4, 1965; 1501 GCT; 28°16'N, 118°58'W; sounding, 2110 fm; wind, 030°, force 3; weather, cloudy; sea, moderate; wire angle, 05°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.25 | 33.579 | 5.80 | 0.31 | 2 | 333 | 0 | 16.18 | 33.56 | 24.62 | 333 | 0.00 |
| 10 | 16.27 | 33.579 | 5.83 | 0.31 | 2 | 333 | 10 | 16.26 | 33.59 | 24.62 | 332 | 0.03 |
| 30 | 16.46 | 33.645 | 5.88 | 0.29 | 2 | 333 | 20 | 16.42 | 33.65 | 24.63 | 331 | 0.07 |
| 50 | 15.47 | 33.388 | 5.97 | 0.32 | 2 | 330 | 30 | 16.38 | 33.63 | 24.63 | 332 | 0.10 |
| 75 | 15.42 | 33.397 | 5.95 | 0.34 | 2 | 329 | 50 | 15.60 | 33.40 | 24.63 | 332 | 0.17 |
| 100 | 14.29 | 33.538 | 5.74 | 0.47 | 4 | 295 | 75 | 15.40 | 33.41 | 24.68 | 327 | 0.25 |
| 125 | 12.53 | 33.632 | 4.88 | 0.94 | 9 | 254 | 100 | 14.37 | 33.50 | 24.97 | 299 | 0.33 |
| 154 | 10.80 | 33.733 | 3.95 | 1.46 | 18 | 216 | 125 | 12.81 | 33.61 | 25.37 | 261 | 0.40 |
| 179 | 10.05 | 33.848 | 3.50 | 1.73 | 23 | 195 | 150 | 11.04 | 33.71 | 25.78 | 222 | 0.46 |
| 214 | 9.26 | 34.026 | 2.98 | 1.97 | 33 | 170 | 200 | 9.48 | 33.96 | 26.25 | 178 | 0.56 |
| 254 | 8.84 | 34.131 | 2.24 | 2.28 | 39 | 156 | 250 | 8.84 | 34.11 | 26.47 | 157 | 0.65 |
| | | | | | | | 300 | 8.40 | 34.20 | 26.61 | 144 | 0.73 |
| | | | | | | | 400 | 7.43 | 34.27 | 26.80 | 125 | 0.87 |
| | | | | | | | 500 | 6.66 | 34.34 | 26.97 | 110 | 0.99 |



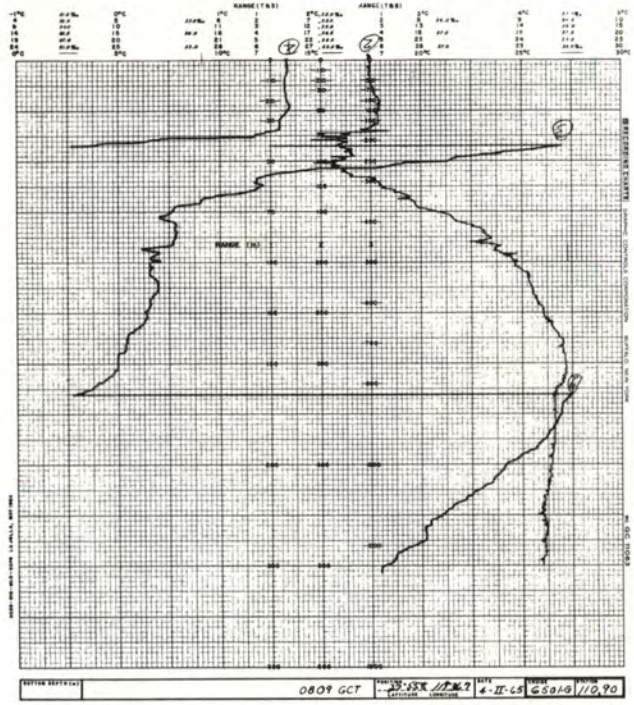

SIO CCOFI 6501

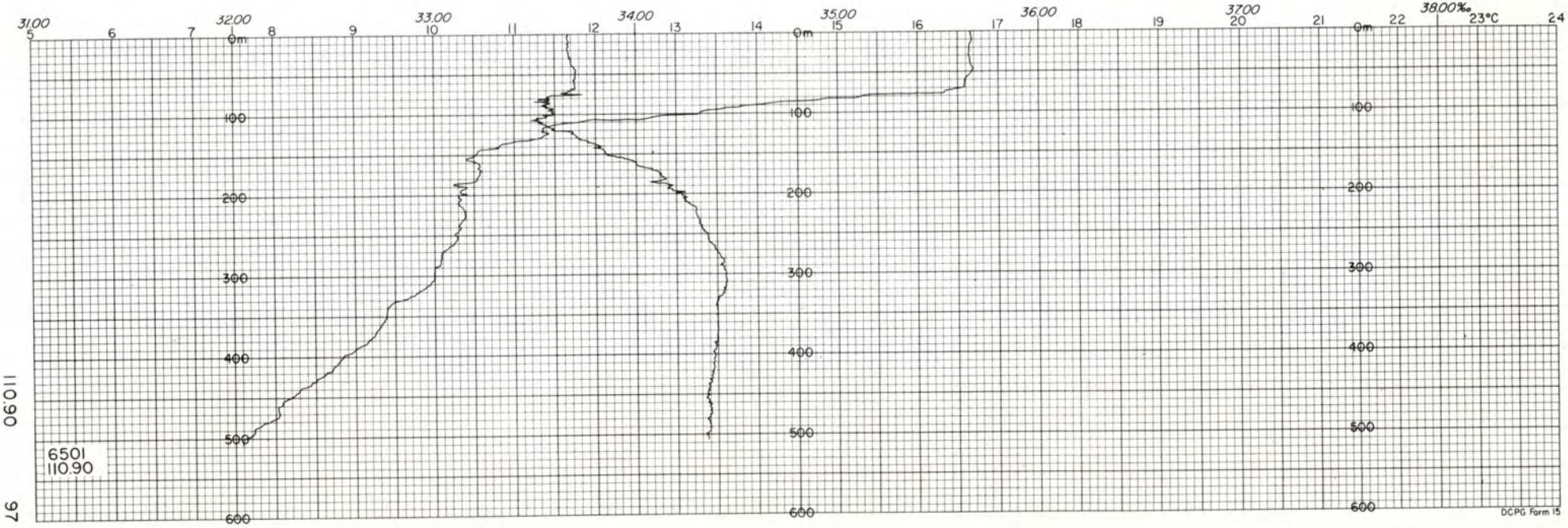
SIO CCOF1 6501

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | μg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 4, 1965; 0809 GCT; 27°56'N, 119°36.5'W; sounding, 2120 fm; wind, 310°, force 3; weather, overcast; sea, rough.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 16.66 | 33.66 | 24.59 | 336 | 0.00 |
| 10 | 16.67 | 33.67 | 24.59 | 336 | 0.03 |
| 20 | 16.64 | 33.66 | 24.59 | 336 | 0.07 |
| 30 | 16.64 | 33.68 | 24.61 | 334 | 0.10 |
| 50 | 16.67 | 33.70 | 24.61 | 333 | 0.17 |
| 75 | 16.33 | 33.72 | 24.71 | 324 | 0.25 |
| 100 | 13.27 | 33.59 | 25.27 | 271 | 0.33 |
| 125 | 11.40 | 33.70 | 25.71 | 229 | 0.39 |
| 150 | 10.52 | 33.85 | 25.99 | 203 | 0.44 |
| 200 | 10.31 | 34.23 | 26.32 | 171 | 0.54 |
| 250 | 10.28 | 34.35 | 26.42 | 162 | 0.62 |
| 300 | 9.99 | 34.44 | 26.54 | 151 | 0.71 |
| 400 | 8.83 | 34.39 | 26.69 | 136 | 0.86 |
| 500 | 7.62 | 34.35 | 26.84 | 122 | 0.99 |

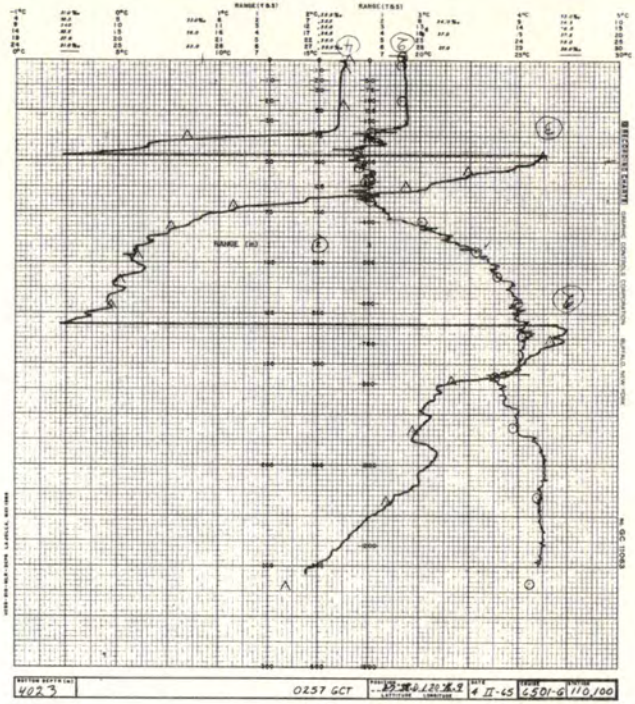


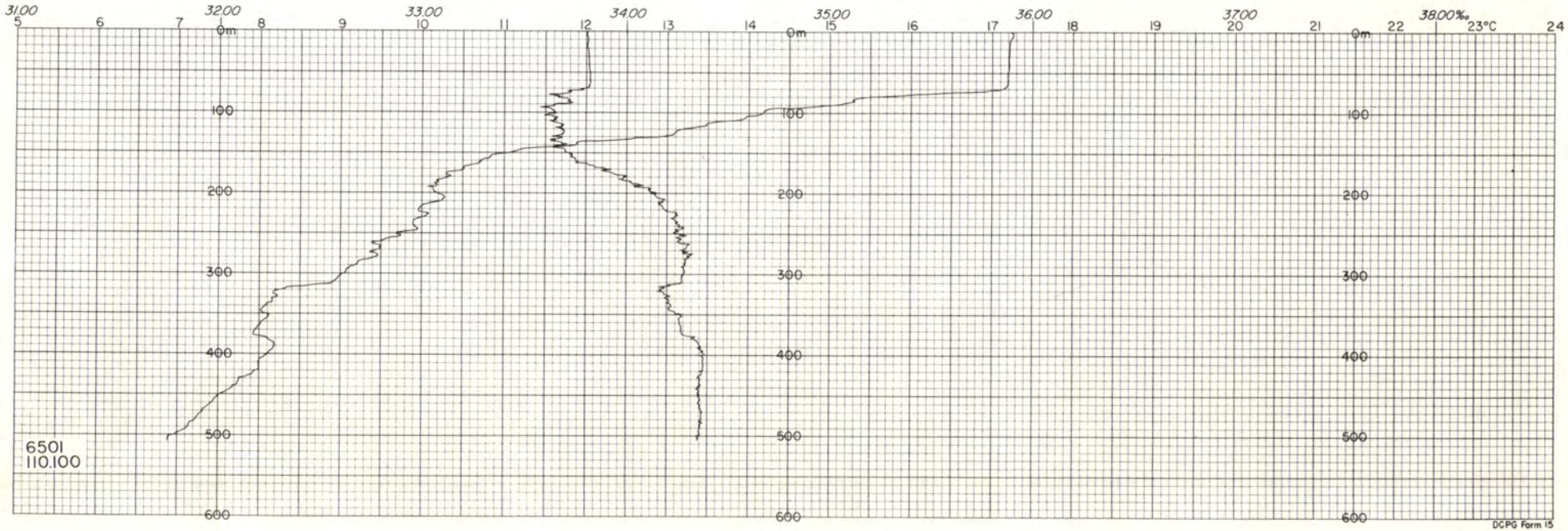



| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | μg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 4, 1965; 0235 GCT; 27°38'N, 120°17'W; sounding, 2200 fm; wind, 010°, force 3; weather, partly cloudy; sea, very rough; wire angle, 06°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.30 | 33.832 | 5.72 | 0.25 | 2 | 338 | 0 | 17.25 | 33.80 | 24.55 | 339 | 0.00 |
| 10 | 17.26 | 33.824 | 5.76 | 0.28 | 2 | 338 | 10 | 17.23 | 33.81 | 24.57 | 338 | 0.03 |
| 45 | 17.24 | 33.824 | 5.81 | 0.27 | 1 | 337 | 20 | 17.22 | 33.81 | 24.57 | 338 | 0.07 |
| 75 | 15.68 | 33.705 | 5.91 | 0.32 | 2 | 311 | 30 | 17.21 | 33.82 | 24.58 | 337 | 0.10 |
| 95 | 14.24 | 33.652 | - | 0.51 | 4 | 286 | 50 | 17.20 | 33.82 | 24.58 | 336 | 0.17 |
| 110 | 13.48 | 33.660 | - | 0.68 | 6 | 270 | 75 | 16.45 | 33.72 | 24.68 | 327 | 0.25 |
| 125 | 12.86 | 33.684 | 5.10 | 0.82 | 7 | 257 | 100 | 14.16 | 33.65 | 25.13 | 284 | 0.33 |
| 144 | 11.14 | 33.703 | 4.39 | 1.25 | 14 | 224 | 125 | 13.08 | 33.68 | 25.38 | 261 | 0.40 |
| 164 | 10.52 | 33.905 | 3.20 | 1.75 | 24 | 199 | 150 | 11.07 | 33.71 | 25.78 | 223 | 0.46 |
| 194 | 10.20 | 34.122 | 2.26 | 2.17 | 32 | 178 | 200 | 10.17 | 34.15 | 26.28 | 175 | 0.56 |
| 218 | 10.02 | 34.210 | 1.82 | 2.33 | 33 | 168 | 250 | 9.69 | 34.26 | 26.45 | 159 | 0.65 |
| 243 | 9.94 | 34.298 | 1.49 | 2.42 | 36 | 160 | 300 | 9.03 | 34.28 | 26.57 | 147 | 0.73 |
| 277 | 9.32 | 34.313 | 1.37 | - | - | 149 | 400 | 8.12 | 34.38 | 26.79 | 127 | 0.87 |
| 317 | 8.32 | 34.203 | 1.63 | - | - | 143 | 500 | 6.97 | 34.36 | 26.94 | 112 | 1.00 |
| 367 | 7.94 | 34.278 | 1.11 | - | - | 132 | | | | | | |
| 436 | 7.68 | 34.374 | 0.56 | - | - | 121 | | | | | | |
| 521 | 6.68 | 34.343 | 0.54 | - | - | 110 | | | | | | |
| 605 | 6.04 | 34.376 | 0.37 | - | - | 99 | | | | | | |

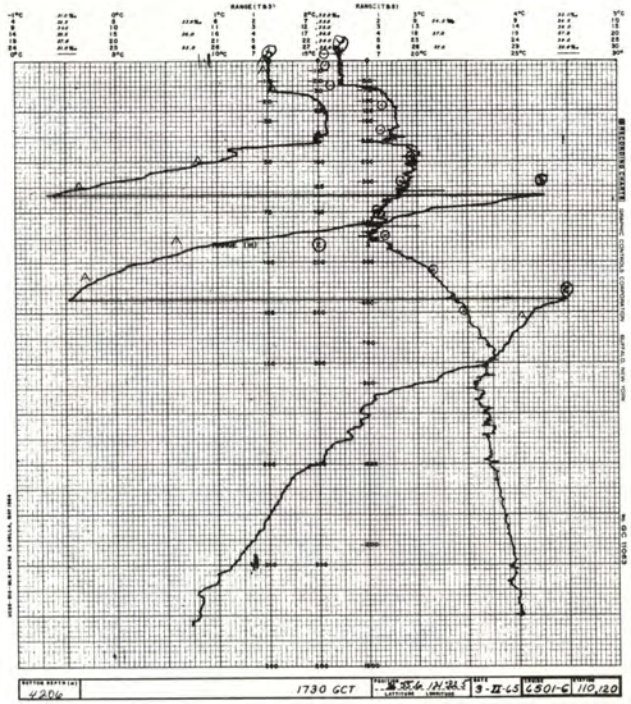


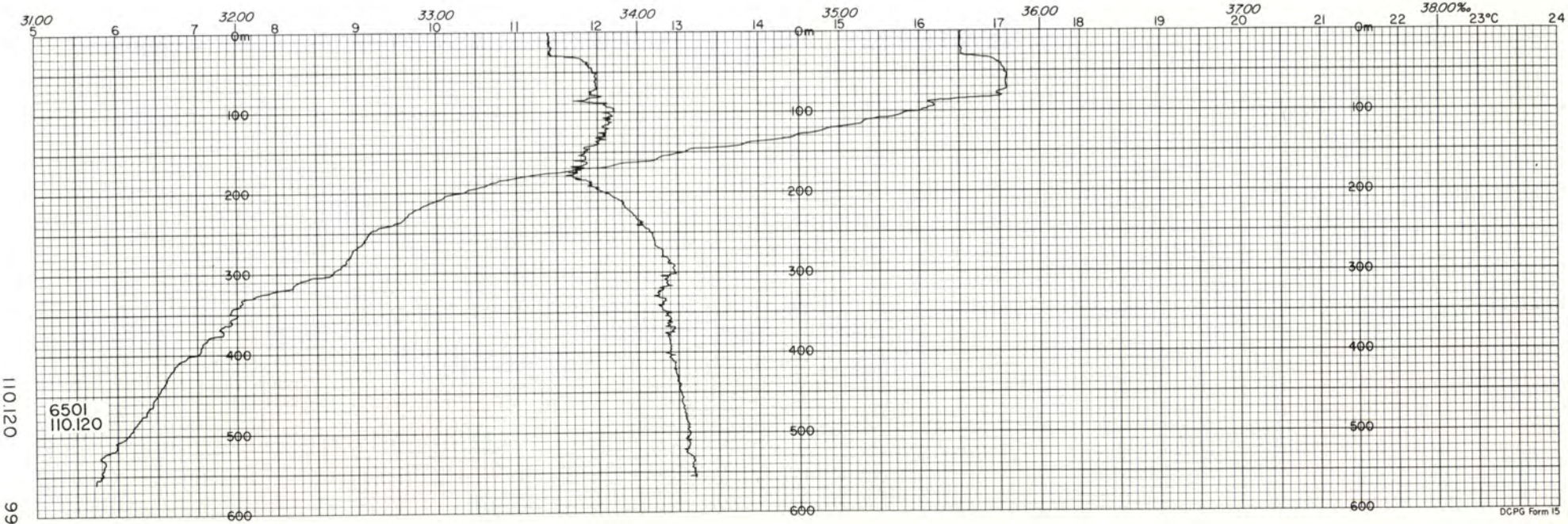



| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | μg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 3, 1965; 1710 GCT; 26°55.5'N, 121°32.5'W; sounding, 2300 fm; wind, 070°, force 2; weather, cloudy; sea, rough; wire angle, 05°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.45 | 33.522 | 5.78 | 0.32 | 3 | 341 | 0 | 16.52 | 33.56 | 24.54 | 340 | 0.00 |
| 10 | 16.46 | 33.527 | 5.78 | 0.31 | 2 | 341 | 10 | 16.52 | 33.56 | 24.54 | 340 | 0.03 |
| 30 | 16.56 | 33.550 | 5.84 | 0.30 | 2 | 342 | 20 | 16.52 | 33.57 | 24.55 | 340 | 0.07 |
| 50 | 17.05 | 33.759 | 5.74 | 0.33 | 3 | 338 | 30 | 16.55 | 33.64 | 24.60 | 335 | 0.10 |
| 75 | 17.00 | 33.754 | 5.71 | 0.29 | 2 | 337 | 50 | 17.06 | 33.77 | 24.58 | 337 | 0.17 |
| 100 | 15.82 | 33.878 | 5.70 | 0.74 | 3 | 302 | 75 | 17.02 | 33.76 | 24.58 | 337 | 0.25 |
| 125 | 14.63 | 33.828 | 5.45 | 0.52 | 5 | 281 | 100 | 16.00 | 33.84 | 24.88 | 308 | 0.34 |
| 155 | 12.58 | 33.738 | 4.91 | 0.84 | 9 | 247 | 125 | 14.75 | 33.83 | 25.14 | 283 | 0.41 |
| 179 | 10.60 | 33.770 | 4.10 | 1.39 | 18 | 210 | 150 | 13.07 | 33.73 | 25.42 | 257 | 0.48 |
| 214 | 9.68 | 33.967 | 3.08 | 1.93 | 28 | 181 | 200 | 10.33 | 33.84 | 26.01 | 201 | 0.59 |
| 255 | 9.04 | 34.082 | 2.68 | 2.14 | 36 | 162 | 250 | 9.15 | 34.06 | 26.38 | 166 | 0.69 |
| | | | | | | | 300 | 8.69 | 34.18 | 26.55 | 150 | 0.77 |
| | | | | | | | 400 | 7.00 | 34.15 | 26.77 | 128 | 0.91 |
| | | | | | | | 500 | 6.13 | 34.25 | 26.97 | 110 | 1.04 |



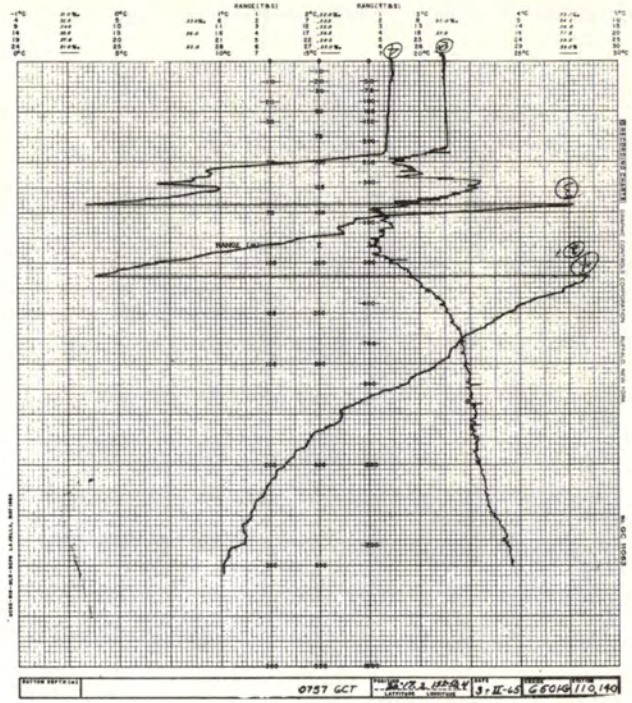
100

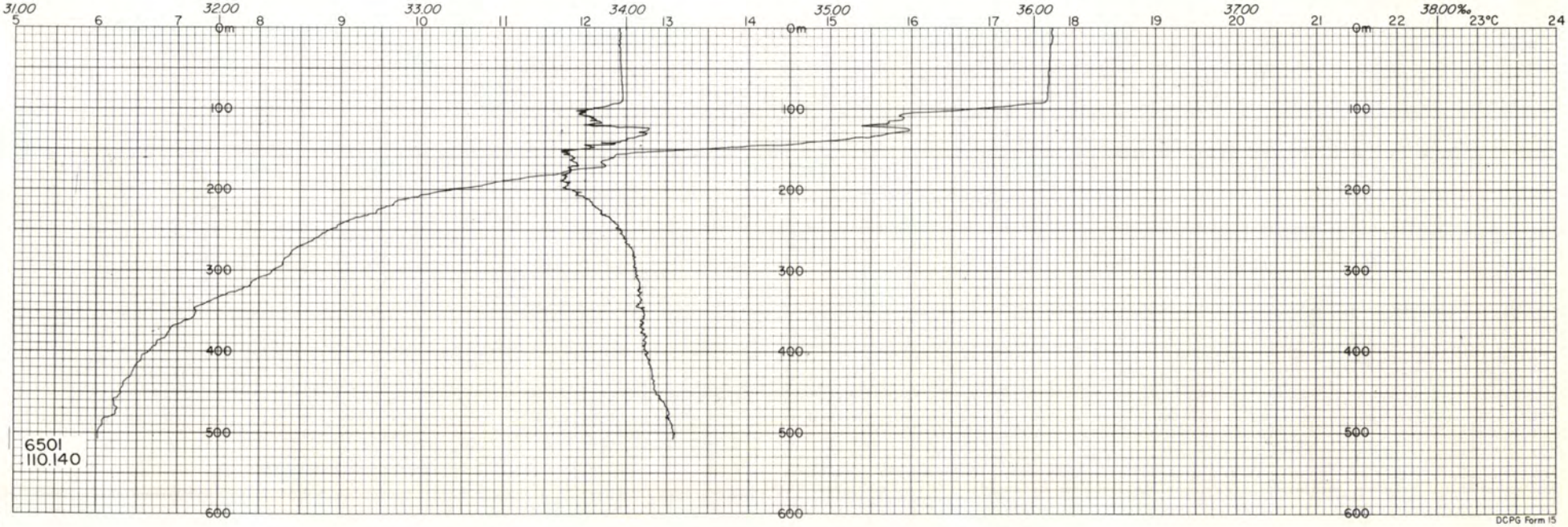
110.140

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 3, 1965; 0757 GCT; 26°17'N, 122°50.5'W; sounding, 2550 fm; wind, 320°, force 3; weather, missing; sea, rough.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 17.72 | 33.97 | 24.57 | 337 | 0.00 |
| 10 | 17.73 | 33.97 | 24.57 | 338 | 0.03 |
| 20 | 17.72 | 33.97 | 24.57 | 337 | 0.07 |
| 30 | 17.70 | 33.97 | 24.58 | 337 | 0.10 |
| 50 | 17.69 | 33.97 | 24.58 | 337 | 0.17 |
| 75 | 17.67 | 33.98 | 24.59 | 336 | 0.25 |
| 100 | 16.78 | 33.83 | 24.69 | 326 | 0.34 |
| 125 | 15.98 | 34.11 | 25.09 | 288 | 0.41 |
| 150 | 13.39 | 33.76 | 25.37 | 261 | 0.48 |
| 200 | 10.36 | 33.74 | 25.93 | 208 | 0.60 |
| 250 | 8.86 | 33.97 | 26.35 | 168 | 0.70 |
| 300 | 8.17 | 34.05 | 26.52 | 152 | 0.78 |
| 400 | 6.65 | 34.10 | 26.78 | 128 | 0.93 |
| 500 | 6.02 | 34.24 | 26.97 | 109 | 1.05 |




S10 CCOFI 6501

| BOTTLE SAMPLES | | | | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 2, 1965; 1850, 2158 GCT; 25°37'N, 124°03'W; sounding, 2285 fm; wind, 020°, force 3; weather, partly cloudy; sea, rough; wire angle, 13°, 28°.[a)]

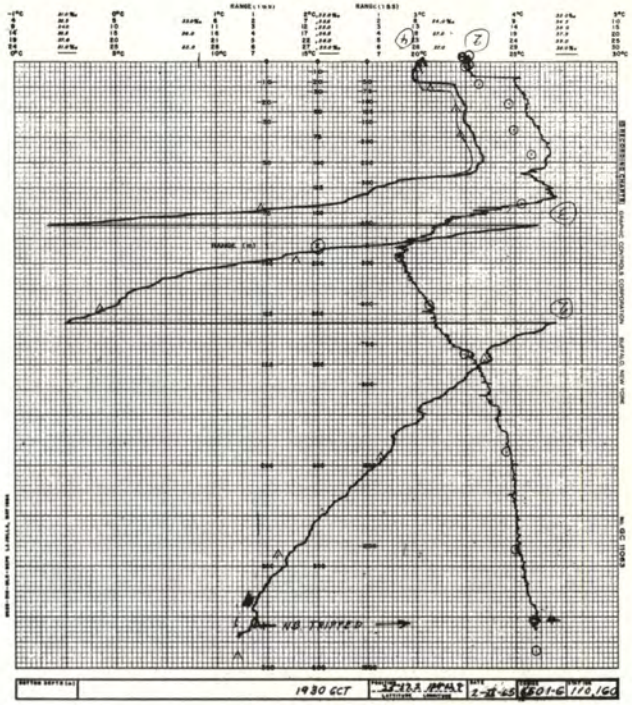
| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.06 | 34.114 | 5.52 | 0.28 | 2 | 335 | 0 | 18.06 | 34.11 | 24.60 | 335 | 0.00 |
| 10 | 18.01 | 34.100 | 5.55 | 0.26 | 2 | 335 | 10 | 18.01 | 34.10 | 24.60 | 335 | 0.03 |
| 29 | 18.14 | 34.153 | 5.63 | 0.26 | 2 | 334 | 20 | 18.02 | 34.11 | 24.61 | 334 | 0.07 |
| 48 | 18.40 | 34.274 | 5.49 | 0.24 | 2 | 331 | 30 | 18.30 | 34.23 | 24.63 | 332 | 0.10 |
| 74 | 18.44 | 34.296 | 5.52 | 0.23 | 2 | 331 | 50 | 18.40 | 34.28 | 24.64 | 331 | 0.17 |
| 98 | - | 34.367 | 5.48 | 0.24 | 2 | | 75 | 18.44 | 34.30 | 24.65 | 330 | 0.25 |
| 147 | 16.44 | 34.323 | 5.19 | 0.32 | 3 | 283 | 100 | 18.55 | 34.37 | 24.67 | 328 | 0.33 |
| 200 | 11.78 | 33.835 | 4.68 | 0.97 | 11 | 226 | 125 | 17.56 | 34.36 | 24.91 | 305 | 0.41 |
| 247 | 9.84 | 33.947 | 3.55 | 1.70 | 24 | 185 | 150 | 16.10 | 34.28 | 25.19 | 279 | 0.49 |
| 296 | 8.68 | 34.093 | 2.63 | 2.07 | 37 | 156 | 200 | 11.78 | 33.84 | 25.75 | 225 | 0.62 |
| 393 | 7.63 | 34.260 | 1.02 | 2.75 | 53 | 129 | 250 | 9.76 | 33.96 | 26.20 | 182 | 0.72 |
| 489 | 6.60 | 34.298 | 0.64 | 3.02 | 67 | 112 | 300 | 8.63 | 34.11 | 26.50 | 154 | 0.81 |
| 590 | 6.20 | 34.379 | 0.39 | 3.12 | 75 | 101 | 400 | 7.54 | 34.27 | 26.79 | 127 | 0.95 |
| 685 | 5.60 | 34.419 | 0.38 | 3.26 | 86 | 91 | 500 | 6.54 | 34.30 | 26.95 | 111 | 1.08 |
| 781 | 5.05 | 34.436 | 0.45 | 3.26 | 94 | 84 | 600 | 6.13 | 34.38 | 27.07 | 100 | 1.19 |
| 881 | 4.57 | 34.459 | 0.62 | 3.18 | 101 | 77 | 700 | 5.51 | 34.42 | 27.18 | 90 | 1.30 |
| 977 | 4.22 | 34.492 | 0.70 | 3.18 | 109 | 71 | 800 | 4.97 | 34.44 | 27.26 | 82 | 1.39 |
| 1075 | 3.94 | 34.512 | 0.78 | 3.20 | 116 | 66 | 1000 | 4.16 | 34.50 | 27.39 | 69 | 1.56 |
| 1172 | 3.66 | 34.523 | 0.90 | 3.20 | 124 | 63 | 1200 | 3.60 | 34.53 | 27.47 | 62 | 1.71 |
| 1271 | 3.43 | 34.537 | 0.99 | 3.12 | 131 | 60 | 1500 | 3.01 | 34.57 | 27.56 | 53 | 1.91 |
| | | | | | | | 2000 | 2.17 | 34.63 | 27.68 | 42 | 2.20 |
| 1302b) | 3.44 | 34.543 | 0.98 | 3.14 | 126 | 59 | 2500 | 1.81 | 34.65 | 27.73 | 38 | 2.45 |
| 1495 | 3.02 | 34.566 | 1.19 | 3.08 | 139 | 54 | 3000 | 1.61 | 34.67 | 27.76 | 35 | 2.68 |
| 1689 | 2.62 | 34.590 | 1.55 | 3.01 | 146 | 49 | 4000 | 1.54 | 34.68 | 27.77 | 34 | 3.13 |
| 1882 | 2.32 | 34.615 | 1.87 | 2.94 | 149 | 44 | | | | | | |
| 2075 | 2.08 | 34.632 | 2.15 | 2.81 | 154 | 41 | | | | | | |
| 2267 | 1.92 | 34.645 | 2.39 | 2.82 | 154 | 39 | | | | | | |
| 2460 | 1.84 | 34.650 | 2.56 | 2.78 | 156 | 38 | | | | | | |
| 2651 | 1.74 | 34.656 | 2.68 | 2.71 | 156 | 37 | | | | | | |
| 2844 | 1.62 | 34.664 | 2.81 | 2.62 | 160 | 35 | | | | | | |
| 3037 | 1.60 | 34.670 | 3.00 | 2.66 | 160 | 35 | | | | | | |
| 3182 | 1.56 | 34.668 | 2.99 | 2.55 | 161 | 35 | | | | | | |
| 3328 | 1.53 | 34.672 | 3.12 | 2.60 | 163 | 34 | | | | | | |
| 3472 | 1.52 | 34.675 | 3.22 | 2.59 | 157 | 34 | | | | | | |
| 3618 | 1.52 | 34.680 | 3.31 | 2.49 | 163 | 33 | | | | | | |
| 3718 | 1.52 | 34.677 | 3.32 | 2.54 | 156 | 34 | | | | | | |
| 3814 | 1.54 | 34.676 | 3.31 | 2.59 | 159 | 34 | | | | | | |
| 3911 | 1.53 | 34.680 | 3.34 | 2.60 | 158 | 33 | | | | | | |
| 4008 | 1.54 | 34.682 | 3.23 | 2.55 | 157 | 33 | | | | | | |
| 4154 | 1.57 | 34.675 | 3.27 | 2.46 | 161 | 34 | | | | | | |
| 4299 | 1.60 | 34.677 | 3.20 | 2.44 | 164 | 34 | | | | | | |

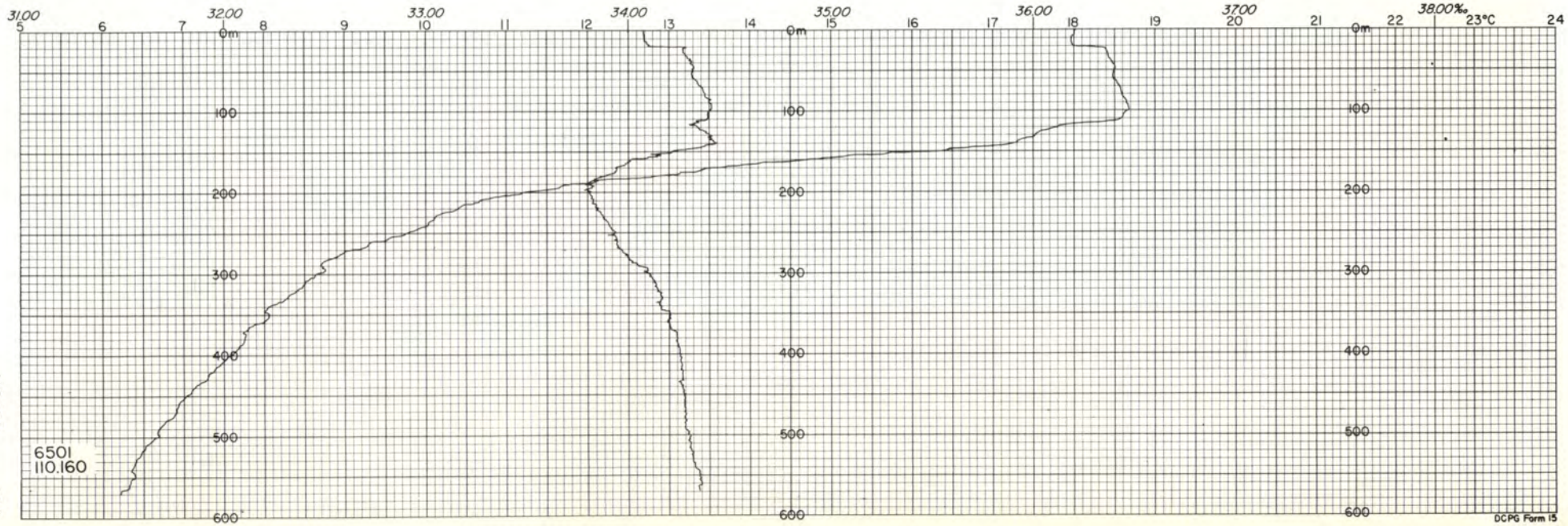
a) Wire angle decreased to 17° at start up time.
b) Multiple casts; reconciliation of property curves when necessary.

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | μg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 2, 1965; 1930 GCT; 25°37'N, 124°03'W; sounding, 2285 fm; wind, 020°, force 3; weather, partly cloudy; sea, rough.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 18.01 | 34.08 | 24.59 | 336 | 0.00 |
| 10 | 17.96 | 34.08 | 24.60 | 335 | 0.03 |
| 20 | 17.98 | 34.11 | 24.62 | 333 | 0.07 |
| 30 | 18.41 | 34.28 | 24.64 | 331 | 0.10 |
| 50 | 18.48 | 34.31 | 24.64 | 330 | 0.17 |
| 75 | 18.58 | 34.37 | 24.67 | 329 | 0.25 |
| 100 | 18.66 | 34.39 | 24.66 | 329 | 0.33 |
| 125 | 17.58 | 34.38 | 24.92 | 304 | 0.41 |
| 150 | 16.10 | 34.28 | 25.19 | 279 | 0.49 |
| 200 | 11.22 | 33.81 | 25.83 | 218 | 0.61 |
| 250 | 9.78 | 33.94 | 26.18 | 184 | 0.72 |
| 300 | 8.63 | 34.09 | 26.48 | 156 | 0.80 |
| 400 | 7.58 | 34.25 | 26.77 | 129 | 0.95 |
| 500 | 6.67 | 34.30 | 26.93 | 113 | 1.08 |



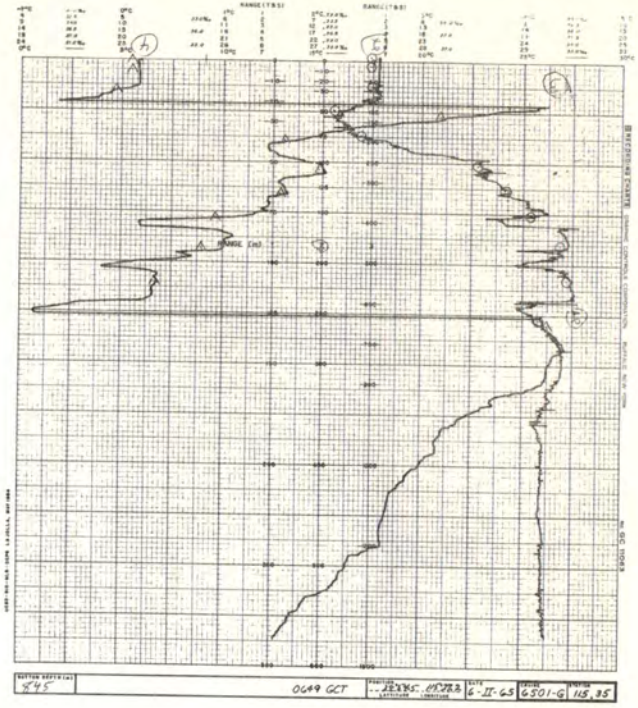
| BOTTLE SAMPLES | | | | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| ALEXANDER AGASSIZ; February 6, 1965; 0312 GCT; 29°21.5'N, 115°18'W; sounding, 35 fm; wind, 300°, force 6; weather, clear; sea, rough; wire angle, 13°. | | | | | | | | | | | | |
| 0 | 14.65 | 33.724 | 6.42 | 0.32 | 2 | 289 | 0 | 14.65 | 33.72 | 25.08 | 289 | 0.00 |
| 10 | 14.66 | 33.721 | 6.50 | 0.31 | 1 | 289 | 10 | 14.66 | 33.72 | 25.08 | 289 | 0.03 |
| 20 | 14.08 | 33.670 | 6.11 | 0.52 | 4 | 281 | 20 | 14.08 | 33.67 | 25.16 | 281 | 0.06 |
| 29 | 12.67 | 33.637 | 4.59 | 1.12 | 12 | 256 | 30 | 12.61 | 33.64 | 25.44 | 255 | 0.08 |
| 39 | 12.22 | 33.687 | 4.08 | 1.40 | 14 | 244 | 50 | (11.88) | (33.79) | (25.69) | (231) | (0.13) |
| 48 | 11.92 | 33.779 | 2.59 | 1.92 | 27 | 232 | | | | | | |

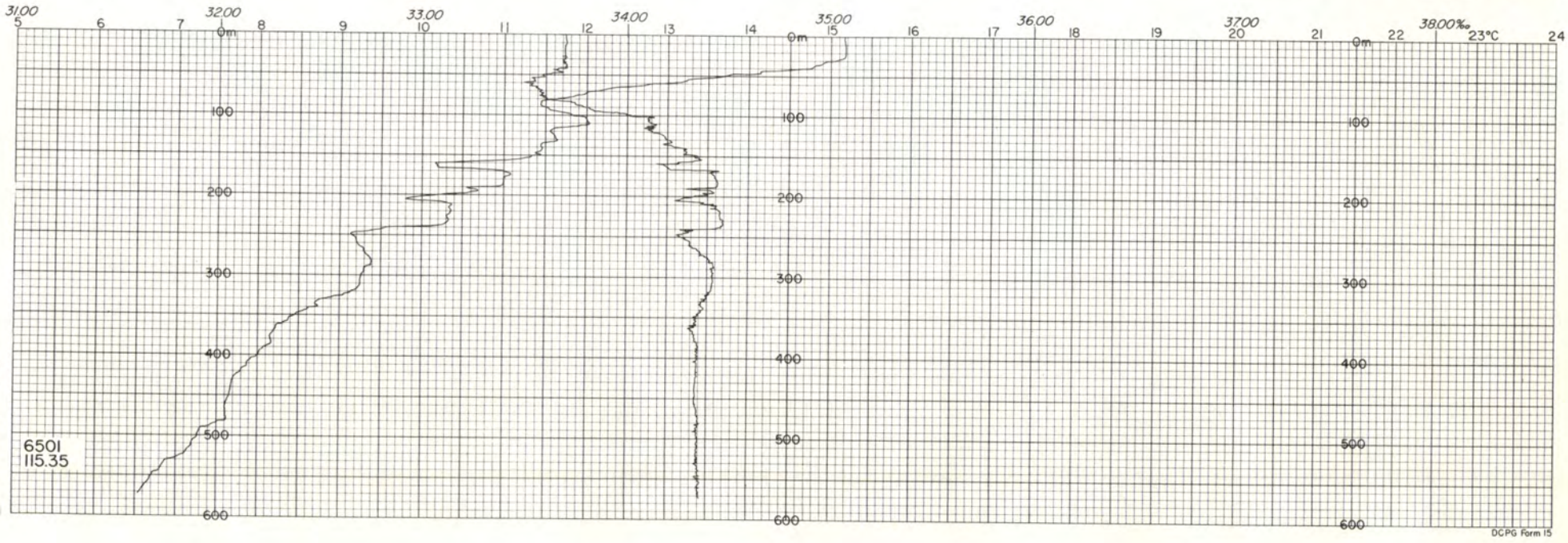
104 115.35

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 6, 1965; 0633 GCT; 28°54.5'N, 115°27'W; sounding, 462 fm; wind, 300°, force 4; weather, overcast; sea, rough; wire angle, 15°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.09 | 33.691 | 6.13 | 0.33 | 3 | 300 | 0 | 15.17 | 33.70 | 24.95 | 301 | 0.00 |
| 10 | 15.08 | 33.690 | 6.15 | 0.35 | 3 | 300 | 10 | 15.17 | 33.70 | 24.95 | 301 | 0.03 |
| 30 | 14.94 | 33.694 | 6.04 | 0.38 | 4 | 297 | 20 | 15.17 | 33.69 | 24.95 | 302 | 0.06 |
| 54 | 13.18 | 33.542 | 5.36 | 0.79 | 7 | 273 | 30 | 14.98 | 33.69 | 24.99 | 298 | 0.09 |
| 78 | 11.61 | 33.652 | 4.30 | 1.32 | 14 | 236 | 50 | 13.67 | 33.60 | 25.19 | 278 | 0.15 |
| 107 | 11.96 | 34.121 | 2.30 | 2.08 | 26 | 208 | 75 | 11.88 | 33.58 | 25.53 | 246 | 0.21 |
| 131 | 11.57 | 34.232 | 1.88 | 2.27 | 32 | 193 | 100 | 11.85 | 34.02 | 25.88 | 213 | 0.27 |
| 156 | 10.92 | 34.325 | 1.48 | 2.43 | 34 | 175 | 125 | 11.62 | 34.18 | 26.04 | 197 | 0.32 |
| 186 | 10.79 | 34.445 | 0.99 | 2.64 | 38 | 164 | 150 | 11.35 | 34.33 | 26.21 | 182 | 0.37 |
| 220 | 10.34 | 34.473 | 0.76 | 2.71 | 41 | 154 | 200 | 10.15 | 34.35 | 26.44 | 160 | 0.46 |
| 260 | 9.24 | 34.361 | 1.07 | 2.70 | 46 | 145 | 250 | 9.13 | 34.27 | 26.55 | 150 | 0.54 |
| | | | | | | | 300 | 9.26 | 34.43 | 26.65 | 140 | 0.61 |
| | | | | | | | 400 | 7.99 | 34.35 | 26.79 | 127 | 0.75 |
| | | | | | | | 500 | 7.27 | 34.35 | 26.89 | 117 | 0.88 |



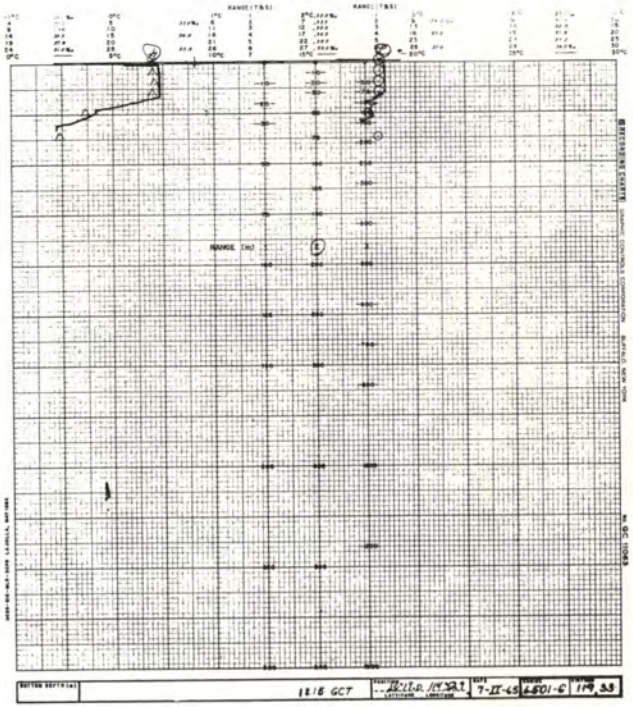



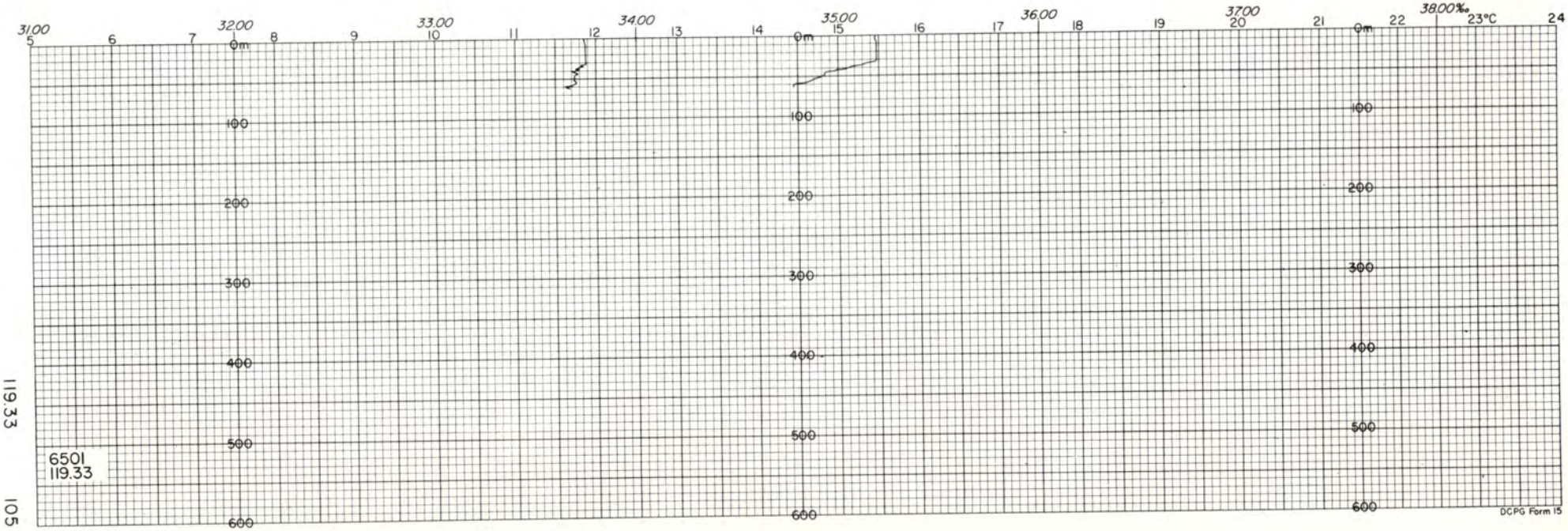

SIO CCOFI 6501

DCPG Form 15

SIO CCOFI 6501

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $PO_4$-P<br>µg at/L | $SiO_3$-Si<br>µg at/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |
| ALEXANDER AGASSIZ; February 7, 1965; 1103 GCT; 28°19'N, 114°53'W; sounding, 58 fm; wind, 270°, force 5; weather, missing; sea, slight; wire angle, 11°. | | | | | | | | | | | | |
| 0 | 15.40 | 33.759 | 5.90 | 0.35 | 5 | 302 | 0 | 15.45 | 33.74 | 24.92 | 304 | 0.00 |
| 10 | 15.40 | 33.757 | 5.91 | 0.38 | 4 | 302 | 10 | 15.47 | 33.75 | 24.93 | 304 | 0.03 |
| 20 | 15.42 | 33.755 | 5.99 | 0.37 | 4 | 302 | 20 | 15.47 | 33.75 | 24.93 | 304 | 0.06 |
| 30 | 15.40 | 33.755 | 5.94 | 0.40 | 4 | 302 | 30 | 15.47 | 33.75 | 24.93 | 304 | 0.09 |
| 50 | 14.73 | 33.705 | 6.01 | 0.44 | 3 | 292 | 50 | 14.80 | 33.69 | 25.03 | 294 | 0.15 |
| 74 | 14.48 | 33.749 | 5.77 | 0.54 | 5 | 283 | | | | | | |



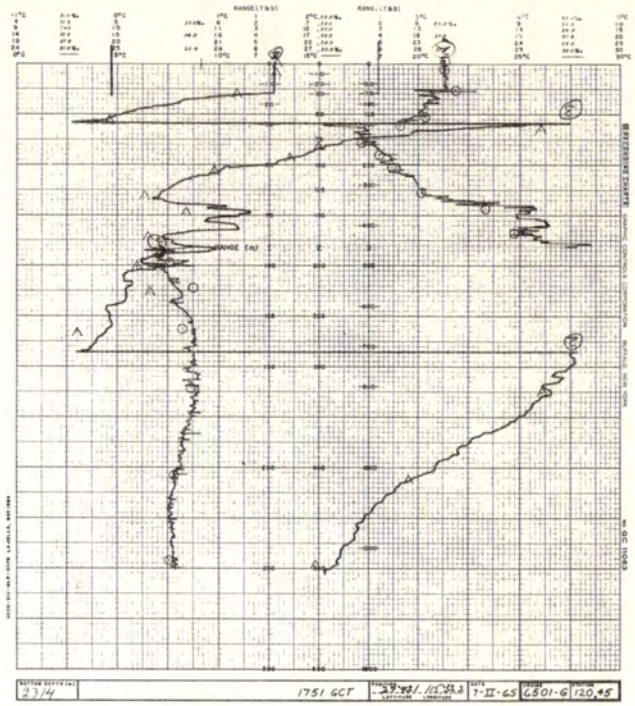




119.33

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 7, 1965; 1731 GCT; 27°43'N, 115°33'W; sounding, 1265 fm; wind, 300°, force 6; weather, partly cloudy; sea, very rough; wire angle, 29°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.58 | 34.006 | 5.87 | 0.35 | 3 | 309 | 0 | 16.55 | 33.98 | 24.86 | 310 | 0.00 |
| 10 | 16.56 | 34.004 | 5.89 | 0.36 | 3 | 309 | 10 | 16.55 | 33.98 | 24.86 | 310 | 0.03 |
| 31 | 16.17 | 34.049 | 5.95 | 0.44 | 3 | 297 | 20 | 16.55 | 33.98 | 24.86 | 310 | 0.06 |
| 57 | 14.92 | 33.928 | 5.22 | 0.73 | 6 | 279 | 30 | 16.35 | 33.98 | 24.90 | 306 | 0.09 |
| 66 | 14.20 | 33.824 | 4.97 | 0.86 | 8 | 272 | 50 | 15.05 | 33.89 | 25.13 | 285 | 0.15 |
| 83 | 11.99 | 33.670 | 4.43 | 1.21 | 13 | 242 | 75 | 12.32 | 33.65 | 25.50 | 249 | 0.22 |
| 95 | 11.70 | 33.741 | 4.01 | 1.36 | 16 | 231 | 100 | 11.48 | 33.76 | 25.74 | 226 | 0.28 |
| 107 | 10.95 | 33.790 | 3.79 | 1.54 | 19 | 215 | 125 | 10.48 | 33.87 | 26.01 | 201 | 0.33 |
| 132 | 10.26 | 33.911 | 3.31 | 1.80 | 26 | 194 | 150 | 11.19 | 34.31 | 26.22 | 180 | 0.38 |
| 148 | 10.67 | 34.164 | 2.30 | 2.12 | 32 | 182 | 200 | 10.50 | 34.37 | 26.39 | 164 | 0.47 |
| 172 | 10.30 | 34.276 | 1.71 | 2.38 | 35 | 168 | 250 | 9.92 | 34.43 | 26.54 | 150 | 0.55 |
| 201 | 10.19 | 34.404 | 1.21 | 2.59 | 38 | 157 | 300 | 9.48 | 34.47 | 26.65 | 140 | 0.63 |
| 227 | 10.32 | 34.499 | 0.78 | - | - | 152 | 400 | 8.17 | 34.42 | 26.81 | 124 | 0.77 |
| 267 | 9.60 | 34.456 | 0.75 | - | - | 143 | 500 | 7.13 | 34.40 | 26.95 | 111 | 0.89 |
| 326 | 9.21 | 34.489 | 0.51 | - | - | 135 | | | | | | |
| 413 | 7.90 | 34.421 | 0.49 | - | - | 120 | | | | | | |
| 497 | 6.96 | 34.403 | 0.49 | - | - | 109 | | | | | | |
| 568 | 6.39 | 34.414 | 0.34 | - | - | 101 | | | | | | |



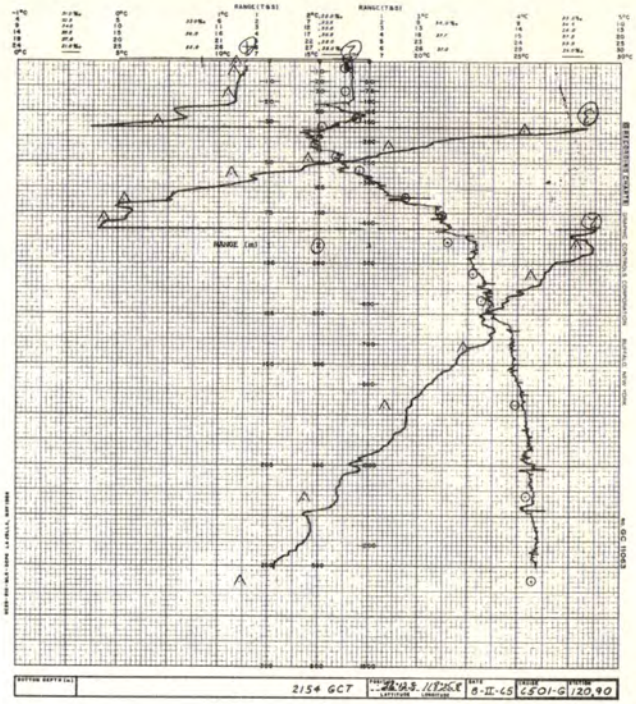

| BOTTLE SAMPLES | | | | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| ALEXANDER AGASSIZ; February 8, 1965; 0323 GCT; 27°13'N, 116°31'W; sounding, 1974 fm; wind, 330°, force 3; weather, partly cloudy; sea, high; wire angle, 05°. | | | | | | | | | | | | |
| 0 | 16.45 | 33.830 | 5.84 | 0.32 | 2 | 319 | 0 | 16.45 | 33.83 | 24.77 | 319 | 0.00 |
| 10 | 16.42 | 33.822 | 5.88 | 0.34 | 2 | 319 | 10 | 16.42 | 33.82 | 24.76 | 319 | 0.03 |
| 30 | 16.47 | 33.833 | 5.93 | 0.34 | 2 | 319 | 20 | 16.43 | 33.83 | 24.77 | 319 | 0.06 |
| 55 | 16.26 | 33.824 | 5.89 | 0.38 | 2 | 315 | 30 | 16.47 | 33.83 | 24.76 | 319 | 0.10 |
| 80 | 15.65 | 33.847 | 5.76 | 0.48 | 3 | 300 | 50 | 16.35 | 33.83 | 24.79 | 317 | 0.16 |
| 110 | 13.22 | 34.029 | 2.99 | 1.70 | 18 | 238 | 75 | 15.85 | 33.84 | 24.91 | 305 | 0.24 |
| 135 | 12.66 | 34.169 | 2.32 | 2.02 | 24 | 217 | 100 | 13.04 | 33.92 | 25.57 | 243 | 0.31 |
| 159 | 12.14 | 34.340 | 1.61 | 2.39 | 29 | 195 | 125 | 13.10 | 34.08 | 25.68 | 232 | 0.37 |
| 189 | 11.74 | 34.507 | 0.99 | 2.64 | 35 | 175 | 150 | 12.32 | 34.28 | 25.99 | 203 | 0.42 |
| 224 | 10.42 | 34.352 | 1.46 | 2.53 | 37 | 164 | 200 | 11.40 | 34.48 | 26.32 | 171 | 0.52 |
| 264 | 10.27 | 34.471 | 0.85 | 2.73 | 40 | 153 | 250 | 10.30 | 34.42 | 26.47 | 157 | 0.60 |
| ALEXANDER AGASSIZ; February 8, 1965; 1548 GCT; 26°32.5'N, 117°49'W; sounding, 1890 fm; wind, 330°, force 4; weather, partly cloudy; sea, very rough; wire angle, 17°. | | | | | | | | | | | | |
| 1 | 16.28 | 33.659 | 5.81 | 0.37 | 2 | 328 | 0 | (16.28) | (33.66) | (24.67) | (328) | (0.00) |
| 11 | 16.29 | 33.659 | 5.86 | 0.36 | 1 | 328 | 10 | 16.28 | 33.66 | 24.67 | 328 | 0.03 |
| 34 | 16.32 | 33.662 | 5.90 | 0.37 | 1 | 328 | 20 | 16.30 | 33.66 | 24.67 | 328 | 0.07 |
| 58 | 16.36 | 33.696 | 5.85 | 0.36 | 1 | 327 | 30 | 16.31 | 33.66 | 24.67 | 328 | 0.10 |
| 87 | 13.85 | 33.458 | 5.86 | 0.52 | 3 | 292 | 50 | 16.34 | 33.68 | 24.68 | 328 | 0.16 |
| 116 | 12.04 | 33.626 | 4.69 | 1.15 | 10 | 246 | 75 | 14.30 | 33.48 | 24.97 | 299 | 0.24 |
| 145 | 10.45 | 33.790 | 3.74 | 1.70 | 21 | 206 | 100 | 13.00 | 33.50 | 25.25 | 273 | 0.32 |
| 174 | 9.99 | 33.966 | 3.00 | 2.00 | 27 | 186 | 125 | 11.82 | 33.64 | 25.59 | 241 | 0.38 |
| 208 | 9.40 | 34.142 | 2.35 | 2.29 | 34 | 163 | 150 | 10.37 | 33.81 | 25.98 | 203 | 0.44 |
| 233 | 8.97 | 34.161 | 2.22 | 2.34 | 39 | 155 | 200 | 9.53 | 34.13 | 26.37 | 166 | 0.53 |
| 283 | 8.36 | 34.206 | 1.66 | 2.58 | 45 | 143 | 250 | 8.73 | 34.18 | 26.54 | 150 | 0.61 |

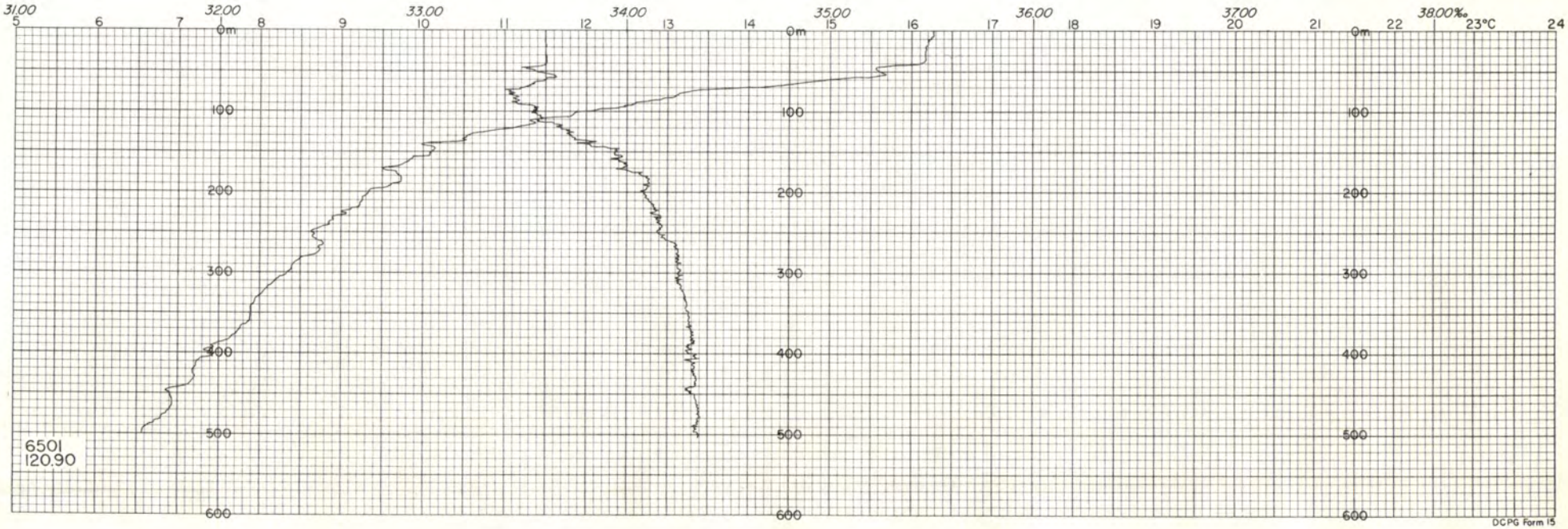
108 120.90

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 8, 1965; 2130 GCT; 26°13'N, 118°26'W; sounding, 2140 fm; wind, 340°, force 3; weather, partly cloudy; sea, high; wire angle, 23°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.16 | 33.608 | 5.92 | 0.39 | 3 | 329 | 0 | 16.27 | 33.60 | 24.63 | 332 | 0.00 |
| 10 | 16.14 | 33.599 | 5.94 | 0.37 | 2 | 329 | 10 | 16.26 | 33.60 | 24.63 | 332 | 0.03 |
| 33 | 16.08 | 33.601 | 5.99 | 0.36 | 2 | 328 | 20 | 16.19 | 33.60 | 24.65 | 330 | 0.07 |
| 60 | 15.39 | 33.646 | 5.91 | 0.44 | 3 | 310 | 30 | 16.17 | 33.60 | 24.65 | 330 | 0.10 |
| 68 | 14.06 | 33.508 | 5.84 | 0.56 | 4 | 293 | 50 | 15.57 | 33.56 | 24.76 | 320 | 0.16 |
| 85 | 12.69 | 33.481 | 5.44 | 0.83 | 6 | 268 | 75 | 13.13 | 33.42 | 25.16 | 281 | 0.24 |
| 98 | 11.88 | 33.564 | 4.85 | 1.15 | 10 | 247 | 100 | 11.95 | 33.55 | 25.49 | 250 | 0.31 |
| 112 | 11.12 | 33.659 | 4.33 | 1.43 | 15 | 227 | 125 | 10.75 | 33.70 | 25.83 | 218 | 0.37 |
| 138 | 10.06 | 33.843 | 3.63 | 1.76 | 24 | 196 | 150 | 10.13 | 33.95 | 26.13 | 189 | 0.42 |
| 156 | 9.86 | 33.993 | 3.11 | 1.94 | 29 | 182 | 200 | 9.34 | 34.07 | 26.36 | 168 | 0.51 |
| 182 | 9.56 | 34.106 | 2.42 | 2.21 | 32 | 169 | 250 | 8.64 | 34.15 | 26.53 | 151 | 0.59 |
| 213 | 9.12 | 34.118 | 2.60 | 2.24 | 35 | 161 | 300 | 8.37 | 34.25 | 26.65 | 140 | 0.67 |
| 240 | 8.70 | 34.152 | 2.11 | - | - | 152 | 400 | 7.33 | 34.30 | 26.84 | 122 | 0.80 |
| 284 | 8.45 | 34.267 | 1.32 | - | - | 140 | 500 | 6.57 | 34.34 | 26.98 | 109 | 0.92 |
| 343 | 7.66 | 34.289 | 0.95 | - | - | 127 | | | | | | |
| 434 | 6.86 | 34.334 | 0.62 | - | - | 113 | | | | | | |
| 517 | 6.22 | 34.358 | 0.50 | - | - | 103 | | | | | | |
| 588 | 5.70 | 34.383 | 0.46 | - | - | 95 | | | | | | |



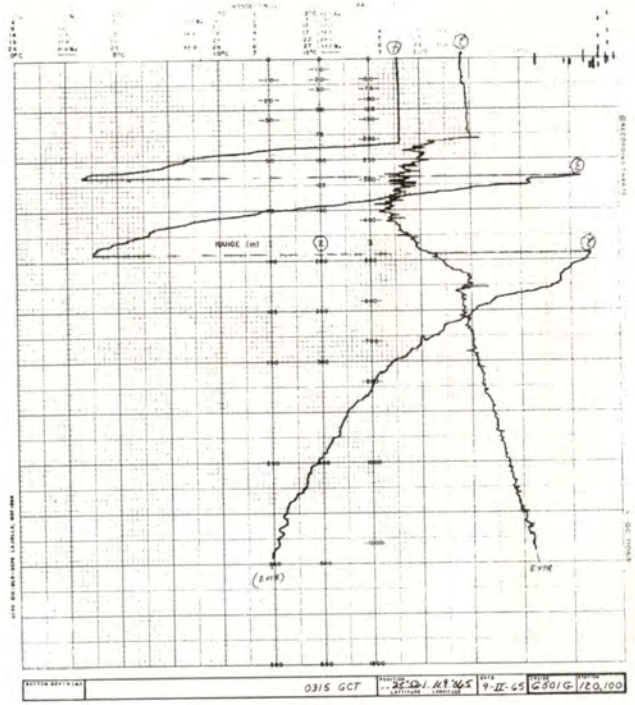

SIO CCOFI 6501

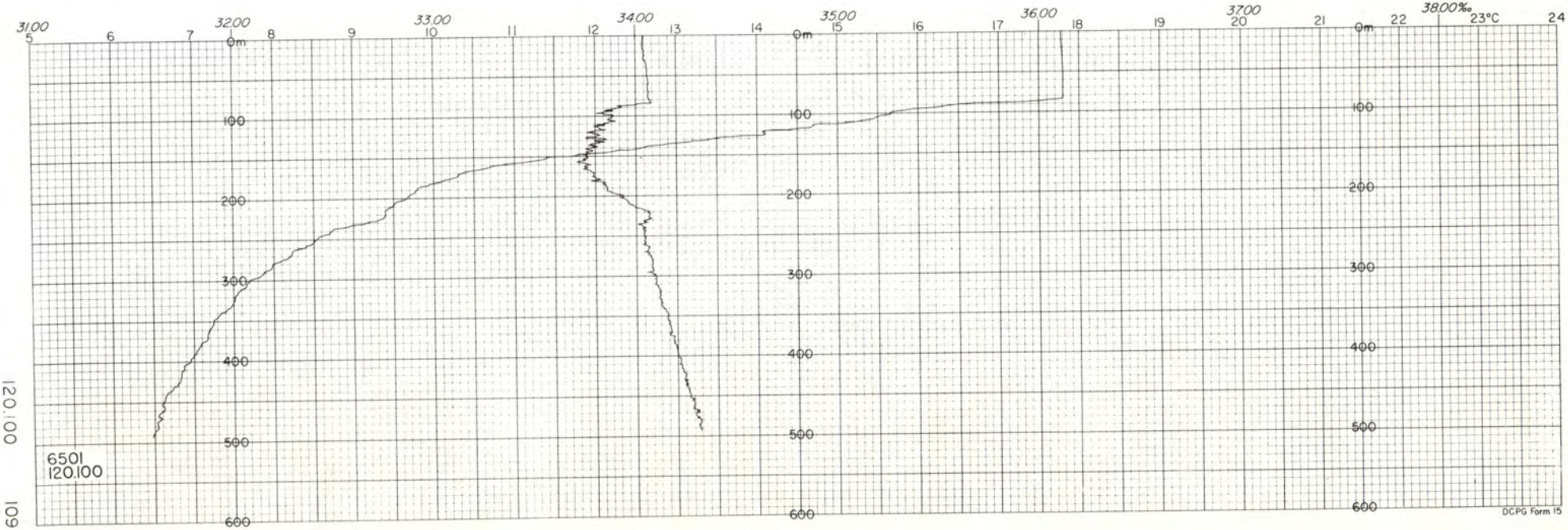
SIO CCOFI 6501

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 9, 1965; 0315 GCT; 25°52'N, 119°06.5'W; sounding, 2200 fm; wind, 350°, force 4; weather, partly cloudy; sea, high.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 17.78 | 34.03 | 24.60 | 334 | 0.00 |
| 10 | 17.78 | 34.03 | 24.60 | 334 | 0.03 |
| 20 | 17.78 | 34.04 | 24.61 | 334 | 0.07 |
| 30 | 17.79 | 34.04 | 24.61 | 334 | 0.10 |
| 50 | 17.80 | 34.06 | 24.62 | 333 | 0.17 |
| 75 | 17.80 | 34.06 | 24.62 | 333 | 0.25 |
| 100 | 15.67 | 33.88 | 24.98 | 298 | 0.33 |
| 125 | 14.08 | 33.81 | 25.27 | 271 | 0.40 |
| 150 | 11.50 | 33.75 | 25.73 | 227 | 0.47 |
| 200 | 9.67 | 33.93 | 26.19 | 183 | 0.57 |
| 250 | 8.53 | 34.04 | 26.46 | 158 | 0.66 |
| 300 | 7.72 | 34.09 | 26.62 | 143 | 0.73 |
| 400 | 6.94 | 34.20 | 26.82 | 124 | 0.87 |
| 500 | 6.48 | 34.32 | 26.97 | 109 | 1.00 |




120.100

109

| BOTTLE SAMPLES | | | | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 9, 1965; 1224 GCT; 25°11.5'N, 120°24.5'W; sounding, 2130 fm; wind, 330°, force 2; weather, partly cloudy; sea, very rough; wire angle, 08°.

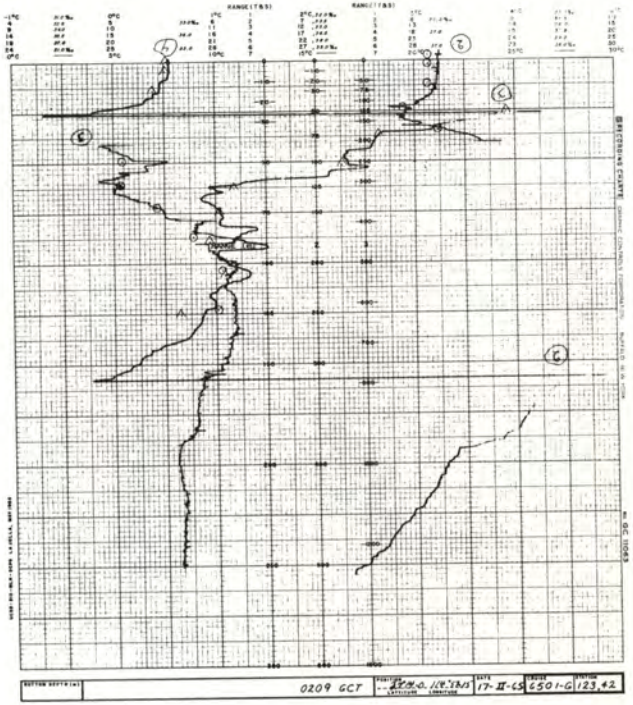
| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.59 | 33.929 | 5.65 | 0.28 | 2 | 337 | 0 | 17.59 | 33.93 | 24.57 | 337 | 0.00 |
| 10 | 17.62 | 33.924 | 5.69 | 0.26 | 2 | 338 | 10 | 17.62 | 33.92 | 24.56 | 339 | 0.03 |
| 30 | 17.64 | 33.924 | 5.72 | 0.25 | 1 | 339 | 20 | 17.64 | 33.92 | 24.55 | 339 | 0.07 |
| 54 | 17.61 | 33.926 | 5.65 | 0.25 | 2 | 338 | 30 | 17.64 | 33.92 | 24.55 | 339 | 0.10 |
| 79 | 17.61 | 33.929 | 5.69 | 0.25 | 2 | 338 | 50 | 17.62 | 33.92 | 24.56 | 339 | 0.17 |
| 108 | 15.20 | 33.808 | 5.51 | 0.44 | 3 | 294 | 75 | 17.61 | 33.93 | 24.57 | 338 | 0.25 |
| 133 | 12.57 | 33.655 | 4.85 | 0.92 | 9 | 253 | 100 | 16.00 | 33.86 | 24.89 | 307 | 0.34 |
| 157 | 11.26 | 33.784 | 3.84 | 1.45 | 17 | 220 | 125 | 13.47 | 33.70 | 25.31 | 267 | 0.41 |
| 186 | 10.34 | 34.001 | 2.86 | 1.93 | 28 | 189 | 150 | 11.52 | 33.74 | 25.72 | 228 | 0.47 |
| 221 | 9.56 | 34.089 | 2.72 | 2.09 | 33 | 170 | 200 | 9.99 | 34.04 | 26.22 | 180 | 0.58 |
| 261 | 9.12 | 34.240 | 1.68 | 2.53 | 40 | 152 | 250 | 9.21 | 34.20 | 26.48 | 156 | 0.66 |

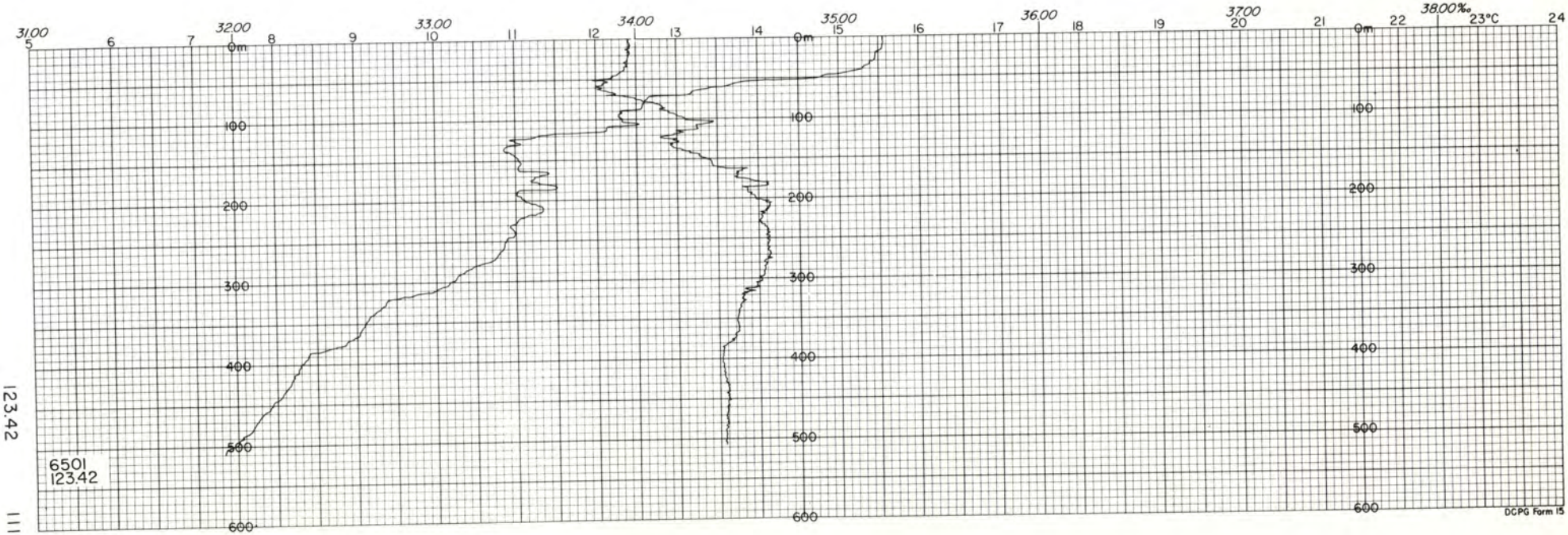
SIO CCOFI 6501

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

ALEXANDER AGASSIZ; February 17, 1965; 0138 GCT; 27°14'N, 114°59'W; sounding, 1050 fm; wind, 340°, force 5; weather, clear; sea, very rough; wire angle, 22°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.52 | 33.957 | 5.94 | 0.50 | 5 | 290 | 0 | 15.55 | 33.97 | 25.08 | 289 | 0.00 |
| 9 | 15.51 | 33.957 | 5.93 | 0.45 | 5 | 289 | 10 | 15.55 | 33.97 | 25.08 | 289 | 0.03 |
| 28 | 15.38 | 33.953 | 5.76 | 0.48 | 4 | 287 | 20 | 15.47 | 33.96 | 25.09 | 288 | 0.06 |
| 51 | 13.92 | 33.855 | 4.25 | 1.07 | 10 | 264 | 30 | 15.45 | 33.95 | 25.08 | 289 | 0.09 |
| 74 | 12.64 | 33.993 | 3.05 | 1.69 | 19 | 230 | 50 | 14.78 | 33.83 | 25.14 | 284 | 0.14 |
| 103 | 12.26 | 34.233 | 1.87 | 2.20 | 25 | 205 | 75 | 12.62 | 34.00 | 25.71 | 229 | 0.21 |
| 126 | 11.18 | 34.229 | 1.87 | 2.25 | 30 | 186 | 100 | 12.32 | 34.24 | 25.96 | 206 | 0.26 |
| 150 | 11.04 | 34.369 | 1.25 | 2.51 | 33 | 173 | 125 | 10.94 | 34.18 | 26.17 | 186 | 0.31 |
| 179 | 10.94 | 34.510 | 0.78 | 2.68 | 39 | 161 | 150 | 11.04 | 34.36 | 26.29 | 174 | 0.36 |
| 212 | 11.08 | 34.622 | 0.47 | 2.83 | 40 | 155 | 200 | 11.12 | 34.58 | 26.45 | 159 | 0.44 |
| 251 | 10.65 | 34.605 | 0.39 | 2.81 | 40 | 149 | 250 | 10.88 | 34.64 | 26.54 | 151 | 0.52 |
| | | | | | | | 300 | 10.20 | 34.60 | 26.63 | 142 | 0.60 |
| | | | | | | | 400 | 8.29 | 34.42 | 26.80 | 126 | 0.74 |
| | | | | | | | 500 | 7.48 | 34.42 | 26.92 | 115 | 0.87 |



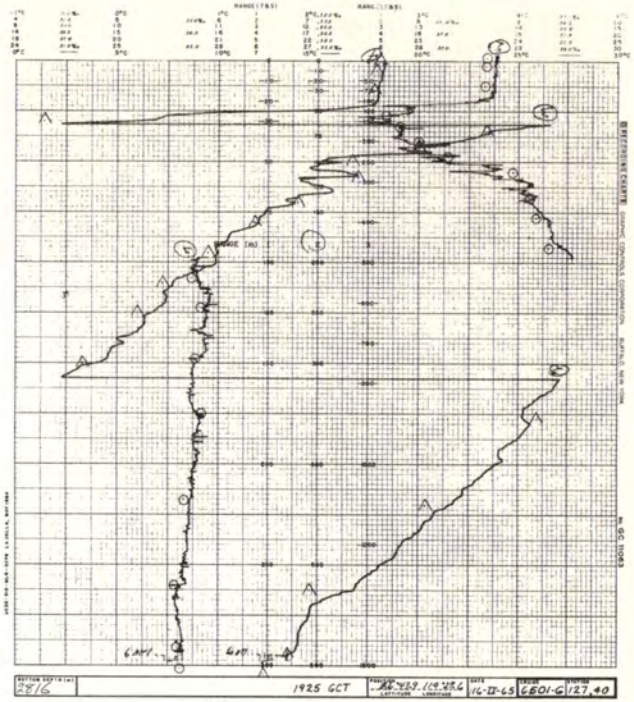



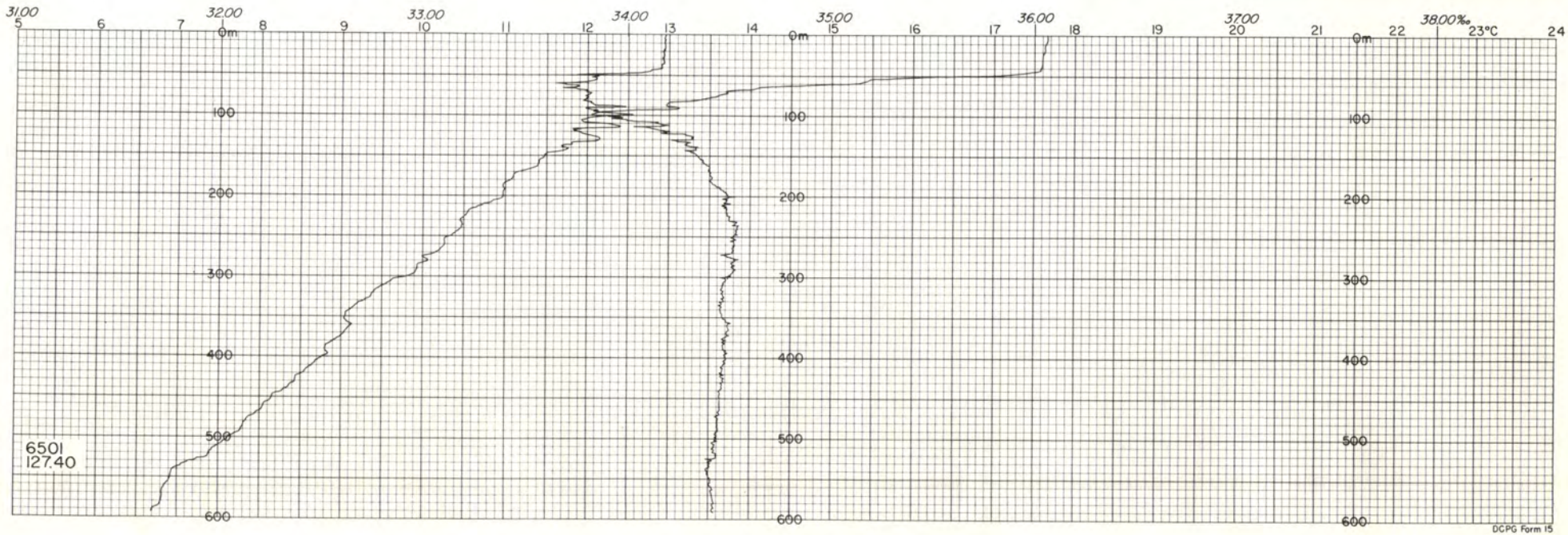

123.42

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 16, 1965; 1929 GCT; 26°44'N, 114°27.5'W; sounding, 1540 fm; wind, 050°, force 3; weather, clear; sea, rough; wire angle, 03°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.62 | 34.173 | 5.63 | 0.34 | 2 | 320 | 0 | 17.66 | 34.18 | 24.75 | 321 | 0.00 |
| 10 | 17.58 | 34.167 | 5.66 | 0.34 | 2 | 320 | 10 | 17.64 | 34.18 | 24.75 | 320 | 0.03 |
| 30 | 17.56 | 34.162 | 5.63 | 0.34 | 2 | 320 | 20 | 17.62 | 34.17 | 24.75 | 321 | 0.06 |
| 60 | 14.28 | 33.768 | 4.88 | 0.81 | 5 | 278 | 30 | 17.60 | 34.17 | 24.75 | 320 | 0.10 |
| 70 | 13.67 | 33.823 | 4.12 | 1.14 | 11 | 262 | 50 | 16.50 | 33.84 | 24.76 | 319 | 0.16 |
| 85 | 13.00 | 33.899 | 3.39 | 1.49 | 16 | 243 | 75 | 13.58 | 33.79 | 25.36 | 262 | 0.23 |
| 100 | 12.34 | 34.014 | 2.80 | 1.81 | 20 | 223 | 100 | 12.20 | 33.99 | 25.79 | 222 | 0.29 |
| 116 | 12.40 | 34.276 | 1.95 | 2.21 | 27 | 204 | 125 | 12.07 | 34.31 | 26.06 | 196 | 0.35 |
| 141 | 11.80 | 34.343 | 1.60 | 2.36 | 31 | 189 | 150 | 11.47 | 34.34 | 26.20 | 183 | 0.40 |
| 161 | 11.36 | 34.368 | 1.31 | 2.45 | 34 | 179 | 200 | 10.97 | 34.49 | 26.40 | 163 | 0.48 |
| 191 | 10.89 | 34.421 | 1.09 | 2.58 | 35 | 167 | 250 | 10.35 | 34.52 | 26.54 | 151 | 0.57 |
| 221 | 10.44 | 34.492 | 0.77 | 2.72 | 42 | 154 | 300 | 9.80 | 34.49 | 26.61 | 144 | 0.64 |
| 250 | 10.19 | 34.529 | 0.62 | - | - | 147 | 400 | 8.76 | 34.49 | 26.78 | 128 | 0.78 |
| 300 | 9.66 | 34.506 | 0.56 | - | - | 140 | 500 | 7.62 | 34.44 | 26.91 | 115 | 0.91 |
| 355 | 9.18 | 34.532 | 0.37 | - | - | 131 | | | | | | |
| 441 | 8.07 | 34.463 | 0.38 | - | - | 120 | | | | | | |
| 525 | 6.92 | 34.423 | 0.39 | - | - | 107 | | | | | | |
| 610 | 6.45 | 34.441 | 0.32 | - | - | 100 | | | | | | |



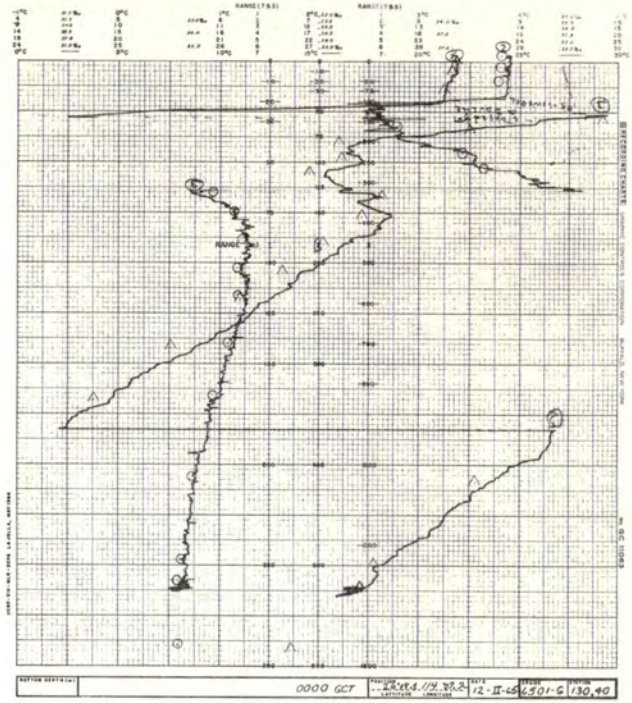



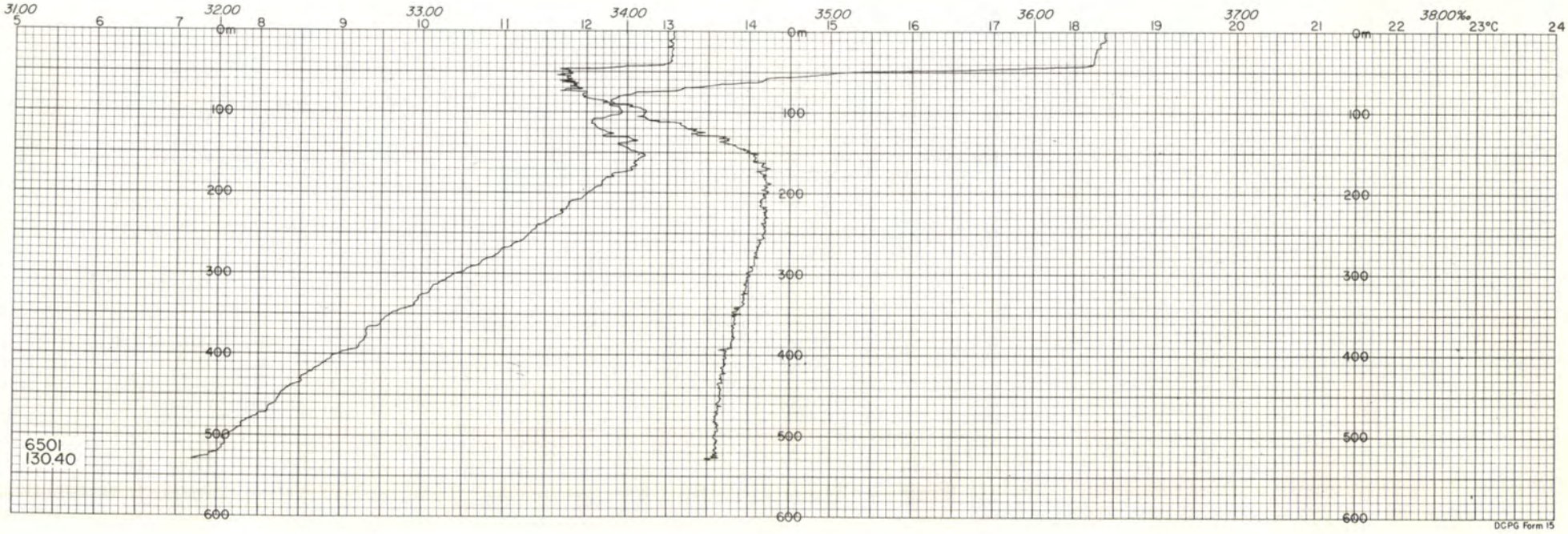
| BOTTLE SAMPLES | | | | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| ALEXANDER AGASSIZ; February 12, 1965; 0639 GCT; 26°29'N, 113°29'W; sounding, 38 fm; wind, 030°, force 7; weather, clear; sea, very rough; wire angle, 25°. | | | | | | | | | | | | |
| 0 | 16.38 | 34.006 | 5.81 | 0.37 | 4 | 305 | 0 | 16.38 | 34.01 | 24.92 | 304 | 0.00 |
| 9 | 16.44 | 34.007 | 5.72 | 0.39 | 4 | 306 | 10 | 16.44 | 34.01 | 24.91 | 306 | 0.03 |
| 18 | 16.44 | 34.008 | 5.75 | 0.40 | 3 | 306 | 20 | 16.41 | 34.01 | 24.91 | 305 | 0.06 |
| 27 | 16.25 | 34.006 | 5.56 | 0.45 | 4 | 302 | 30 | 15.70 | 34.01 | 25.07 | 290 | 0.09 |
| 45 | 15.16 | 34.046 | 4.44 | 0.95 | 9 | 276 | 50 | (14.60) | | | | |

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 11, 1965; 2338 GCT; 26°09'N, 114°07'W; sounding, 1300 fm; wind, 310°, force 3; weather, clear; sea, very rough; wire angle, 15°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.36 | 34.225 | 5.63 | 0.30 | 2 | 334 | 0 | 18.37 | 34.23 | 24.61 | 334 | 0.00 |
| 10 | 18.32 | 34.222 | 5.67 | 0.30 | 2 | 333 | 10 | 18.37 | 34.22 | 24.60 | 334 | 0.03 |
| 29 | 18.24 | 34.216 | 5.71 | 0.30 | 1 | 332 | 20 | 18.30 | 34.22 | 24.62 | 333 | 0.07 |
| 59 | 14.84 | 33.711 | 5.67 | 0.51 | 3 | 293 | 30 | 18.26 | 34.22 | 24.63 | 332 | 0.10 |
| 69 | 13.50 | 33.813 | 4.11 | 1.18 | 10 | 259 | 50 | 15.20 | 33.71 | 24.95 | 301 | 0.16 |
| 82 | 12.20 | 33.813 | 3.71 | 1.39 | 16 | 235 | 75 | 12.70 | 33.80 | 25.54 | 245 | 0.23 |
| 97 | 12.23 | 34.070 | 2.60 | 1.88 | 21 | 216 | 100 | 12.44 | 34.09 | 25.82 | 219 | 0.29 |
| 111 | 11.90 | 34.159 | 2.28 | 2.05 | 24 | 204 | 125 | 12.24 | 34.37 | 26.07 | 195 | 0.34 |
| 135 | 12.64 | 34.572 | 1.10 | 2.60 | 34 | 187 | 150 | 12.66 | 34.60 | 26.17 | 185 | 0.39 |
| 154 | 12.43 | 34.651 | 0.85 | 2.70 | 37 | 177 | 200 | 12.03 | 34.68 | 26.35 | 168 | 0.48 |
| 182 | 12.04 | 34.683 | 0.56 | 2.78 | 37 | 168 | 250 | 11.32 | 34.67 | 26.48 | 156 | 0.57 |
| 210 | 11.63 | 34.667 | 0.52 | 2.78 | 38 | 162 | 300 | 10.43 | 34.59 | 26.58 | 147 | 0.64 |
| 237 | 11.20 | 34.668 | 0.40 | - | - | 154 | 400 | 8.96 | 34.48 | 26.74 | 132 | 0.79 |
| 284 | 10.57 | 34.629 | 0.37 | - | - | 146 | 500 | 7.60 | 34.43 | 26.91 | 116 | 0.92 |
| 336 | 9.76 | 34.570 | 0.38 | - | - | 137 | | | | | | |
| 417 | 8.56 | 34.490 | 0.39 | - | - | 125 | | | | | | |
| 500 | 7.56 | 34.451 | 0.40 | - | - | 113 | | | | | | |
| 584 | 6.72 | 34.436 | 0.33 | - | - | 103 | | | | | | |



| BOTTLE SAMPLES | | | | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

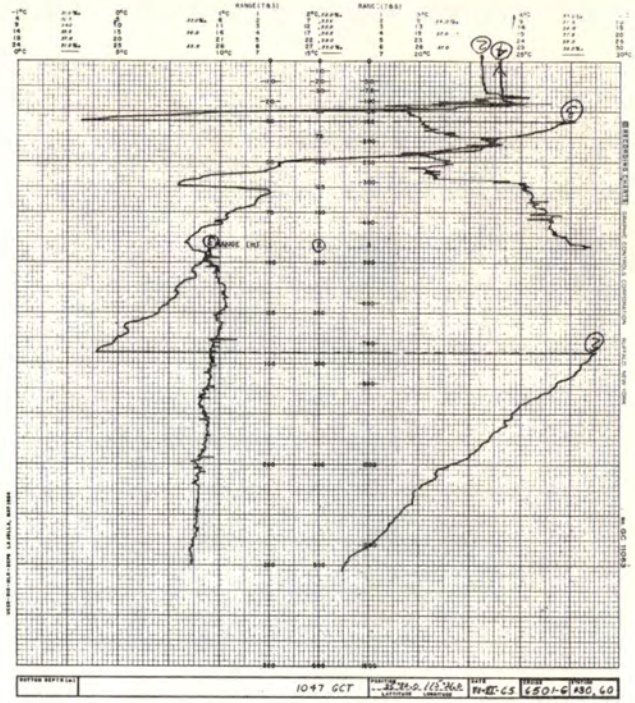
ALEXANDER AGASSIZ; February 11, 1965; 1726 GCT; 25°50'N, 114°47.5'W; sounding, 1920 fm; wind, 350°, force 3; weather, partly cloudy; sea, very rough; wire angle, 12°.

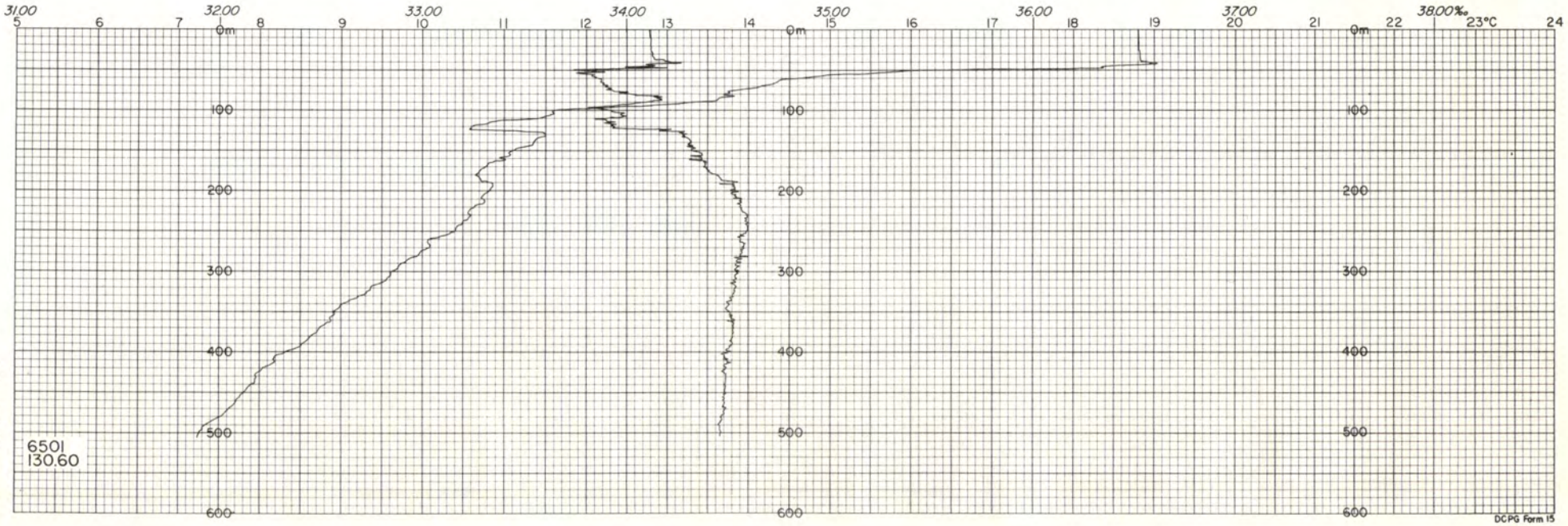
| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.36 | 34.098 | 5.75 | 0.33 | 3 | 320 | 0 | 17.36 | 34.10 | 24.76 | 320 | 0.00 |
| 10 | 17.36 | 34.095 | 5.73 | 0.32 | 3 | 320 | 10 | 17.36 | 34.10 | 24.76 | 320 | 0.03 |
| 30 | 17.37 | 34.093 | 5.83 | 0.32 | 2 | 320 | 20 | 17.36 | 34.09 | 24.75 | 320 | 0.06 |
| 59 | 16.45 | 34.040 | 5.19 | 0.58 | 5 | 304 | 30 | 17.37 | 34.09 | 24.75 | 321 | 0.10 |
| 68 | 14.67 | 33.832 | 4.88 | 0.88 | 7 | 281 | 50 | 17.08 | 34.06 | 24.79 | 316 | 0.16 |
| 82 | 13.40 | 33.904 | 3.74 | 1.34 | 14 | 251 | 75 | 14.00 | 33.87 | 25.33 | 265 | 0.23 |
| 97 | 13.28 | 34.129 | 2.75 | 1.80 | 20 | 232 | 100 | 13.12 | 34.13 | 25.71 | 229 | 0.30 |
| 112 | 12.68 | 34.191 | 2.32 | 1.99 | 23 | 216 | 125 | 12.54 | 34.30 | 25.96 | 205 | 0.35 |
| 136 | 13.06 | 34.556 | 1.14 | 2.51 | 33 | 196 | 150 | 12.51 | 34.56 | 26.17 | 186 | 0.40 |
| 155 | 12.40 | 34.564 | 1.04 | 2.55 | 36 | 183 | 200 | 11.70 | 34.63 | 26.38 | 166 | 0.49 |
| 184 | 12.16 | 34.664 | 0.58 | 2.71 | 37 | 172 | 250 | 10.20 | 34.46 | 26.52 | 153 | 0.57 |
| 213 | 11.24 | 34.597 | 0.67 | 2.71 | 40 | 160 | 300 | 9.43 | 34.44 | 26.63 | 142 | 0.65 |
| 242 | 10.42 | 34.487 | 0.87 | - | - | 154 | 400 | 8.68 | 34.53 | 26.82 | 124 | 0.79 |
| 291 | 9.43 | 34.429 | 0.83 | - | - | 143 | 500 | 7.35 | 34.45 | 26.96 | 111 | 0.91 |
| 344 | 9.52 | 34.555 | 0.36 | - | - | 135 | 600 | (6.61) | (34.45) | (27.06) | (101) | (1.03) |
| 429 | 8.27 | 34.503 | 0.36 | - | - | 120 | | | | | | |
| 513 | 7.23 | 34.445 | 0.37 | - | - | 109 | | | | | | |
| 597 | 6.62 | 34.450 | 0.32 | - | - | 101 | | | | | | |

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 11, 1965; 1047 GCT; 25°30'N, 115°21'W; sounding, 2020 fm; wind, 350°, force 3; weather, cloudy; sea, rough.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 18.81 | 34.11 | 24.41 | 353 | 0.00 |
| 10 | 18.81 | 34.12 | 24.42 | 352 | 0.04 |
| 20 | 18.81 | 34.12 | 24.42 | 352 | 0.07 |
| 30 | 18.82 | 34.13 | 24.42 | 352 | 0.11 |
| 50 | 16.35 | 33.77 | 24.74 | 321 | 0.17 |
| 75 | 13.86 | 33.92 | 25.40 | 258 | 0.25 |
| 100 | 11.64 | 33.91 | 25.83 | 218 | 0.31 |
| 125 | 11.00 | 34.17 | 26.15 | 187 | 0.36 |
| 150 | 11.10 | 34.32 | 26.25 | 178 | 0.40 |
| 200 | 10.82 | 34.53 | 26.46 | 158 | 0.49 |
| 250 | 10.40 | 34.59 | 26.58 | 146 | 0.57 |
| 300 | 9.61 | 34.54 | 26.68 | 137 | 0.64 |
| 400 | 8.31 | 34.48 | 26.84 | 122 | 0.78 |
| 500 | 7.26 | 34.46 | 26.98 | 109 | 0.90 |

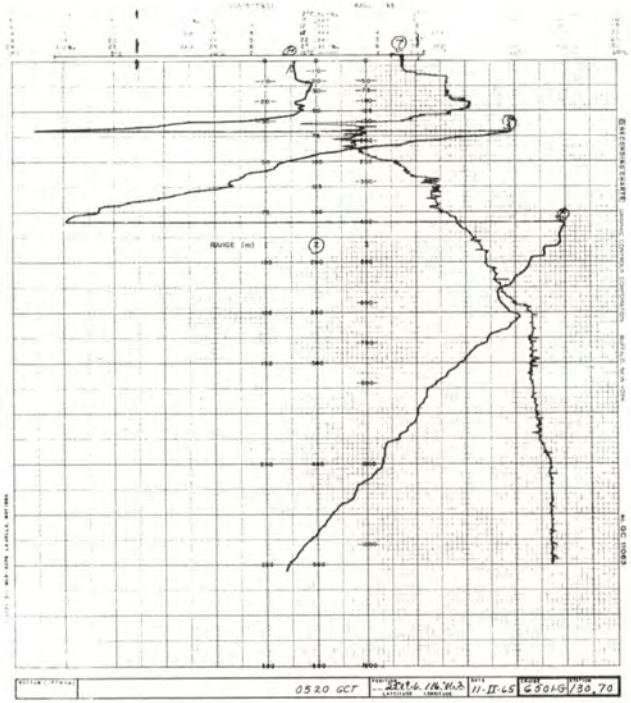


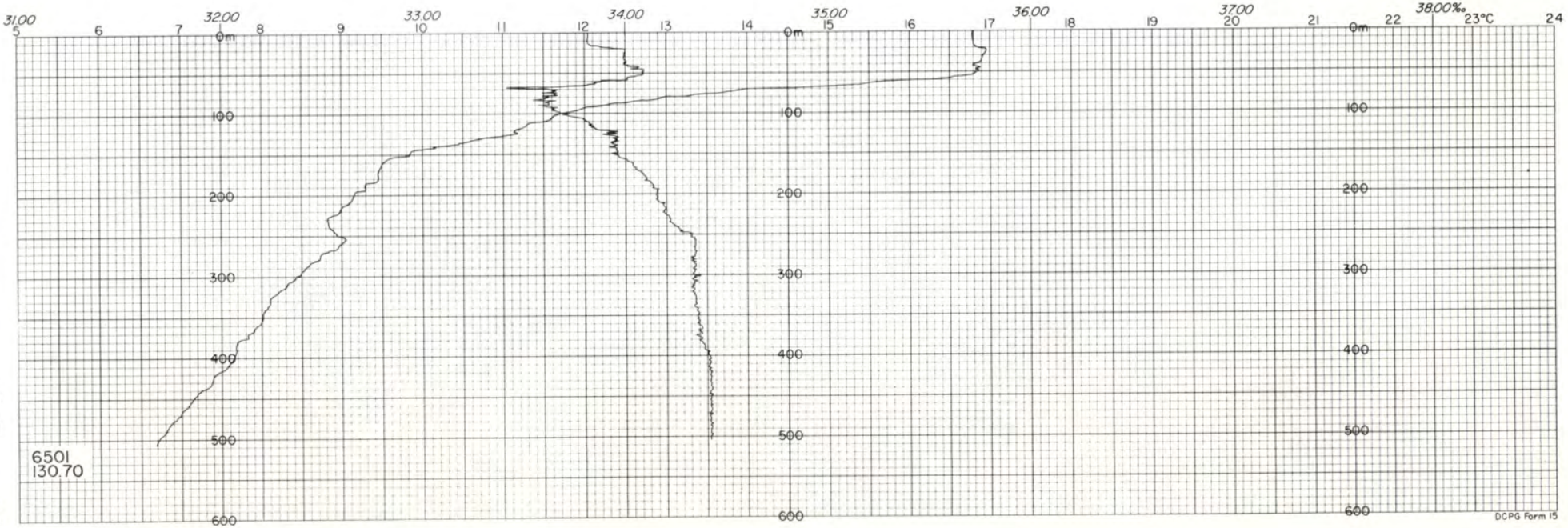



| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 11, 1965; 0520 GCT; 25°09.5'N, 116°01'W; sounding, 1710 fm; wind, 340°, force 3; weather, overcast; sea, very rough.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 16.78 | 33.82 | 24.68 | 327 | 0.00 |
| 10 | 16.79 | 33.82 | 24.68 | 327 | 0.03 |
| 20 | 16.84 | 33.97 | 24.78 | 317 | 0.07 |
| 30 | 16.92 | 33.99 | 24.78 | 318 | 0.10 |
| 50 | 16.85 | 34.09 | 24.87 | 309 | 0.16 |
| 75 | 13.65 | 33.65 | 25.24 | 274 | 0.23 |
| 100 | 11.70 | 33.68 | 25.64 | 236 | 0.30 |
| 125 | 11.13 | 33.93 | 25.94 | 207 | 0.35 |
| 150 | 9.84 | 33.93 | 26.16 | 186 | 0.40 |
| 200 | 9.14 | 34.15 | 26.45 | 159 | 0.49 |
| 250 | 8.96 | 34.32 | 26.61 | 143 | 0.57 |
| 300 | 8.42 | 34.35 | 26.72 | 133 | 0.64 |
| 400 | 7.66 | 34.40 | 26.87 | 119 | 0.77 |
| 500 | 6.72 | 34.41 | 27.01 | 105 | 0.89 |

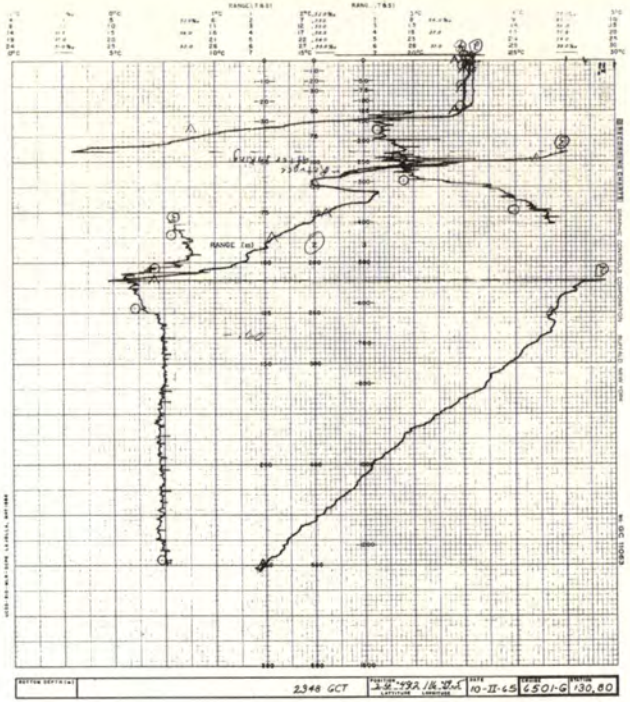


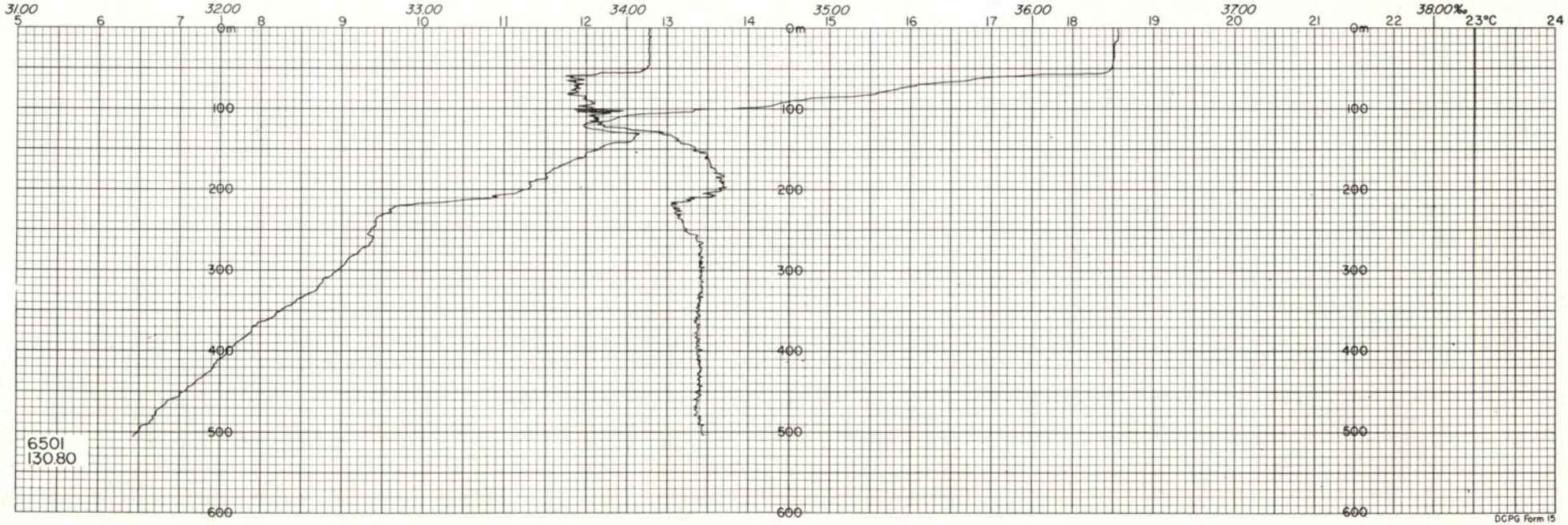



| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 10, 1965; 2328 GCT; 24°49'N, 116°39'W; sounding, 2100 fm; wind, 350°, force 4; weather, cloudy; sea, very rough; wire angle, 10°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.50 | 34.104 | 5.60 | 0.27 | 2 | 346 | 0 | 18.56 | 34.11 | 24.47 | 347 | 0.00 |
| 10 | 18.50 | 34.098 | 5.64 | 0.26 | 1 | 346 | 10 | 18.56 | 34.11 | 24.47 | 347 | 0.03 |
| 30 | 18.48 | 34.098 | 5.67 | 0.27 | 1 | 346 | 20 | 18.52 | 34.11 | 24.48 | 346 | 0.07 |
| 50 | 18.41 | 34.093 | 5.61 | 0.28 | 1 | 345 | 30 | 18.52 | 34.11 | 24.48 | 346 | 0.10 |
| 69 | 15.77 | 33.757 | 5.86 | 0.33 | 2 | 310 | 50 | 18.48 | 34.09 | 24.48 | 346 | 0.17 |
| 99 | 14.21 | 33.835 | 4.48 | 0.94 | 7 | 272 | 75 | 15.85 | 33.74 | 24.83 | 313 | 0.26 |
| 123 | 12.00 | 33.860 | 4.01 | 1.29 | 14 | 228 | 100 | 13.55 | 33.84 | 25.40 | 258 | 0.33 |
| 153 | 12.12 | 34.298 | 1.52 | 2.32 | 28 | 198 | 125 | 12.15 | 34.00 | 25.80 | 220 | 0.39 |
| 177 | 11.56 | 34.427 | 1.08 | 2.56 | 33 | 178 | 150 | 12.15 | 34.33 | 26.06 | 196 | 0.44 |
| 212 | 10.40 | 34.361 | 1.52 | 2.53 | 36 | 163 | 200 | 11.23 | 34.47 | 26.34 | 169 | 0.54 |
| 251 | 9.35 | 34.285 | 1.49 | 2.53 | 41 | 152 | 250 | 9.35 | 34.28 | 26.52 | 152 | 0.62 |
| | | | | | | | 300 | 8.93 | 34.37 | 26.66 | 139 | 0.69 |
| | | | | | | | 400 | 7.58 | 34.35 | 26.85 | 121 | 0.83 |
| | | | | | | | 500 | 6.48 | 34.37 | 27.01 | 105 | 0.95 |

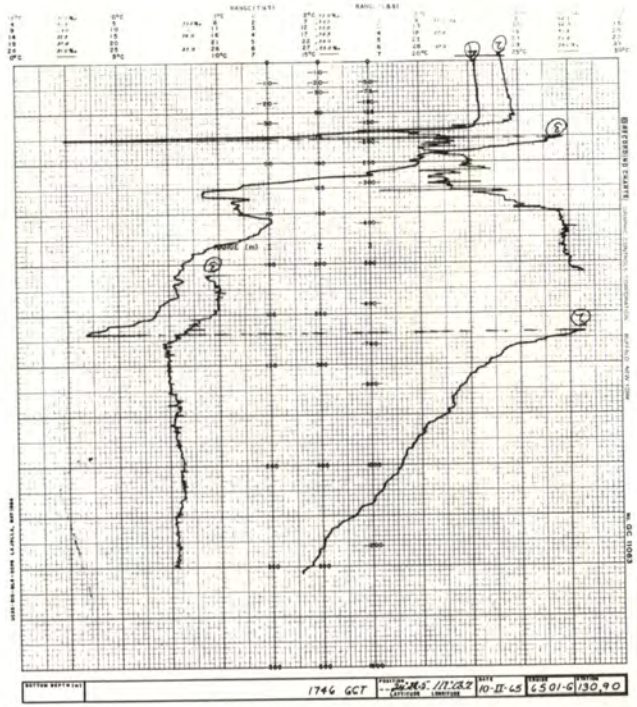


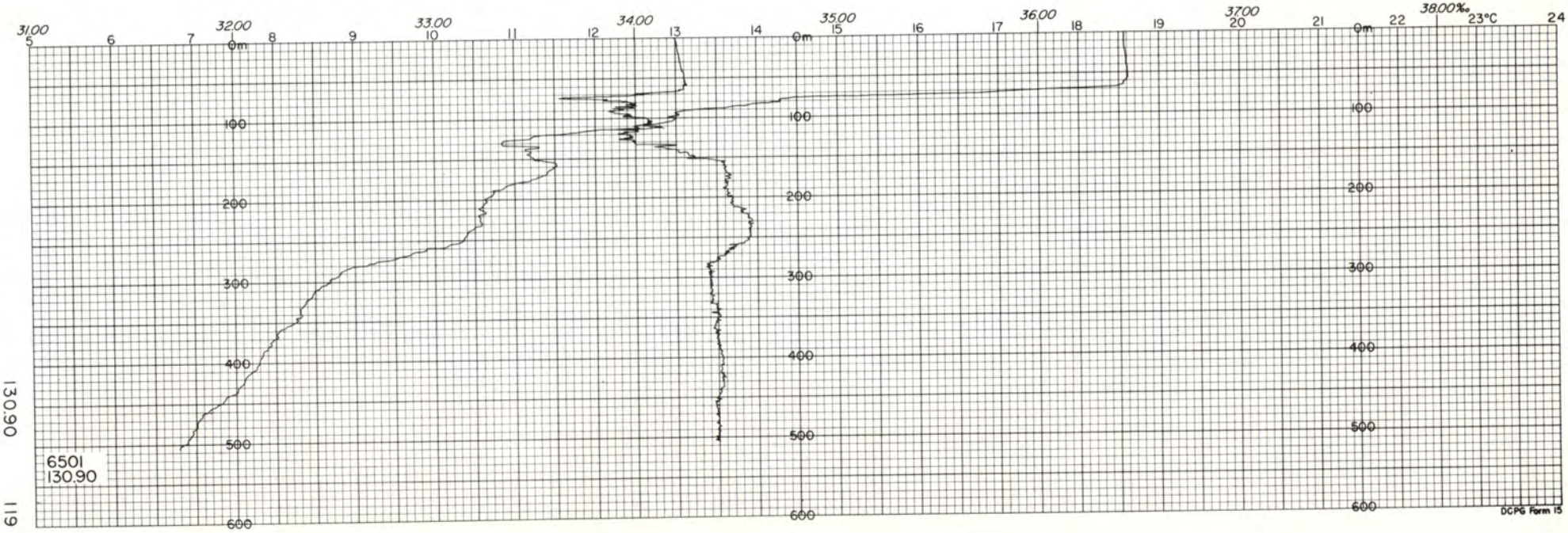



| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | μg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 10, 1965; 1746 GCT; 24°28.5'N, 117°17.5'W; sounding, 2060 fm; wind, 010°, force 3; weather, overcast; sea, very rough.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 18.56 | 34.20 | 24.54 | 340 | 0.00 |
| 10 | 18.57 | 34.21 | 24.55 | 340 | 0.03 |
| 20 | 18.58 | 34.22 | 24.55 | 339 | 0.07 |
| 30 | 18.59 | 34.22 | 24.55 | 340 | 0.10 |
| 50 | 18.61 | 34.24 | 24.56 | 339 | 0.17 |
| 75 | 15.35 | 33.77 | 24.97 | 300 | 0.25 |
| 100 | 12.98 | 34.05 | 25.68 | 232 | 0.32 |
| 125 | 11.00 | 33.94 | 25.97 | 204 | 0.37 |
| 150 | 11.23 | 34.26 | 26.18 | 185 | 0.42 |
| 200 | 10.63 | 34.47 | 26.45 | 159 | 0.51 |
| 250 | 10.37 | 34.56 | 26.56 | 148 | 0.59 |
| 300 | 8.68 | 34.37 | 26.70 | 136 | 0.66 |
| 400 | 7.79 | 34.42 | 26.87 | 119 | 0.80 |
| 500 | 6.87 | 34.39 | 26.98 | 109 | 0.92 |

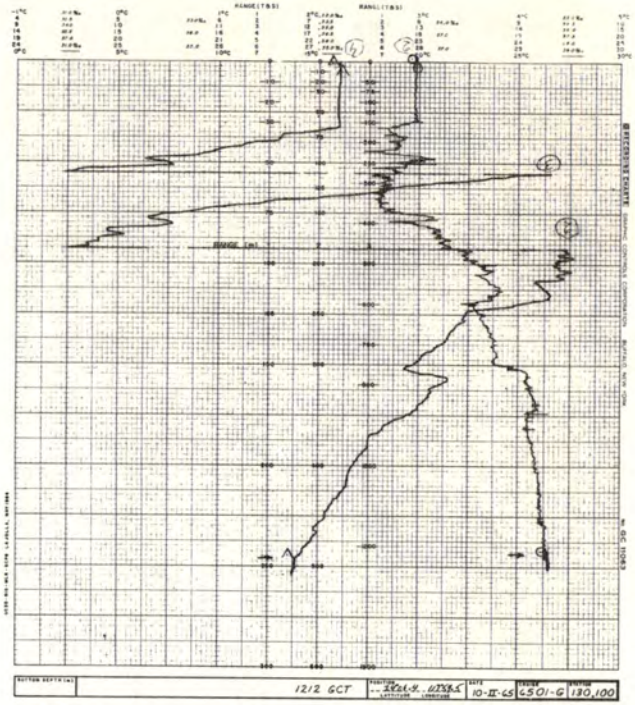


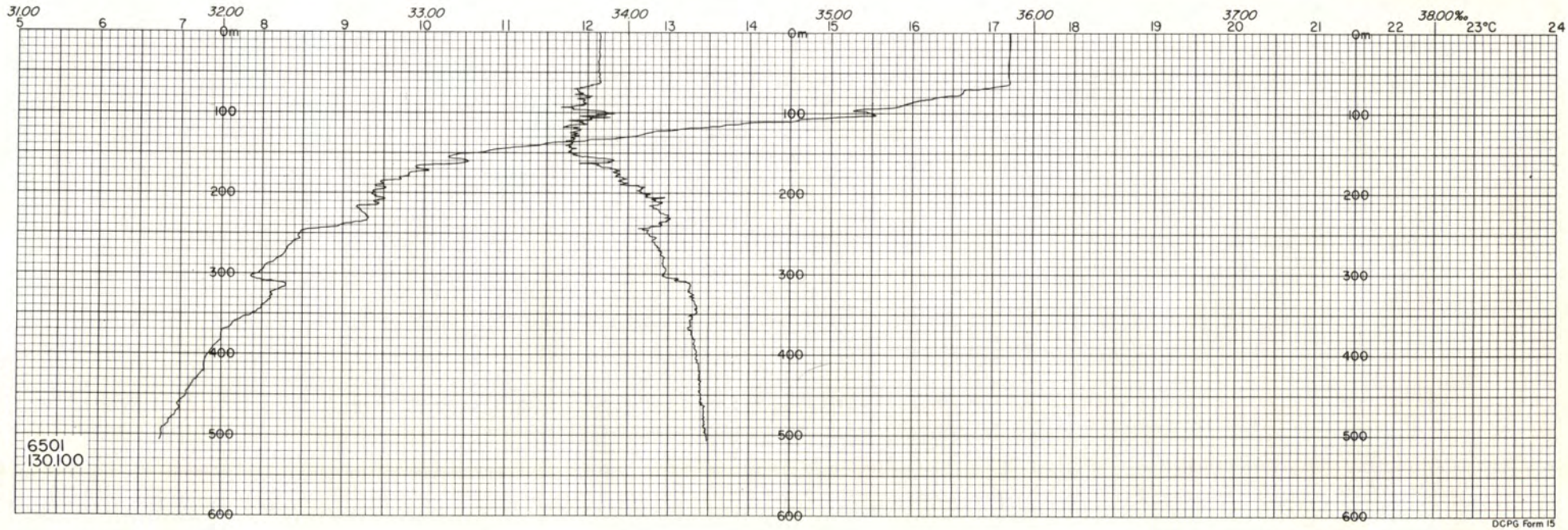



| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 10, 1965; 1212 GCT; 24°06.5'N, 117°54.5'W; sounding, 2100 fm; wind, 330°, force 4; weather, overcast; sea, rough.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 17.22 | 33.86 | 24.61 | 334 | 0.00 |
| 10 | 17.21 | 33.86 | 24.61 | 334 | 0.03 |
| 20 | 17.21 | 33.86 | 24.61 | 334 | 0.07 |
| 30 | 17.19 | 33.86 | 24.61 | 333 | 0.10 |
| 50 | 17.18 | 33.85 | 24.61 | 334 | 0.17 |
| 75 | 16.62 | 33.76 | 24.67 | 328 | 0.25 |
| 100 | 15.48 | 33.91 | 25.05 | 292 | 0.33 |
| 125 | 12.73 | 33.73 | 25.48 | 251 | 0.40 |
| 150 | 10.63 | 33.73 | 25.87 | 214 | 0.46 |
| 200 | 9.37 | 34.06 | 26.34 | 169 | 0.55 |
| 250 | 8.47 | 34.09 | 26.51 | 153 | 0.64 |
| 300 | 7.94 | 34.17 | 26.65 | 140 | 0.71 |
| 400 | 7.33 | 34.34 | 26.87 | 119 | 0.85 |
| 500 | 6.77 | 34.39 | 26.99 | 108 | 0.97 |

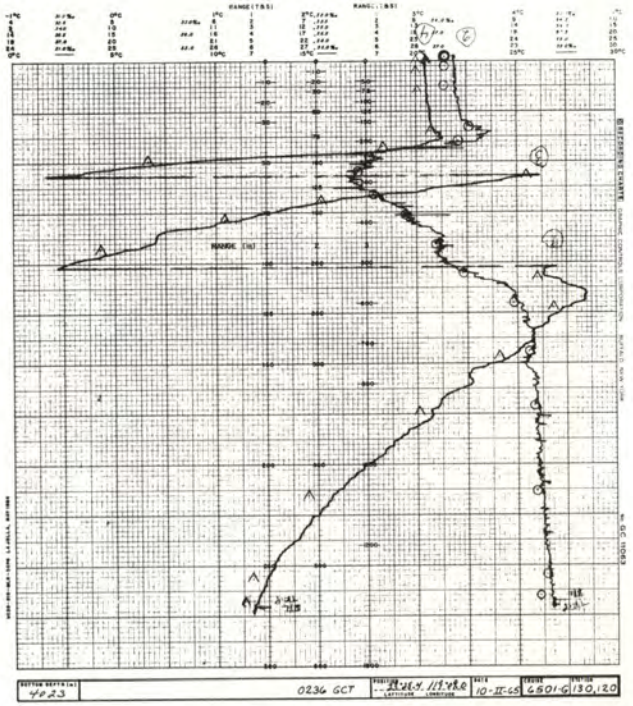


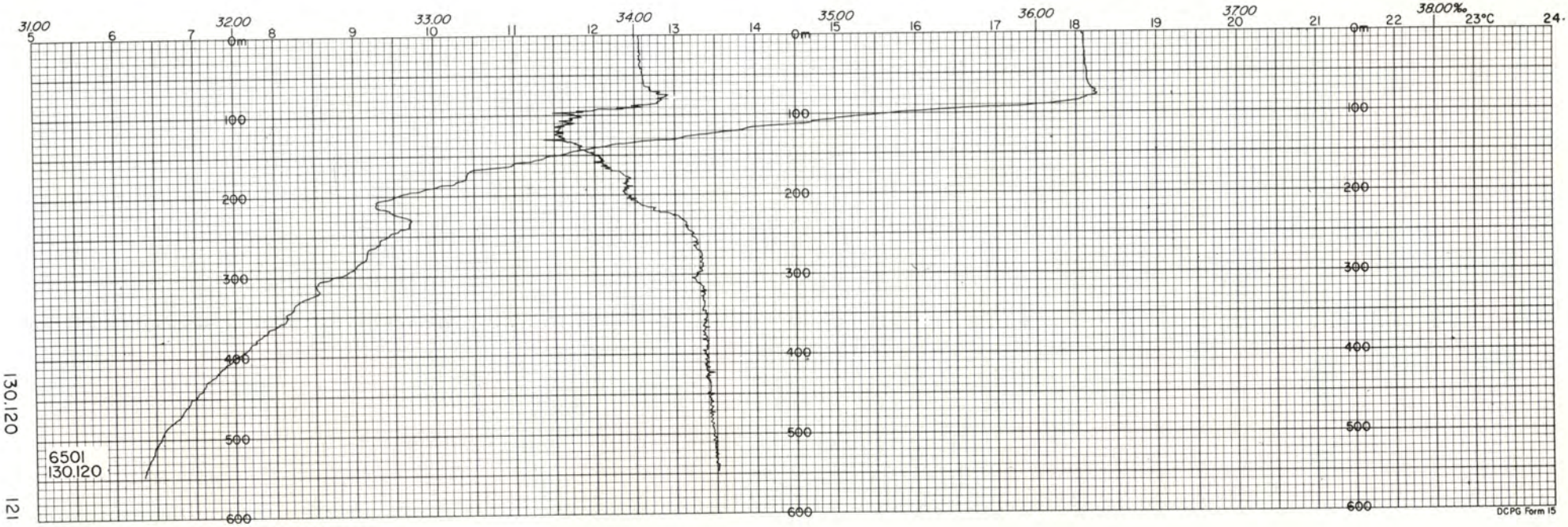



| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

ALEXANDER AGASSIZ; February 10, 1965; 0153 GCT; 23°28.5'N, 119°09'W; sounding, 2200 fm; wind, 350°, force 4; weather, cloudy; sea, very rough; wire angle, 10°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.00 | 34.011 | 5.64 | 0.28 | 2 | 341 | 0 | 18.09 | 34.02 | 24.52 | 342 | 0.00 |
| 10 | 18.00 | 34.011 | 5.67 | 0.26 | 2 | 341 | 10 | 18.09 | 34.02 | 24.52 | 342 | 0.03 |
| 30 | 18.02 | 34.011 | 5.72 | 0.28 | 2 | 341 | 20 | 18.10 | 34.02 | 24.52 | 343 | 0.07 |
| 59 | 18.03 | 34.030 | 5.64 | 0.27 | 2 | 340 | 30 | 18.11 | 34.02 | 24.52 | 343 | 0.10 |
| 69 | 18.14 | 34.102 | 5.66 | 0.25 | 2 | 338 | 50 | 18.13 | 34.04 | 24.53 | 342 | 0.17 |
| 84 | 17.66 | 34.064 | 5.69 | 0.25 | 2 | 329 | 75 | 18.22 | 34.12 | 24.56 | 338 | 0.26 |
| 99 | 15.33 | 33.710 | 5.79 | 0.36 | 3 | 304 | 100 | 15.64 | 33.70 | 24.85 | 311 | 0.34 |
| 114 | 14.08 | 33.662 | 5.49 | 0.56 | 5 | 282 | 125 | 13.27 | 33.62 | 25.29 | 269 | 0.41 |
| 138 | 12.04 | 33.728 | 3.99 | 1.30 | 14 | 238 | 150 | 11.53 | 33.80 | 25.77 | 224 | 0.47 |
| 157 | 11.08 | 33.853 | 3.40 | 1.62 | 21 | 212 | 200 | 9.54 | 33.97 | 26.25 | 178 | 0.58 |
| 186 | 9.86 | 33.975 | 3.19 | 1.84 | 26 | 183 | 250 | 9.42 | 34.29 | 26.51 | 153 | 0.66 |
| 215 | 9.19 | 34.082 | 2.78 | 2.09 | 34 | 165 | 300 | 8.77 | 34.31 | 26.63 | 141 | 0.74 |
| 245 | 9.36 | 34.281 | 1.55 | - | - | 152 | 400 | 7.48 | 34.35 | 26.86 | 120 | 0.87 |
| 293 | 8.82 | 34.342 | 1.05 | - | - | 140 | 500 | 6.56 | 34.39 | 27.02 | 105 | 0.99 |
| 347 | 8.02 | 34.364 | 0.71 | - | - | 126 | | | | | | |
| 431 | 6.90 | 34.372 | 0.51 | - | - | 111 | | | | | | |
| 513 | 6.34 | 34.411 | 0.45 | - | - | 101 | | | | | | |
| 597 | 5.84 | 34.434 | 0.39 | - | - | 93 | | | | | | |



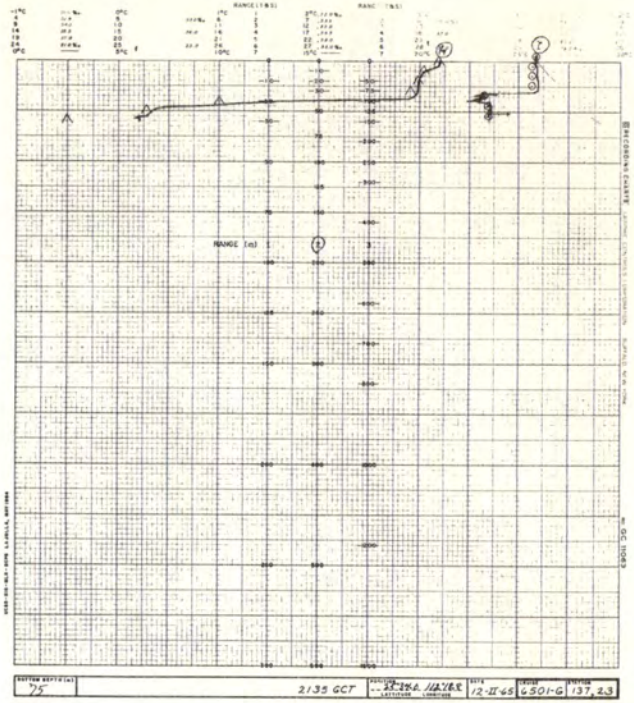



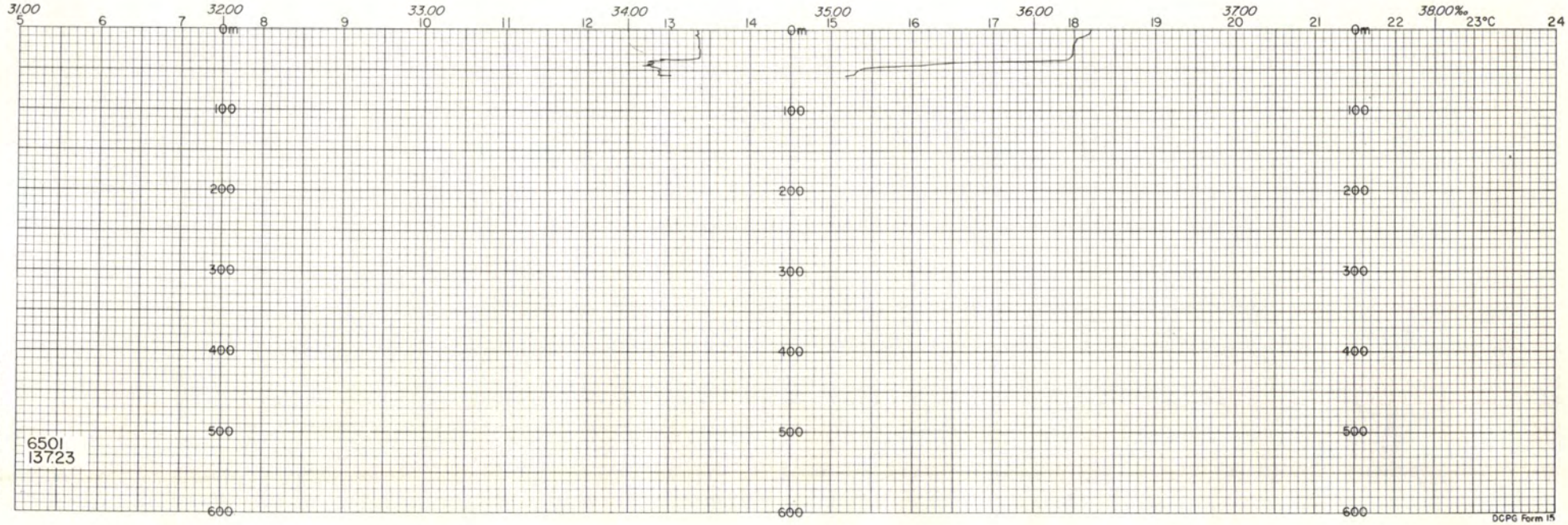
122 137.23

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

ALEXANDER AGASSIZ; February 12, 1965; 2128 GCT; 25°34'N, 112°19'W; sounding, 41 fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 00°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.18 | 34.365 | 5.53 | 0.41 | 5 | 319 | 0 | 18.20 | 34.34 | 24.74 | 322 | 0.00 |
| 10 | 18.03 | 34.356 | 5.69 | 0.41 | 4 | 317 | 10 | 18.05 | 34.34 | 24.77 | 318 | 0.03 |
| 20 | 17.98 | 34.358 | 5.70 | 0.41 | 4 | 315 | 20 | 17.98 | 34.34 | 24.79 | 317 | 0.06 |
| 30 | 17.90 | 34.354 | 5.50 | 0.47 | 4 | 314 | 30 | 17.98 | 34.35 | 24.80 | 316 | 0.10 |
| 40 | 16.00 | 34.158 | 3.98 | 1.09 | 10 | 285 | 50 | 15.33 | 34.16 | 25.27 | 271 | 0.15 |
| 50 | 15.28 | 34.171 | 3.22 | 1.44 | 14 | 269 | | | | | | |
| 60 | 14.49 | 34.178 | 2.72 | 1.73 | 20 | 252 | | | | | | |

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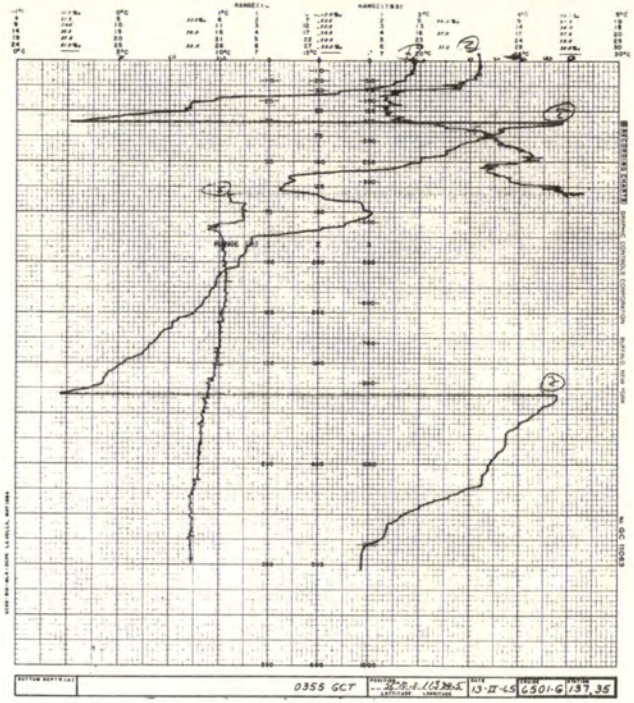
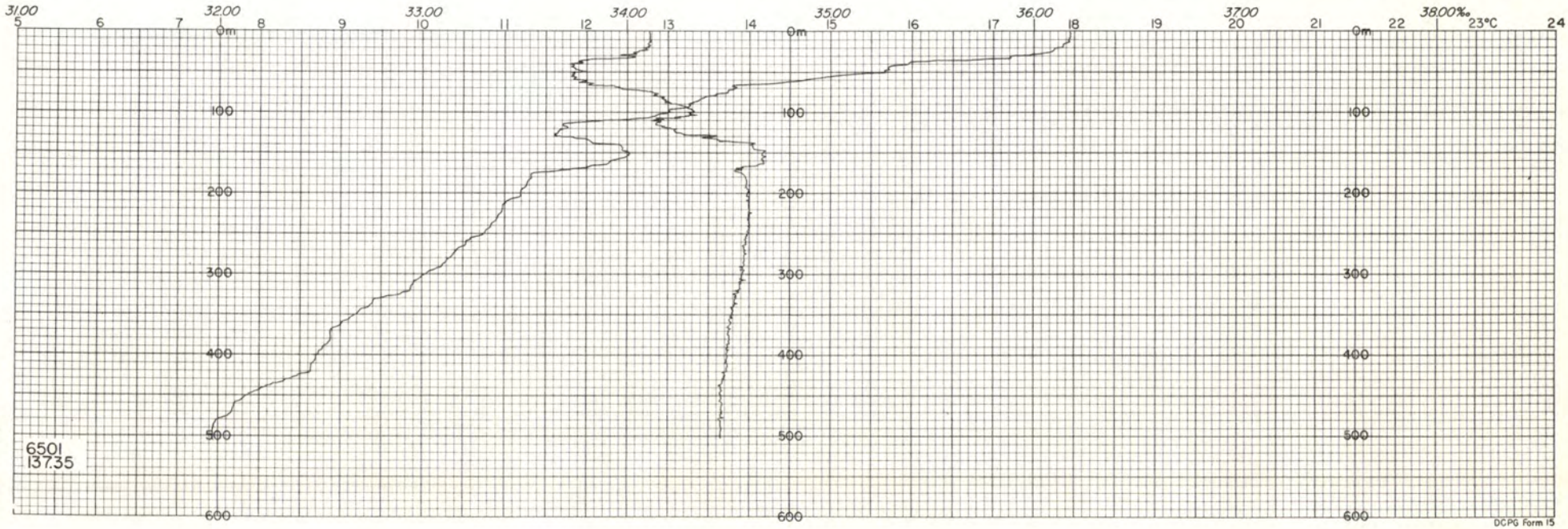
| BOTTLE SAMPLES | | | | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| ALEXANDER AGASSIZ; February 13, 1965; 0058 GCT; 25°20'N, 112°45.5'W; sounding, 200 fm; wind, 300°, force 3; weather, clear; sea, rough; wire angle, 07°. | | | | | | | | | | | | |
| 0 | 18.16 | 34.287 | 5.61 | 0.40 | 3 | 325 | 0 | 18.16 | 34.29 | 24.71 | 324 | 0.00 |
| 10 | 17.94 | 34.263 | 5.65 | 0.37 | 4 | 321 | 10 | 17.94 | 34.26 | 24.74 | 321 | 0.03 |
| 30 | 18.16 | 34.372 | 5.68 | 0.39 | 4 | 318 | 20 | 17.94 | 34.28 | 24.76 | 320 | 0.06 |
| 50 | 15.44 | 34.024 | 4.37 | 0.99 | 9 | 283 | 30 | 18.16 | 34.37 | 24.77 | 318 | 0.10 |
| 75 | 13.64 | 33.973 | 3.53 | 1.42 | 14 | 250 | 50 | 15.44 | 34.02 | 25.14 | 283 | 0.16 |
| 99 | 13.34 | 34.213 | 2.34 | 1.94 | 23 | 227 | 75 | 13.64 | 33.97 | 25.49 | 250 | 0.22 |
| 124 | 13.56 | 34.517 | 1.11 | 2.52 | 32 | 209 | 100 | 13.34 | 34.22 | 25.74 | 226 | 0.28 |
| 154 | 12.50 | 34.619 | 0.52 | 2.81 | 38 | 181 | 125 | 13.54 | 34.52 | 25.94 | 208 | 0.34 |
| 179 | 12.00 | 34.622 | 0.45 | 2.86 | 40 | 172 | 150 | 12.65 | 34.61 | 26.18 | 185 | 0.39 |
| 213 | 11.24 | 34.608 | 0.39 | 2.90 | 45 | 159 | 200 | 11.53 | 34.62 | 26.40 | 164 | 0.48 |
| 253 | 10.74 | 34.588 | 0.34 | 2.90 | 47 | 152 | 250 | 10.78 | 34.59 | 26.52 | 152 | 0.56 |

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | μg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 13, 1965; 0355 GCT; 25°10'N, 113°04.5'W; sounding, 642 fm; wind, 340°, force 3; weather, clear; sea, rough.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 17.94 | 34.11 | 24.63 | 332 | 0.00 |
| 10 | 17.92 | 34.11 | 24.63 | 332 | 0.03 |
| 20 | 17.83 | 34.09 | 24.64 | 331 | 0.07 |
| 30 | 17.25 | 34.00 | 24.71 | 324 | 0.10 |
| 50 | 15.67 | 33.74 | 24.87 | 309 | 0.16 |
| 75 | 13.73 | 34.12 | 25.58 | 241 | 0.23 |
| 100 | 13.01 | 34.30 | 25.87 | 214 | 0.29 |
| 125 | 11.66 | 34.24 | 26.08 | 194 | 0.34 |
| 150 | 12.52 | 34.66 | 26.24 | 178 | 0.39 |
| 200 | 11.19 | 34.59 | 26.44 | 160 | 0.48 |
| 250 | 10.76 | 34.59 | 26.52 | 152 | 0.56 |
| 300 | 10.06 | 34.56 | 26.62 | 143 | 0.63 |
| 400 | 8.71 | 34.49 | 26.79 | 127 | 0.77 |
| 500 | 7.43 | 34.46 | 26.95 | 111 | 0.90 |

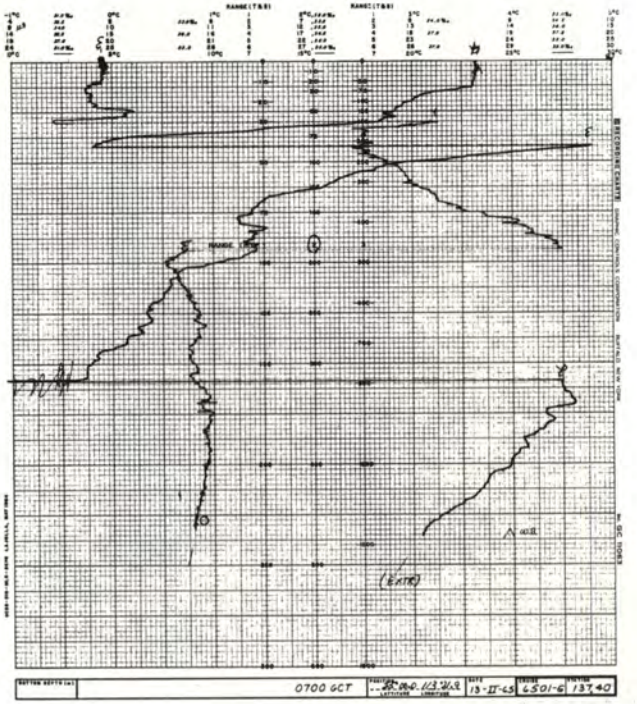


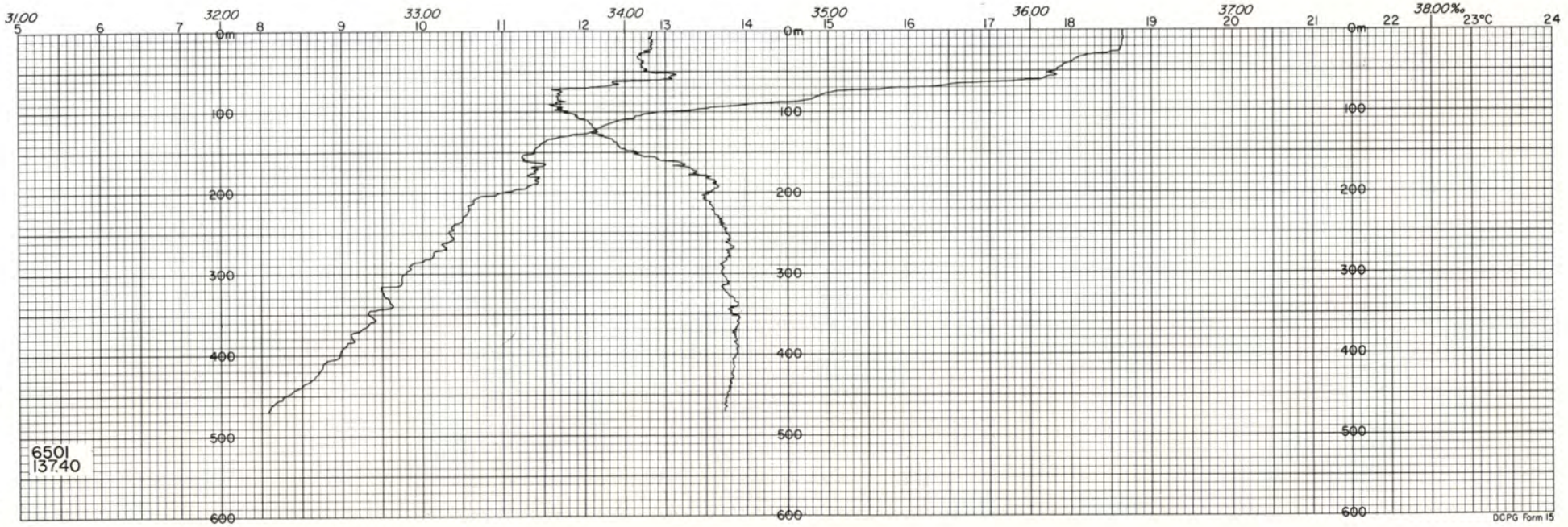



| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 13, 1965; 0700 GCT; 25°00'N, 113°22'W; sounding, 1390 fm; wind, 340°, force 4; weather, partly cloudy; sea, moderate.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 18.64 | 34.13 | 24.47 | 347 | 0.00 |
| 10 | 18.64 | 34.13 | 24.47 | 347 | 0.03 |
| 20 | 18.62 | 34.12 | 24.46 | 348 | 0.07 |
| 30 | 18.25 | 34.07 | 24.52 | 342 | 0.10 |
| 50 | 17.82 | 34.11 | 24.65 | 330 | 0.17 |
| 75 | 15.10 | 33.68 | 24.95 | 301 | 0.25 |
| 100 | 12.95 | 33.71 | 25.42 | 256 | 0.32 |
| 125 | 12.08 | 33.85 | 25.70 | 230 | 0.38 |
| 150 | 11.38 | 34.06 | 25.99 | 202 | 0.44 |
| 200 | 11.00 | 34.41 | 26.34 | 170 | 0.53 |
| 250 | 10.34 | 34.50 | 26.52 | 152 | 0.62 |
| 300 | 9.78 | 34.48 | 26.60 | 144 | 0.69 |
| 400 | 8.98 | 34.55 | 26.79 | 127 | 0.83 |
| 500 | 7.77 | 34.47 | 26.91 | 115 | 0.96 |



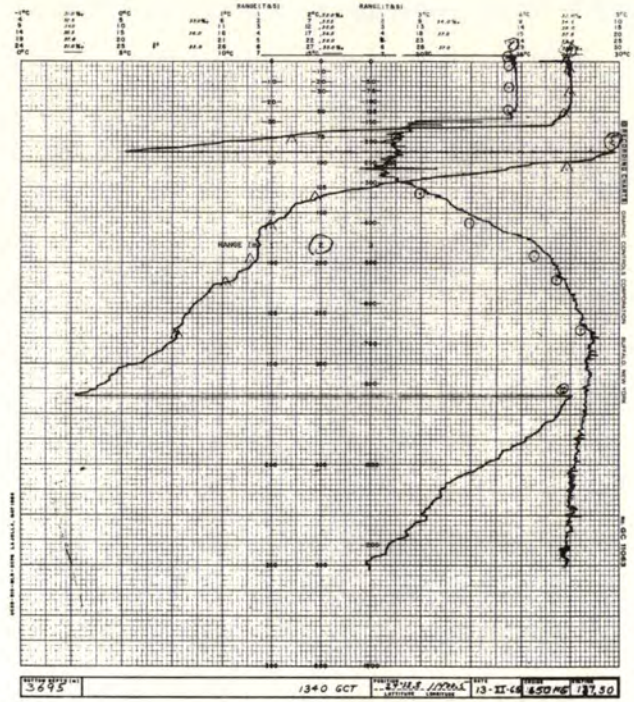



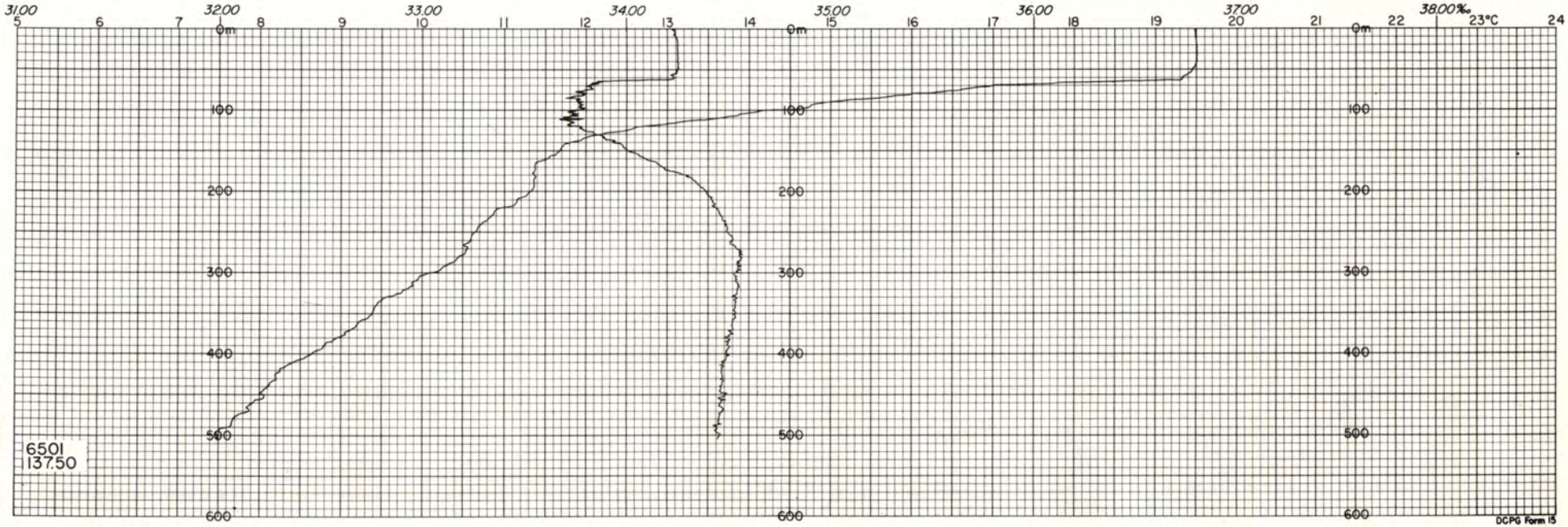
126 137.50

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | μg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 13, 1965; 1322 GCT; 24°39'N, 114°00.5'W; sounding, 2020 fm; wind, 030°, force 6; weather, partly cloudy; sea, very rough; wire angle, 28°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.45 | 34.242 | 5.49 | 0.19 | 2 | 359 | 0 | 19.48 | 34.23 | 24.33 | 360 | 0.00 |
| 8 | 19.48 | 34.247 | 5.55 | 0.24 | 2 | 359 | 10 | 19.50 | 34.24 | 24.33 | 360 | 0.04 |
| 31 | 19.48 | 34.245 | 5.54 | 0.24 | 2 | 359 | 20 | 19.50 | 34.25 | 24.34 | 359 | 0.07 |
| 53 | 19.43 | 34.242 | 5.50 | 0.25 | 2 | 358 | 30 | 19.51 | 34.25 | 24.34 | 360 | 0.11 |
| 80 | 16.70 | 33.801 | 5.84 | 0.27 | 3 | 327 | 50 | 19.46 | 34.25 | 24.35 | 359 | 0.18 |
| 107 | 14.46 | 33.781 | 4.79 | 0.64 | 6 | 281 | 75 | 16.60 | 33.79 | 24.70 | 325 | 0.27 |
| 136 | 11.94 | 33.897 | 3.32 | 1.34 | 18 | 224 | 100 | 14.25 | 33.76 | 25.20 | 278 | 0.34 |
| 165 | 11.49 | 34.096 | 2.41 | 1.69 | 24 | 201 | 125 | 12.50 | 33.79 | 25.57 | 242 | 0.41 |
| 198 | 11.28 | 34.352 | 1.47 | 2.05 | 32 | 179 | 150 | 11.67 | 34.01 | 25.90 | 211 | 0.47 |
| 222 | 11.03 | 34.443 | 1.05 | 2.15 | 36 | 168 | 200 | 11.31 | 34.39 | 26.26 | 177 | 0.56 |
| 272 | 10.53 | 34.540 | 0.63 | 2.32 | 41 | 152 | 250 | 10.66 | 34.49 | 26.46 | 158 | 0.65 |
| | | | | | | | 300 | 10.16 | 34.54 | 26.59 | 146 | 0.73 |
| | | | | | | | 400 | 8.64 | 34.49 | 26.80 | 126 | 0.87 |
| | | | | | | | 500 | 7.48 | 34.46 | 26.95 | 112 | 1.00 |

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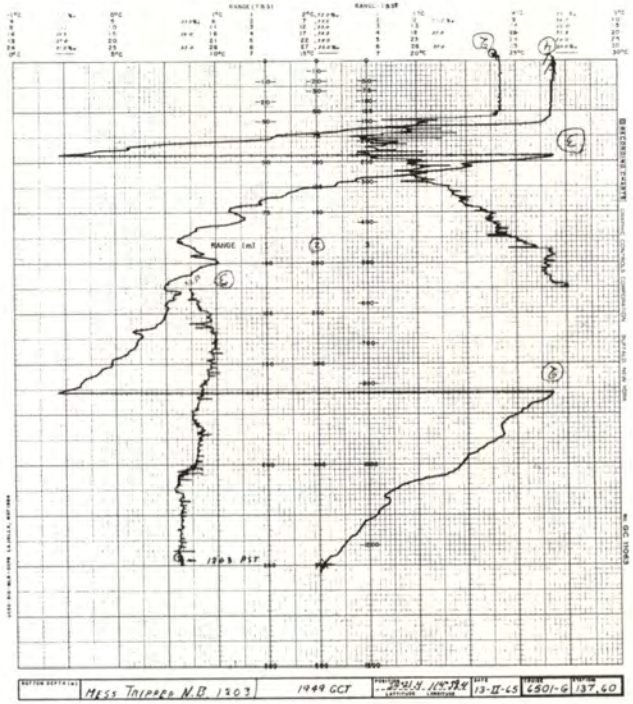
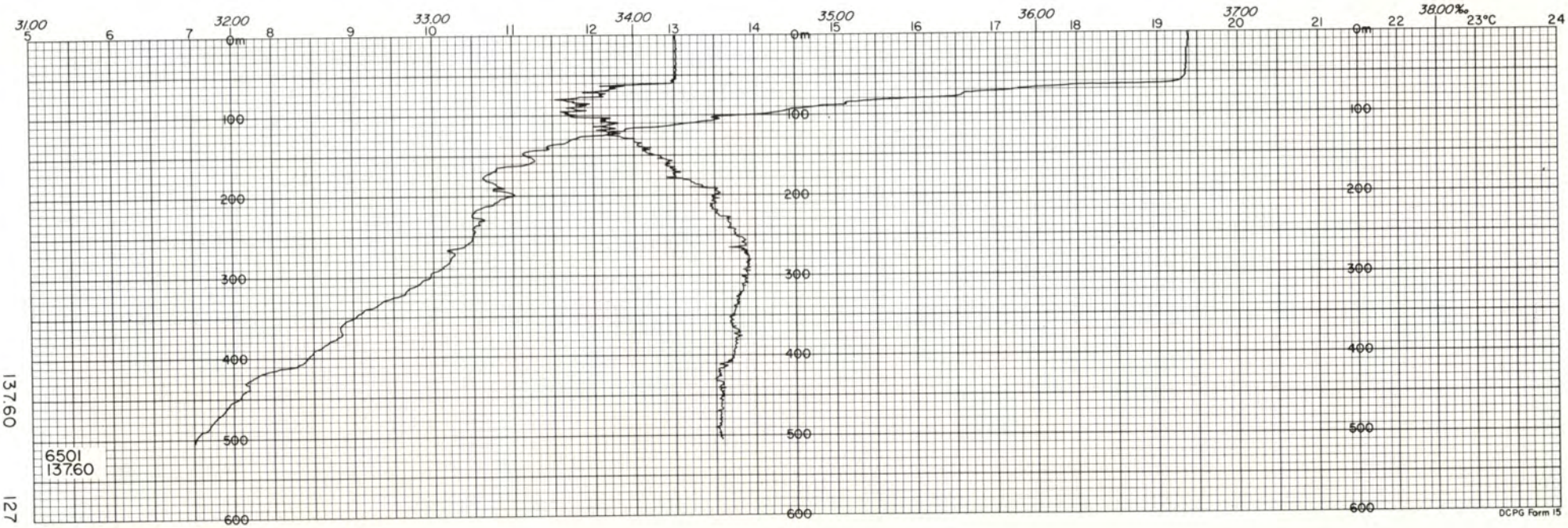
| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $PO_4$-P<br>µg at/L | $SiO_3$-Si<br>µg at/L | $\delta_T$<br>cl/ton | Z<br>m | T<br>°C | S<br>‰ | $\sigma_t$<br>g/L | $\delta_T$<br>cl/ton | ΔD<br>dyn m |

ALEXANDER AGASSIZ; February 13, 1965; 1949 GCT; 24°21.5'N, 114°39.5'W; sounding, 1975 fm; wind, 030°, force 4; weather, clear; sea, very rough.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 19.38 | 34.21 | 24.34 | 359 | 0.00 |
| 10 | 19.38 | 34.21 | 24.34 | 359 | 0.04 |
| 20 | 19.37 | 34.21 | 24.34 | 359 | 0.07 |
| 30 | 19.36 | 34.21 | 24.35 | 359 | 0.11 |
| 50 | 19.35 | 34.21 | 24.35 | 359 | 0.18 |
| 75 | 16.58 | 33.84 | 24.74 | 321 | 0.27 |
| 100 | 13.85 | 33.70 | 25.23 | 274 | 0.34 |
| 125 | 12.08 | 33.88 | 25.72 | 228 | 0.40 |
| 150 | 11.18 | 34.10 | 26.06 | 196 | 0.46 |
| 200 | 11.02 | 34.39 | 26.32 | 172 | 0.55 |
| 250 | 10.50 | 34.50 | 26.49 | 155 | 0.64 |
| 300 | 9.96 | 34.56 | 26.64 | 141 | 0.71 |
| 400 | 8.43 | 34.49 | 26.83 | 123 | 0.85 |
| 500 | 7.03 | 34.42 | 26.98 | 109 | 0.97 |



| BOTTLE SAMPLES | | | | | | COMP | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |
| ALEXANDER AGASSIZ; February 14, 1965; 0125 GCT; 24°02'N, 115°24.5'W; sounding, 2100 fm; wind, 030°, force 4; weather, partly cloudy; sea, very rough; wire angle, 21°. | | | | | | | | | | | | |
| 1 | 18.70 | 34.271 | 5.53 | 0.31 | 2 | 339 | 0 | (18.70) | (34.27) | (24.56) | (339) | (0.00) |
| 10 | 18.71 | 34.262 | 5.56 | 0.31 | 2 | 339 | 10 | 18.71 | 34.26 | 24.55 | 340 | 0.03 |
| 33 | 18.25 | 34.180 | 5.66 | 0.31 | 2 | 335 | 20 | 18.70 | 34.26 | 24.55 | 339 | 0.07 |
| 42 | 17.33 | 33.995 | 5.75 | 0.32 | 2 | 327 | 30 | 18.40 | 34.20 | 24.58 | 337 | 0.10 |
| 56 | 15.69 | 33.765 | 5.88 | 0.36 | 3 | 307 | 50 | 16.41 | 33.85 | 24.79 | 317 | 0.17 |
| 70 | 13.76 | 33.784 | 4.47 | 1.00 | 10 | 266 | 75 | 13.60 | 33.79 | 25.36 | 263 | 0.24 |
| 94 | 12.46 | 33.748 | 3.99 | 1.30 | 13 | 244 | 100 | 12.20 | 33.76 | 25.61 | 239 | 0.30 |
| 112 | 11.26 | 33.814 | 3.51 | 1.58 | 18 | 218 | 125 | 10.81 | 33.89 | 25.97 | 205 | 0.36 |
| 131 | 10.64 | 33.919 | 3.12 | 1.79 | 23 | 200 | 150 | 10.06 | 34.01 | 26.19 | 184 | 0.41 |
| 158 | 9.82 | 34.049 | 2.78 | 2.00 | 30 | 177 | 200 | 9.35 | 34.21 | 26.46 | 158 | 0.50 |
| 186 | 9.34 | 34.145 | 2.25 | 2.21 | 34 | 162 | 250 | 9.08 | 34.33 | 26.60 | 144 | 0.57 |
| 223 | 9.40 | 34.314 | 1.37 | 2.74 | 40 | 151 | 300 | 8.50 | 34.36 | 26.72 | 134 | 0.65 |
| 251 | 9.07 | 34.336 | 1.16 | - | - | 144 | 400 | 7.79 | 34.44 | 26.89 | 117 | 0.78 |
| 297 | 8.53 | 34.357 | 0.92 | - | - | 134 | 500 | 6.74 | 34.44 | 27.03 | 103 | 0.90 |
| 358 | 8.12 | 34.420 | 0.56 | - | - | 124 | 600 | 5.96 | 34.44 | 27.14 | 94 | 1.00 |
| 451 | 7.28 | 34.450 | 0.35 | - | - | 110 | | | | | | |
| 537 | 6.36 | 34.420 | 0.39 | - | - | 100 | | | | | | |
| 610 | 5.91 | 34.443 | 0.35 | - | - | 93 | | | | | | |

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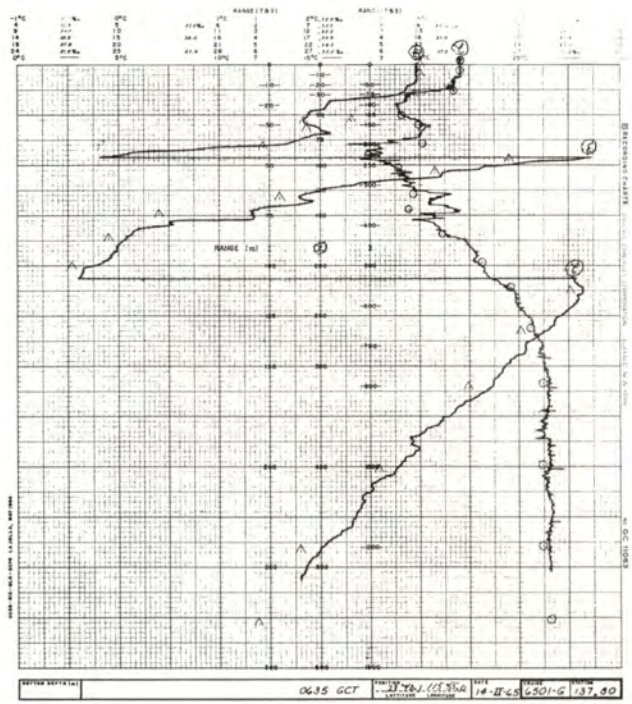
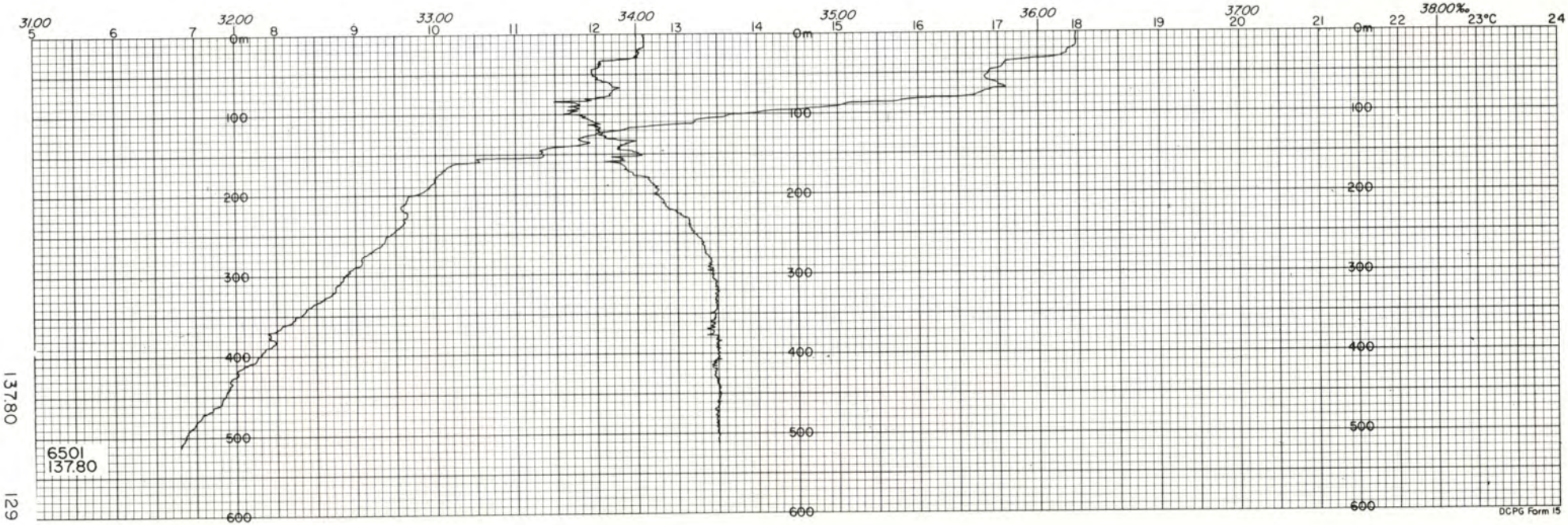
| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 14, 1965; 0609 GCT; 23°40'N, 115°55'W; sounding, 1996 fm; wind, 030°, force 5; weather, clear; sea, very rough; wire angle, 30°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 18.00 | 34.064 | 5.59 | 0.32 | 2 | 337 | 0 | 17.96 | 34.03 | 24.56 | 339 | 0.00 |
| 9 | 18.00 | 34.060 | 5.61 | 0.29 | 2 | 337 | 10 | 17.96 | 34.04 | 24.57 | 338 | 0.03 |
| 31 | 17.94 | 34.039 | 5.63 | 0.29 | 1 | 338 | 20 | 17.92 | 34.01 | 24.55 | 339 | 0.07 |
| 56 | 16.83 | 33.823 | 5.76 | 0.33 | 2 | 328 | 30 | 17.78 | 33.98 | 24.57 | 338 | 0.10 |
| 65 | 16.86 | 33.897 | 5.72 | 0.33 | 2 | 323 | 50 | 16.88 | 33.78 | 24.63 | 332 | 0.17 |
| 82 | 16.44 | 33.909 | 5.72 | 0.41 | 3 | 313 | 75 | 16.80 | 33.87 | 24.71 | 324 | 0.25 |
| 95 | 13.90 | 33.691 | 4.98 | 0.76 | 6 | 276 | 100 | 13.87 | 33.67 | 25.21 | 277 | 0.33 |
| 107 | 13.15 | 33.813 | 4.32 | 1.00 | 10 | 253 | 125 | 12.00 | 33.82 | 25.69 | 231 | 0.39 |
| 133 | 11.60 | 33.878 | 3.63 | 1.46 | 17 | 219 | 150 | 11.33 | 34.02 | 25.97 | 204 | 0.45 |
| 149 | 10.40 | 33.858 | 3.84 | 1.56 | 21 | 200 | 200 | 9.76 | 34.09 | 26.30 | 173 | 0.54 |
| 173 | 9.90 | 33.990 | 2.98 | 1.87 | 26 | 182 | 250 | 9.42 | 34.28 | 26.51 | 153 | 0.63 |
| 202 | 9.54 | 34.149 | 2.23 | 2.24 | 35 | 165 | 300 | 8.86 | 34.37 | 26.67 | 138 | 0.70 |
| 227 | 9.52 | 34.264 | 1.59 | - | - | 156 | 400 | 7.78 | 34.40 | 26.86 | 120 | 0.84 |
| 267 | 9.02 | 34.345 | 1.00 | - | - | 142 | 500 | 6.86 | 34.40 | 26.99 | 108 | 0.96 |
| 321 | 8.48 | 34.398 | 0.63 | - | - | 130 | | | | | | |
| 404 | 7.58 | 34.397 | 0.52 | - | - | 118 | | | | | | |
| 484 | 6.80 | 34.397 | 0.47 | - | - | 107 | | | | | | |
| 557 | 6.38 | 34.424 | 0.31 | - | - | 100 | | | | | | |



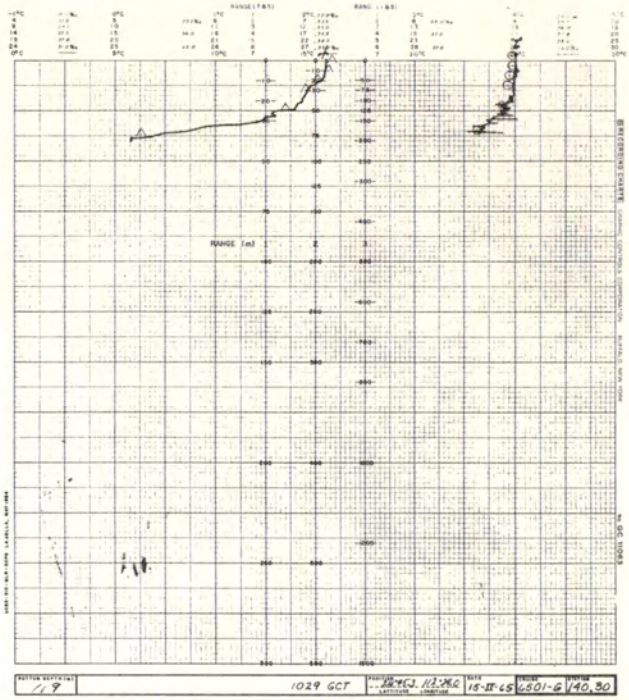

137.80

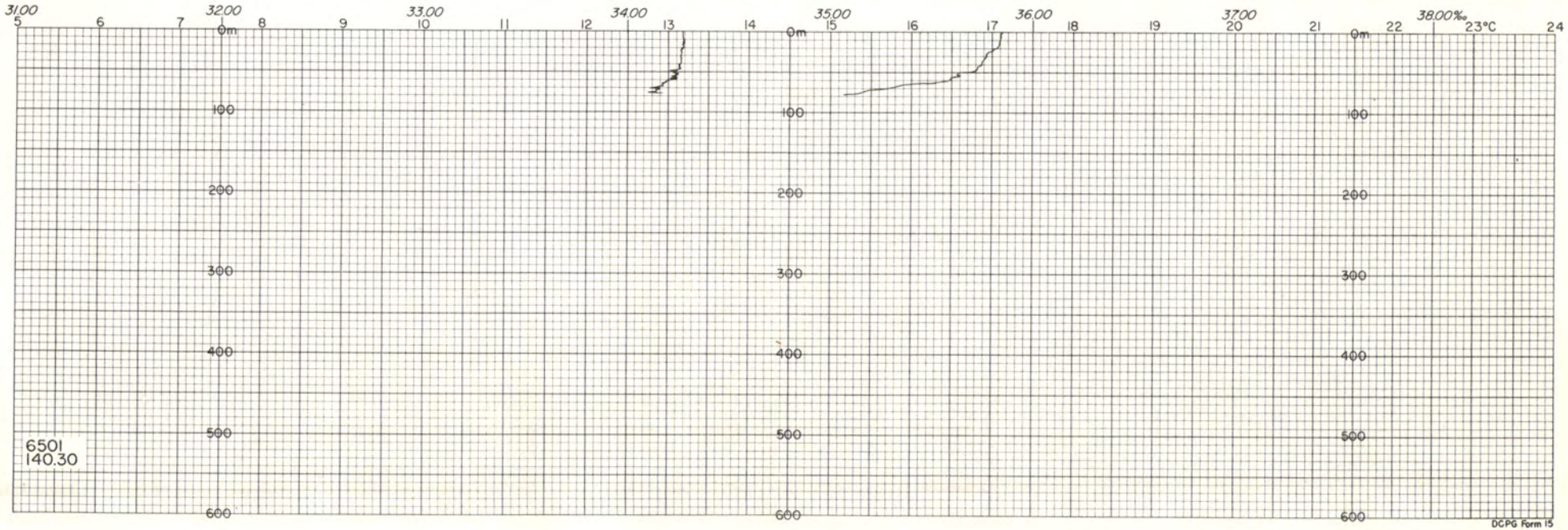
130 140.30

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 15, 1965; 1016 GCT; 24°45.5'N, 112°24'W; sounding, 60 fm; wind, 310°, force 3; weather, partly cloudy; sea, rough; wire angle, 10°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.16 | 34.291 | 5.52 | 0.55 | 7 | 301 | 0 | 17.11 | 34.27 | 24.95 | 302 | 0.00 |
| 10 | 17.13 | 34.289 | 5.48 | 0.55 | 7 | 301 | 10 | 17.10 | 34.28 | 24.96 | 301 | 0.03 |
| 20 | 17.02 | 34.280 | 5.35 | 0.61 | 8 | 299 | 20 | 17.06 | 34.27 | 24.96 | 301 | 0.06 |
| 30 | 16.90 | 34.274 | 5.25 | 0.66 | 9 | 297 | 30 | 16.92 | 34.26 | 24.98 | 298 | 0.09 |
| 49 | 16.70 | 34.257 | 5.03 | 0.78 | 11 | 293 | 50 | 16.63 | 34.24 | 25.04 | 293 | 0.15 |
| 74 | 15.26 | 34.148 | 3.63 | 1.32 | 16 | 270 | 75 | 15.39 | 34.14 | 25.24 | 274 | 0.22 |



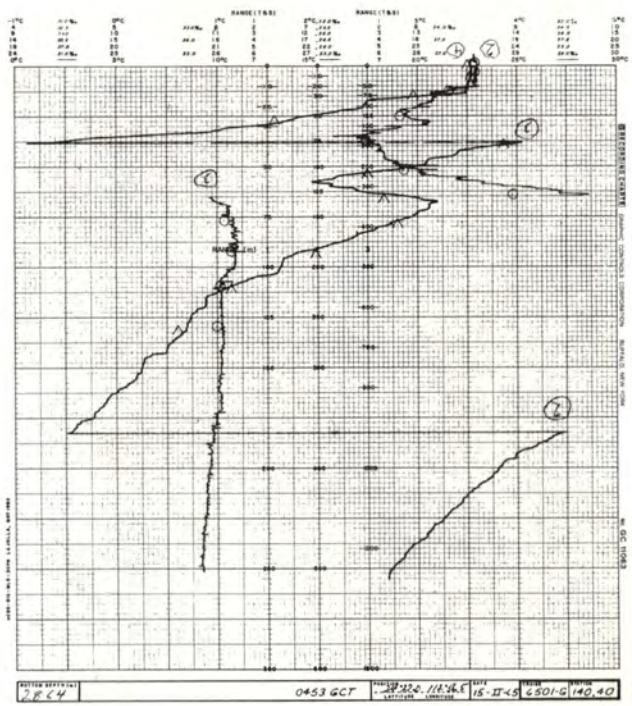



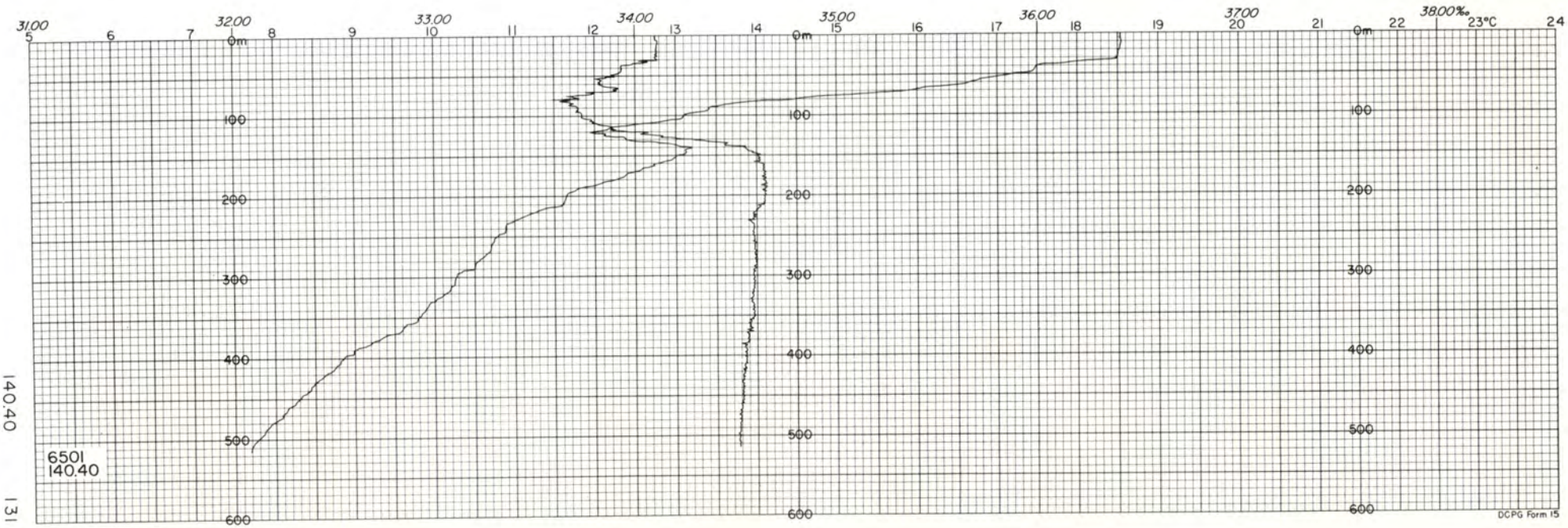

SIO CCOFI 6501

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 15, 1965; 0437 GCT; 24°27'N, 112°56.5'W; sounding, 1565 fm; wind, 310°, force 3; weather, clear; sea, rough; wire angle, 10°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.50 | 34.134 | 5.58 | 0.28 | 2 | 344 | 0 | 18.53 | 34.10 | 24.47 | 347 | 0.00 |
| 10 | 18.54 | 34.132 | 5.59 | 0.27 | 3 | 345 | 10 | 18.54 | 34.11 | 24.48 | 346 | 0.03 |
| 30 | 17.96 | 34.026 | 5.66 | 0.31 | 2 | 339 | 20 | 18.51 | 34.10 | 24.48 | 346 | 0.07 |
| 55 | 16.57 | 33.824 | 5.79 | 0.33 | 3 | 322 | 30 | 18.49 | 34.10 | 24.48 | 346 | 0.10 |
| 79 | 13.87 | 33.688 | 4.96 | 0.78 | 8 | 276 | 50 | 17.22 | 33.88 | 24.62 | 333 | 0.17 |
| 108 | 12.50 | 33.842 | 3.80 | 1.29 | 14 | 238 | 75 | 15.10 | 33.70 | 24.97 | 300 | 0.25 |
| 133 | 12.66 | 34.280 | 2.03 | 2.17 | 27 | 209 | 100 | 13.10 | 33.74 | 25.42 | 257 | 0.32 |
| 158 | 12.80 | 34.625 | 0.70 | 2.68 | 35 | 186 | 125 | 12.18 | 34.10 | 25.88 | 213 | 0.38 |
| 188 | 11.98 | 34.657 | 0.46 | 2.85 | 43 | 169 | 150 | 13.02 | 34.61 | 26.11 | 192 | 0.43 |
| 223 | 11.14 | 34.609 | 0.52 | 2.80 | 40 | 157 | 200 | 11.65 | 34.64 | 26.39 | 164 | 0.52 |
| 263 | 10.61 | 34.599 | 0.44 | 2.79 | 42 | 149 | 250 | 10.78 | 34.59 | 26.52 | 153 | 0.61 |
| | | | | | | | 300 | 10.27 | 34.59 | 26.61 | 144 | 0.68 |
| | | | | | | | 400 | 8.85 | 34.54 | 26.80 | 125 | 0.82 |
| | | | | | | | 500 | 7.78 | 34.51 | 26.94 | 112 | 0.95 |



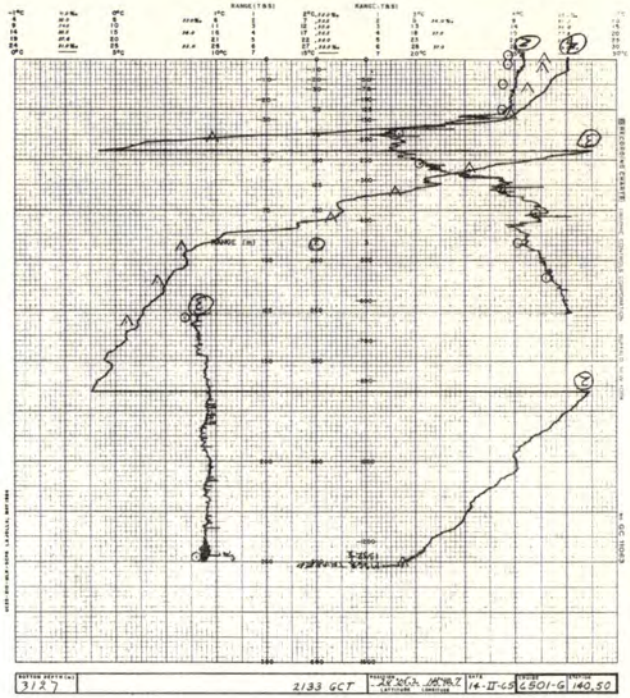



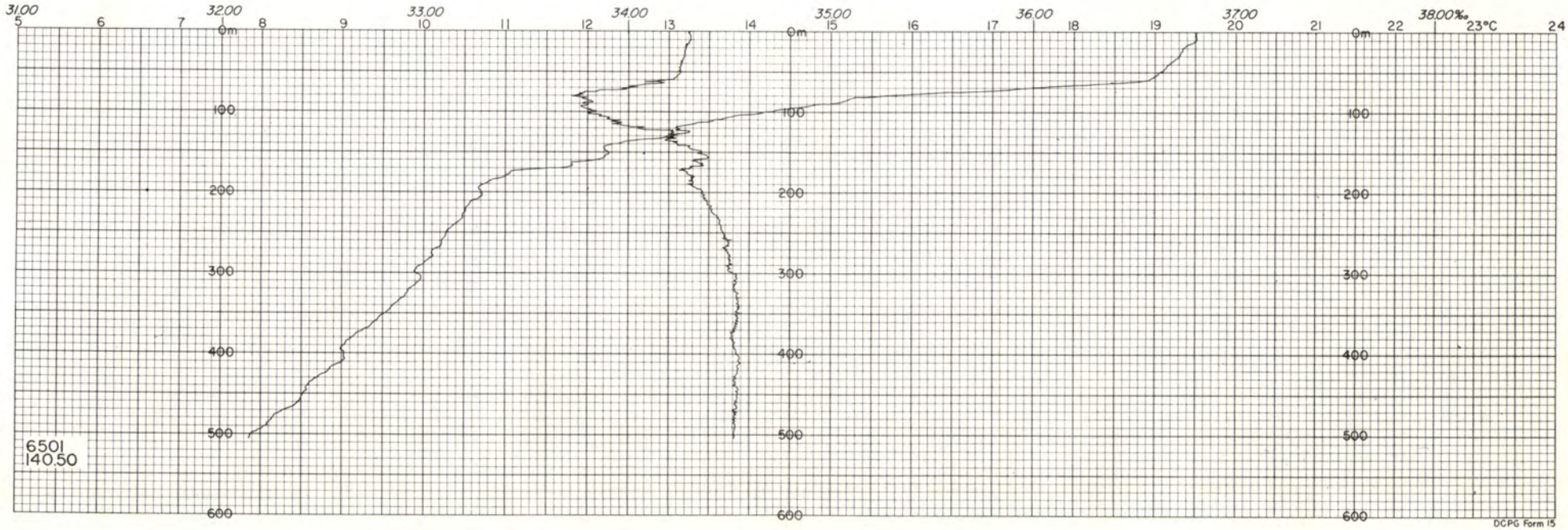
132 140.50

| BOTTLE SAMPLES | | | | | | COMP | STD SELECTED DEPTHS | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $\delta_T$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | cl/ton | m | °C | ‰ | g/L | cl/ton | dyn m |

ALEXANDER AGASSIZ; February 14, 1965; 2114 GCT; 24°05'N, 113°40.5'W; sounding, 1710 fm; wind, 350°, force 3; weather, clear; sea, very rough; wire angle, 06°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.28 | 34.274 | 5.50 | 0.28 | 2 | 352 | 0 | 19.51 | 34.31 | 24.38 | 355 | 0.00 |
| 10 | 19.26 | 34.271 | 5.52 | 0.28 | 2 | 352 | 10 | 19.51 | 34.31 | 24.38 | 355 | 0.04 |
| 30 | 19.12 | 34.252 | 5.52 | 0.29 | 2 | 350 | 20 | 19.36 | 34.28 | 24.40 | 354 | 0.07 |
| 55 | 18.96 | 34.247 | 5.54 | 0.33 | 2 | 347 | 30 | 19.30 | 34.27 | 24.41 | 353 | 0.11 |
| 79 | 15.96 | 33.833 | 5.70 | 0.42 | 3 | 308 | 50 | 19.06 | 34.25 | 24.45 | 349 | 0.18 |
| 109 | 13.54 | 33.917 | 3.80 | 1.24 | 12 | 252 | 75 | 16.70 | 33.79 | 24.68 | 327 | 0.26 |
| 133 | 12.79 | 34.242 | 2.11 | 2.07 | 24 | 214 | 100 | 14.16 | 33.84 | 25.28 | 270 | 0.34 |
| 158 | 12.14 | 34.379 | 1.45 | 2.32 | 27 | 192 | 125 | 13.22 | 34.22 | 25.76 | 224 | 0.40 |
| 188 | 10.65 | 34.309 | 1.58 | 2.40 | 35 | 171 | 150 | 12.26 | 34.36 | 26.06 | 196 | 0.45 |
| 222 | 10.42 | 34.419 | 1.17 | 2.60 | 37 | 159 | 200 | 10.72 | 34.37 | 26.35 | 168 | 0.55 |
| 262 | 10.11 | 34.475 | 0.84 | 2.64 | 39 | 150 | 250 | 10.28 | 34.47 | 26.51 | 153 | 0.63 |
| | | | | | | | 300 | 9.89 | 34.52 | 26.62 | 143 | 0.71 |
| | | | | | | | 400 | 9.02 | 34.54 | 26.77 | 128 | 0.85 |
| | | | | | | | 500 | 7.87 | 34.52 | 26.94 | 113 | 0.98 |




SIO CCOFI 6501

DATA AT NET TOW STATIONS

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $NO_2$-N µg at/L | $\delta T$ cl/ton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 60.49-G | I-10 | 2050 | 37°59.0' | 122°49.5' | 14 | 300° | 2 | overcast | smooth | 10 | 11.32 | 31.377 | 6.46 | 1.17 | 29 | | 399 |
| 60.50-G | 10 | 2130 | 37°57.5' | 122°53.0' | 25 | 300° | 2 | overcast | smooth | 10 | 11.38 | 31.526 | 6.31 | 1.14 | 26 | | 389 |
| 60.51-G | 10 | 2230 | 37°55.5' | 122°57.5' | 35 | 300° | 2 | partly cloudy | slight | 10 | 11.62 | 32.406 | 6.14 | 1.00 | 17 | | 328 |
| 60.55-G | 11 | 0140 | 37°47.5' | 123°15.0' | 68 | 190° | 2 | partly cloudy | slight | 10 | 12.18 | 33.184 | 6.43 | 0.67 | 8 | | 281 |
| 60.70-G | 11 | 1030 | 37°17.0' | 124°20.5' | 2125 | 250° | 3 | drizzle | rough | 10 | 12.28 | 33.052 | 6.36 | 0.61 | 7 | | 293 |
| 60.90-G | 11 | 2200 | 36°37.0' | 125°46.5' | 2404 | 340° | 4 | cloudy | very rough | 10 | 11.92 | 32.847 | 6.45 | - | 7 | | 301 |
| 60.160-G | 13 | 0640 | 34°18.0' | 130°40.5' | 2680 | 040° | 4 | cloudy | moderate | 10 | 14.70 | 32.907 | 6.14 | 0.47 | 4 | | 349 |
| 60.180-G | 13 | 1605 | 33°38.0' | 132°05.0' | 2690 | 030° | 2 | overcast | rough | 10 | 15.36 | 33.286 | 5.96 | 0.32 | 4 | | 335 |
| 63.49-G | 9 | 1628 | 37°24.0' | 122°26.5' | 10 | 340° | 1 | cloudy | slight | 10 | 11.72 | 33.035 | 6.09 | 0.98 | 15 | | 284 |
| 63.50-G | 9 | 1548 | 37°23.5' | 122°28.0' | 15 | 020° | 3 | overcast | moderate | 10 | 11.64 | 32.992 | 6.16 | 0.90 | 14 | | 286 |
| 63.51-G | 9 | 1500 | 37°22.0' | 122°32.5' | 35 | 050° | 3 | overcast | slight | 10 | 11.76 | 33.034 | 6.22 | 0.62 | 10 | | 284 |
| 67.47-G | 8 | 1535 | 36°54.5' | 121°53.5' | 9 | 090° | 2 | clear | smooth | 10 | 11.76 | 33.111 | 6.37 | 0.95 | 10 | | 278 |
| 67.48-G | 8 | 1640 | 36°53.0' | 121°55.5' | 20 | 080° | 3 | clear | smooth | 10 | 11.74 | 32.947 | 6.04 | 1.00 | 14 | | 290 |
| 67.49-G | 8 | 1742 | 36°51.0' | 122°00.5' | 45 | 070° | 3 | clear | slight | 10 | 11.98 | 33.115 | 6.12 | 0.89 | 12 | | 282 |
| 70.50-G | 17 | 2340 | 36°11.5' | 121°44.0' | 60 | 170° | 2 | cloudy | smooth | 10 | 12.45 | 33.414 | 6.65 | 0.86 | 10 | | 269 |
| 70.51-G | 17 | 2227 | 36°10.5' | 121°45.5' | 210 | 310° | 2 | cloudy | smooth | 10 | 12.32 | 33.468 | 6.57 | 0.78 | 9 | | 262 |
| 70.52-G | 17 | 2115 | 36°08.5' | 121°50.0' | 345 | 300° | 2 | cloudy | smooth | 10 | 12.19 | 33.452 | 6.46 | 0.78 | 8 | | 261 |
| 70.53-G | 17 | 1955 | 36°06.5' | 121°54.0' | 560 | 320° | 1 | cloudy | smooth | 10 | 12.38 | 33.441 | 6.68 | 0.72 | 8 | | 266 |
| 70.60-G | 17 | 1405 | 35°53.0' | 122°24.0' | 1700 | 360° | 1 | overcast | smooth | 10 | 12.39 | 32.811 | 6.53 | 0.65 | 6 | | 312 |

DATA AT NET TOW STATIONS

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $NO_2$-N µg at/L | $\delta T$ cl/ton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 70.80-G | I-17 | 0338 | 35°13.0' | 123°47.0' | 2175 | 050° | 1 | partly cloudy | slight | 10 | 15.14 | 33.293 | 6.06 | 0.39 | 4 | | 330 |
| 70.100-G | 16 | 1737 | 34°33.0' | 125°09.5' | 2420 | 090° | 4 | cloudy | moderate | 10 | 14.81 | 33.161 | 5.98 | 0.38 | 4 | | 333 |
| 70.140-G | 15 | 2215 | 33°13.0' | 127°56.5' | 2600 | 120° | 1 | partly cloudy | slight | 10 | 14.90 | 33.249 | 6.20 | 0.36 | 3 | | 328 |
| 70.180-G | 15 | 0005 | 31°54.0' | 130°43.0' | 1990 | 080° | 3 | partly cloudy | moderate | 10 | 17.04 | 33.797 | 6.00 | 0.25 | 3 | | 335 |
| 73.50-G | 18 | 0407 | 35°38.5' | 121°15.0' | 17 | 180° | 1 | cloudy | calm | 10 | 11.76 | 33.564 | 5.81 | 1.16 | 17 | | 245 |
| 73.50-G | 18 | 0438 | 35°37.0' | 121°17.0' | 53 | 210° | 1 | cloudy | calm | 10 | 11.80 | 33.562 | 5.61 | 1.17 | 17 | | 246 |
| 73.51-G | 18 | 0526 | 35°35.0' | 121°21.0' | 205 | 150° | 2 | cloudy | slight | 10 | 12.06 | 33.508 | 5.86 | 1.02 | 13 | | 255 |
| 77.48-G | 19 | 0629 | 35°09.0' | 120°42.0' | 10 | 250° | 2 | clear | calm | 10 | 11.72 | 33.549 | - | 1.05 | 17 | | 246 |
| 77.48-G | 19 | 0705 | 35°08.5' | 120°42.0' | 15 | 270° | 2 | partly cloudy | calm | 10 | 12.02 | 33.532 | - | 0.83 | 15 | | 253 |
| 77.49-G | 19 | 0745 | 35°06.5' | 120°47.5' | 35 | 150° | 1 | cloudy | calm | 10 | 11.90 | 33.521 | 6.02 | 0.94 | 13 | | 251 |
| 80.50-G | 19 | 1525 | 34°27.5' | 120°29.0' | 12 | 340° | 3 | partly cloudy | moderate | 10 | 12.44 | 33.585 | 6.52 | 0.65 | 13 | | 256 |
| 80.51-G | 19 | 1613 | 34°26.0' | 120°32.5' | 80 | 310° | 3 | partly cloudy | moderate | 10 | 12.49 | 33.570 | 6.90 | 0.81 | 9 | | 258 |
| 80.65-G | 20 | 0345 | 33°59.0' | 121°30.0' | 1800 | 300° | 4 | drizzle | rough | 10 | 13.28 | 32.734 | 6.39 | 0.41 | 5 | | 334 |
| 80.70-G | 20 | 0620 | 33°48.0' | 121°51.0' | 1932 | 310° | 4 | rain | rough | 10 | 14.56 | 33.091 | 5.91 | 0.36 | 3 | | 333 |
| 80.90-G | 20 | 1728 | 33°08.0' | 123°13.0' | 2267 | 330° | 6 | cloudy | rough | 10 | 15.74 | 33.409 | 6.54 | - | - | | 334 |
| 80.160-G | 22 | 0250 | 30°48.0' | 127°56.0' | 2390 | 300° | 2 | partly cloudy | rough | 10 | 17.92 | 34.085 | 6.03 | 0.05 | 3 | | 333 |
| 80.180-G | 22 | 1207 | 30°08.0' | 129°17.0' | 2528 | 200° | 2 | cloudy | moderate | 10 | 17.58 | 33.862 | 5.67 | 0.13 | 3 | | 342 |
| 83.39-B | 20 | 1800 | 34°15.5' | 119°17.5' | 9 | 250° | 3 | cloudy | moderate | 10 | 12.56 | 33.583 | - | - | - | | 258 |
| 83.40-B | 20 | 1930 | 34°13.5' | 119°22.0' | 13 | 250° | 3 | partly cloudy | moderate | 10 | 12.48 | 33.577 | - | - | - | | 258 |

DATA AT NET TOW STATIONS

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $NO_2$-N µg at/L | $\sigma_T$ cl/ton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 83.65-B | I-22 | 0135 | 33°25.0' | 121°06.0' | 2000 | 320° | 7 | partly cloudy | very rough | 10 | 12.74 | 33.066 | | | | | 300 |
| 83.80-B | 22 | 0930 | 32°53.0' | 122°07.5' | 2200 | 290° | 3 | cloudy | very rough | 10 | 13.58 | 33.575 | | | | | 278 |
| 87.32-B | 24 | 0920 | 33°54.0' | 118°26.5' | 10 | 120° | 3 | drizzle | slight | 10 | 13.40 | 33.513 | | | | | 279 |
| 87.33-B | 24 | 0835 | 33°54.0' | 118°29.5' | 27 | 120° | 3 | drizzle | slight | 10 | 13.50 | 33.528 | | | | | 280 |
| 87.34-B | 24 | 0745 | 33°52.0' | 118°33.5' | 37 | 120° | 3 | drizzle | slight | 10 | 13.34 | 33.517 | | | | | 278 |
| 87.55-B | 23 | 1655 | 33°11.0' | 120°01.5' | 400 | 320° | 3 | overcast | moderate | 10 | 12.70 | 33.565 | | | | | 262 |
| 87.60-B | 23 | 1355 | 33°00.0' | 120°21.5' | 450 | 300° | 4 | fog | rough | 10 | 14.40 | 33.437 | | | | | 304 |
| 87.65-B | 23 | 1030 | 32°49.5' | 120°41.5' | 2000 | 310° | 4 | light fog | rough | 10 | 14.81 | 33.404 | | | | | 315 |
| 87.70-B | 23 | 0725 | 32°39.5' | 121°02.0' | 2100 | 320° | 5 | light fog | rough | 10 | 14.92 | 33.395 | | | | | 318 |
| 87.90-B | 22 | 2025 | 32°00.0' | 122°23.0' | 2200 | 290° | 3 | cloudy | rough | 10 | 14.08 | 33.027 | | | | | 328 |
| 90.28-G | 27 | 2008 | 33°29.0' | 117°44.5' | 13 | 260° | 1 | cloudy | smooth | 10 | 12.60 | 33.495 | 6.03 | 1.02 | 13 | | 266 |
| 90.65-G | 26 | 1705 | 32°15.5' | 120°18.5' | - | 350° | 6 | partly cloudy | high | 10 | 14.64 | 33.417 | - | 0.36 | 3 | | 311 |
| 90.140-G | 24 | 1548 | 29°45.0' | 125°20.0' | 2330 | 010° | 6 | partly cloudy | very rough | 10 | 16.98 | 33.655 | 5.69 | 0.31 | 3 | | 343 |
| 90.180-G | 23 | 2110 | 28°24.5' | 127°58.5' | 2470 | 210° | 3 | cloudy | rough | 10 | 18.68 | 34.376 | 5.90 | 0.18 | 2 | | 331 |
| 93.27-B | 24 | 1820 | 32°57.0' | 117°16.5' | 10 | 270° | 6 | partly cloudy | rough | 10 | 13.65 | 33.499 | | | | | 285 |
| 93.27-B | 24 | 1910 | 32°56.0' | 117°19.0' | 50 | 280° | 6 | partly cloudy | very rough | 10 | 13.82 | 33.480 | | | | | 290 |
| 93.35-B | 26 | 0415 | 32°40.5' | 117°51.5' | 350 | 320° | 4 | clear | rough | 10 | 13.68 | 33.487 | | | | | 287 |
| 93.45-B | 26 | 1155 | 32°21.5' | 118°34.0' | 750 | 320° | 5 | missing | rough | 10 | 13.48 | 33.500 | | | | | 282 |
| 93.55-B | 26 | 1810 | 32°00.0' | 119°13.5' | 950 | 320° | 6 | partly cloudy | very rough | 10 | 13.52 | 33.457 | | | | | 286 |

DATA AT NET TOW STATIONS

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $NO_2$-N µg at/L | $\delta_T$ cl/ton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 93.65-B | I-27 | 0045 | 31°42.5' | 119°55.0' | 2000 | 340° | 5 | clear | very rough | 10 | 15.18 | 33.364 | | | | | 326 |
| 97.29-B | 29 | 0955 | 32°17.5' | 117°04.5' | 26 | 350° | 2 | clear | slight | 10 | 13.00 | 33.523 | | | | | 271 |
| 97.29-B | 29 | 1035 | 32°19.5' | 117°04.0' | 9 | 350° | 2 | clear | slight | 10 | 12.90 | 33.545 | | | | | 267 |
| 97.30-B | 29 | 0900 | 32°16.0' | 117°07.0' | 35 | 300° | 1 | clear | slight | 10 | 13.45 | 33.520 | | | | | 280 |
| 97.32-B | 29 | 0730 | 32°12.0' | 117°15.0' | 700 | 320° | 2 | clear | slight | 10 | 14.00 | 33.534 | | | | | 289 |
| 97.35-B | 29 | 0520 | 32°06.5' | 117°28.5' | 700 | 320° | 2 | clear | slight | 10 | 13.92 | 33.515 | | | | | 289 |
| 97.45-B | 28 | 2230 | 31°46.0' | 118°08.5' | 800 | 340° | 4 | clear | moderate | 10 | 14.00 | 33.518 | | | | | 291 |
| 97.55-B | 28 | 1615 | 31°25.5' | 118°49.5' | 300 | 340° | 4 | partly cloudy | moderate | 10 | 13.98 | 33.461 | | | | | 294 |
| 97.60-B | 28 | 1320 | 31°16.0' | 119°10.0' | 2000 | 320° | 4 | clear | moderate | 10 | 14.12 | 33.429 | | | | | 299 |
| 97.65-B | 28 | 1025 | 31°07.0' | 119°31.0' | 2000 | 320° | 4 | partly cloudy | moderate | 10 | 14.45 | 33.428 | | | | | 306 |
| 97.70-B | 28 | 0750 | 30°56.5' | 119°51.0' | 1950 | 320° | 4 | partly cloudy | moderate | 10 | 14.32 | 33.440 | | | | | 302 |
| 97.89-B | 27 | 2050 | 30°18.0' | 121°08.5' | 2000 | 360° | 3 | cloudy | rough | 10 | 15.74 | 33.398 | | | | | 335 |
| 100.29-G | 30 | 0605 | 31°42.0' | 116°43.5' | 84 | 310° | 2 | partly cloudy | slight | 10 | 12.93 | 33.537 | 6.06 | 0.63 | 8 | | 268 |
| 100.35-G | 30 | 1120 | 31°31.0' | 117°07.0' | 600 | 310° | 2 | partly cloudy | moderate | 10 | 14.54 | 33.509 | 6.06 | 0.38 | 2 | | 302 |
| 100.45-G | 30 | 1825 | 31°12.5' | 117°48.5' | 1180 | 310° | 2 | clear | moderate | 10 | 13.56 | 33.460 | 6.14 | 0.46 | 7 | | 286 |
| 100.50-G | 30 | 2058 | 31°01.0' | 118°07.5' | 944 | 320° | 2 | clear | rough | 10 | 14.41 | 33.434 | 6.16 | 0.36 | 3 | | 305 |
| 100.55-G | 31 | 0027 | 30°50.0' | 118°29.5' | 1420 | 330° | 3 | clear | very rough | 10 | 14.06 | 33.441 | 6.17 | 0.41 | 4 | | 298 |
| 100.65-G | 31 | 0626 | 30°29.5' | 119°09.5' | 2040 | 050° | 2 | clear | moderate | 10 | 14.26 | 33.490 | 6.17 | 0.34 | 2 | | 298 |
| 100.80-G | 31 | 1530 | 29°52.0' | 120°09.0' | 2100 | 030° | 3 | missing | rough | 10 | 15.73 | 33.389 | 5.99 | 0.36 | 2 | | 335 |

DATA AT NET TOW STATIONS

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $NO_2$-N µg at/L | $\delta_T$ cl/ton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 100.100-G | II-1 | 1210 | 29°21.0' | 121°29.5' | 2120 | 200° | 2 | partly cloudy | moderate | 10 | 16.06 | 33.457 | 5.82 | 0.34 | 1 | | 338 |
| 103.29-B | I-31 | 0700 | 31°08.0' | 116°19.0' | 9 | 140° | 1 | missing | slight | 10 | 12.68 | 33.566 | | | | | 262 |
| 103.29-B | 31 | 0740 | 31°07.0' | 116°21.0' | 16 | 140° | 2 | missing | slight | 10 | 12.82 | 33.567 | | | | | 264 |
| 103.30-B | 31 | 0900 | 31°05.0' | 116°25.0' | 35 | 090° | 1 | missing | slight | 10 | 14.08 | 33.518 | | | | | 292 |
| 103.35-B | 31 | 1155 | 30°55.0' | 116°45.0' | 100 | 320° | 3 | missing | slight | 10 | 14.32 | 33.482 | | | | | 299 |
| 103.40-B | 31 | 1430 | 30°46.5' | 117°04.5' | 850 | 340° | 3 | partly cloudy | moderate | 10 | 15.16 | 33.458 | | | | | 319 |
| 103.45-B | 31 | 1715 | 30°36.0' | 117°24.0' | 1060 | 340° | 2 | partly cloudy | slight | 10 | 15.24 | 33.553 | | | | | 313 |
| 103.50-B | 31 | 2007 | 30°26.5' | 117°45.0' | 1400 | 320° | 2 | partly cloudy | slight | 10 | 15.06 | 33.539 | | | | | 311 |
| 103.55-B | 31 | 2320 | 30°17.0' | 118°05.0' | 1400 | 320° | 3 | cloudy | moderate | 10 | 15.52 | 33.394 | | | | | 331 |
| 103.60-B | II-1 | 0205 | 30°07.0' | 118°25.0' | 1800 | 340° | 3 | missing | moderate | 10 | 15.25 | 33.426 | | | | | 323 |
| 103.65-B | 1 | 0430 | 29°57.0' | 118°44.5' | 1700 | 330° | 1 | missing | slight | 10 | 14.44 | 33.490 | | | | | 301 |
| 103.70-B | 1 | 0730 | 29°47.0' | 119°04.0' | 1800 | 330° | 1 | missing | slight | 10 | 15.64 | 33.419 | | | | | 331 |
| 103.80-B | 1 | 1210 | 29°26.0' | 119°40.0' | 1900 | 320° | 3 | missing | slight | 10 | 15.90 | 33.486 | | | | | 332 |
| 103.90-B | 1 | 1650 | 29°04.5' | 120°16.0' | 2040 | 340° | 3 | cloudy | moderate | 10 | 16.20 | 33.471 | | | | | 340 |
| 105.140-G | 2 | 0740 | 27°09.5' | 123°26.0' | 2240 | 010° | 3 | clear | moderate | 10 | 18.06 | 34.159 | 5.60 | 0.24 | 2 | | 332 |
| 107.30-B | 3 | 0700 | 30°30.0' | 116°03.5' | 8 | 320° | 2 | missing | slight | 10 | 13.47 | 33.560 | | | | | 277 |
| 107.31-B | 3 | 0615 | 30°28.0' | 116°07.0' | 22 | 320° | 3 | missing | slight | 10 | 13.41 | 33.538 | | | | | 278 |
| 107.32-B | 3 | 0500 | 30°26.0' | 116°11.0' | 180 | 340 | 2 | missing | moderate | 10 | 13.22 | 33.542 | | | | | 274 |
| 107.35-B | 3 | 0300 | 30°21.5' | 116°22.5' | 900 | 330° | 4 | missing | rough | 10 | 13.92 | 33.525 | | | | | 288 |

DATA AT NET TOW STATIONS

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $NO_2$-N µg at/L | $\delta_T$ cl/ton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 107.40-B | II-2 | 2350 | 30°11.5' | 116°42.5' | 1500 | 320° | 4 | cloudy | rough | 10 | 15.20 | 33.499 | | | | | 316 |
| 107.45-B | 2 | 2105 | 30°01.5' | 117°02.0' | 750 | 300° | 3 | cloudy | moderate | 10 | 15.20 | 33.426 | | | | | 321 |
| 107.50-B | 2 | 1830 | 29°50.0' | 117°23.0' | 1450 | 340° | 3 | cloudy | moderate | 10 | 15.43 | 33.503 | | | | | 321 |
| 107.55-B | 2 | 1500 | 29°41.5' | 117°42.5' | 1800 | 340° | 2 | cloudy | moderate | 10 | 15.46 | 33.566 | | | | | 317 |
| 107.60-B | 2 | 1300 | 29°32.0' | 118°01.5' | 1800 | 340° | 4 | missing | slight | 10 | 15.36 | 33.429 | | | | | 325 |
| 107.65-B | 2 | 1005 | 29°22.0' | 118°21.0' | 2000 | 330° | 4 | missing | moderate | 10 | 15.72 | 33.445 | | | | | 331 |
| 107.70-B | 2 | 0650 | 29°12.0' | 118°41.0' | 1400 | 330° | 4 | missing | moderate | 10 | 16.22 | 33.51 a) | | | | | 337 |
| 107.80-B | 2 | 0200 | 28°53.0' | 119°20.5' | 1900 | 340° | 2 | cloudy | moderate | 10 | 16.70 | 33.643 | | | | | 338 |
| 107.90-B | 1 | 2115 | 28°32.0' | 119°59.0' | 1000 | 360° | 3 | cloudy | slight | 10 | 16.92 | 33.714 | | | | | 338 |
| 110.32-G | 5 | 2210 | 29°52.0' | 115°48.0' | 16 | 310° | 4 | cloudy | very rough | 10 | 13.29 | 33.648 | 6.66 | 0.68 | 12 | | 267 |
| 110.41-G | 5 | 1500 | 29°37.5' | 116°26.5' | 1110 | 320° | 4 | partly cloudy | rough | 10 | 14.49 | 33.496 | 6.11 | 0.24 | 2 | | 302 |
| 110.45-G | 5 | 1225 | 29°27.0' | 116°43.5' | 760 | 350° | 4 | partly cloudy | moderate | 10 | 15.32 | 33.379 | 5.95 | 0.26 | 2 | | 328 |
| 110.55-G | 5 | 0605 | 29°06.0' | 117°19.0' | 1805 | 360° | 3 | partly cloudy | rough | 10 | 15.78 | 33.561 | 5.98 | 0.30 | 2 | | 324 |
| 110.60-G | 5 | 0315 | 28°57.0' | 117°39.0' | 1910 | 340° | 4 | partly cloudy | rough | 10 | 15.76 | 33.552 | 5.95 | 0.33 | 2 | | 324 |
| 110.65-G | 4 | 2345 | 28°46.0' | 117°58.0' | 1908 | 020° | 3 | cloudy | moderate | 10 | 15.63 | 33.539 | 5.94 | 0.34 | 2 | | 323 |
| 110.70-G | 4 | 2030 | 28°36.0' | 118°18.0' | 1980 | 240° | 2 | cloudy | moderate | 10 | 15.12 | 33.413 | 6.03 | 0.31 | 2 | | 321 |
| 110.90-G | 4 | 0805 | 27°56.0' | 119°36.5' | 2120 | 310° | 3 | overcast | rough | 10 | 16.69 | 33.689 | 5.75 | 0.30 | 2 | | 335 |

a) Alternate value, 33.53‰ ; 336 cl/ton.

DATA AT NET TOW STATIONS

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $NO_2$-N µg at/L | $\delta_T$ cl/ton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 110.140-G | II-3 | 0755 | 26°17.0' | 122°50.5' | 2550 | 320° | 3 | missing | rough | 10 | 17.78 | 33.984 | 5.67 | 0.28 | 2 | | 338 |
| 113.28-B | 3 | 1600 | 29°25.0' | 115°11.5' | 8 | - | 1 | partly cloudy | slight | 10 | 14.60 | 33.741 | | | | | 286 |
| 113.29-B | 3 | 1640 | 29°24.0' | 115°13.0' | 14 | 320° | 3 | partly cloudy | slight | 10 | 14.66 | 33.758 | | | | | 286 |
| 113.30-B | 3 | 1730 | 29°21.5' | 115°18.0' | 33 | 320° | 4 | partly cloudy | moderate | 10 | 14.60 | 33.746 | | | | | 286 |
| 113.35-B | 3 | 2030 | 29°11.0' | 115°38.5' | 650 | 320° | 4 | overcast | rough | 10 | 14.95 | 33.592 | | | | | 305 |
| 113.40-B | 3 | 2300 | 29°01.0' | 116°00.0' | 1000 | 340° | 3 | cloudy | rough | 10 | 15.34 | 33.524 | | | | | 317 |
| 113.45-B | 4 | 0130 | 28°51.0' | 116°22.0' | 1150 | 320° | 3 | partly cloudy | rough | 10 | 15.44 | 33.552 | | | | | 318 |
| 113.50-B | 4 | 0415 | 28°42.0' | 116°39.5' | 2050 | 320° | 3 | missing | moderate | 10 | 15.54 | 33.616 | | | | | 315 |
| 113.55-B | 4 | 0655 | 28°32.0' | 116°57.0' | 1850 | 320° | 3 | missing | rough | 10 | 15.56 | 33.638 | | | | | 314 |
| 113.60-B | 4 | 0940 | 28°22.5' | 117°18.5' | 2000 | 320° | 4 | missing | moderate | 10 | 15.54 | 33.701 | | | | | 309 |
| 113.65-B | 4 | 1215 | 28°13.0' | 117°38.0' | 2000 | 320° | 4 | missing | moderate | 10 | 16.31 | 33.758 | | | | | 321 |
| 113.70-B | 4 | 1500 | 28°03.0' | 117°59.0' | 1800 | 330° | 3 | cloudy | moderate | 10 | 15.67 | 33.581 | | | | | 320 |
| 113.80-B | 4 | 1925 | 27°42.0' | 118°33.5' | 2050 | var. | 1 | overcast | moderate | 10 | 16.20 | 33.582 | | | | | 332 |
| 113.90-B | 5 | 0005 | 27°22.5' | 119°12.5' | 2000 | 340° | 3 | cloudy | slight | 10 | 16.62 | 33.630 | | | | | 338 |
| 117.25-B | 6 | 1915 | 28°58.0' | 114°37.0' | 30 | 270° | 3 | drizzle | moderate | 10 | 15.14 | 33.769 | | | | | 295 |
| 117.25-B | 6 | 2015 | 28°58.5' | 114°36.5' | 10 | 160° | 4 | drizzle | moderate | 10 | 14.78 | 33.785 | | | | | 287 |
| 117.26-B | 6 | 1815 | 28°56.0' | 114°41.5' | 39 | 270° | 2 | drizzle | slight | 10 | 15.09 | - | | | | | - |
| 117.30-B | 6 | 1610 | 28°48.0' | 114°56.5' | 55 | 300° | 3 | cloudy | moderate | 10 | 15.11 | 33.675 | | | | | 302 |
| 117.35-B | 6 | 1330 | 28°38.0' | 115°16.0' | 120 | 270° | 3 | missing | moderate | 10 | 14.88 | 33.586 | | | | | 303 |

DATA AT NET TOW STATIONS

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $NO_2$-N µg at/L | $\delta T$ cl/ton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 117.40-B | II-6 | 0835 | 28°28.0' | 115°35.5' | 500 | 320° | 4 | missing | very rough | 10 | 15.70 | 33.785 | | | | | 306 |
| 117.45-B | 6 | 0520 | 28°19.5' | 116°00.0' | 2000 | 320° | 4 | missing | very rough | 10 | 15.66 | 33.948 | | | | | 293 |
| 117.50-B | 6 | 0215 | 28°09.0' | 116°17.0' | 2200 | 330° | 4 | partly cloudy | rough | 10 | 15.00 | 33.552 | | | | | 309 |
| 117.55-B | 5 | 2305 | 27°57.5' | 116°35.5' | 2000 | 330° | 4 | cloudy | rough | 10 | 16.04 | 33.642 | | | | | 324 |
| 117.60-B | 5 | 2015 | 27°49.0' | 116°53.5' | 2000 | 340° | 4 | partly cloudy | rough | 10 | 16.28 | 33.689 | | | | | 325 |
| 117.65-B | 5 | 1730 | 27°40.0' | 117°12.0' | 1800 | 340° | 4 | cloudy | rough | 10 | 15.91 | 33.604 | | | | | 324 |
| 117.70-B | 5 | 1430 | 27°30.0' | 117°31.0' | 2100 | 330° | 4 | cloudy | moderate | 10 | 16.34 | 33.697 | | | | | 326 |
| 117.80-B | 5 | 0915 | 27°08.5' | 118°10.5' | 2000 | 340° | 4 | missing | moderate | 10 | 16.33 | 33.619 | | | | | 332 |
| 117.90-B | 5 | 0420 | 26°48.5' | 118°50.0' | 2050 | 340° | 3 | missing | moderate | 10 | 16.42 | 33.612 | | | | | 334 |
| 118.39-B | 6 | 1055 | 28°18.5' | 115°23.5' | 150 | 300° | 3 | missing | very rough | 10 | 15.19 | 33.612 | | | | | 308 |
| 120.22-B | 7 | 0110 | 28°28.0' | 114°04.0' | 9 | 300° | 5 | rain | moderate | 10 | 15.89 | 33.887 | | | | | 303 |
| 120.23-B | 7 | 0200 | 28°27.0' | 114°06.5' | 15 | 300° | 5 | rain | moderate | 10 | 15.62 | 33.894 | | | | | 296 |
| 120.24-B | 7 | 0245 | 28°25.0' | 114°10.5' | 20 | 300° | 4 | drizzle | moderate | 10 | 15.34 | 33.838 | | | | | 295 |
| 120.25-B | 7 | 0330 | 28°22.5' | 114°15.0' | 29 | 300° | 4 | missing | moderate | 10 | 15.04 | 33.793 | | | | | 292 |
| 120.30-B | 7 | 1215 | 28°13.0' | 114°34.0' | 50 | 080° | 3 | missing | slight | 10 | 14.80 | 33.704 | | | | | 293 |
| 120.35-B | 7 | 1445 | 28°03.0' | 114°54.0' | 47 | 240° | 4 | cloudy | moderate | 10 | 15.20 | 33.785 | | | | | 295 |
| 120.40-B | 7 | 1725 | 27°56.5' | 115°14.0' | 21 | 290° | 5 | squalls | rough | 10 | 15.10 | 33.864 | | | | | 288 |
| 120.50-G | 7 | 2120 | 27°34.0' | 115°52.5' | 2100 | 300° | 3 | partly cloudy | very rough | 10 | 15.84 | 33.764 | 5.88 | 0.41 | 2 | | 310 |
| 120.55-G | 8 | 0030 | 27°23.0' | 116°11.5' | 2360 | 310° | 3 | drizzle | very rough | 10 | 15.63 | 33.714 | 5.97 | 0.39 | 2 | | 310 |

DATA AT NET TOW STATIONS

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $NO_2$-N µg at/L | $\delta T$ cl/ton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 120.65-G | II-8 | 0635 | 27°03.0' | 116°50.0' | 2080 | 320° | 4 | partly cloudy | high | 10 | 16.10 | 33.717 | 5.82 | 0.42 | 2 | | 320 |
| 120.70-G | 8 | 1025 | 26°52.5' | 117°09.5' | 2020 | 320° | 3 | partly cloudy | high | 10 | 16.09 | 33.764 | 5.83 | 0.32 | 2 | | 316 |
| 120.100-G | 9 | 0300 | 25°52.0' | 119°06.5' | 2200 | 350° | 4 | partly cloudy | high | 10 | 17.72 | 34.026 | 5.65 | 0.24 | 2 | | 333 |
| 123.35-B | 7 | 2230 | 27°24.0' | 114°32.0' | 10 | 290° | 4 | cloudy | rough | 10 | 16.88 | 34.047 | | | | | 313 |
| 123.36-B | 7 | 2330 | 27°26.0' | 114°36.0' | 27 | 290° | 5 | partly cloudy | rough | 10 | 16.74 | 34.076 | | | | | 308 |
| 123.37-B | 8 | 0000 | 27°24.0' | 114°40.0' | 40 | 320° | 5 | partly cloudy | very rough | 10 | 17.22 | 33.998 | | | | | 324 |
| 123.42-B | 8 | 0300 | 27°14.0' | 114°59.0' | 1000 | 320° | 4 | missing | very rough | 10 | 17.54 | 34.046 | | | | | 327 |
| 123.45-B | 8 | 0505 | 27°08.0' | 115°11.5' | 2300 | 320° | 4 | missing | very rough | 10 | 17.40 | 34.035 | | | | | 325 |
| 123.50-B | 8 | 0745 | 26°58.0' | 115°30.5' | 1950 | 320° | 5 | missing | rough | 10 | 17.46 | 34.113 | | | | | 321 |
| 123.55-B | 8 | 1020 | 26°48.0' | 115°52.0' | 2000 | 310° | 4 | missing | rough | 10 | 17.13 | 34.097 | | | | | 315 |
| 123.60-B | 8 | 1250 | 26°39.0' | 116°13.0' | 2000 | 210° | 4 | missing | rough | 10 | 16.10 | 33.707 | | | | | 320 |
| 123.65-B | 8 | 1520 | 26°31.0' | 116°29.0' | 2050 | 330° | 5 | partly cloudy | rough | 10 | 15.88 | 33.736 | | | | | 313 |
| 123.70-B | 8 | 1810 | 26°21.0' | 116°47.5' | 2000+ | 330° | 5 | partly cloudy | rough | 10 | 17.24 | 34.160 | | | | | 313 |
| 123.80-B | 8 | 2300 | 25°58.5' | 117°24.0' | 2000 | 330° | 5 | partly cloudy | very rough | 10 | 16.78 | 33.905 | | | | | 321 |
| 127.33-B | 10 | 0515 | 26°57.5' | 114°02.0' | 31 | 310° | 5 | missing | rough | 10 | 16.98 | 34.01 a) | | | | | 317 |
| 127.33-B | 10 | 0540 | 26°58.5' | 114°00.5' | 10 | 320° | 5 | missing | rough | 10 | 16.03 | 34.024 | | | | | 296 |
| 127.34-B | 10 | 0415 | 26°55.0' | 114°06.5' | 41 | 310° | 5 | missing | rough | 10 | 17.14 | 34.012 | | | | | 321 |

a) Alternate value, 34.02‰; 317 cl/ton.

DATA AT NET TOW STATIONS

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $NO_2$-N µg at/L | $\delta T$ cl/ton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 127.40-B | II-10 | 0130 | 26°43.5' | 114°29.0' | 1700 | 320° | 4 | partly cloudy | rough | 10 | 17.74 | 34.153 | | | | | 324 |
| 127.45-B | 9 | 2230 | 26°34.0' | 114°48.5' | 1800 | 320° | 5 | partly cloudy | rough | 10 | 18.06 | 34.227 | | | | | 327 |
| 127.50-B | 9 | 2000 | 26°25.0' | 115°06.5' | 1600 | 320° | 4 | partly cloudy | rough | 10 | 17.93 | 34.229 | | | | | 323 |
| 127.55-B | 9 | 1715 | 26°09.5' | 115°25.5' | 2000 | 340° | 4 | partly cloudy | very rough | 10 | 18.34 | 34.247 | | | | | 331 |
| 127.60-B | 9 | 1450 | 26°07.0' | 115°41.5' | 2000 | 320° | 4 | partly cloudy | rough | 10 | 17.11 | 34.150 | | | | | 310 |
| 127.65-B | 9 | 1150 | 25°56.0' | 116°02.0' | 2000 | 340° | 4 | missing | rough | 10 | 17.26 | 34.150 | | | | | 314 |
| 127.70-B | 9 | 0845 | 25°45.0' | 116°22.5' | 2000 | 340° | 4 | missing | rough | 10 | 16.92 | 33.997 | | | | | 317 |
| 127.80-B | 9 | 0340 | 25°24.0' | 117°02.5' | 2100 | 330° | 5 | missing | rough | 10 | 16.72 | 33.772 | | | | | 329 |
| 130.25-G | 12 | 1025 | 26°38.0' | 113°11.5' | - | - | - | missing | missing | 10 | 15.97 | 34.256 | 4.44 | 1.02 | 14 | | 277 |
| 130.26-G | 12 | 0940 | 26°37.0' | 113°13.0' | 16 | 030° | 7 | clear | very rough | 10 | 16.32 | 34.251 | 4.94 | 0.77 | 10 | | 285 |
| 130.28-G | 12 | 0825 | 26°33.0' | 113°21.0' | 30 | 030° | 7 | clear | very rough | 10 | 16.07 | 34.080 | 5.35 | 0.64 | 8 | | 292 |
| 130.35-G | 12 | 0310 | 26°20.0' | 113°48.5' | 510 | 330° | 4 | clear | very rough | 10 | 17.50 | 34.209 | 5.67 | 0.38 | 2 | | 315 |
| 130.45-G | 11 | 2039 | 25°59.0' | 114°26.5' | 1854 | 340° | 4 | clear | very rough | 10 | 18.40 | 34.225 | 5.49 | 0.34 | 2 | | 335 |
| 130.50-G | 11 | 1625 | 25°50.0' | 114°47.5' | 1920 | 350° | 3 | partly cloudy | very rough | 10 | 17.33 | 34.091 | - | - | - | | 319 |
| 130.55-G | 11 | 1408 | 25°41.0' | 115°01.0' | 1960 | 350° | 4 | partly cloudy | very rough | 10 | 18.96 | 34.140 | 5.53 | 0.28 | 2 | | 354 |
| 130.60-G | 11 | 1045 | 25°30.0' | 115°21.0' | 2020 | 350° | 3 | cloudy | rough | 10 | 18.78 | 34.142 | 5.51 | 0.27 | 2 | | 350 |
| 130.70-G | 11 | 0510 | 25°09.5' | 116°01.0' | 1710 | 340° | 3 | overcast | very rough | 10 | 16.77 | 33.819 | 5.78 | 0.27 | 2 | | 327 |
| 130.90-G | 10 | 1747 | 24°28.5' | 117°17.5' | 2060 | 010° | 3 | overcast | very rough | 10 | 18.50 | 34.231 | 5.50 | 0.31 | 2 | | 337 |
| 130.100-G | 10 | 1210 | 24°06.5' | 117°54.5' | 2100 | 330° | 4 | overcast | rough | 10 | 17.22 | 33.888 | 5.66 | 0.28 | 2 | | 332 |

DATA AT NET TOW STATIONS

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $NO_2$-N µg at/L | $\delta_T$ cl/ton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 133.19-B | II-10 | 1510 | 26°13.5' | 112°26.0' | 9 | 300° | 3 | partly cloudy | moderate | 10 | 16.66 | 34.330 | | | | | 287 |
| 133.21-B | 10 | 1600 | 26°12.5' | 112°32.5' | 29 | 300° | 3 | partly cloudy | moderate | 10 | 17.06 | 34.379 | | | | | 293 |
| 133.23-B | 10 | 1715 | 26°08.5' | 112°40.0' | 39 | 300° | 3 | partly cloudy | moderate | 10 | 17.82 | - | | | | | - |
| 133.25-B | 10 | 1837 | 26°04.5' | 112°48.0' | 43 | 330° | 4 | partly cloudy | moderate | 10 | 17.51 | 34.374 | | | | | 303 |
| 133.30-B | 11 | 0330 | 25°54.5' | 113°07.5' | 110 | 300° | 5 | missing | rough | 10 | 18.18 | 34.363 | | | | | 320 |
| 133.35-B | 11 | 0600 | 25°44.5' | 113°26.5' | 500 | 330° | 5 | missing | very rough | 10 | 17.53 | 34.102 | | | | | 323 |
| 133.40-B | 11 | 0830 | 25°35.0' | 113°44.5' | 1500 | 340° | 5 | missing | rough | 10 | 17.76 | 34.190 | | | | | 322 |
| 133.45-B | 11 | 1110 | 25°25.0' | 114°03.0' | 2000 | 320° | 5 | missing | very rough | 10 | 17.76 | 34.214 | | | | | 321 |
| 133.50-B | 11 | 1340 | 25°14.5' | 114°21.0' | 2000 | 320° | 4 | missing | very rough | 10 | 19.04 | 34.195a) | | | | | 353 |
| 133.55-B | 11 | 1625 | 25°04.5' | 114°40.0' | 2050 | 340° | 3 | partly cloudy | rough | 10 | 19.14 | 34.185 | | | | | 355 |
| 133.60-B | 11 | 1900 | 24°54.0' | 115°01.0' | 2100 | 340° | 4 | partly cloudy | rough | 10 | 18.80 | 34.237 | | | | | 344 |
| 133.65-B | 11 | 2210 | 24°44.0' | 115°21.0' | 2000 | 350° | 4 | clear | very rough | 10 | 18.55 | 34.228 | | | | | 338 |
| 133.70-B | 12 | 0030 | 24°35.0' | 115°39.0' | 2100 | 340° | 4 | partly cloudy | rough | 10 | 18.42 | 34.238 | | | | | 334 |
| 133.80-B | 12 | 0500 | 24°14.5' | 116°17.0' | 2000 | 340° | 4 | cloudy | moderate | 10 | 18.88 | 34.253 | | | | | 344 |
| 137.20-G | 12 | 1840 | 25°40.0' | 112°07.0' | 5 | 010° | 2 | clear | slight | 5 | 17.87 | 34.478 | 5.47 | 0.48 | 9 | | 304 |
| 137.21-G | 12 | 1938 | 25°38.0' | 112°11.0' | 13 | 340° | 3 | clear | slight | 10 | 17.27 | 34.347 | 5.28 | 0.52 | 8 | | 300 |
| 137.22-G | 12 | 2027 | 25°36.0' | 112°15.0' | 28 | 300° | 3 | clear | moderate | 10 | 17.60 | 34.323 | 5.52 | 0.49 | 6 | | 309 |

a) Possible evaporation.

DATA AT NET TOW STATIONS

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $NO_2$-N µg at/L | $\delta T$ cl/ton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 137.35-G | II-13 | 0355 | 25°10.0' | 113°04.5' | 642 | 340° | 3 | clear | rough | 10 | 17.83 | 34.109 | 5.60 | 0.37 | 2 | | 330 |
| 137.40-G | 13 | 0650 | 25°00.0' | 113°22.0' | 1390 | 340° | 4 | partly cloudy | moderate | 10 | 18.50 | 34.140 | 5.51 | 0.22 | 2 | | 343 |
| 137.45-G | 13 | 1010 | 24°49.5' | 113°41.0' | 1864 | 340° | 4 | partly cloudy | very rough | 10 | 19.16 | 34.218 | 5.38 | 0.25 | 2 | | 354 |
| 137.55-G | 13 | 1650 | 24°29.5' | 114°20.0' | 2050 | 030° | 4 | partly cloudy | very rough | 10 | 19.42 | 34.260 | 5.50 | 0.25 | 2 | | 357 |
| 137.60-G | 13 | 1932 | 24°21.5' | 114°39.5' | 1975 | 030° | 4 | clear | very rough | 10 | 19.35 | 34.209 | 5.49 | 0.29 | 2 | | 359 |
| 140.29-G | 15 | 1145 | 24°47.5' | 112°20.5' | 32 | 310 | 4 | partly cloudy | rough | 10 | 16.64 | 34.291 | 5.15 | 0.84 | 14 | | 290 |
| 140.29-G | 15 | 1220 | 24°48.0' | 112°19.0' | - | - | - | missing | missing | 10 | 16.62 | 34.287 | 5.00 | 0.86 | 13 | | 290 |
| 140.35-G | 15 | 0720 | 24°34.0' | 112°42.0' | 640 | 320° | 4 | partly cloudy | rough | 10 | 18.07 | 34.249 | 5.58 | 0.39 | 3 | | 325 |
| 140.45-G | 15 | 0040 | 24°17.5' | 113°23.0' | 1810 | 330° | 3 | partly cloudy | rough | 10 | 19.55 | 34.332 | 5.46 | 0.29 | 2 | | 355 |

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